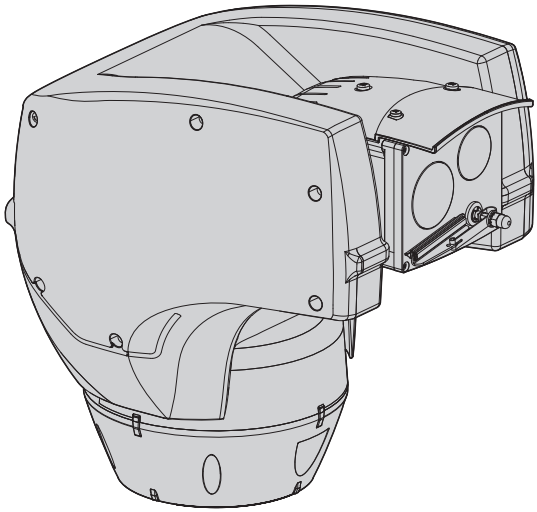
ULISSE COMPACT THERMAL

Dual camera positioning unit for thermal imaging



EN **English** - Instructions manual

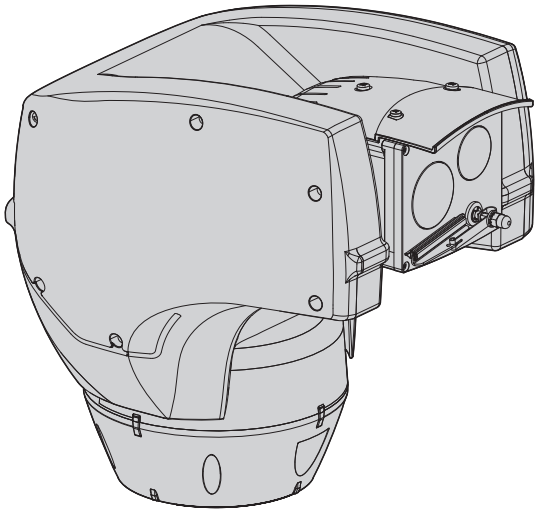
IT **Italiano** - Manuale di istruzioni

FR **Francais** - Manuel d'instructions

DE **Deutsch** - Bedienungslanleitung

ULISSE COMPACT THERMAL

Dual camera positioning unit for thermal imaging



EN English - Instructions manual

Contents

1 About this manual

Before installing and using this unit, please read this manual carefully. Be sure to keep it handy for later reference.

1.1 Typographical conventions

DANGER!
High level hazard.
Risk of electric shock; disconnect the power supply before proceeding with any operation, unless indicated otherwise.

DANGER!
Hot surface.
Avoid contact. Surfaces are hot and may cause personal injury if touched.

DANGER!
Mechanical hazard.
Risk of crushing or shearing.

WARNING!
Medium level hazard.
This operation is very important for the system to function properly. Please read the procedure described very carefully and carry it out as instructed.

INFO
Description of system specifications.
We recommend reading this part carefully in order to understand the subsequent stages.

2 Notes on copyright and information on trademarks

The quoted names of products or companies are trademarks or registered trademarks.

Microsoft Internet Explorer®, Windows Xp ® and Windows Vista® are the property of Microsoft Corporation.

INTEL® Core™ 2 Duo and INTEL® Core™ 2 Quad are the property of Intel Corporation.

3 Safety rules

The manufacturer declines all responsibility for any damage caused by an improper use of the appliances mentioned in this manual. Furthermore, the manufacturer reserves the right to modify its contents without any prior notice. The documentation contained in this manual has been collected with great care, the manufacturer, however, cannot take any liability for its use. The same thing can be said for any person or company involved in the creation and production of this manual.

The integrated positioning systems for video surveillance comprising the ULISSE COMPACT THERMAL line of devices comply with current legislation and standards in force at the time of publication of this handbook.

Nevertheless, in order to ensure the user's safety (installer technician and operator) the following warnings are specified in order to work in maximum safety:

If it is necessary to transport the device, this should be done with great care. Abrupt stops, bumps and violent impact could damage the unit or injure the user.

The building must be equipped with a 20A maximum bipolar protection circuit (magneto thermal), that must include a bipolar automatic-type circuit breaker, which must also envisage earth fault current protection (magneto-thermal + differential) with minimum distance of 3mm between contacts.

- The device must be installed only and exclusively by qualified technical personnel.
- Before any technical work on the appliance, disconnect the power supply.
- Do not use power supply cables that seem worn or old.
- Never, under any circumstances, make any changes or connections that are not shown in this handbook: improper use of the appliance can cause serious hazards, risking the safety of personnel and of the installation.
- Use only original spare parts. Not original spare parts could cause fire, electrical discharge or other hazards.
- Before proceeding with installation check the supplied material to make sure it corresponds to the order specification by examining the identification labels (*"4.2 Product markings", page 10*).
- Connect the device to a power source corresponding to the indications given on the marking label. Before proceeding with installation make sure that the power line is properly isolated. For devices powered at 24Vac the supply voltage should never exceed the (+/- 10%) limit. Connections must comply with local legislation. If you are not sure of the power supply specifications contact your utility supplier for further information.
- The device has been designed for permanent and secured installation to a building or other suitable structure.
- The device should be mounted so that it is accessible only to the technician/installer because the moving parts constitute a residual risk of injury caused by movement of said parts.
- Attach the **Dangerous Moving Parts** (*Fig. 02, page 11*) label near the device.
- Do not use the appliance in the presence of inflammable substances.
- Do not allow children or unauthorised people to use the appliance.
- The appliance should only be considered switched off when the power supply has been disconnected and the connecting cables to other devices have been removed.
- A power disconnect device must be included in the electrical installation, and it must be very quickly recognizable and operated if needed.
- Only skilled personnel should carry out maintenance on the device. When carrying out maintenance, the operator is exposed to the risk of electrocution and other hazards.
- Use only the accessories indicated by the manufacturer. Any change that has not been expressly approved by the manufacturer will invalidate the guarantee.
- Connect the coaxial cable to earth.
- Before connecting all the cables make sure the device is properly connected to the earth circuit.
- If the device has to be removed from the installation, always disconnect the earth cable last.
- Take all necessary precautions to prevent the apparatus from being damaged by electrostatic discharge.
- The unit has been made for connection using a 3-pole cable. To make a correct connection to the earth circuit, follow the instructions in this handbook.
- Before any technical work, always disconnect the power supply; handle the device with great care: high mechanical stress could damage the unit.
- Make especially sure that the power supply line is isolated at a sufficient distance from all the other cables, including lightning protection devices.

- The main switch must be easily accessible for rapid intervention when needed.
- Use a Class 2 listed UL tranformer, compliant with the Standards in force, only for products marked UL, powered at 24Vac.
- Installation category (also called Overvoltage Category) specifies the level of mains voltage surges that the equipment will be subjected to. The category depends upon the location of the equipment, and on any external surge protection provided. Equipment in an industrial environment, directly connected to major feeders/short branch circuits, is subjected to Installation Category III. If this is the case, a reduction to Installation Category II is required. This can be achieved by use of an isolating transformer with an earthed screen between primary and secondary, or by fitting listed Surge Protective Devices (SPDs) from live to neutral and from neutral to earth. Listed SPDs shall be designed for repeated limiting of transient voltage surges, suitable rated for operating voltage and designated as follows: Type 2 (Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device); Nominal Discharge Current (In) 20kA min. For example: FERRAZ SHAWMUT, STT2240SPG-CN, STT2BL240SPG-CN rated 120/240Vac, (In=20kA). Maximum distance between installation and reduction is 5m.
- This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

4 Identification

4.1 Product description and type designation

ULISSE COMPACT THERMAL offers an integrated solution for vision even in total darkness, fog, rain, heavy smoke.

This integrated P&T unit combines an advanced thermal imaging camera and an optical day/night zoom module, factory-aligned and installed within the same enclosure.

ULISSE COMPACT THERMAL features two independent video outputs and allows dual real-time vision on monitors for an optimal monitoring of the area.

ULISSE COMPACT THERMAL offers continuous, high-speed rotation, positioning precision, superior image quality, utmost sturdiness and simplified system configuration. The speed reaches 200°/s in continuous horizontal rotation, with vertical range between -90° to +90°.

ULISSE COMPACT THERMAL manages the preset, auto-pan and patrol functions with an accuracy 0.1°. The unit perform a constant monitoring and correction of his position, very useful in case of difficult environmental conditions.

The thermal camera is an Uncooled Vanadium Oxide microbolometer (VOx) with spectral band 7.5-13.5 µm; it delivers a thermal video of 320x 256 (PAL) and 320x240 (NTSC), with an image frequency of 8.3fps or 25 fps (PAL) and 7.5 or 30fps (NTSC). The high sensitivity NEdT 50mK at f/1.0 ensures an optimal thermal imaging. It supports 2x or 4x digital zoom. A choice of lens sizes is offered between 35mm, 25mm and 9mm, depending on the detection distance required.

The thermal camera parameters are easily configurable on OSD. The setup interface offers typical pre-set configurations or complete customization of the system.

The camera also has functions such as the Isothermal analysis (special colors of the objects that fall within the parameters set by the operator), base thermography and other colors of the scene.

The integrated day/night SONY camera offers a selection from different zoom lenses, 36x, 18x or 10x, which allows the recording with exceptional precision of both close-by and far away objects, as well as dynamic privacy zone masking. Furthermore, the Super HAD, 1/3" CCD (for 10x optical zoom) guarantees an excellent sensitivity in poorly lit environments.

ULISSE COMPACT THERMAL is also available with the only thermal camera. Supplied in 24, 230 or 120Vac and in PAL or NTSC mode.

Besides the OSD configuration, the system is equipped with an RS485/RS422 interface for complete system control and for the updating in remote mode of the latest firmware version.

This solution is particularly suited for round-the-clock video surveillance in a wide range of high security environments such as perimeter protection, airports, coastlines, prisons and harbours.

4.2 Product markings

ULISSE COMPACT THERMAL pan & tilt devices have a label complying with CE markings.

The label on the body shows:

- Model identification code (Extended 3/9 bar code)
- Power supply voltage (Volt)
- Frequency (Hertz)
- Absorbed current (Amps)
- IP weatherproof standard
- Serial number

4.2.1 Checking the markings

Before proceeding further with installation, make sure the material supplied corresponds to the order specification by examining the marking labels.

Never, under any circumstances, make any changes or connections that are not described in this handbook: the use of inappropriate appliances may expose personnel and the system to serious safety hazards.

5 Versions

5.2.1 Washer

If the pan & tilt is fitted with a wiper, it can also have an external pump supplying water to clean the glass.

As shown in the picture, the spray to clean the glass is outside the pan & tilt.

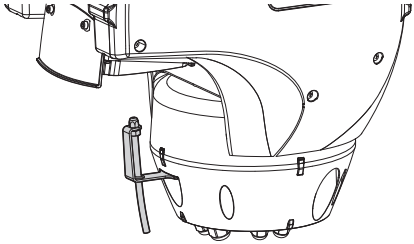


Fig. 01

Once the command has been sent (*"10.9 Enabling the Washer (Washer)", page 45*) the pan & tilt positions itself with the glass facing the spray and the pump and wiper are activated for a set period of time; at the end of the operation ULISSE COMPACT THERMAL returns to its initial position.

For models with Washer complete with level sensor, ULISSE COMPACT THERMAL can also display a video message when the level of the liquid inside the tank is too low (only if using a high prevalence pump of the UPTWAS series).

For further details on configuring and using the Washer, refer to *"9.6.7 Washer Menu", page 38*.

6 Preparing the product for use

Any change that is not expressly approved by the manufacturer will invalidate the guarantee.

All other parts must not be disassembled or tampered (excepting for mounting and maintenance operations according the present manual).

6.1 Safety precautions before use

The building must be equipped with a 20A maximum bipolar protection circuit (magneto thermal), that must include a bipolar automatic-type circuit breaker, which must also envisage earth fault current protection (magneto-thermal + differential) with minimum distance of 3mm between contacts.

The appliance includes moving parts. Make sure that the unit is positioned where it is inaccessible under normal operating conditions. Attach the warning label supplied with the appliance, placing it near the unit so that it can be seen easily.

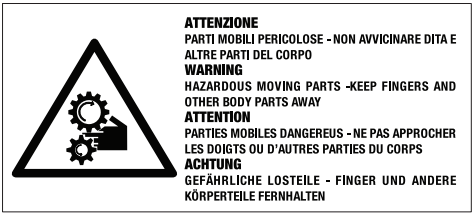


Fig. 02

6.2 Contents and unpacking

When the product is delivered, make sure that the package is intact and that there are no signs that it has been dropped or scratched.

If there are obvious signs of damage, contact the supplier immediately.

Keep the packaging in case you need to send the product for repairs.

Check the contents to make sure they correspond with the list of materials as below:

- Positioning unit ULISSE COMPACT THERMAL
- Accessories box:
  - Serial extension cable
  - Label
  - Silicon sheath
  - Ties
  - Instructions manual

6.3 Safely disposing of packaging material

The packaging material can all be recycled. The installer technician will be responsible for separating the material for disposal, and in any case for compliance with the legislation in force where the device is to be used.

Bear in mind that if the material has to be returned due to a fault, using the original packaging for its transport is strongly recommended.

6.4 Preparatory work before installation

6.4.1 Attaching the support

There are two kinds of support, choose the most suitable one for your installation and follow all the instructions given in this section.

The device should be assembled vertically. Any other position could impair the performance of the appliance. Do not attach the device upside down.

Take special care when attaching and fastening down the apparatus. If it is to be attached to a concrete surface you must use dowel pins with a traction torque rating of at least 300daN each; for a metal surface use screws with a diameter of at least 8 mm and of an appropriate length.

6.4.1.1 Attachment with bracket (optional)

The bracket is drilled to make it easy the connection cables through it.

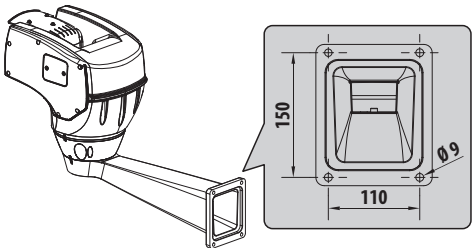


Fig. 03

6.4.1.2 Attachment with a pole support (optional)

The column support allows the internal passage of the connection cables.

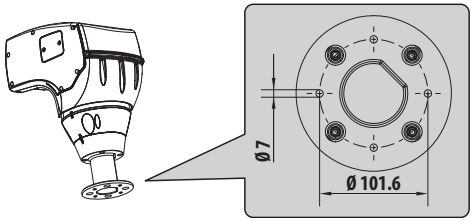


Fig. 04

6.4.2 Cables management

The connection cables should not be accessible from the outside; what is more, since the cable could be pulled out it is necessary to fasten it securely to the pole in order to prevent excessive weight pulling it out by accident and rendering the apparatus unsafe.

You must use cables suited to the type of installation.

Insert the cables into the support so that they protrude by about 50cm.

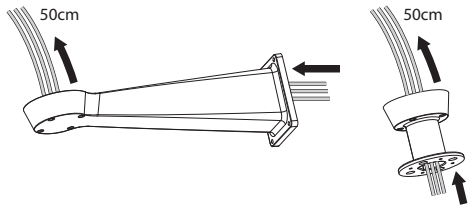


Fig. 05

7 Assembling and installing

Only specialised personnel should be allowed to assemble and install the device.

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

7.1 Installation

7.1.1 Connecting the cables to the base

Do not make any changes or install connections that are not included in this handbook. Failure to follow the connection instructions that are given in the handbook may create serious safety hazards for people and for the installation.

Do not change the wiring in the product as it is supplied to you. Failure to follow this instruction may create serious safety hazards for people and for the installation, and will also invalidate the guarantee.

Keep a connection diagram for future reference.

Insert the cables into the cable glands and, holding the base at about 20cm from the support, lock the cable glands with a torque wrench setting of 5Nm. The cable glands are suitable for cables with diameters of between 5 and 10mm.

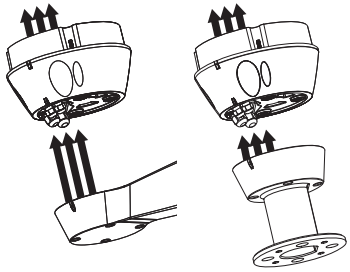


Fig. 06

7.1.2 Fixing the base to the support

Use the screws and the washers supplied with the base.

After having positioned gasket (01), fasten base (02) on support (03) using screws (04), toothed spring washers (05) and the flat washers (06). Insert the screw-sealing OR (07).

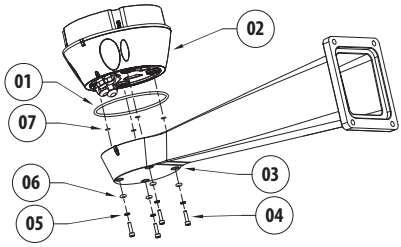


Fig. 07

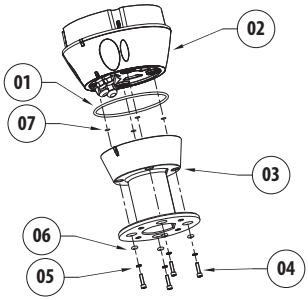


Fig. 08

Align the 3 notches on the base with those on the support as shown in the following figure.

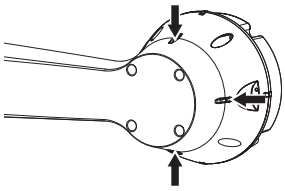


Fig. 09

Apply a Loctite 243® type thread-locker on the holes of the screws.

Fasten with tightening torque of 4Nm.

7.1.3 Connection of the power supply

The device is available in versions for different power supply voltages: the value for the particular device is shown on its identification label.

Always make the base connections with the power supply disconnected and the circuit-breaker open.

When commencing installation make sure that the specifications for the power supply for the installation correspond with those required by the device.

Make sure that the power source and connecting cables are suitable for the power consumption of the system.

Earth cable should be about 10mm longer than the other two, so that it will not be disconnected accidentally if the cable is stretched or pulled.

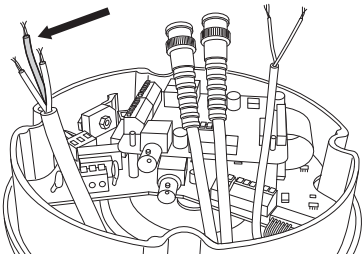


Fig. 10

The power supply cable should also be covered by the silicone sheath (01) supplied for this purpose, and fastened with the corresponding tie (02). Furthermore, all signal cables must be grouped together by means of a strap (03).

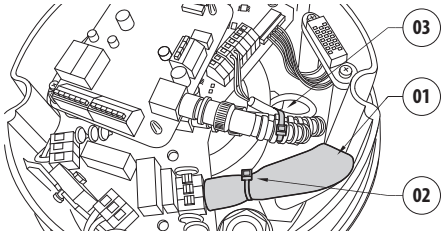


Fig. 11

The building must be equipped with a 20A maximum bipolar protection circuit (magneto thermal), that must include a bipolar automatic-type circuit breaker, which must also envisage earth fault current protection (magneto-thermal + differential) with minimum distance of 3mm between contacts.

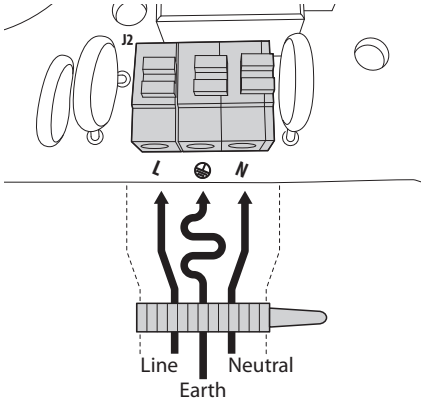


Fig. 12

Connect the power supply cables to the clamp as described in the table below:

POWER SUPPLY CONNECTION	
Power supply 24Vac	
Colour	**Clamps**
Defined by the installer	(N) Neutral
Defined by the installer	(L) Phase
Yellow/Green	Earth
Power supply 230Vac	
Colour	**Clamps**
Blue	(N) Neutral
Brown	(L) Phase
Yellow/Green	Earth
Power supply 120Vac	
Colour	**Clamps**
Blue	(N) Neutral
Brown	(L) Phase
Yellow/Green	Earth

Tab. 01

Only for products marked UL intended for the North American market, use a class 2 UL listed transformer.

Use the appropriate junction-box UPTJBUL to connect the power supply line. For further information, refer to the product use and installation manual.

7.1.4 Video cables connection

The installation is type CDS (Cable Distribution System), do not connect it to SELV circuits.

In order to reduce the risk of fire, only use cable sizes greater than or equal to 26AWG.

7.1.4.1 Connecting the main video

The video signal is present on connectors J5 and J7 of the board. Only use one connector.

Connector J5: Connect the screen and the central cable to terminals **GND** and **CVBS** respectively.

J7 connector: Connect the coaxial cable to the **BNC** connector (not supplied) and then connect it to connector J7.

The terminals accept cables with sections between 1.5mm² (AWG16) and 0,5mm² (AWG30).

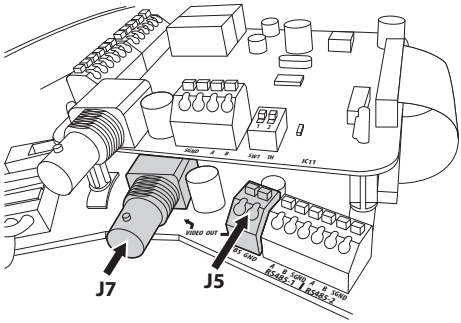


Fig. 13

7.1.4.2 Connecting the secondary video

CN3 connector: Connect the coaxial cable to the **BNC** connector (not supplied) and then connect it to connector CN3.

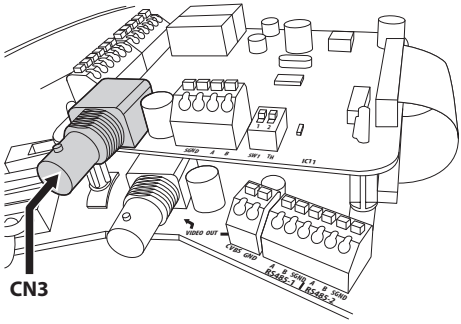


Fig. 14

7.1.4.3 Video signals output (models with double camera)

Description of video outputs:

- **Main Video**: The main video output (connectors J5-J7, *Fig. 13, page 15*) is used to transmit the video signal of the integrated module.
- **Secondary Video**: The second video output (connector CN3, *Fig. 14, page 15*) allows the selection of the video signal of the thermal camera or of the integrated module (*"10.11 Switching of the secondary video output", page 45*). The default video signal is that of the thermal camera.

7.1.4.4 Video signal output (only for models with thermal camera)

Description of video outputs:

- **Main Video**: In all models fitted with thermal camera only, the main video output (connectors J5-J7, *Fig. 13, page 15*) is used for the transmission of the thermal camera video signal.
- **Secondary Video**: The secondary video signal (connector CN3, *Fig. 14, page 15*) is not used.

7.1.5 Connecting the direct control line of the thermal camera RS485-3 (only for models with double camera)

The installation is type TNV-1, do not connect it to SELV circuits.

In order to reduce the risk of fire, only use cable sizes greater than or equal to 26AWG.

The thermal camera can be externally controlled by means of connector's CN4 serial line (*"9.6.10 Thermal Camera Menu", page 39*).

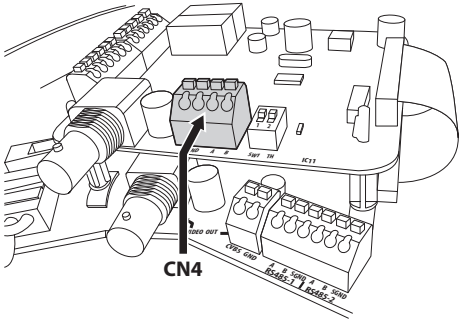


Fig. 15

7.1.6 Setting the DS1 video format (only for models with thermal camera)

Dip-switch 1 selects the output video format type.

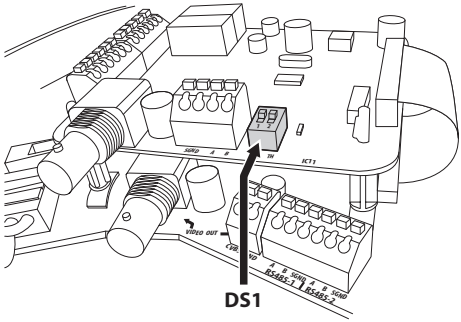


Fig. 16

VIDEO AND TELEMETRY CONFIGURATION (DS1)			
Description	**SW 1**	**SW 2**	**Configuration**
Video format	ON	-	PAL video format
	OFF	-	NTSC video format

Tab. 02

For models fitted with a double camera the position of the dip-switch is irrelevant.

7.1.7 Termination of the RS485-3 serial line (DS1)

Dip-switch 2 enables the termination (120 Ohm) of the serial line.

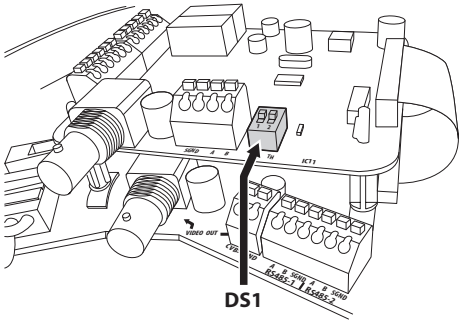


Fig. 17

VIDEO AND TELEMETRY CONFIGURATION (DS1)			
Description	**SW 1**	**SW 2**	**Configurazione**
Serial line termination	-	ON	RS485-3 termination enabled
	-	OFF	RS485-3 termination disabled

Tab. 03

7.1.8 Telemetry line connections

The installation is type TNV-1, do not connect it to SELV circuits.

In order to reduce the risk of fire, only use cable sizes greater than or equal to 26AWG.

The product is supplied with 2 RS485 (*Tab. 04, page 17*) serial communication lines which can be configured in various ways according to the positions of dip-switches 5 and 6 on the **Serial (DIP 1)** of the CPU board (*"7.1.14 Serial communication lines (DIP1)", page 21*).

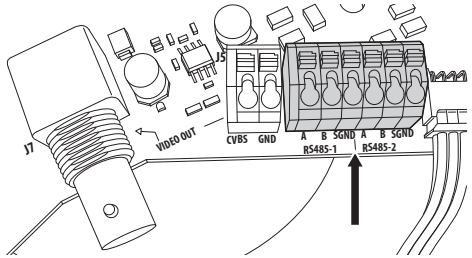


Fig. 18

SERIAL LINE	CLAMP	DESCRIPTION
RS485-1	A (+)	RS485 line (1)
	B (-)	RS485 line (1)
	SGND	RS485-1 line reference
RS485-2	A (+)	RS485 line (2)
	B (-)	RS485 line (2)
	SGND	RS485-2 line reference

Tab. 04

7.1.9 Connecting the alarm board

The Alarm Board, if present, is located on the base of the unit, as shown in the figure here below.

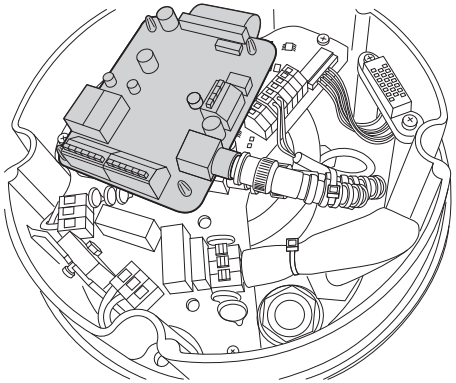


Fig. 19

It features six alarm contacts and two output relays with clean contact. There are two recognized alarms type:

- Clean contact alarm (5 alarm inputs available);
- Energised alarm (1 alarm input available, only for controlling the level of the float in the UPTWAS) tank.

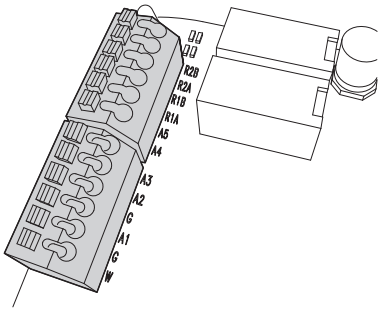


Fig. 20

TERMINAL	DESCRIPTION
W	Washer float alarm *
G	W alarm ground or A1-A5 alarms ground
A1	Alarm 1 (clean contact)
G	A1-A2-A3-A4 A5 alarms ground
A2	Alarm 2 (clean contact)
A3	Alarm 3 (clean contact)
A4	Alarm 4 (clean contact)
A5	Alarm 5 (clean contact) **

Tab. 05 *Alarm input contemplated only for UPTWAS, to check the level of liquid in the Washer tank.

All alarms have an approximate reach of 200 metres, which can be obtained using an unshielded cable with a minimum section of 0.25 sq.mm. (AWG 24).

7.1.9.1 Connecting an alarm with clean contact (dry contact)

For a clean contact alarm (alarms A1, A2, A3, A4 and A5), carry out the following connection:

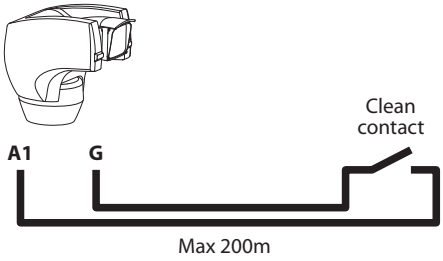


Fig. 21

The alarm switch can be NO (normally open) or NC (normally closed).

For further details on configuring and using the alarms, refer to *"9.6.6.1 Alarms menu", page 37*.

7.1.9.2 Relay Connection

Relays are located inside R1A and R1B (Relay 1) and inside R2A and R2B (Relay 2) connectors. Relays do not have polarity and therefore both terminals A or B of the same relay can be used, for alternating or continuous current voltages.

TERMINAL	DESCRIPTION
R1A	Relay 1 terminal A
R1B	Relay 1 terminal B
R2A	Relay 2 terminal A
R2B	Relay 2 terminal B

Tab. 06

Relays can be used for low working voltages only (up to 30 Vac or 60 Vdc) and with a maximum current of 2A. Use cables with a section suitable for the load to be controlled. The terminal can house cables with a section comprised between 0.5 and 1.5mm² (AWG 30-16).

For further details on configuring and using the relays, refer to *"9.6.6.1 Alarms menu", page 37*, page 38.

7.1.9.3 Connecting the Washer

To connect the pump of the Washer UPTWAS to ULISSE COMPACT THERMAL refer to the following connection method:

UPTWAS (CN4 CONNECTOR)	ALARM BOARD ULISSE COMPACT THERMAL (CONNECTOR CN1)
CMD	R2A
GND	R2B

Tab. 07

In this case relay 2 is used only to activate the Glass Washer Pump control on the board UPTWAS (*"9.6.7 Washer Menu", page 38*).

If the tank with float is used, it is also necessary to carry out the following wiring:

UPTWAS (CN4 CONNECTOR)	ALARM BOARD ULISSE COMPACT THERMAL (CONNECTOR CN2)
ALM	W
ALM/G	G

Tab. 08

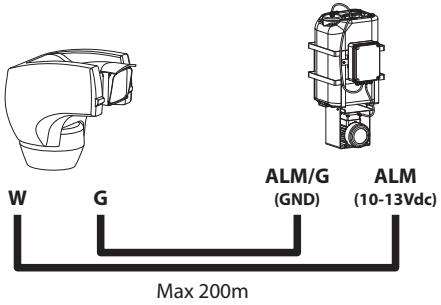


Fig. 22

For further details on the Washer, refer to *"9.6.7 Washer Menu", page 38*, page 39.

7.1.10 Fixing the top unit

Point the self-centering connector (01) of the upper unit. Point the side set (02) so that it faces the frontal vision of the camera. Position the upper part on the base in the same direction shown in the figure.

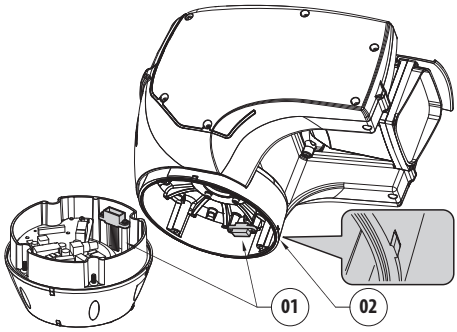


Fig. 23

The side sets on the base and on the upper unit are thus aligned in the only possible position.

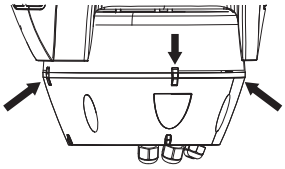


Fig. 24

Fasten the upper unit (01) to the base (02) by means of the fastening screws (03), the notched washers (04) and the flat washers (05). Make sure that the base gasket is in position and in good state (06).

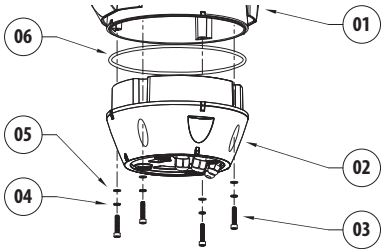


Fig. 25

Apply a Loctite 243® type thread-locker on the holes of the screws.

Fasten using a torque wrench setting of 4Nm.

7.1.11 Dip-switch configuration

Before powering the device it must be configured correctly by setting the dip-switches inside the configuration window.

Open the window by undoing the screws as shown in the illustration:

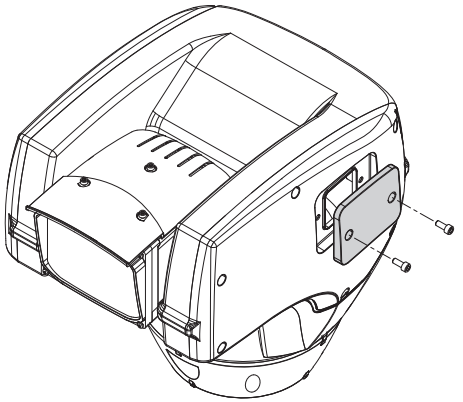


Fig. 26

The following diagram represents the position of the dip-switches when the configuration window is opened.

When the dip-switch rocker (SW) is up it represents the value 1 (ON) while if it is down it represents the value 0 (OFF).

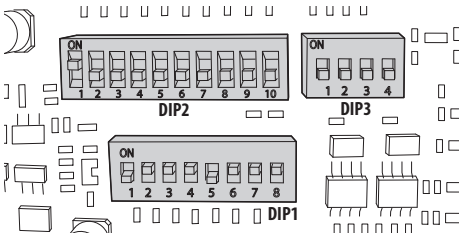


Fig. 27

7.1.12 Setting the configuration check mode (DIP1)

- **SW1=ON**: **Display Configuration**. To be used only to verify the configuration at the end of the setting. During normal operation make sure the lever is on OFF (**DIP1=OFF**).

7.1.13 Setting the baud rate (DIP1)

Dip-switches 4, 3 and 2 are used to set the communication rate of the device according to the table below.

SETTING THE BAUD RATE (DIP1)						
Description	**SW 1**	**SW 2**	**SW 3**	**SW 4**	**SW 5-6-7-8**	**Configuration**
Baud-rate selection	-	ON	ON	ON	-	38400 baud
	-	OFF	ON	ON	-	19200 baud
	-	ON	OFF	ON	-	9600 baud
	-	OFF	OFF	ON	-	4800 baud
	-	ON	ON	OFF	-	2400 baud
	-	OFF	ON	OFF	-	1200 baud
	-	ON	OFF	OFF	-	600 baud
	-	OFF	OFF	OFF	-	300 baud
Configurations display	ON		-	-	-	Display enabled
	OFF		-	-	-	Display disabled

Tab. 09

7.1.14 Serial communication lines (DIP1)

The product is designed with two RS485 serial communication lines which can have various settings according to the positions of dip-switches 5 and 6 on the **DIP1** selector.

SERIAL COMMUNICATION LINES (DIP1)					
Description	**SW 1-2-3-4**	**SW 5**	**SW 6**	**SW 7-8**	**Configuration**
Serial lines	-	ON	ON	-	*"7.1.14.1 Two-way RS485 TX/RX line", page 21*
	-	OFF	ON	-	*"7.1.14.2 Line RS485-1 reception, line RS485-2 repetition", page 21*
	-	ON	OFF	-	*"7.1.14.3 Two-way RS422 line", page 21*
	-	OFF	OFF	-	*"7.1.14.4 One-way RS485 line", page 22*

Tab. 10

7.1.14.1 Two-way RS485 TX/RX line

With this type of setting it is possible to obtain a bi-directional, half/duplex, communication on the RS485-1 line.

The RS485-2 serial line is not used.

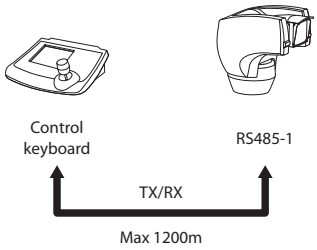


Fig. 28

7.1.14.2 Line RS485-1 reception, line RS485-2 repetition

With this type of setting it is possible to connect more than one device in cascade. The signal is repeated from every unit, making it possible to markedly increase total distance.

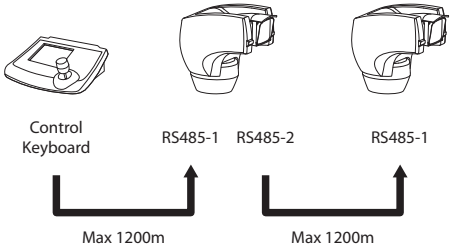


Fig. 29

It only works with mono-directional protocols.

This configuration does not allow the remote updating of the firmware.

7.1.14.3 Two-way RS422 line

This setting allows full duplex communication according to the RS422 standard.

Line RS485-1 is always in receiving mode (RS422-RX).

Line RS485-2 is always in transmission mode (RS422-TX).

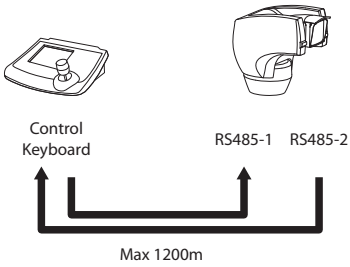


Fig. 30

7.1.14.4 One-way RS485 line

The first line (RS485-1) will operate according to the settings in the **Address**, **Baudrate** and **Protocol** dip-switch.

The RS485-2 serial line is not used.

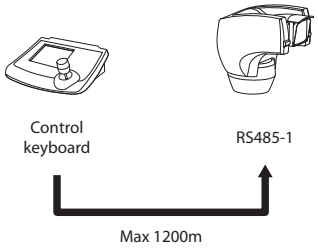


Fig. 31

It only works with mono-directional protocols.

This configuration does not allow the remote updating of the firmware.

7.1.15 Serial line terminations (DIP1) and connections

The diagram shows two dip-switches that are used to configure termination of the serial line.

Every peripheral that is situated at the end of a line must be terminated using the appropriate dip-switch in order to prevent signal reflection and distortion.

Dip-switches 7 and 8 terminate serial lines RS485-1 and RS485-2 respectively.

SERIAL LINE TERMINATIONS (DIP1) AND CONNECTIONS				
Description	**SW 1-2-3-4-5-6**	**SW 7**	**SW 8**	**Configuration**
Serial line termination			ON	RS485-2 termination enabled
			OFF	RS485-2 termination disabled
		ON		RS485-1 termination enabled
		OFF		RS485-1 termination disabled

Tab. 11

7.1.16 Setting the protocol (DIP3)

Video positioning systems with the ULISSE COMPACT THERMAL line can be controlled by a range of protocols.

SETTING THE PROTOCOL (DIP3)				
SW 1	**SW 2**	**SW 3**	**SW 4**	**Protocol**
ON	OFF	ON	OFF	PANASONIC
OFF	OFF	ON	OFF	ERNITEC
OFF	ON	OFF	OFF	SENSORMATIC
ON	OFF	OFF	OFF	PELCO D
OFF	OFF	OFF	OFF	MACRO (VIDEOTEC)

Tab. 12

7.1.17 Setting the address (DIP2)

ULISSE COMPACT THERMAL address can be set from 1 to 1023. The address is selected based on the binary coding, by means of DIP2 10 dip-switches (*"16 Appendix A - Dip-switch address table", page 55*).

8 Switching on

Systems in the ULISSE COMPACT THERMAL line are switched on by simply connecting the power supply, and switched off by disconnecting the power.

The automatic pre-heating (de-ice) process could be started whenever the device is switched on and the air temperature is below 0°C. This process is used to ensure that the device works properly even at low temperatures. The duration ranges between 60 and 120 minutes, depending on conditions.

8.1 Before powering the device

Make sure that the ULISSE COMPACT THERMAL system and other components of the installation are closed so that it is impossible to come into contact with live parts.

Do not stay in the vicinity of the device when it is powered. Always disconnect the power supply before working on the device.

Make sure that all parts are fastened down firmly and safely.

The first time the device is switched on we recommend making sure it is configured correctly.

To do this, disconnect the power supply, remove the dip-switch protection window and set the **Display Configuration** dip-switch rocker (**DIP1, SW1**) to **ON**.

Power the device and after a few seconds it will be possible to check the settings on the screen.

After completing the check, switch off the device and re-toggle the **Display Configuration** dip-switch rocker (**DIP1, SW1**).

Close the window and re-connect the power supply.

8.2 Checks list

While it is switching on, the device displays a list of the checks it has to carry out before starting normal operation.

```
STARTUP
Reading Parameters...OK
Zero axis............OK
Camera...........36x.OK
Temperature probe....OK
IR Spotlight.........--
Wiper................--
Optional Board.......--
```

Fig. 32

If one of the checks fails (ERR), seek assistance. The message "- -" means that the pan & tilt is not fitted with the described option.

9 Configuration

9.1 On Screen Menu (OSM)

During normal ULISSE COMPACT THERMAL operation it is possible to activate the **On Screen Menu** in order to set the advanced functions using the corresponding key/s ((refer to the manual of the keyboard in use or to *Tab. 14, page 47*).

Exit the **On Screen Menu** with **Zoom Wide** (or Zoom-).

9.1.1 How to use the joystick

All operations in the menus are carried out using the joystick.

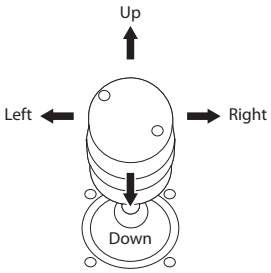


Fig. 33 Pan & tilt.

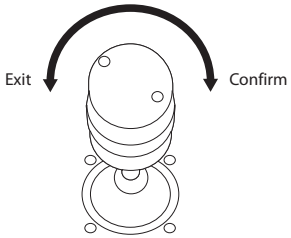


Fig. 34 Zoom wide & tele.

If using a control keyboard with a dual axis joystick, use the Zoom Wide and Zoom Tele keys to carry out the Exit and Confirm commands.

9.2 How to move around the menus

Each page of the OSM shows a list of parameters or sub-menus that can be selected by the operator. To scroll through the parameters move the cursor by operating the joystick (up and down).

```
 ADVANCED
------------------------
1 ZOOM SPEED      :  7
2>DIGITAL ZOOM    :  N
3 WIDE DYNAMIC    :  Y
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  Y
6 FOCUS                >
7 EXPOSURE             >
8 INFRARED             >
9 WHITE BALANCE        >
```

Fig. 35

The symbol **>** at the end of a line indicates the presence of a specific submenu. To enter the submenu just confirm the menu item. To exit the submenu use the **Exit** function (**Zoom Wide**).

```
 ADVANCED
------------------------
1>ZOOM SPEED      :  7
2 DIGITAL ZOOM    :  N
3 WIDE DYNAMIC    :  Y
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  Y
6 FOCUS                >
7 EXPOSURE             >
8 INFRARED             >
9 WHITE BALANCE        >
```

Fig. 36

9.3 How to change the settings

Move the cursor to the parameter to be changed and confirm. The field will start flashing, indicating that it is in change mode. Operating the joystick (up and down) will show the alternative choices.

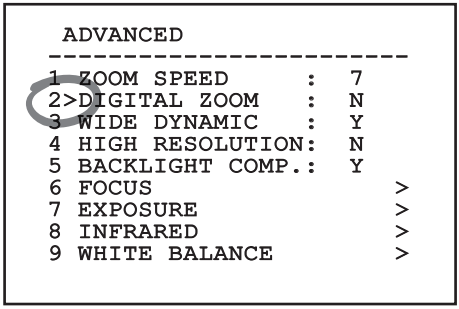


Fig. 37

After identifying the desired selection, confirm.

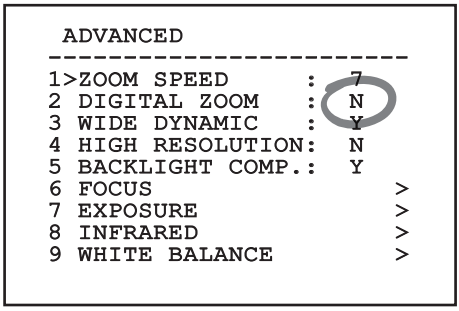


Fig. 38

The parameter will stop flashing to confirm the choice.

9.4 How to change the numeric fields

Move the cursor to the parameter to be changed, then confirm.

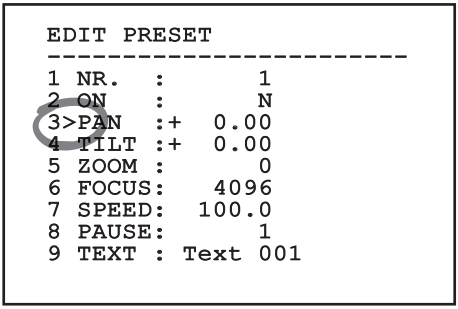


Fig. 39

The first digit in the numeric field to be changed will flash and the last line of the display will show the accepted limits for the field. Move in the field (left and right) and change the sign or the numeric value (up and down).

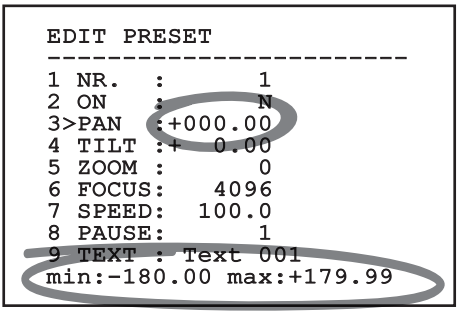


Fig. 40

After making the change, confirm. The cursor returns to the left and the modified figure stops flashing. The field will be forced to the minimum or maximum allowed value if you try to insert a value outside the limits.

9.5 How to change text

Move the cursor on the parameter to be edited and confirm.

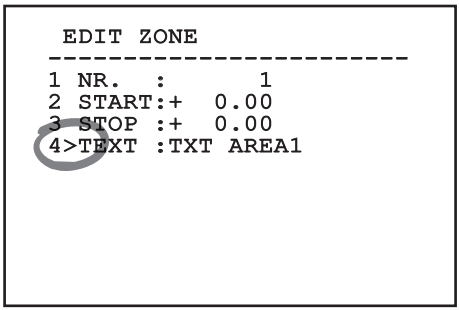


Fig. 41

The text editing display will open. Symbol ☐ will position itself under the character that can be edited while the cursor > positions itself to the right of the character to be entered.

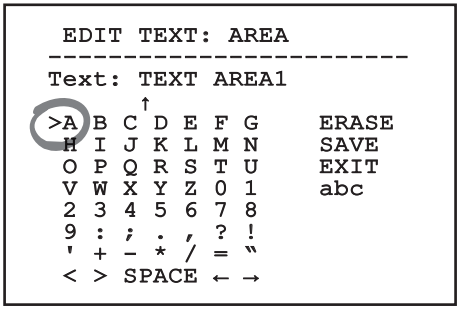


Fig. 42

You can move inside the menu using the joystick.

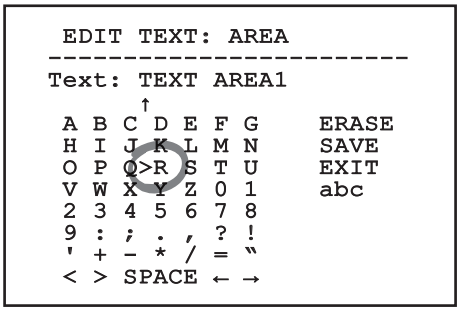


Fig. 43

Press **Enter** to enter the required character.

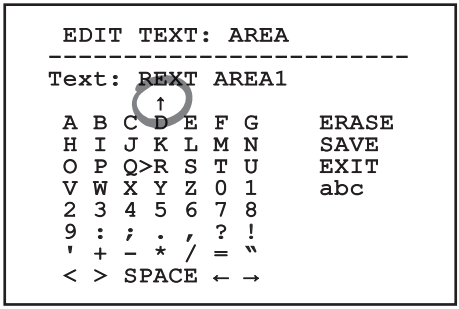


Fig. 44

Use:

- **ERASE**: To delete the whole text string.
- **SAVE**: To store the new text.
- **EXIT**: To exit the menu.
- **abc**: To display lower case letters.

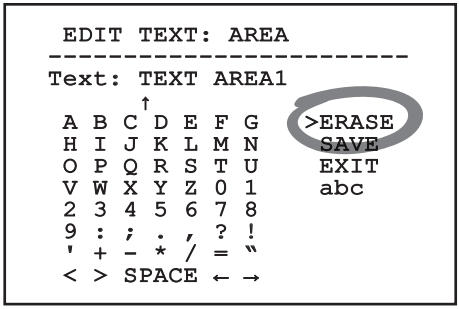


Fig. 45

To exit the menu you can also use the **Zoom Wide** key.

9.6 Configuring the system

9.6.1 Main menu

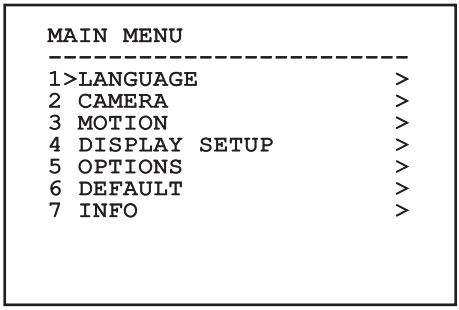


Fig. 46

9.6.2 Language

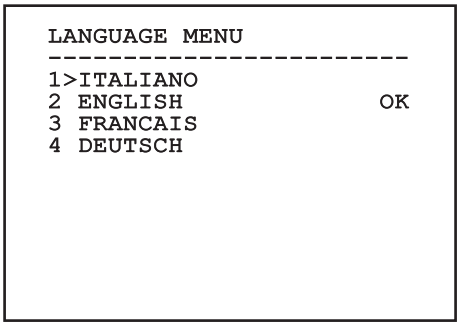


Fig. 47

9.6.3 Camera menu

01. **Configuration**: Sets one of the default configurations for the SONY module. :
    - **Standard**: Sets the standard operating mode for the camera.
    - **Low Light**: Sets the operating mode for dimly lit environments.
    - **Far Mode**: Sets the operating mode for large areas. It enables the proportional zoom and the digital zoom.
    - **Custom**: Signals that the user has manually selected the parameters of the camera.
02. **Area titling**: Allows access to the area titling submenu.
03. **Masking**: Allows access to the dynamic masking submenu.
04. **Advanced**: Allows access to the advanced settings submenu of the SONY module.

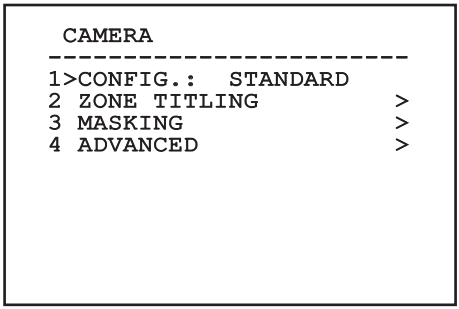


Fig. 48

9.6.3.1 Zone titling menu

This function allows setting up to eight (variable dimension) areas with titling option.

From the **Zone Titling** menu it is possible to set the following parameters:

01. **Enabling**: To enable onscreen display of the message associated with the area currently being shown.
02. **Edit area**: Allows access to the zone parameter setting submenu .

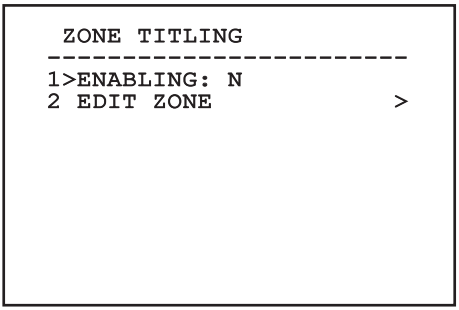


Fig. 49

9.6.3.2 Zone titling menu (Edit Zone)

Once inside the **Edit Zone** menu it is possible to set the following parameters.

01. **Number**: Selects the area to be edited.
02. **Start**: Sets the initial position of the area.
03. **Stop**: sets the final position of the area.
04. **Text**: Modifies the text which is displayed when moving within the zone.

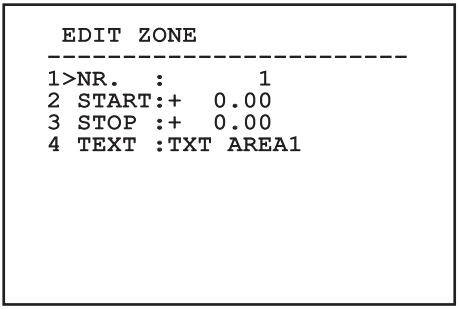


Fig. 50

Example: To enable titling of zone 1 when the device is between +15° and +45°, it is necessary to:

- Enable area titling by setting **Y** as the value of **Enabling** under the **Area Titling** menu.
- Set **1** as the value of parameter **Nr** under the **Edit Area** menu.
- Set **+15.00** as the value of parameter **Start** under the **Edit Zone** menu.
- Set **+45.00** as the value of parameter **Stop** under the **Edit Zone** menu.
- If necessary, edit the displayed text by selecting **Text** under the **Edit Zone** menu.

Setting the Start and Stop values of the Edit Zone menu to zero will disable text display. If there are overlapping areas, the area with the highest number will prevail.

To define zones proceed in a clockwise direction, as shown in the figure.

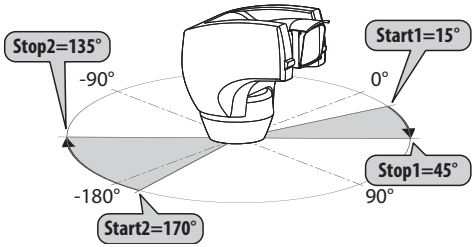


Fig. 51

The default name and position of the zones of the pan & tilt refer to the four cardinal points. The NORTH position can be modified by means of the Offset Pan parameter in the movement menu (*"9.6.4 Movement menu", page 33*).

9.6.3.3 Masking menu

Dynamic masking allows the creation of up to a maximum of 24 masks so as to obtain the masking of certain areas defined by the user.

Masks are defined in space and take account of the horizontal, vertical and zoom depth position when making the settings.

ULISSE COMPACT THERMAL automatically maintains the position and dimension of the masking, based on the displayed area.

It is possible to simultaneously display up to 8 masks.

If the device is used at maximum speed, video signal updating times become critical and it is necessary to create masks larger than the object so that it remains masked for longer during the passage and therefore cannot be seen.

To ensure full functionality, the tilt position of the masks must always be between -70 and +70 degrees; in addition , the size of the mask must be double the size of the object to be masked (both height-wise and width-wise).

From the **Masking** menu it is possible to set the following parameters:

01. **Mask Colour**: Allows you to choose the colour of the masks.
02. **Edit Masks**: Allows access to the **Edit Masks** submenu and set the dynamic masking parameters.

```
 MASKING
------------------------
1>COLOUR :      BLUE
2 EDIT MASKS            >
```

Fig. 52

9.6.3.4 Masking menu (Edit Masks)

Once inside the **Edit Masks** menu it is possibile to set the following parameters:

01. **Mask Number**: Allows you to choose the mask on which to operate.
02. **Enable Mask**: Enables or disables the selected mask.
03. **Edit Mask**: Allows the creation or editing of a mask.

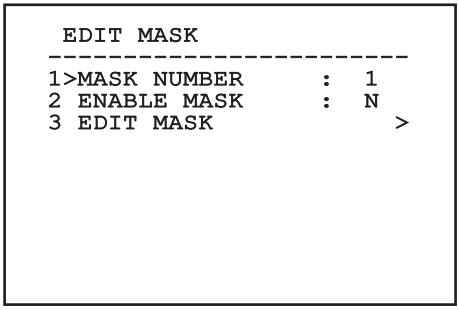


Fig. 53

Selecting the option **Edit Mask** in the menu makes it possible to set new values for the selected mask.

9.6.3.5 How to create a new mask

Choose a disabled mask by selecting **Mask Number** from the **Edit Masks** (*Fig. 53, page 29*) menu. Select **Edit Mask** to edit it.

In the following example we shall mask a flower.

- Press the **Iris Close** button to pass from **Masking** mode to **Move Camera** mode.

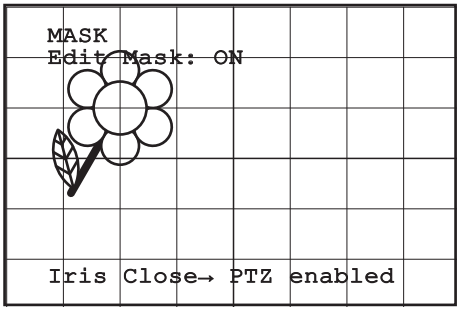


Fig. 54

- Operate the joystick on the keyboard to move the ULISSE COMPACT THERMAL and if necessary operate the zoom to centre the flower on the screen.

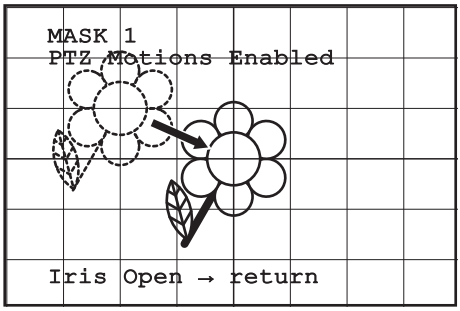


Fig. 55

- When the desired result is obtained press the **Iris Open**.

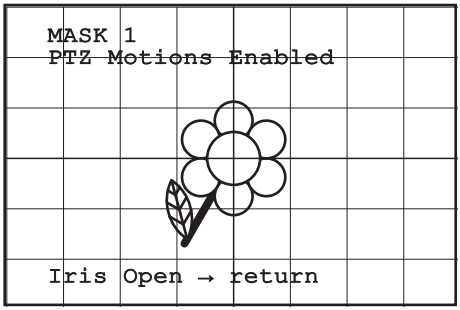


Fig. 56

- A small rectangle will appear. Operate the joystick (**Pan & Tilt**) to enlarge the rectangle until it covers the whole flower.

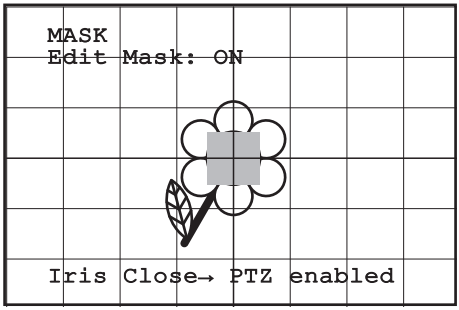


Fig. 57

- When the desired result is obtained confirm by turning the zoom to tele.

9.6.3.6 How to modify a mask

Choose an enabled mask by selecting **Mask Number** from the **Edit Masks** (*Fig. 53*, *page 29*) menu. Select **Edit Mask** to edit it.

- Operate the joystick (**Pan & Tilt**) to enlarge or reduce the rectangle until the desired effect is obtained.

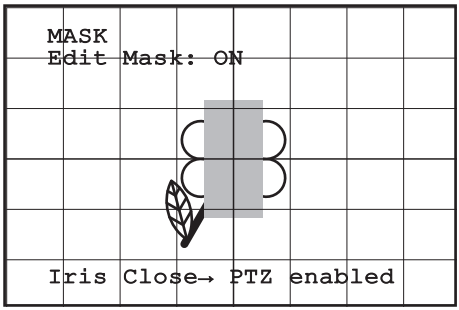


Fig. 58

- Confirm by turning the zoom to tele.

9.6.3.7 Advanced setting menu

This menu is used to configure the SONY module.

01. **Zoom**: Allows access to the **Zoom** submenu.
02. **Focus**: Allows access to the **Focus** submenu.
03. **Exposure**: Allows access to the **Exposure** submenu.
04. **Infrared**: Allows access to the **Infrared** submenu.
05. **White Balance**: Allows access to the **White Balance** submenu.
06. **Other**: Allows access to the **Other** submenu.

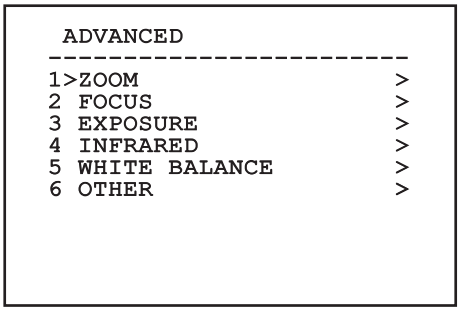


Fig. 59

9.6.3.8 Advanced setting menu (Zoom)

01. **Zoom Speed**: Sets the speed of the zoom. The speed ranges between 0 (minimum speed) and 7 (maximum speed).
02. **Digital Zoom**: Enables the digital zoom.

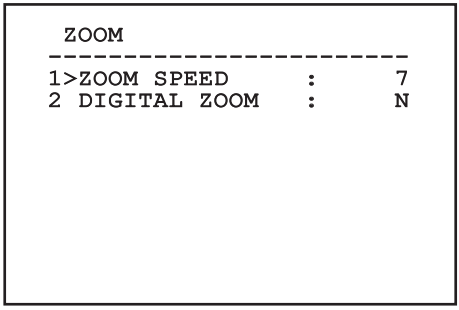


Fig. 60

9.6.3.9 Advanced setting menu (Focus)

Once inside the **Focus** menu it is possible to set the following parameters:

01. **Focus speed**: Sets the speed of the Focus. The speed ranges between 0 (minimum speed) and 7 (maximum speed).
02. **Autofocus**: Enables or disables the autofocus. When on, it is to automatically load Autofocus at any positioning or movement of the zoom, depending on the selected operating mode.
03. **Autofocus Type**: Sets the type of Autofocus. The possible values are:
    - **Normal**: Autofocus is always enabled.
    - **Interval**: The autofocus function is loaded at regular intervals of 5 seconds.
    - **Trigger**: Autofocus is loaded at every PTZ movement. This is the recommended solution.
04. **Sensitivity**: Sets the level of sensitivity. The possible values are:
    - **Normal**: Focusing at the highest possible speed. This is the recommended solution.
    - **Low**: Slowed-down focusing. It is useful in case of dim lighting as it makes the image more stable.

```
 FOCUS
------------------------
1>FOCUS SPEED    :      2
2 AUTOFOCUS      :      N
3 AUTOFOCUS TYPE:TRIGGER
4 SENSITIVITY    : NORMAL
```

Fig. 61

9.6.3.10 Advanced setting menu (Exposure)

Once inside the **Exposure** menu it is possible to set the following parameters:

01-05. **Mode**: Sets the type of exposure control Automatic, Manual, Shutter, Iris and Bright.

06. **Auto Slowshutter**: If enabled, this function automatically increases the exposure time to improve night vision.

07-08. **Compensation, Compensation Value**: Sets the exposure compensation.

09. **Backlight Compensation**: Enables the Backlight Compensation function. It improves vision of any dark zone in the image.

In automatic mode it is possible to enable Backlight compensation. This is a dynamic self-configuration menu based on the choice made and shows the parameters on which it is possible to operate.

The chosen exposure operating mode is associated to all presets.

The recommended setting is **Automatic**.

```
  EXPOSURE
------------------------
1>MODE :        AUTOMATIC



6 AUTO SLOW SHUTTER :  Y
7 COMPENSATION      :  N
8 COMPENSATION VALUE:  7
9 BACKLIGHT COMP.   :  N
```

Fig. 62

The following table shows the inserted values with the corresponding effects on the SONY module lens.

VALUE	SHUTTER		IRIS	GAIN	EXPOSURE COMPENSATION
	NTSC	PAL			
0	1/1	1/1	Closed	-3db	-10,5db
1	1/2	1/2	F28	0db	-9db
2	1/4	1/3	F22	2db	-7,5db
3	1/8	1/6	F19	4db	-6db
4	1/15	1/12	F16	6db	-4,5db
5	1/30	1/25	F14	8db	-3db
6	1/60	1/50	F11	10db	-1,5db
7	1/90	1/75	F9.6	12db	0db
8	1/100	1/100	F5	14db	1,5db
9	1/125	1/120	F6.8	16db	3db
10	1/180	1/150	F5.6	18db	4.5db
11	1/250	1/215	F4.8	20db	6db
12	1/350	1/300	F4	22db	7,5db

VALUE	SHUTTER		IRIS	GAIN	EXPOSURE COMPENSATION
13	1/500	1/425	F3.4	24db	9db
14	1/725	1/600	F2.8	26db	10,5db
15	1/1000	1/1000	F2.4	28db	-
16	1/1500	1/1250	F2	-	-
17	1/2000	1/1750	F1.6	-	-
18	1/3000	1/2500	-	-	-
19	1/4000	1/3500	-	-	-
20	1/6000	1/6000	-	-	-
21	1/10000	1/10000	-	-	-

Tab. 13

9.6.3.11 Advanced setting menu (Infrared)

Once inside the **Infrared** menu it is possible to set the following parameters:

01. **IR Mode**: If set to OFF it forces the day mode in a continuous manner (the switching on of the illuminator (if present) is carried out by means of the dusk swtich or by means of the control on the keyboard); if set to ON it forces the night mode in a continuous manner; if set to **Auto**, it activates the automatic switching of the camera.
02. **Night Level**: Sets the detection threshold of the light conditions for the night mode switching. Lower values correspond to lower lighting levels.
03. **Night Delay**: Sets the detection time of the darkness conditions, expressed in seconds, before switching to night mode.
04. **Day Level**: Sets the detection threshold of the light conditions for the day mode switching. Lower values correspond to lower lighting levels.
05. **Day Delay**: Sets the detection time of the light conditions, expressed in seconds, before switching to night mode.

To avoid false switching, we recommend choosing the higher day switching threshold and delay values.

```
INFRARED
------------------------
1>IR MODE          :   AUTO
2 NIGHT LEVEL      :      5
3 NIGHT DELAY      :      5
4 DAY LEVEL        :     20
5 DAY DELAY        :     30
```

Fig. 63

This is a dynamic self-configuration menu based on the choice made and displays the parameters on which it is possible to operate.

The automatic Day/Night switching mode of the module is strongly unadvisable when swinging is subject to repeated light variations during the night period, for example during patrol, or due to the switching on of auxiliary lighting devices, in that this can cause numerous unwanted switching, in this way compromising the functioning of the same module.

9.6.3.12 Advanced setting menu (White Balance)

Once inside the **White Balance** menu it is possible to set the following parameters:

01. **Mode**: Sets the type of control on White Balance. The possible values are:
    - **Automatic**: Sets automatic white balance. This is the recommended setting.
    - **Manual**: Enables manual setting of red and blue gains.
    - **Outdoor**: Sets fixed red and blue gains for outdoor applications.
    - **Indoor**: Sets fixed red and blue gains for indoor applications.
    - **ATW**: Enables Auto Tracing White Balance.
02. **Red Value**: Sets the value of the red gain.

03. **Blue Value**: Sets the value of the blue gain.

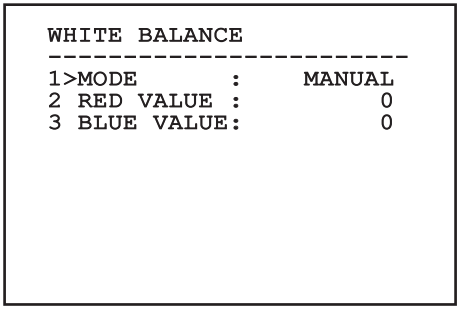


Fig. 64

This is a dynamic self-configuration menu based on che choice made and displays the parameters on which it is possibile to operate.

9.6.3.13 Advanced setting menu (Other)

01. **Sharpness**: Sets the sharpness value of the image.
02. **High Resolution**: Enables the High Resolution function. The output video signal has a higher resolution.
03. **Wide Dynamic**: Enables the Wide Dynamic function. It improves vision when some zones within the frame are much brighter than others.
04. **Stabilizer**: Enables the electronic image stabilization function.
05. **Progressive Scan**: Enables the Progressive Scan function. Gives a more stable image when the Pan & Tilt is connected to a video server.
06. **Noise Reduction**: Sets the noise reduction level. Vary the parameter according to the environmental conditions to obtain a higher contrast image.

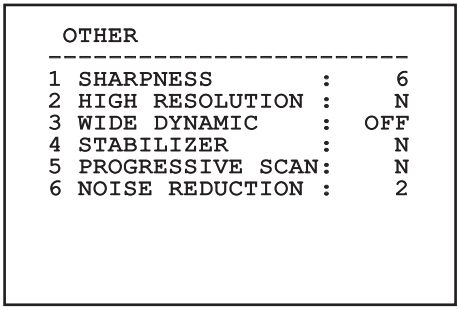


Fig. 65

9.6.4 Movement menu

01. **Configuration**: Sets one of the default configurations of the pan & tilt.
    - **Standard**: Sets the standard movement speed.
    - **Low Speed**: Sets the **Low Speed** mode that slows down all pan & tilt operating speeds.
    - **Wind Mode**: Sets the movements speed to adjust them to environments subject to vibrations and/or windblasts.
    - **High Perf**: Establishes that all the movements are carried out at the maximum possible speed.
    - **Custom**: Signals that the user has manually selected the movement speeds of the unit.
02. **Offset Pan**: The pan & tilt has a mechanically defined 0° position. The Offset Pan function allows the definition of a different 0° position using software.
03. **Manual Control**: To access the submenus operating the parameters associated with the manual movements of the device.
04. **Preset**: To access the submenus used to to edit Preset values.
05. **Patrol**: To access the submenus used to edit Patrol values.
06. **Autopan**: To access the submenus used to edit Autopan values.
07. **Motions Recall**: To access the submenu which manages automatic load of the movements.
08. **Advanced**: Allows access to the advanced settings submenu.

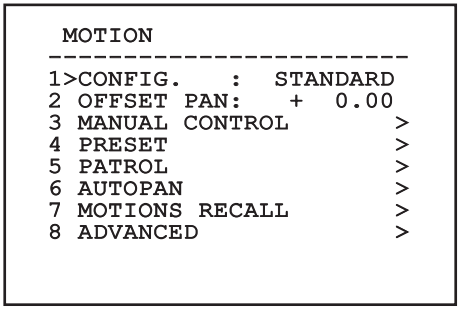


Fig. 66

9.6.4.1 Manual Control Menu

01. **Maximum Speed**: Sets the maximum manual speed.
02. **Fast Mode**: Enables the **Fast** mode. When enabled, this option is used to move fastly the pan & tilt by moving the joystick to the limit stop.
03. **Speed With Zoom**: Enables the option Speed with ZOOM. When enabled, this parameter automatically slows down the PAN & TILT speed, based on the ZOOM factor.
04. **Tilt factor**: Sets the reduction factor of the tilt axis manual speed.
05. **Autoflip**: Enables the autoflip function (i.e. when the tilt reaches the end of the stroke, it automatically rotates the pan & tilt by 180°), making it easier to follow the objects along corridors or roads.
06. **Movement Limits**: To access the **Limits** menu

```
 MANUAL CONTROL
------------------------
1>MAXIMUM SPEED   :100.0
2 FAST MODE       :    Y
3 VEL. WITH ZOOM  :    N
4 TILT SCALE FACT.:    2
5 AUTOFLIP        :    Y
6 MOVEMENT LIMITS      >
```

Fig. 67

9.6.4.2 Manual Control Menu (Limits)

Once inside the **Limits** menu it is possible to set the following parameters:

01. **Pan Limits**: Enables the limits of Pan.
02. **Pan Start**: Sets the start limit of Pan.
03. **Pan End**: Sets the end limit of Pan.
04. **Tilt Limits**: Enables the limits of Tilt.
05. **Tilt Start**: Sets the start limit of Tilt.
06. **Tilt End**: Sets the end limit of Tilt.

```
 LIMITS
------------------------
1>PAN LIMITS  :       N
2 PAN START   : +  0.00
3 PAN END     : +  0.00
4 TILT LIMITD :       N
5 TILT START  : +  0.00
6 TILT END    : +  0.00
```

Fig. 68

9.6.4.3 Preset Menu

01. **Edit Preset**: Allows access to Edit Preset menu.
02. **Utilities Configuration**: Allows access to Utilities Configuration menu

```
 PRESET
------------------------
1>EDIT PRESET          >
2 PRESET UTILITIES     >
```

Fig. 69

9.6.4.4 Preset Menu (Edit Preset)

Once inside the **Edit Preset** menu it is possible to set the following parameters:

01. **Number**: The Preset number to be edited.
02. **Enabling**: Enabling preset.
03. **Pan**: Pan position in degrees.
04. **Tilt**: Tilt position in degrees.
05. **Zoom**: Zoom position.
06. **Focus**: Daytime and night-time position of the focus.
07. **Speed**: The speed at which the position is reached when preset is recalled from the Patrol and Scan function.
08. **Pause**: Sets the dwell time in seconds before starting the next movement in Patrol.
09. **Text**: The text that is displayed when the preset position is reached.

```
 EDIT PRESET
------------------------
1>NR.   :       1
2 ON    :       N
3 PAN   :+   0.00
4 TILT  :+   0.00
5 ZOOM  :       0
6 FOCUS:    4096 - 5600
7 SPEED:   100.0
8 PAUSE:        1
9 TEXT : Text 001
```

Fig. 70

From the menu it is possible to directly store the preset by sending the **Iris Close** command that enables the pan & tilt movements.

9.6.4.5 Preset Menu (Preset Utilities)

Once inside the **Utilities Configuration** menu it is possible to set the following parameters:

01. **Daytime A.Focus**: Enables the use of the autofocus when loading the preset in daytime mode. To guarantee fast and accurate focusing of the image, disable the automatic focus.
02. **Night-time A.Focus**: Enables the use of the autofocus when loading the preset in night-time mode. We advise enabling the automatic focus when the pan & tilt is fitted with an infrared illuminator, as the focal point varies depending on whether the light is visible or infrared.
03. **Scan Speed**: This is the reference speed used when a preset position is recalled by the **Scan** function.
04. **Default Speed**: Changes the default speed of the Presets. This value is used based on the function **Set Speed?** to assign the same speed to all Presets .
05. **Default Dwell time**: Changes the default pause of the Presets. This value is used based on the function **Set Dwell Time?** to assign all Presets the same pause time.
06. **Set Speed**: To assign all Presets the same default speed.
07. **Set Dwell time**: To assign all Presets the same default dwell time.

```
 PRESET UTILITIES
------------------------
1>AUTOFOCUS DAY   :      N
2 AUTOFOCUS NIGHT:       Y
3 SCAN SPEED      : 200.0
4 DEFAULT SPEED   : 100.0
5 DEFAULT DWELL   :      3
6 SET SPEED?
7 SET PAUSE?
```

Fig. 71

9.6.4.6 Patrol Menu

01. **First Preset**: Sets the first preset of the Patrol sequence.
02. **Last Preset**: Sets the last preset of the Patrol sequence.
03. **Random Mode**: Enables random execution. The sequence is re-calculated on a continuous basis.

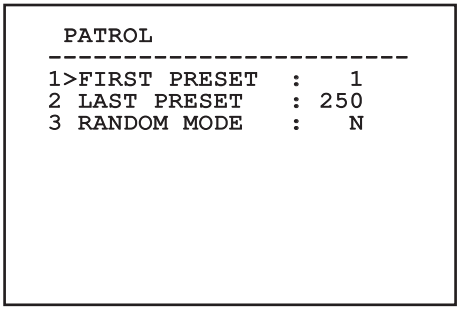


Fig. 72

9.6.4.7 Autopan Menu

01. **Preset Outward Movement**: Sets the initial position of the Autopan.
02. **Preset Return Movement**: Sets the final position of the Autopan.
03. **Outward Movement Speed**: Sets the speed of the outward movement of the Autopan.
04. **Return Speed**: Sets the speed of the return of the Autopan.

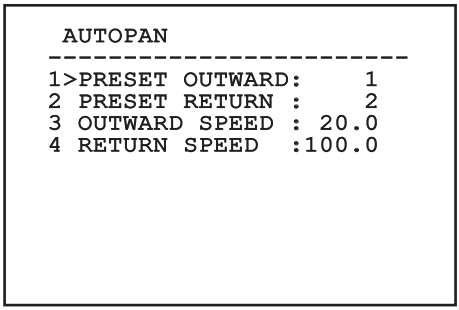


Fig. 73

9.6.4.8 Motion Recall Menu

It is possibile to set the ULISSE COMPACT THERMAL so that, after a given inactivity interval, it automatically carries out the movement function set by the operator.

From the menu it is possible to set the following parameters:

01. **Movement Type**: Choice of type of movement to be loaded (None, Home, Autopan, Patrol, Tour 1, Tour 2, Tour 3).
02. **Movement Delay**: The time (in seconds) that needs to elapse from the state of inactivity of the Joystick before loading the set movement.

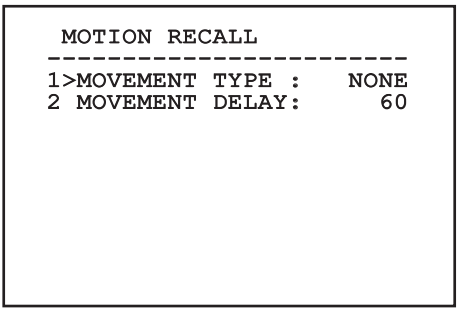


Fig. 74

9.6.4.9 Advanced Menu

01. **Static Control**: Enables control of the position only when the pan & tilt is stopped.
02. **Dynamic Control**: Enables control of the position only when the pan & tilt is moving.
03. **Cyclic Homing**: If other than zero, it sets a new homing procedure after the specified number of hours.
04. **Economy Mode**: Reduces the motor toque when the pan & tilt is not moving. Do not enable in presence of strong wind or vibrations.

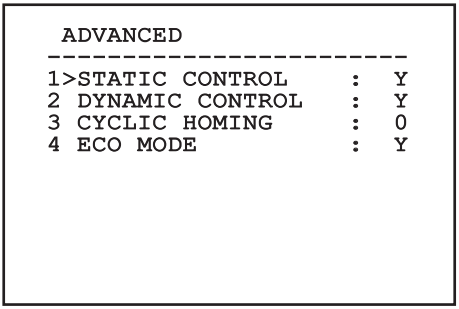


Fig. 75

9.6.5 Display menu

01. **PTZ Positions**: If not on OFF, it is used to select how the Pan, Tilt and Zoom positions are displayed on the screen. It is possible to select timed (1 S, 3 S and 5 S) or constant (CONST) display.
02. **Preset Name**: If not on OFF, it is used to select how the text associated with the last-reached Preset position is displayed on the screen. It is possibile to select timed (1 S, 3 S and 5 S) or a constant (CONST) display.
03. **Areas Name**: If not on OFF, it is used to select how the texts associated with active areas are displayed. It is possibile to select timed (1 S, 3 S and 5 S) or constant (CONST) display.
04. **Pan & Tilt ID**: If not on OFF, it shows the ID of the pan & tilt.
05. **Received Commands**: If not on OFF, it is used to select how the received serial commands are displayed. It is possibile to select timed (1 S, 3 S and 5 S) or constant (CONST) display.
06. **Horizontal Delta**: This moves the menu texts horizontally, for better centring.
07. **Vertical Delta**: This moves the menu texts vertically for better.

```
 DISPLAY
------------------------
1>PTZ POSITIONS    :  1 S
2 PRESET NAME      :  3 S
3 AREAS NAME       :  OFF
4 UNIT ID          :CONST
5 RECEIVED COMMAND:CONST
6 HORIZONTAL DELTA:    3
7 VERTICAL DELTA   :    3
```

Fig. 76

9.6.6 Options menu

01. **Ceiling Mount**: When this mode is enabled the image and the movements controls are turned upsidedown.
02. **Alarms**: Allows access to the Alarms menu.
03. **Washer**: Allows access to the Washer menu.

```
 OPTION
------------------------
1>CEILING MOUNT        :N
2 ALARMS                >
3 WASHER                >
```

Fig. 77

9.6.6.1 Alarms menu

01. **Alarms 1-5**: Allow access to the menus from which it is possible to set the parameters of Alarms 1 to 5.
02. **Alarms State**: Allows access to the Alarms State menu.

```
 ALARMS
------------------------
1>ALARM 1               >
2 ALARM 2               >
3 ALARM 3               >
4 ALARM 4               >
5 ALARM 5               >
6 ALARMS STATE          >
```

Fig. 78

If the IR illuminator is fitted, alarm 5 is reserved for the external dusk switch and therefore alarm 5 will not be displayed on the screen.

From the Alarms menu it is possible to access one of the menus (Alarms 1-5) to edit the alarms parameters.

From these menus it is possible to set the following values:

01. **Type**: Set the type of contact: normally closed (N.C.) or normally open (N.O.).
02. **Action**: The type of action (Scan, Patrol, Autopan, Tour 1, Tour 2 and Tour 3) carried out by ULISSE COMPACT THERMAL when the alarm triggers. If Off is selected, the alarm is disabled.
03. **Number**: The preset to be reached when the alarm's type of action is Scan.
04. **Text**: The message that is displayed when the alarm is active.

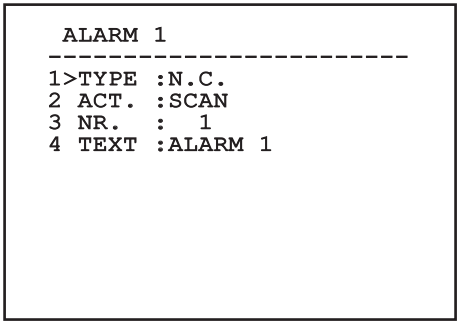


Fig. 79

This is a dynamic self-configuration menu based on the choice made and shows the parameters on which it is possible to operate.

From the Alarms menu it is possible to access the Alarms State menu where the state of alarms inputs is displayed (CLOSE, contact closed, OPEN, contact open).

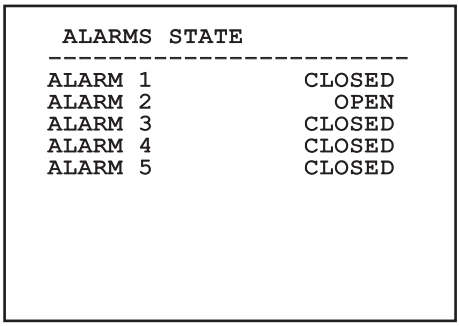


Fig. 80

9.6.7 Washer Menu

ULISSE COMPACT THERMAL offers the possibility to use a wiper and to operate a pump to clean the glass.

To configure the Washer put the lens of the camera in front of the nozzle of the Washer.

Save a preset (XY) that identifies this position; the preset will be recalled by the pan & tilt when the WASHER function is enabled.

From the menu, set the following parameters:

01. **Enable**: Enables the Washer function.
02. **Nozzle preset**: Enter the preset number (XY) corresponding to the nozzle.
03. **Wiper On Delay**: Sets the interval between the enabling of the pump and that of the wiper.
04. **Washing length**: Sets the length of the brushing.
05. **Wiper Off Delay**: Sets the length of the brushing without water.

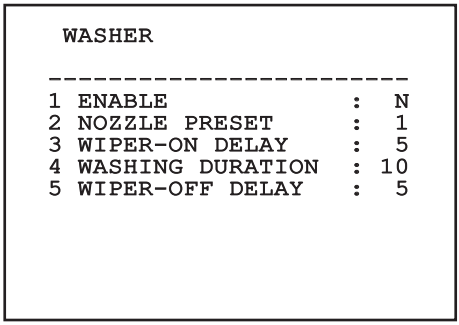


Fig. 81

The enabling of the Washer function reserves the use of Relay 2 to the switching on of the pump and does not allow the association of Relay 2 with an alarm.

9.6.8 Default menu

01. **Delete Setup**: Resets all the parameters except the Presets.
02. **Delete Preset**: Deletes all previously stored presets.

```
 DEFAULT
------------------------
1>DELETE SETUP?
2 DELETE PRESET?
```

Fig. 82

The above mentioned operations cause the loss of all previously stored data (i.e. Preset, Patrol, Autopan, Home…).

9.6.9 Info Menu

The menu is used to check the configuration of the device and the installed firmware version.

```
 INFO
------------------------
Address: 1
Protocol: MACRO
RS485-1: 38400 N81 RX
RS485-2: 38400 N81 RIPET
HW: 0a (Apr 14 2009)
FW: 000-0000
Camera    : 36x
PC: UC1PSSA000A
SN: 109032220029
```

Fig. 83

9.6.10 Thermal Camera Menu

01. **Control**: Sets the type of control on the thermal camera.
    - **Internal**: The camera configuration is managed by the pan & tilt.
    - **External**: The camera configuration is managed through the RS485-3 serial line (only for models with double camera)
02. **Configuration**: To set one of the preset configurations of the thermal camera.
    - **Standard**: Sets the standard configuration of the thermal camera.
    - **High Gain**: Sets the configuration for a higher-resolution image.
    - **Isotherm**: Sets the configuration for highlighting objects within a given temperature range (*"9.6.10.8 Thermal Analysis Menu (Isotherm)", page 43*).
    - **Custom**: Signals that the operator has manually chosen the configuration of the thermal camera.
03. **Flat Field Correction**: Allows access to the Flat Field correction management submenu.
04. **Video Setup**: Allows access to the video configuration management submenu.
05. **Gain control**: Allows access to the gain control management submenu.
06. **ROI Setup**: Allows access to the ROI management submenu.
07. **Thermal Analysis**: Allows access to the thermal analysis management submenu.
08. **Status**: Allows access to the submenu containing the technical features of the thermal camera.

```
 THERMAL CAMERA
------------------------
1>CONTROL  :  INTERNAL
2 CONFIG.  :  STANDARD
3 FLAT FIELD CORRECTION>
4 VIDEO SETUP          >
5 GAIN CONTROL         >
6 ROI SETUP            >
7 THERMAL ANALYSIS     >
8 STATUS               >
```

Fig. 84

9.6.10.1 Flat Field Correction Menu

The thermal camera is fitted with an internal mechanism which periodically improves the quality of the images called Flat Field Correction (FFC). The parameters which manage this function are:

01. **Flat Field Auto**: Enables the automatic or manual Flat Field correction. When the automatic correction is enabled, the camera carries out a FFC after a given time or temperature change. Vice versa, when the manual correction is set, the FFC operations are carried out when requested by the operator. We advise setting the manual correction at all times.
02. **Interval**: Sets the time that has to elapse before carrying out a FFC when the dynamic gain range is High. The time interval is indicated in frames (33ms for NTSC and 40ms for PAL).
03. **Low Gain Interval**: Sets the time that has to elapse before carrying out a FFC when the dynamic gain range is Low. The time interval is indicated in frames (33ms for NTSC and 40ms for PAL).
04. **Temperature**: Sets the temperature change after which a FFC has to be carried out when the dynamic gain range is High. The temperature change is indicated in 0.1°C intervals.
05. **Low Gain Temperature**: Sets the temperature interval after which a FFC has to be carried out when the dynamic gain range is Low. The temperature change is indicated in 0.1°C intervals.
06. **Gain mode**: Allows the setting of dynamic gain range type:
    - **High**: This setting aims to maximize the contrast and is especially suitable for applications which carry out the video analysis of images.
    - **Low**: This setting increases the dynamic range of the image and diminishes the contrast. It is especially suitable for identifying the hottest elements in an image.
    - **Auto**: This setting allows the camera to switch between High and Low modes depending on the type of image currently being displayed. The parameters in the Gain Change Values menu (*"9.6.10.2 Flat Field Correction Menu (Gain Switch Values)", page 41*) are used to change the behaviour of this mode.
07. **Do FFC**: Carries out a FFC.
08. **Gain Switch Values**: Allows access to the Gain Switch Values submenu.

```
 FLAT FIELD CORRECTION
-----------------------
1>FLAT FIELD AUTO:     Y
2 INTERVAL       :  7200
3 LOW GAIN INTER.:  1350
4 TEMPERATURE    :     5
5 LOW GAIN TEMP. :    10
6 GAIN MODE      :  ALTO
7 DO FFC?
8 GAIN SWITCH VALUES   >
```

Fig. 85

We recommend that you do not change the default values which have been set to guarantee high quality images in any operating condition.

9.6.10.2 Flat Field Correction Menu (Gain Switch Values)

Once inside the Gain Switch Values menu it is possible to set one of the following parameters:

09. **High-Low Threshold**: Sets the temperature threshold used by the **High-Low Population** parameter to force the switching in **Low Gain** mode. The value is indicated in degrees Celsius.
10. **High-Low Population**: Sets the minimum pixel percentage above which the switching in **Low Gain** mode is carried out.
11. **Low-High Threshold**: Sets the temperature threshold used by the **Low-High Population** parameter to force the switching in **High Gain** mode. The value is indicated in degrees Celsius.
12. **Low-High Population**: Sets the minimum pixel percentage above which the switching in **High Gain** mode is carried out.

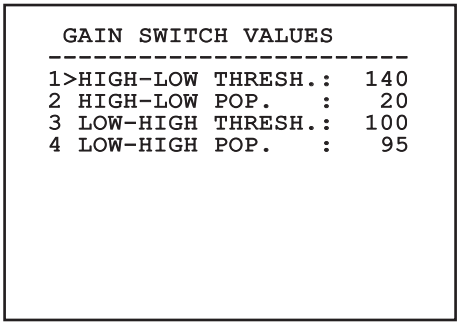


Fig. 86

We recommend that you do not change the default values which have been set to guarantee high quality images in any operating condition.

The settings of the Gain Change Values Menu are effective only if the Gain mode (*"9.6.10.1 Flat Field Correction Menu", page 40*) was set to Auto.

9.6.10.3 Video Setup Menu

Once inside the Video Configuration menu it is possible to set one of the following parameters:

01. **Lut polarity**: Sets the hue of the image shot by the thermal camera.
02. **FFC Warning**: Sets the interval for which a coloured square is displayed on the upper right side of the video when a FFC is about to be carried out. The interval is indicated in frames (33ms for NTSC and 40ms for PAL). A value lower than 15 frames automatically disables the alert.
03. **Digital Zoom**: Sets the type of zoom to be applied to the video signal (OFF, Auto, 2x, 4x). When using the Auto mode, the zoom of the thermal camera automatically adjusts to that of the SONY module.
04. **Dynamic DDE**: Sets the value of the DDE filter, used to improve the sharpness of outline. Typical values range from 17 and 25. Value 17 disables the filter.
05. **Test Pattern**: Enables the pattern test to check the camera electronics.

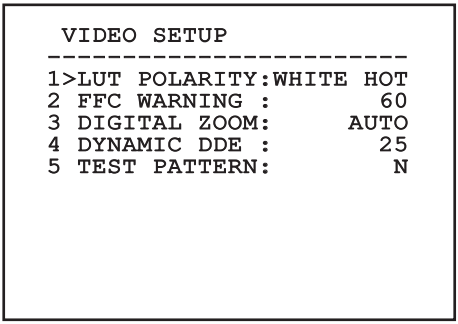


Fig. 87

9.6.10.4 Gain Control Menu

Once inside the Gain Control Configuration menu it is possible to set one of the following parameters:

01. **Algorithm**: Sets the type of automatic gain control (AGC) to optimize the image. It is possible to choose between the following algorithms:
    - **Automatic**: Automatically sets the contrast and brightness of the image when environmental conditions change by equalizing the grey scale histogram. The image can be modified by changing the value of the ITT Mean, Max Gain and Plateau Value parameters. This is the default algorithm and it is recommended for normal use of the thermal camera.
    - **Once Bright**: The set brightness level represents the mean of the brightness values of the image when this parameter is selected. The image can be modified by changing the value of the Contrast parameter.
    - **Auto Bright**: The set brightness level represents the mean of the brightness values. Such level is updated in real-time. The image can be modified by changing the values of the Contrast and Compensation parameters.
    - **Manual**: The contrast and brightness levels are manually set by the user.
    - **Linear Histogram**: Contrast and brightness of the image are optimized using one linear transfer function. The image can be modified by changing the values of the ITT Mean and Max Gain parameters.
02. **Plateau value**: Sets the maximum pixel value which can be found in a grey scale.
03. **ITT Mean**: Sets the mean point on a grey scale.
04. **Max Gain**: Sets the maximum gain of the AGC.
05. **Contrast**: Sets the contrast level of the image.
06. **Brightness**: Sets the brightness level of the image.
07. **Brightness Compensation**: Sets the brightness compensation level of the image.

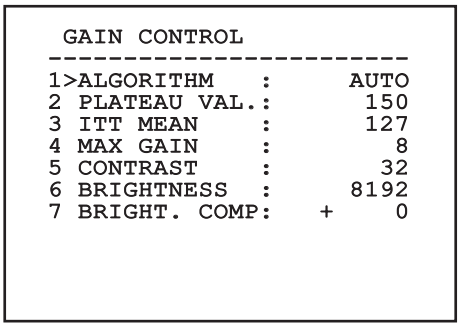


Fig. 88

This is a dynamic self-configuration menu based on the choice made and shows the parameters on which it is possible to operate.

9.6.10.5 ROI Setup Menu

Once inside the ROI Configuration Menu it is possible to change the region of interest (ROI) used by the AGC algorithm to calculate the contrast and brightness levels of the image.

01. **Point 1 Left**: Sets the left limit of the ROI.
02. **Point 1 Top**: Sets the upper limit of the ROI.
03. **Point 2 Right**: Sets the right limit of the ROI.
04. **Point 2 Bottom**: Sets the lower limit of the ROI.

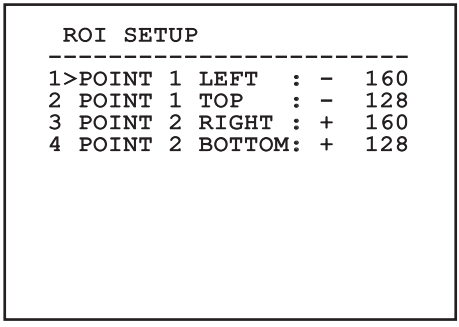


Fig. 89

9.6.10.6 Thermal Analysis Menu

01. **Spot Meter**: Allows access to the point measurement configuration submenu.
02. **Isotherm**: Allows access to the isotherm management submenu.

```
 THERMAL ANALYSIS
------------------------
1>SPOT METER            >
2 ISOTHERM              >
```

Fig. 90

9.6.10.7 Thermal Analysis Menu (Spot Meter)

Once inside the Point Measurement menu it is possible to set one of the following parameters:

01. **Mode**: Enables the visualization of the taken temperature from the 4 pixels to the centre of the image (in degrees Celsius or Fahrenheit). The OFF option disables the visualization.
02. **Digital**: Enables the visualization of the relative symbol on the display.
03. **Thermometer**: Enables the visualization of the relative symbol on the display.

```
 SPOT METER
------------------------
1 MODE        :       OFF
2 DIGITAL     :         N
3 THERMOMETER:          N
```

Fig. 91

9.6.10.8 Thermal Analysis Menu (Isotherm)

Once inside the Isotherm menu it is possible to enable a special colouring for objects included within the set temperature interval. The parameters which manage this function are:

01. **Enable**: Enables the Isotherm function.
02. **Mode**: Selects the way in which the interval is indicated (in percentage or in degrees Celsius).

03-05 **Upper**: Sets the upper limit of the Isotherm function.

03-05 **Lower**: Sets the lower limit of the Isotherm function.

```
ISOTHERM
------------------------
1>ENABLE     :          N
2 MODE       :    PERCENT
3 UPPER      :         95
4 LOWER      :         90
```

Fig. 92

This is a dynamic self-configuration menu based on the choice made and shows the parameters on which it is possible to operate.

9.6.10.9 Status Menu

Once inside the Status menu it is possible to learn the technical features of the thermal camera.

```
 STATUS
------------------------
SW VERSION  :  0A00.022B
FW VERSION  :  0802.0040
CAMERA S.N. :   00001234
SENSOR S.N. :   00001234
TEMPERATURE :    +0034.0


P.N. 41320035A-SPXXX
```

Fig. 93

10 Instructions for normal operation

Direct and prolonged shooting of the sun by the thermal camera can cause irreparable damage to its sensor.

10.1 Visualizing the state of the pan & tilt

During normal operation the pan & tilt displays on screen the data organized as illustrated (user's choice). Visualization can be enabled or disabled as described in *"9.6.5 Display menu", page 37*.

```
        NORTH/EAST
ID: 1               12345



AL 1: Alarm 1
Pan : -  5.56
Tilt: +120.01
Zoom:  36.00x
Preset: Text 001
E7-PRESET NOT CONFIGURED
```

Fig. 94

NORTH/EAST: Name of the area where one is currently located.

ID: 1: Receiver's address;

12345: Complete list of active alarms;

AL 1: Alarm 1: Text regarding the last active alarm;

Pan: - 5.56/Tilt: +120.01/Zoom: 36.00x: Current position of Pan, Tilt and Zoom;

Preset: Text 001: Name of selected active preset;

E7-PRESET NOT CONFIGURED: The following field shows the errors found while the system was running or the commands received via serial (visualization can be enabled or disabled only for received commands).

10.2 Saving the current position (Preset)

10.2.1 Quick save

Using the control keyboard it is possible to save the current position (for further information, refer to the manual of the keyboard in use).

During the saving stage, it is possible to change the speed at which Preset is reached using keys Focus Far / Focus Near and to change the waiting time using keys Iris Open / Iris Close.

```
------------------------
SET PRESET
Focus to change speed
Iris to change dwell
Joystick to exit
------------------------
Speed   : 100deg./s
Dwell   :   5s
Pan : -  5.56
Tilt: +120.01
Zoom:   36.00x
```

Fig. 95

10.2.2 Saving from the Menu

Refer to *"9.6.4.3 Preset Menu", page 34*.

10.3 Recalling a position (Scan)

Using the control keyboard it is possible to recall a previously saved position (for further information, refer to the manual of the keyboard in use).

10.4 Enabling Patrol function

Using the control keyboard it is possible to enable the automatic patrol (for further information, refer to the manual of the keyboard in use or to *Tab. 14, page 47)*.

Disabling can be carried out by moving the joystick or by recalling a different type of movement.

To configure the Patrol function, refer to *"9.6.4.6 Patrol Menu", page 36*.

10.5 Enabling Autopan Function

Using the control keyboard it is possible to enable the Autopan (for further information, refer to the manual of the keyboard in use or to *Tab. 14, page 47*.

Disabling can be carried out by moving the joystick or by recalling a different type of movement.

To configure the Patrol function, refer to *"9.6.4.7 Autopan Menu", page 36*.

10.6 Recalling a pattern (Tour)

The Tour functioning mode allows the repetition of a previously recorded route in a continuous manner.

The pan & tilt can store up to 3 Tours, each lasting no more than 2 minutes.

To save a Tour, enter the special preset of the number of Tour to be saved using the keyboard (*Tab. 14, page 47*).

To simplify the recording of the Tour, the pan & tilt automatically limits the speed of the Pan & Tilt depending on the Zoom factor.

While the Tour is being recorded, the remaining recording time is displayed, as shown in the figure.

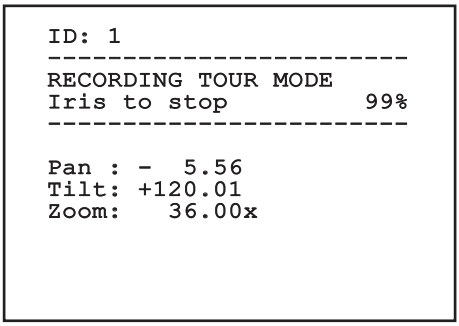


Fig. 96

To interrupt recording, press the Iris Open or Iris Close key.

To start the play-back of a Tour, enter the special preset of the number of Tour to be displayed using the keyboard (*Tab. 14, page 47*).

10.7 Recalling the Home position

Using the control keyboard it is possible to recall a previously saved Home position (Scan No. 1) (for further information, refer to the manual of the keyboard in use).

10.8 Enabling the Wiper (Wiper)

Do not use the wiper when the outside temperature is below 0°C or in case of ice.

To enable/disable the Wiper refer to the manual of the keyboard or to *Tab. 14, page 47*).

If it is left on, the Wiper automatically disables itself.

10.9 Enabling the Washer (Washer)

Do not use the wiper when the outside temperature is below 0°C or in case of ice.

To enable/disable the Washer refer to the manual of the keyboard or to *Tab. 14, page 47*).

To configure the Washer, refer to *"9.6.7 Washer Menu", page 38*.

10.10 Reboot the device

By means of the control keyboard it is possible to send the device resetting command (for further information, refer to the manual of the keyboard in use or to *Tab. 14, page 47*).

10.11 Switching of the secondary video output

To select the video signal (of the integrated module or of the thermal camera), please refer to controls **Video 2 - integrated module** and **Video 2 - thermal camera** (*Tab. 14, page 47*).

10.12 Manual correction of a preset focusing

Load the preset whose focus needs to be changed using the Scan command; change the focus using the appropriate keys Focus Far / Focus Near without changing the Pan/Tilt/Zoom position; then save the preset using the appropriate Preset command.

The manual correction of the Preset works only if the Daytime/Nigh-time Autofocus fields are disabled (*Fig. 71, page 35*).

SPECIAL CONTROLS					
Control	**Protocol**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Tour 1 Record Start	Save Preset 77	Save Preset 77	Save Preset 77	Save Preset 77	Save Preset 77
		Save Pattern 2	Start recording pattern 3		Save Preset 47
Tour 2 Record Start	Save Preset 78	Save Preset 78	Save Preset 78	Save Preset 78	Save Preset 78
		Save Pattern 3			Save Preset 48
Tour 3 Record Start	Save Preset 79	Save Preset 79	Save Preset 79	Save Preset 79	Save Preset 79
		Save Pattern 4			Save Preset 50
Tour 1 Start	Save Preset 80	Save Preset 80	Save Preset 80	Save Preset 80	Save Preset 80
		Pattern 2	Run pattern 3		Save Preset 51
Tour 2 Start	Save Preset 81	Save Preset 81	Save Preset 81	Save Preset 81	Save Preset 81
		Pattern 3			Save Preset 52
Tour 3 Start	Save Preset 82	Save Preset 82	Save Preset 82	Save Preset 82	Save Preset 82
		Pattern 4			Save Preset 53
Tour Record Stop	Iris Open/Close	IrisOpen/Close	Iris Open/Close	Iris Open/Close	Iris Open/Close
		Ack	Save new pattern		
Wiper Start	Save Preset 85	Save Preset 85	Save Preset 85	Save Preset 85	Save Preset 85
	Aux 3 ON	Aux 3 ON	Aux 3 ON	Aux 3 ON	Save Preset 54
	Wip+				
Wiper Stop	Save Preset 86	Save Preset 86	Save Preset 86	Save Preset 86	Save Preset 86
	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Save Preset 55
	Wip-				
Washer	Save Preset 87	Save Preset 87	Save Preset 87	Save Preset 87	Save Preset 87
	Aux 4 ON	Aux 4 ON	Aux 4 ON	Aux 4 ON	Save Preset 56
	Was+				

SPECIAL CONTROLS					
Control	**Protocol**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Night Mode on	Save Preset 88	Save Preset 88	Save Preset 88	Save Preset 88	Save Preset 88
					Save Preset 57
Night Mode off	Save Preset 89	Save Preset 89	Save Preset 89	Save Preset 89	Save Preset 89
					Save Preset 58
Reboot the device	Save Preset 94	Save Preset 94	Save Preset 94	Save Preset 94	Save Preset 94
	Ini+		Faster+ Zoom out+ Focus far+ Iris open		Save Preset 61
Enabling OSM	Save Preset 95	Save Preset 95	Save Preset 95	Save Preset 95	Save Preset 95
	Men+		Iris open+ Focus+ Zoom out		Save Preset 46
Patrol Start	Save Preset 93	Save Preset 93	Save Preset 93	Save Preset 93	Save Preset 93
	Pat+	Pattern	Run pattern 1	Run patrol	Save Preset 60
Patrol Stop	Save Preset 92	Save Preset 92	Save Preset 92	Save Preset 92	Save Preset 92
	Joystick	Joystick	Joystick	Joystick	Joystick
	Pat-				Save Preset 59
Autopan Start	Save Preset 99	Save Preset 99	Save Preset 99	Save Preset 99	Save Preset 99
	Apa+	Pattern 1	Run pattern 2	Run autopan	Save Preset 63
Autopan Stop	Save Preset 96	Save Preset 96	Save Preset 96	Save Preset 96	Save Preset 96
	Joystick	Joystick	Joystick	Joystick	Joystick
	Apa-				Save Preset 62
Carry out a FFC	Save Preset 74	Save Preset 74	Save Preset 74	Save Preset 74	Save Preset 74
					Save Preset 43
Video 2 thermal camera	Save Preset 75	Save Preset 75	Save Preset 75	Save Preset 75	Save Preset 75
					Save Preset 44
Video 2 integrated module	Save Preset 76	Save Preset 76	Save Preset 76	Save Preset 76	Save Preset 76
					Save Preset 45

Tab. 14

11 Maintaining and cleaning

11.1 Maintaining

Maintenance on ULISSE COMPACT THERMAL must be carried out by personnel trained to operate on electrical circuits.

11.1.1 Firmware updating

If necessary, it is possible to update the pan & tilt firmware; for further information please contact Videotec.

The firmware updating operation can be done on site, using the cable supplied with the pan & tilt, or in remote mode (only MACRO/VIDEOTEC and PELCO D protocols) using a 485 serial – USB converter (not supplied).

11.1.2 Clone configuration

If necessary it is possible to save the pan & tilt configuration; for further information contact Videotec.

The saving/resetting operation can be done on site, using the cable supplied with the pan & tilt or in remote mode (only MACRO/VIDEOTEC and PELCO D protocols), using the serial 485 – USB converter (not supplied).

11.1.3 Replacing the fuses

For continued protection against risk of fire, replace only with same type and rating of fuse.

There are two preset fuses on the connection board.

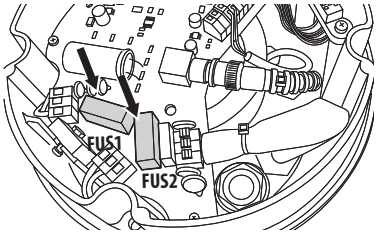


Fig. 97

Their sizes are related to the power supply voltage, as shown in the table.

VOLTAGE	FUS 1	FUS 2
24Vac 50/60Hz	T 4A L 250V 5x20	T 6.3A H 250V 5x20
120Vac 50/60Hz	T 4A L 250V 5x20	T 4A H 250V 5x20
230Vac 50/60Hz	T 4A L 250V 5x20	T 2A H 250V 5x20

Tab. 15

11.2 Cleaning

ULISSE COMPACT THERMAL pan & tilt devices require no particular maintenance. To clean the device use neutral detergent and a non-abrasive cloth. Remember that the device is waterproof.

11.2.1 Window and plastic cover cleaning (PC)

Surface dirt should be rinsed away with water and then the window cleaned with a neutral soap diluted with water, or specific products for spectacle lens cleaning. These should be applied with a soft cloth.

Avoid ethyl alcohol, solvents, hydrogenated hydrocarbide, strong acid and alkali. Such products may irreparably damage the surface.

12 Disposal of waste materials

This symbol mark and recycle system are applied only to EU countries and not applied to the countries in the other area of the world.

Your product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.

Please dispose of this equipment at your local Community waste collection or Recycling centre.

In the European Union there are separate collection systems for used electrical and electronic products.

13 Troubleshooting

Ask for assistance from skilled personnel if:

- The unit is damaged after being dropped.
- There is noticeable deterioration in performance of the unit.
- The unit does not work properly, even though all the instructions in this handbook have been followed.

PROBLEM	POSSIBLE CAUSES AND SOLUTIONS
The device is off and shows no signs of life.	**Wiring error, blown fuse.** Make sure the connections are correct; check the continuity of the fuses and if one is blown replace it using the size as indicated in the table. If blown fuses are a frequent problem, contact your authorised service centre.
The preset position settings do not correspond to the shooting area.	**Loss of absolute position reference point.** Follow the procedure to calibrate the P&T from the keyboard (see the appropriate handbook), or reset the apparatus by switching it off and on again.

The monitor does **not** show the picture taken by the ULISSE COMPACT THERMAL, but shows an image of the type:
`Address : 1`
`Protocol : MACRO`
`RS485-1: 38400 N81 RX`
`RS485-2: 38400 N81 REPEAT`
`232 : FW UPGRADE ONLY`
`HW: 000-0001`
`FW: 0a (Jun 4 2009)`
`DIP1.1: VIEW CONF. ON`
	Dip-switch for Display Configuration (DIP1, SW1).
	Switch off the pan & tilt, switch down the dip-switch (**DIP1, SW1**). Switch-on the unit again.

During start-up the pan & tilt is disabled and the following type of message is shown:
`Address : 1`
`DE-ICE PROCEDURE`
`IN PROGRESS...`
`REMAINING MINUTES:59`
	Environment temperature is very low.
	Wait until the end of the pre-heating procedure. If the air temperature is too low the ULISSE COMPACT THERMAL will remain disabled and the following message will be shown:
	`Address : 1`
	`DE-ICE PROCEDURE`
	`----------`
	`SYSTEM BLOCKED`
	`TEMPERATURE TOO LOW`
	`----------`

Error **E1-AUTOPAN WITHOUT LIMITS**	**The two presets used as limits have not been programmed.** Program the two presets and then update the Autopan configuration menu (*"10.2 Saving the current position (Preset)", page 44* and *"9.6.4.7 Autopan Menu", page 36*).
Error **E2-WIPER BLOCKED**	**The wiper is either jammed or broken.** Check that the wiper is free to move; if the problem persists, seek assistance.

Error **E3-PATROL WITHOUT PRESET** or Error **E4-PATROL, 1 PRESET ONLY**	**The presets have not been programmed.** Program two or more presets and then update the Patrol configuration menu (*"10.2 Saving the current position (Preset)", page 44* and *"9.6.4.6 Patrol Menu", page 36*).
Error **E5-IR TEMP. TOO HIGH** or error **E6-IR FAULT**.	**The infrared illuminator is not working properly.** Seek assistance.
Error **E7-PRST. NOT CONFIGURED**.	**Recalling of a non programmed preset.** Save the preset using the relative control (*"10.2 Saving the current position (Preset)", page 44*).
Error **E8-TOUR NOT CONFIGURED**.	**Recalling of a non configured Tour.** Save the Tour using the relative control (*"10.6 Recalling a pattern (Tour)", page 45*).
Error **E9-TEMP. TOO LOW**	**The environment temperature is too low. The movements of the P&T unit is blocked to prevent mechanical damage.**
Alarm **AL6 :WATER LEVEL LOW**	**Low wiper liquid level.** Fill the tank of the pump using the suitable wiper liquid.

Tab. 16

14 Technical specifications

The installation is type TNV-1, do not connect it to SELV circuits.

In order to reduce the risk of fire, only use cable sizes greater than or equal to 26AWG.

14.1 General

Constructed from aluminium and tecnopolymer

Epoxypolyester powder painting, RAL9002 colour

Germanium glass window for thermal camera

Easy installation thanks to the self-centring connector

Zero backlash

Dynamic positioning control system

14.2 Mechanical

2 cable glands M16 and 2 cable glands M12

Horizontal continuous rotation

Vertical rotation -90° to +90°

Variable pan speed: from 0.1° up to 200°/s

Variable tilt speed: from 0.1° up to 200°/s

Preset accuracy: 0.05°

14.3 Electrical/video

Input voltage:

- 230Vac, 50/60Hz,
- 24Vac, 50/60Hz
- 120Vac, 50/60Hz

Current consumption:

- 230Vac, 0.4°
- 24Vac, 4°
- 120Vac, 0.8°

Power consumption:

- 40W with pan-and-tilt stopped and heating switched off
- 60W in motion, with heating switched off
- 125W peak at start-up, with heating switched on

Dimensions of input cables: AWG 16 (24Vac) -18 (120/230Vac)

Dimensions of signal cables: AWG 20-26

Video lines: coaxial cable (1Vpp, 75Ohm)

Functions: Autopan, Preset, Patrol, Tour (max 3), Autoflip

Maximum number of presets:

- AMERICAN DYNAMICS protocol: 95*
- ERNITEC protocol: 250
- PANASONIC protocol: 250
- PELCO D protocol: 99*
- VIDEOTEC MACRO protocol: 250
- *250 from OSD (On Screen Display) only

16-characters string for zone and preset titling

I/O alarm card (option):

- 6 alarm inputs
- 2 relais outputs (2A 30Vac/60Vdc max)

14.4 Camera

AVAILABLE BUILT-IN THERMAL CAMERAS						
	THERMAL CAMERA 35MM		THERMAL CAMERA 25MM		THERMAL CAMERA 9MM	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Detector	Uncooled Vanadium Oxide microbolometer (VOx)					
Resolution	320x256	320x240	320x256	320x240	320x256	320x240
Pixel dimensions	25µm					
Spectral response - Infrared long wave (LWIR)	From 7.5µm to 13.5µm					
Internal shutter (only for sensor compensation)	Video stop < 1sec.					
Digital Detail Enhancement (DDE)	Yes		Yes		Yes	
Digtal zoom	2x, 4x					
Image frequency	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps
Image temperature range	-40°C ÷ +160°C (-40°F ÷ +320°F)					
Horizontal field of view	13°		18°		48°	
Vertical field of view	10°		14°		37°	
F-number	F/1.4		F/1.4		F/1.25	
Thermal sensitivity (NEdT)	< 50mK at f/1.0					
Man (detection / recognition / identification)	780m / 190m / 97m (2559/623/318ft)		560m / 140m / 70m (1837/459/230ft)		205m / 56m / 26m (673/184/85ft)	
Car (detection / recognition / identification)	2150m / 560m / 280m (7054/1837/919ft)		1550m / 400m / 200m (5085/1312/656ft)		590m / 150m / 74m (1936/492/243ft)	

Tab. 17

AVAILABLE ANALOG CAMERAS				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X HIGH SENSITIVITY	
	PAL	NTSC	PAL	NTSC
Optical zoom	36x		28x	
Wide Dynamic Range (Fix/Auto)	Yes		-	
Progressive SCAN	Yes		-	
Digital image stabilisation	Yes		Yes	
White balance	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)			
High horizontal resolution	Up to 550 TV Lines			
Day-Night (Auto ICR)	Yes			
Image Sensor	1/4" EXView HAD CCD		1/4" Super HAD CCD II	
Number of effective Pixels	~ 440000 pixel	~ 380000 pixel	~ 440000 pixel	~ 380000 pixel
Min. night Illumination (ICR ON) (typical)	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
Min. day Illumination (ICR OFF) (typical)	0.1 Lux / 1/3s	0.1 Lux / 1/4s	0.16 Lux / 1/3s	0.16 Lux / 1/4s
"Shutter Time" automatic increase to improve the night surveillance	Yes			
S/N ratio	More than 50dB			
AE control	Auto, Shutter priority, Diaphragm priority, Brightness priority and Manual			
Back Light Compensation	On/Off			
Spherical masking (3D) of Privacy zones with automatic upgrade	Yes			
Privacy Zone Masking	On/Off (24 positions)			
Maximum number of masking blocks to be displayed	8			
Resolution of masking blocks	160x120 HxV			

AVAILABLE ANALOG CAMERAS				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X HIGH SENSITIVITY	
	PAL	NTSC	PAL	NTSC
Masking	Up to 15 different masking types: 14 colour types or mosaic			
Focusing System	Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual			
"Smart" Lens Control	SONY Modular Automatic Lens Reset Technology			
High Zoom and Wide Horizontal Field of View Capability	Yes			
Optical Zoom	36x, f=3.4 (wide) to 122.4mm (tele) / F1.6 to F4.5		28x, f=3.5 (wide) to 98mm (tele) / F1.35 to F3.7	
Digital Zoom	12x (432x with optical zoom)		12x (336x with optical zoom)	
Angle of View (A)	57.8 degrees (wide) to 1.7 degrees (tele)		55.8 degrees (wide) to 2.1 degrees (tele)	
Min. Object Distance	320mm (wide) to 1500mm (tele)		10mm (wide) to 1500mm (tele)	
Electronic Shutter Speed	1/1 ÷ 1/10000s			

Tab. 18 SONY is a registered trademark of SONY Corporation, Japan. EXview HAD is a registered trademark of SONY Corporation.

14.5 Communications

Configuration through OSD

Half-duplex serial RS485 interface, full-duplex RS422 and daisy-chain architecture

Firmware updating from console in remote mode (only VIDEOTEC MACRO and PELCO D protocols)

Up to 1023 units, addressable by means of dip-switches

14.6 Protocols

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO are registered trademarks.

The product may be interfaced with devices not manufactured by VIDEOTEC. It is possible that the interface protocols have changed or are in a different configuration from earlier tested units by VIDEOTEC. VIDEOTEC recommends a test prior to installation. VIDEOTEC will not be liable for any installation costs or lost revenues in the event a compatibility problem will occur.

14.7 Environment

Indoor / Outdoor

Operating temperature: -40°C /+60°C (-40°F / +140°F)

Surge immunity: up to 2KV line to line, up to 4KV line to earth (Class 4)

14.8 Certifications

CE EN60950-1, EN61000-6-3 and EN50130-4

FCC part 15, Class A

IP66 EN60529

UL listed

UL Canadian Safety Standards listed

NEMA 4X

15 Technical drawings

The values are in millimeters.

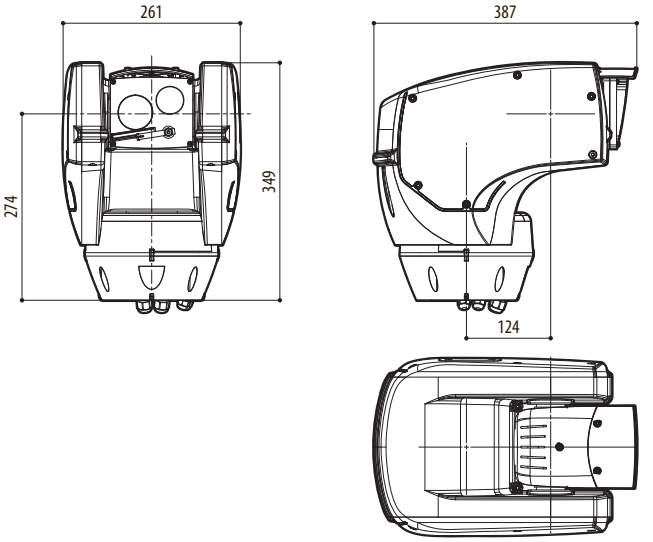


Fig. 100 ULISSE COMPACT THERMAL

16 Appendix A - Dip-switch address table

All possible combinations are shown below.

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Address not enabled	Address 512
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Address 1	Address 513
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Address 2	Address 514
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Address 3	Address 515
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Address 4	Address 516
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Address 5	Address 517
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Address 6	Address 518
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Address 7	Address 519
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Address 8	Address 520
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Address 9	Address 521
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Address 10	Address 522
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Address 11	Address 523
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Address 12	Address 524
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Address 13	Address 525
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Address 14	Address 526
ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Address 15	Address 527
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Address 16	Address 528
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Address 17	Address 529
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Address 18	Address 530
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Address 19	Address 531
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Address 20	Address 532
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Address 21	Address 533
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Address 22	Address 534
ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Address 23	Address 535
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Address 24	Address 536
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Address 25	Address 537
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Address 26	Address 538
ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Address 27	Address 539
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Address 28	Address 540
ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Address 29	Address 541
OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Address 30	Address 542
ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Address 31	Address 543
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Address 32	Address 544
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Address 33	Address 545
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Address 34	Address 546
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Address 35	Address 547
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Address 36	Address 548
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Address 37	Address 549
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Address 38	Address 550
ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Address 39	Address 551
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Address 40	Address 552
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Address 41	Address 553
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Address 42	Address 554
ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Address 43	Address 555

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Address 44	Address 556
ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Address 45	Address 557
OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Address 46	Address 558
ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Address 47	Address 559
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Address 48	Address 560
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Address 49	Address 561
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Address 50	Address 562
ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Address 51	Address 563
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Address 52	Address 564
ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Address 53	Address 565
OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Address 54	Address 566
ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Address 55	Address 567
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Address 56	Address 568
ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Address 57	Address 569
OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Address 58	Address 570
ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Address 59	Address 571
OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Address 60	Address 572
ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Address 61	Address 573
OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	Address 62	Address 574
ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	Address 63	Address 575
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Address 64	Address 576
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Address 65	Address 577
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Address 66	Address 578
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Address 67	Address 579
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Address 68	Address 580
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Address 69	Address 581
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Address 70	Address 582
ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Address 71	Address 583
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Address 72	Address 584
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Address 73	Address 585
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Address 74	Address 586
ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Address 75	Address 587
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Address 76	Address 588
ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Address 77	Address 589
OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Address 78	Address 590
ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Address 79	Address 591
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Address 80	Address 592
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Address 81	Address 593
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Address 82	Address 594
ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Address 83	Address 595
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Address 84	Address 596
ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Address 85	Address 597
OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Address 86	Address 598
ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Address 87	Address 599
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Address 88	Address 600
ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Address 89	Address 601
OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Address 90	Address 602

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Address 91	Address 603
OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Address 92	Address 604
ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Address 93	Address 605
OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	Address 94	Address 606
ON	ON	ON	ON	ON	OFF	ON	OFF	OFF	Address 95	Address 607
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Address 96	Address 608
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Address 97	Address 609
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Address 98	Address 610
ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Address 99	Address 611
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Address 100	Address 612
ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Address 101	Address 613
OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Address 102	Address 614
ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Address 103	Address 615
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Address 104	Address 616
ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Address 105	Address 617
OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Address 106	Address 618
ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Address 107	Address 619
OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Address 108	Address 620
ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Address 109	Address 621
OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	Address 110	Address 622
ON	ON	ON	ON	OFF	ON	ON	OFF	OFF	Address 111	Address 623
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Address 112	Address 624
ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Address 113	Address 625
OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Address 114	Address 626
ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Address 115	Address 627
OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Address 116	Address 628
ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Address 117	Address 629
OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	Address 118	Address 630
ON	ON	ON	OFF	ON	ON	ON	OFF	OFF	Address 119	Address 631
OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Address 120	Address 632
ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Address 121	Address 633
OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	Address 122	Address 634
ON	ON	OFF	ON	ON	ON	ON	OFF	OFF	Address 123	Address 635
OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	Address 124	Address 636
ON	OFF	ON	ON	ON	ON	ON	OFF	OFF	Address 125	Address 637
OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	Address 126	Address 638
ON	ON	ON	ON	ON	ON	ON	OFF	OFF	Address 127	Address 639
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Address 128	Address 640
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Address 129	Address 641
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Address 130	Address 642
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Address 131	Address 643
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Address 132	Address 644
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Address 133	Address 645
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Address 134	Address 646
ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Address 135	Address 647
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Address 136	Address 648
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Address 137	Address 649

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Address 138	Address 650
ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Address 139	Address 651
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Address 140	Address 652
ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Address 141	Address 653
OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Address 142	Address 654
ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Address 143	Address 655
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Address 144	Address 656
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Address 145	Address 657
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Address 146	Address 658
ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Address 147	Address 659
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Address 148	Address 660
ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Address 149	Address 661
OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Address 150	Address 662
ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Address 151	Address 663
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Address 152	Address 664
ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Address 153	Address 665
OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Address 154	Address 666
ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Address 155	Address 667
OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Address 156	Address 668
ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Address 157	Address 669
OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	Address 158	Address 670
ON	ON	ON	ON	ON	OFF	OFF	ON	OFF	Address 159	Address 671
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Address 160	Address 672
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Address 161	Address 673
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Address 162	Address 674
ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Address 163	Address 675
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Address 164	Address 676
ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Address 165	Address 677
OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Address 166	Address 678
ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Address 167	Address 679
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Address 168	Address 680
ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Address 169	Address 681
OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Address 170	Address 682
ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Address 171	Address 683
OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Address 172	Address 684
ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Address 173	Address 685
OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	Address 174	Address 686
ON	ON	ON	ON	OFF	ON	OFF	ON	OFF	Address 175	Address 687
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Address 176	Address 688
ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Address 177	Address 689
OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Address 178	Address 690
ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Address 179	Address 691
OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Address 180	Address 692
ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Address 181	Address 693
OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	Address 182	Address 694
ON	ON	ON	OFF	ON	ON	OFF	ON	OFF	Address 183	Address 695
OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Address 184	Address 696

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Address 185	Address 697
OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	Address 186	Address 698
ON	ON	OFF	ON	ON	ON	OFF	ON	OFF	Address 187	Address 699
OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	Address 188	Address 700
ON	OFF	ON	ON	ON	ON	OFF	ON	OFF	Address 189	Address 701
OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	Address 190	Address 702
ON	ON	ON	ON	ON	ON	OFF	ON	OFF	Address 191	Address 703
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Address 192	Address 704
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Address 193	Address 705
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Address 194	Address 706
ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Address 195	Address 707
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Address 196	Address 708
ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Address 197	Address 709
OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Address 198	Address 710
ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Address 199	Address 711
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Address 200	Address 712
ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Address 201	Address 713
OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Address 202	Address 714
ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Address 203	Address 715
OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Address 204	Address 716
ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Address 205	Address 717
OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	Address 206	Address 718
ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	Address 207	Address 719
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Address 208	Address 720
ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Address 209	Address 721
OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Address 210	Address 722
ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Address 211	Address 723
OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Address 212	Address 724
ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Address 213	Address 725
OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	Address 214	Address 726
ON	ON	ON	OFF	ON	OFF	ON	ON	OFF	Address 215	Address 727
OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Address 216	Address 728
ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Address 217	Address 729
OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	Address 218	Address 730
ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	Address 219	Address 731
OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	Address 220	Address 732
ON	OFF	ON	ON	ON	OFF	ON	ON	OFF	Address 221	Address 733
OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	Address 222	Address 734
ON	ON	ON	ON	ON	OFF	ON	ON	OFF	Address 223	Address 735
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Address 224	Address 736
ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Address 225	Address 737
OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Address 226	Address 738
ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Address 227	Address 739
OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Address 228	Address 740
ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Address 229	Address 741
OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	Address 230	Address 742
ON	ON	ON	OFF	OFF	ON	ON	ON	OFF	Address 231	Address 743

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Address 232	Address 744
ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Address 233	Address 745
OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	Address 234	Address 746
ON	ON	OFF	ON	OFF	ON	ON	ON	OFF	Address 235	Address 747
OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	Address 236	Address 748
ON	OFF	ON	ON	OFF	ON	ON	ON	OFF	Address 237	Address 749
OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	Address 238	Address 750
ON	ON	ON	ON	OFF	ON	ON	ON	OFF	Address 239	Address 751
OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Address 240	Address 752
ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Address 241	Address 753
OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	Address 242	Address 754
ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	Address 243	Address 755
OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	Address 244	Address 756
ON	OFF	ON	OFF	ON	ON	ON	ON	OFF	Address 245	Address 757
OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	Address 246	Address 758
ON	ON	ON	OFF	ON	ON	ON	ON	OFF	Address 247	Address 759
OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	Address 248	Address 760
ON	OFF	OFF	ON	ON	ON	ON	ON	OFF	Address 249	Address 761
OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	Address 250	Address 762
ON	ON	OFF	ON	ON	ON	ON	ON	OFF	Address 251	Address 763
OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	Address 252	Address 764
ON	OFF	ON	ON	ON	ON	ON	ON	OFF	Address 253	Address 765
OFF	ON	ON	ON	ON	ON	ON	ON	OFF	Address 254	Address 766
ON	ON	ON	ON	ON	ON	ON	ON	OFF	Address 255	Address 767
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Address 256	Address 768
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Address 257	Address 769
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Address 258	Address 770
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Address 259	Address 771
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Address 260	Address 772
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Address 261	Address 773
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Address 262	Address 774
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Address 263	Address 775
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Address 264	Address 776
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Address 265	Address 777
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Address 266	Address 778
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Address 267	Address 779
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Address 268	Address 780
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Address 269	Address 781
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Address 270	Address 782
ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Address 271	Address 783
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Address 272	Address 784
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Address 273	Address 785
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Address 274	Address 786
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Address 275	Address 787
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Address 276	Address 788
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Address 277	Address 789
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Address 278	Address 790

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Address 279	Address 791
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Address 280	Address 792
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Address 281	Address 793
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Address 282	Address 794
ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Address 283	Address 795
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Address 284	Address 796
ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Address 285	Address 797
OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	Address 286	Address 798
ON	ON	ON	ON	ON	OFF	OFF	OFF	ON	Address 287	Address 799
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Address 288	Address 800
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Address 289	Address 801
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Address 290	Address 802
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Address 291	Address 803
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Address 292	Address 804
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Address 293	Address 805
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Address 294	Address 806
ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Address 295	Address 807
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Address 296	Address 808
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Address 297	Address 809
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Address 298	Address 810
ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Address 299	Address 811
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Address 300	Address 812
ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Address 301	Address 813
OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	Address 302	Address 814
ON	ON	ON	ON	OFF	ON	OFF	OFF	ON	Address 303	Address 815
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Address 304	Address 816
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Address 305	Address 817
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Address 306	Address 818
ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Address 307	Address 819
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Address 308	Address 820
ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Address 309	Address 821
OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	Address 310	Address 822
ON	ON	ON	OFF	ON	ON	OFF	OFF	ON	Address 311	Address 823
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Address 312	Address 824
ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Address 313	Address 825
OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	Address 314	Address 826
ON	ON	OFF	ON	ON	ON	OFF	OFF	ON	Address 315	Address 827
OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	Address 316	Address 828
ON	OFF	ON	ON	ON	ON	OFF	OFF	ON	Address 317	Address 829
OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	Address 318	Address 830
ON	ON	ON	ON	ON	ON	OFF	OFF	ON	Address 319	Address 831
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Address 320	Address 832
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Address 321	Address 833
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Address 322	Address 834
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Address 323	Address 835
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Address 324	Address 836
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Address 325	Address 837

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Address 326	Address 838
ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Address 327	Address 839
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Address 328	Address 840
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Address 329	Address 841
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Address 330	Address 842
ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Address 331	Address 843
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Address 332	Address 844
ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Address 333	Address 845
OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	Address 334	Address 846
ON	ON	ON	ON	OFF	OFF	ON	OFF	ON	Address 335	Address 847
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Address 336	Address 848
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Address 337	Address 849
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Address 338	Address 850
ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Address 339	Address 851
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Address 340	Address 852
ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Address 341	Address 853
OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	Address 342	Address 854
ON	ON	ON	OFF	ON	OFF	ON	OFF	ON	Address 343	Address 855
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Address 344	Address 856
ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Address 345	Address 857
OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	Address 346	Address 858
ON	ON	OFF	ON	ON	OFF	ON	OFF	ON	Address 347	Address 859
OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	Address 348	Address 860
ON	OFF	ON	ON	ON	OFF	ON	OFF	ON	Address 349	Address 861
OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	Address 350	Address 862
ON	ON	ON	ON	ON	OFF	ON	OFF	ON	Address 351	Address 863
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Address 352	Address 864
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Address 353	Address 865
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Address 354	Address 866
ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Address 355	Address 867
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Address 356	Address 868
ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Address 357	Address 869
OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	Address 358	Address 870
ON	ON	ON	OFF	OFF	ON	ON	OFF	ON	Address 359	Address 871
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Address 360	Address 872
ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Address 361	Address 873
OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	Address 362	Address 874
ON	ON	OFF	ON	OFF	ON	ON	OFF	ON	Address 363	Address 875
OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	Address 364	Address 876
ON	OFF	ON	ON	OFF	ON	ON	OFF	ON	Address 365	Address 877
OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	Address 366	Address 878
ON	ON	ON	ON	OFF	ON	ON	OFF	ON	Address 367	Address 879
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Address 368	Address 880
ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Address 369	Address 881
OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	Address 370	Address 882
ON	ON	OFF	OFF	ON	ON	ON	OFF	ON	Address 371	Address 883
OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	Address 372	Address 884

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	ON	OFF	ON	ON	ON	OFF	ON	Address 373	Address 885
OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	Address 374	Address 886
ON	ON	ON	OFF	ON	ON	ON	OFF	ON	Address 375	Address 887
OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	Address 376	Address 888
ON	OFF	OFF	ON	ON	ON	ON	OFF	ON	Address 377	Address 889
OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	Address 378	Address 890
ON	ON	OFF	ON	ON	ON	ON	OFF	ON	Address 379	Address 891
OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	Address 380	Address 892
ON	OFF	ON	ON	ON	ON	ON	OFF	ON	Address 381	Address 893
OFF	ON	ON	ON	ON	ON	ON	OFF	ON	Address 382	Address 894
ON	ON	ON	ON	ON	ON	ON	OFF	ON	Address 383	Address 895
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Address 384	Address 896
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Address 385	Address 897
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Address 386	Address 898
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Address 387	Address 899
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Address 388	Address 900
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Address 389	Address 901
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Address 390	Address 902
ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Address 391	Address 903
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Address 392	Address 904
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Address 393	Address 905
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Address 394	Address 906
ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Address 395	Address 907
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Address 396	Address 908
ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Address 397	Address 909
OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	Address 398	Address 910
ON	ON	ON	ON	OFF	OFF	OFF	ON	ON	Address 399	Address 911
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Address 400	Address 912
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Address 401	Address 913
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Address 402	Address 914
ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Address 403	Address 915
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Address 404	Address 916
ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Address 405	Address 917
OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	Address 406	Address 918
ON	ON	ON	OFF	ON	OFF	OFF	ON	ON	Address 407	Address 919
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Address 408	Address 920
ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Address 409	Address 921
OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	Address 410	Address 922
ON	ON	OFF	ON	ON	OFF	OFF	ON	ON	Address 411	Address 923
OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	Address 412	Address 924
ON	OFF	ON	ON	ON	OFF	OFF	ON	ON	Address 413	Address 925
OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	Address 414	Address 926
ON	ON	ON	ON	ON	OFF	OFF	ON	ON	Address 415	Address 927
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Address 416	Address 928
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Address 417	Address 929
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Address 418	Address 930
ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Address 419	Address 931

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Address 420	Address 932
ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Address 421	Address 933
OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	Address 422	Address 934
ON	ON	ON	OFF	OFF	ON	OFF	ON	ON	Address 423	Address 935
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Address 424	Address 936
ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Address 425	Address 937
OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	Address 426	Address 938
ON	ON	OFF	ON	OFF	ON	OFF	ON	ON	Address 427	Address 939
OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	Address 428	Address 940
ON	OFF	ON	ON	OFF	ON	OFF	ON	ON	Address 429	Address 941
OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	Address 430	Address 942
ON	ON	ON	ON	OFF	ON	OFF	ON	ON	Address 431	Address 943
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Address 432	Address 944
ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Address 433	Address 945
OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	Address 434	Address 946
ON	ON	OFF	OFF	ON	ON	OFF	ON	ON	Address 435	Address 947
OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	Address 436	Address 948
ON	OFF	ON	OFF	ON	ON	OFF	ON	ON	Address 437	Address 949
OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	Address 438	Address 950
ON	ON	ON	OFF	ON	ON	OFF	ON	ON	Address 439	Address 951
OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	Address 440	Address 952
ON	OFF	OFF	ON	ON	ON	OFF	ON	ON	Address 441	Address 953
OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	Address 442	Address 954
ON	ON	OFF	ON	ON	ON	OFF	ON	ON	Address 443	Address 955
OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	Address 444	Address 956
ON	OFF	ON	ON	ON	ON	OFF	ON	ON	Address 445	Address 957
OFF	ON	ON	ON	ON	ON	OFF	ON	ON	Address 446	Address 958
ON	ON	ON	ON	ON	ON	OFF	ON	ON	Address 447	Address 959
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Address 448	Address 960
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Address 449	Address 961
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Address 450	Address 962
ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Address 451	Address 963
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Address 452	Address 964
ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Address 453	Address 965
OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	Address 454	Address 966
ON	ON	ON	OFF	OFF	OFF	ON	ON	ON	Address 455	Address 967
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Address 456	Address 968
ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Address 457	Address 969
OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	Address 458	Address 970
ON	ON	OFF	ON	OFF	OFF	ON	ON	ON	Address 459	Address 971
OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	Address 460	Address 972
ON	OFF	ON	ON	OFF	OFF	ON	ON	ON	Address 461	Address 973
OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	Address 462	Address 974
ON	ON	ON	ON	OFF	OFF	ON	ON	ON	Address 463	Address 975
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Address 464	Address 976
ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Address 465	Address 977
OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	Address 466	Address 978

SETTING THE ADDRESS (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	OFF	ON	OFF	ON	ON	ON	Address 467	Address 979
OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	Address 468	Address 980
ON	OFF	ON	OFF	ON	OFF	ON	ON	ON	Address 469	Address 981
OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	Address 470	Address 982
ON	ON	ON	OFF	ON	OFF	ON	ON	ON	Address 471	Address 983
OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	Address 472	Address 984
ON	OFF	OFF	ON	ON	OFF	ON	ON	ON	Address 473	Address 985
OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	Address 474	Address 986
ON	ON	OFF	ON	ON	OFF	ON	ON	ON	Address 475	Address 987
OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	Address 476	Address 988
ON	OFF	ON	ON	ON	OFF	ON	ON	ON	Address 477	Address 989
OFF	ON	ON	ON	ON	OFF	ON	ON	ON	Address 478	Address 990
ON	ON	ON	ON	ON	OFF	ON	ON	ON	Address 479	Address 991
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Address 480	Address 992
ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Address 481	Address 993
OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	Address 482	Address 994
ON	ON	OFF	OFF	OFF	ON	ON	ON	ON	Address 483	Address 995
OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	Address 484	Address 996
ON	OFF	ON	OFF	OFF	ON	ON	ON	ON	Address 485	Address 997
OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	Address 486	Address 998
ON	ON	ON	OFF	OFF	ON	ON	ON	ON	Address 487	Address 999
OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	Address 488	Address 1000
ON	OFF	OFF	ON	OFF	ON	ON	ON	ON	Address 489	Address 1001
OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	Address 490	Address 1002
ON	ON	OFF	ON	OFF	ON	ON	ON	ON	Address 491	Address 1003
OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	Address 492	Address 1004
ON	OFF	ON	ON	OFF	ON	ON	ON	ON	Address 493	Address 1005
OFF	ON	ON	ON	OFF	ON	ON	ON	ON	Address 494	Address 1006
ON	ON	ON	ON	OFF	ON	ON	ON	ON	Address 495	Address 1007
OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	Address 496	Address 1008
ON	OFF	OFF	OFF	ON	ON	ON	ON	ON	Address 497	Address 1009
OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	Address 498	Address 1010
ON	ON	OFF	OFF	ON	ON	ON	ON	ON	Address 499	Address 1011
OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	Address 500	Address 1012
ON	OFF	ON	OFF	ON	ON	ON	ON	ON	Address 501	Address 1013
OFF	ON	ON	OFF	ON	ON	ON	ON	ON	Address 502	Address 1014
ON	ON	ON	OFF	ON	ON	ON	ON	ON	Address 503	Address 1015
OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	Address 504	Address 1016
ON	OFF	OFF	ON	ON	ON	ON	ON	ON	Address 505	Address 1017
OFF	ON	OFF	ON	ON	ON	ON	ON	ON	Address 506	Address 1018
ON	ON	OFF	ON	ON	ON	ON	ON	ON	Address 507	Address 1019
OFF	OFF	ON	ON	ON	ON	ON	ON	ON	Address 508	Address 1020
ON	OFF	ON	ON	ON	ON	ON	ON	ON	Address 509	Address 1021
OFF	ON	ON	ON	ON	ON	ON	ON	ON	Address 510	Address 1022
ON	ON	ON	ON	ON	ON	ON	ON	ON	Address 511	Address 1023

Tab. 19

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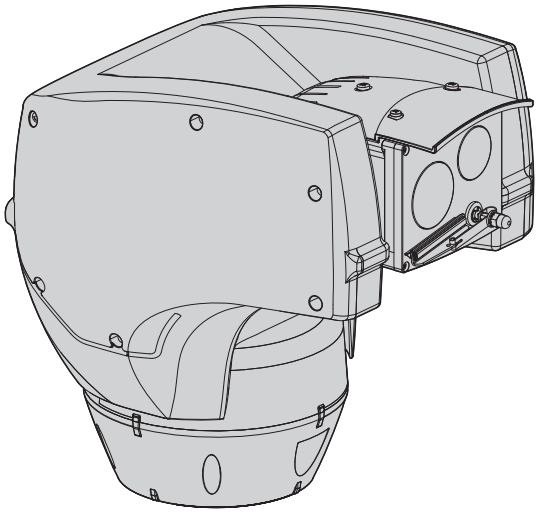
ULISSE COMPACT THERMAL

Unitá di posizionamento con doppia telecamera per rilevamento termico



IT **Italiano** - Manuale di istruzioni

Sommario

1 Informazioni sul presente manuale

Prima di installare e utilizzare questa unità, leggere attentamente questo manuale. Conservare questo manuale a portata di mano come riferimento futuro.

1.1 Convenzioni tipografiche

PERICOLO!
Pericolosità elevata.
Rischio di scosse elettriche. Togliere l'alimentazione prima di procedere con le operazioni, salvo diversa indicazione.

PERICOLO!
Superficie calda.
Evitare il contatto. Le superfici sono calde e potrebbero causare danni alla persona in caso di contatto.

PERICOLO!
Pericolo di natura meccanica.
Rischio di schiacciamento o cesoiamento.

ATTENZIONE!
Pericolosità media.
L'operazione è molto importante per il corretto funzionamento del sistema. Si prega di leggere attentamente la procedura indicata e di eseguirla secondo le modalità previste.

INFO
Descrizione delle caratteristiche del sistema.
Si consiglia di leggere attentamente per comprendere le fasi successive.

2 Note sul copyright e informazioni sui marchi commerciali

I nomi di prodotto o di aziende citati sono marchi commerciali o marchi commerciali registrati appartenenti alle rispettive società.

Microsoft Internet Explorer®, Windows Xp ® e Windows Vista® sono proprietà della Microsoft Corporation.

INTEL® Core™ 2 Duo e INTEL® Core™ 2 Quad sono di proprietà della Intel Corporation.

3 Norme di sicurezza

Il produttore declina ogni responsabilità per eventuali danni derivanti da un uso improprio delle apparecchiature menzionate in questo manuale. Si riserva inoltre il diritto di modificarne il contenuto senza preavviso. Ogni cura è stata posta nella raccolta e nella verifica della documentazione contenuta in questo manuale, tuttavia il produttore non può assumersi alcuna responsabilità derivante dall'utilizzo della stessa. Lo stesso dicasi per ogni persona o società coinvolta nella creazione e nella produzione di questo manuale.

I sistemi di posizionamento integrati per video sorveglianza della linea ULISSE COMPACT THERMAL sono dispositivi conformi alle normative vigenti all'atto della pubblicazione del presente manuale.

Si desidera tuttavia garantire gli utilizzatori (tecnico installatore e operatore) specificando alcune avvertenze per operare nella massima sicurezza:

È possibile trasportare il dispositivo solo prestando la massima attenzione. Fermate brusche, dislivelli e impatti violenti possono causare danneggiamenti all'oggetto o ferite per l'utente.

L'edificio deve avere installato un circuito di protezione (magneto termico) bipolare da 20A massimo, che deve comprendere un interruttore bipolare di tipo automatico che preveda anche la protezione della corrente di guasto verso terra (magnetotermico + differenziale) con distanza minima tra i contatti di 3mm.

- L'installazione e la manutenzione del dispositivo deve essere eseguita solo da personale tecnico qualificato.
- Prima di effettuare interventi tecnici sull'apparecchio togliere l'alimentazione elettrica.
- Non utilizzare cavi di alimentazione con segni di usura o invecchiamento.
- Non effettuare per nessun motivo alterazioni o collegamenti non previsti in questo manuale: l'uso di apparecchi non idonei può portare a gravi pericoli per la sicurezza del personale e dell'impianto.
- Utilizzare solo parti di ricambio originali. Pezzi di ricambio non originali potrebbero causare incendi, scariche elettriche o altri pericoli.
- Prima di procedere con l'installazione controllare che il materiale fornito corrisponda alle specifiche richieste esaminando le etichette di marcatura (*"4.2 Marcatura del prodotto", pagina 10*).
- Collegare il dispositivo ad una sorgente d'alimentazione corrispondente a quella indicata nell'etichetta di marcatura. Prima di procedere con l'installazione verificare che la linea elettrica sia opportunamente sezionata. Per dispositivi alimentati a 24Vac la tensione di alimentazione non deve eccedere i limiti (+/- 10%). I collegamenti devono essere conformi alle normative locali. Se non si è sicuri del tipo di fornitura contattare la società che fornisce il servizio per avere chiarimenti in merito.
- Il dispositivo è stato concepito per essere installato in modo permanente e sicuro ad un edificio o ad una struttura adeguata.
- Il dispositivo va montato in modo da non essere accessibile al personale diverso dal tecnico/installatore in quanto, essendo dotato di parti mobili, rimane residuo il pericolo di ferirsi a seguito dei movimenti delle parti mobili.
- Applicare l'etichetta **Parti Mobili Pericolose** (*Fig. 02, pagina 11*) vicino all'unità.
- Non utilizzare l'apparecchio in presenza di sostanze infiammabili.
- Non permettere l'uso dell'apparecchio a bambini o personale non autorizzato.
- L'apparecchio si considera disattivato soltanto quando l'alimentazione è stata tolta e i cavi di collegamento con altri dispositivi sono stati rimossi.
- L'impianto deve essere dotato di un dispositivo di scollegamento immediatamente riconoscibile e utilizzabile in caso di necessità.
- La manutenzione del dispositivo deve essere eseguita solo da personale qualificato. Durante le operazioni di manutenzione l'operatore è esposto al rischio di folgorazione o ad altri pericoli.
- Utilizzare solo gli accessori indicati dal costruttore. Qualsiasi cambiamento non espressamente approvato dal costruttore fa decadere la garanzia.
- Collegare a terra il cavo coassiale.
- Prima di collegare tutti i cavi di segnale verificare che l'unità sia opportunamente collegato al circuito di terra.
- Se il dispositivo deve essere rimosso dall'impianto, scollegare sempre per ultimo il cavo di terra.
- Adottare le dovute precauzioni per evitare di danneggiare l'apparecchiatura con scariche elettrostatiche.
- L'unità è stata realizzata per essere collegata con cavo tripolare, seguire le indicazioni per un corretto collegamento del circuito di terra descritte nel presente manuale.
- Prima di qualsiasi intervento tecnico togliere sempre l'alimentazione elettrica; inoltre maneggiare con cura l'unità: forti sollecitazioni meccaniche potrebbero danneggiare l'unità.
- Porre particolare attenzione alle distanze di isolamento tra la linea di alimentazione e tutti gli altri cavi compresi i dispositivi di protezione conto i fulmini.

- L'interruttore principale deve essere accessibile per intervenire rapidamente in caso di necessità.
- Per i soli prodotti marcati UL alimentati a 24Vac, utilizzare un trasformatore UL listed Classe 2, conforme alle normative vigenti.
- La categoria di installazione (detta anche categoria di sovratensione) specifica i livelli della tensione transitoria di rete alla quale l'apparato è soggetto. La categoria dipende dal luogo di installazione e dalla presenza di dispositivi di protezione contro le sovratensioni. Un dispositivo per ambienti industriali, connesso ai rami principali dell'impianto di alimentazione è soggetto alla categoria di installazione III. Se questo è il caso, è richiesta una riduzione alla categoria II. Ciò può essere ottenuto utilizzando un trasformatore di isolamento con schermatura connessa a terra tra il primario ed il secondario, o tramite l'impiego di dispositivi di protezione contro le sovratensioni (SPD), UL listed, connessi tra la fase ed il neutro a tra il neutro e terra. I dispositivi SPD UL listed, dovranno essere predisposti per limitare sovratensioni transitorie in modo ripetitivo e per la seguenti condizioni nominale di funzionamento: Tipo 2 (Dispositivi SPD connessi permanentemente alla rete di alimentazione, per istallazioni dal lato del carico del dispositivo di servizio); Corrente nominale di scarica (In) 20kA minimi. Si possono utilizzare ad esempio: FERRAZ SHAWMUT, ST23401PG-CN, ST240SPG-CN specificati per 120/240Vac, (In=20kA). La distanza massima tra l'installazione e la riduzione è di 5m.
- Questo è un apparecchio di Classe A. In un ambiente residenziale questo apparecchio può provocare radio disturbi. In questo caso può essere richiesto all'utilizzatore di prendere misure adeguate.

4 Identificazione

4.1 Descrizione e designazione del tipo

ULISSE COMPACT THERMAL offre una soluzione integrata per visione anche nel buio più totale, nebbia, pioggia, fumo, ecc.

Questa unità unisce un modulo avanzato per le immagini termiche e una telecamera day/night con zoom, entrambi allineati in fabbrica e installati all'interno della custodia stessa.

ULISSE COMPACT THERMAL dispone di due uscite video indipendenti e permette una visione duplice in tempo reale sui monitor per un controllo ottimale della zona.

ULISSE COMPACT THERMAL permette una rotazione continua ed alta velocità, assoluta precisione di posizionamento e qualità d'immagine superiore, estrema robustezza e configurazione del sistema semplificata. La velocità raggiunge i 200°/s con rotazione continua in orizzontale, spaziando da -90° a +90° in verticale.

ULISSE COMPACT THERMAL gestisce le funzioni di preset, autopan e patrol con una precisione di rilevamento pari a 0.1°. Il brandeggio effettua un costante controllo e correzione della sua posizione, funzione molto utile in caso di difficili condizioni ambientali.

La telecamera termica è un Microbolometro all'ossido di vanadio non raffreddato (Vox) con banda spettrale 7.5-13.5 µm; essa genera un video termico 320x 256 (PAL) e 320x240 (NTSC), con una frequenza d'immagine di 8.3fps o 25 fps (PAL) e 7.5 o 30fps (NTSC). La notevole sensibilità NEdT 50mK a f/1.0 garantisce un'ottima visione termica. Supporta zoom digitale 2x o 4x. Sono disponibili diverse lunghezze focali tra 50mm, 25mm e 9mm, a seconda delle distanze di rilevamento necessarie.

I parametri della telecamera termica sono facilmente configurabili da OSD. L'interfaccia di setup offre configurazioni tipiche pre-impostate o la completa personalizzazione del sistema.

La telecamera dispone inoltre di funzioni come l'analisi Isoterma (colorazione speciale degli oggetti che rientrano nei parametri stabiliti dall'operatore), termografia di base e diverse colorazioni della scena inquadrata.

La telecamera day/night integrata SONY con diversi zoom ottici, 36x, 18x o 10x, permette di riprendere oggetti vicini o lontani con un'elevata precisione e di mascherare dinamicamente le zone di privacy.

Inoltre il sensore Super HAD, 1/3" CCD (con zoom 10x) garantisce un'elevata sensibilità in ambienti con scarsa illuminazione.

ULISSE COMPACT THERMAL è disponibile anche con la sola telecamera termica. Fornito in 24, 230 o 120Vac e in modalità PAL o NTSC.

Oltre alla configurazione OSD, il sistema è dotato di un'interfaccia RS485/RS422 per il controllo completo del sistema e l'aggiornamento dell'ultima versione firmware da remoto.

Questa soluzione è particolarmente adatta per una videosorveglianza assoluta in una vasta gamma di ambienti ad alta sicurezza quali la protezione perimetrale, aeroporti, coste, carceri e porti.

4.2 Marcatura del prodotto

Sui brandeggi ULISSE COMPACT THERMAL è applicata una etichetta conforme alla marcatura CE.

L' etichetta presente sul corpo riporta:

- Codice di identificazione del modello (Codice a barre Extended 3/9)
- Tensione di alimentazione (Volt)
- Frequenza (Hertz)
- Corrente assorbita (Ampere)
- Grado di protezione IP
- Numero di serie

4.2.1 Controllo della marcatura

Prima di procedere con l'installazione controllare che il materiale fornito corrisponda alle specifiche richieste, esaminando le etichette di marcatura.

Non effettuare per nessun motivo alterazioni o collegamenti non previsti in questo manuale: l'uso di apparecchi non idonei può portare a gravi pericoli per la sicurezza del personale e dell'impianto.

5 Versioni

5.2.1 Impianto di lavaggio

Il brandeggio, se provvisto di tergicristallo, può essere provvisto anche di una pompa esterna che fornisce acqua per la pulizia del vetro.

Come indicato in figura, lo spruzzo è in posizione esterna rispetto al brandeggio.

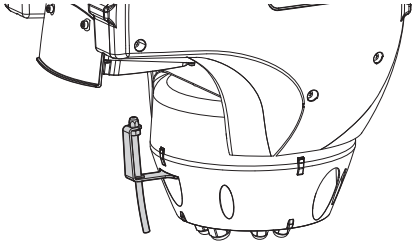


Fig. 01

Quando si invia il comando (*"10.9 Attivazione Impianto di lavaggio (Washer)", pagina 45*) il brandeggio si posiziona con il vetro di fronte allo spruzzo e vengono attivati la pompa ed il tergicristallo per un tempo determinato; alla fine della procedura ULISSE COMPACT THERMAL ritorna nella posizione iniziale.

Per i modelli con Impianto di lavaggio provvisti di sensore di livello, ULISSE COMPACT THERMAL può inoltre visualizzare un messaggio a video quando il livello del liquido nel serbatoio è insufficiente (solo se si usa una pompa ad alta prevalenza della serie UPTWAS).

Per dettagli sulla configurazione e l'utilizzo dell'impianto di lavaggio vedere *"9.6.7 Menù Impianto di Lavaggio", pagina 38*.

6 Preparazione del prodotto per l'utilizzo

Qualsiasi cambiamento non espressamente approvato dal costruttore fa decadere la garanzia.

Tutte le altre parti dell'unità non devono essere smontate o manomesse (eccetto per operazioni di montaggio e manutenzione previste nel presente manuale).

6.1 Precauzioni di sicurezza prima dell'utilizzo

L'edificio deve avere installato un circuito di protezione (magneto termico) bipolare da 20A massimo, che deve comprendere un interruttore bipolare di tipo automatico che preveda anche la protezione della corrente di guasto verso terra (magnetotermico + differenziale) con distanza minima tra i contatti di 3mm.

L'apparecchiatura comprende parti mobili. Assicurarsi che l'unità venga posizionata in un'area non accessibile durante le normali condizioni di funzionamento. Applicare l'apposita etichetta fornita assieme all'apparecchio nelle vicinanze dell'oggetto ed in modo ben visibile.

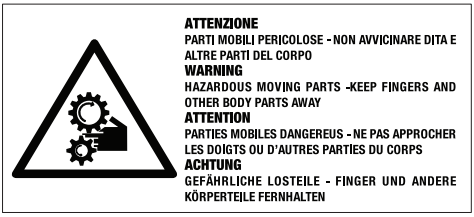


Fig. 02

6.2 Contenuto e disimballaggio

Alla consegna del prodotto verificare che l'imballo sia integro e non abbia segni evidenti di cadute o abrasioni.

In caso di evidenti segni di danno all'imballo contattare immediatamente il fornitore.

Conservare l'imballo nel caso sia necessario inviare il prodotto in riparazione.

Controllare che il contenuto sia rispondente alla lista del materiale sotto indicata:

- Unitá di posizionamento ULISSE COMPACT THERMAL
- Scatola Accessori:
  - Cavo prolunga seriale
  - Etichetta
  - Guaina siliconica
  - Fascette
  - Manuale di istruzioni

6.3 Smaltimento in sicurezza dei materiali di imballaggio

I materiali d'imballo sono costituiti interamente da materiale riciclabile. Sarà cura del tecnico installatore smaltirli secondo le modalità di raccolta differenziata o comunque secondo le norme vigenti nel Paese di utilizzo.

Si ricorda comunque che in caso di ritorno di materiale con malfunzionamenti è consigliato l'imballaggio originale per il trasporto.

6.4 Lavoro preparatorio prima dell'installazione

6.4.1 Fissaggio del supporto

Esistono due tipi di supporti, scegliere il supporto più adatto all'installazione e seguire tutte le indicazioni riportate in questo capitolo.

Il dispositivo deve essere montato in posizione verticale. Ogni posizionamento alternativo potrebbe compromettere le prestazioni dell'apparecchiatura. Non montare il dispositivo capovolto.

Porre particolare attenzione ai sistemi di fissaggio dell'apparecchiatura. Se l'apparecchiatura deve essere fissata ad una superficie di calcestruzzo bisogna utilizzare tasselli con coppia di trazione minima pari a 300daN cadauno, se la superficie è di metallo usare viti di diametro minimo pari a 8mm e di lunghezza appropriata.

6.4.1.1 Fissaggio con staffa (opzionale)

La staffa è forata per consentire il passaggio dei cavi di collegamento.

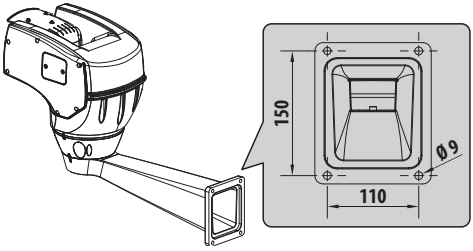


Fig. 03

6.4.1.2 Fissaggio con supporto a colonna (opzionale)

Il supporto a colonna permette il passaggio interno dei cavi di collegamento.

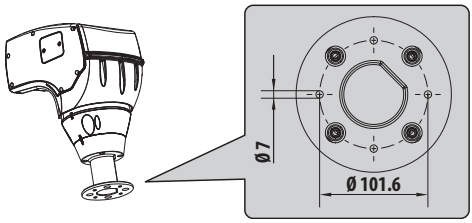


Fig. 04

6.4.2 Passaggio cavi

I cavi di collegamento non devono essere accessibili dall'esterno, inoltre, poiché il cavo si potrebbe sfilare, devono essere opportunamente fissati al palo per evitare che l'eccessivo peso ne comporti lo sfilamento accidentale compromettendone la sicurezza dell'apparecchiatura.

I cavi utilizzati devono essere conformi al tipo di installazione.

Introdurre i cavi all'interno del supporto in modo che fuoriescano per circa 50cm.

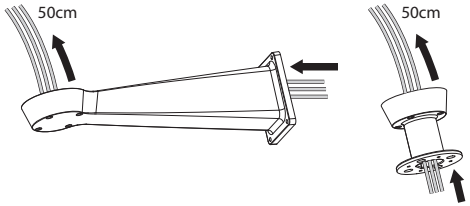


Fig. 05

7 Assemblaggio e installazione

Assemblaggio e installazione vanno eseguiti solo da personale specializzato.

Questo è un apparecchio di Classe A. In un ambiente residenziale questo apparecchio può provocare radiodisturbi. In questo caso può essere richiesto all'utilizzatore di prendere misure adeguate.

7.1 Installazione

7.1.1 Collegamento dei cavi alla base

Non effettuare alterazioni o collegamenti non previsti in questo manuale. Il mancato rispetto delle indicazioni fornite nel manuale in merito ai collegamenti può portare a gravi pericoli per la sicurezza del personale e dell'impianto.

Non modificare i cablaggi già presenti nel prodotto. Il mancato rispetto di questa indicazione può portare a gravi pericoli per la sicurezza del personale e dell'impianto, oltre a far decadere la garanzia.

Mantenere uno schema di collegamento per successive consultazioni.

Introdurre i cavi all'interno dei pressacavi e tenendo la base a circa 20cm dal supporto serrare i pressacavi con coppia pari a 5Nm. I pressacavi sono adatti a cavi con diametro compreso tra 5 e 10mm.

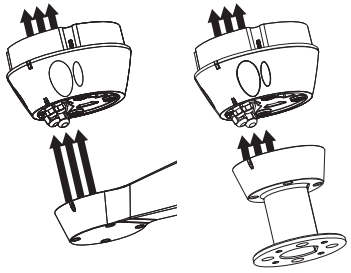


Fig. 06

7.1.2 Fissaggio della base al supporto

Utilizzare le viti e le rondelle fornite con la base.

Dopo aver posizionato la guarnizione (01), fissare la base (02) sul supporto (03) utilizzando le viti (04), le rondelle dentellate (05) e rondelle piane (06). Inserire gli OR antiperdita viti (07).

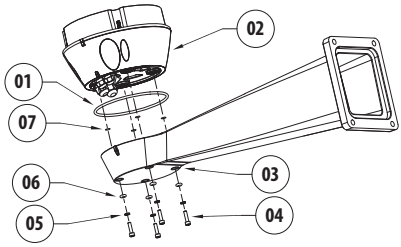


Fig. 07

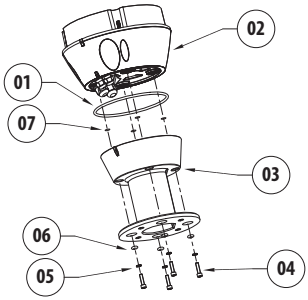


Fig. 08

Allineare le 3 tacche sulla base con quelle presenti sui supporti come nella figura seguente.

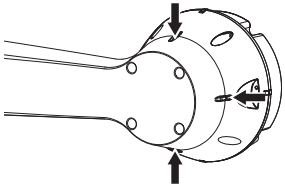


Fig. 09

Applicare nei fori delle viti del frenafiletti tipo Loctite 243®.

Fissare con coppia di serraggio pari a 4Nm.

7.1.3 Collegamento della linea di alimentazione

Il dispositivo è disponibile in versioni con tensioni di alimentazione diverse, il cui valore è riportato nell'etichetta identificativa del prodotto.

Eseguire le operazioni di connessione della base, soltanto in assenza di alimentazione e con dispositivo di sezionamento aperto.

All'atto dell'installazione controllare che le caratteristiche di alimentazione fornita dall'impianto corrispondano a quelle richieste dal dispositivo.

Controllare che le fonti di alimentazione ed i cavi di collegamento siano in grado di sopportare il consumo del sistema.

Il cavo di terra deve essere più lungo degli altri due di circa 10mm per prevenirne il distacco accidentale a causa dello stiramento del cavo.

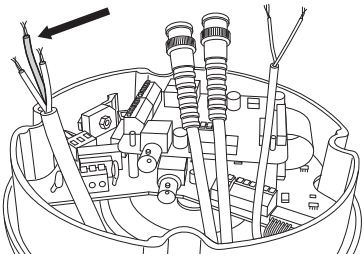


Fig. 10

Il cavo di alimentazione deve essere coperto con la guaina siliconica (01) presente nella dotazione e fissata con l'apposita fascetta (02). Inoltre tutti i cavi di segnale devono essere raggruppati con una fascetta (03).

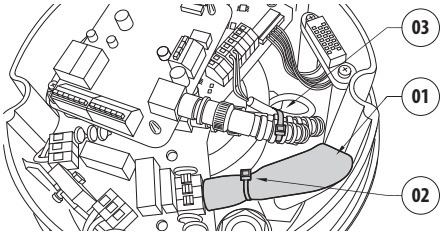


Fig. 11

L'edificio deve avere installato un circuito di protezione (magneto termico) bipolare da 20A massimo, che deve comprendere un interruttore bipolare di tipo automatico che preveda anche la protezione della corrente di guasto verso terra (magnetotermico + differenziale) con distanza minima tra i contatti di 3mm.

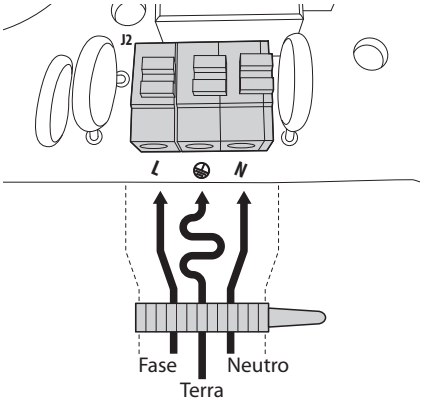


Fig. 12

Collegare i cavi di alimentazione al morsetto J2 come descritto nella tabella sottostante:

COLLEGAMENTO LINEA ALIMENTAZIONE	
Alimentazione 24Vac	
Colore	**Morsetti**
Definito dall'installatore	(N) Neutro
Definito dall'installatore	(L) Fase
Giallo/Verde	Terra
Alimentazione 230Vac	
Colore	**Morsetti**
Blu	(N) Neutro
Marrone	(L) Fase
Giallo/Verde	Terra
Alimentazione 120Vac	
Colore	**Morsetti**
Blu	(N) Neutro
Marrone	(L) Fase
Giallo/Verde	Terra

Tab. 01

Solo per i prodotti marcati UL destinati al mercato Nordamericano, utilizzare un trasformatore UL listed, in classe 2.

Per la connessione della linea di alimentazione utilizzare l'apposita junction-box UPTJBUL. Fare riferimento al manuale d'uso ed installazione del prodotto per ulteriori informazioni.

7.1.4 Collegamento dei cavi video

L'impianto è di tipo CDS (Cable Distribution System), non collegare a circuiti SELV.

Per ridurre il rischio di incendio usare solamente cavi aventi dimensioni maggiori o uguali a 26AWG.

7.1.4.1 Collegamento del video principale

Il segnale video è presente sui connettori J5 e J7 della scheda. Utilizzare sempre un solo connettore.

Connettore J5: Collegare rispettivamente lo schermo e il cavo centrale ai morsetti **GND** e **CVBS**.

Connettore J7: Collegare il cavo coassiale al connettore **BNC** (non fornito) e poi connetterlo al connettore J7.

I morsetti accettano cavi di sezione compresa tra 1.5mm^2 (AWG16) e 0,5mm^2 (AWG30).

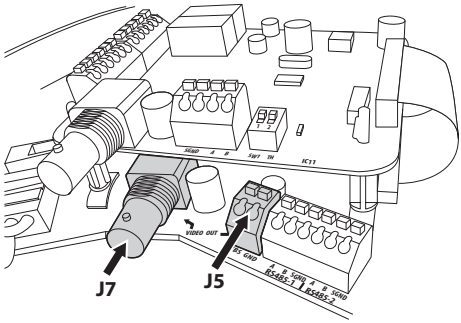


Fig. 13

7.1.4.2 Collegamento del video secondario

Connettore CN3: Collegare il cavo coassiale al connettore **BNC** (non fornito) e poi connetterlo al connettore CN3.

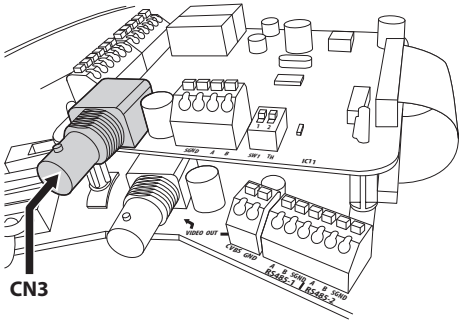


Fig. 14

7.1.4.3 Uscita dei segnali video (versione con doppia telecamera)

Descrizione delle uscite video:

- **Video Principale**: L'uscita video principale (connettori J5-J7, *Fig. 13, pagina 15*) è usata per la trasmissione del segnale video del modulo integrato.
- **Video Secondario**: La seconda uscita video (connettore CN3, *Fig. 14, pagina 15*) permette di selezionare il segnale video della camera termica o del modulo integrato (*"10.11 Commutazione dell'uscita video secondaria", pagina 45*). Il segnale video visualizzato di default è quello proveniente dalla telecamera termica.

7.1.4.4 Uscita del segnale video (versioni con la sola telecamera termica)

Descrizione delle uscite video:

- **Video Principale**: In tutti i modelli con la sola telecamera termica l'uscita video principale (connettori J5-J7, *Fig. 13, pagina 15*) è usata per la trasmissione del segnale video della telecamera termica.
- **Video Secondario**: Il segnale video secondario (connettore CN3, *Fig. 14, pagina 15*) non è utilizzato.

7.1.5 Collegamento della linea di controllo diretto della telecamera termica RS485-3 (solo versioni con doppia telecamera)

L'installazione è di tipo TNV-1, non collegare a circuiti SELV.

Per ridurre il rischio di incendio usare solamente cavi aventi dimensioni maggiori o uguali a 26AWG.

La telecamera termica può essere controllata dall'esterno tramite la linea seriale del connettore CN4 (*"9.6.10 Menù Camera Termica", pagina 39*).

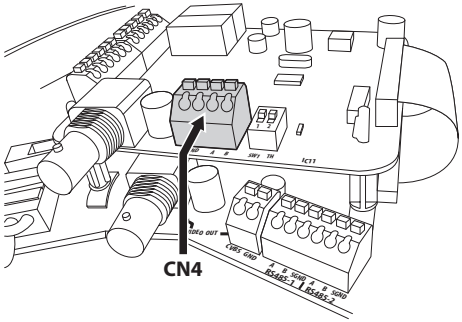


Fig. 15

7.1.6 Impostazione formato video DS1 (solo versioni con telecamera termica)

Il dip-switch 1 seleziona il tipo di formato video in uscita.

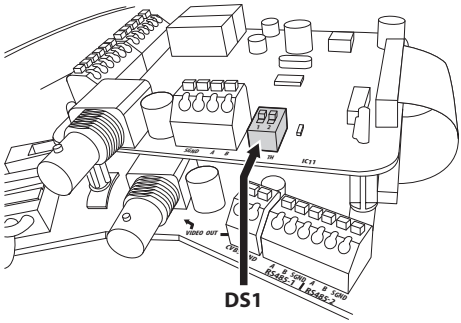


Fig. 16

CONFIGURAZIONE VIDEO E TELEMETRIA (DS1)			
Descrizione	**SW 1**	**SW 2**	**Configurazione**
Formato video	ON	-	Formato video PAL
	OFF	-	Formato video NTSC

Tab. 02

Nelle versioni con doppia telecamera la posizione del dip-switch è ininfluente.

7.1.7 Terminazione della linea seriale RS485-3 (DS1)

Il dip-switch 2 abilita la terminazione (120 Ohm) della linea seriale.

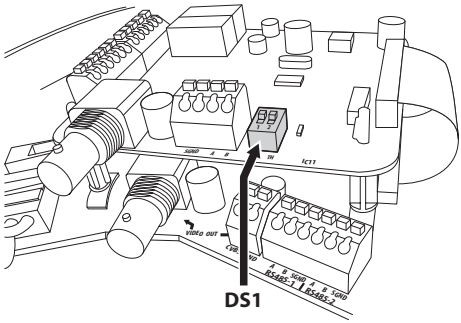


Fig. 17

CONFIGURAZIONE VIDEO E TELEMETRIA (DS1)			
Descrizione	**SW 1**	**SW 2**	**Configurazione**
Terminazione linea seriale	-	ON	Terminazione RS485-3 abilitata
	-	OFF	Terminazione RS485-3 disabilitata

Tab. 03

7.1.8 Collegamento delle linee di telemetria

L'installazione è di tipo TNV-1, non collegare a circuiti SELV.

Per ridurre il rischio di incendio usare solamente cavi aventi dimensioni maggiori o uguali a 26AWG.

Il prodotto prevede 2 linee seriali di comunicazione RS485 (*Tab. 04, pagina 17*) che possono essere configurate in vari modi secondo la posizione dei dip-switch 5 e 6 del selettore **Seriali (DIP1)** della scheda CPU (*"7.1.14 Linee di comunicazione seriali (DIP1)", pagina 21*).

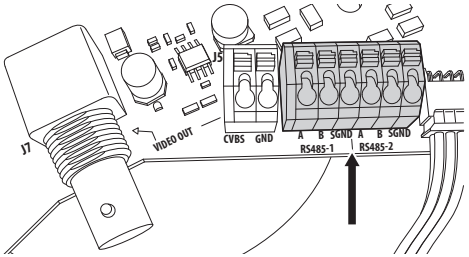


Fig. 18

LINEA SERIALE	MORSETTO	DESCRIZIONE
RS485-1	A (+)	Linea RS485 (1)
	B (-)	Linea RS485 (1)
	SGND	Riferimento linea RS485-1
RS485-2	A (+)	Linea RS485 (2)
	B (-)	Linea RS485 (2)
	SGND	Riferimento linea RS485-2

Tab. 04

7.1.9 Collegamento degli allarmi

La Scheda Allarmi è situata nella base dell'unità, come visibile nell'immagine seguente.

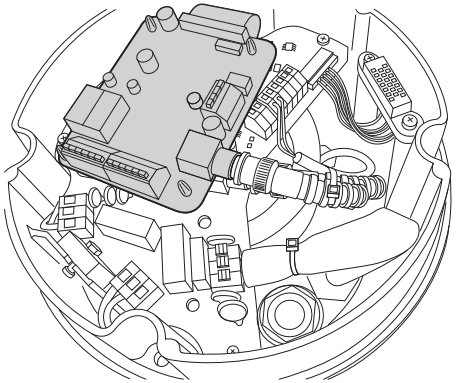


Fig. 19

Essa presenta sei contatti di allarme e due relè in uscita con contatto pulito. Le tipologie di allarmi riconosciuti sono due:

- Allarme a contatto pulito (5 ingressi allarmi disponibili);
- Allarme in tensione (1 ingresso allarme disponibile, solo per controllo livello galleggiante su tanica UPTWAS).

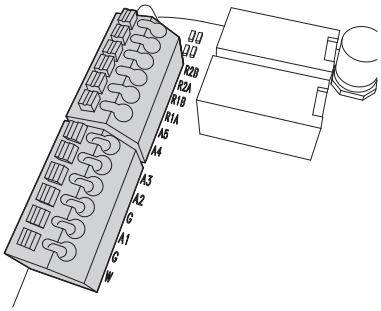


Fig. 20

MORSETTO	DESCRIZIONE
W	Allarme galleggiante Washer *
G	Massa allarme W oppure massa allarmi A1-A5
A1	Allarme 1 (contatto pulito)
G	Massa allarmi A1-A2-A3-A4 A5
A2	Allarme 2 (contatto pulito)
A3	Allarme 3 (contatto pulito)
A4	Allarme 4 (contatto pulito)
A5	Allarme 5 (contatto pulito) **

Tab. 05 * Ingresso di allarme previsto esclusivamente per UPTWAS, controllo livello liquido tanica impianto di Lavaggio.

Tutti gli allarmi hanno una portata di circa 200 metri, ottenibile con un cavo non schermato di sezione minima 0.25 mmq (AWG 24).

7.1.9.1 Collegamento allarme con contatto pulito (contatto secco)

Nel caso di allarme a contatto pulito (allarmi A1, A2, A3, A4, A5), eseguire il collegamento seguente:

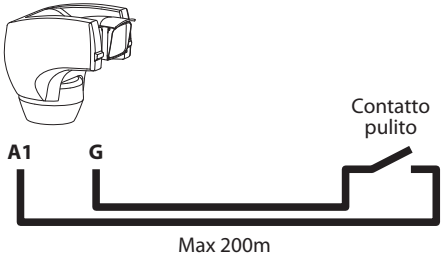


Fig. 21

L'interruttore di allarme, può essere di tipo NO (normalmente aperto) oppure NC (normalmente chiuso).

Per ulteriori dettagli sulla configurazione e l'utilizzo degli allarmi fare riferimento a *"9.6.6.1 Menù Allarmi", pagina 37*.

7.1.9.2 Collegamento Relè

I relè sono situati nei connettori R1A ed R1B (Rele 1) e R2A e R2B (Relè 2). I relè non hanno polarità e pertanto è indifferente usare il morsetto A oppure B dello stesso relè, per tensioni alternate oppure continue.

MORSETTO	DESCRIZIONE
R1A	Relè 1 morsetto A
R1B	Relè 1 morsetto B
R2A	Relè 2 morsetto A
R2B	Relè 2 morsetto B

Tab. 06

I relè sono utilizzabili solamente per basse tensioni di lavoro (fino a 30Vac oppure 60Vdc) e con una corrente massima di 2A. Utilizzare un cavi di sezione adeguata al carico da controllare. Il morsetto può ospitare cavi con sezione compresa tra 0.5 e 1.5mm² (AWG 30-16).

Per ulteriori dettagli sulla configurazione e l'utilizzo dei relè fare riferimento a *"9.6.6.1 Menù Allarmi", pagina 37*.

7.1.9.3 Collegamento dell'impianto di lavaggio

Per collegare la pompa dell'impianto di lavaggio UPTWAS con ULISSE COMPACT THERMAL fare riferimento al seguente metodo di connessione:

UPTWAS (CONNETTORE CN4)	SCHEDA ALLARMI ULISSE COMPACT THERMAL (CONNETTORE CN1)
CMD	R2A
GND	R2B

Tab. 07

Il Relè 2 è utilizzato in questo caso esclusivamente per l'attivazione del comando Pompa Lavavetro sulla scheda UPTWAS (*"9.6.7 Menù Impianto di Lavaggio", pagina 38*).

Inoltre, se si utilizza la tanica dotata di galleggiante occorre effettuare anche il seguente cablaggio:

UPTWAS (CONNETTORE CN4)	SCHEDA ALLARMI ULISSE COMPACT THERMAL (CONNETTORE CN2)
ALM	W
ALM/G	G

Tab. 08

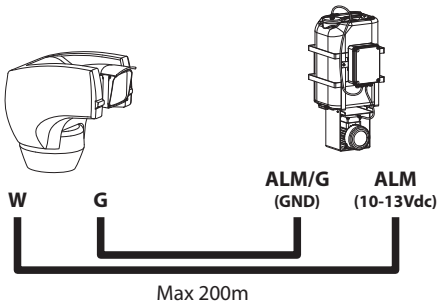


Fig. 22

Per ulteriori dettagli sull'impianto di lavaggio fare riferimento a *"9.6.7 Menù Impianto di Lavaggio", pagina 38*.

7.1.10 Fissaggio dell'unità superiore

Orientare il connettore autocentrante (01) dell'unità superiore. Orientare la sporgenza laterale (02) nel senso di visione frontale della telecamera. Posizionare l'unità superiore sulla base con l'orientamento mostrato in figura.

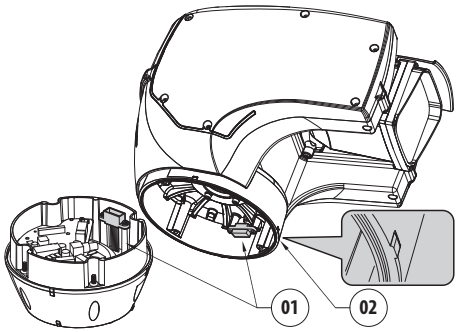


Fig. 23

In questo modo le sporgenze laterali sulla base e sull'unità superiore sono allineate nell'unica posizione possibile.

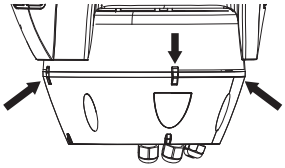


Fig. 24

Fissare l'unità superiore (01) alla base (02) tramite le viti di fissaggio (03), le rondelle dentellate (04) e le rondelle piane (05). Controllare che sia presente ed in buono stato la guarnizione della base (06).

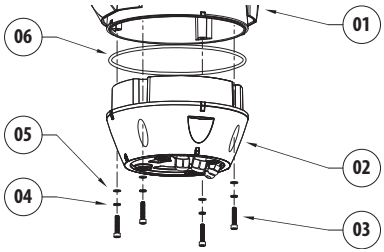


Fig. 25

Applicare nei fori delle viti del frenafiletti tipo Loctite 243®.

Fissare con coppia di serraggio pari a 4Nm.

7.1.11 Configurazione dip-switch

Prima di alimentare il dispositivo, è necessario configurarlo correttamente tramite i dip-switch presenti all'interno dello sportellino di configurazione. Aprire svitando le viti come illustrato in figura:

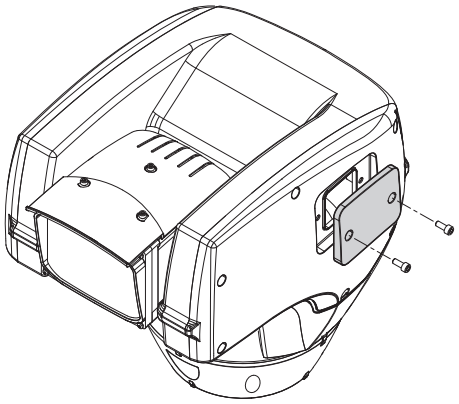


Fig. 26

Il successivo schema raffigura i dip-switch, una volta aperto lo sportellino di configurazione.

La levetta del dip-switch (SW) verso l'alto rappresenta il valore 1 (ON) mentre la levetta verso il basso rappresenta il valore 0 (OFF).

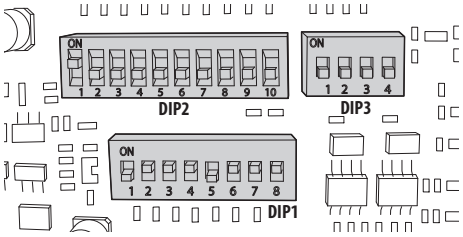


Fig. 27

7.1.12 Impostazione modo verifica settaggi (DIP1)

- **SW 1=ON**: **Visualizza Configurazione**. Da usare solo come verifica della configurazione alla fine dei settaggi. Durante il normale utilizzo assicurarsi che la levetta sia su OFF (**SW 1=OFF**).

7.1.13 Impostazione del baudrate (DIP1)

I dip-switch 4, 3 e 2 sono utilizzati per impostare la velocità di comunicazione del dispositivo secondo la tabella sotto riportata.

IMPOSTAZIONE DEL BAUDRATE (DIP1)						
Descrizione	**SW 1**	**SW 2**	**SW 3**	**SW 4**	**SW 5-6-7-8**	**Configurazione**
Selezione del baud-rate	-	ON	ON	ON	-	38400 baud
	-	OFF	ON	ON	-	19200 baud
	-	ON	OFF	ON	-	9600 baud
	-	OFF	OFF	ON	-	4800 baud
	-	ON	ON	OFF	-	2400 baud
	-	OFF	ON	OFF	-	1200 baud
	-	ON	OFF	OFF	-	600 baud
	-	OFF	OFF	OFF	-	300 baud
Visualizzazione configurazioni	ON		-	-	-	Visualizzazione abilitata
	OFF		-	-	-	Visualizzazione disabilitata

Tab. 09

7.1.14 Linee di comunicazione seriali (DIP1)

Il prodotto prevede due linee seriali di comunicazione RS485, che possono essere configurate in vari modi secondo la posizione dei dip-switch 5 e 6 del selettore **DIP1**.

LINEE DI COMUNICAZIONE SERIALI (DIP1)					
Descrizione	**SW 1-2-3-4**	**SW 5**	**SW 6**	**SW 7-8**	**Configurazione**
Linee seriali	-	ON	ON	-	*"7.1.14.1 Linea RS485 TX/RX bidirezionale", pagina 21*
	-	OFF	ON	-	*"7.1.14.2 Linea RS485-1 ricezione, linea RS485-2 ripetizione", pagina 21*
	-	ON	OFF	-	*"7.1.14.3 Linea RS422 bidirezionale", pagina 21*
	-	OFF	OFF	-	*"7.1.14.4 Linea RS485 monodirezionale", pagina 22*

Tab. 10

7.1.14.1 Linea RS485 TX/RX bidirezionale

Questo tipo di impostazione permette di ottenere una comunicazione bidirezionale half-duplex sulla linea RS485-1.

La linea seriale RS485-2 non è utilizzata.

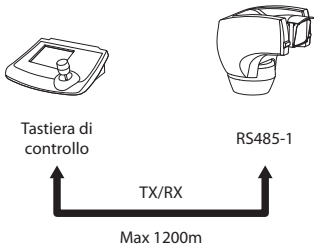


Fig. 28

7.1.14.2 Linea RS485-1 ricezione, linea RS485-2 ripetizione

Questa impostazione permette di collegare più dispositivi in cascata. Il segnale viene rigenerato da ogni unità permettendo di aumentare notevolmente la distanza totale.

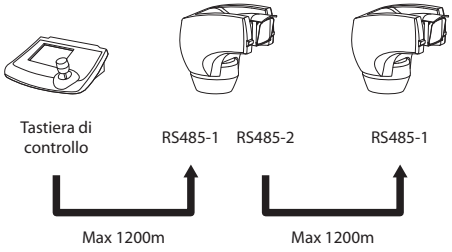


Fig. 29

Questa impostazione è utilizzabile solo con protocolli monodirezionali.

In questa configurazione non è possibile fare l'aggiornamento del firmware da remoto.

7.1.14.3 Linea RS422 bidirezionale

Questa impostazione consente la comunicazione in full duplex secondo lo standard RS422.

La linea RS485-1 è sempre in ricezione (RS422-RX).

La linea RS485-2 è sempre in trasmissione (RS422-TX).

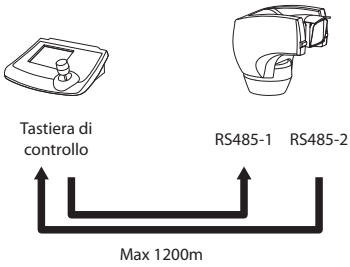


Fig. 30

7.1.14.4 Linea RS485 monodirezionale

La prima linea (RS485-1) funzionerà secondo le impostazioni settate con i dip-switch **Indirizzo**, **Baudrate** e **Protocollo**.

La linea RS485-2 non è utilizzata.

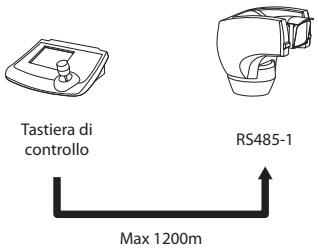


Fig. 31

Questa impostazione è utilizzabile solo con protocolli monodirezionali.

In questa configurazione non è possibile fare l'aggiornamento del firmware da remoto.

7.1.15 Terminazione linee seriali (DIP1) e collegamenti

Sulla scheda sono presenti due dip-switch usati per configurare la terminazione (120 Ohm) della linea seriale.

Ogni periferica che si trovi a fine linea deve essere terminata utilizzando l'apposito dip-switch in modo da evitare che si formino riflessioni e deformazioni del segnale.

I dip-switch 7 e 8 terminano rispettivamente le linee seriali RS485-1 e RS485-2.

TERMINAZIONE LINEE SERIALI (DIP1) E COLLEGAMENTI				
Descrizione	**SW 1-2-3-4-5-6**	**SW 7**	**SW 8**	**Configurazione**
Terminazioni linee seriali			ON	Terminazione RS485-2 abilitata
			OFF	Terminazione RS485-2 disabilitata
		ON		Terminazione RS485-1 abilitata
		OFF		Terminazione RS485-1 disabilitata

Tab. 11

7.1.16 Impostazione protocollo (DIP3)

I sistemi di posizionamento video della linea ULISSE COMPACT THERMAL, sono comandabili mediante vari protocolli.

IMPOSTAZIONE PROTOCOLLO (DIP3)				
SW 1	**SW 2**	**SW 3**	**SW 4**	**Protocollo**
ON	OFF	ON	OFF	PANASONIC
OFF	OFF	ON	OFF	ERNITEC
OFF	ON	OFF	OFF	SENSORMATIC
ON	OFF	OFF	OFF	PELCO D
OFF	OFF	OFF	OFF	MACRO (VIDEOTEC)

Tab. 12

7.1.17 Impostazione indirizzo (DIP2)

È possibile impostare l'indirizzo di ULISSE COMPACT THERMAL, da 1 a 1023. La selezione dell'indirizzo avviene secondo la codifica binaria, tramite i 10 dip-switch di DIP2 (*"16 Appendice A - Tabella indirizzi dip-switch", pagina 55)*.

8 Accensione

I sistemi della linea ULISSE COMPACT THERMAL si accendono semplicemente fornendo l'alimentazione e si spengono togliendola.

La procedura di preriscaldamento automatico (De-Ice) si potrebbe attivare tutte le volte che il dispositivo viene acceso ad una temperatura ambiente inferiore ai 0°C. La procedura serve a garantire la corretta funzionalità del dispositivo anche alle basse temperature. La durata varia tra 60 e 120 minuti a seconda delle condizioni.

8.1 Prima di fornire alimentazione

Controllare che il sistema ULISSE COMPACT THERMAL e gli altri componenti dell'impianto siano chiusi e sia quindi impossibile il contatto diretto con parti in tensione.

Non sostare nei pressi del dispositivo quando alimentato. Agire sul dispositivo sempre in mancanza di alimentazione.

Accertarsi che tutte le parti siano fissate in maniera solida ed affidabile.

Alla prima accensione è sempre utile verificare la corretta configurazione del dispositivo.

Per fare questo è necessario togliere l'alimentazione, rimuovere lo sportellino di protezione dei dip-switch e porre la levetta del dip-switch di **Visualizza Configurazione** (**DIP1, SW1**) su **ON**.

Alimentare il dispositivo e dopo pochi secondi sarà possibile verificare a schermo la configurazione impostata.

Conclusa la verifica, spegnere il dispositivo e abbassare nuovamente la levetta del dip-switch di **Visualizza Configurazione** (**DIP1, SW1**).

Chiudere lo sportellino ed alimentare di nuovo il dispositivo.

8.2 Lista dei controlli

Durante la fase di accensione il dispositivo visualizza la lista dei controlli che deve effettuare prima di passare al funzionamento normale.

```
ACCENSIONE
Lettura parametri....OK
Ricerca zero.........OK
Telecamera.......36x.OK
Sonde di temperatura.OK
Faro Infrarosso......--
Tergicristallo.......--
Scheda Opzionale.....--
```

Fig. 32

Se uno dei controlli dà errore (ERR) contattare il centro assistenza.
La scritta "- -" significa che il brandeggio non è provvisto dell'opzione descritta.

9 Configurazione

9.1 Menù su schermo (OSM)

Durante il normale funzionamento di ULISSE COMPACT THERMAL è possibile attivare il **Menù Su Schermo** per l'impostazione delle funzioni avanzate utilizzando i tasti corrispondenti (fare riferimento al manuale della tastiera utilizzata oppure alla *Tab. 14, pagina 47*).

Uscire dal **Menù Su Schermo** con **Zoom Wide** (oppure **Zoom-**).

9.1.1 Come usare il joystick

Tutte le operazioni nei menù vengono eseguite utilizzando il joystick.

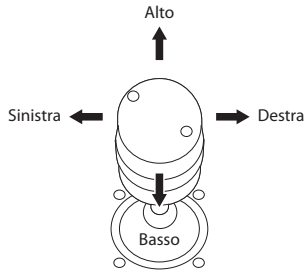


Fig. 33 Pan e tilt.

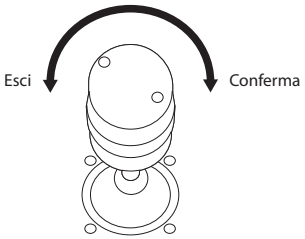


Fig. 34 Zoom wide e tele.

Nel caso si usino tastiere di controllo con joystick a due assi, utilizzare i pulsanti di Zoom Wide e Zoom Tele per realizzare i comandi Esci e Conferma.

9.2 Come muoversi nei menù

Ogni videata dell'OSM presenta una lista di parametri o di sottomenù che possono essere selezionati dall'operatore. Per scorrere lungo i parametri muovere il cursore agendo sul joystick (alto e basso).

```
  AVANZATE
-----------------------
1 VEL. ZOOM      :  7
2>ZOOM DIGITALE  :  N
3 WIDE DYNAMIC   :  Y
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  Y
6 FOCUS                >
7 ESPOSIZIONE          >
8 INFRAROSSO           >
9 BILANCIAMENTO BIANCO >
```

Fig. 35

Il simbolo > a fine riga indica la presenza di uno specifico sottomenù. Per attivarlo è sufficiente confermare la voce del menù. Per uscire dal sottomenù, usare la funzione **Esci** (**Zoom Wide**).

```
  AVANZATE
-----------------------
1 VEL. ZOOM      :  7
2 ZOOM DIGITALE  :  N
3 WIDE DYNAMIC   :  Y
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  Y
6 FOCUS                >
7 ESPOSIZIONE          >
8 INFRAROSSO           >
9>BILANCIAMENTO BIANCO >
```

Fig. 36

9.3 Come modificare le impostazioni

Spostarsi con il cursore in corrispondenza del parametro che si intende modificare e confermare. Il campo comincerà a lampeggiare indicando che è in modifica. Agendo sul joystick (alto e basso) verranno mostrate le possibili scelte.

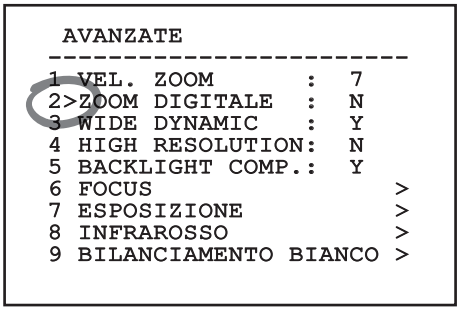


Fig. 37

Individuata la scelta desiderata, confermare.

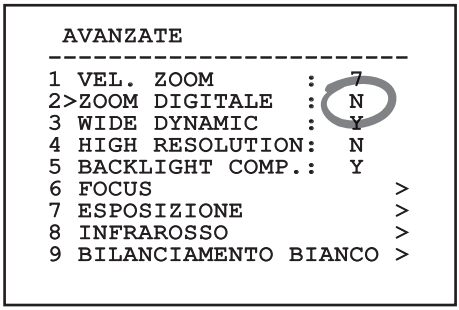


Fig. 38

Il parametro smetterà di lampeggiare confermando la preferenza.

9.4 Come cambiare i campi numerici

Spostarsi con il cursore in corrispondenza del parametro che si intende modificare e confermare.

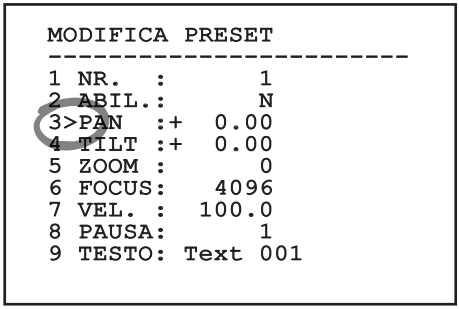


Fig. 39

La prima cifra del campo numerico in modifica lampeggia e l'ultima riga dello schermo mostra i limiti di accettazione del campo. Muoversi sul campo (sinistra e destra) e cambiare il segno oppure il valore numerico (alto e basso).

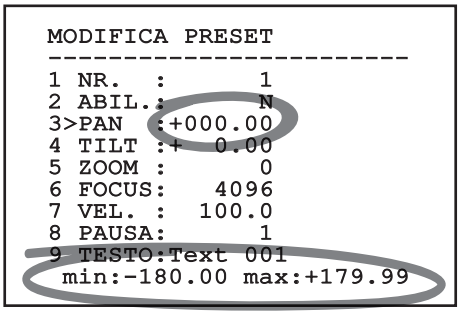


Fig. 40

A risultato ottenuto confermare. Il cursore ritorna a sinistra e la cifra modificata non lampeggia. Il campo verrà forzato al minimo o al massimo consentito se si tenta di inserire un valore esterno ai limiti.

9.5 Come modificare i testi

Spostarsi con il cursore in corrispondenza del parametro che si intende modificare e confermare.

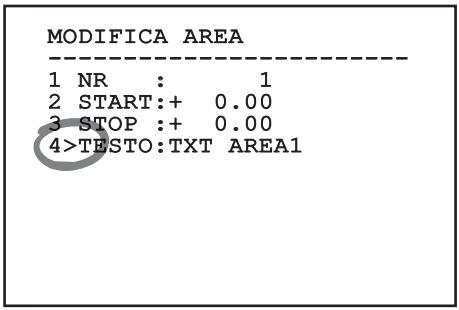


Fig. 41

Apparirà la schermata di modifica del testo. Il simbolo ↑ si posiziona sotto il carattere modificabile mentre il cursore > si posiziona alla sinistra del carattere da inserire.

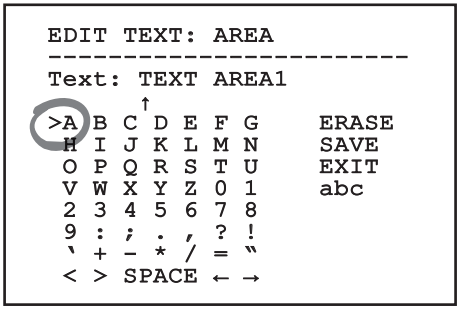


Fig. 42

È possibile navigare all'interno del menù usando il joystick.

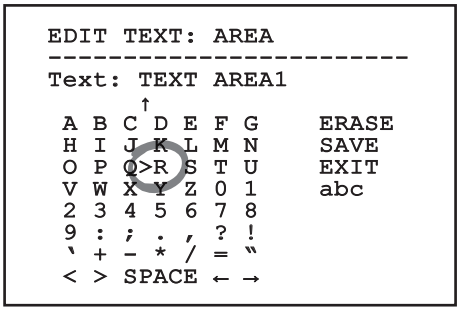


Fig. 43

Il comando **Conferma** (**Zoom Tele**) inserisce il carattere desiderato.

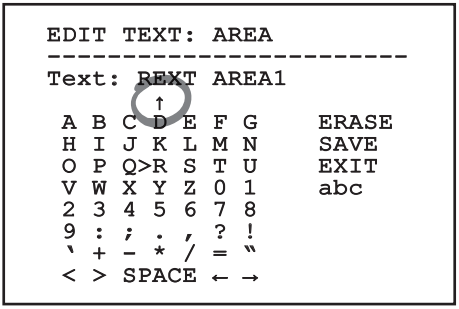


Fig. 44

Usare:

- **ERASE**: Per cancellare l'intera stringa di testo.
- **SAVE**: Per salvare il nuovo testo.
- **EXIT**: Per uscire dal menù.
- **abc**: Per visualizzare i caratteri minuscoli.

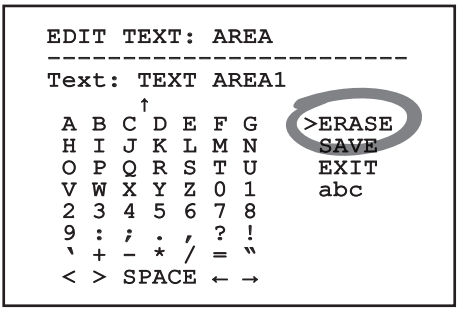


Fig. 45

Per uscire dal menù è possibile usare anche il comando **Zoom Wide**.

9.6 Configurazione del sistema

9.6.1 Menù principale

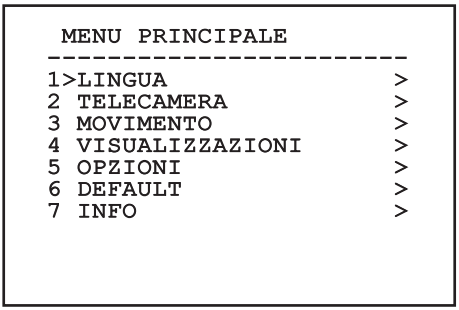


Fig. 46

9.6.2 Lingua

```
 MENU SCELTA LINGUA
------------------------
1>ITALIANO
2 ENGLISH
3 FRANCAIS
4 DEUTSCH
```

Fig. 47

9.6.3 Menù telecamera

01. **Configurazione**: Imposta una delle configurazioni predefinite per il modulo SONY.
    - **Standard**: Imposta la modalità di funzionamento standard della telecamera.
    - **Low Light**: Imposta la modalità di funzionamento pensata per ambienti con scarsa luminosità.
    - **Far Mode**: Imposta la modalità di funzionamento pensata per aree di grandi dimensioni. Abilita lo zoom proporzionale e lo zoom digitale.
    - **Custom**: Segnala che i parametri della telecamera sono stati scelti manualmente dall'utente.
02. **Titolazione Aree**: Permette di entrare nel sottomenù per la gestione della titolazione delle aree.
03. **Mascheratura**: Permette di entrare nel sottomenù per la gestione della mascheratura dinamica.
04. **Avanzate**: Permette di entrare nel sottomenù per l'impostazione dei parametri avanzati del modulo SONY.

```
 TELECAMERA
------------------------
1>CONFIG.:  STANDARD
2 TITOLAZIONE AREE     >
3 MASCHERATURA         >
4 AVANZATE             >
```

Fig. 48

9.6.3.1 Menù Titolazione Aree

Questa funzione consente di impostare fino a otto zone (di dimensioni variabili) con possibilità di titolazione.

Dal menù **Titolazione Aree** è possibile impostare i seguenti parametri:

01. **Abilitazione**: Abilitare la visualizzazione sullo schermo del messaggio associato all'area raggiunta.
02. **Modifica Area**: Permette di entrare nel sottomenù per l'impostazione dei parametri delle aree.

```
 TITOLAZIONE AREE
------------------------
1>ABILITAZIONE: N
2 MODIFICA AREA        >
```

Fig. 49

9.6.3.2 Menù Titolazione Aree (Modifica Area)

Una volta entrati nel menù **Modifica Area** è possibile impostare i seguenti parametri:

01. **Numero**: Seleziona l'area da modificare.
02. **Start**: Imposta la posizione iniziale dell'area.
03. **Stop**: Imposta la posizione finale dell'area
04. **Testo**: Modifica il testo che viene visualizzato quando ci si muove all'interno dell'area.

```
 MODIFICA AREA
------------------------
1>NR   :       1
2 START:+  0.00
3 STOP :+  0.00
4 TESTO:TXT AREA1
```

Fig. 50

Esempio: Per attivare la titolazione dell'area 1 quando il dispositivo si trova tra +15° e +45° è necessario:

- Abilitare la titolazione delle aree, impostando **S** come valore della voce **Abilitazione** del menù **Titolazione Aree**.
- Impostare **1** come valore del parametro **Nr** del menù **Modifica Area**.
- Impostare **+15.00** come valore del parametro **Start** del menù **Modifica Area**.
- Impostare **+45.00** come valore del parametro **Stop** del menù **Modifica Area**.
- Se necessario, modificare il testo visualizzato selezionando la voce **Testo** del menù **Modifica Area**.

Ponendo a zero i valori di Start e Stop del menù Modifica Area si disabilita la visualizzazione della scritta. In caso di sovrapposizione di più aree prevale quella di numero superiore.

Per la definizione delle aree seguire il senso orario come indicato in figura.

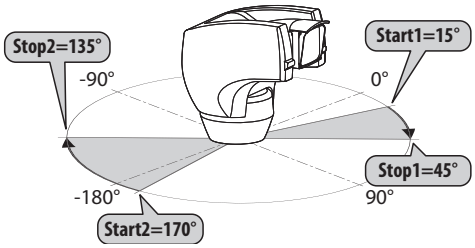


Fig. 51

Il nome e la posizione di default delle aree del brandeggio fanno riferimento ai quatto punti cardinali. La posizione del NORD si modifica tramite il parametro Offset Pan del menu movimento (*"9.6.4 Menù Movimento", pagina 33*).

9.6.3.3 Menù Mascheratura

La mascheratura dinamica permette di creare fino ad un massimo di 24 maschere in modo da ottenere l'oscuramento di particolari aree definite dall'utente.

Le maschere vengono definite nello spazio e tengono conto della posizione orizzontale, verticale e di profondità dello zoom al momento dell'impostazione.

ULISSE COMPACT THERMAL provvede automaticamente a mantenere la posizione e la dimensione della mascheratura, in funzione dell'area visualizzata.

È possibile visualizzare fino ad un massimo di 8 maschere contemporaneamente.

Se si usa il dispositivo al massimo della velocità, i tempi di aggiornamento del segnale video diventano critici e si devono creare delle maschere più grandi dell'oggetto, in modo da nasconderlo per più tempo durante il passaggio e non rischiare di vederlo.

Per garantire la piena funzionalità, la posizione in tilt della maschera deve essere sempre compresa tra -70 e +70 gradi, inoltre, rispetto all'oggetto da coprire la dimensione della maschera deve essere doppia (sia in altezza che in larghezza).

Dal menù **Mascheratura** è possibile impostare i seguenti parametri:

01. **Colore Maschera**: Permette di scegliere il colore delle maschere.
02. **Modifica Maschere**: Permette di accedere al sottomenù **Modifica Maschere** ed impostare i parametri di mascheratura dinamica.

```
 MASCHERATURA
------------------------
1>COLORE :       BLU
2 MODIFICA MASCHERE    >
```

Fig. 52

9.6.3.4 Menù Mascheratura (Modifica Maschere)

Una volta entrati nel menù **Modifica Maschere** è possibile impostare i seguenti parametri:

01. **Maschera Numero**: Permette di scegliere su quale maschera agire.
02. **Abilita Maschera**: Abilita o disabilita la maschera selezionata.
03. **Modifica Maschera**: Permette di creare o modificare una maschera.

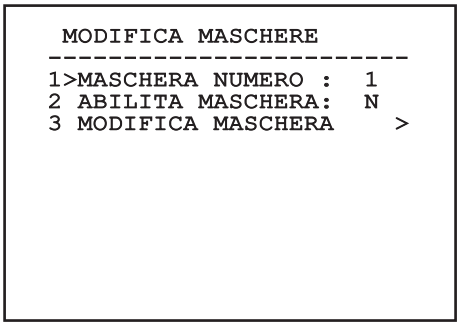


Fig. 53

Se si seleziona l'opzione **Modifica Maschera** del menù, si abilita la possibilità di impostare i nuovi valori della maschera selezionata.

9.6.3.5 Come creare una nuova maschera

Scegliere una maschera non abilitata selezionando dal menù **Modifica Maschere** (*Fig. 53, pagina 29*) la voce **Maschera Numero**. Per modificarla seleziona la voce **Modifica Maschera**.

Nell'esempio che segue andremo a mascherare un fiore.

- Premere il pulsante **Iris Close** per passare dalla modalità **Mascheratura** alla modalità **Muovi Camera**.

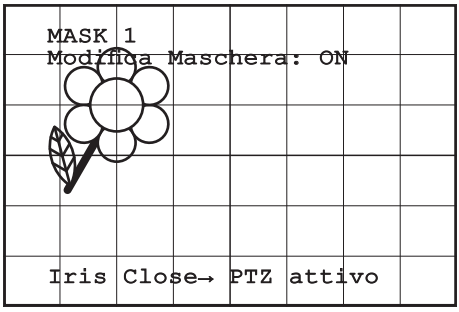


Fig. 54

- Agendo sul joystick della tastiera muovere ULISSE COMPACT THERMAL ed eventualmente agire con lo zoom fino ad ottenere il fiore centrato nello schermo.

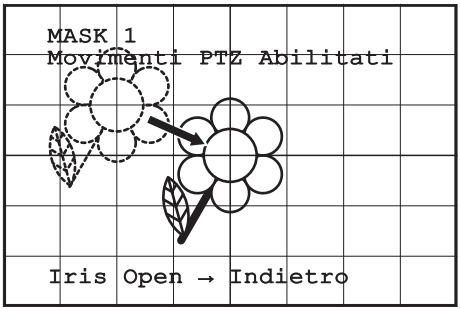


Fig. 55

- Una volta ottenuto il risultato desiderato premere il pulsante **Iris Open**.

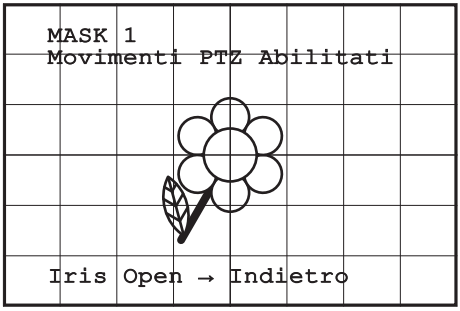


Fig. 56

- Apparirà un piccolo rettangolo. Agendo sul joystick (**Pan e Tilt**) ingrandire il rettangolo fino a coprire tutto il fiore.

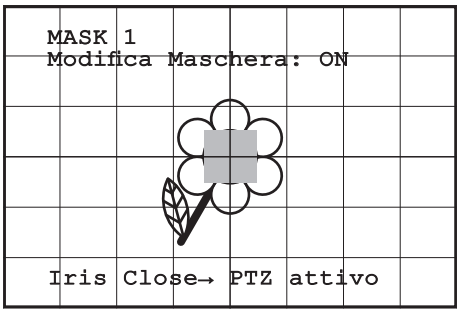


Fig. 57

- Una volta ottenuto il risultato desiderato confermare ruotando lo zoom su tele.

9.6.3.6 Come modificare una maschera

Scegliere una maschera abilitata selezionando dal menù **Modifica Maschere** (*Fig. 53, pagina 29*) la voce **Maschera Numero**. Per modificarla seleziona la voce **Modifica Maschera**.

- Agendo sul joystick (**Pan e Tilt**) ingrandire o ridurre il rettangolo fino ad ottenere l'effetto desiderato.

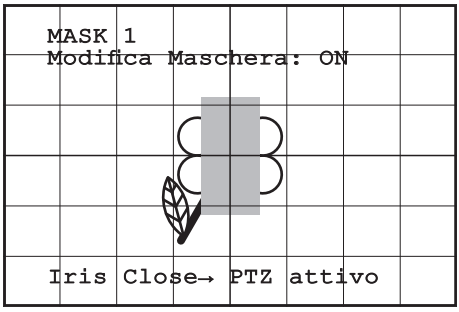


Fig. 58

- Confermare ruotando lo zoom su tele.

9.6.3.7 Menù Configurazioni Avanzate

Accedendo a questo menù è possibile configurare il modulo SONY.

01. **Zoom**: Permette di accedere al sottomenù **Zoom**.
02. **Focus**: Permette di accedere al sottomenù **Focus**.
03. **Esposizione**: Permette di accedere al sottomenù **Esposizione**.
04. **Infrarosso**: Permette di accedere al sottomenù **Infrarosso**.
05. **Bilanciamento Bianco**: Permette di accedere al sottomenù **Bilanciamento Bianco**.
06. **Altro**: Permette di accedere al sottomenù **Altro**.

Fig. 59

9.6.3.8 Menù Configurazioni Avanzate (Zoom)

01. **Velocità Zoom**: Imposta la velocità dello zoom. I valori di velocità sono compresi tra 0 (minima velocità) e 7 (massima velocità).
02. **Zoom Digitale**: Abilita lo zoom digitale.

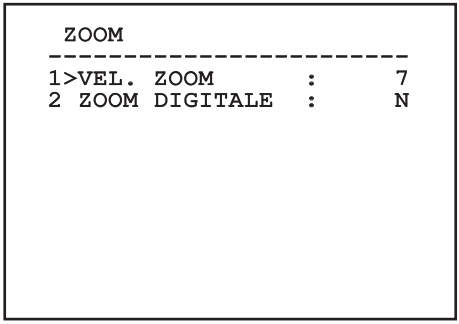


Fig. 60

9.6.3.9 Menù Configurazioni Avanzate (Focus)

Una volta entrati nel menù **Focus** è possibile impostare i seguenti parametri:

01. **Velocità Focus**: Imposta la velocità del Focus. I valori di velocità sono compresi tra 0 (minima velocità) e 7 (massima velocità).
02. **Autofocus**: Abilita o disabilita l'autofocus. Se attivo, consente di richiamare automaticamente l'Autofocus ad ogni posizionamento o movimento dello zoom, a seconda del tipo di funzionamento selezionato.
03. **Tipo Autofocus**: Imposta il tipo di Autofocus. I valori possibili sono:
    - **Normale**: L'autofocus è sempre abilitato.
    - **Intervallo**: Richiamo della funzione autofocus ad intervalli. Il richiamo è fissato ogni 5 secondi.
    - **Trigger**: Richiamo dell'autofocus ad ogni movimento PTZ. È la soluzione consigliata.
04. **Sensibilità**: Imposta il tipo di sensibilità. I valori possibili sono:
    - **Normale**: Messa a fuoco alla velocità più alta. È la soluzione consigliata.
    - **Bassa**: Messa a fuoco rallentata. È utile in caso di scarsa luminosità ambientale perché rende più stabile l'immagine.

```
 FOCUS
------------------------
1>VEL. FOCUS     :      2
2 AUTOFOCUS      :      N
3 TIPO AUTOFOCUS:TRIGGER
4 SENSIBILITA'   :NORMALE
```

Fig. 61

9.6.3.10 Menù Configurazioni Avanzate (Esposizione)

Una volta entrati nel menù **Esposizione** è possibile impostare i seguenti parametri:

01-05. **Modo**: Imposta il tipo di controllo dell'esposizione: Automatica, Manuale, Shutter, Iris e Bright.
06. **Auto Slowshutter**: Se abilitata, aumenta automaticamente il tempo di esposizione per migliorare la funzione notturna.
07-08. **Compensazione, Valore Compensazione**: Imposta la compensazione dell'esposizione.
09. **Compensazione Backlight**: Abilita la funzione Compensazione Backlight. Permette di vedere meglio eventuali zone buie nell'immagine.

Con la modalità automatica è possibile abilitare anche la compensazione Backlight. Il menù si autoconfigura dinamicamente in funzione della scelta effettuata mostrando i parametri sui quali si può agire.

La modalità di gestione dell'esposizione selezionata viene associata a tutti i preset.

L'impostazione consigliata è **Automatico**.

```
 ESPOSIZIONE
------------------------
1>MODO :       AUTOMATICO



6 AUTO SLOW SHUTTER :   S
7 COMPENSAZIONE     :   N
8 COMPENSAZIONE VAL.:   7
9 BACKLIGHT COMP.   :   N
```

Fig. 62

La tabella seguente riporta la corrispondenza tra i valori introdotti e l'effetto sull'ottica del modulo SONY.

VALORE	SHUTTER		IRIS	GAIN	COMPENSAZIONE ESPOSIZIONE
	NTSC	PAL			
0	1/1	1/1	Chiuso	-3db	-10,5db
1	1/2	1/2	F28	0db	-9db
2	1/4	1/3	F22	2db	-7,5db
3	1/8	1/6	F19	4db	-6db
4	1/15	1/12	F16	6db	-4,5db
5	1/30	1/25	F14	8db	-3db
6	1/60	1/50	F11	10db	-1,5db
7	1/90	1/75	F9.6	12db	0db

VALORE	SHUTTER		IRIS	GAIN	COMPENSAZIONE ESPOSIZIONE
8	1/100	1/100	F5	14db	1,5db
9	1/125	1/120	F6.8	16db	3db
10	1/180	1/150	F5.6	18db	4.5db
11	1/250	1/215	F4.8	20db	6db
12	1/350	1/300	F4	22db	7,5db
13	1/500	1/425	F3.4	24db	9db
14	1/725	1/600	F2.8	26db	10,5db
15	1/1000	1/1000	F2.4	28db	-
16	1/1500	1/1250	F2	-	-
17	1/2000	1/1750	F1.6	-	-
18	1/3000	1/2500	-	-	-
19	1/4000	1/3500	-	-	-
20	1/6000	1/6000	-	-	-
21	1/10000	1/10000	-	-	-

Tab. 13

9.6.3.11 Menù Configurazioni Avanzate (Infrarosso)

Una volta entrati nel menù **Infrarosso** è possibile impostare i seguenti parametri:

01. **Modo IR**: Se settato OFF forza la modalità diurna in modo continuativo (l'accensione del faro se presente si effettua tramite interruttore crepuscolare o apposito comando da tastiera), se settato ON forza la modalità notturna in modo continuativo, se settato **Auto** attiva la commutazione automatica della camera.
02. **Soglia Notte**: Imposta la soglia di rilevamento delle condizioni di luce per la commutazione in modalità notturna. A valori inferiori corrispondono livelli di luminosità più bassi.
03. **Ritardo Notte**: Imposta il tempo di rilevamento delle condizioni di oscurità, espresso in secondi, prima della commutazione in modalità notturna.
04. **Soglia Giorno**: Imposta la soglia di rilevamento delle condizioni di luce per la commutazione in modalità diurna. A valori inferiori corrispondono livelli di luminosità più bassi.
05. **Ritardo Giorno**: imposta il tempo di rilevamento delle condizioni di luce, espresso in secondi, prima della commutazione in modalità diurna.

Per evitare false commutazioni si consiglia di scegliere i valori di soglia e ritardo di commutazione diurna più elevati.

```
INFRAROSSO
------------------------
1>MODO IR          :   AUTO
2 SOGLIA NOTTE     :      5
3 RITARDO NOTTE    :      5
4 SOGLIA GIORNO    :     20
5 RITARDO GIORNO   :     30
```

Fig. 63

Il menù si autoconfigura dinamicamente in funzione della scelta effettuata mostrando i parametri sui quali si può agire.

La modalità di commutazione Day/Night automatica del modulo, è fortemente sconsigliata quando il brandeggio è soggetto a repentine variazioni di luce durante il periodo notturno, per esempio nell'esecuzione di un percorso di patrol, o a causa dell'accensione di dispositivi di illuminazione ausiliari, in quanto questo potrebbe causare numerose commutazioni indesiderate, compromettendo così il funzionamento del modulo stesso.

9.6.3.12 Menù Configurazioni Avanzate (Bilanciamento Bianco)

Una volta entrati nel menù **Bilanciamento Bianco** è possibile impostare i seguenti parametri:

01. **Modo**: Imposta il tipo di controllo del bilanciamento del bianco. I valori possibili sono:
    - **Automatico**: Impone il bilanciamento del bianco automatico. È l'impostazione consigliata.
    - **Manuale**: Abilita l'impostazione manuale dei guadagni di rosso e blu.
    - **Outdoor**: Imposta dei valori fissi di guadagno del rosso e del blu per ambienti esterni.
    - **Indoor**: Imposta dei valori fissi di guadagno del rosso e del blu per ambienti interni.
    - **ATW**: Abilita l'Auto Tracing White Balance.
02. **Valore Rosso**: Imposta il valore del guadagno del rosso.

03. **Valore Blu**: Imposta il valore del guadagno del blu.

```
BILANCIAMENTO BIANCO
------------------------
1>MODO       :   MANUALE
2 ROSSO VAL.:         0
3 BLU VAL.   :         0
```

Fig. 64

Il menù si autoconfigura dinamicamente in funzione della scelta effettuata mostrando i parametri sui quali si può agire.

9.6.3.13 Menù Configurazioni Avanzate (Altro)

01. **Nitidezza**: Imposta il valore della nitidezza dell'immagine.
02. **Alta Risoluzione**: Abilita la funzione Alta Risoluzione. Il segnale video in uscita ha una risoluzione più elevata.
03. **Wide Dynamic**: Abilita la funzione Wide Dynamic. Migliora la visione quando l'area inquadrata ha zone molto più luminose di altre.
04. **Stabilizzatore**: Abilita la funzione di stabilizzazione elettronica dell'immagine.
05. **Scansione Progressiva**: Abilita la funzione di Scansione Progressiva. Permette di ottenere un'immagine più stabile quando il brandeggio è collegato ad un video server.
06. **Noise Reduction**: Imposta il livello di riduzione del rumore. Variando il parametro in base alle condizioni ambientali è possibile ottenere un'immagine più contrastata.

```
 ALTRO
------------------------
1 NITIDEZZA        :    6
2 ALTA RISOLUZIONE:     N
3 WIDE DYNAMIC     :  OFF
4 STABILIZZATORE   :     N
5 SCANSIONE PROGR.:      N
6 RIDUZIONE RUMORE:      2
```

Fig. 65

9.6.4 Menù Movimento

01. **Configurazione**: Imposta una delle configurazioni predefinite del brandeggio.
    - **Standard**: Imposta le velocità standard di movimento.
    - **Low Speed**: Imposta la modalità **Low Speed** che riduce tutte le velocità di funzionamento del brandeggio.
    - **Wind Mode**: Imposta le velocità dei movimenti in modo da renderle adatte ad ambienti soggetti a vibrazioni e/o raffiche di vento.
    - **High Perf**: Impone che i movimenti siano eseguiti alla massima velocità possibile.
    - **Custom**: Segnala che le velocità di movimento dell'unità sono state scelte manualmente dall'utente.
02. **Offset Pan**: Il brandeggio ha una posizione di 0° definita meccanicamente. La funzione Offset Pan permette di definire via software una diversa posizione di 0°.
03. **Controllo Manuale**: Accedere ai sottomenù che gestiscono i parametri associati ai movimenti manuali del dispositivo.
04. **Preset**: Permette di accedere ai sottomenù che consentono di modificare i valori dei Preset.
05. **Patrol**: Permette di accedere ai sottomenù che consentono di modificare i valori del Patrol.
06. **Autopan**: Permette di accedere ai sottomenù che consentono di modificare i valori dell'Autopan.
07. **Richiamo Movimenti**: Permette di accedere al sottomenù che gestisce il richiamo automatico dei movimenti.
08. **Avanzate**: Permette di entrare nel sottomenù per l'impostazione dei parametri avanzati.

```
 MOVIMENTO
------------------------
1>CONFIG.    :  STANDARD
2 OFFSET PAN:   +  0.00
3 CONTROLLO MANUALE    >
4 PRESET               >
5 PATROL               >
6 AUTOPAN              >
7 RICHIAMO MOVIMENTI   >
8 AVANZATE             >
```

Fig. 66

9.6.4.1 Menù Controllo Manuale

01. **Velocità Massima**: Imposta la velocità manuale massima.
02. **Modalità Fast**: Attiva la modalità **Fast**. Questa opzione, se attiva, permette di muovere velocemente il brandeggio spostando il joystick a fine corsa.
03. **Velocità Con Zoom**: Abilita l'opzione **Velocità con Zoom**. Tale parametro, se abilitato, riduce automaticamente la velocità di PAN e TILT in funzione del fattore di ZOOM.
04. **Fattore Tilt**: Imposta il fattore di riduzione della velocità manuale dell'asse tilt.
05. **Autoflip**: Abilita la funzione autoflip (ovvero ruota automaticamente il brandeggio di 180° quando il tilt arriva a finecorsa) per facilitare l'inseguimento di soggetti lungo corridoi o strade.
06. **Limiti Movimento**: Accede al menù **Limiti**.

```
 CONTROLLO MANUALE
------------------------
1>VEL. MASSIMA     :100.0
2 MODALITA' FAST   :    S
3 VEL. CON ZOOM    :    N
4 FATTORE TILT     :    2
5 AUTOFLIP         :    S
6 LIMITI MOVIMENTO      >
```

Fig. 67

9.6.4.2 Menù Controllo Manuale (Limiti)

Una volta entrati nel menù **Limiti** è possibile impostare i seguenti parametri:

01. **Limiti Pan**: Abilita i limiti del Pan.
02. **Pan Inizio**: Imposta il limite iniziale del Pan.
03. **Pan Fine**: Imposta il limite finale del Pan.
04. **Limiti Tilt**: Abilita i limiti del Tilt.
05. **Tilt Inizio**: Imposta il limite iniziale del Tilt.
06. **Tilt Fine**: Imposta il limite finale del Tilt.

```
 LIMITI
------------------------
1>LIMITI PAN   :       N
2 PAN INIZIO   : +  0.00
3 PAN FINE     : +  0.00
4 LIMITI TILT  :       N
5 TILT INIZIO  : +  0.00
6 TILT FINE    : +  0.00
```

Fig. 68

9.6.4.3 Menù Preset

01. **Modifica Preset**: Permette di accedere al menù Modifica Preset.
02. **Utilità Preset**: Permette di accedere al menù Utilità Preset.

```
 PRESET
------------------------
1>MODIFICA PRESET       >
2 UTILITA' PRESET       >
```

Fig. 69

9.6.4.4 Menù Preset (Modifica Preset)

Una volta entrati nel menù **Modifica Preset** è possibile impostare i seguenti parametri:

01. **Numero**: Il numero del Preset che si desidera modificare.
02. **Abilitazione**: L'abilitazione del preset.
03. **Pan**: Posizione di pan espressa in gradi.
04. **Tilt**: Posizione del tilt espressa in gradi.
05. **Zoom**: La posizione dello Zoom.
06. **Focus**: La posizione del focus diurno e notturno.
07. **Velocità**: La velocità di raggiungimento della posizione quando il preset viene richiamato dalla funzione Patrol e Scan.
08. **Pausa**: Imposta l'attesa in secondi prima di iniziare il successivo movimento in Patrol.
09. **Testo**: La scritta visualizzata quando si raggiunge la posizione di preset.

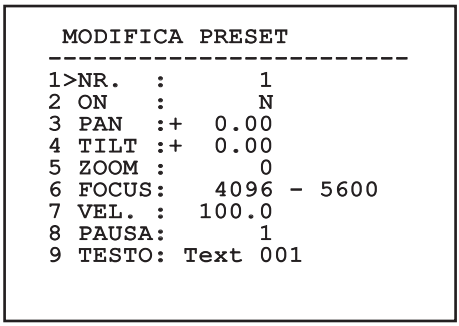


Fig. 70

Dal menù è possibile memorizzare direttamente i preset inviando il comando **Iris Close** che abilita i movimenti del brandeggio.

9.6.4.5 Menù Preset (Utilità Preset)

Una volta entrati nel menù **Utilità Preset** è possibile impostare i seguenti parametri:

01. **A.Focus Giorno**: Abilita l'utilizzo dell'autofocus durante il richiamo dei preset in modalità giorno. Per garantire rapidità e accuratezza nella messa a fuoco dell'immagine disabilitare la messa a fuoco automatica.
02. **A.Focus Notte**: Abilita l'utilizzo dell'autofocus durante il richiamo dei preset in modalità notte. Si consiglia di abilitare la messa a fuoco automatica quando il brandeggio è provvisto di faro infrarosso in quanto il punto focale varia tra luce visibile e luce infrarosso.
03. **Velocità Scan**: È la velocità che sarà usata come riferimento quando si richiamerà una nuova posizione di preset con la funzione **Scan**.
04. **Velocità Default**: Modifica la velocità di default dei Preset. Tale valore viene utilizzato dalla funzione **Imponi Vel.?** per assegnare a tutti i Preset la stessa velocità.
05. **Pausa Default**: Modifica la pausa di default dei Preset. Tale valore viene utilizzato dalla funzione **Imponi Pausa?** per assegnare a tutti i Preset la stessa pausa.
06. **Imponi Velocità**: Assegna a tutti i Preset la velocità di default.
07. **Imponi Pausa**: Assegna a tutti i Preset la pausa di default.

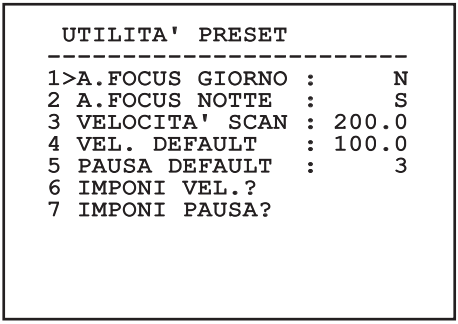


Fig. 71

9.6.4.6 Menù Patrol

01. **Primo Preset**: Imposta il primo preset della sequenza di Patrol.
02. **Ultimo Preset**: Impostare l'ultimo preset della sequenza di Patrol.
03. **Modo Random**: Abilita l'esecuzione in modo casuale. La sequenza viene ricalcolata continuamente.

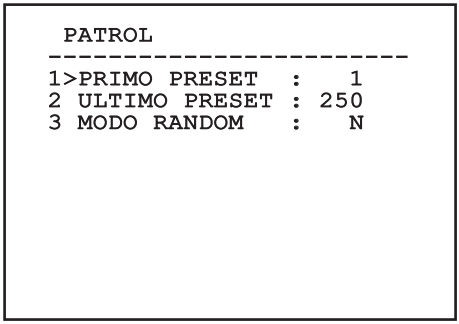


Fig. 72

9.6.4.7 Menù Autopan

01. **Preset Andata**: Imposta la posizione iniziale dell'Autopan.
02. **Preset Ritorno**: Imposta la posizione finale dell'Autopan.
03. **Velocità Andata**: Imposta la velocità d'andata dell'Autopan.
04. **Velocità Ritorno**: Imposta la velocità di ritorno dell'Autopan.

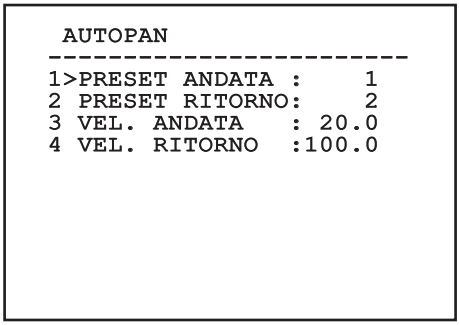


Fig. 73

9.6.4.8 Menù Richiamo Movimenti

È possibile impostare ULISSE COMPACT THERMAL in modo che, dopo un certo periodo di inattività esegua automaticamente una funzione di movimento impostata dall'operatore.

Dal menù è possibile impostare i seguenti parametri:

01. **Tipo Movimento**: Scelta del tipo di movimento da richiamare (None, Home, Autopan, Patrol, Tour 1, Tour 2, Tour 3).
02. **Ritardo Movimento**: Il tempo (espresso in secondi) da attendere dall'inattività del Joystick prima di richiamare il movimento impostato.

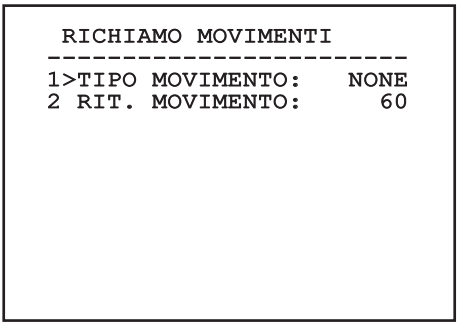


Fig. 74

9.6.4.9 Menù Avanzate

01. **Controllo Statico**: Abilita il controllo della posizione solo quando il brandeggio è fermo.
02. **Controllo Dinamico**: Abilita il controllo della posizione solo quando il brandeggio è in movimento.
03. **Homing Ciclico**: Se diverso da zero, impone l'esecuzione di una nuova procedura di homing dopo il numero di ore specificato.
04. **Modo Economico**: Riduce la coppia dei motori quando il brandeggio è fermo. Non abilitare in presenza di forte vento o vibrazioni intense.

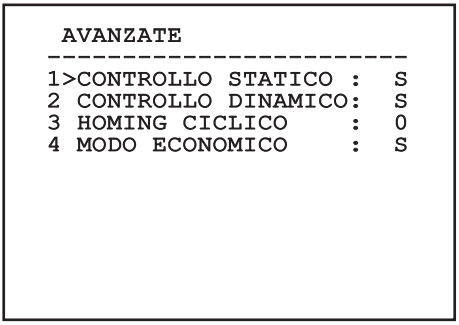


Fig. 75

9.6.5 Menù Visualizzazioni

01. **Posizione PTZ**: Se posto diverso da OFF, permette di selezionare la modalità con la quale vengono visualizzate sullo schermo le posizioni di Pan, Tilt e Zoom. È possibile scegliere una visualizzazione a tempo (1 S, 3 S e 5 S) oppure costante (CONST).
02. **Nome Preset**: Se posto diverso da OFF, permette di selezionare la modalità con la quale viene visualizzato sullo schermo il testo associato all'ultima posizione di Preset raggiunta. È possibile scegliere una visualizzazione a tempo (1 S, 3 S e 5 S) oppure costante (CONST).
03. **Nome Aree**: Se posto diverso da OFF, permette di selezionare la modalità con la quale vengono visualizzati i testi associati alle aree attive. È possibile scegliere una visualizzazione a tempo (1 S, 3 S e 5 S) oppure costante (CONST).
04. **ID Brandeggio**: Se posto diverso da OFF, visualizza l'ID del brandeggio.
05. **Comandi Ricevuti**: Se posto diverso da OFF, permette di selezionare la modalità con la quale vengono visualizzati i comandi seriali ricevuti. È possibile scegliere una visualizzazione a tempo (1 S, 3 S e 5 S) oppure costante (CONST).
06. **Delta Orizzontale**: Muove orizzontalmente i testi dei menù consentendo un centraggio migliore degli stessi.
07. **Delta Verticale**: Muove verticalmente i testi dei menù consentendo un centraggio migliore degli stessi.

```
 VISUALIZZAZIONI
------------------------
1>POSIZIONE PTZ   :  1 S
2 NOME PRESET     :  3 S
3 NOME AREE       :  OFF
4 ID BRANDEGGIO   :CONST
5 COMANDI RICEVUTI:CONST
6 DELTA ORIZ.     :    3
7 DELTA VERTICALE :    3
```

Fig. 76

9.6.6 Menù Opzioni

01. **Montaggio A Soffitto**: Abilitando questa modalità si ha il capovolgimento dell'immagine e dei comandi di direzione.
02. **Allarmi**: Permette di accedere al menù Allarmi.
03. **Impianto Di Lavaggio**: Permette di accedere al menù Impianto di Lavaggio.

```
 OPZIONI
------------------------
1>MONTAGGIO SOFFITTO:  N
2 ALLARMI              >
3 IMPIANTO DI LAVAGGIO >
```

Fig. 77

9.6.6.1 Menù Allarmi

01. **Allarmi 1-5**: Permettono di accedere ai menù in cui è possibile impostare i parametri degli Allarmi da 1 a 5.
02. **Stato Allarmi**: Permette di accedere al menù Stato Allarmi.

```
 ALLARMI
------------------------
1>ALLARME 1            >
2 ALLARME 2            >
3 ALLARME 3            >
4 ALLARME 4            >
5 ALLARME 5            >
6 STATO ALLARMI        >
```

Fig. 78

Se è montato il faro IR l'allarme 5 è riservato all'interruttore crepuscolare esterno, per cui l'allarme 5 non compare a video.

Dal menù Allarmi è possibile accedere ad uno dei menù (Allarme 1-5) dove modificare i parametri degli allarmi.

Da questi menu è possibile impostare i seguenti valori:

01. **Tipo**: Imposta il tipo di contatto: normalmente chiuso (N.C.) o normalmente aperto (N.O.)
02. **Azione**: Il tipo di azione (Scan, Patrol, Autopan, Tour 1, Tour 2, Tour 3) che ULISSE COMPACT THERMAL effettua quando l'allarme si attiva. Se si seleziona la voce Off l'allarme è disabilitato.
03. **Numero**: Il preset da raggiungere quando il tipo di azione dell'allarme è Scan.
04. **Testo**: La scritta visualizzata quando l'allarme è attivo.

```
 ALLARME 1
------------------------
1>TIPO :N.C.
2 AZ.  :SCAN
3 NR.  :  1
4 TESTO:ALARM 1
```

Fig. 79

Il menù si autoconfigura dinamicamente in funzione della scelta effettuata mostrando i parametri sui quali si può agire.

Dal menù Allarmi è possibile accedere al menù Stato Allarmi in cui viene visualizzato lo stato dell'ingresso degli allarmi (CLOSED contatto chiuso, OPEN contatto aperto).

```
 STATO ALLARMI
------------------------
ALLARME 1        CLOSED
ALLARME 2          OPEN
ALLARME 3        CLOSED
ALLARME 4        CLOSED
ALLARME 5        CLOSED
```

Fig. 80

9.6.7 Menù Impianto di Lavaggio

ULISSE COMPACT THERMAL offre la possibilità di utilizzare un tergicristallo e di azionare una pompa per la pulizia del vetro.

Per configurare l'impianto di lavaggio posizionare l'obiettivo della telecamera di fronte all'ugello dell'impianto di lavaggio.

Salvare un preset (XY) per questa posizione, che sarà richiamato dal brandeggio quando si attiva la funzione Washer.

Impostare dal menù i seguenti paramentri:

01. **Abilita**: Abilita la funzione Washer.
02. **Preset Ugello**: Inserire il numero del preset (XY) corrispondente all'ugello
03. **Ritardo Tergi On**: Imposta l'intervallo di tempo che passa tra l'attivazione della pompa e quella del tergicristallo.
04. **Durata Lavaggio**: Imposta la durata dello spazzolamento.
05. **Ritardo Tergi Off**: Imposta la durata dello spazzolamento senza acqua.

```
 IMPIANTO DI LAVAGGIO
------------------------
1>ABILITA            :  N
2 PRESET UGELLO      :  1
3 RITARDO TERGI ON   :  5
4 DURATA LAVAGGI     : 10
5 RITARDO TERGI OFF  :  5
```

Fig. 81

L'attivazione della funzione Washer riserva l'utilizzo del Relè 2 per l'accensione della pompa e toglie la possibilità di associare il Relè 2 ad un allarme.

9.6.8 Menù Default

01. **Cancella Setup**: Ripristina tutti i parametri eccetto i preset.
02. **Cancella Preset**: Elimina tutti i preset precedentemente memorizzati.

```
 DEFAULT
------------------------
1>CANCELLA SETUP?
2 CANCELLA PRESET?
```

Fig. 82

Le operazioni sopra descritte comportano la perdita di tutti i dati precedentemente memorizzati (es.: Preset, Patrol, Autopan, Home...).

9.6.9 Menù Info

Il menù consente di verificare la configurazione del dispositivo e la versione di firmware installata.

```
 INFO
------------------------
Indirizzo: 1
Protocollo: MACRO
RS485-1: 38400 N81 RX
RS485-2: 38400 N81 RIPET
FW: 0a (Apr 14 2009)
HW: 000-0000
Telecamera: 36x
PC: UC1PSSA000A
SN: 109032220029
```

Fig. 83

9.6.10 Menù Camera Termica

01. **Controllo**: Imposta il tipo di controllo della camera termica.
    - **Interno**: La configurazione della telecamera viene gestita dal brandeggio.
    - **Esterno**: La configurazione della telecamera viene gestita tramite la seriale RS485-3 (solo per la versione con doppia telecamera).
02. **Configurazione**: Imposta una delle configurazioni predefinite della camera termica.
    - **Standard**: Imposta la configurazione standard della camera termica.
    - **High Gain**: Imposta la configurazione pensata per una maggiore risoluzione dell'immagine.
    - **Isotherm**: Imposta la configurazione pensata per evidenziare gli oggetti all'interno di un dato range di temperatura (*"9.6.10.8 Menù Analisi Termica (Isoterma)", pagina 43*).
    - **Custom**: Segnala che la configurazione della camera termica è stata scelta manualmente dall'utente.
03. **Correzione Flat Field**: Permette di entrare nel sottomenù per la gestione della correzione Flat Field.
04. **Configurazione Video**: Permette di entrare nel sottomenù per la gestione della configurazione del video.
05. **Controllo Guadagno**: Permette di entrare nel sottomenù per la gestione del controllo del guadagno.
06. **Configurazione ROI**: Permette di entrare nel sottomenù per la configurazione del ROI.
07. **Analisi Termica**: Permette di entrare nel sottomenù per la gestione dell'analisi termica.
08. **Status**: Permette di entrare nel sottomenù in cui sono riportate le caratteristiche tecniche della camera termica.

```
 CAMERA TERMICA
------------------------
1>CONTROLLO:   INTERNO
2 CONFIG.  :  STANDARD
3 CORREZIONE FLAT FIELD>
4 CONFIGURAZIONE VIDEO >
5 CONTROLLO GUADAGNO   >
6 CONFIGURAZIONE ROI   >
7 ANALISI TERMICA      >
8 STATUS               >
```

Fig. 84

9.6.10.1 Menù Correzione Flat Field

La camera termica ha un meccanismo interno per migliorare periodicamente la qualita' delle immagini: la correzione Flat Field (FFC). I parametri che gestiscono questa funzione sono i seguenti:

01. **Flat Field Auto**: Abilita la correzione Flat Field automatica oppure manuale. Quando la correzione automatica è abilitata, la camera effettua una FFC dopo un dato intervallo di tempo o una data variazione di temperatura. Viceversa quando si utilizza la correzione manuale le operazioni FFC sono eseguite su richiesta dell'utente. Si consiglia di usare sempre la correzione automatica.
02. **Intervallo**: Imposta l'intervallo di tempo dopo cui eseguire una FFC quando il range dinamico di guadagno è High. L'intervallo di tempo è espresso in frames (33ms per l'NTSC, 40ms per il PAL).
03. **Intervallo Low**: Imposta l'intervallo di tempo dopo cui eseguire una FFC quando il range dinamico di guadagno è Low. L'intervallo di tempo è espresso in frames (33ms per l'NTSC, 40ms per il PAL).
04. **Temperatura**: Imposta la variazione di temperatura dopo cui eseguire una FFC quando il range dinamico di guadagno è High. La variazione di temperatura è espressa in intervalli di 0,1 °C.
05. **Temperatura Low**: Imposta l'intervallo di temperatura dopo cui eseguire una FFC quando il range dinamico di guadagno è Low. La variazione di temperatura è espressa in intervalli di 0,1 °C.
06. **Modo Guadagno**: Permette di selezionare il tipo di range dinamico di guadagno:
    - **High**: Questa impostazione è pensata per massimizzare il contrasto ed è particolarmente indicata per applicazioni che effettuano analisi video delle immagini.
    - **Low**: Questa impostazione aumenta il range dinamico dell'immagine e ne diminuisce il contrasto. E' particolarmente indicata per identificare gli elementi più caldi dell'immagine.
    - **Auto**: Questa impostazione permette alla camera di commutare tra le modalità High e Low basandosi sul tipo di immagine attualmente visualizzata. I parametri del menù Valori Cambio Guadagno (*"9.6.10.2 Menù Correzione Flat Field (Valori Cambio Guadagno)", pagina 41*) servono per modificare il comportamento di questa modalità
07. **Eseguire FFC**: Esegue un'operazione di FFC.
08. **Valori Cambio Guadagno**: Permette di entrare nel sottomenù Valori Cambio Guadagno.

```
 CORREZIONE FLAT FIELD
-----------------------
1>FLAT FIELD AUTO:      S
2 INTERVALLO     :   7200
3 INTERVALLO LOW :   1350
4 TEMPERATURA    :      5
5 TEMPERATURA LOW:     10
6 MODO GUADAGNO  :   ALTO
7 ESEGUIRE FFC?
8 VALORI CAMBIO GUAD.  >
```

Fig. 85

Si consiglia di non cambiare i valori di default in quanto pensati per offrire un'alta qualità delle imagini in tutte le condizioni di funzionamento.

9.6.10.2 Menù Correzione Flat Field (Valori Cambio Guadagno)

Una volta entrati nel menù Valori Cambio Guadagno è possibile impostare uno dei seguenti parametri:

01. **Soglia Alto-Basso**: Imposta la soglia di temperatura usata dal parametro **Popolamento Alto-Basso** per forzare la commutazione in modalità **Basso Guadagno**. Il valore è espresso in gradi Celsius.
02. **Popolamento Alto-Basso**: Imposta la percentuale di pixel minima al di sopra della quale avviene la commutazione in modalità **Basso Guadagno**.
03. **Soglia Basso-Alto**: Imposta la soglia di temperatura usata dal parametro **Popolamento Basso-Alto** per forzare la commutazione in modalità **Alto Guadagno**. Il valore è espresso in gradi Celsius.
04. **Popolamento Basso-Alto**: Imposta la percentuale di pixel minima al di sopra della quale avviene la commutazione in modalità **Alto Guadagno**.

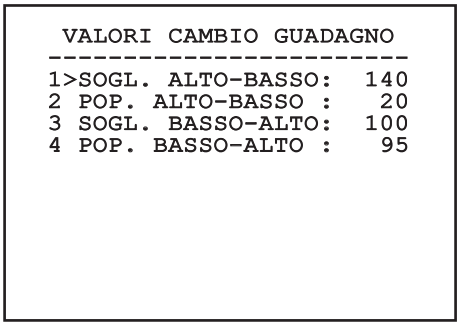


Fig. 86

Si consiglia di non cambiare i valori di default in quanto pensati per offrire un'alta qualità delle imagini in tutte le condizioni di funzionamento.

Le impostazioni del menù Valori Cambio Guadagno hanno effetto solo se il modo Guadagno (*"9.6.10.1 Menù Correzione Flat Field", pagina 40*) è stato impostato su Auto.

9.6.10.3 Menù Configurazione Video

Una volta entrati nel menù Configurazione Video è possibile impostare uno dei seguenti parametri:

01. **Polarità Lut**: Imposta il tipo di colorazione dell'immagine inquadrata dalla camera termica.
02. **Avviso FFC**: Imposta la durata della visualizzazione sul video di un quadrato colorato in alto a destra quando sta per essere eseguita una FFC. L'intervallo di tempo è espresso in frames (33ms per l'NTSC, 40ms per il PAL). Un valore inferiore ai 15 frames disabilita automaticamente tale segnalazione.
03. **Zoom Digitale**: Imposta il tipo di zoom da applicare al segnale video (OFF, Auto, 2x, 4x). Se si utilizza la modalità Auto lo zoom della telecamera termica si adatta automaticamente a quello del modulo SONY.
04. **Dynamic DDE**: Imposta il valore del filtro DDE che serve per migliorare la nitidezza dei contorni. I valori tipici da utilizzare variano tra 17 e 25. Il valore 17 disabilita il filtro.
05. **Segnale Test**: Abilita il test pattern per verificare l'elettronica della camera.

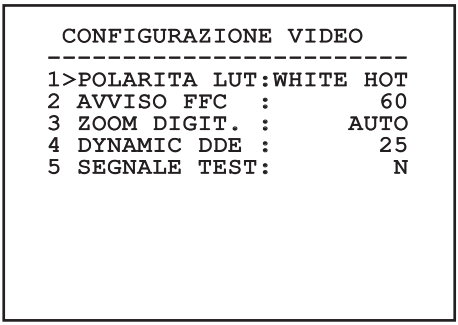


Fig. 87

9.6.10.4 Menù Controllo Guadagno

Una volta entrati nel menù Configurazione Controllo Guadagno è possibile impostare uno dei seguenti parametri:

01. **Algoritmo**: Imposta il tipo di controllo automatico del guadagno (AGC) per l'ottimizzazione dell'immagine. E' possibile scegliere uno dei seguenti algoritmi:
    - **Automatico**: Imposta automaticamente il contrasto e la luminosità dell'immagine al variare delle condizioni ambientali equalizzando l'istogramma dei livelli di grigio. L'immagine può essere modificata cambiando il valore dei parametri ITT Mean, Max Gain e Plateau Value. Questa è l'algoritmo impostato di default e consigliato per il normale utilizzo della camera termica.
    - **Once Bright**: Il livello di luminosità impostato è la media dei valori di luminosità dell'immagine quando si seleziona questa voce. L'immagine può essere modificata cambiando il valore del parametro Contrasto.
    - **Auto Bright**: Il livello di luminosità impostato è la media dei valori di luminosità dell'immagine. Tale livello viene aggiornato in tempo reale. L'immagine può essere modificata cambiando i valori dei parametri Contrasto e Compensazione.
    - **Manuale**: I livelli di contrasto e luminosità sono impostati manualmente dell'utente.
    - **Istogramma Lineare**: Il contrasto e la luminosità dell'immagine sono ottimizzati usando una funzione di trasferimento lineare. L'immagine può essere modificata cambiando il valore dei parametri ITT Mean, Max Gain.
02. **Valore di Plateau**:Imposta il valore massimo di pixel che possono essere contenuti in un livello di grigio.
03. **Media ITT**: Imposta il punto medio della scala di grigi.
04. **Guadagno Max**: Imposta il guadagno massimo dell'AGC.
05. **Contrasto**: Imposta il livello di contrasto dell'immagine.
06. **Luminosità**: Imposta il livello di luminosità dell'immagine.
07. **Compensazione**: Imposta il livello di compensazione della luminosità dell'immagine.

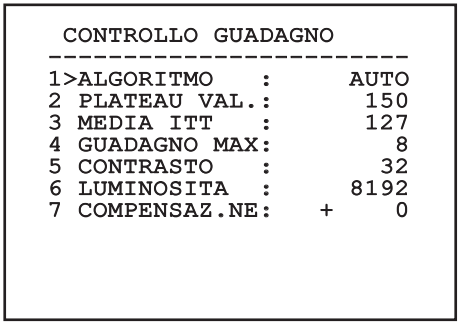


Fig. 88

Il menù si autoconfigura dinamicamente in funzione della scelta effettuata mostrando i parametri sui quali si può agire.

9.6.10.5 Menù Configurazione ROI

Una volta entrati nel menù Configurazione ROI è possibile modificare la regione di interesse (ROI) usata dall'algoritmo AGC per calcolare i livelli di contrasto e luminosità dell'immagine.

01. **P1 Sinistra**: Imposta il limite sinistro della ROI.
02. **P1 Alto**: Imposta il limite superiore della ROI.
03. **P2 Destra**: Imposta il limite destro della ROI.
04. **P2 Basso**: Imposta il limite inferiore della ROI.

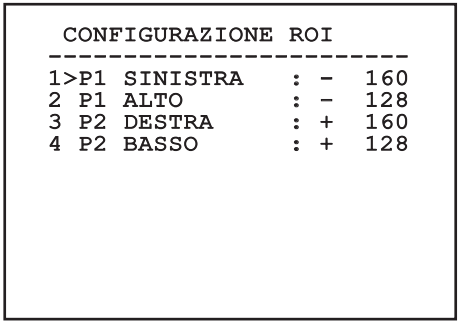


Fig. 89

9.6.10.6 Menù Analisi Termica

01. **Punto di Misura**: Permette di entrare nel sottomenù per la configurazione del punto di misura.
02. **Isoterma**: Permette di entrare nel sottomenù per la gestione dell'isoterma.

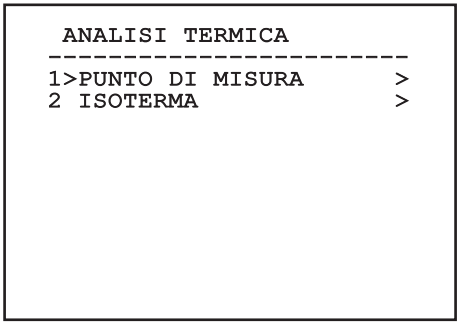


Fig. 90

9.6.10.7 Menù Analisi Termica (Punto di Misura)

Una volta entrati nel menù Punto di Misura è possibile impostare uno dei seguenti parametri:

01. **Modo**: abilita la visualizzazione della temperatura misurata dai 4 pixels al centro dell'immagine (in gradi Celsius oppure Fahrenheit). L'opzione OFF disabilita la visualizzazione.
02. **Digitale**: Abilita la visualizzazione del relativo simbolo sul display.
03. **Termometro**: Abilita la visualizzazione del relativo simbolo sul display.

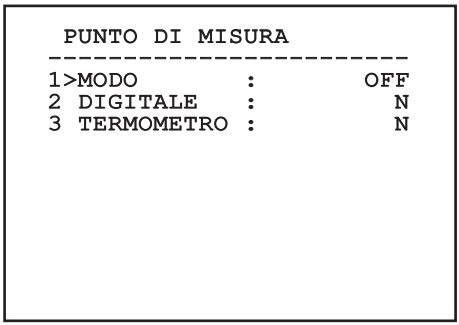


Fig. 91

9.6.10.8 Menù Analisi Termica (Isoterma)

Una volta entrati nel menù Isoterma è possibile attivare una speciale colorazione per oggetti compresi nell'intervallo di temperatura impostato. I parametri che gestiscono questa funzione sono i seguenti:

01. **Abilita**: Abilita la funzione Isoterma.
02. **Modo**: Seleziona la modalità in cui è espresso l'intervallo (in Percentuale oppure in gradi Celsius).

03-05. **Superiore**: Imposta il limite superiore della funzione Isoterma.

04-06. **Inferiore**: Imposta il limite inferiore della funzione Isoterma.

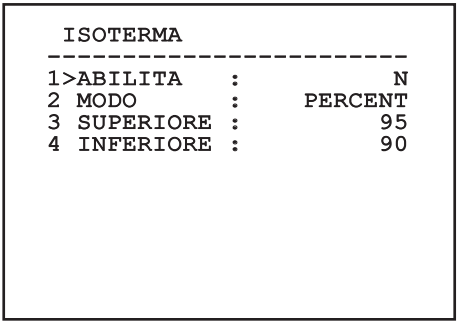


Fig. 92

Il menù si autoconfigura dinamicamente in funzione della scelta effettuata mostrando i parametri sui quali si può agire.

9.6.10.9 Menù Stato

Una volta entrati nel menù Status è possibile conoscere le caratteristiche tecniche della telecamera termica.

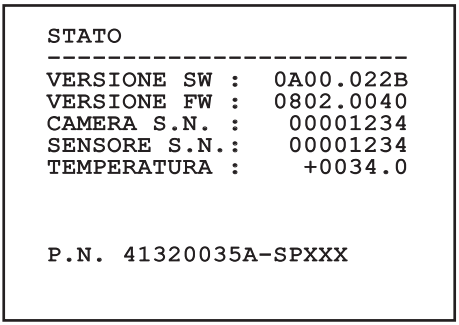


Fig. 93

10 Istruzioni di funzionamento ordinario

Inquadrare direttamente e per un periodo prolungato il sole può causare danni irreparabili al sensore della telecamera termica.

10.1 Visualizzazione stato del brandeggio

Durante il normale funzionamento, a scelta dell'utente, il brandeggio visualizza a monitor i dati organizzati come illustrato. La visualizzazione può essere abilitata o disabilitata come descritto in *"9.6.5 Menù Visualizzazioni", pagina 37* .

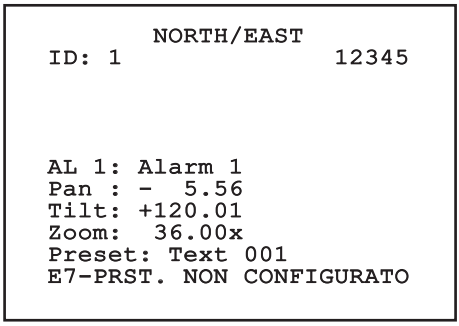


Fig. 94

NORTH/EAST: Nome dell'area nella quale ci si trova;

ID: 1: L'indirizzo del ricevitore;

12345: La lista completa degli allarmi attivi;

AL 1: Alarm 1: Il testo dell'ultimo allarme attivo;

Pan: - 5.56/Tilt: +120.01/Zoom: 36.00x: La posizione attuale di Pan, Tilt e Zoom;

Preset: Text 001: Il nome del preset selezionato attivo;

E7-PRST. NON CONFIGURATO: Il seguente campo visualizza gli errori riscontati durante il funzionamento del sistema o i comandi ricevuti via seriale (solo per i comandi ricevuti la visualizzazione può essere abilitata o disabilitata).

10.2 Salvataggio della posizione attuale (Preset)

10.2.1 Salvataggio veloce

Tramite la tastiera di controllo è possibile salvare la posizione attuale (per ulteriori informazioni fare riferimento al manuale della tastiera utilizzata).

Durante la fase di salvataggio è possibile modificare la velocità di raggiungimento del Preset con i tasti Focus Far / Focus Near e il tempo di attesa con i tasti Iris Open / Iris Close.

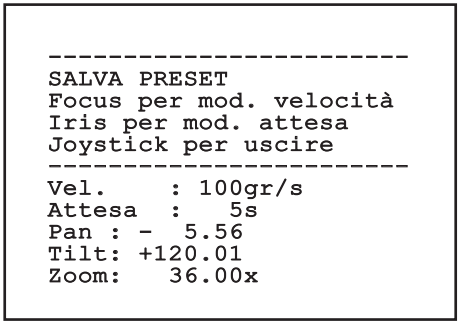


Fig. 95

10.2.2 Salvataggio da Menù

Fare riferimento a *"9.6.4.3 Menù Preset", pagina 34*.

10.3 Richiamo di una posizione (Scan)

Tramite la tastiera di controllo è possibile richiamare una posizione precedentemente salvata (per ulteriori informazioni fare riferimento al manuale della tastiera utilizzata).

10.4 Attivazione pattugliamento (Patrol)

Tramite la tastiera di controllo è possibile attivare il pattugliamento automatico (per ulteriori informazioni fare riferimento al manuale della tastiera utilizzata o alla *Tab. 14, pagina 47*).

La disattivazione può essere fatta muovendo il joystick o richiamando un tipo di movimento diverso.

Per la configurazione del Patrol fare riferimento a *"9.6.4.6 Menù Patrol", pagina 36*.

10.5 Attivazione Autopan

Tramite la tastiera di controllo è possibile attivare l'Autopan (per ulteriori informazioni fare riferimento al manuale della tastiera utilizzata o alla *Tab. 14, pagina 47*).

La disattivazione può essere fatta muovendo il joystick o richiamando un tipo di movimento diverso.

Per la configurazione dell'Autopan fare riferimento a *"9.6.4.7 Menù Autopan", pagina 36*.

10.6 Richiamo di un percorso (Tour)

La modalità di funzionamento Tour permette di ripetere un percorso precedentemente registrato in modo continuo.

Il brandeggio può memorizzare fino a 3 Tour di durata massima pari a 2 minuti ciascuno.

Per memorizzare un Tour digitare sulla tastiera il preset speciale relativo al numero del Tour da salvare (*Tab. 14, pagina 47*).

Per facilitare la registrazione del Tour, il brandeggio limita in automatico la velocità di Pan e Tilt in funzione del fattore di Zoom.

Durante la registrazione del Tour viene visualizzata la percentuale del tempo di registrazione rimanente come indicato in figura.

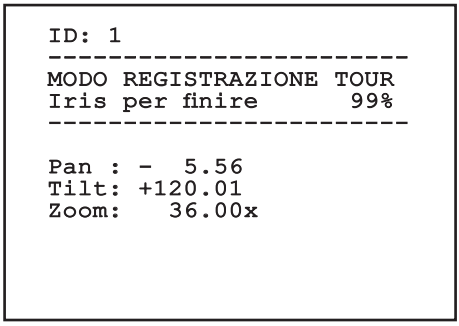


Fig. 96

Per interrompere la registrazione premere il tasto Iris Open o Iris Close.

Per avviare la riproduzione di un Tour digitare sulla tastiera il preset speciale relativo al numero del Tour da visualizzare (*Tab. 14, pagina 47*).

10.7 Richiamo della posizione di Home

Tramite la tastiera di controllo è possibile richiamare la posizione di Home (Scan n.1) precedentemente salvata (per ulteriori informazioni fare riferimento al manuale della tastiera utilizzata).

10.8 Attivazione Tergicristallo (Wiper)

Non utilizzare il tergicristallo quando la temperatura esterna è inferiore agli 0°C o in presenza di ghiaccio.

Per attivare/disattivare il Tergicristallo fare riferimento al manuale della tastiera o alla *Tab. 14, pagina 47*.

Il Tergicristallo si disattiva in modo automatico se lasciato acceso.

10.9 Attivazione Impianto di lavaggio (Washer)

Non utilizzare il tergicristallo quando la temperatura esterna è inferiore agli 0°C o in presenza di ghiaccio.

Per attivare l'Impianto di lavaggio fare riferimento al manuale della tastiera o alla *Tab. 14, pagina 47*.

Per la configurazione dell'Impianto di lavaggio fare riferimento a *"9.6.7 Menù Impianto di Lavaggio", pagina 38*.

10.10 Reboot dispositivo

Tramite la tastiera di controllo è possibile inviare il comando di riavvio del dispositivo (per ulteriori informazioni fare riferimento al manuale della tastiera utilizzata o a *Tab. 14, pagina 47*).

10.11 Commutazione dell'uscita video secondaria

Per selezionare il segnale video (del modulo integrato o della telecamera termica) fare riferimento ai comandi **Video 2 modulo integrato** e **Video 2 camera termica** (*Tab. 14, pagina 47*).

10.12 Correzione manuale messa a fuoco di un preset

Richiamare il preset del quale si intende modificare la messa a fuoco con il comando Scan, modificare la messa a fuoco con gli appositi tasti **Focus Far / Focus Near** senza modificare la posizione di Pan/Tilt/Zoom e poi salvare il preset con l'apposito comando Preset.

La correzione manuale del Preset ha effetto solo se i campi Autofocus Giorno/Notte sono disabilitati (*Fig. 71, pagina 35*).

COMANDI SPECIALI					
Comando	**Protocollo**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Tour 1 Start registrazione	Salvare Preset 77	Salvare Preset 77	Salvare Preset 77	Salvare Preset 77	Salvare Preset 77
		Salvare Pattern 2	Inizio memorizzazione del pattern 3		Salvare Preset 47
Tour 2 Start registrazione	Salvare Preset 78	Salvare Preset 78	Salvare Preset 78	Salvare Preset 78	Salvare Preset 78
		Salvare Pattern 3			Salvare Preset 48
Tour 3 Start registrazione	Salvare Preset 79	Salvare Preset 79	Salvare Preset 79	Salvare Preset 79	Salvare Preset 79
		Salvare Pattern 4			Salvare Preset 50
Tour 1 Start	Salvare Preset 80	Salvare Preset 80	Salvare Preset 80	Salvare Preset 80	Salvare Preset 80
		Pattern 2	Attiva pattern 3		Salvare Preset 51
Tour 2 Start	Salvare Preset 81	Salvare Preset 81	Salvare Preset 81	Salvare Preset 81	Salvare Preset 81
		Pattern 3			Salvare Preset 52
Tour 3 Start	Salvare Preset 82	Salvare Preset 82	Salvare Preset 82	Salvare Preset 82	Salvare Preset 82
		Pattern 4			Salvare Preset 53
Tour Record Stop	Iris Open/Close	IrisOpen/Close	Iris Open/Close	Iris Open/Close	Iris Open/Close
		Ack	Salvataggio nuovo pattern		
Wiper Start	Salvare Preset 85	Salvare Preset 85	Salvare Preset 85	Salvare Preset 85	Salvare Preset 85
	Aux 3 ON	Aux 3 ON	Aux 3 ON	Aux 3 ON	Salvare Preset 54
	Wip+				
Wiper Stop	Salvare Preset 86	Salvare Preset 86	Salvare Preset 86	Salvare Preset 86	Salvare Preset 86
	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Salvare Preset 55
	Wip-				
Washer	Salvare Preset 87	Salvare Preset 87	Salvare Preset 87	Salvare Preset 87	Salvare Preset 87
	Aux 4 ON	Aux 4 ON	Aux 4 ON	Aux 4 ON	Salvare Preset 56
	Was+				

COMANDI SPECIALI					
Comando	**Protocollo**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Modalità Notturna on	Salvare Preset 88	Salvare Preset 88	Salvare Preset 88	Salvare Preset 88	Salvare Preset 88
					Salvare Preset 57
Night mode off	Salvare Preset 89	Salvare Preset 89	Salvare Preset 89	Salvare Preset 89	Salvare Preset 89
					Salvare Preset 58
Reboot dispositivo	Salvare Preset 94	Salvare Preset 94	Salvare Preset 94	Salvare Preset 94	Salvare Preset 94
	Ini+		Faster+ Zoom out+ Focus far+ Iris open		Salvare Preset 61
Attivazione OSM	Salvare Preset 95	Salvare Preset 95	Salvare Preset 95	Salvare Preset 95	Salvare Preset 95
	Men+		Iris open+ Focus+ Zoom out		Salvare Preset 46
Patrol Start	Salvare Preset 93	Salvare Preset 93	Salvare Preset 93	Salvare Preset 93	Salvare Preset 93
	Pat+	Pattern	Attiva pattern 1	Attiva patrol	Salvare Preset 60
Patrol Stop	Salvare Preset 92	Salvare Preset 92	Salvare Preset 92	Salvare Preset 92	Salvare Preset 92
	Joystick	Joystick	Joystick	Joystick	Joystick
	Pat-				Salvare Preset 59
Autopan Start	Salvare Preset 99	Salvare Preset 99	Salvare Preset 99	Salvare Preset 99	Salvare Preset 99
	Apa+	Pattern 1	Attiva pattern 2	Attiva autopan	Salvare Preset 63
Autopan Stop	Salvare Preset 96	Salvare Preset 96	Salvare Preset 96	Salvare Preset 96	Salvare Preset 96
	Joystick	Joystick	Joystick	Joystick	Joystick
	Apa-				Salvare Preset 62
Esegui FCC	Salvare Preset 74	Salvare Preset 74	Salvare Preset 74	Salvare Preset 74	Salvare Preset 74
					Salvare Preset 43
Video 2 camera termica	Salvare Preset 75	Salvare Preset 75	Salvare Preset 75	Salvare Preset 75	Salvare Preset 75
					Salvare Preset 44
Video 2 modulo integrato	Salvare Preset 76	Salvare Preset 76	Salvare Preset 76	Salvare Preset 76	Salvare Preset 76
					Salvare Preset 45

Tab. 14

11 Manutenzione e pulizia

11.1 Manutenzione

La manutenzione di ULISSE COMPACT THERMAL deve essere eseguita solo da personale qualificato ad intervenire su circuiti elettrici.

11.1.1 Aggiornamento firmware

In caso di necessità il firmware del brandeggio può essere aggiornato, per ulteriori informazioni contattare il centro assistenza Videotec.

L'operazione di aggiornamento firmware può essere fatta in loco con l'apposito cavo fornito in dotazione al brandeggio oppure da remoto (solo protocolli MACRO/VIDEOTEC e PELCO D) con convertitore USB – seriale 485 (non fornito in dotazione).

11.1.2 Clone configurazione

In caso di necessità è possibile salvare la configurazione del brandeggio, per ulteriori informazioni contattare il centro assistenza Videotec.

L'operazione di salvataggio / ripristino può essere fatta in loco con l'apposito cavo fornito in dotazione al brandeggio oppure da remoto (solo protocolli MACRO/VIDEOTEC e PELCO D) con convertitore USB – seriale 485 (non fornito in dotazione).

11.1.3 Sostituzione fusibili

Per assicurare la protezione contro il rischio di incendio, sostituire i fusibili con lo stesso tipo e valore.

Sono presenti due fusibili sulla scheda di connessione.

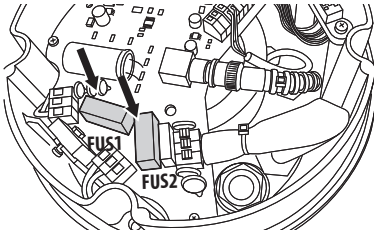


Fig. 97

I valori sono legati alla tensione di alimentazione.

TENSIONE	FUS 1	FUS 2
24Vac 50/60Hz	T 4A L 250V 5x20	T 6.3A H 250V 5x20
120Vac 50/60Hz	T 4A L 250V 5x20	T 4A H 250V 5x20
230Vac 50/60Hz	T 4A L 250V 5x20	T 2A H 250V 5x20

Tab. 15

11.2 Pulizia

I brandeggi ULISSE COMPACT THERMAL non necessitano di particolare manutenzione. Per la pulizia del dispositivo utilizzare detergenti neutri e panni non abrasivi. Si ricorda che il dispositivo è impermeabile.

11.2.1 Pulizia del vetro e delle parti in plastica (PC)

Si consigliano saponi neutri diluiti con acqua o prodotti specifici per la pulizia delle lenti degli occhiali con l'utilizzo di un panno morbido.

Sono da evitare alcool etilico, solventi, idrocarburi idrogenati, acidi forti e alcali. L'utilizzo di detti prodotti danneggia in modo irreparabile la superficie delle parti in plastica.

12 Smaltimento dei rifiuti

Questo simbolo e il sistema di riciclaggio sono validi solo nei paesi dell'EU e non trovano applicazione in altri paesi del mondo.

Il vostro prodotto è stato costruito da materiali e componenti di alta qualità, che sono riutilizzabili o riciclabili.

Prodotti elettrici ed elettronici che portano questo simbolo alla fine dell'uso devono essere smaltiti separatamente dai rifiuti casalinghi.

Vi preghiamo di smaltire questo apparecchio in un Centro di raccolta o in un'Ecostazione.

Nell'Unione Europea esistono sistemi di raccolta differenziata per prodotti elettrici ed elettronici.

13 Troubleshooting

Richiedere l'intervento di personale qualificato quando:

- L'unità si è danneggiata a seguito di una caduta;
- Le prestazioni dell'unità hanno avuto un evidente peggioramento;
- L'unità non funziona correttamente anche se sono state seguite tutte le indicazioni riportate nel presente manuale.

PROBLEMA	POSSIBILI CAUSE E SOLUZIONI
Il dispositivo è spento e non dà segni di vita.	**Errato cablaggio, rottura dei fusibili.** Verificare la corretta esecuzione delle connessioni; verificare la continuità dei fusibili e, in caso di guasto, sostituire secondo i valori indicati in tabella. Nel caso di ripetuti guasti sui fusibili, rivolgersi al centro di assistenza autorizzato.
Le posizioni di preset impostate non corrispondono all'area ripresa.	**Perdita del riferimento di posizione assoluto.** Eseguire la procedura di calibrazione del brandeggio da tastiera (fare riferimento al relativo manuale), oppure resettare l'apparecchiatura spegnendo e riaccendendo.

Sul monitor **non** viene visualizzata l'immagine ripresa da ULISSE COMPACT THERMAL, ma una schermata del tipo:
`Indirizzo : 1`
`Protocollo: MACRO`
`RS485-1: 38400 N81 RX`
`RS485-2: 38400 N81 REPEAT`
`232 : SOLO AGG. FW`
`HW: 000-0001`
`FW: 0a (Jun 4 2009)`
`DIP1.1: VIS. CONFIG. ON`
	Dip-switch di Visualizza Configurazione (DIP1, SW1).
	Spegnere il brandeggio, abbassare la levetta del dip-switch (**DIP1, SW1**). Accendere nuovamente l'apparecchiatura.

Durante l'accensione il brandeggio rimane bloccato visualizzando una schermata del tipo:
`Indirizzo : 1`
`PROCEDURA DI DE-ICE`
`IN CORSO...`
`MINUTI RIMANENTI: 59`
	Temperatura ambiente troppo bassa.
	Attendere il termine della procedura di preriscaldamento. Se la temperatura ambiente è troppo bassa ULISSE COMPACT THERMAL rimane bloccato visualizzando la seguente schermata:
	`Indirizzo : 1`
	`PROCEDURA DI DE-ICE`
	`------------------------`
	`SISTEMA BLOCCATO`
	`TEMPERATURA TROPPO BASSA`
	`------------------------`

Errore **E1-AUTOPAN SENZA LIMITI**.	**I due preset utilizzati come limiti non sono stati programmati.** Programmare i due preset e poi aggiornare il menu di configurazione dell'autopan (*"10.2 Salvataggio della posizione attuale (Preset)", pagina 44* e *"9.6.4.7 Menù Autopan", pagina 36*).

Errore **E2-TERGICRIST. BLOCCATO**.	**Tergicristallo bloccato o rotto.** Verificare che il tergicristallo sia libero di muoversi, se il problema persiste contattare il centro assistenza.
Errore **E3-PATROL SENZA PRESET** oppure errore **E4-PATROL SOLO 1 PRESET.**	**I preset non sono stati programmati.** Programmare due o più preset e poi aggiornare il menu di configurazione patrol (*"10.2 Salvataggio della posizione attuale (Preset)", pagina 44* e *"9.6.4.6 Menù Patrol", pagina 36*).
Errore **E5-IR TEMP. TROPPO ALTA** oppure errore **E6-IR GUASTO**.	**Errato funzionamento del faro infrarosso.** Contattare il centro assistenza.
Errore **E7-PRST. NON CONFIGURATO**.	**Richiamo di un preset non programmato.** Salvare il preset con l'apposito comando (*"10.2 Salvataggio della posizione attuale (Preset)", pagina 44*).
Errore **E8-TOUR NON CONFIGURATO**.	**Richiamo di un Tour non programmato.** Salvare il Tour con l'apposito comando (*"10.6 Richiamo di un percorso (Tour)", pagina 45*).
Errore **E9-TEMP. TROPPO BASSA**	**La temperatura ambiente è troppo bassa. I movimenti del brandeggio vengono bloccati per evitare danni meccanici.**
Allarme **AL6 :LIV. ACQUA BASSO**	**Livello liquido lavavetro basso.** Riempire il serbatoio della pompa con l'apposito liquido lavavetro

Tab. 16

14 Dati tecnici

L'installazione è di tipo TNV-1, non collegare a circuiti SELV.

Per ridurre il rischio di incendio usare solamente cavi aventi dimensioni maggiori o uguali a 26AWG.

14.1 Generale

Costruzione in pressofusione di alluminio e tecnopolimero

Verniciatura a polveri di epossipoliestere, colore RAL9002

Finestra con vetro al Germanio per telecamera termica

Installazione semplice grazie al connettore auto centrante

Assenza di gioco meccanico

Sistema dinamico di controllo della posizione

14.2 Meccanica

2 pressacavi M16, 2 pressacavi M12

Rotazione orizzontale continua

Rotazione verticale da -90° a +90°

Velocità orizzontale variabile:da 0.1° fino a 200°/s

Velocità verticale variabile:da 0.1° fino a 200°/s

Accuratezza del richiamo posizioni preset: 0.05°

14.3 Elettrico/video

Tensione di ingresso:

- 230Vac, 50/60Hz,
- 24Vac, 50/60Hz
- 120Vac, 50/60Hz

Corrente assorbita:

- 230Vac, 0.4A
- 24Vac, 4A
- 120Vac, 0.8A

Potenza assorbita:

- 40W brandeggio fermo con riscaldamento spento
- 60W in movimento, con riscaldamento spento
- 125W picco all'accensione, con riscaldamento acceso

Dimensione cavi d'ingresso: AWG 16 (24Vac) -18 (120/230Vac)

Dimensione cavi di segnale: AWG 20-26

Linee video: cavo coassiali (1Vpp, 75Ohm)

Funzioni: Autopan, Preset, Patrol, Tour (massimo 3), Autoflip

Massimo numero di preset:

- Protocollo AMERICAN DYNAMICS: 95*
- Protocollo ERNITEC: 250
- Protocollo PANASONIC: 250
- Protocollo PELCO D: 99*
- Protocollo VIDEOTEC MACRO: 250
- *250 solo da OSD (On Screen Display)

Stringa di 16 caratteri per titolazione dell'area e dei preset

Scheda allarme I/O

- 6 ingressi allarme
- 2 uscite relè (2A 30Vac/60Vdc max)

14.4 Telecamera

TELECAMERE TERMICHE DISPONIBILI						
	THERMAL CAMERA 35MM		THERMAL CAMERA 25MM		THERMAL CAMERA 9MM	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Detector	Uncooled Vanadium Oxide microbolometer (VOx)					
Risoluzione	320x256	320x240	320x256	320x240	320x256	320x240
Dimensioni pixel	25µm					
Risposta spettrale - Infrarossi onda lunga (LWIR)	From 7.5µm to 13.5µm					
Otturatore interno (solo per compensazione sensore)	Video stop < 1sec.					
Digital Detail Enhancement (DDE)	Sì		Sì		Sì	
Zoom digitale	2x, 4x					
Frequenza di aggiornamento immagine	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps
Gamma di temperatura scene	-40°C ÷ +160°C (-40°F ÷ +320°F)					
Campo visione orizzontale	13°		18°		48°	
Campo visione verticale	10°		14°		37°	
F-number	F/1.4		F/1.4		F/1.25	
Sensibilità termica (NEdT)	< 50mK a f/1.0					
Uomo (rilevamento / riconoscimento / identificazione)	780m / 190m / 97m		560m / 140m / 70m		205m / 56m / 26m	
Auto (rilevamento / riconoscimento / identificazione)	2150m / 560m / 280m		1550m / 400m / 200m		590m / 150m / 74m	

Tab. 17

TELECAMERE ANALOGICHE DISPONIBILI				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X ALTA SENSIBILITÀ	
	PAL	NTSC	PAL	NTSC
Zoom ottico	36x		28x	
Wide Dynamic Range (Fix/Auto)	Sì		-	
Progressive SCAN	Sì		-	
Stabilizzazione immagine digitale	Sì		Sì	
Bilanciamento del bianco	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)			
Elevata risoluzione orizzontale	Fino a 550 Linee TV			
Day-Night (Auto ICR)	Sì			
Sensore di Immagine	1/4" EXView HAD CCD		1/4" Super HAD CCD II	
Numero di Pixel effettivi	~ 440000 pixel	~ 380000 pixel	~ 440000 pixel	~ 380000 pixel
Illuminazione Min. notturna (ICR ON) (tipica)	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
Illuminazione Min. diurna (ICR OFF) (tipica)	0.1 Lux / 1/3s	0.1 Lux / 1/4s	0.16 Lux / 1/3s	0.16 Lux / 1/4s
Aumento automatico del tempo di esposizione per migliorare la visione notturna	Sì			
Rapporto S/N	Superiore a 50dB			
Controllo AE	Automatico, Priorità di otturatore, Priorità di diaframma, Priorità di luminosità e Manuale			
Compensazione di retroilluminazione	On/Off			
Mascheratura sferica (3D) della aree di Privacy con aggiornamento automatico	Sì			
Mascheratura della Zona di Privacy	On/Off (24 posizioni)			

TELECAMERE ANALOGICHE DISPONIBILI				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X ALTA SENSIBILITÀ	
	PAL	NTSC	PAL	NTSC
Numero massimo di blocchi di mascheratura visualizzabili	8			
Risoluzione dei blocchi di mascheratura	160x120 HxV			
Mascheratura	Fino a 15 tipi di mascheratura diversi: 14 colori oppure effetto mosaico			
Sistema di focalizzazione	Auto (Sensibilità: Normale, Bassa), Trigger PTZ, Manuale			
Controllo lenti "Intelligente"	Tecnologia SONY di Reset Lenti Modulare Automatico			
Elevata capacità di Zoom e ampio campo visivo orizzontale	Sì			
Zoom ottico	36x, f=3.4 (grandangolo) a 122.4mm (tele) / F1.6 a F4.5		28x, f=3.5 (grandangolo) a 98mm ((tele) / F1.35 a F3.7	
Zoom digitale	12x (432x con zoom ottico)		12x (336x con zoom ottico)	
Angolo visivo (A)	57.8 gradi (grandangolo) a 1.7 gradi (tele)		55.8 gradi (grandangolo) a 2.1 gradi (tele)	
Distanza minima dell'oggetto	320mm (grandangolo) a 1500mm (tele)		10mm (grandangolo) a 1500mm (tele)	
Velocità Iris Elettronico	1/1 ÷ 1/10000s			

Tab. 18 SONY è un marchio registrato della SONY Corporation, Giappone. EXView HAD è un marchio registrato della SONY Corporation.

14.5 Comunicazioni

Configurabile da OSD

Interfaccia seriale RS485 half duplex, RS422 full duplex e configurazione in cascata

Aggiornamento firmware da console in remoto (solo protocolli VIDEOTEC MACRO e PELCO D)

Fino a 1023 unità indirizzabili via dip-switch

14.6 Protocolli

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO sono marchi registrati.

Il prodotto può essere interfacciato con dispositivi non prodotti da VIDEOTEC. È possibile che il loro protocolli siano cambiati o che questi siano stati modificati rispetto a quelli testati da VIDEOTEC. VIDEOTEC suggerisce un test prima di qualsiasi installazione. VIDEOTEC non è responsabile di qualsiasi ulteriore costo d'installazione nel caso di problemi di compatibilità.

14.7 Ambiente

Interno / Esterno

Temperatura di esercizio: -40°C / +60°C

Immunità agli impulsi: fino a 2KV tra linea a linea, fino a 4KV tra linea e terra (Classe 4)

14.8 Certificazioni

CE EN60950-1, EN61000-6-3 e EN50130-4

FCC part 15, Class A

IP66 EN60529

Certificato UL

UL Canadian Safety Standards listed

NEMA 4X

15 Disegni tecnici

I valori espressi sono in millimetri.

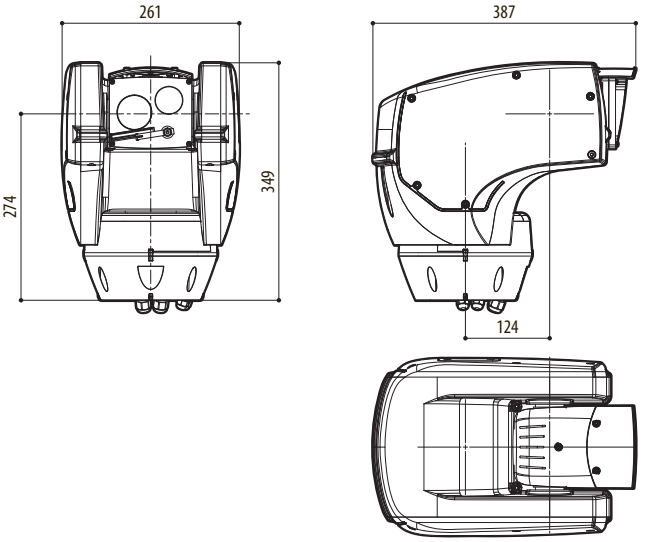


Fig. 100 ULISSE COMPACT THERMAL

16 Appendice A - Tabella indirizzi dip-switch

Di seguito sono riportate tutte le combinazioni possibili.

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Non valido	Indirizzo 512
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Indirizzo 1	Indirizzo 513
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Indirizzo 2	Indirizzo 514
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Indirizzo 3	Indirizzo 515
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Indirizzo 4	Indirizzo 516
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Indirizzo 5	Indirizzo 517
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Indirizzo 6	Indirizzo 518
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Indirizzo 7	Indirizzo 519
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 8	Indirizzo 520
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 9	Indirizzo 521
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 10	Indirizzo 522
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 11	Indirizzo 523
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 12	Indirizzo 524
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 13	Indirizzo 525
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 14	Indirizzo 526
ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Indirizzo 15	Indirizzo 527
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 16	Indirizzo 528
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 17	Indirizzo 529
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 18	Indirizzo 530
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 19	Indirizzo 531
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 20	Indirizzo 532
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 21	Indirizzo 533
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 22	Indirizzo 534
ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Indirizzo 23	Indirizzo 535
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 24	Indirizzo 536
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 25	Indirizzo 537
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 26	Indirizzo 538
ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 27	Indirizzo 539
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 28	Indirizzo 540
ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 29	Indirizzo 541
OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 30	Indirizzo 542
ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Indirizzo 31	Indirizzo 543
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 32	Indirizzo 544
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 33	Indirizzo 545
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 34	Indirizzo 546
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 35	Indirizzo 547
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 36	Indirizzo 548
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 37	Indirizzo 549
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 38	Indirizzo 550
ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Indirizzo 39	Indirizzo 551
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 40	Indirizzo 552
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 41	Indirizzo 553
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 42	Indirizzo 554
ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 43	Indirizzo 555

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 44	Indirizzo 556
ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 45	Indirizzo 557
OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 46	Indirizzo 558
ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Indirizzo 47	Indirizzo 559
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 48	Indirizzo 560
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 49	Indirizzo 561
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 50	Indirizzo 562
ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 51	Indirizzo 563
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 52	Indirizzo 564
ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 53	Indirizzo 565
OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 54	Indirizzo 566
ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Indirizzo 55	Indirizzo 567
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Indirizzo 56	Indirizzo 568
ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Indirizzo 57	Indirizzo 569
OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Indirizzo 58	Indirizzo 570
ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Indirizzo 59	Indirizzo 571
OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Indirizzo 60	Indirizzo 572
ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Indirizzo 61	Indirizzo 573
OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	Indirizzo 62	Indirizzo 574
ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	Indirizzo 63	Indirizzo 575
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 64	Indirizzo 576
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 65	Indirizzo 577
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 66	Indirizzo 578
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 67	Indirizzo 579
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 68	Indirizzo 580
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 69	Indirizzo 581
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 70	Indirizzo 582
ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Indirizzo 71	Indirizzo 583
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 72	Indirizzo 584
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 73	Indirizzo 585
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 74	Indirizzo 586
ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 75	Indirizzo 587
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 76	Indirizzo 588
ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 77	Indirizzo 589
OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 78	Indirizzo 590
ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Indirizzo 79	Indirizzo 591
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 80	Indirizzo 592
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 81	Indirizzo 593
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 82	Indirizzo 594
ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 83	Indirizzo 595
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 84	Indirizzo 596
ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 85	Indirizzo 597
OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 86	Indirizzo 598
ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Indirizzo 87	Indirizzo 599
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Indirizzo 88	Indirizzo 600
ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Indirizzo 89	Indirizzo 601
OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Indirizzo 90	Indirizzo 602

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Indirizzo 91	Indirizzo 603
OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Indirizzo 92	Indirizzo 604
ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Indirizzo 93	Indirizzo 605
OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	Indirizzo 94	Indirizzo 606
ON	ON	ON	ON	ON	OFF	ON	OFF	OFF	Indirizzo 95	Indirizzo 607
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 96	Indirizzo 608
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 97	Indirizzo 609
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 98	Indirizzo 610
ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 99	Indirizzo 611
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 100	Indirizzo 612
ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 101	Indirizzo 613
OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 102	Indirizzo 614
ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Indirizzo 103	Indirizzo 615
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Indirizzo 104	Indirizzo 616
ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Indirizzo 105	Indirizzo 617
OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Indirizzo 106	Indirizzo 618
ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Indirizzo 107	Indirizzo 619
OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Indirizzo 108	Indirizzo 620
ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Indirizzo 109	Indirizzo 621
OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	Indirizzo 110	Indirizzo 622
ON	ON	ON	ON	OFF	ON	ON	OFF	OFF	Indirizzo 111	Indirizzo 623
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Indirizzo 112	Indirizzo 624
ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Indirizzo 113	Indirizzo 625
OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Indirizzo 114	Indirizzo 626
ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Indirizzo 115	Indirizzo 627
OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Indirizzo 116	Indirizzo 628
ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Indirizzo 117	Indirizzo 629
OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	Indirizzo 118	Indirizzo 630
ON	ON	ON	OFF	ON	ON	ON	OFF	OFF	Indirizzo 119	Indirizzo 631
OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Indirizzo 120	Indirizzo 632
ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Indirizzo 121	Indirizzo 633
OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	Indirizzo 122	Indirizzo 634
ON	ON	OFF	ON	ON	ON	ON	OFF	OFF	Indirizzo 123	Indirizzo 635
OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	Indirizzo 124	Indirizzo 636
ON	OFF	ON	ON	ON	ON	ON	OFF	OFF	Indirizzo 125	Indirizzo 637
OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	Indirizzo 126	Indirizzo 638
ON	ON	ON	ON	ON	ON	ON	OFF	OFF	Indirizzo 127	Indirizzo 639
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 128	Indirizzo 640
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 129	Indirizzo 641
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 130	Indirizzo 642
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 131	Indirizzo 643
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 132	Indirizzo 644
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 133	Indirizzo 645
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 134	Indirizzo 646
ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Indirizzo 135	Indirizzo 647
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 136	Indirizzo 648
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 137	Indirizzo 649

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 138	Indirizzo 650
ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 139	Indirizzo 651
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 140	Indirizzo 652
ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 141	Indirizzo 653
OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 142	Indirizzo 654
ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Indirizzo 143	Indirizzo 655
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 144	Indirizzo 656
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 145	Indirizzo 657
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 146	Indirizzo 658
ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 147	Indirizzo 659
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 148	Indirizzo 660
ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 149	Indirizzo 661
OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 150	Indirizzo 662
ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Indirizzo 151	Indirizzo 663
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Indirizzo 152	Indirizzo 664
ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Indirizzo 153	Indirizzo 665
OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Indirizzo 154	Indirizzo 666
ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Indirizzo 155	Indirizzo 667
OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Indirizzo 156	Indirizzo 668
ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Indirizzo 157	Indirizzo 669
OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	Indirizzo 158	Indirizzo 670
ON	ON	ON	ON	ON	OFF	OFF	ON	OFF	Indirizzo 159	Indirizzo 671
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 160	Indirizzo 672
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 161	Indirizzo 673
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 162	Indirizzo 674
ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 163	Indirizzo 675
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 164	Indirizzo 676
ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 165	Indirizzo 677
OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 166	Indirizzo 678
ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Indirizzo 167	Indirizzo 679
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Indirizzo 168	Indirizzo 680
ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Indirizzo 169	Indirizzo 681
OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Indirizzo 170	Indirizzo 682
ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Indirizzo 171	Indirizzo 683
OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Indirizzo 172	Indirizzo 684
ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Indirizzo 173	Indirizzo 685
OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	Indirizzo 174	Indirizzo 686
ON	ON	ON	ON	OFF	ON	OFF	ON	OFF	Indirizzo 175	Indirizzo 687
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Indirizzo 176	Indirizzo 688
ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Indirizzo 177	Indirizzo 689
OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Indirizzo 178	Indirizzo 690
ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Indirizzo 179	Indirizzo 691
OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Indirizzo 180	Indirizzo 692
ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Indirizzo 181	Indirizzo 693
OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	Indirizzo 182	Indirizzo 694
ON	ON	ON	OFF	ON	ON	OFF	ON	OFF	Indirizzo 183	Indirizzo 695
OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Indirizzo 184	Indirizzo 696

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Indirizzo 185	Indirizzo 697
OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	Indirizzo 186	Indirizzo 698
ON	ON	OFF	ON	ON	ON	OFF	ON	OFF	Indirizzo 187	Indirizzo 699
OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	Indirizzo 188	Indirizzo 700
ON	OFF	ON	ON	ON	ON	OFF	ON	OFF	Indirizzo 189	Indirizzo 701
OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	Indirizzo 190	Indirizzo 702
ON	ON	ON	ON	ON	ON	OFF	ON	OFF	Indirizzo 191	Indirizzo 703
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 192	Indirizzo 704
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 193	Indirizzo 705
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 194	Indirizzo 706
ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 195	Indirizzo 707
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 196	Indirizzo 708
ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 197	Indirizzo 709
OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 198	Indirizzo 710
ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Indirizzo 199	Indirizzo 711
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Indirizzo 200	Indirizzo 712
ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Indirizzo 201	Indirizzo 713
OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Indirizzo 202	Indirizzo 714
ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Indirizzo 203	Indirizzo 715
OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Indirizzo 204	Indirizzo 716
ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Indirizzo 205	Indirizzo 717
OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	Indirizzo 206	Indirizzo 718
ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	Indirizzo 207	Indirizzo 719
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Indirizzo 208	Indirizzo 720
ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Indirizzo 209	Indirizzo 721
OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Indirizzo 210	Indirizzo 722
ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Indirizzo 211	Indirizzo 723
OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Indirizzo 212	Indirizzo 724
ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Indirizzo 213	Indirizzo 725
OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	Indirizzo 214	Indirizzo 726
ON	ON	ON	OFF	ON	OFF	ON	ON	OFF	Indirizzo 215	Indirizzo 727
OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Indirizzo 216	Indirizzo 728
ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Indirizzo 217	Indirizzo 729
OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	Indirizzo 218	Indirizzo 730
ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	Indirizzo 219	Indirizzo 731
OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	Indirizzo 220	Indirizzo 732
ON	OFF	ON	ON	ON	OFF	ON	ON	OFF	Indirizzo 221	Indirizzo 733
OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	Indirizzo 222	Indirizzo 734
ON	ON	ON	ON	ON	OFF	ON	ON	OFF	Indirizzo 223	Indirizzo 735
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Indirizzo 224	Indirizzo 736
ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Indirizzo 225	Indirizzo 737
OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Indirizzo 226	Indirizzo 738
ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Indirizzo 227	Indirizzo 739
OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Indirizzo 228	Indirizzo 740
ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Indirizzo 229	Indirizzo 741
OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	Indirizzo 230	Indirizzo 742
ON	ON	ON	OFF	OFF	ON	ON	ON	OFF	Indirizzo 231	Indirizzo 743

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Indirizzo 232	Indirizzo 744
ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Indirizzo 233	Indirizzo 745
OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	Indirizzo 234	Indirizzo 746
ON	ON	OFF	ON	OFF	ON	ON	ON	OFF	Indirizzo 235	Indirizzo 747
OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	Indirizzo 236	Indirizzo 748
ON	OFF	ON	ON	OFF	ON	ON	ON	OFF	Indirizzo 237	Indirizzo 749
OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	Indirizzo 238	Indirizzo 750
ON	ON	ON	ON	OFF	ON	ON	ON	OFF	Indirizzo 239	Indirizzo 751
OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Indirizzo 240	Indirizzo 752
ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Indirizzo 241	Indirizzo 753
OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	Indirizzo 242	Indirizzo 754
ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	Indirizzo 243	Indirizzo 755
OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	Indirizzo 244	Indirizzo 756
ON	OFF	ON	OFF	ON	ON	ON	ON	OFF	Indirizzo 245	Indirizzo 757
OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	Indirizzo 246	Indirizzo 758
ON	ON	ON	OFF	ON	ON	ON	ON	OFF	Indirizzo 247	Indirizzo 759
OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	Indirizzo 248	Indirizzo 760
ON	OFF	OFF	ON	ON	ON	ON	ON	OFF	Indirizzo 249	Indirizzo 761
OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	Indirizzo 250	Indirizzo 762
ON	ON	OFF	ON	ON	ON	ON	ON	OFF	Indirizzo 251	Indirizzo 763
OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	Indirizzo 252	Indirizzo 764
ON	OFF	ON	ON	ON	ON	ON	ON	OFF	Indirizzo 253	Indirizzo 765
OFF	ON	ON	ON	ON	ON	ON	ON	OFF	Indirizzo 254	Indirizzo 766
ON	ON	ON	ON	ON	ON	ON	ON	OFF	Indirizzo 255	Indirizzo 767
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 256	Indirizzo 768
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 257	Indirizzo 769
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 258	Indirizzo 770
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 259	Indirizzo 771
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 260	Indirizzo 772
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 261	Indirizzo 773
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 262	Indirizzo 774
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Indirizzo 263	Indirizzo 775
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 264	Indirizzo 776
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 265	Indirizzo 777
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 266	Indirizzo 778
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 267	Indirizzo 779
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 268	Indirizzo 780
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 269	Indirizzo 781
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 270	Indirizzo 782
ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Indirizzo 271	Indirizzo 783
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 272	Indirizzo 784
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 273	Indirizzo 785
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 274	Indirizzo 786
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 275	Indirizzo 787
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 276	Indirizzo 788
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 277	Indirizzo 789
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 278	Indirizzo 790

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Indirizzo 279	Indirizzo 791
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Indirizzo 280	Indirizzo 792
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Indirizzo 281	Indirizzo 793
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Indirizzo 282	Indirizzo 794
ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Indirizzo 283	Indirizzo 795
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Indirizzo 284	Indirizzo 796
ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Indirizzo 285	Indirizzo 797
OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	Indirizzo 286	Indirizzo 798
ON	ON	ON	ON	ON	OFF	OFF	OFF	ON	Indirizzo 287	Indirizzo 799
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 288	Indirizzo 800
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 289	Indirizzo 801
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 290	Indirizzo 802
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 291	Indirizzo 803
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 292	Indirizzo 804
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 293	Indirizzo 805
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 294	Indirizzo 806
ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Indirizzo 295	Indirizzo 807
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Indirizzo 296	Indirizzo 808
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Indirizzo 297	Indirizzo 809
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Indirizzo 298	Indirizzo 810
ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Indirizzo 299	Indirizzo 811
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Indirizzo 300	Indirizzo 812
ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Indirizzo 301	Indirizzo 813
OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	Indirizzo 302	Indirizzo 814
ON	ON	ON	ON	OFF	ON	OFF	OFF	ON	Indirizzo 303	Indirizzo 815
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Indirizzo 304	Indirizzo 816
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Indirizzo 305	Indirizzo 817
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Indirizzo 306	Indirizzo 818
ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Indirizzo 307	Indirizzo 819
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Indirizzo 308	Indirizzo 820
ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Indirizzo 309	Indirizzo 821
OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	Indirizzo 310	Indirizzo 822
ON	ON	ON	OFF	ON	ON	OFF	OFF	ON	Indirizzo 311	Indirizzo 823
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Indirizzo 312	Indirizzo 824
ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Indirizzo 313	Indirizzo 825
OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	Indirizzo 314	Indirizzo 826
ON	ON	OFF	ON	ON	ON	OFF	OFF	ON	Indirizzo 315	Indirizzo 827
OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	Indirizzo 316	Indirizzo 828
ON	OFF	ON	ON	ON	ON	OFF	OFF	ON	Indirizzo 317	Indirizzo 829
OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	Indirizzo 318	Indirizzo 830
ON	ON	ON	ON	ON	ON	OFF	OFF	ON	Indirizzo 319	Indirizzo 831
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 320	Indirizzo 832
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 321	Indirizzo 833
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 322	Indirizzo 834
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 323	Indirizzo 835
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 324	Indirizzo 836
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 325	Indirizzo 837

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 326	Indirizzo 838
ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Indirizzo 327	Indirizzo 839
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Indirizzo 328	Indirizzo 840
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Indirizzo 329	Indirizzo 841
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Indirizzo 330	Indirizzo 842
ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Indirizzo 331	Indirizzo 843
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Indirizzo 332	Indirizzo 844
ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Indirizzo 333	Indirizzo 845
OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	Indirizzo 334	Indirizzo 846
ON	ON	ON	ON	OFF	OFF	ON	OFF	ON	Indirizzo 335	Indirizzo 847
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Indirizzo 336	Indirizzo 848
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Indirizzo 337	Indirizzo 849
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Indirizzo 338	Indirizzo 850
ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Indirizzo 339	Indirizzo 851
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Indirizzo 340	Indirizzo 852
ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Indirizzo 341	Indirizzo 853
OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	Indirizzo 342	Indirizzo 854
ON	ON	ON	OFF	ON	OFF	ON	OFF	ON	Indirizzo 343	Indirizzo 855
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Indirizzo 344	Indirizzo 856
ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Indirizzo 345	Indirizzo 857
OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	Indirizzo 346	Indirizzo 858
ON	ON	OFF	ON	ON	OFF	ON	OFF	ON	Indirizzo 347	Indirizzo 859
OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	Indirizzo 348	Indirizzo 860
ON	OFF	ON	ON	ON	OFF	ON	OFF	ON	Indirizzo 349	Indirizzo 861
OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	Indirizzo 350	Indirizzo 862
ON	ON	ON	ON	ON	OFF	ON	OFF	ON	Indirizzo 351	Indirizzo 863
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Indirizzo 352	Indirizzo 864
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Indirizzo 353	Indirizzo 865
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Indirizzo 354	Indirizzo 866
ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Indirizzo 355	Indirizzo 867
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Indirizzo 356	Indirizzo 868
ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Indirizzo 357	Indirizzo 869
OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	Indirizzo 358	Indirizzo 870
ON	ON	ON	OFF	OFF	ON	ON	OFF	ON	Indirizzo 359	Indirizzo 871
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Indirizzo 360	Indirizzo 872
ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Indirizzo 361	Indirizzo 873
OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	Indirizzo 362	Indirizzo 874
ON	ON	OFF	ON	OFF	ON	ON	OFF	ON	Indirizzo 363	Indirizzo 875
OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	Indirizzo 364	Indirizzo 876
ON	OFF	ON	ON	OFF	ON	ON	OFF	ON	Indirizzo 365	Indirizzo 877
OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	Indirizzo 366	Indirizzo 878
ON	ON	ON	ON	OFF	ON	ON	OFF	ON	Indirizzo 367	Indirizzo 879
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Indirizzo 368	Indirizzo 880
ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Indirizzo 369	Indirizzo 881
OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	Indirizzo 370	Indirizzo 882
ON	ON	OFF	OFF	ON	ON	ON	OFF	ON	Indirizzo 371	Indirizzo 883
OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	Indirizzo 372	Indirizzo 884

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	ON	OFF	ON	ON	ON	OFF	ON	Indirizzo 373	Indirizzo 885
OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	Indirizzo 374	Indirizzo 886
ON	ON	ON	OFF	ON	ON	ON	OFF	ON	Indirizzo 375	Indirizzo 887
OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	Indirizzo 376	Indirizzo 888
ON	OFF	OFF	ON	ON	ON	ON	OFF	ON	Indirizzo 377	Indirizzo 889
OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	Indirizzo 378	Indirizzo 890
ON	ON	OFF	ON	ON	ON	ON	OFF	ON	Indirizzo 379	Indirizzo 891
OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	Indirizzo 380	Indirizzo 892
ON	OFF	ON	ON	ON	ON	ON	OFF	ON	Indirizzo 381	Indirizzo 893
OFF	ON	ON	ON	ON	ON	ON	OFF	ON	Indirizzo 382	Indirizzo 894
ON	ON	ON	ON	ON	ON	ON	OFF	ON	Indirizzo 383	Indirizzo 895
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 384	Indirizzo 896
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 385	Indirizzo 897
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 386	Indirizzo 898
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 387	Indirizzo 899
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 388	Indirizzo 900
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 389	Indirizzo 901
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 390	Indirizzo 902
ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Indirizzo 391	Indirizzo 903
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Indirizzo 392	Indirizzo 904
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Indirizzo 393	Indirizzo 905
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Indirizzo 394	Indirizzo 906
ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Indirizzo 395	Indirizzo 907
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Indirizzo 396	Indirizzo 908
ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Indirizzo 397	Indirizzo 909
OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	Indirizzo 398	Indirizzo 910
ON	ON	ON	ON	OFF	OFF	OFF	ON	ON	Indirizzo 399	Indirizzo 911
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Indirizzo 400	Indirizzo 912
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Indirizzo 401	Indirizzo 913
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Indirizzo 402	Indirizzo 914
ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Indirizzo 403	Indirizzo 915
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Indirizzo 404	Indirizzo 916
ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Indirizzo 405	Indirizzo 917
OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	Indirizzo 406	Indirizzo 918
ON	ON	ON	OFF	ON	OFF	OFF	ON	ON	Indirizzo 407	Indirizzo 919
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Indirizzo 408	Indirizzo 920
ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Indirizzo 409	Indirizzo 921
OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	Indirizzo 410	Indirizzo 922
ON	ON	OFF	ON	ON	OFF	OFF	ON	ON	Indirizzo 411	Indirizzo 923
OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	Indirizzo 412	Indirizzo 924
ON	OFF	ON	ON	ON	OFF	OFF	ON	ON	Indirizzo 413	Indirizzo 925
OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	Indirizzo 414	Indirizzo 926
ON	ON	ON	ON	ON	OFF	OFF	ON	ON	Indirizzo 415	Indirizzo 927
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Indirizzo 416	Indirizzo 928
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Indirizzo 417	Indirizzo 929
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Indirizzo 418	Indirizzo 930
ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Indirizzo 419	Indirizzo 931

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Indirizzo 420	Indirizzo 932
ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Indirizzo 421	Indirizzo 933
OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	Indirizzo 422	Indirizzo 934
ON	ON	ON	OFF	OFF	ON	OFF	ON	ON	Indirizzo 423	Indirizzo 935
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Indirizzo 424	Indirizzo 936
ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Indirizzo 425	Indirizzo 937
OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	Indirizzo 426	Indirizzo 938
ON	ON	OFF	ON	OFF	ON	OFF	ON	ON	Indirizzo 427	Indirizzo 939
OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	Indirizzo 428	Indirizzo 940
ON	OFF	ON	ON	OFF	ON	OFF	ON	ON	Indirizzo 429	Indirizzo 941
OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	Indirizzo 430	Indirizzo 942
ON	ON	ON	ON	OFF	ON	OFF	ON	ON	Indirizzo 431	Indirizzo 943
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Indirizzo 432	Indirizzo 944
ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Indirizzo 433	Indirizzo 945
OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	Indirizzo 434	Indirizzo 946
ON	ON	OFF	OFF	ON	ON	OFF	ON	ON	Indirizzo 435	Indirizzo 947
OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	Indirizzo 436	Indirizzo 948
ON	OFF	ON	OFF	ON	ON	OFF	ON	ON	Indirizzo 437	Indirizzo 949
OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	Indirizzo 438	Indirizzo 950
ON	ON	ON	OFF	ON	ON	OFF	ON	ON	Indirizzo 439	Indirizzo 951
OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	Indirizzo 440	Indirizzo 952
ON	OFF	OFF	ON	ON	ON	OFF	ON	ON	Indirizzo 441	Indirizzo 953
OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	Indirizzo 442	Indirizzo 954
ON	ON	OFF	ON	ON	ON	OFF	ON	ON	Indirizzo 443	Indirizzo 955
OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	Indirizzo 444	Indirizzo 956
ON	OFF	ON	ON	ON	ON	OFF	ON	ON	Indirizzo 445	Indirizzo 957
OFF	ON	ON	ON	ON	ON	OFF	ON	ON	Indirizzo 446	Indirizzo 958
ON	ON	ON	ON	ON	ON	OFF	ON	ON	Indirizzo 447	Indirizzo 959
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Indirizzo 448	Indirizzo 960
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Indirizzo 449	Indirizzo 961
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Indirizzo 450	Indirizzo 962
ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Indirizzo 451	Indirizzo 963
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Indirizzo 452	Indirizzo 964
ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Indirizzo 453	Indirizzo 965
OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	Indirizzo 454	Indirizzo 966
ON	ON	ON	OFF	OFF	OFF	ON	ON	ON	Indirizzo 455	Indirizzo 967
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Indirizzo 456	Indirizzo 968
ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Indirizzo 457	Indirizzo 969
OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	Indirizzo 458	Indirizzo 970
ON	ON	OFF	ON	OFF	OFF	ON	ON	ON	Indirizzo 459	Indirizzo 971
OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	Indirizzo 460	Indirizzo 972
ON	OFF	ON	ON	OFF	OFF	ON	ON	ON	Indirizzo 461	Indirizzo 973
OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	Indirizzo 462	Indirizzo 974
ON	ON	ON	ON	OFF	OFF	ON	ON	ON	Indirizzo 463	Indirizzo 975
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Indirizzo 464	Indirizzo 976
ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Indirizzo 465	Indirizzo 977
OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	Indirizzo 466	Indirizzo 978

IMPOSTAZIONE INDIRIZZO (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	OFF	ON	OFF	ON	ON	ON	Indirizzo 467	Indirizzo 979
OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	Indirizzo 468	Indirizzo 980
ON	OFF	ON	OFF	ON	OFF	ON	ON	ON	Indirizzo 469	Indirizzo 981
OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	Indirizzo 470	Indirizzo 982
ON	ON	ON	OFF	ON	OFF	ON	ON	ON	Indirizzo 471	Indirizzo 983
OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	Indirizzo 472	Indirizzo 984
ON	OFF	OFF	ON	ON	OFF	ON	ON	ON	Indirizzo 473	Indirizzo 985
OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	Indirizzo 474	Indirizzo 986
ON	ON	OFF	ON	ON	OFF	ON	ON	ON	Indirizzo 475	Indirizzo 987
OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	Indirizzo 476	Indirizzo 988
ON	OFF	ON	ON	ON	OFF	ON	ON	ON	Indirizzo 477	Indirizzo 989
OFF	ON	ON	ON	ON	OFF	ON	ON	ON	Indirizzo 478	Indirizzo 990
ON	ON	ON	ON	ON	OFF	ON	ON	ON	Indirizzo 479	Indirizzo 991
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Indirizzo 480	Indirizzo 992
ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Indirizzo 481	Indirizzo 993
OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	Indirizzo 482	Indirizzo 994
ON	ON	OFF	OFF	OFF	ON	ON	ON	ON	Indirizzo 483	Indirizzo 995
OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	Indirizzo 484	Indirizzo 996
ON	OFF	ON	OFF	OFF	ON	ON	ON	ON	Indirizzo 485	Indirizzo 997
OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	Indirizzo 486	Indirizzo 998
ON	ON	ON	OFF	OFF	ON	ON	ON	ON	Indirizzo 487	Indirizzo 999
OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	Indirizzo 488	Indirizzo 1000
ON	OFF	OFF	ON	OFF	ON	ON	ON	ON	Indirizzo 489	Indirizzo 1001
OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	Indirizzo 490	Indirizzo 1002
ON	ON	OFF	ON	OFF	ON	ON	ON	ON	Indirizzo 491	Indirizzo 1003
OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	Indirizzo 492	Indirizzo 1004
ON	OFF	ON	ON	OFF	ON	ON	ON	ON	Indirizzo 493	Indirizzo 1005
OFF	ON	ON	ON	OFF	ON	ON	ON	ON	Indirizzo 494	Indirizzo 1006
ON	ON	ON	ON	OFF	ON	ON	ON	ON	Indirizzo 495	Indirizzo 1007
OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	Indirizzo 496	Indirizzo 1008
ON	OFF	OFF	OFF	ON	ON	ON	ON	ON	Indirizzo 497	Indirizzo 1009
OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	Indirizzo 498	Indirizzo 1010
ON	ON	OFF	OFF	ON	ON	ON	ON	ON	Indirizzo 499	Indirizzo 1011
OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	Indirizzo 500	Indirizzo 1012
ON	OFF	ON	OFF	ON	ON	ON	ON	ON	Indirizzo 501	Indirizzo 1013
OFF	ON	ON	OFF	ON	ON	ON	ON	ON	Indirizzo 502	Indirizzo 1014
ON	ON	ON	OFF	ON	ON	ON	ON	ON	Indirizzo 503	Indirizzo 1015
OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	Indirizzo 504	Indirizzo 1016
ON	OFF	OFF	ON	ON	ON	ON	ON	ON	Indirizzo 505	Indirizzo 1017
OFF	ON	OFF	ON	ON	ON	ON	ON	ON	Indirizzo 506	Indirizzo 1018
ON	ON	OFF	ON	ON	ON	ON	ON	ON	Indirizzo 507	Indirizzo 1019
OFF	OFF	ON	ON	ON	ON	ON	ON	ON	Indirizzo 508	Indirizzo 1020
ON	OFF	ON	ON	ON	ON	ON	ON	ON	Indirizzo 509	Indirizzo 1021
OFF	ON	ON	ON	ON	ON	ON	ON	ON	Indirizzo 510	Indirizzo 1022
ON	ON	ON	ON	ON	ON	ON	ON	ON	Indirizzo 511	Indirizzo 1023

Tab. 19

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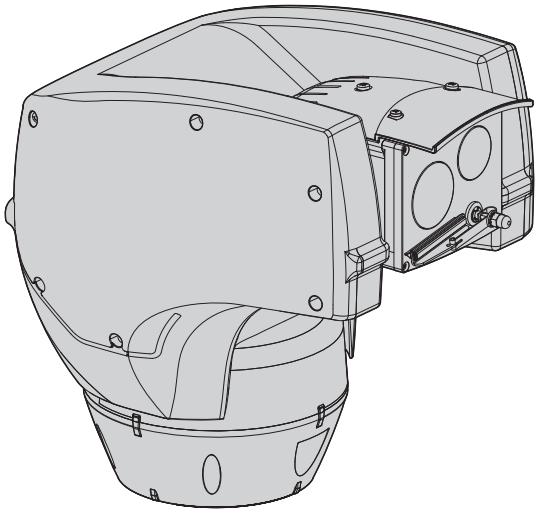
ULISSE COMPACT THERMAL

Unité de positionnement avec double caméra pour la détection thermique



FR **Français** - Manuel d'instructions

Sommaire

1 À propos de ce mode d'emploi

Avant d'installer et d'utiliser cet appareil, veuillez lire attentivement ce mode d'emploi. Conservez-le à portée de main pour pouvoir vous y reporter en cas de besoin.

1.1 Conventions typographiques

DANGER!
Risque élevé.
Risque de choc électrique. Sauf indication contraire, sectionner l'alimentation avant de procéder à toute opération.

DANGER!
Surface à température élevée.
Evitez le contact. La température des surfaces est élevée et leur contact peut provoquer des blessures corporelles.

DANGER!
Danger mécanique.
Risque d'écrasement ou de cisaillement.

ATTENTION!
Risque moyen.
Opération extrêmement importante en vue d'un fonctionnement correct du système; lire avec attention les opérations indiquées et s'y conformer rigoureusement.

REMARQUE
Description des caractéristiques du système.
Il est conseillé de procéder à une lecture attentive pour une meilleure compréhension des phases suivantes.

2 Notes sur le copyright et informations sur les marques de commerce

Les noms de produit ou de sociétés cités sont des marques de commerce ou des marques de commerce enregistrées.

Microsoft Internet Explorer®, Windows Xp ® et Windows Vista® sont la propriété de Microsoft Corporation.

INTEL® Core™ 2 Duo et INTEL® Core™ 2 Quad sont la propriété d' Intel Corporation.

3 Normes de securité

Le producteur décline toute responsabilité pour les dommages éventuels dus à une utilisation non appropriée des appareils mentionnés dans ce manuel. On réserve en outre le droit d'en modifier le contenu sans préavis. La documentation contenue dans ce manuel a été rassemblée et vérifiée avec le plus grand soin, cependant, le producteur ne peut pas s'assumer aucune responsabilité dérivante de l'emploi de celle là. La même chose vaut pour chaque personne ou société impliquées dans la création et la production de ce manuel.

Les systèmes de positionnement intégrés pour vidéo-surveillance de la série ULISSE COMPACT THERMAL sont conformes aux normes en vigueur lors de la publication de ce manuel.

Il est toutefois nécessaire de fournir aux utilisateurs (techniciens installateurs et opérateurs) plusieurs indications leur permettant d'opérer dans des conditions de sécurité optimales.

En cas de transport du dispositif, faire preuve d'une attention extrême. Tout arrêt brusque, dénivellations et chocs violents risque de l'endommager et d'entraîner des blessures.

Le bâtiment doit comprendre un circuit de protection (magnétothermique) bipolaire de 20A max. avec interrupteur bipolaire automatique assurant également la protection du courant de panne vers la terre (magnétothermique + différentiel) avec distance min. de 3mm entre les contacts.

- L'installation et l'entretien du dispositif doivent être exclusivement être effectués par un personnel technique qualifié.
- Sectionner l'alimentation électrique avant toute intervention technique sur l'appareil.
- Ne pas utiliser de câbles d'alimentation usés ou endommagés.
- Ne procéder sous aucun prétexte à des modifications ou des connexions non prévues dans ce manuel: l'utilisation d'appareils non adéquats peut comporter des dangers graves pour la sécurité du personnel et de l'installation.
- Utiliser uniquement des pièces de rechange d'origine. Les pièces non d'origine peuvent être source d'incendies, de choc électrique ou autres.
- Avant de procéder à l'installation, contrôler que le matériel fourni correspond à la commande et examiner les étiquettes de marquage (*"4.2 Marquage du produit", page 10*).
- Raccorder le système à une source d'alimentation conforme à celle figurant sur l'étiquette de marquage du produit. Avant de procéder à l'installation, vérifier que la ligne électrique est sectionnée. Pour les dispositifs alimentés à 24Vac, la tension d'alimentation doit être comprise dans les limites (+/- 10%). Les connexions doivent être conformes aux normes locales. En cas de doute sur le type de fourniture, contacter la société de service pour information.
- L'appareil est conçu pour une installation permanente et en toute sécurité sur un bâtiment ou une structure adéquate.
- Les parties mobiles du système représentant un risque potentiel d'accident, le système doit être installé de façon à en empêcher l'accès aux personnes non autorisées.
- Appliquer l'étiquette **Parties mobiles dangereuses (***Fig. 02, page 11***)** près de l'unité.
- Ne pas utiliser l'appareil en présence de substances inflammables.
- Ne pas laisser l'appareil à portée des enfants ou de personnes non autorisées.
- L'appareil ne doit être considéré comme désactivé qu'avec l'alimentation sectionnée et les câbles de connexion aux autres dispositifs débranchés.
- L'installation doit être équipé d'un dispositif de déconnexion immédiatement reconnaissable et utilisable en cas de besoin.
- L'entretien du dispositif doit uniquement être effectué par un personnel qualifié. Durant les opérations d'entretien, l'opérateur est exposé au risque d'électrocution ou autres.
- Utiliser uniquement les accessoires indiqués par le fabricant. Tout changement non approuvé expressément par le fabricant entraînera l'annulation de la garantie.
- Brancher à la terre le câble coaxial.
- Avant de brancher tous les câbles de signalisation, vérifier que l'unité est correctement branché à la terre.
- En cas de transfert du dispositif de l'installation, toujours débrancher le câble de terre en dernier.
- Adopter les précautions utiles pour éviter d'endommager l'appareil à la suite de décharges électrostatiques.
- L'unité a été réalisée pour un branchement avec câble tri-polaire, se conformer aux indications fournies dans ce manuel pour un branchement correct du circuit de terre.
- Avant toute intervention technique, toujours sectionner l'alimentation électrique et manipuler avec soin l'unité: toute sollicitation mécanique importante risque d'endommager l'unité.
- Accorder une attention particulière aux distances d'isolement entre la ligne d'alimentation et tous les autres câbles, dispositifs de protection contre la foudre compris.

- L'interrupteur principal doit être accessible afin d'intervenir rapidement en cas de nécessité.
- Il faut, uniquement pour les produits marqués UL alimentés à 24Vac, utiliser un transformateur UL listed Classe 2, conforme aux normes en vigueur.
- La catégorie d'installation (ou catégorie de surtension) spécifie les niveaux de la tension de secteur correspondant à l'appareil. La catégorie dépend du lieu d'installation et du dispositif de protection contre les surtensions installé. En cas d'environnement industriel directement connecté aux circuits de dérivation du système d'alimentation, l'équipement est classé dans la catégorie d'installation III. Dans ce cas, un déclassement à la catégorie II est nécessaire et peut être obtenu au moyen d'un transformateur d'isolement avec blindage électrostatique entre le primaire et le secondaire ou en utilisant des dispositifs de protection contre les surtensions (SPD) entre la phase et le neutre et entre le neutre et la terre. Les dispositifs SPD UL cités doivent être prévus pour limiter les surtensions transitoires en mode répétitif et pour les conditions nominales de fonctionnement suivantes : Type 2 (dispositifs SPD reliés en permanence au côté charge du côté du dispositif de protection contre les surintensités) ; courant nominal de décharge (In) 20kA min. Exemples d'utilisation possible : FERRAZ SHAWMUT, ST23401PG-CN, ST240SPG-CN spécifiés pour 120/240Vca, (In=20kA). La distance maximale entre installation et réduction est de 5m.
- Cet appareil appartient à la Classe A. Pourtant dans un milieu résidentiel il peut être la cause de radioperturbations. Dans ce cas il est préferable de prendre des mésures appropritées.

4 Identification

4.1 Description et désignation du produit

ULISSE COMPACT THERMAL offre une solution intégrée pour des installations de haute sécurité même dans une obscurité totale, en cas de brouillard, pluie, fumée ,etc.

L'unité combine un module d'image thermique de dernière géneration et une caméra jour/nuit, alignées à l'usine et installées dans le même logement.

ULISSE COMPACT THERMAL a comme caractéristique deux sorties vidéo indépendantes et permet une vision double en temps réel sur l'écran pour un monitoring optimal de la zone.

ULISSE COMPACT THERMAL assure une rotation continue et haute vitesse, une précision de positionnement absolue et une qualité d'image supérieure, une extrême solidité et une configuration simplifiée du système. La vitesse atteint 200°/s en rotation continue horizontale et de -90° à +90° à la verticale.

ULISSE COMPACT THERMAL gère les fonctions de preset, autopan et patrol avec une précision de relevé de 0,1°. Le contrôle et la correction de position constamment effectué par la tourelle est une fonction extrêmement utile en cas de conditions difficiles de fonctionnement.

La caméra thermique est un Micro bolomètre à l'oxyde de vanadium non refroidi (VOx) con banda spettrale 7.5-13.5 µm; elle développe une vidéo thermique 320x 256 (PAL) et 320x240 (NTSC) avec une fréquence d'image de 8.3fps ou 25fps (PAL) et 7.5 ou 30fps (NTSC). La haute sensibilité NEdT 50mK à f/1.0 assure une optimale vision thermique. Elle utilise un zoom numérique de 2x ou 4x. On peut installer un choix de différentes optiques, 50mm, 25mm et 9mm, selon la distance de détection demandée.

Les paramètres de la caméra thermique sont facilement configurable par OSD. L'interface de configuration offre des pre-set -configurations typiques ou une personnalisation complète du système.

La caméra possède également des fonctions telles que l'analyse isotherme (couleurs spéciales des objets qui entrent dans les paramètres fixés par l'opérateur), la thermographie de base et d'autres couleurs de la scène.

La caméra jour/nuit intégrée SONY offre différents zooms optiques, 36x, 18x ou 10x et permet de filmer des objets proches ou lointains avec une précision exceptionnelle et la possibilité de masquages vidéo dynamiques de plusieurs zones. Le capteur Super

HAD, 1/3" CCD (avec zoom 10x), garantit en outre une haute sensibilité dans des environnements faiblement illuminés.

ULISSE COMPACT THERMAL est également disponible avec seulement la caméra thermique. Livré en 24, 230 ou 120Vac et en mode PAL ou NTSC.

Outre la configuration OSD, le système est équipé d'une interface RS485/RS422 pour le contrôle complet du système et la mise à jour de la dernière version du micrologiciel à distance.

Cette solution est particulièrement adaptée pour une surveillance vidéo 24h sur 24 pour des zones de haute sécurité à vaste portée comme les périmètres de protection, les aéroports, le littoral, les prisons et les ports.

4.2 Marquage du produit

Les tourelles ULISSE COMPACT THERMAL portent un étiquette conforme au marquage CE.

L'étiquette fixée sur la structure indique:

- Code d'identification du modèle (Code barres Extended 3/9)
- Tension d'alimentation (Volts)
- Fréquence (Hertz)
- Courant absorbé (ampères)
- Etanche IP
- Numéro de série

4.2.1 Contrôle du marquage

Avant de procéder à l'installation, contrôler que le matériel fourni correspond à la commande et examiner les étiquettes de marquage.

N'effectuer sous aucun prétexte des modifications ou connexions non prévues dans ce manuel: l'utilisation d'appareils inadéquats peut comporter des risques sérieux pour les appareils et la sécurité du personnel.

5 Versions

5.2.1 Système de lavage

La tourelle, si elle est munie d'un essuie-glace, peut aussi être équipée d'une pompe externe qui fournit l'eau pour le nettoyage de la glace.

Comme on le voit sur la figure, le jet est en position externe par rapport à la tourelle.

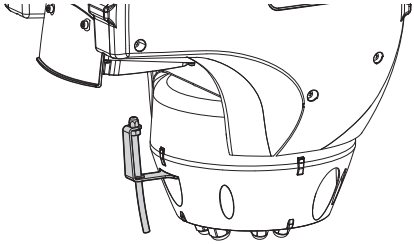


Fig. 01

Quand on envoie la commande (*"10.9 Validation du Système de lavage (Washer)", page 45*) la tourelle se place avec la glace devant le jet et la pompe et l'essuie-glace sont validés pendant une durée déterminée; à la fin de la procédure ULISSE COMPACT THERMAL revient dans sa position initiale.

Pour les modèles avec Système de lavage équipés de senseur de niveau, ULISSE COMPACT THERMAL peut en outre visualiser un message sur la vidéo quand le niveau du liquide dans le réservoir est insuffisant (seulement si l'on utilise une pompe à grande hauteur d'élévation de la série UPTWAS).

Pour d'autres détails sur la configuration et l'utilisation du système de lavage, voir *"9.6.7 Menu Système de lavage", page 38*.

6 Préparation du produit en vue de l'utilisation

Toute modification non approuvée expressément par le fabricant entraînera l'annulation de la garantie.

Toutes les autres parties de l'unité ne doivent pas être désassemblées (sauf pour opérations de montage et d'entretien prévues dans ce manuel).

6.1 Précautions de sécurité avant l'utilisation

Le bâtiment doit comprendre un circuit de protection (magnétothermique) bipolaire de 20A max. avec interrupteur bipolaire automatique assurant également la protection du courant de panne vers la terre (magnétothermique + différentiel) avec distance min. de 3mm entre les contacts.

L'appareil comprend des parties mobiles: s'assurer que l'unité est positionnée dans une zone non accessible pendant le fonctionnement. Appliquer l'étiquette fournie avec l'appareil près de l'objet et en position visible.

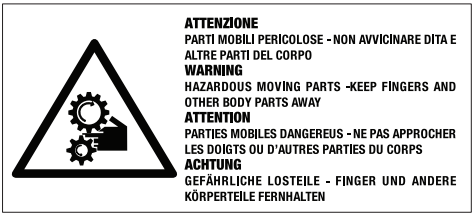


Fig. 02

6.2 Contenu et déballage

Lors de la livraison du produit, vérifier que l'emballage est en bon état et l'absence de tout signe évident de chute ou d'abrasion.

En cas de dommages évidents, contacter immédiatement le fournisseur.

Conserver l'emballage en cas de nécessité d'expédition du produit pour réparation.

Contrôler que le contenu correspond à la liste matériel indiquée ci-dessous:

- Unité de positionnement ULISSE COMPACT THERMAL
- Emballage Accessoires:
  - Rallonge sérielle
  - Étiquette
  - Gaine en silicone
  - Colliers
  - Manuel d'instructions

6.3 Élimination sans danger des matériaux d'emballage

Le matériel d'emballage est entièrement composé de matériaux recyclables. Le technicien chargé de l'installation est tenu de l'éliminer conformément aux dispositions en matière de collecte sélective et selon les normes en vigueur dans le pays d'utilisation.

En cas de dysfonctionnement et de retour de matériel , il est conseillé d'utiliser l'emballage original pour le transport.

6.4 Opérations à effectuer avant l'installation

6.4.1 Fixation du support

Parmi les 2 types de supports disponibles, choisir le plus adapté à l'installation et se conformer aux indications de ce chapitre.

L'appareil doit être monté en position verticale. Tout autre position compromettrait le bon fonctionnement du système. Il est impératif de ne pas monter la tête en bas.

Accorder une attention particulière aux systèmes de fixation de l'appareil. Si ce dernier doit être fixé à une surface en béton, utiliser des chevilles avec un couple de traction de 300daN chacune tandis que, en cas de surface métallique, utiliser des vis d'un diamètre min. de 8mm et d'une longueur adéquate.

6.4.1.1 Fixation avec support mural (en option)

Le support creux permet le passage des câbles de raccordement.

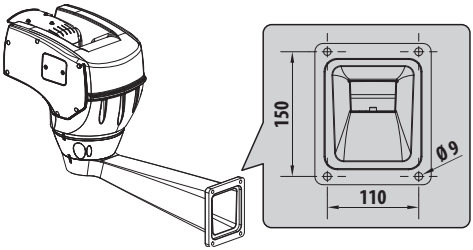


Fig. 03

6.4.1.2 Fixation avec colonne de support (en option)

Le support en colonne permet le passage interne des câbles de branchement.

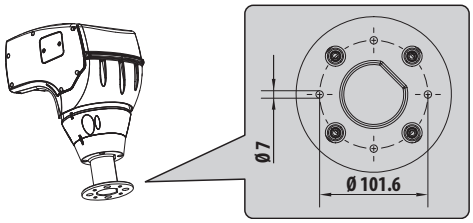


Fig. 04

6.4.2 Passage des câbles

Les câbles de connexion ne doivent pas être accessibles de l'extérieur et, pour éviter qu'ils ne se déplacent, doivent être fixés au mât pour éviter que le poids excessif n'entraîne leur sortie accidentelle et compromette la sécurité de l'appareil.

Les câbles utilisés doivent être conformes au type d'installation.

Passer les câbles à l'intérieur du support jusqu'à ce qu'ils dépassent d'environ 50cm

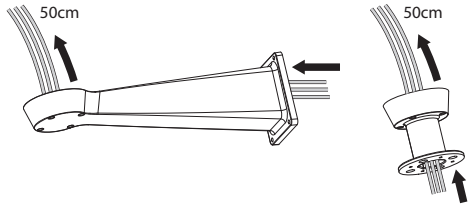


Fig. 05

7 Assemblage et installation

L'assemblage et l'installation doivent exclusivement être effectués par un personnel spécialisé.

Cet appareil appartient à la classe A. Pourtant dans un milieu résidentiel il peut être la cause de radioperturbations. Dans ce cas il est préferable de prendre des mésures appropritées.

7.1 Installation

7.1.1 Connexion des câbles à la base

N'effectuer des modifications ou connexions non prévues dans ce manuel: l'utilisation d'appareils inadéquats peut comporter des risques sérieux pour les appareils et la sécurité du personnel.

Ne pas modifier les câblages du produit. La non observation de cette indication peut entraîner des risques graves pour la sécurité du personnel de l'installation et annuler la garantie.

Conserver un schéma de connexion pour toute consultation nécessaire.

Passer et serrer les câbles dans les presse-câbles en maintenant la base à environ 20cm du support avec un couple de 5Nm. Les presse-câbles sont prévus pour des câbles avec un diamètre compris entre 5 et 10mm.

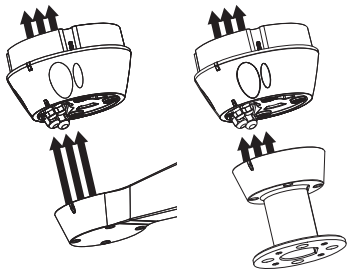


Fig. 06

7.1.2 Fixage de la base au support

Utiliser les vis et les rondelles fournies avec la base.

Après avoir installé la garniture (01), fixer la base (02) sur son support (03) au moyen des vis (04), des rondelles dentées (05) et des rondelles pleines (06). Insérer les joints toriques anti-fuite des vis (07).

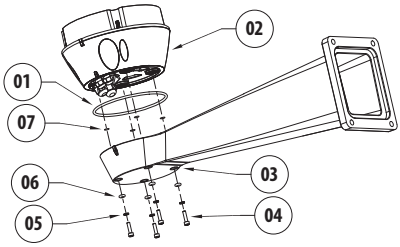


Fig. 07

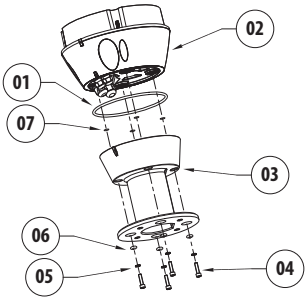


Fig. 08

Aligner les 3 encoches de la base avec celles des supports comme sur la figure suivante.

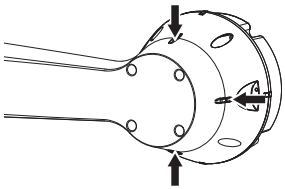


Fig. 09

Appliquer sur les trous des vis un produit de freinage du filet du type Loctite 243®.

Utiliser un couple de serrage de 4Nm.

7.1.3 Connexion de la ligne d'alimentation

Le dispositif est disponible en versions avec différentes tensions d'alimentation dont la valeur figure sur l'étiquette d'identification du produit.

Lors de l'installation, contrôler que les caractéristiques d'alimentation de l'installation correspondent à celles requises par le dispositif.

Contrôler que les sources d'alimentation et les câbles de branchement sont en mesure de supporter la consommation du système.

Procéder exclusivement aux connexions de la base avec l'alimentation sectionnée et le dispositif de sectionnement ouvert.

Le câble de terre doit être plus long des deux autres d'environ 10mm pour éviter tout détachement accidentel.

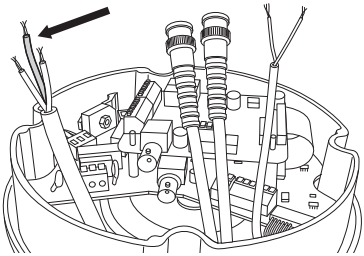


Fig. 10

Le câble d'alimentation doit en outre être couvert de la gaine en silicone (01) fournie et fixée au moyen du collier prévu (02). Tous les câbles de signalisation doivent également être regroupés avec un collier (03).

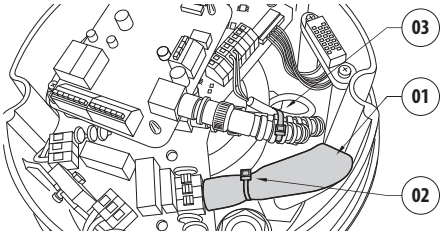


Fig. 11

Le bâtiment doit comprendre un circuit de protection (magnétothermique) bipolaire de 20A max. avec interrupteur bipolaire automatique assurant également la protection du courant de panne vers la terre (magnétothermique + différentiel) avec distance min. de 3mm entre les contacts.

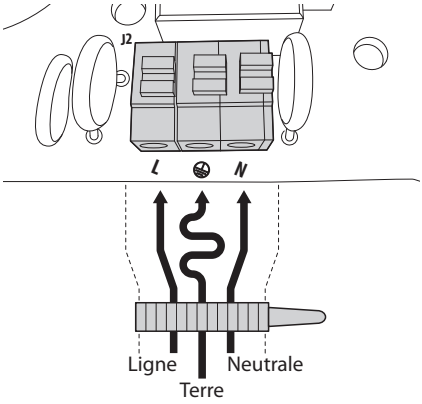


Fig. 12

Connecter les câbles d'alimentation au borne comme décrit dans le tableau ci-dessous:

CONNEXION LIGNE ALIMENTATION	
Alimentation 24Vac	
Couleur	**Bornes**
Défini par l'installateur	(N) Neutre
Défini par l'installateur	(L) Fase
Jaune/Vert	Terre
Alimentation 230Vac	
Couleur	**Bornes**
Bleu	(N) Neutre
Marron	(L) Phase
Jaune/Vert	Terre
Alimentation 120Vac	
Couleur	**Bornes**
Bleu	(N) Neutre
Marron	(L) Phase
Jaune/Vert	Terre

Tab. 01

Seulement pour les produits marqués UL destinés au marché de l'Amérique du Nord, utiliser un transformateur UL listed, en classe 2.

Pour connecter la ligne d'alimentation utiliser le junction-box UPTJBUL spécifique. Pour plus d'informations, se référer au manuel d'utilisation et d'installation du produit.

7.1.4 Connexion des câbles vidéo

L'installation est du type CDS (Cable Distribution System), ne pas la connecter à des circuits SELV.

Pour réduire les risques d'incendie, utiliser uniquement des câbles de dimensions égales ou supérieures à 26AWG.

7.1.4.1 Connexion de la vidéo principale

Le signal vidéo est présent sur les connecteurs J5 et J7 de la carte. Toujours utiliser un seul connecteur.

Connecteur J5: Raccorder l'écran et le câble central aux bornes **GND** et **CVBS**.

Connecteur J7: Brancher le câble coaxial au connecteur **BNC** (non fourni), puis le brancher au connecteur J7.

Les bornes acceptent des câbles d'une section comprise entre 1.5mm² (AWG16) et 0,5mm² (AWG30).

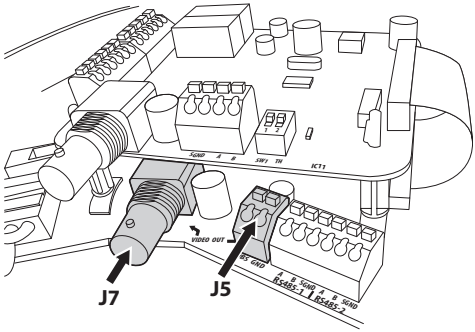


Fig. 13

7.1.4.2 Connexion de la vidéo secondaire

Connecteur CN3: Brancher le câble coaxial au connecteur **BNC** (non fourni), puis le brancher au connecteur CN3.

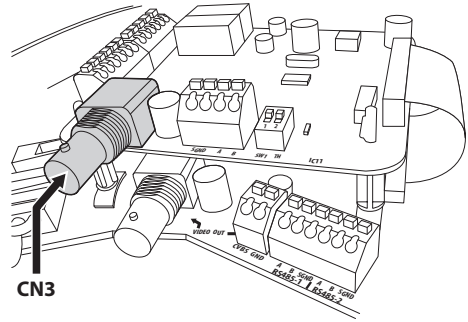


Fig. 14

7.1.4.3 Sortie des signaux vidéo (version avec double caméra)

Description des sorties vidéo:

- **Vidéo principale**:La sortie vidéo principale (connecteurs J5-J7, *Fig. 13, page 15*) est utilisée pour la transmission du signal vidéo du module intégré.
- **Vidéo secondaire**: La seconde sortie vidéo (connecteur CN3, *Fig. 14, page 15*) permet de sélectionner le signal vidéo de la caméra thermique ou du module intégré (*"10.11 Commutation de la sortie vidéo secondaire", page 45*). Le signal vidéo affiché par défaut est celui provenant de la caméra thermique.

7.1.4.4 Sortie du Signal vidéo (version avec caméra thermique uniquement)

Description des sorties vidéo :

- **Vidéo principale**: Sur tous les modèles avec caméra thermique uniquement, la sortie vidéo principale (connecteurs J5-J7, *Fig. 13, page 15*) est utilisée pour la transmission du signal vidéo de la caméra thermique.
- **Vidéo secondaire**: Le signal vidéo secondaire (connecteur CN3, *Fig. 14, page 15*) n'est pas utilisé.

7.1.5 Connexion de la ligne de contrôle direct de la caméra thermique RS485-3 (versions avec double caméra uniquement)

L'installation est du type TNV-1, ne pas la connecter à des circuits SELV.

Pour réduire les risques d'incendie, utiliser uniquement des câbles de dimensions égales ou supérieures à 26AWG.

La caméra thermique peut être contrôlée de l'extérieur via la ligne sérielle du connecteur CN4 (*"9.6.10 Menu Caméra thermique", page 39*).

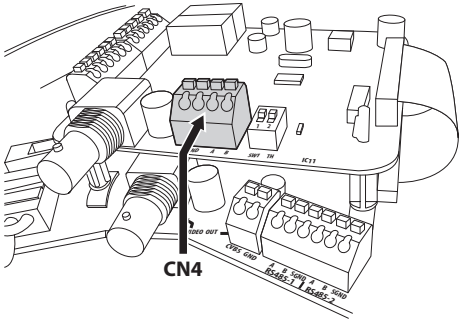


Fig. 15

7.1.6 Configuration format vidéo DS1 (versions avec caméra thermique uniquement)

Le dip-switch 1 sélectionne le type de format vidéo en sortie.

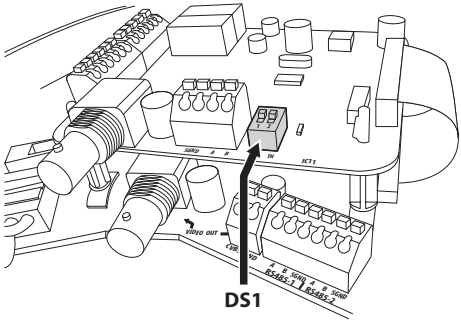


Fig. 16

CONFIGURATION VIDÉO ET TÉLÉMÉTRIE (DS1)			
Description	**SW 1**	**SW 2**	**Configuration**
Format vidéo	ON	-	Format vidéo PAL
	OFF	-	Format vidéo NTSC

Tab. 02

La position du dip-switch est sans importance sur les versions avec double caméra.

7.1.7 Terminaison de la ligne sérielle RS485-3 (DS1)

Le dip-switch 2 valide la terminaison (120 Ohms) de la ligne sérielle.

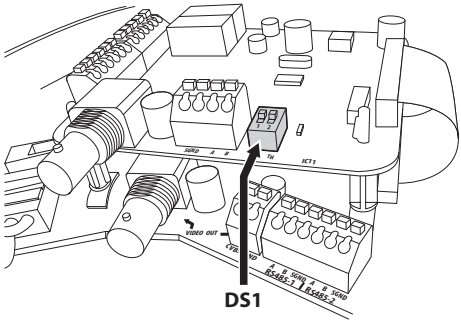


Fig. 17

CONFIGURATION VIDÉO ET TÉLÉMÉTRIE (DS1)			
Description	**SW 1**	**SW 2**	**Configuration**
Terminaison ligne sérielle	-	ON	Terminaison RS485-3 habilitée
	-	OFF	Terminaison RS485-3 non-habilitée

Tab. 03

7.1.8 Connexion des lignes de télémétrie

L'installation est du type TNV-1, ne pas la connecter à des circuits SELV.

Pour réduire les risques d'incendie, utiliser uniquement des câbles de dimensions égales ou supérieures à 26AWG.

Le produit prévoit 2 lignes sérielles de communication RS485 (*Tab. 04, page 17*) pouvant être configurés de différentes façons en fonction de la position des dip-switch 5 et 6 du sélecteur **Sériels (DIP1)** de la carte CPU (*"7.1.14 Lignes de communication sérielles (DIP1)", page 21*).

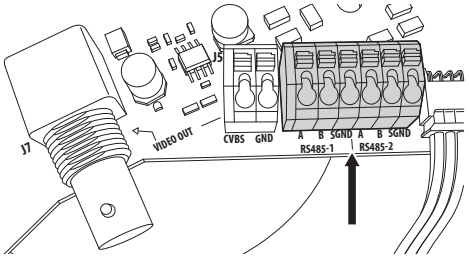


Fig. 18

LIGNE SERIELLE	BORNE	DESCRIPTION
RS485-1	A (+)	Ligne RS485 (1)
	B (-)	Ligne RS485 (1)
	SGND	Réference ligne RS485-1
RS485-2	A (+)	Ligne RS485 (2)
	B (-)	Ligne RS485 (2)
	SGND	Réference ligne RS485-2

Tab. 04

7.1.9 Branchement des alarmes

La Carte des Alarmes est située sur la base de l'unité, comme on le voit sur l'image suivante.

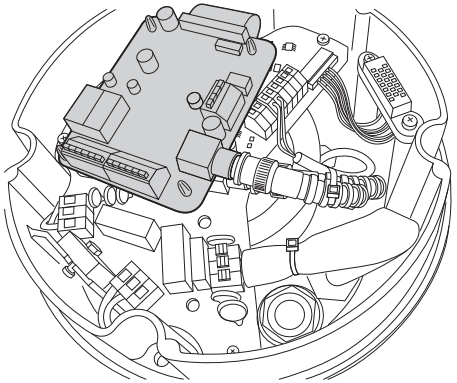


Fig. 19

Elle présente six contacts d'alarme et deux relais en sortie avec contact sec. Les typologies d'alarmes reconnues sont au nombre de deux:

- Alarme à contact sec
  (5 entrées d'alarmes disponibles);
- Alarme en tension (1 entrée d'alarme disponible, seulement pour le contrôle du niveau du flotteur sur jerrycan UPTWAS).

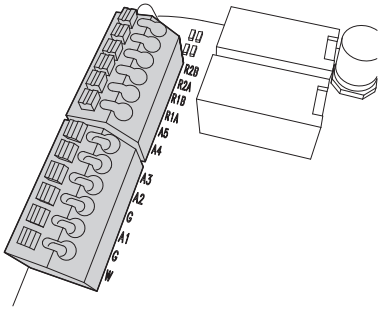


Fig. 20

BORNE	DESCRIPTION
W	Alarme flotteur Washer *
G	Masse de l'alarme W ou masse des alarmes A1-A5
A1	Alarme 1 (contact sec)
G	Masse des alarmes A1-A2-A3-A4 A5
A2	Alarme 2 (contact sec)
A3	Alarme 3 (contact sec)
A4	Alarme 4 (contact sec)
A5	Alarme 5 (contact sec) **

Tab. 05 * Entrée d'alarme prévue exclusivement pour UPTWAS, contrôle du niveau de liquide dans le jerrycan du système de lavage.

Toutes les alarmes ont une portée d'environ 200 mètres, réalisable avec un câble non blindé d'une section minimale de 0.25 mm2 (AWG 24).

7.1.9.1 Branchement d'alarme avec contact sec

En cas d'alarme avec contact sec (alarmes A1, A2, A3, A4, A5), exécuter le branchement suivant:

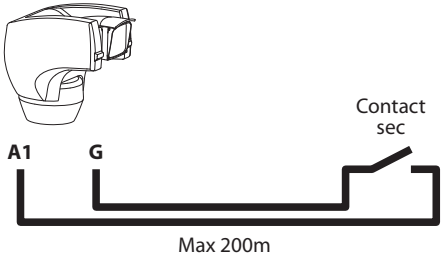


Fig. 21

L'interrupteur d'alarme peut être de type NO (normalement ouvert) ou encore NC (normalement clos).

Pour de plus amples détails sur la configuration et sur l'utilisation des alarmes, se référer à *"9.6.6.1 Menu Alarmes", page 37*.

7.1.9.2 Branchement des Relais

Les relais sont situés dans les connecteurs R1A et R1B (Relais 1), et R2A et R2B (Relais 2). Les relais n'ont pas de polarité, il est donc indifférent d'utiliser la borne A ou B du même relais, pour des tensions alternatives ou continues.

BORNE	DESCRIPTION
R1A	Relais 1 borne A
R1B	Relais 1 borne B
R2A	Relais 2 borne A
R2B	Relais 2 borne B

Tab. 06

Les relais sont utilisables seulement pour de basses tensions de travail (jusqu'à 30Vac ou 60Vdc) et avec un courant maximum de 2A. Utiliser des câbles d'une section adéquate à la charge à contrôler. La borne peut abriter des câbles d'une section comprise entre 0.5 et 1.5mm² (AWG 30-16).

Pour plus de détails sur la configuration et sur l'utilisation des relais, se référer à *"9.6.6.1 Menu Alarmes", page 37*, page 38.

7.1.9.3 Branchement du système de lavage

Pour brancher la pompe du système de lavage UPTWAS à ULISSE COMPACT THERMAL, se référer à la méthode de connexion suivante:

UPTWAS (CONNECTEUR CN4)	CARTE ALARMES ULISSE COMPACT THERMAL (CONNECTEUR CN1)
CMD	R2A
GND	R2B

Tab. 07

Le Relais 2 est utilisé dans ce cas exclusivement pour la validation de la commande Pompe Lave-glace sur la carte UPTWAS (*"9.6.7 Menu Système de lavage", page 38*).

En outre, si on utilise le jerrycan équipé d'un flotteur, il faut aussi effectuer le câblage suivant:

UPTWAS (CONNECTEUR CN4)	CARTE ALARMES ULISSE COMPACT THERMAL (CONNECTEUR CN2)
ALM	W
ALM/G	G

Tab. 08

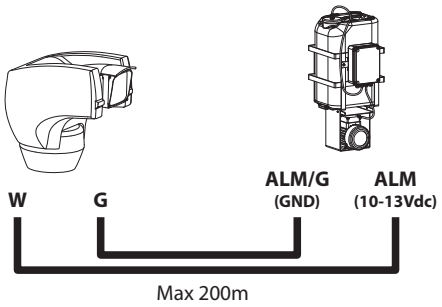


Fig. 22

Pour plus de détails sur le système de lavage, se référer à *"9.6.7 Menu Système de lavage", page 38*, page 39.

7.1.10 Montage de la partie supérieure

Orienter le connecteur autocentrant (01) de l'unité supérieure. Orienter la saillie latérale (02) dans le sens de vision frontale de la caméra. Positionner l'unité supérieure sur la base selon l'orientation représentée sur la figure.

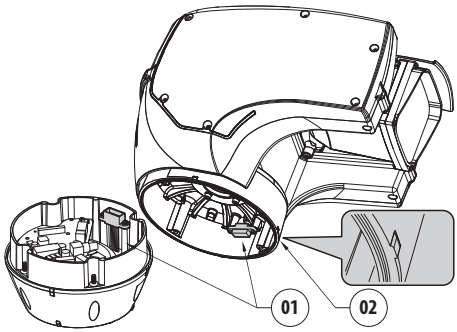


Fig. 23

Les saillies latérales sur la base et sur l'unité supérieure sont ainsi alignées dans la seule position possible.

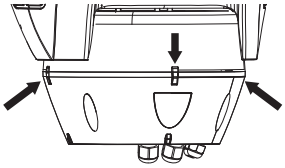


Fig. 24

Fixer l'unité supérieure (01) à la base (02) au moyen des vis de fixation (03), les rondelles dentées (04) et les rondelles planes (05). Contrôler la présence et l'état de la garniture de la base (06).

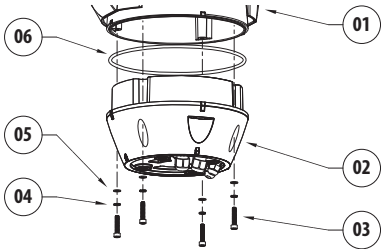


Fig. 25

Appliquer sur les trous des vis un produit de freinage du filet du type Loctite 243®.

Fixer avec couple de serrage égal à 4Nm.

7.1.11 Configuration des dip-switch

Avant de mettre l'appareil sous tension, il est nécessaire de le configurer correctement au moyen des dip-switches installés derrière le panneau de configuration. Ouvrir en desserrant les vis comme indiqué sur la figure:

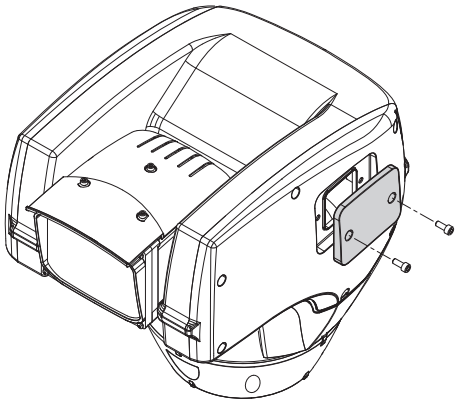


Fig. 26

Le schéma suivant représente les dip-switches du module de configuration installé sur la partie supérieure.

Le levier du dip-switch (SW) vers le haut représente la valeur 1 (ON) tandis que le levier vers le bas représente la valeur 0 (OFF).

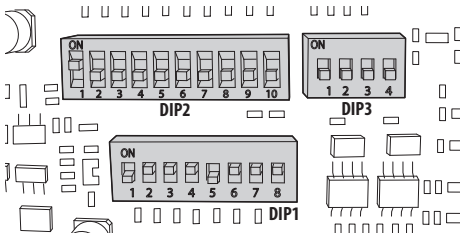


Fig. 27

7.1.12 Configuration mode contrôle réglages (DIP1)

- **SW 1=ON**: **Affiche Configuration**. Utiliser uniquement comme vérification de la configuration à la fin des réglages. Durant l'utilisation normale, contrôler que le levier est sur OFF (**SW 1=OFF**).

7.1.13 Configuration de la vitesse de transmission en bauds (DIP1)

Les dip-switches 4, 3 et 2 permettent de configurer la vitesse de communication du dispositif conformément au tableau ci-dessous.

CONFIGURATION DE LA VITESSE DE TRANSMISSION EN BAUDS (DIP1)						
Description	**SW 1**	**SW 2**	**SW 3**	**SW 4**	**SW 5-6-7-8**	**Configuration**
Séléction du baud-rate	-	ON	ON	ON	-	38400 baud
	-	OFF	ON	ON	-	19200 baud
	-	ON	OFF	ON	-	9600 baud
	-	OFF	OFF	ON	-	4800 baud
	-	ON	ON	OFF	-	2400 baud
	-	OFF	ON	OFF	-	1200 baud
	-	ON	OFF	OFF	-	600 baud
	-	OFF	OFF	OFF	-	300 baud
Visualisation des configurations	ON		-	-	-	Visualisation habilitée
	OFF		-	-	-	Visualisation non-habilitée

Tab. 09

7.1.14 Lignes de communication sérielles (DIP1)

Le produit prévoit deux lignes sérielles de communication RS485 et une ligne sérielle RS232, qui peuvent être configurés de différentes façons selon la position des dip-switches 5 et 6 du sélecteur **DIP1**.

LIGNES DE COMMUNICATION SÉRIELLES (DIP1					
Description	**SW 1-2-3-4**	**SW 5**	**SW 6**	**SW 7-8**	**Configuration**
Lignes serielles	-	ON	ON	-	*"7.1.14.1 Ligne RS485 TX/RX bidirectionnelle", page 21*
	-	OFF	ON	-	*"7.1.14.2 Ligne RS485-1 réception, ligne RS485-2 répétition", page 21*
	-	ON	OFF	-	*"7.1.14.3 Ligne RS422 bidirectionnelle", page 21*
	-	OFF	OFF	-	*"7.1.14.4 Ligne RS485 monodirectionnelle", page 22*

Tab. 10

7.1.14.1 Ligne RS485 TX/RX bidirectionnelle

Ce type de configuration permet d'obtenir une communication bidirectionnelle half-duplex sur la ligne RS485-1.

La ligne sérielle RS485-2 n'est pas utilisée.

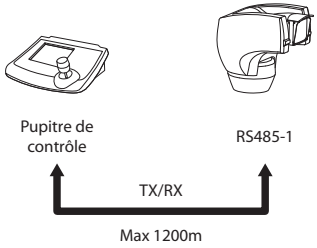


Fig. 28

7.1.14.2 Ligne RS485-1 réception, ligne RS485-2 répétition

Ce type de configuration permet de connecter plusieurs dispositifs en cascade. Le signal est régénéré par chaque unité et permet d'augmenter sensiblement la distance totale.

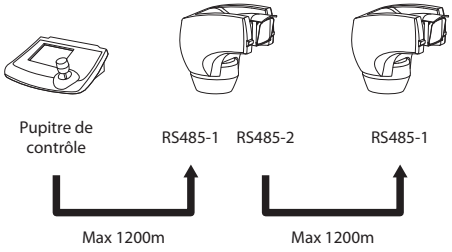


Fig. 29

Ne fonctionne qu'avec les protocoles mono-directionnels.

Cette configuration ne permet pas d'effectuer la mise à jour du micrologiciel à distance.

7.1.14.3 Ligne RS422 bidirectionnelle

Cette programmation permet la communication en full duplex selon le standard RS422.

La ligne RS485-1 est toujours en réception (RS422-RX).

La ligne RS485-2 est toujours en transmission (RS422-TX).

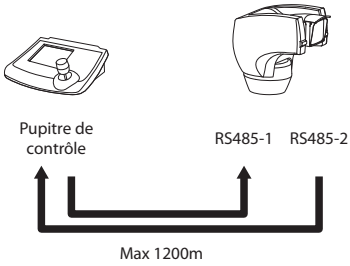


Fig. 30

7.1.14.4 Ligne RS485 monodirectionnelle

La première ligne (RS485-1) fonctionne selon les programmations établies avec les dip-switches **Adresse**, **Vitesse De Transmission** et **Protocole**.

La ligne RS485-2 n'est pas utilisée.

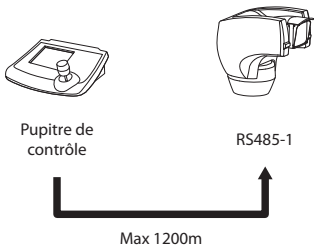


Fig. 31

Ne fonctionne qu'avec les protocoles mono-directionnels.

Cette configuration ne permet pas d'effectuer la mise à jour du micrologiciel à distance.

7.1.15 Terminaisons lignes sérielles (DIP1) et connexions

Sur la carte, deux dip-switches sont prévus pour configurer le bouclage de la ligne sérielle.

Chaque périphérique en fin de ligne doit être terminée (bouclé) au moyen du dip-switch prévu pour éviter tout phénomène de réflexion et de déformation du signal.

Les dip-switches 7 et 8 terminent respectivement les lignes sérielles RS485-1 et RS485-2.

TERMINAISONS LIGNES SÉRIELLES (DIP1) ET CONNEXIONS				
Description	**SW 1-2-3-4-5-6**	**SW 7**	**SW 8**	**Configuration**
Terminations lignes serielles			ON	Termination RS485-2 habilitée
			OFF	Termination RS485-2 non-habilitée
		ON		Termination RS485-1 habilitée
		OFF		Termination RS485-1 non-habilitée

Tab. 11

7.1.16 Configuration protocole (DIP3)

Les systèmes de positionnement vidéo de ULISSE COMPACT THERMAL peuvent être commandés par différents protocoles.

CONFIGURATION PROTOCOLE (DIP3)				
SW 1	**SW 2**	**SW 3**	**SW 4**	**Protocole**
ON	OFF	ON	OFF	PANASONIC
OFF	OFF	ON	OFF	ERNITEC
OFF	ON	OFF	OFF	SENSORMATIC
ON	OFF	OFF	OFF	PELCO D
OFF	OFF	OFF	OFF	MACRO (VIDEOTEC)

Tab. 12

7.1.17 Configuration adresse (DIP2)

Il est possible de configurer l'adresse d'ULISSE COMPACT THERMAL de 1 à 1023. La sélection de l'adresse s'effectue selon le code binaire entre les 10 dip-switch de DIP2 (*"16 Annexe A - Tableau des adresses dip-switch", page 55*).

8 Allumage

La marche et l'arrêt des appareils de la série ULISSE COMPACT THERMAL s'effectue avec l'alimentation.

La procédure de préchauffage automatique (De-Ice) peut être activée chaque fois que le dispositif est mis en fonction à une température ambiante inférieure à 0°C. La procédure permet de garantir un fonctionnement correct du dispositif également à basse température. La durée varie entre 60 et 120 minutes en fonction des conditions.

8.1 Avant de mettre sous tension

Contrôler que le système ULISSE COMPACT THERMAL et les autres composants de l'installation sont hors tension et que aucun court-circuit n'est possible.

S'assurer que tous les produits sont solidement fixés.

Ne pas stationner à proximité du dispositif sous tension. N'intervenir sur le dispositif qu'avec l'alimentation coupée.

Lors de la première mise en service, toujours vérifier la configuration de l'appareil.

Sectionner l'alimentation, retirer le panneau de protection des dip-switches et placer le levier du dip-switch d'**Affiche Configuration** (**DIP1, SW1**) sur **ON**.

Alimenter l'appareil et patienter quelques secondes avant de vérifier la configuration sur l'écran.

Le contrôle terminé, éteindre l'appareil et abaisser le levier du dip-switch d'**Affiche Configuration** (**DIP1, SW1**).

Refermer le panneau et mettre l'appareil sous tension.

8.2 Liste des contrôles

Durante la phase d'allumage, le dispositif affiche la liste des contrôles qu'il doit effectuer avant de passer au fonctionnement normal.

```
DEMARRAGE
----------------------
Lecture parametres...OK
Recherche zero.......OK
Camera............36x.OK
Sonde de temperature.OK
IR Phare.............--
Essuie-glace.........--
Carte Optionnelle....--
```

Fig. 32

Si l'un des contrôles donne erreur (ERR), contacter le centre d'assistance. L'inscription "- -" signifie que la tourelle n'est pas munie de l'option décrite.

9 Configuration

9.1 Menu sur écran (OSM)

Durant le fonctionnement normal de l'ULISSE COMPACT THERMAL, il est possible d'activer le **Menu Sur Écran** pour la configuration des fonctions avancées au moyen des touches correspondantes (se référer au manuel du pupitre utilisé ou au *Tab. 14, page 47*).

Sortir du **Menu Sur Écran** avec **Zoom Wide** (ou **Zoom-**).

9.1.1 Utilisation du joystick

Toutes les opérations des menus s'effectuent au moyen du manche à balai.

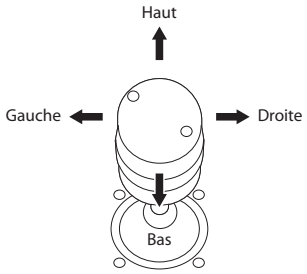


Fig. 33 Pan e tilt.

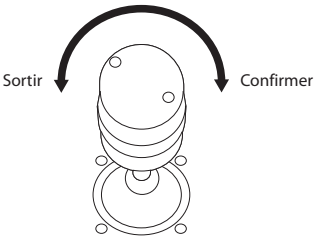


Fig. 34 Zoom wide e tele.

En cas d'utilisation de pupitres de contrôle avec joystick à deux axes, utiliser les boutons de Zoom Wide et Zoom Télé pour réaliser les commandes Sortir et Confirmer.

9.2 Comment se déplacer dans le menu

Chaque page-écran du OSM présente une liste de paramètres ou de sous-menus pouvant être sélectionnés par l'opérateur. Pour faire défiler les paramètres, déplacer le curseur au moyen du joystick (haut et bas).

```
 AVANCEES
------------------------
1 VITESSE ZOOM   :  7
2>ZOOM NUMERIQUE :  N
3 WIDE DYNAMIC   :  O
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  O
6 FOCUS              >
7 ESPOSITION         >
8 INFRAROUGE         >
9 EQUILIBRE BLANC    >
```

Fig. 35

Le symbole > en fin de ligne indique la présence d'un sous-menu spécifique. Pour l'activer, il suffit de confirmer la rubrique du menu. Pour sortir du sous-menu, utiliser la fonction **Sortir** (**Zoom Wide**).

```
 AVANCEES
------------------------
1>VITESSE ZOOM   :  7
2 ZOOM NUMERIQUE :  N
3 WIDE DYNAMIC   :  O
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  O
6 FOCUS              >
7 ESPOSITION         >
8 INFRAROUGE         >
9 EQUILIBRE BLANC    >
```

Fig. 36

9.3 Comment modifier les configurations

Se déplacer au moyen du curseur sur le paramètre à modifier et confirmer. Le champ commence à clignoter pour indiquer la modification en cours. Utiliser le joystick (haut et bas) pour indiquer les sélections possibles.

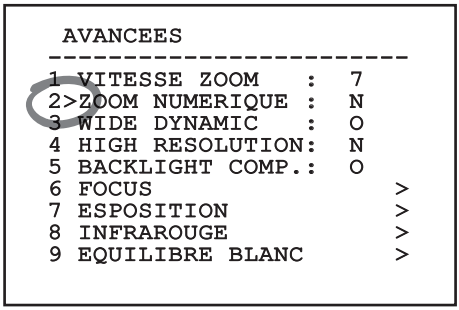


Fig. 37

Après avoir effectué la sélection désirée, confirmer.

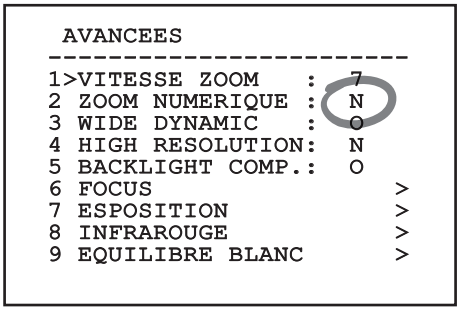


Fig. 38

Le paramètre cesse de clignoter et confirme la sélection.

9.4 Comment modifier les champs numériques

Se déplacer au moyen du curseur sur le paramètre à modifier et confirmer.

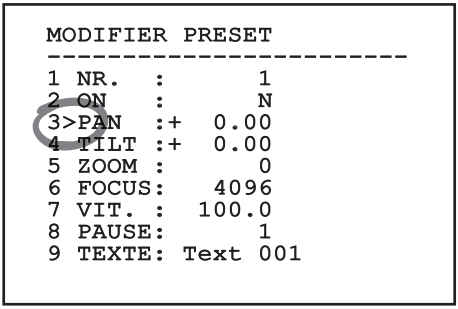


Fig. 39

Le premier chiffre du champ numérique en cours de modification clignote et la dernière ligne de l'écran indique les limites d'acceptation du champ. Se déplacer sur le champ (gauche et droite) et modifier le signe ou la valeur numérique (haut et bas).

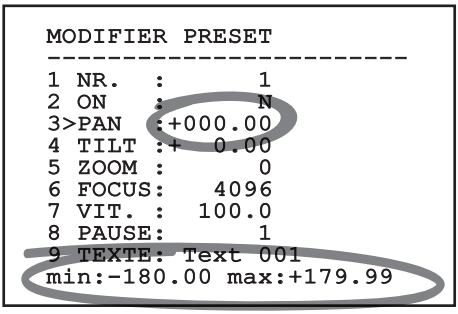


Fig. 40

Une fois le résultat désiré obtenu, confirmer. Le curseur se repositionne à gauche et le nombre modifié cesse de clignoter. Le champ sera forcé au minimum ou au maximum autorisé en cas de tentative d'insertion d'une valeur hors limites.

9.5 Comment modifier les textes

Au moyen du curseur, se placer à hauteur du paramètre à modifier et confirmer.

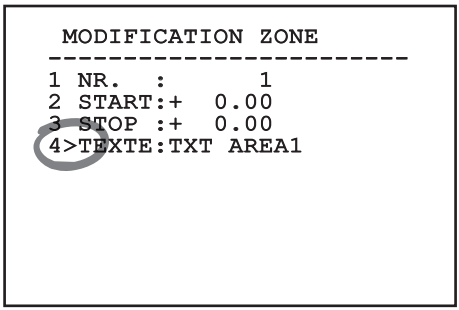


Fig. 41

La page-écran de modification du texte s'affiche. Le symbole ↑ se positionne sous le caractère modifiable tandis que le curseur > se positionne à gauche du caractère à insérer.

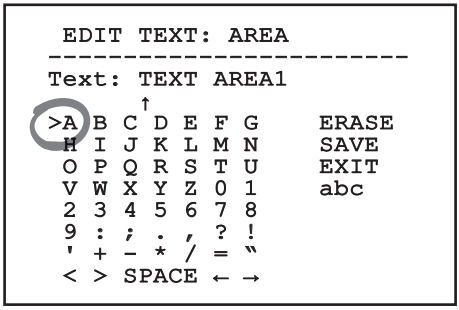


Fig. 42

Il est possible d'utiliser le joystick pour naviguer à l'intérieur du menu.

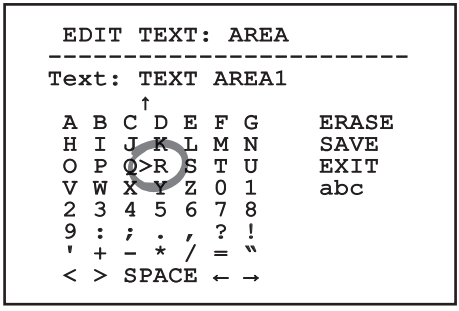


Fig. 43

La commande **Confirmer** (**Zoom Tele**) permet d'insérer le caractère désiré.

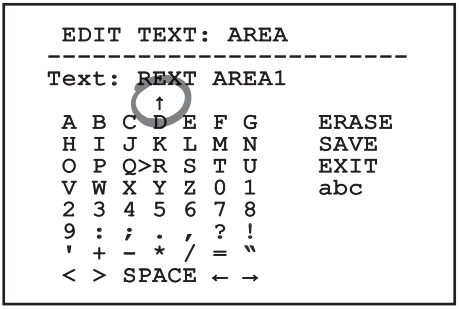


Fig. 44

Utiliser:

- **ERASE**: pour effacer toute la chaîne de caractères.
- **SAVE**: pour enregistrer le nouveau texte.
- **EXIT**: pour sortir du menu.
- **abc**: pour afficher le texte en minuscules.

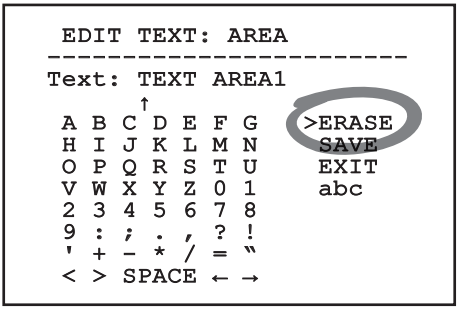


Fig. 45

Pour sortir du menu, il est également possible d'utiliser la commande **Zoom Wide**.

9.6 Configuration du système

9.6.1 Menu principal

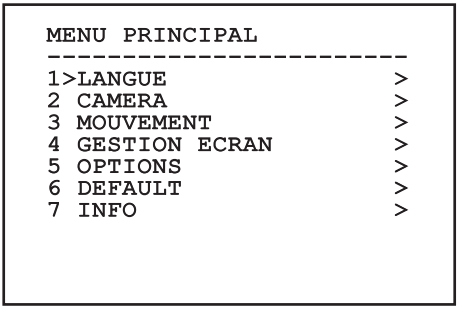


Fig. 46

9.6.2 Langue

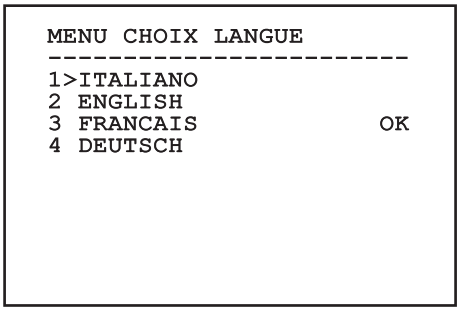


Fig. 47

9.6.3 Menu caméra

01. **Configuration**: Définit l'une des configurations prédéfinies pour le module SONY. :
    - **Standard**: Configure le mode de fonctionnement standard de la caméra.
    - **Low Light**: Configure le mode de fonctionnement conçu pour les environnements à faible luminosité.
    - **Far Mode**: Configure le mode de fonctionnement conçu pour les zones de grandes dimensions. Active le zoom proportionnel et le zoom numérique.
    - **Custom**: Signale que les paramètres de la caméra ont été sélectionnés manuellement par l'utilisateur.
02. **Titrage des zones**: Permet d'accéder au sous-menu pour la gestion du titrage des zones.
03. **Masquage**: Permet d'accéder au sous-menu pour la gestion du masquage dynamique.
04. **Avancées**: Permet d'accéder au sous-menu pour la configuration des paramètres avancés du module SONY.

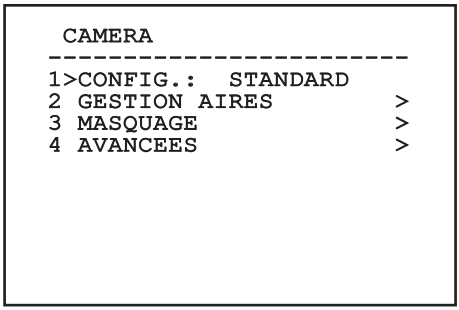


Fig. 48

9.6.3.1 Menu Titrage des zones

Cette fonction permet de configurer un maximum de huit zones (de dimensions variables) et éventuellement de les titrer.

Le menu **Titrage des zones** permet de configurer les paramètres suvants:

01. **Validation**: Valide l'affichage du message associé à la zone atteinte.
02. **Modifier zones**: Permet d'accéder au sous-menu pour la configuration des paramètres des zones.

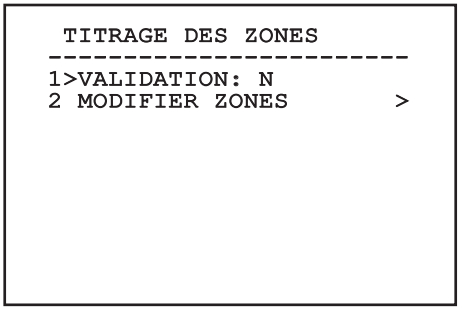


Fig. 49

9.6.3.2 Menu Titrage des zones (Modifier Zone)

L'accès au menu **Modifier Zone** permet de configurer les paramètres suivants:

01. **Numéro**: Sélectionne la zone à modifier.
02. **Start**: Configure la position initiale de la zone.
03. **Stop**: Configure la position finale de la zone.
04. **Texte**: Modifie le texte qui est affiché quand on se déplace à l'intérieur de l'aire.

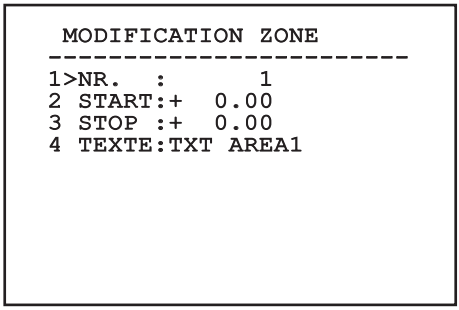


Fig. 50

Exemple: Pour activer le titrage de la zone 1 quand le dispositif se trouve entre +15° et +45°, procéder comme suit:

- Valider le titrage des zones en configurant **O** comme valeur de la rubrique **Validation** du menu **Titrage Des Zones**.
- Configurer **1** comme valeur du paramètre **Nr** du menu **Modifier Zones**.
- Configurer **+15.00** comme valeur du paramètre **Start** du menu **Modifier Zones**.
- Configurer **+45.00** comme valeur du paramètre **Stop** du menu **Modifier Zones**.
- Si nécessaire, modifier le texte affiché en sélectionnant la rubrique **Texte** du menu **Modifier Zone**.

Si les valeurs de Start et Stop du menu Modifier zone sont à zéro, l'affichage du texte est désactivé. En cas de superposition de plusieurs zones, la zone portant le nombre le plus haut prévaut.

Pour la définition des aires, suivre le sens des aiguilles d'une montre comme indiqué sur la figure.

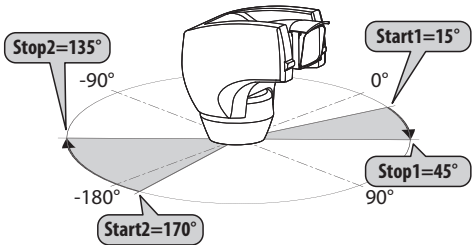


Fig. 51

Le nom et la position standards des aires de la tourelle se réfèrent aux quatre points cardinaux. La position du NORD se modifie à l'aide du paramètre Offset Pan du menu mouvement (*"9.6.4 Menu Mouvement", page 33*).

9.6.3.3 Menu Masquage

Le masquage dynamique permet de créer un maximum de 24 masques de façon à obscurcir des zones particulières définies par l'utilisateur.

Les masques sont définis dans l'espace et tiennent compte de la position horizontale et verticale et de la profondeur du zoom au moment de la configuration.

ULISSE COMPACT THERMAL maintient automatiquement la position et la dimension du masque en fonction de la zone affichée.

Un maximum de 8 masques peut être affiché simultanément.

Si le dispositif est utilisé à sa vitesse maximale, les temps de mise à jour du signal vidéo deviennent critiques et il est nécessaire de créer des masques plus grands que l'objet afin de cacher ce dernier plus longtemps durant le passage et d'éviter tout risque de visualisation.

En vue d'un fonctionnement parfait, la position en tilt du masque doit toujours être comprise entre -70 et +70 degrés et la dimension du masque doit être le double de celle de l'objet (en hauteur et en largeur).

Le menu **Masquage** permet de configurer les paramètres suivants:

01. **Couleur Masque**: Permet de sélectionner la couleur des masques.
02. **Modifier Masques**: Permet d'accéder au sous-menu **Modifier Masques** et de configurer les paramètres de masquage dynamique.

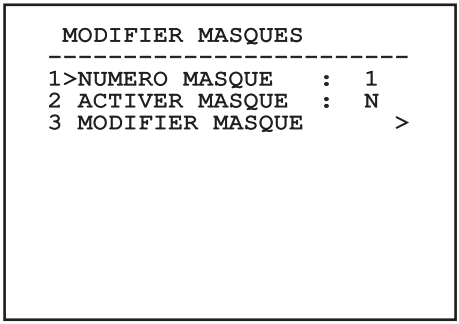
```
 MASQUAGE
------------------------
1>COULEUR :     BLEU
2 MODIFIER MASQUES     >
```

Fig. 52

9.6.3.4 Menu Masquage (Modifier Masques)

L'accès au menu **Modifier Masques** permet de configurer les paramètres suivants:

01. **Numéro Masque**: Permet de sélectionner le masque à modifier.
02. **Activer Masque**: Active ou désactive le masque sélectionné.
03. **Modifier Masque**: Permet de créer ou de modifier un masque.



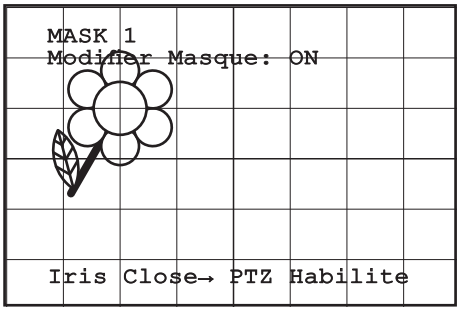
La sélection de l'option **Modifier Masque** du menu permet de valider la possibilité de configurer de nouvelles valeurs du masque sélectionné.

9.6.3.5 Comment créer un nouveau masque

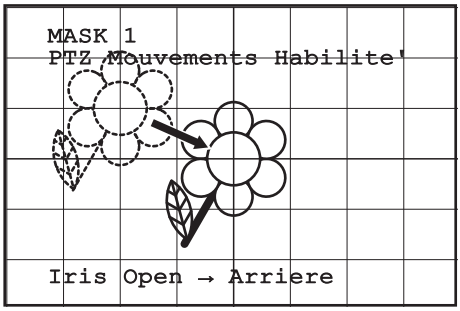
Sélectionner un masque non validé sur le menu **Modifier Masques** (*Fig. 53, page 29*), rubrique **Masque Numéro**. Pour le modifier, sélectionner la rubrique **Modifier Masque**.

L'exemple suivant décrit le masquage d'une fleur.

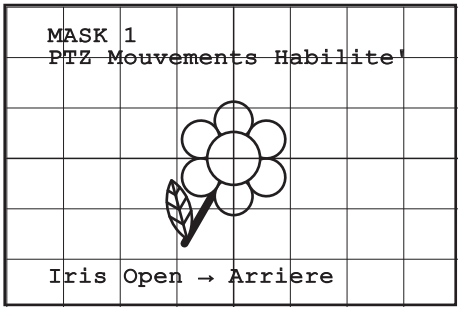
- Enfoncer le bouton **Iris Close** pour passer du mode **Masquage** au mode **Mouvement Caméra**.



- Au moyen du joystick du pupitre, effectuer un mouvement de l'unité ULISSE COMPACT THERMAL et utiliser si nécessaire le zoom pour centrer la fleur sur l'écran.



- Une fois le résultat désiré obtenu, enfoncer le bouton **Iris Open**.



- Un petit rectangle s'affiche. Au moyen du joystick (**Pan et Tilt**), agrandir le rectangle jusqu'à couvrir toute la fleur.

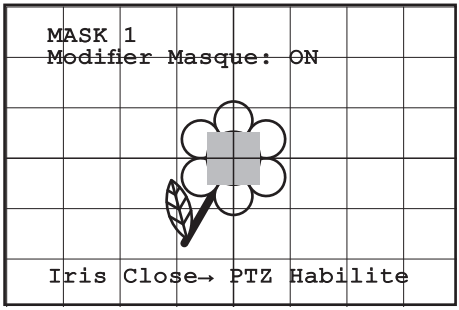


Fig. 57

- Une fois le résultat désiré obtenu, confirmer en tournant le zoom sur télé.

9.6.3.6 Comment modifier un masque

Sélectionner un masque validé sur le menu **Modifier Masques** (*Fig. 53*, *page 29*), rubrique **Masque Numéro**. Pour le modifier, sélectionner la rubrique **Modifier Masque**.

- Au moyen du joystick (**Pan et Tilt**), agrandir ou réduire le rectangle jusqu'à obtenir l'effet désiré.

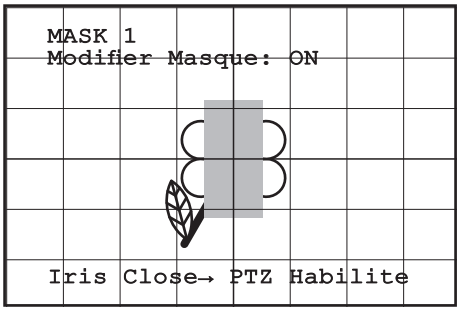


Fig. 58

- Confirmer en tournant le zoom sur télé.

9.6.3.7 Menu Configurations Avancées

L'accès à ce menu permet de configurer le module SONY.

01. **Zoom**: Permet d'accéder au sous-menu **Zoom**.
02. **Focus**: Permet d'accéder au sous-menu **Focus**.
03. **Esposition**: Permet d'accéder au sous-menu **Exposition**.
04. **Infrarouge**: Permet d'accéder au sous-menu **Infrarouge**.
05. **Équilibre Blanc**: Permet d'accéder au sous-menu **Équilibre Blanc**.
06. **Autre**: Permet d'accéder au sous-menu **Autre**.

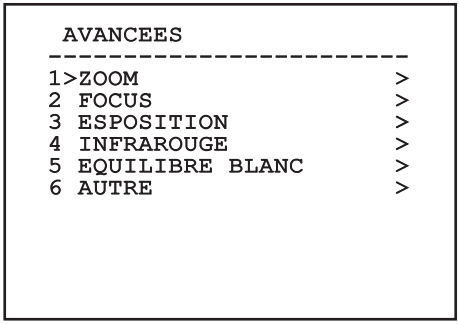


Fig. 59

9.6.3.8 Menu Configurations Avancées (Zoom)

01. **Vitesse Zoom**: Configure la vitesse du zoom. Les valeurs de vitesse sont comprises entre 0 (vitesse minimale) et 7 (vitesse maximale).
02. **Zoom Numérique**: Valide le zoom numérique.

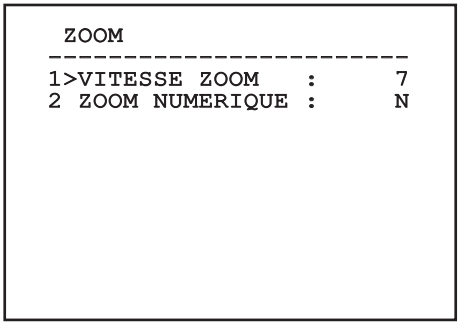


Fig. 60

9.6.3.9 Menu Configurations Avancées (Focus)

L'accès au menu **Focus** permet de configurer les paramètres suivants:

01. **Vitesse Focus**: Configure la vitesse du Focus. Les valeurs de vitesse sont comprises entre 0 (vitesse minimale) et 7 (vitesse maximale).
02. **Autofocus**: Active ou désactive l'autofocus. Activé, permet de rappeler automatiquement l'Autofocus à chaque positionnement ou mouvement du zoom, en fonction du type de fonctionnement sélectionné.
03. **Type Autofocus**: Configure le type d'Autofocus. Valeurs possibles:
    - **Normal**: L'autofocus est toujours activé.
    - **Intervalle**: Rappel de la fonction autofocus à intervalles. Le rappel est fixé toutes les 5 secondes.
    - **Trigger**: Rappel de l'autofocus à chaque mouvement PTZ. Solution conseillée.
04. **Sensibilité**: Configure le type de sensibilité. Valeurs possibles:
    - **Normal**: Mise au point à la vitesse maximale. Solution conseillée.
    - **Basse**: Mise au point ralentie. Utile en cas de faible luminosité ambiante car elle augmente la stabilité de l'image.

```
 FOCUS
------------------------
1>VITESSE FOCUS :      2
2 AUTOFOCUS     :      N
3 TYPE AUTOFOCUS:TRIGGER
4 SENSIBILITE'  : NORMAL
```

Fig. 61

9.6.3.10 Menu Configurations Avancées (Exposition)

Après avoir accédé au menu **Exposition** il est possible de configurer les paramètres suivants:

01-05. **Mode**: Configure le type de contrôle de l'exposition Automatique, Manuelle, Shutter, Iris et Bright.

06. **Auto Slowshutter**: Activée, augmente automatiquement le temps d'exposition pour améliorer le fonctionnement nocturne.

07-08. **Compensation, Valeur compensation**: Configure la compensation de l'exposition.

09. **Compensation Backlight**: Valide la fonction Compensation Backlight. Permet de mieux voir d'éventuelles zones obscures sur l'image.

Le mode automatique permet également d'activer la compensation Backlight. Le menu se configure automatiquement de façon dynamique en fonction de la sélection effectuée en affichant les paramètres pouvant être modifiés.

e mode de gestion de l'exposition sélectionnée est associée à tous les preset.

La configuration conseillé est l'**Automatique**.

```
 EXPOSITION
------------------------
1>MODE :              AUTO



6 AUTO SLOW SHUTTER :  O
7 COMPENSATION      :  N
8 COMPENSATION VAL. :  7
9 BACKLIGHT COMP.   :  N
```

Fig. 62

Le tableau suivant indique la correspondance entre les valeurs introduites et leur effet sur le système optique du module SONY.

VALEUR	SHUTTER		IRIS	GAIN	COMPENSATION EXPOSITION
	NTSC	PAL			
0	1/1	1/1	Fermé	-3db	-10,5db
1	1/2	1/2	F28	0db	-9db
2	1/4	1/3	F22	2db	-7,5db
3	1/8	1/6	F19	4db	-6db
4	1/15	1/12	F16	6db	-4,5db
5	1/30	1/25	F14	8db	-3db
6	1/60	1/50	F11	10db	-1,5db
7	1/90	1/75	F9.6	12db	0db
8	1/100	1/100	F5	14db	1,5db

VALEUR	SHUTTER		IRIS	GAIN	COMPENSATION EXPOSITION
9	1/125	1/120	F6.8	16db	3db
10	1/180	1/150	F5.6	18db	4.5db
11	1/250	1/215	F4.8	20db	6db
12	1/350	1/300	F4	22db	7,5db
13	1/500	1/425	F3.4	24db	9db
14	1/725	1/600	F2.8	26db	10,5db
15	1/1000	1/1000	F2.4	28db	-
16	1/1500	1/1250	F2	-	-
17	1/2000	1/1750	F1.6	-	-
18	1/3000	1/2500	-	-	-
19	1/4000	1/3500	-	-	-
20	1/6000	1/6000	-	-	-
21	1/10000	1/10000	-	-	-

Tab. 13

9.6.3.11 Menu Configurations Avancées (Infrarouge)

Après avoir accédé au menu **Infrarouge** il est possible de configurer les paramètres suivants:

01. **Mode IR** : Si réglé sur OFF, force le mode jour en continu (la mise en fonction du projecteur, si prévue, s'effectue via interrupteur crépusculaire ou commande du pupitre, si réglé sur ON, force le mode nocturne en continu, si réglé sur **Auto** active la commutation automatique de la caméra.
02. **Seuil Nuit**: Il configure le seuil de relèvement des conditions de lumière pour la commutation en modalité nocturne. Aux valeurs inférieures correspondent des niveaux de luminosité plus bas.
03. **Retard Nuit**: Il configure le temps de relèvement des conditions d'obscurité, exprimé en secondes, avant de passer en modalité nocturne.
04. **Seuil Jour**: Il configure le seuil de relèvement des conditions de lumière pour la commutation en modalité diurne. Aux valeurs inférieures correspondent des niveaux de luminosité plus bas.
05. **Retard Jour**: Il configure le temps de relèvement des conditions de lumière, exprimé en secondes, avant de passer en modalité diurne.

Pour éviter de fausses commutations nous conseillons de choisir les valeurs de seuil et de retard de commutation diurne plus élevées.

```
INFRAROUGE
-----------------------
1>MODE IR        :   AUTO
2 SEUIL NUIT     :      5
3 RETARD NUIT    :      5
4 SEUIL JOUR     :     20
5 RETARD JOUR    :     30
```

Fig. 63

Le menu se configure automatiquement de façon dynamique en fonction de la sélection effectuée et affiche les paramètres pouvant être modifiés.

La modalité de commutation Day/Night automatique du module, est vivement déconseillée quand la tourelle est sujette à des variations soudaines de lumières durant la période nocturne, par exemple durant l'exécution d'un parcours de patrol ou à cause de l'allumage des dispositifs auxiliaires d'éclairage car ceci pourrait provoquer de nombreuses commutations indésirables en compromettant ainsi le fonctionnement du module lui-même.

9.6.3.12 Menu Configurations Avancées (Équilibre Blanc)

L'accès au menu **Équilibre Blanc** permet de configurer les paramètres suivants:

01. **Mode**: Configure le type de contrôle d'équilibre des blancs. Valeurs possibles:
    - **Automatique**: Impose l'équilibrage automatique du blanc. Configuration conseillée.
    - **Manuel**: Valide la configuration manuelle des gains de rouge et de bleu.
    - **Outdoor**: Configure des valeurs fixes de gain de rouge et de bleu pour l'extérieur.
    - **Indoor**: Configure des valeurs fixes de gain de rouge et de bleu pour l'intérieur.
    - **ATW**: Valide l'Auto Tracing White Balance.
02. **Valeur Rouge**: Configure la valeur de gain du rouge.

03. **Valeur Lleue**: Configure la valeur de gain du bleu.

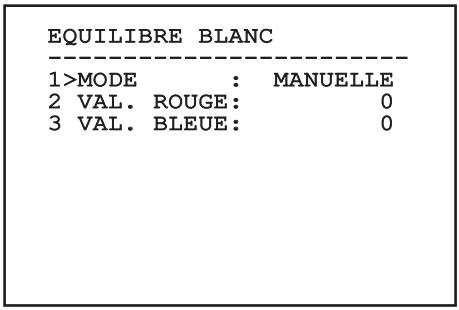


Fig. 64

Le menu se configure automatiquement de façon dynamique en fonction de la sélection effectuée et affiche les paramètres pouvant être modifiés.

9.6.3.13 Menu Configurations Avancées (Autre)

01. **Netteté**: Configure la valeur de netteté de l'image.
02. **Haute Resolution**: Valide la fonction Haute Resolution. Le signal vidéo en sortie a une résolution plus élevée.
03. **Wide Dynamic**: Valide la fonction Wide Dynamic. Améliore la vision quand l'aire filmée a des zones beaucoup plus lumineuses que d'autres.
04. **Stabilisateur**: Habilite la fonction de stabilisation électronique de l'image.
05. **Balayage Progr.**: Habilite la fonction de Balayage Progr. Permet d'obtenir une image plus stable quand la tourelle est branchée à un serveur vidéo.
06. **Noise Reduction**: Programme le niveau de réduction du bruit. En variant le paramètre en fonction des conditions environnementales, il est possible d'obtenir une image plus contrastée.

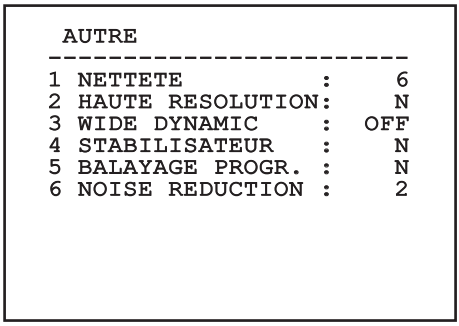


Fig. 65

9.6.4 Menu Mouvement

01. **Configuration**: Configure l'une des configurations prédéfinies de la tourelle.
    - **Standard**: Configure les vitesses standard de mouvement.
    - **Low Speed**: Configure le mode **Low Speed** qui réduit toutes les vitesses de fonctionnement de la tourelle.
    - **Wind Mode**: Configure les vitesses de mouvement pour les adapter aux environnements soumis à vibrations et/ou rafales de vent.
    - **High Perf**: Impose d'effectuer ses mouvements à la plus grande vitesse possible.
    - **Custom**: Signale que les vitesses de mouvement de l'unité ont été sélectionnées manuellement par l'utilisateur.
02. **Offset Pan**: La tourelle a une position de 0° définie mécaniquement. La fonction Offset Pan permet de définir une position différente de 0° à l'aide du logiciel.
03. **Contrôle Manuel**: Permet d'accéder aux sous-menus de gestion des paramètres associés aux mouvements manuels du dispositif.
04. **Preset**: Permet d'accéder aux sous-menus de modification des valeurs de Preset.
05. **Patrol**: Permet d'accéder aux sous-menus de modification des valeurs de Patrol.
06. **Autopan**: Permet d'accéder aux sous-menus de modification des valeurs de l'Autopan.
07. **Rappel Mouvements**: Permet d'accéder au sous-menu de gestion du rappel automatique des mouvements.
08. **Avancées**: Permet d'accéder au sous-menu pour la configuration des paramètres avancés.

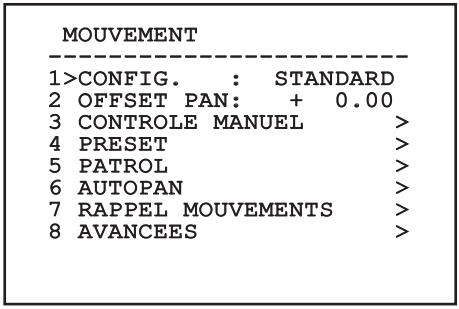


Fig. 66

9.6.4.1 Menu Contrôle Manuel

01. **Vitesse Maximale**: Configure la vitesse manuelle maximale.
02. **Mode Fast**: Active le mode **Fast**. L'activation de cette option permet de déplacer rapidement la tourelle en déplaçant le joystick en fin de course.
03. **Vitesse avec Zoom**: Active l'option **Vitesse avec Zoom**. L'activation de ce paramètre réduit automatiquement la vitesse de PAN et TILT en fonction du facteur de ZOOM.
04. **Facteur Tilt**: Configure le facteur de réduction de la vitesse manuelle de l'axe tilt.
05. **Autoflip**: Active la fonction autoflip (c'est-à-dire tourne automatiquement la tourelle de 180° quand le tilt arrive en fin de course) pour faciliter la poursuite d'objets le long de couloirs ou de rues.
06. **Limites Mouvement**: Accès au menu **Limites**.

```
 CONTROLE MANUEL
------------------------
1>VITESSE MAX      :100.0
2 MODE FAST        :    O
3 VIT. AVEC ZOOM   :    N
4 FACTEUR TILT     :    2
5 AUTOFLIP         :    O
6 LIMITES MOUVEMENT     >
```

Fig. 67

9.6.4.2 Menu Contrôle Manuel (Limites)

Après avoir accédé au menu **Limites**, il est possible de configurer les paramètres suivants:

01. **Limites Pan**: Valide les limites de Pan.
02. **Pan Début**: Configure la limite initiale de Pan.
03. **Pan Fin**: Configure la limite finale de Pan.
04. **Limites Tilt**: Valide les limites deTilt.
05. **Tilt Début**: Configure la limite initiale de Tilt.
06. **Tilt Fin**: Configure la limite finale de Tilt.

```
 LIMITES
------------------------
1>LIMITES PAN :        N
2 PAN DEBUT   : +  0.00
3 PAN FIN     : +  0.00
4 LIMITES TILT:        N
5 TILT DEBUT  : +  0.00
6 TILT FIN    : +  0.00
```

Fig. 68

9.6.4.3 Menu Preset

01. **Modifier Preset**: Permet d'accéder au menu Modifier Preset.
02. **Utilités Preset**: Permet d'accéder au menu Utilités Preset.

```
 PRESET
------------------------
1>MODIFIER PRESET      >
2 UTILITES PRESET      >
```

Fig. 69

9.6.4.4 Menu Preset (Modifier Preset)

Après avoir accédé au menu **Modifier Preset**, il est possible de configurer les paramètres suivants:

01. **Numéro**: Numéro du Preset devant être modifié.
02. **Activation**: Activation du preset.
03. **Pan**: Position de pan exprimée en degrés.
04. **Tilt**: Position de tilt exprimée en degrés.
05. **Zoom**: Position du Zoom.
06. **Focus**: Position du focus diurne et nocturne.
07. **Vitesse**: Vitesse d'atteinte de la position si le preset est rappelé par la fonction Patrol et Scan.
08. **Pause**: Configure l'attente en secondes avant le début du mouvement suivant en Patrol.
09. **Texte**: Texte affiché à l'atteinte de la position de preset.

```
 MODIFIER PRESET
------------------------
1>NR.   :       1
2 ON    :       N
3 PAN   :+   0.00
4 TILT  :+   0.00
5 ZOOM  :       0
6 FOCUS:    4096 - 5600
7 VIT.  :  100.0
8 PAUSE:        1
9 TEXTE: Text 001
```

Fig. 70

Le menu permet de mémoriser directement les preset en envoyant la commande **Iris Close** qui active les mouvements de la tourelle.

9.6.4.5 Menu Preset (Utilités Preset)

Une fois entré dans le menu **Utilités Preset** il est possible de configurer les paramètres suivants:

01. **A.Focus jour**: Active l'utilisation de l'autofocus durant le rappel des preset en mode jour. Pour garantir rapidité et précision de la mise au point de l'image, désactiver la mise au point automatique.
02. **A.Focus nuit**: Active l'utilisation de l'autofocus durant le rappel des preset en mode nuit. Il est conseillé d'activer la mise au point automatique quand la tourelle est équipée de phares infrarouges car le point focal varie entre la lumière visible et la lumière infrarouge.
03. **Vitesse Scan**: Vitesse scan: vitesse utilisée comme référence en cas de rappel d'une nouvelle position de preset avec la fonction **Scan**.
04. **Vitesse par défaut**: Modifie la vitesse par défaut des Preset. Cette valeur est utilisée par la fonction **Configurer Vitesse?** pour assigner à tous les Preset la même vitesse.
05. **Pause par défaut**: Modifie la pause par défaut des Preset. Cette valeur est utilisée par la fonction **Configurer Pause?** pour assigner à tous les Preset la même pause.
06. **Configurer vitesse**: Assigne à tous les Preset la vitesse par défaut.
07. **Configurer pause**: Assigne à tous les Preset la pause par défaut.

```
 UTILITES PRESET
------------------------
1>AUTOFOCUS JOUR :     N
2 AUTOFOCUS NUIT :     O
3 VITESSE SCAN   : 200.0
4 VIT. DEFAULT   : 100.0
5 PAUSE DEFAULT  :     3
6 CONFIGURER VITESSE?
7 CONFIGURER PAUSE?
```

Fig. 71

9.6.4.6 Menu Patrol

01. **Premier Preset**: Configure le premier preset de la séquence de Patrol.
02. **Dernier Preset**: Configure le dernier preset de la séquence de Patrol.
03. **Mode Random**: Active l'exécution en mode aléatoire. La séquence est constamment recalculée.

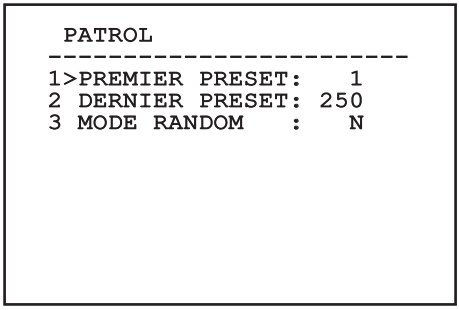


Fig. 72

9.6.4.7 Menu Autopan

01. **Preset Aller**: Configure la position initiale de l'Autopan.
02. **Preset Retour**: Configure la position finale de l'Autopan.
03. **Vitesse Aller**: Configure la vitesse d'aller de l'Autopan.
04. **Vitesse Retour**: Configure la vitesse de retour de l'Autopan.

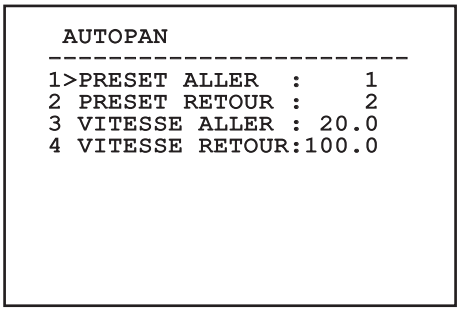


Fig. 73

9.6.4.8 Menu Rappel mouvements

Il est possible de configurer ULISSE COMPACT THERMAL de façon à ce que, après une certaine période d'inactivité, le système effectue automatiquement une fonction de mouvement configurée par l'opérateur.

Le menu permet de configurer les paramètres suivants:

01. **Type Mouvement**: Choix du type de mouvement à rappeler (None, Home, Autopan, Patrol, Tour 1, Tour 2, Tour 3).
02. **Retard Mouvement**: Temps (exprimé en secondes) d'attente à partir de l'inactivité du joysstick avant de rappeler le mouvement configuré.

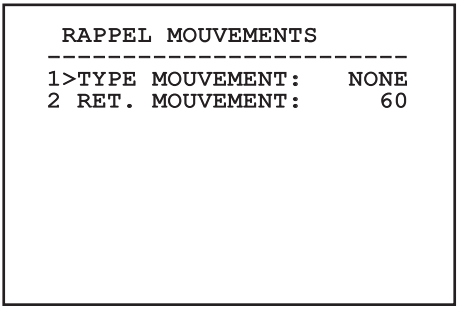


Fig. 74

9.6.4.9 Menu Avancées

01. **Contrôle Statique**: Active le contrôle de la position uniquement si la tourelle est à l'arrêt.
02. **Contrôle Dynamique**: Active le contrôle de la position uniquement si la tourelle est en mouvement.
03. **Homing Cyclique**: Si différent de zéro, impose l'exécution d'une nouvelle procédure de homing après le nombre d'heures spécifié.
04. **Mode Économique**: Réduit le couple des moteurs quand la tourelle est à l'arrêt. Ne pas activer en présence de vent fort ou de vibrations intenses.

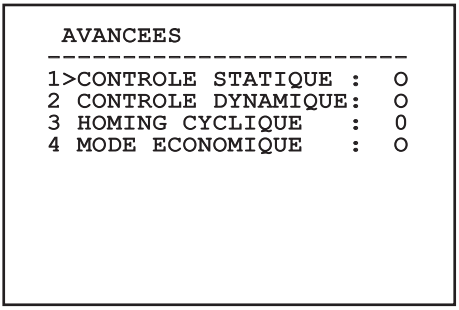


Fig. 75

9.6.5 Menu Affichages

01. **Position PTZ**: Si différente de OFF, permet de sélectionner le mode d'affichage des positions de Pan, Tilt et Zoom. Il est possible de sélectionner un affichage temporel (1 S, 3 S et 5 S) ou constant (CONST).
02. **Nom Preset**: Si différente de OFF, permet de sélectionner le mode d'affichage du texte associé à la dernière position de preset atteinte. Il est possible de sélectionner un affichage temporel (1 S, 3 S et 5 S) ou constant (CONST).
03. **Nom Zones**: Si différente de OFF, permet de sélectionner le mode d'affichage des textes associés aux zones activées. I est possible de sélectionner un affichage temporel (1 S, 3 S et 5 S) ou constant (CONST).
04. **ID Tourelle**: Si différente de OFF, affiche l'ID de la tourelle.
05. **Commandes Reçues**: Si différente de OFF, permet de sélectionner le mode d'affichage des commandes sérielles reçues. Il est possible de sélectionner un affichage temporel (1 S, 3 S et 5 S) ou constant (CONST).
06. **Delta Horizontal**: Déplace horizontalement les textes des menus en autorisant un centrage optimisé de ces derniers.
07. **Delta Vertical**: Déplace verticalement les textes des menus en autorisant un centrage optimisé de ces derniers.

```
 AFFICHAGES
------------------------
1>POSITION PTZ     :  1 S
2 NOM PRESET       :  3 S
3 NOM ZONES        :  OFF
4 ID TOURELLE      :CONST
5 COMMANDES RECUES:CONST
6 DELTA HORIZONTAL:    3
7 DELTA VERTICAL   :    3
```

Fig. 76

9.6.6 Menu Options

01. **Montage Plafond**: Ce mode entraîne l'inversion de l'image et des commandes de movement.
02. **Alarmes**: Permet d'accéder au menu Alarmes.
03. **Système De Lavage**: Permet d'accéder au menu Système de Lavage.

```
 OPTIONS
------------------------
1>MONTAGE PLAFOND:      N
2 ALARMES               >
3 SYSTEME DE LAVAGE     >
```

Fig. 77

9.6.6.1 Menu Alarmes

01. **Alarmes 1-5**: Permettent d'accéder aux menus où il est possible de programmer les paramètres des Alarmes de 1 à 5.
02. **Etat des Alarmes**: Permet d'accéder au menu État des Alarmes.

```
 ALARMES
------------------------
1>ALARME 1              >
2 ALARME 2              >
3 ALARME 3              >
4 ALARME 4              >
5 ALARME 5              >
6 ETAT ALARMES          >
```

Fig. 78

Si le projecteur IR est monté, l'alarme 5 est réservée à l'interrupteur crépusculaire externe, c'est pourquoi l'alarme 5 n'apparaît pas sur la vidéo.

A partir du menu Alarmes, il est possible d'accéder à un des menus (Alarme 1-5) dans lequel on peut modifier les paramètres des alarmes.

A partir de ces menus, il est possible de programmer les valeurs suivantes:

01. **Type**: Programme le type de contact: normalement clos (N.C.) ou normalement ouvert (N.O.)
02. **Action**: Le type d'action (Scan, Patrol, Autopan, Tour 1, Tour 2, Tour 3) qu'ULISSE COMPACT THERMAL effectue quand l'alarme s'actionne. Si on sélectionne la rubrique Off l'alarme n'est plus validée.
03. **Numéro**: La présélection à atteindre quand le type d'action de l'alarme est Scan.
04. **Texte**: L'inscription affichée quand l'alarme est validée.

```
 ALARME 1
------------------------
1>TYPE :N.C.
2 ACT. :SCAN
3 NR.  :  1
4 TEXTE:ALARM 1
```

Fig. 79

Le menu se configure automatiquement et dynamiquement en fonction du choix effectué et montre les paramètres sur lesquels on peut agir.

À partir du menu Alarmes, il est possible d'accéder au menu État des Alarmes où est affiché l'état de l'entrée des alarmes (CLOSED contact clos, OPEN contact ouvert).

```
 ETAT ALARMES
------------------------
ALARME 1          CLOSED
ALARME 2            OPEN
ALARME 3          CLOSED
ALARME 4          CLOSED
ALARME 5          CLOSED
```

Fig. 80

9.6.7 Menu Système de lavage

ULISSE COMPACT THERMAL offre la possibilité d'utiliser un essuie-glace et d'actionner une pompe pour le nettoyage de la glace.

Pour configurer le système de lavage, positionner l'objectif de la caméra devant la buse du système de lavage.

Sauvegarder une présélection (XY) pour cette position, qui sera rappelée par la tourelle lors de la validation de la fonction Washer.

Programmer à partir du menu les paramètres suivants:

01. **Valider**: Valide la fonction Washer.
02. **Preset Buse**: Insérer le n° de la présélection (XY) correspondant à la buse
03. **Retard Essuie-glace On**: Programme l'intervalle de temps qui s'écoule entre la validation de la pompe et celle de l'essuie-glace.
04. **Durée de Lavage**: Programme la durée du balayage.
05. **Retard Essuie-glace Off**: Programme la durée du balayage sans eau.

```
 SYSTEME DE LAVAGE
------------------------
1 ACTIVE             :  N
2 PRESET BUSE        :  1
3 RETARD ESSUIE ON   :  5
4 DUREE LAVAGES      : 10
5 RETARD ESSUIE OFF  :  5
```

Fig. 81

La validation de la fonction Washer réserve l'utilisation du Relais 2 pour l'allumage de la pompe et enlève la possibilité d'associer le Relais 2 à une alarme.

9.6.8 Menu par défaut

01. **Effacer Setup**: Rétablissement de tous les paramètres à l'exception des preset.
02. **Effacer Preset**: Élimine tous les preset mémorisés précédemment.

```
DEFAULT
------------------------
1>EFFACER SETUP?
2 EFFACER PRESET?
```

Fig. 82

Les opérations susmentionnées entraînent la perte de toutes les données mémorisées précédemment (ex.: Preset, Patrol, Autopan, Home...).

9.6.9 Menu Infos

Permet de vérifier la configuration du dispositif et la version de micrologiciel installée.

```
 INFO
------------------------
Adresse: 1
Protocole: MACRO
RS485-1: 38400 N81 RX
RS485-2: 38400 N81 RIPET
HW: 0a (Apr 14 2009)
FW: 000-0000
Camera    : 36x
PC: UC1PSSA000A
SN: 109032220029
```

Fig. 83

9.6.10 Menu Caméra thermique

01. **Contrôle**: Configure le type de contrôle de la caméra thermique.
    - **Interne**: La configuration de la caméra est gérée par la tourelle.
    - **Externe**: La configuration de la caméra est gérée via ligne sérielle RS485-3 (version avec double caméra uniquement).
02. **Configuration**: Applique l'une des configurations prédéfinies de la caméra thermique.
    - **Standard**: Applique la configuration standard de la configuration thermique.
    - **High Gain**: Définit la configuration prévue pour une résolution supérieure de l'image.
    - **Isotherme**: Applique la configuration prévue pour souligner les objets à l'intérieur d'une plage de température donnée (*"9.6.10.8 Menu Analyse thermique (Isotherme)", page 43*).
    - **Custom**: Signale que la configuration de la caméra thermique a été sélectionnée manuellement par l'utilisateur.
03. **Correction Flat Field**: Permet d'entrer dans le sous-menu pour la gestion de la correction Flat Field.
04. **Configuration Vidéo**: Permet d'entrer dans le sous-menu pour la gestion de la configuration de la vidéo.
05. **Contrôle Gain**: Permet d'entrer dans le sous-menu pour la gestion du contrôle du gain.
06. **Configuration ROI**: Permet d'entrer dans le sous-menu pour la configuration du ROI.
07. **Analyse Thermique**: Permet d'entrer dans le sous-menu pour la gestion de l'analyse thermique.
08. **Statut**: Permet d'entrer dans le sous-menu indiquant les caractéristiques techniques de la caméra thermique.

```
 CAMERA THERMIQUE
------------------------
1>CONTROLE   :   INTERNE
2 CONFIG.    :  STANDARD
3 CORRECTION FLAT FIELD>
4 CONFIGURATION VIDEO  >
5 CONTROLE GAIN        >
6 CONFIGURATION ROI    >
7 ANALYSE THERMIQUE    >
8 STATUT               >
```

Fig. 84

9.6.10.1 Menu Correction Flat Field

La caméra thermique possède un mécanisme interne permettant d'améliorer périodiquement la qualité des images: la correction Flat Field (FFC). Les paramètres de gestion de cette fonction sont les suivants:

01. **Flat Field Auto**: Valide la correction Flat Field automatique ou manuelle. Si la correction automatique est validée, la caméra effectue une FFC après un intervalle de temps ou une variation de température donnée. Vice-versa, en cas d'utilisation de la correction manuelle, les opérations FFC sont effectuées sur demande de l'utilisateur. Il est conseillé de toujours utiliser la correction automatique.
02. **Intervalle**: Configure l'intervalle de temps après lequel effectuer une FFC si la plage dynamique de gain est High. L'intervalle de temps est exprimé en photogrammes (33ms pour le NTSC, 40ms pour le PAL).
03. **Intervalle Low**: Configure l'intervalle de temps après lequel effectuer une FFC si la plage dynamique de gain est Low. L'intervalle de temps est exprimé en photogrammes (33ms pour le NTSC, 40ms pour le PAL).
04. **Température**: Configure la variation de température après laquelle effectuer une FFC si la plage dynamique de gain est High. La variation de température est exprimée en intervalles de 0,1 °C.
05. **Température Low**: Configure l'intervalle de temps après lequel effectuer une FFC si la plage dynamique de gain est Low. La variation de température est exprimée en intervalles de 0,1 °C.
06. **Mode Gain**: Permet de sélectionner le type de plage dynamique de gain:
    - **High**: Cette configuration est prévue pour optimiser le contraste et particulièrement indiquée pour les applications effectuant les analyses vidéo des images.
    - **Low**: Cette configuration augmente la plage dynamique de l'image et diminue le contraste. Particulièrement indiquée pour identifier les éléments les plus chauds de l'image.
    - **Auto**: Cette configuration permet à la caméra de commuter entre les modes High et Low en se basant sur le type d'image actuellement affiché. Les paramètres du menu Valeurs changement gain (*"9.6.10.2 Menu Correction Flat Field (Valeurs Modification Gain)", page 41*) permettent de modifier le comportement de ce mode.
07. **Effectuer FFC**: Effectue une opération de FFC.
08. **Valeurs Modification Gain**: Permet d'entrer dans le sous-menu Valeurs Modification Gain.

```
 CORRECTION FLAT FIELD
-----------------------
1>FLAT FIELD AUTO:      S
2 INTERVALLE     :  7200
3 INTERVALLE LOW :  1350
4 TEMPERATURE    :     5
5 TEMPERATURE LOW:    10
6 MODE GAIN      :  HAUT
7 EFFECTUER FFC?
8 VALEURS MODIF. GAIN  >
```

Fig. 85

Il est conseillé de ne pas modifier les valeurs par défaut car ces dernières sont pensées pour offrir une haute qualité des images en toutes conditions de fonctionnement.

9.6.10.2 Menu Correction Flat Field (Valeurs Modification Gain)

Une fois entré dans le menu Valeurs modification gain, il est possible de configurer l'un des paramètres suivants:

01. **Seuil Haut-Bas**: Configure le seuil de température utilisé par le paramètre **Population Haut-Bas** pour forcer la commutation en mode **Faible Gain**. La valeur est exprimée en degré Celsius.
02. **Population Haut-Bas**: Configure le taux minimum de pixels au-delà duquel la commutation s'effectue en mode **Faible Gain**.
03. **Seuil Bas-Haut**: Configure le seuil de température utilisé par le paramètre **Population Bas-Haut** pour forcer la commutation en mode **Gain Élevé**. La valeur est exprimée en degré Celsius.
04. **Population Bas-Haut**: Configure le taux minimum de pixels au-delà duquel la commutation s'effectue en mode **Gain Élevé**.

```
 VALEURS MODIF. GAIN
------------------------
1>SEUIL HAUT-BAS :  140
2 POP. HAUT-BAS  :   20
3 SEUIL BAS-HAUT :  100
4 POP. BAS-HAUT  :   95
```

Fig. 86

Il est conseillé de ne pas modifier les valeurs par défaut car ces dernières sont pensées pour offrir une haute qualité des images en toutes conditions de fonctionnement.

Les programmations du menu Valeurs Changement Gain ont effet seulement si le mode Gain (*"9.6.10.1 Menu Correction Flat Field", page 40*) a été programmé sur Auto.

9.6.10.3 Menu Configuration vidéo

Une fois entré dans le menu Configuration vidéo, il est possible de configurer l'un des paramètres suivants:

01. **Polarité Lut**: Configure le type de coloration de l'image cadrée par la caméra thermique.
02. **Avertissemet FFC**: Configure la durée de l'affichage sur l'écran d'un carré coloré en haut à droite avant d'effectuer une FFC. L'intervalle de temps est exprimé en photogrammes (33ms pour le NTSC, 40ms pour le PAL). Une valeur inférieure à 15 photogrammes désactive automatiquement cette signalisation.
03. **Zoom numérique**: Configure le type de zoom à appliquer au signal vidéo (OFF, Auto, 2x, 4x). En cas d'utilisation du mode Auto le zoom de la caméra thermique s'adapte automatiquement à celui du module SONY.
04. **Dynamic DDE**: Configure la valeur du filtre DDE permettant d'améliorer la netteté des contours. Les valeurs types à utiliser varient entre 17 et 25. La valeur 17 désactive le filtre.
05. **Signal Test**: Valide le test pattern pour vérifier le système électronique de la caméra.

```
 CONFIGURATION VIDEO
------------------------
1>POLARITE LUT:WHITE HOT
2 AVERT. FFC  :       60
3 ZOOM NUMER. :     AUTO
4 DYNAMIC DDE :       25
5 SIGNAL TEST :        N
```

Fig. 87

9.6.10.4 Menu Contrôle Gain

Une fois entré dans le menu Configuration contrôle gain, il est possible de configurer l'un des paramètres suivants:

01. **Algorithme**: Configure le type de contrôle automatique du gain (AGC) pour l'optimisation de l'image. Il est possible de sélectionner l'un des algorithmes suivants:
    - **Automatique**: Configure automatiquement le contraste et la luminosité de l'image en cas de variation des conditions ambiantes en égalisant l'histogramme des niveaux de gris. L'image peut être modifiée en changement la valeur des paramètres ITT Mean, Max Gain et Plateau Value. Cet algorithme est celui configuré par défaut et est conseillé pour l'utilisation normale de la caméra thermique.
    - **Once Bright**: Le niveau de luminosité configuré est la moyenne des valeurs de luminosité de l'image en cas de sélection de cette rubrique. L'image peut être modifiée en changeant la valeur du paramètre Contraste.
    - **Auto Bright**: Le niveau de luminosité configuré est la moyenne des valeurs de luminosité de l'image. Ce niveau est mis à jour en temps réel. L'image peut être modifiée en changeant la valeur des paramètres Contraste et Compensation.
    - **Manuel**: Les niveaux de contraste et de luminosité sont configurés manuellement par l'utilisateur.
    - **Histogramme linéaire**: Le contraste et la luminosité de l'image sont optimisés au moyen d'une fonction de transfert linéaire. L'image peut être modifiée en changement la valeur des paramètres ITT Mean et Max Gain.
02. **Valeur de plateau**: configure la valeur max. de pixels pouvant être contenus dans un niveau de gris.
03. **Moyenne ITT**: Configure le point moyen de l'échelle de gris.
04. **Gain max.**: Configure le gain max. de l'AGC.
05. **Contraste**: Configure le niveau de contraste de l'image.
06. **Luminosité**: Configure le niveau de luminosité de l'image.
07. **Compensation**: Configure le niveau de compensation de la luminosité de l'image.

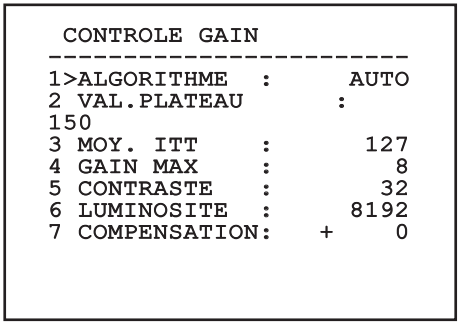


Fig. 88

Le menu se configure automatiquement et dynamiquement en fonction du choix effectué et affiche les paramètres sur lesquels agir.

9.6.10.5 Menu Configuration ROI

Une fois entré dans le menu Configuration ROI, il est possible de modifier la région intéressée (ROI) utilisée par l'algorithme AGC pour calculer les niveaux de contraste et de luminosité de l'image.

01. **P1 gauche**: Configure la limite gauche de la ROI.
02. **P1 Haut**: Configure la limite supérieure de la ROI.
03. **P2 Droit**: Configure la limite droite de la ROI.
04. **P2 Bas**: Configure la limite inférieure de la ROI.

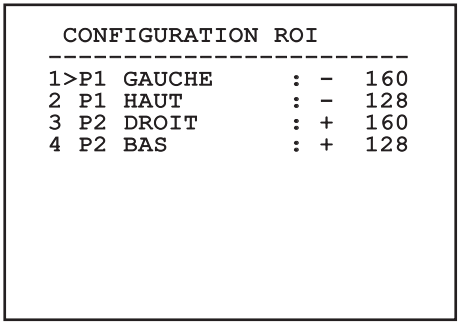


Fig. 89

9.6.10.6 Menu Analyse thermique

01. **Point de mesure**: Permet d'entrer dans le sous-menu pour la configuration du point de mesure.
02. **Isotherme**: Permet d'entrer dans le sous-menu pour la gestion de l'isotherme.

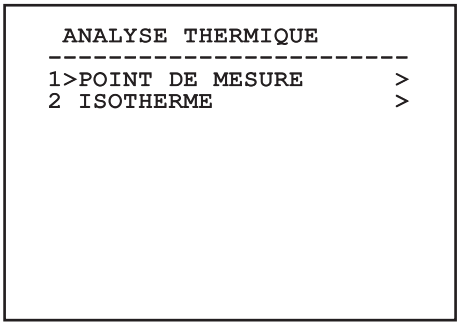


Fig. 90

9.6.10.7 Menu Analyse thermique (Point de mesure)

Une fois entré dans le menu Point de mesure, il est possible de configurer l'un des paramètres suivants:

01. **Mode**: valide l'affichage de la température mesurée des 4 pixels au centre de l'image (en degrés Celsius ou Fahrenheit). L'option OFF désactive l'affichage.
02. **Numérique**: Valide l'affichage du symbole correspondant sur l'écran.
03. **Thermomètre**: Valide l'affichage du symbole correspondant sur l'écran.

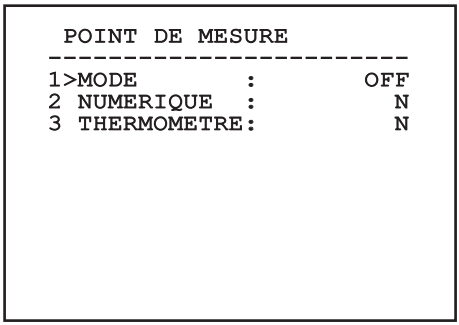


Fig. 91

9.6.10.8 Menu Analyse thermique (Isotherme)

Une fois entré dans le menu Isotherme, il est possible d'activer une coloration particulière des objets compris dans l'intervalle de température configuré. Les paramètres de gestion de cette fonction sont les suivants:

01. **Valider**: Valide la fonction Isotherme.
02. **Mode**: Sélectionne le mode dans lequel est exprimé l'intervalle (en pourcentage ou en degrés Celsius).

03-05. **Plus Haut**: Configure la limite supérieure de la fonction Isotherme.

03-05. **Plus Bas**: Configure la limite inférieure de la fonction Isotherme.

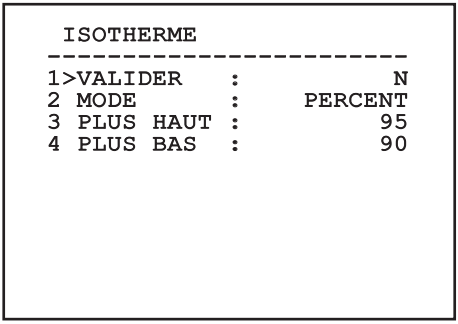


Fig. 92

Le menu se configure automatiquement et dynamiquement en fonction du choix effectué et affiche les paramètres sur lesquels agir.

9.6.11 Menu Status

Une fois entré dans le menu Statut, il est possible de consulter les caractéristiques techniques de la caméra technique.

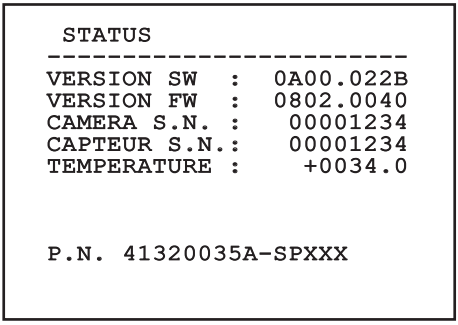


Fig. 93

10 Instructions de fonctionnement courant

Cadrer le soleil directement et pendant une période prolongée peut causer des dommages irréparables au senseur de la caméra thermique.

10.1 Affichage de l'état de la tourelle

Durant le fonctionnement normal, au choix de l'utilisateur, la tourelle affiche sur le moniteur les données organisées selon les illustrations. L'affichage peut être validé ou exclu comme décrit dans *"9.6.5 Menu Affichages", page 37*.

```
        NORTH/EAST
ID: 1               12345



AL 1: Alarm 1
Pan : -  5.56
Tilt: +120.01
Zoom:  36.00x
Preset: Text 001
E7-PRESET NON CONFIGURE'
```

Fig. 94

NORTH/EAST: Nom de l'aire dans laquelle on se trouve;

ID: 1: L'adresse du récepteur;

12345: La liste complète des alarmes validées;

AL 1: Alarm 1: Le texte de la dernière alarme validée;

Pan: - 5.56/Tilt: +120.01/Zoom: 36.00x: La position actuelle de Pan, Tilt et Zoom;

Preset: Text 001: Le nom de la présélection choisie validée;

E7-PRST. NON CONFIGURÉ: Le champ suivant affiche les erreurs constatées durant le fonctionnement du système ou les commandes reçues par sérielle (l'affichage peut être validé ou non seulement pour les commandes reçues).

10.2 Sauvegarde de la position actuelle (Présélection)

10.2.1 Sauvegarde rapide

A partir du pupitre de contrôle, il est possible de sauvegarder la position actuelle (pour plus d'informations, se référer au manuel du pupitre utilisé).

Durant la phase de sauvegarde, il est possible de modifier la vitesse d'obtention de la Présélection avec les touches Focus Far / Focus Near et le temps d'attente avec les touches Iris Open / Iris Close.

```
------------------------
CONFIGURER PRESET
Focus pour chang. vit.
Iris pour chang. Pause
Joystick pour sortir
------------------------
Vitesse : 100gr/s
Pause   :   5s
Pan : -  5.56
Tilt: +120.01
Zoom:   36.00x
```

Fig. 95

10.2.2 Sauvegarde à partir du Menu

Se référer à *"9.6.4.3 Menu Preset", page 34*.

10.3 Rappel d'une position (Scan)

A partir du pupitre de contrôle, il est possible de rappeler une position précédemment sauvegardée (pour plus d'informations, se référer au manuel du pupitre utilisé).

10.4 Validation patrouille (Patrol)

A partir du pupitre de contrôle, il est possible d'activer la patrouille automatique (pour plus d'informations, se référer au manuel du pupitre utilisé ou au *Tab. 14, page 47*.

L'exclusion peut être faite en bougeant le joystick ou en rappelant un type de mouvement différent.

Pour configurer la Patrol, se référer à *"9.6.4.6 Menu Patrol", page 36*.

10.5 Validation Autopan

A partir du pupitre de contrôle, il est possible d'activer l'Autopan (pour plus d'informations, se référer au manuel du pupitre utilisé ou au *Tab. 14, page 47*.

L'exclusion peut être faite en bougeant le joystick ou en rappelant un type de mouvement différent.

Pour configurer l'Autopan, se référer à *"9.6.4.7 Menu Autopan", page 36*.

10.6 Rappel d'un parcours (Tour)

La modalité de fonctionnement Tour permet de répéter un parcours précédemment enregistré de façon continue.

La tourelle peut mémoriser jusqu'à 3 Tours d'une durée maximale de 2 minutes chacun.

Pour mémoriser un Tour, taper sur le pupitre la présélection spéciale correspondant au numéro du Tour à sauvegarder (*Tab. 14, page 47*).

Pour faciliter l'enregistrement du Tour, la tourelle limite en automatique la vitesse de Pan et de Tilt en fonction du facteur de Zoom.

Durant l'enregistrement du Tour, le pourcentage du temps d'enregistrement restant s'affiche comme sur la figure.

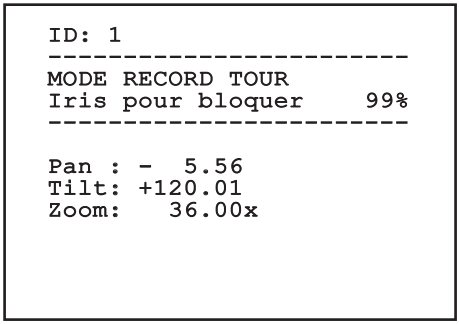


Fig. 96

Pour interrompre l'enregistrement, appuyer sur la touche Iris Open ou Iris Close.

Pour démarrer la reproduction d'un Tour, taper sur le pupitre le preset spécial correspondant au numéro du Tour à afficher (*Tab. 14, page 47*).

10.7 Rappel de la position de Home

A partir du pupitre de contrôle, il est possible de rappeler la position de Home (Scan n.1) précédemment sauvegardée (pour plus d'informations, se référer au manuel du pupitre utilisé).

10.8 Validation de l'Essuie-glace (Wiper)

Ne pas utiliser l'essuie-glace lorsque la température extérieure est inférieure à 0°C ou en cas de glace.

Pour valider/exclure l'Essuie-glace, se référer au manuel du pupitre ou au *Tab. 14, page 47*.

L'Essuie-glace est exclu de façon automatique si on le laisse allumé.

10.9 Validation du Système de lavage (Washer)

Ne pas utiliser l'essuie-glace lorsque la température extérieure est inférieure à 0°C ou en cas de glace.

Pour valider le Système de lavage, se référer au manuel du pupitre ou au *Tab. 14, page 47*.

Pour configurer le Système de lavage, se référer à *"9.6.7 Menu Système de lavage", page 38*.

10.10 Reboot du dispositif

A partir du pupitre de contrôle, il est possible d'envoyer la commande de réinitialisation du dispositif (pour plus d'informations, se référer au manuel du pupitre utilisé ou au *Tab. 14, page 47*).

10.11 Commutation de la sortie vidéo secondaire

Pour sélectionner le signal vidéo (du module intégré ou de la caméra thermique), se reporter aux commandes **Vidéo 2 module intégré** et **Vidéo 2 caméra thermique** (*Tab. 14, page 47*).

10.12 Correction manuelle mise au point d'un preset

Rappeler le preset dont la mise au point doit être modifiée avec la commande Scan, modifier la mise au point au moyen des touches Focus Far / Focus Near sans modifier la position de Pan/Tilt/Zoom, puis enregistrer le preset au moyen de la commande Preset.

La correction manuelle du Preset n'est effective que si les Autofocus Jour/Nuit sont désactivés (*Fig. 71, page 35*).

COMMANDES SPÉCIALES					
Commande	**Protocole**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Tour 1 Start enregistrement	Sauver Preset 77	Sauver Preset 77	Sauver Preset 77	Sauver Preset 77	Sauver Preset 77
		Sauver Pattern 2	Start memorisation pattern 3		Sauver Preset 47
Tour 2 Start enregistrement	Sauver Preset 78	Sauver Preset 78	Sauver Preset 78	Sauver Preset 78	Sauver Preset 78
		Sauver Pattern 3			Sauver Preset 48
Tour 3 Start enregistrement	Sauver Preset 79	Sauver Preset 79	Sauver Preset 79	Sauver Preset 79	Sauver Preset 79
		Sauver Pattern 4			Sauver Preset 50
Tour 1 Start	Sauver Preset 80	Sauver Preset 80	Sauver Preset 80	Sauver Preset 80	Sauver Preset 80
		Pattern 2	Activer pattern 3		Sauver Preset 51
Tour 2 Start	Sauver Preset 81	Sauver Preset 81	Sauver Preset 81	Sauver Preset 81	Sauver Preset 81
		Pattern 3			Sauver Preset 52
Tour 3 Start	Sauver Preset 82	Sauver Preset 82	Sauver Preset 82	Sauver Preset 82	Sauver Preset 82
		Pattern 4			Sauver Preset 53
Tour Record Stop	Iris Open/Close	IrisOpen/Close	Iris Open/Close	Iris Open/Close	Iris Open/Close
		Ack	Sauver nouveaux pattern		
Wiper Start	Sauver Preset 85	Sauver Preset 85	Sauver Preset 85	Sauver Preset 85	Sauver Preset 85
	Aux 3 ON	Aux 3 ON	Aux 3 ON	Aux 3 ON	Sauver Preset 51
	Wip+				
Wiper Stop	Sauver Preset 86	Sauver Preset 86	Sauver Preset 86	Sauver Preset 86	Sauver Preset 86
	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Sauver Preset 55
	Wip-				
Washer	Sauver Preset 87	Sauver Preset 87	Sauver Preset 87	Sauver Preset 87	Sauver Preset 87
	Aux 4 ON	Aux 4 ON	Aux 4 ON	Aux 4 ON	Sauver Preset 56
	Was+				

COMMANDES SPÉCIALES					
Commande	**Protocole**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Modalité Nocturne on	Sauver Preset 88	Sauver Preset 88	Sauver Preset 88	Sauver Preset 88	Sauver Preset 88
					Sauver Preset 57
Modalité Nocturne off	Sauver Preset 89	Sauver Preset 89	Sauver Preset 89	Sauver Preset 89	Sauver Preset 89
					Sauver Preset 58
Reboot dispositif	Sauver Preset 94	Sauver Preset 94	Sauver Preset 94	Sauver Preset 94	Sauver Preset 94
	Ini+		Faster+ Zoom out+ Focus far+ Iris open		Sauver Preset 61
Validation OSM	Sauver Preset 95	Sauver Preset 95	Sauver Preset 95	Sauver Preset 95	Sauver Preset 95
	Men+		Iris open+ Focus+ Zoom out		Sauver Preset 46
Patrol Start	Sauver Preset 93	Sauver Preset 93	Sauver Preset 93	Sauver Preset 93	Sauver Preset 93
	Pat+	Pattern	Activer pattern 1	Activer patrol	Sauver Preset 60
Patrol Stop	Sauver Preset 92	Sauver Preset 92	Sauver Preset 92	Sauver Preset 92	Sauver Preset 92
	Joystick	Joystick	Joystick	Joystick	Joystick
	Pat-				Sauver Preset 59
Autopan Start	Sauver Preset 99	Sauver Preset 99	Sauver Preset 99	Sauver Preset 99	Sauver Preset 99
	Apa+	Pattern 1	Activer pattern 2	Activer autopan	Sauver Preset 63
Autopan Stop	Sauver Preset 96	Sauver Preset 96	Sauver Preset 96	Sauver Preset 96	Sauver Preset 96
	Joystick	Joystick	Joystick	Joystick	Joystick
	Apa-				Sauver Preset 62
Exécuter FCC	Sauver Preset 74	Sauver Preset 74	Sauver Preset 74	Sauver Preset 74	Sauver Preset 74
					Sauver Preset 43
Video 2 camèra termique	Sauver Preset 75	Sauver Preset 75	Sauver Preset 75	Sauver Preset 75	Sauver Preset 75
					Sauver Preset 44
Video 2 module integré	Sauver Preset 76	Sauver Preset 76	Sauver Preset 76	Sauver Preset 76	Sauver Preset 76
					Sauver Preset 45

Tab. 14

11 Entretien et nettoyage

11.1 Entretien

L'entretien d'ULISSE COMPACT THERMAL doit être uniquement effectué par un personnel qualifié en matière de circuits électriques.

11.1.1 Mise à jour micrologiciel

Le micrologiciel de la tourelle peut être actualisé en cas de nécessité, pour toute information supplémentaire, contacter le centre d'assistance Videotec.

L'opération d'actualisation du micrologiciel peut être effectuée sur place au moyen du câble fourni avec la tourelle, ou à distance (seulement MACRO/VIDEOTEC et PELCO D protocoles) avec un convertisseur USB – sériel 485 (non fourni).

11.1.2 Clone configuration

Enregistrer la configuration de la tourelle en cas de nécessité, pour toute information supplémentaire, contacter le centre d'assistance Videotec.

L'opération d'enregistrement/réinitialisation peut être effectuée sur place au moyen du câble fourni avec la tourelle, ou à distance (seulement MACRO/VIDEOTEC et PELCO D protocoles) avec un convertisseur USB – sériel 485 (non fourni).

11.1.3 Remplacement des fusibles

Pour assurer la protection contre le risque d'incendie, remplacer les fusibles avec le même type et valeur.

Deux fusibles sont prévus sur la carte de connexion.

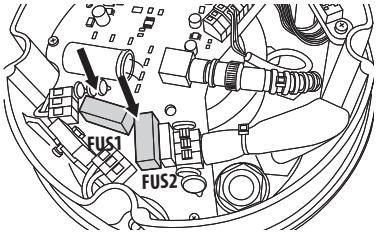


Fig. 97

Les valeurs correspondent à la tension d'alimentation comme indiqué sur le tableau.

TENSION	FUS 1	FUS 2
24Vac 50/60Hz	T 4A L 250V 5x20	T 6.3A H 250V 5x20
120Vac 50/60Hz	T 4A L 250V 5x20	T 4A H 250V 5x20
230Vac 50/60Hz	T 4A L 250V 5x20	T 2A H 250V 5x20

Tab. 15

11.2 Nettoyage

Les tourelles ULISSE COMPACT THERMAL n'exigent aucun entretien particulier. Pour le nettoyage de l'appareil, utiliser des détergents neutres et des chiffons non abrasifs. Le dispositif est imperméable.

11.2.1 Entretiens de la vitre et des parties en plastique (PC)

Nous conseillons l'emploi, avec un chiffon souple, de savons neutres dilués avec de l'eau ou bien de produits spécifiques pour le nettoyage des vitres de lunettes.

On doit éviter alcool éthylique, solvants, hydrocarbures hydro-génés, acides forts et alcali. L'emploi de ce type de produits abîme d'une façon irréparable la surface traitée.

12 Élimination des déchets

Ce symbole et le système de recyclage ne sont appliqués que dans les pays UE et non dans les autres pays du monde.

Votre produit est conçu et fabriqué avec des matèriels et des composants de qualité supérieure qui peuvent être recyclés et réutilisés.

Ce symbole signifie que les équipements électriques et électroniques en fin de vie doivent être éliminés séparément des ordures ménagères.

Nous vous prions donc de confier cet équipement à votre Centre local de collecte ou Recyclage.

Dans l'Union Européenne, il existe des systèmes sélectifs de collecte pour les produits électriques et électroniques usagés.

13 Troubleshooting

Demander l'intervention d'un personnel qualifié dans les cas suivants:

- L'unité est endommagée à la suite d'une chute
- Les performances de l'unité ont baissé
- L'unité ne fonctionne pas correctement après avoir respecté toutes les indications de ce manuel.

PROBLÈME	CAUSES POSSIBLES ET SOLUTIONS
Le dispositif est éteint et ne réagit pas.	**Câblage incorrect, rupture des fusibles.** Vérifier les connexions, la continuité des fusibles et, en cas de panne, les remplacer conformément aux valeurs indiquées dans le tableau. En cas de pannes répétées des fusibles, s'adresser au centre d'assistance autorisé.
Les positions de preset configurées ne correspondent pas à la zone filmée.	**Perte de référence de position absolue.** Effectuer la procédure d'étalonnage de la tourelle sur le pupitre (se reporter au manuel correspondant) ou resetter l'appareil en l'éteignant et en le réallumant.

Le moniteur n'affiche **pas** l'image filmée par l'ULISSE COMPACT THERMAL, mais une page-écran du type suivant:
`Adresse : 1`
`Protocole : MACRO`
`RS485-1: 38400 N81 RX`
`RS485-2: 38400 N81 REPEAT`
`232 : ACTUALIS.FW SEULE`
`HW: 000-0001`
`FW: 0a (Jun 4 2009)`
`DIP1.1: VUE CONFIG. ON`
	Dip switch d'Affiche Configuration (DIP1, SW1).
	Éteindre la tourelle, baisser le levier du dip-switch (**DIP1, SW1**). Rallumer l'appareil.

Durant la mise en service, la tourelle reste bloquée et affiche une page-écran du type suivant:
`Adresse : 1`
`PROCED. DE DEGIVRAGE`
`EN COURS...`
`MINUTES RESTANTES:59`
	La température ambiante est très basse.
	Attendre la fin de la procédure de préchauffage. Si la température ambiante est trop basse, l'ULISSE COMPACT THERMAL reste bloqué et affiche la page-écran suivante:
	`Adresse : 1`
	`PROCED. DE DEGIVRAGE`
	`----------`
	`SYSTEME BLOQUE`
	`TEMPERATURE TROP BAS`
	`----------`

Erreur **E1-AUTOPAN SANS LIMITES**.	**Les deux présélections utilisées comme limites n'ont pas été programmées.** Programmer les deux présélections, puis mettre à jour le menu de configuration de l'autopan (*"10.2 Sauvegarde de la position actuelle (Présélection)", page 44* et *"9.6.4.7 Menu Autopan", page 36*).

Erreur **E2-ESSUIE-GLACE BLOQUÉ**.	**Essuie-glace bloqué ou cassé.** Vérifier que l'essuie-glace est libre de se déplacer, si le problème persiste, contacter le centre d'assistance.
Erreur **E3-PATROL SANS PRÉSÉLECTION** ou erreur **E4-PATROL SEULEMENT 1 PRÉSÉLECTION**.	**Les présélections n'ont pas été programmées.** Programmer deux ou plusieurs présélections, puis mettre à jour le menu de configuration patrol (*"10.2 Sauvegarde de la position actuelle (Présélection)", page 44* et *"9.6.4.6 Menu Patrol", page 36*).
Erreur **E5-IR TEMP. TROP HAUTE** ou erreur **E6-IR EN PANNE**.	**Fonctionnement erroné du projecteur à infrarouge.** Contacter le centre d'assistance.
Erreur **E7-PRST. NON CONFIGURÉ**.	**Rappel d'une présélection non programmée.** Sauvegarder la présélection à l'aide de la commande prévue à cet effet (*"10.2 Sauvegarde de la position actuelle (Présélection)", page 44*).
Erreur **E8-TOUR NON CONFIGURÉ**.	**Rappel d'un Tour non programmé.** Sauvegarder le Tour avec la commande prévue à cet effet (*"10.6 Rappel d'un parcours (Tour)", page 45*).
Erreur **E9-TEMP. TROP FAIBLE**	**La température ambiante est trop basse. Les mouvements de la tourelle sont bloquées pour empêcher les dommages mécaniques.**
Alarme **AL6 :NIVEAU DE L'EAU BAS**	**Niveau liquide lave-glace insuffisant.** Remplir le réservoir de la pompe avec le liquide lave-glace.

Tab. 16

14 Données techniques

L'installation est du type TNV-1, ne pas la connecter à des circuits SELV.

Pour réduire les risques d'incendie, utiliser uniquement des câbles de dimensions égales ou supérieures à 26AWG.

14.1 Généralités

Fabriqué en fonte d'aluminium et en technopolymère

Vernissage avec poudres époxypolyester, couleur RAL9002

Fenêtre avec vitre au Germanium pour la caméra thermique

Installation simplifiée grâce au connecteur autocentrant

Aucun jeu mécanique

Système dinamique de contrôle de la position

14.2 Mecanique

2 presse-étoupes M16 et 2 presse-étoupes M12

Rotation horizontale continue

Débattement vertical de -90° à +90°

Vitesse horizontale variable: de 0.1° à 200°/s

Vitesse verticale variable: de 0.1° à 200°/s

Précision du rappel des prépositions: 0.05°

14.3 Electrique/video

Tension d'entrée:

- 230Vac, 50/60Hz,
- 24Vac, 50/60Hz
- 120Vac, 50/60Hz

Courant absorbé:

- 230Vac, 0.4A
- 24Vac, 4A
- 120Vac, 0.8A

Puissance absorbée:

- 40W tourelle à l'arrêt avec chauffage éteint
- 60W en mouvement, avec chauffage éteint
- 125W pic à l'allumage, avec chauffage allumé

Dimensions câbles d'entrée: AWG 16 (24Vac) -18 (120/230Vac)

Dimensions câbles de signalisation: AWG 20-26

Ligne vidéos: câble coaxial (1Vpp, 75Ohms)

Fonctions: Autopan, Préposition, Patrol, Tour (maximum 3), Autoflip

Nombre maximal de prépositions:

- Protocole AMERICAN DYNAMICS: 95*
- Protocole ERNITEC: 250
- Protocole PANASONIC: 250
- Protocole PELCO D: 99*
- Protocole VIDEOTEC MACRO: 250
- *250 seul par OSD (On Screen Display)

Chaîne de 16 caractères pour titrage de la zone et des prépositions

I/O carte d'alarme (en option):

- 6 entrées d'alarme
- 2 sorties relais (2A 30Vac/60Vdc max)

14.4 Caméra

CAMÉRAS THERMIQUES DISPONIBLES						
	THERMAL CAMERA 35MM		THERMAL CAMERA 25MM		THERMAL CAMERA 9MM	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Detector	Uncooled Vanadium Oxide microbolometer (VOx)					
Résolution	320x256	320x240	320x256	320x240	320x256	320x240
Dimensions pixel	25µm					
Réponse spectrale (Infrarouge à ondes longues (LWIR)	From 7.5µm to 13.5µm					
Obturateur interne (uniquement pour les capteurs de compensation)	Video stop < 1sec.					
Digital Detail Enhancement (DDE)	Oui		Oui		Oui	
Zoom numérique	2x, 4x					
Fréquence d'image	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps
Gamme température des scènes	-40°C ÷ +160°C (-40°F ÷ +320°F)					
Champ de vision horizontal	13°		18°		48°	
Champ de vision vertical	10°		14°		37°	
F-number	F/1.4		F/1.4		F/1.25	
Sensibilité thermique (NEdT)	< 50mK à f/1.0					
Homme (détection / reconnaissance / identification)	780m / 190m / 97m		560m / 140m / 70m		205m / 56m / 26m	
Voiture (détection / reconnaissance / identification)	2150m / 560m / 280m		1550m / 400m / 200m		590m / 150m / 74m	

Tab. 17

CAMÉRAS ANALOGIQUES DISPONIBLES				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X HAUTE SENSIBILITÉ	
	PAL	NTSC	PAL	NTSC
Zoom optique	36x		28x	
Wide Dynamic Range (Fix/Auto)	Oui		-	
Progressive SCAN	Oui		-	
Stabilisation image numérique	Oui		Oui	
Balance des blancs	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)			
Haute résolution horizontale	Jusqu'à 550 Lignes TV			
Day-Night (Auto ICR)	Oui			
Capteur	1/4" EXView HAD CCD		1/4" Super HAD CCD II	
Nombre de Pixels réels	~ 440000 pixel	~ 380000 pixel	~ 440000 pixel	~ 380000 pixel
Éclairage de nuit minimum (ICR ON) (typique)	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
Éclairage de jour minimum (ICR OFF) (typique)	0.1 Lux / 1/3s	0.1 Lux / 1/4s	0.16 Lux / 1/3s	0.16 Lux / 1/4s
Accroissement automatique du temps d'exposition pour améliorer la vision de nuit	Oui			
Rapport S/N	Supérieur à 50dB			
Contrôle AE	Automatique, Priorité de l'obturateur, Priorité du diaphragme, Priorité de luminosité et Manuel			
Compensation de rétro-éclairage	On/Off			
Masquage (3D) des zones privées avec mise à jour automatique	Oui			
Masquage dynamique	On/Off (24 positions)			

CAMÉRAS ANALOGIQUES DISPONIBLES				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X HAUTE SENSIBILITÉ	
	PAL	NTSC	PAL	NTSC
Max. zones de masquage affichables	8			
Résolution des zones de masquage	160x120 HxV			
Masquage	Jusqu'au 15 types de masquage: 14 couleurs ou mosaïque			
Système de focalisation	Auto (Sensibilité: Normale, Basse), Trigger PTZ, Manuel			
Contrôle optiques "Intelligent"	Technologie SONY de Reset optiques modulaire automatique			
Haute capacité de Zoom et champ horizontal de visualisation étendu	Oui			
Zoom optique	36x, f=3.4 (grand angle) à 122.4mm (télé) / F1.6 à F4.5		28x, f=3.5 (grand angle) à 98mm (télé) / F1.35 à F3.7	
Zoom numérique	12x (432x avec le zoom optique)		12x (336x avec le zoom optique)	
Angle de visualisation (A)	57.8 degrés (grand angle) à 1.7 degrés (télé)		55.8 degrés (grand angle) à 2.1 degrés (télé)	
Distance minimum de l'object	320mm (grand angle) à 1500mm (télé)		10mm (grand angle) à 1500mm (télé)	
Vitesse de l'Iris Electronique	1/1 ÷ 1/10000s			

Tab. 18 SONY est une marque déposée de SONY Corporation, Japon. EXView HAD est une marque déposée de SONY Corporation.

14.5 Communications

Programmation par OSD

Interface sérielle RS485 half duplex, RS422 full duplex et configuration en cascade

Mise à jour du logiciel par console à distance (seulement VIDEOTEC MACRO et PELCO D protocoles)

Jusqu'à 1023 unités adressables par dip-switches

14.6 Protocoles

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO sont des marques enregistrées.

Le produit peut être interfacée avec dispositifs pas manufacturé par VIDEOTEC. Il est donc possible que les protocoles sont change ou que ce dernier soit modifié par rapport à ceux soumis à essai par VIDEOTEC. VIDEOTEC conseille par conséquent de procéder à un essai avant toute installation. VIDEOTEC décline toute responsabilité en cas de coûts d'installations supplémentaires entraînés par des problèmes de compatibilité.

14.7 Environnement

Intérieur / Extérieur

Température d'utilisation: -40°C / +60°C

Protection contre les impulsions: jusqu'à 2KV entre deux lignes, jusqu'à 4KV entre ligne et terre (Classe 4)

14.8 Certifications

CE EN60950-1, EN61000-6-3 et EN50130-4

FCC part 15, Class A

IP66 EN60529

Certifié UL

UL Canadian Safety Standards listed

NEMA 4X

15 Dessins techniques

Les valeurs sont entendues en millimètres.

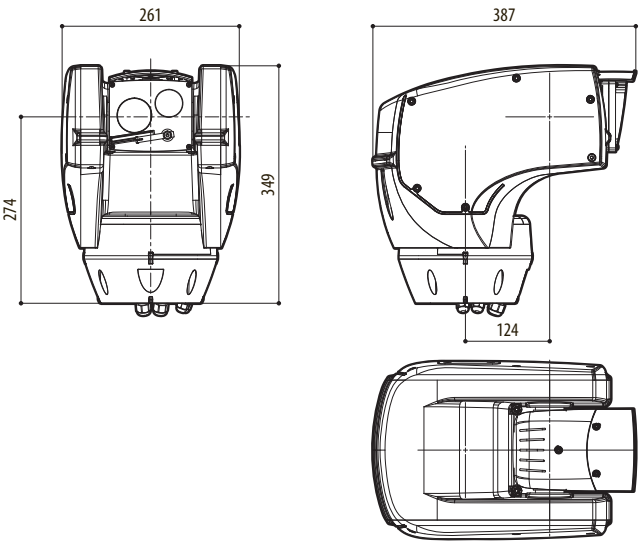


Fig. 100 ULISSE COMPACT THERMAL

16 Annexe A - Tableau des adresses dip-switch

Ci-après, on reporte toutes les combinaisons possibles.

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse non valide	Adresse 512
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 1	Adresse 513
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 2	Adresse 514
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 3	Adresse 515
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 4	Adresse 516
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 5	Adresse 517
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 6	Adresse 518
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 7	Adresse 519
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 8	Adresse 520
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 9	Adresse 521
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 10	Adresse 522
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 11	Adresse 523
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 12	Adresse 524
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 13	Adresse 525
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 14	Adresse 526
ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 15	Adresse 527
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 16	Adresse 528
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 17	Adresse 529
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 18	Adresse 530
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 19	Adresse 531
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 20	Adresse 532
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 21	Adresse 533
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 22	Adresse 534
ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 23	Adresse 535
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 24	Adresse 536
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 25	Adresse 537
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 26	Adresse 538
ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 27	Adresse 539
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 28	Adresse 540
ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 29	Adresse 541
OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 30	Adresse 542
ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 31	Adresse 543
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 32	Adresse 544
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 33	Adresse 545
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 34	Adresse 546
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 35	Adresse 547
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 36	Adresse 548
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 37	Adresse 549
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 38	Adresse 550
ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 39	Adresse 551
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 40	Adresse 552
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 41	Adresse 553
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 42	Adresse 554
ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 43	Adresse 555

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 44	Adresse 556
ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 45	Adresse 557
OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 46	Adresse 558
ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 47	Adresse 559
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 48	Adresse 560
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 49	Adresse 561
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 50	Adresse 562
ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 51	Adresse 563
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 52	Adresse 564
ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 53	Adresse 565
OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 54	Adresse 566
ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 55	Adresse 567
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 56	Adresse 568
ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 57	Adresse 569
OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 58	Adresse 570
ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 59	Adresse 571
OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 60	Adresse 572
ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 61	Adresse 573
OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 62	Adresse 574
ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 63	Adresse 575
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 64	Adresse 576
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 65	Adresse 577
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 66	Adresse 578
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 67	Adresse 579
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 68	Adresse 580
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 69	Adresse 581
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 70	Adresse 582
ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 71	Adresse 583
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 72	Adresse 584
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 73	Adresse 585
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 74	Adresse 586
ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 75	Adresse 587
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 76	Adresse 588
ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 77	Adresse 589
OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 78	Adresse 590
ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 79	Adresse 591
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 80	Adresse 592
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 81	Adresse 593
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 82	Adresse 594
ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 83	Adresse 595
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 84	Adresse 596
ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 85	Adresse 597
OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 86	Adresse 598
ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 87	Adresse 599
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 88	Adresse 600
ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 89	Adresse 601
OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 90	Adresse 602

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 91	Adresse 603
OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 92	Adresse 604
ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 93	Adresse 605
OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 94	Adresse 606
ON	ON	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 95	Adresse 607
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 96	Adresse 608
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 97	Adresse 609
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 98	Adresse 610
ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 99	Adresse 611
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 100	Adresse 612
ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 101	Adresse 613
OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 102	Adresse 614
ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 103	Adresse 615
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 104	Adresse 616
ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 105	Adresse 617
OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 106	Adresse 618
ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 107	Adresse 619
OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 108	Adresse 620
ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 109	Adresse 621
OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 110	Adresse 622
ON	ON	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 111	Adresse 623
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 112	Adresse 624
ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 113	Adresse 625
OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 114	Adresse 626
ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 115	Adresse 627
OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 116	Adresse 628
ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 117	Adresse 629
OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 118	Adresse 630
ON	ON	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 119	Adresse 631
OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 120	Adresse 632
ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 121	Adresse 633
OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 122	Adresse 634
ON	ON	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 123	Adresse 635
OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	Adresse 124	Adresse 636
ON	OFF	ON	ON	ON	ON	ON	OFF	OFF	Adresse 125	Adresse 637
OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	Adresse 126	Adresse 638
ON	ON	ON	ON	ON	ON	ON	OFF	OFF	Adresse 127	Adresse 639
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 128	Adresse 640
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 129	Adresse 641
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 130	Adresse 642
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 131	Adresse 643
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 132	Adresse 644
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 133	Adresse 645
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 134	Adresse 646
ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 135	Adresse 647
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 136	Adresse 648
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 137	Adresse 649

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 138	Adresse 650
ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 139	Adresse 651
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 140	Adresse 652
ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 141	Adresse 653
OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 142	Adresse 654
ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 143	Adresse 655
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 144	Adresse 656
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 145	Adresse 657
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 146	Adresse 658
ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 147	Adresse 659
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 148	Adresse 660
ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 149	Adresse 661
OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 150	Adresse 662
ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 151	Adresse 663
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 152	Adresse 664
ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 153	Adresse 665
OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 154	Adresse 666
ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 155	Adresse 667
OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 156	Adresse 668
ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 157	Adresse 669
OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 158	Adresse 670
ON	ON	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 159	Adresse 671
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 160	Adresse 672
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 161	Adresse 673
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 162	Adresse 674
ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 163	Adresse 675
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 164	Adresse 676
ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 165	Adresse 677
OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 166	Adresse 678
ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 167	Adresse 679
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 168	Adresse 680
ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 169	Adresse 681
OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 170	Adresse 682
ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 171	Adresse 683
OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 172	Adresse 684
ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 173	Adresse 685
OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 174	Adresse 686
ON	ON	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 175	Adresse 687
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 176	Adresse 688
ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 177	Adresse 689
OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 178	Adresse 690
ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 179	Adresse 691
OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 180	Adresse 692
ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 181	Adresse 693
OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 182	Adresse 694
ON	ON	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 183	Adresse 695
OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 184	Adresse 696

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 185	Adresse 697
OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 186	Adresse 698
ON	ON	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 187	Adresse 699
OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	Adresse 188	Adresse 700
ON	OFF	ON	ON	ON	ON	OFF	ON	OFF	Adresse 189	Adresse 701
OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	Adresse 190	Adresse 702
ON	ON	ON	ON	ON	ON	OFF	ON	OFF	Adresse 191	Adresse 703
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 192	Adresse 704
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 193	Adresse 705
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 194	Adresse 706
ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 195	Adresse 707
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 196	Adresse 708
ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 197	Adresse 709
OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 198	Adresse 710
ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 199	Adresse 711
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 200	Adresse 712
ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 201	Adresse 713
OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 202	Adresse 714
ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 203	Adresse 715
OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 204	Adresse 716
ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 205	Adresse 717
OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 206	Adresse 718
ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 207	Adresse 719
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 208	Adresse 720
ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 209	Adresse 721
OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 210	Adresse 722
ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 211	Adresse 723
OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 212	Adresse 724
ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 213	Adresse 725
OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 214	Adresse 726
ON	ON	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 215	Adresse 727
OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 216	Adresse 728
ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 217	Adresse 729
OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 218	Adresse 730
ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 219	Adresse 731
OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	Adresse 220	Adresse 732
ON	OFF	ON	ON	ON	OFF	ON	ON	OFF	Adresse 221	Adresse 733
OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	Adresse 222	Adresse 734
ON	ON	ON	ON	ON	OFF	ON	ON	OFF	Adresse 223	Adresse 735
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 224	Adresse 736
ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 225	Adresse 737
OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 226	Adresse 738
ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 227	Adresse 739
OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 228	Adresse 740
ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 229	Adresse 741
OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 230	Adresse 742
ON	ON	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 231	Adresse 743

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 232	Adresse 744
ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 233	Adresse 745
OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 234	Adresse 746
ON	ON	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 235	Adresse 747
OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	Adresse 236	Adresse 748
ON	OFF	ON	ON	OFF	ON	ON	ON	OFF	Adresse 237	Adresse 749
OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	Adresse 238	Adresse 750
ON	ON	ON	ON	OFF	ON	ON	ON	OFF	Adresse 239	Adresse 751
OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 240	Adresse 752
ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 241	Adresse 753
OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 242	Adresse 754
ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 243	Adresse 755
OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	Adresse 244	Adresse 756
ON	OFF	ON	OFF	ON	ON	ON	ON	OFF	Adresse 245	Adresse 757
OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	Adresse 246	Adresse 758
ON	ON	ON	OFF	ON	ON	ON	ON	OFF	Adresse 247	Adresse 759
OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	Adresse 248	Adresse 760
ON	OFF	OFF	ON	ON	ON	ON	ON	OFF	Adresse 249	Adresse 761
OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	Adresse 250	Adresse 762
ON	ON	OFF	ON	ON	ON	ON	ON	OFF	Adresse 251	Adresse 763
OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	Adresse 252	Adresse 764
ON	OFF	ON	ON	ON	ON	ON	ON	OFF	Adresse 253	Adresse 765
OFF	ON	ON	ON	ON	ON	ON	ON	OFF	Adresse 254	Adresse 766
ON	ON	ON	ON	ON	ON	ON	ON	OFF	Adresse 255	Adresse 767
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 256	Adresse 768
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 257	Adresse 769
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 258	Adresse 770
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 259	Adresse 771
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 260	Adresse 772
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 261	Adresse 773
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 262	Adresse 774
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 263	Adresse 775
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 264	Adresse 776
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 265	Adresse 777
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 266	Adresse 778
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 267	Adresse 779
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 268	Adresse 780
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 269	Adresse 781
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 270	Adresse 782
ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 271	Adresse 783
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 272	Adresse 784
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 273	Adresse 785
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 274	Adresse 786
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 275	Adresse 787
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 276	Adresse 788
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 277	Adresse 789
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 278	Adresse 790

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 279	Adresse 791
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 280	Adresse 792
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 281	Adresse 793
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 282	Adresse 794
ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 283	Adresse 795
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 284	Adresse 796
ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 285	Adresse 797
OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 286	Adresse 798
ON	ON	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 287	Adresse 799
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 288	Adresse 800
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 289	Adresse 801
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 290	Adresse 802
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 291	Adresse 803
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 292	Adresse 804
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 293	Adresse 805
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 294	Adresse 806
ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 295	Adresse 807
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 296	Adresse 808
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 297	Adresse 809
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 298	Adresse 810
ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 299	Adresse 811
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 300	Adresse 812
ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 301	Adresse 813
OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 302	Adresse 814
ON	ON	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 303	Adresse 815
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 304	Adresse 816
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 305	Adresse 817
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 306	Adresse 818
ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 307	Adresse 819
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 308	Adresse 820
ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 309	Adresse 821
OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 310	Adresse 822
ON	ON	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 311	Adresse 823
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 312	Adresse 824
ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 313	Adresse 825
OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 314	Adresse 826
ON	ON	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 315	Adresse 827
OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	Adresse 316	Adresse 828
ON	OFF	ON	ON	ON	ON	OFF	OFF	ON	Adresse 317	Adresse 829
OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	Adresse 318	Adresse 830
ON	ON	ON	ON	ON	ON	OFF	OFF	ON	Adresse 319	Adresse 831
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 320	Adresse 832
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 321	Adresse 833
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 322	Adresse 834
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 323	Adresse 835
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 324	Adresse 836
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 325	Adresse 837

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 326	Adresse 838
ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 327	Adresse 839
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 328	Adresse 840
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 329	Adresse 841
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 330	Adresse 842
ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 331	Adresse 843
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 332	Adresse 844
ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 333	Adresse 845
OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 334	Adresse 846
ON	ON	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 335	Adresse 847
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 336	Adresse 848
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 337	Adresse 849
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 338	Adresse 850
ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 339	Adresse 851
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 340	Adresse 852
ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 341	Adresse 853
OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 342	Adresse 854
ON	ON	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 343	Adresse 855
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 344	Adresse 856
ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 345	Adresse 857
OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 346	Adresse 858
ON	ON	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 347	Adresse 859
OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	Adresse 348	Adresse 860
ON	OFF	ON	ON	ON	OFF	ON	OFF	ON	Adresse 349	Adresse 861
OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	Adresse 350	Adresse 862
ON	ON	ON	ON	ON	OFF	ON	OFF	ON	Adresse 351	Adresse 863
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 352	Adresse 864
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 353	Adresse 865
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 354	Adresse 866
ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 355	Adresse 867
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 356	Adresse 868
ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 357	Adresse 869
OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 358	Adresse 870
ON	ON	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 359	Adresse 871
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 360	Adresse 872
ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 361	Adresse 873
OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 362	Adresse 874
ON	ON	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 363	Adresse 875
OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	Adresse 364	Adresse 876
ON	OFF	ON	ON	OFF	ON	ON	OFF	ON	Adresse 365	Adresse 877
OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	Adresse 366	Adresse 878
ON	ON	ON	ON	OFF	ON	ON	OFF	ON	Adresse 367	Adresse 879
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 368	Adresse 880
ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 369	Adresse 881
OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 370	Adresse 882
ON	ON	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 371	Adresse 883
OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	Adresse 372	Adresse 884

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	ON	OFF	ON	ON	ON	OFF	ON	Adresse 373	Adresse 885
OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	Adresse 374	Adresse 886
ON	ON	ON	OFF	ON	ON	ON	OFF	ON	Adresse 375	Adresse 887
OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	Adresse 376	Adresse 888
ON	OFF	OFF	ON	ON	ON	ON	OFF	ON	Adresse 377	Adresse 889
OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	Adresse 378	Adresse 890
ON	ON	OFF	ON	ON	ON	ON	OFF	ON	Adresse 379	Adresse 891
OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	Adresse 380	Adresse 892
ON	OFF	ON	ON	ON	ON	ON	OFF	ON	Adresse 381	Adresse 893
OFF	ON	ON	ON	ON	ON	ON	OFF	ON	Adresse 382	Adresse 894
ON	ON	ON	ON	ON	ON	ON	OFF	ON	Adresse 383	Adresse 895
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 384	Adresse 896
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 385	Adresse 897
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 386	Adresse 898
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 387	Adresse 899
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 388	Adresse 900
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 389	Adresse 901
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 390	Adresse 902
ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 391	Adresse 903
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 392	Adresse 904
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 393	Adresse 905
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 394	Adresse 906
ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 395	Adresse 907
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 396	Adresse 908
ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 397	Adresse 909
OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 398	Adresse 910
ON	ON	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 399	Adresse 911
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 400	Adresse 912
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 401	Adresse 913
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 402	Adresse 914
ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 403	Adresse 915
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 404	Adresse 916
ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 405	Adresse 917
OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 406	Adresse 918
ON	ON	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 407	Adresse 919
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 408	Adresse 920
ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 409	Adresse 921
OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 410	Adresse 922
ON	ON	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 411	Adresse 923
OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	Adresse 412	Adresse 924
ON	OFF	ON	ON	ON	OFF	OFF	ON	ON	Adresse 413	Adresse 925
OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	Adresse 414	Adresse 926
ON	ON	ON	ON	ON	OFF	OFF	ON	ON	Adresse 415	Adresse 927
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 416	Adresse 928
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 417	Adresse 929
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 418	Adresse 930
ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 419	Adresse 931

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 420	Adresse 932
ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 421	Adresse 933
OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 422	Adresse 934
ON	ON	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 423	Adresse 935
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 424	Adresse 936
ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 425	Adresse 937
OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 426	Adresse 938
ON	ON	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 427	Adresse 939
OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	Adresse 428	Adresse 940
ON	OFF	ON	ON	OFF	ON	OFF	ON	ON	Adresse 429	Adresse 941
OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	Adresse 430	Adresse 942
ON	ON	ON	ON	OFF	ON	OFF	ON	ON	Adresse 431	Adresse 943
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 432	Adresse 944
ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 433	Adresse 945
OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 434	Adresse 946
ON	ON	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 435	Adresse 947
OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	Adresse 436	Adresse 948
ON	OFF	ON	OFF	ON	ON	OFF	ON	ON	Adresse 437	Adresse 949
OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	Adresse 438	Adresse 950
ON	ON	ON	OFF	ON	ON	OFF	ON	ON	Adresse 439	Adresse 951
OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	Adresse 440	Adresse 952
ON	OFF	OFF	ON	ON	ON	OFF	ON	ON	Adresse 441	Adresse 953
OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	Adresse 442	Adresse 954
ON	ON	OFF	ON	ON	ON	OFF	ON	ON	Adresse 443	Adresse 955
OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	Adresse 444	Adresse 956
ON	OFF	ON	ON	ON	ON	OFF	ON	ON	Adresse 445	Adresse 957
OFF	ON	ON	ON	ON	ON	OFF	ON	ON	Adresse 446	Adresse 958
ON	ON	ON	ON	ON	ON	OFF	ON	ON	Adresse 447	Adresse 959
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 448	Adresse 960
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 449	Adresse 961
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 450	Adresse 962
ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 451	Adresse 963
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 452	Adresse 964
ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 453	Adresse 965
OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 454	Adresse 966
ON	ON	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 455	Adresse 967
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 456	Adresse 968
ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 457	Adresse 969
OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 458	Adresse 970
ON	ON	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 459	Adresse 971
OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	Adresse 460	Adresse 972
ON	OFF	ON	ON	OFF	OFF	ON	ON	ON	Adresse 461	Adresse 973
OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	Adresse 462	Adresse 974
ON	ON	ON	ON	OFF	OFF	ON	ON	ON	Adresse 463	Adresse 975
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 464	Adresse 976
ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 465	Adresse 977
OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 466	Adresse 978

CONFIGURATION ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 467	Adresse 979
OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	Adresse 468	Adresse 980
ON	OFF	ON	OFF	ON	OFF	ON	ON	ON	Adresse 469	Adresse 981
OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	Adresse 470	Adresse 982
ON	ON	ON	OFF	ON	OFF	ON	ON	ON	Adresse 471	Adresse 983
OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	Adresse 472	Adresse 984
ON	OFF	OFF	ON	ON	OFF	ON	ON	ON	Adresse 473	Adresse 985
OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	Adresse 474	Adresse 986
ON	ON	OFF	ON	ON	OFF	ON	ON	ON	Adresse 475	Adresse 987
OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	Adresse 476	Adresse 988
ON	OFF	ON	ON	ON	OFF	ON	ON	ON	Adresse 477	Adresse 989
OFF	ON	ON	ON	ON	OFF	ON	ON	ON	Adresse 478	Adresse 990
ON	ON	ON	ON	ON	OFF	ON	ON	ON	Adresse 479	Adresse 991
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 480	Adresse 992
ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 481	Adresse 993
OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 482	Adresse 994
ON	ON	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 483	Adresse 995
OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	Adresse 484	Adresse 996
ON	OFF	ON	OFF	OFF	ON	ON	ON	ON	Adresse 485	Adresse 997
OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	Adresse 486	Adresse 998
ON	ON	ON	OFF	OFF	ON	ON	ON	ON	Adresse 487	Adresse 999
OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	Adresse 488	Adresse 1000
ON	OFF	OFF	ON	OFF	ON	ON	ON	ON	Adresse 489	Adresse 1001
OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	Adresse 490	Adresse 1002
ON	ON	OFF	ON	OFF	ON	ON	ON	ON	Adresse 491	Adresse 1003
OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	Adresse 492	Adresse 1004
ON	OFF	ON	ON	OFF	ON	ON	ON	ON	Adresse 493	Adresse 1005
OFF	ON	ON	ON	OFF	ON	ON	ON	ON	Adresse 494	Adresse 1006
ON	ON	ON	ON	OFF	ON	ON	ON	ON	Adresse 495	Adresse 1007
OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	Adresse 496	Adresse 1008
ON	OFF	OFF	OFF	ON	ON	ON	ON	ON	Adresse 497	Adresse 1009
OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	Adresse 498	Adresse 1010
ON	ON	OFF	OFF	ON	ON	ON	ON	ON	Adresse 499	Adresse 1011
OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	Adresse 500	Adresse 1012
ON	OFF	ON	OFF	ON	ON	ON	ON	ON	Adresse 501	Adresse 1013
OFF	ON	ON	OFF	ON	ON	ON	ON	ON	Adresse 502	Adresse 1014
ON	ON	ON	OFF	ON	ON	ON	ON	ON	Adresse 503	Adresse 1015
OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	Adresse 504	Adresse 1016
ON	OFF	OFF	ON	ON	ON	ON	ON	ON	Adresse 505	Adresse 1017
OFF	ON	OFF	ON	ON	ON	ON	ON	ON	Adresse 506	Adresse 1018
ON	ON	OFF	ON	ON	ON	ON	ON	ON	Adresse 507	Adresse 1019
OFF	OFF	ON	ON	ON	ON	ON	ON	ON	Adresse 508	Adresse 1020
ON	OFF	ON	ON	ON	ON	ON	ON	ON	Adresse 509	Adresse 1021
OFF	ON	ON	ON	ON	ON	ON	ON	ON	Adresse 510	Adresse 1022
ON	ON	ON	ON	ON	ON	ON	ON	ON	Adresse 511	Adresse 1023

Tab. 19

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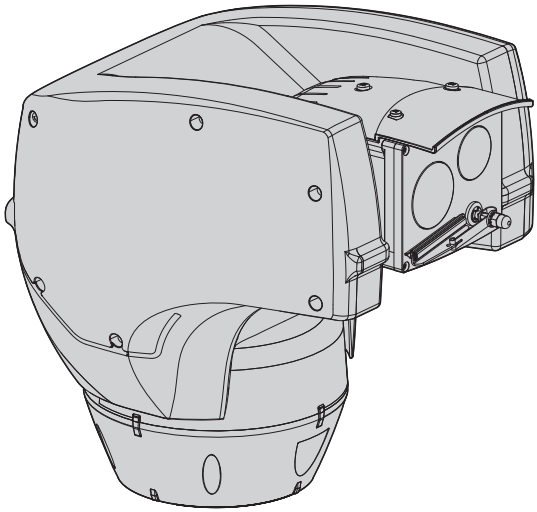
ULISSE COMPACT THERMAL

Dual-Kamera Positioniereinheit für Wärmebildkameras



DE **Deutsch** - Bedienungslanleitung

Inhaltsverzeichnis

1 Allgemeines

Lesen Sie bitte vor dem Installieren und dem Verwenden dieses Gerätes die Bedienungsanleitung sorgfältig durch. Bewahren Sie sie zum späteren Nachschlagen auf.

1.1 Schreibweisen

GEFAHR!
Erhöhte Gefährdung.
Stromschlaggefahr. Falls nichts anderes angegeben, unterbrechen Sie die Stromversorgung, bevor die beschriebenen Arbeiten durchgeführt werden.

GEFAHR!
Heiße Oberfläche.
Nicht berühren. Die Oberflächen sind heiß und können bei Berührung zu Verbrennungen führen.

GEFAHR!
Gefahr mechanischer Natur.
Quetsch- oder Scherkantengefahr.

ACHTUNG!
Mittlere Gefährdung.
Der genannte Vorgang hat große Bedeutung für den einwandfreien Betrieb des Systems: es wird gebeten, sich die Verfahrensweise anzulesen und zu befolgen.

ANMERKUNG
Beschreibung der Systemmerkmale.
Eine sorgfältige Lektüre wird empfohlen, um das Verständnis der folgenden Phasen zu gewährleisten.

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Trotzdem sollen den Benutzern (Installationstechnikern und Bedienern) einige Hinweise an die Hand gegeben werden, die es ihnen ermöglichen, unter sicherstmöglichen Bedingungen zu arbeiten:

Die Einrichtung darf nur mit größter Vorsicht transportiert werden. Ruckartige Haltemanöver, Höhenunterschiede und starke Aufpralle können das Objekt schädigen oder den Benutzer verletzten.

Das Gebäude muss einen zweipoligen Schutzstromkreis mit maximal 20 A besitzen (elektromagnetisch und thermisch). Dieser Kreis muss auch einen zweipoligen Leistungsschalter umfassen, der darüber hinaus den Erdschlussstrom absichert (elektromagnetische und thermische Überstromauslösung + Differenzial) und einen Kontaktabstand von mindestens 3 mm aufweist.

- Die Installation und Wartung der Vorrichtung ist technischen Fachleuten vorbehalten.
- Vor technischen Eingriffen am Gerät muss die Stromversorgung unterbrochen werden.
- Es dürfen keine Versorgungskabel mit Verschleiß- oder Alterungsspuren verwendet werden.
- Unter keinen Umständen dürfen Veränderungen oder Anschlüsse vorgenommen werden, die in diesem Handbuch nicht genannt sind: Der Gebrauch ungeeigneten Geräts kann die Sicherheit des Personals und der Anlage schwer gefährden.
- Es dürfen nur Original-Ersatzteile verwendet werden. Nicht originale Ersatzteile können zu Bränden, elektrischen Entladungen oder anderen Gefahren führen.
- Vor der Installation ist anhand des Kennzeichnungsschildes nachzuprüfen, ob das gelieferte Material die gewünschten Eigenschaften aufweist (*"4.2 Kennzeichnung des Produkts", Seite 10*).
- Vorgeschrieben ist der Anschluss an eine Versorgungsquelle, deren Eigenschaften den Angaben auf dem Kennzeichnungsschild entsprechen. Vor der Installation ist zu prüfen, ob die Stromleitung sachgerecht abgetrennt ist. Bei Einrichtungen mit einer Speisung von 24Vac darf die Versorgungsspannung die Toleranzen (+/- 10%) nicht überschreiten. Die Anschlüsse müssen den örtlichen Vorschriften entsprechen. Besteht keine Sicherheit über den Liefertyp, setzen Sie sich bitte mit der Firma in Verbindung, die diesbezüglich gerne Auskunft erteilt.
- Die Einrichtung ist für den dauerhaften Einbau in ein Gebäude oder eine andere geeignete Struktur konzipiert.
- Die Einrichtung ist so zu montieren, dass sie für keine andere Person als den Techniker oder Installateur zugänglich ist. Da sie mit beweglichen Teilen ausgestattet ist, bleibt ein Restrisiko, sich an den Bewegungselementen zu verletzen.
- Bringen Sie das Schildchen **Gefährliche Bewegungsteile** (*Fig. 02, Seite 11*) in der Nähe der Einrichtung an.
- Das Gerät nicht in der Nähe entzündlicher Stoffe benutzen.
- Kindern oder unbefugten Personen ist der Gebrauch des Gerätes zu untersagen.
- Das Gerät gilt erst dann als deaktiviert, wenn die Stromversorgung ausgeschaltet und die Verbindungskabel zu den anderen Einrichtungen entfernt worden sind.
- Der Einbau soll mit einer Absperrvorrichtung ausgestattet sein , die im Notfall sofort erkennbar und benutzbar sein soll.
- Die Wartung der Einrichtung ist Fachleuten vorbehalten. Während der Wartungsarbeiten ist die tätige Person der Gefahr von Stromschlägen und anderen Gefahren ausgesetzt.
- Verwenden Sie nur vom Hersteller empfohlenes Zubehör. Jede nicht ausdrücklich vom Hersteller genehmigte Änderung führt zum Verfall der Gewährleistungsrechte.
- Erden SIe das Koaxialkabel.
- Vor dem Anschluss sämtlicher Signalkabel ist zu prüfen, ob die Einrichtung sachgerecht mit dem Erdungskreis verbunden ist.
- Wenn die Einrichtung von der Anlage getrennt werden muss, ist das Erdungskabel stets zuletzt abzuklemmen.
- Vermeiden Sie durch gebotene Vorkehrungen, dass das Gerät durch elektrostatische Entladungen beschädigt wird.
- Die Einheit ist dafür ausgelegt, über ein dreipoliges Kabel angeschlossen zu werden. Folgen Sie den Anleitungen in diesem Handbuch für den korrekten Anschluss des Erdungskreises.
- Vor allen technischen Eingriffen ist die Stromversorgung zu unterbrechen. Außerdem ist die Einrichtung vorsichtig zu handhaben: Starke mechanische Beanspruchungen können der Einheit Schaden zufügen.
- Achten Sie besonders auf die Isolierabstände zwischen der Versorgungsleitung und allen anderen Kabeln einschließlich der Vorrichtungen zum Schutz gegen Blitzeinschlag.

- Der Hauptschalter muss zugänglich sein, um bei Bedarf schnell reagieren zu können.
- Lediglich für die Produkte mit UL - Markierung mit 24Vac - Versorgung ein UL - Speisetransformator der Klasse 2 verwenden, welches den geltenden Richtlinien entspricht.
- Die Installationskategorie (auch als Überspannungskategorie bezeichnet) gibt den Pegel der Netzspannungsstöße an, denen die Ausrüstung ausgesetzt ist. Die Kategorie hängt vom Installationsort der Ausrüstung und von den externen Schutzeinrichtungen gegen Spannungsstöße ab. Ausrüstungen in einer gewerblichen Umgebung, die direkt mit den Hauptzweigen der Versorgungsanlage verbunden sind, gehören zur Installationskategorie III. In diesem Fall ist eine Abstufung auf Installationskategorie II erforderlich. Dies kann durch den Einsatz eines Isoliertransformators mit einem geerdeten Schirm zwischen Primär- und Sekundärwicklung erreicht werden. Alternativ können UL-gelistete Überspannungsschutzvorrichtungen (SPD) von Fase zu Nullleiter und von Nullleiter zur Erde geführt werden. UL-gelistete Überspannungsschutzvorrichtungen sind für die wiederholte Begrenzung kurzzeitig auftretender Spannungsspitzen und für die folgenden nominellen Betriebsbedingungen auszulegen: Typ 2 (Dauerhaft angeschlossene Überspannungsschutzvorrichtungen für die Installation auf der Ladungsseite der Hilfseinrichtung); Nennentladestrom (In) 20kA min. Benutzt werden können beispielsweise: FERRAZ SHAWMUT, STT2240SPG-CN, STT2BL240SPG-CN, spezifiziert für 120/240Vac, (In=20kA). Der maximale Abstand zwischen dem Einbau und der Abkürzung ist 5m.
- Dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen;in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen.

4 Identifizierung

4.1 Beschreibung und Bezeichnung des Produktes

ULISSE COMPACT THERMAL bietet eine integrierte Lösung für Hochsicherheitsanwendungen sogar bei totaler Dunkelheit, Nebel, Regen, Rauch usw.

Die Einheit vereint ein Hightech-Wärmebild-Kamera und eine optische Tag-/Nacht-Zoommodul, werkseitig eingestellt und im selben Gehäuse installiert.

ULISSE COMPACT THERMAL weist zwei unabhängige Video-Ausgänge auf, und eine doppelte Echtzeit-Ansicht auf den Monitoren, um den Bereich optimal zu überwachen.

ULYSSES COMPACT THERMAL bietet eine stufenlosen und High-Speed-Rotation, absolut genauer Positionierung und überlegener Bildqualität, extreme Robustheit und eine vereinfachte Systemkonfiguration. Die horizontale Geschwindigkeit stufenlos dreht von bis zu 200°/s und sich bewegt vertikal in einem Bereich von -90° bis +90°.

ULISSE COMPACT THERMAL unterstützt die Funktionen Preset, Autopan und Patrol mit einer Erfassungsgenauigkeit von 0.1°. Der S-N-Kopf kontrolliert und korrigiert fortlaufend seine Position; eine überaus extremen Funktionsbetriebsbedingungen.

Die Wärmebildkamera ist ein ungekühltes Vanadiumoxid-Mikrobolometer (VOx) mit 7.5-13.5 µm- Spectral Band; die liefert bewegte Wärmebilder im Format 320 x 256 (PAL) und 320x240 (NTSC) mit einer Bildfrequenz von 8,3 oder 25 fps (PAL) und 7.5 or 30fps (NTSC). Die hohe Empfindlichkeit NEdT 50mK zu f/1.0 sorgt für eine optimale Wärmebild. Sie unterstützt 2x- und 4x-Digitalzoom. Je nach erforderlichem Erkennungsabstand werden unterschiedliche Optiken (50mm, 25mm und 9mm) angeboten.

Die Parameter der thermische Kamera sind leicht konfigurierbar über OSD. Die Setup-Schnittstelle bietet typische voreingestellten Konfigurationen oder die vollständige Anpassung des Systems.

Die Kamera verfügt auch über Funktionen wie die isotherme Analyse (spezielle Farben der Objekte, die innerhalb der Parameter durch den Betreiber festgelegt) fallen, base-Thermografie und andere Farben der Szene.

Die integrierte Tag-/Nacht Kamera von SONY, mit mehreren optischen Zooms (36fach, 18fach oder 10fach), ermöglicht nah- und ferngelegene Objekte gleichermaßen mit einer außergewöhnlichen

Genauigkeit aufzunehmen und die Privatzonen dynamisch zu maskieren. Zudem gewährleistet der Sensor Super HAD 1/3" CCD (mit 10fachem Zoom) eine hohe Empfindlichkeit bei schlechten Lichtverhältnissen.

ULISSE COMPACT THERMAL ist auch mit das einzige Wärmebildkamera zur Verfügung. Lieferung in 24, 230 oder 120Vac und im PAL-oder NTSC-Modus.

Nicht nur mit OSD, ist das System ausgestattet, sondern auch mit einer Schnittstelle RS485/RS422 für die vollständige Bedienung des Systems und die Fernaktualisierung auf die neueste Firmwareversion.

Diese Lösung eignet sich besonders für Video-Überwachung rund um die Uhr in einem weiten Anwendungsfeld von Hochsicherheitsbereichen wie Geländesicherung, Flughäfen, Küstenschutz, Haftanstalten und Hafenanlagen.

4.2 Kennzeichnung des Produkts

Auf den Schwenk-Neige-Köpfen ULISSE COMPACT THERMAL befinden sich ein Schildchen, die der CE-Kennzeichnung entsprechen.

Das Schildchen auf dem Korpus nennt:

- Identifikationsnummer des Modells (Strichcode Extended 3/9)
- Versorgungsspannung (Volt)
- Frequenz (Hertz)
- Stromaufnahme (Ampere)
- IP Schutzart
- Seriennummer

4.2.1 Prüfung der Kennzeichnung

Vor Beginn der Installationsarbeiten ist zu kontrollieren, ob das gelieferte Material den jeweiligen Anforderungen entspricht. Zu erkennen ist dies anhand der Kennzeichnungsschilder.

Unter keinen Umständen dürfen Änderungen oder Anschlüsse vorgenommen werden, die in diesem Handbuch nicht genannt sind: Der Gebrauch ungeeigneten Gerätes kann eine schwere Gefahr für die Sicherheit des Personals und der Anlage bedeuten.

5 Versionen

5.2.1 Waschanlage

Ist der Schwenk-Neige-Kopf mit Scheibenwischer versehen, kann er auch eine externe Pumpe besitzen, die Wasser für die Reinigung der Scheibe heranführt.

Wie in der Abbildung gezeigt, befindet sich die Spritzvorrichtung außerhalb des Schwenk-Neige-Kopfes.

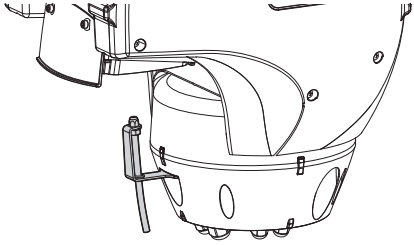

Fig. 01

Wenn der Befehl (*"10.9 Aktivierung Waschanlage (Washer)", Seite 45*) erteilt wird, positioniert sich der Schwenk-Neige-Kopf mit der Scheibe vor der Spritzanlage. Aktiviert werden nun für eine bestimmte Zeit die Pumpe und der Scheibenwischer; am Ende des Vorgangs kehrt ULISSE COMPACT THERMAL in die Ausgangsposition zurück.

Bei den Modellen mit Waschanlagen mit Standsensor kann ULISSE COMPACT THERMAL außerdem eine Bildschirmnachricht anzeigen, wenn der Flüssigkeitsstand im Behälter zu gering ist (nur bei Verwendung einer Pumpe der Serie UPTWAS mit hoher Druckhöhe).

Für Einzelheiten zur Konfiguration und Benutzung der Waschanlage siehe *"9.6.7 Menü Waschanlage", Seite 38*.

6 Vorbereitung des Produktes auf den Gebrauch

Jede vom Hersteller nicht ausdrücklich genehmigte Veränderung führt zum Verfall der Gewährleistungsrechte.

Alle andere Teile der Einheit mußen nicht ausmontiert werden (außer der Montage- und Wartungsvorgänge in diesem Handbuchvorgesehen).

6.1 Sicherheitsvorkehrungen vor dem Gebrauch

Das Gebäude muss einen zweipoligen Schutzstromkreis mit maximal 20 A besitzen (elektromagnetisch und thermisch). Dieser Kreis muss auch einen zweipoligen Leistungsschalter umfassen, der darüber hinaus den Erdschlussstrom absichert (elektromagnetische und thermische Überstromauslösung + Differenzial) und einen Kontaktabstand von mindestens 3 mm aufweist.

Das Gerät umfasst bewegliche Teile. Stellen Sie sicher, dass die Einheit an einer Stelle positioniert wird, die unter normalen Betriebsbedingungen nicht zugänglich ist. Bringen Sie das im Lieferumfang des Gerätes enthaltene Schildchen in der Nähe des Objektes an gut sichtbarer Stelle an.

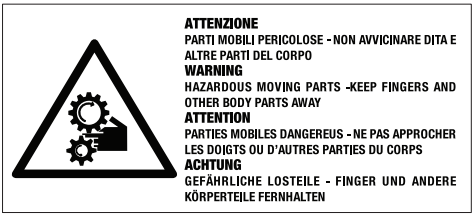

Fig. 02

6.2 Inhalt und Entfernen der Verpackung

Bei der Lieferung des Produktes ist zu prüfen, ob die Verpackung intakt ist oder offensichtliche Anzeichen von Stürzen oder Abrieb aufweist.

Bei offensichtlichen Schadensspuren an der Verpackung muss umgehend der Lieferant verständigt werden.

Bewahren Sie die Verpackung auf für den Fall, dass das Produkt zur Reparatur eingesendet werden muss.

Prüfen Sie, ob der Inhalt mit der nachstehenden Materialliste übereinstimmt:

- ULISSE COMPACT THERMAL Positionierungseinheit
- Zubehör Schachtel:
  - Serielles Verlängerungskabel
  - Schildchen
  - Silikonummantelung
  - Kabelbinder
  - Bedienungslanleitungen

6.3 Sichere Entsorgung der Verpackungsmaterialien

Die Verpackungsmaterialien sind vollständig wiederverwertbar. Es ist Sache des Installationstechnikers, sie getrennt, auf jeden Fall aber nach den geltenden Vorschriften des Anwendungslandes zu entsorgen.

Es wird nochmals empfohlen, mit Fehlfunktionen behaftetes Material in der Originalverpackung zurückzusenden.

6.4 Notwendiges Installationsmaterial

6.4.1 Befestigung der Halterung

Es gibt zwei Arten von Halterungen. Wählen Sie diejenige Halterung aus, die der Anlage am besten entspricht und befolgen Sie sämtliche Anweisungen aus diesem Kapitel.

Die Einrichtung muss in senkrechter Lage montiert werden. Jede andere Stellung könnte die Leistungen des Gerätes beeinträchtigen. Den Schwenk-Neige-Kopf nicht umgekehrt montieren.

Besondere Aufmerksamkeit verlangen die Befestigungssysteme des Gerätes. Soll das Gerät an einer Betonfläche fixiert werden, müssen Dübel verwendet werden, deren Zugmoment jeweils mindestens 300 daN beträgt. Ist die Fläche aus Metall, verwenden Sie Schrauben angemessener Länge mit einem Mindestdurchmesser von 8mm.

6.4.1.1 Befestigung mit Halterung (Optional)

Die Halterung hat ein Loch zum Durchführen der Anschlusskabel.

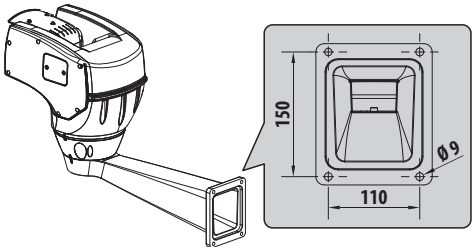

Fig. 03

6.4.1.2 Befestigung mit Haltesäule (Optional)

Der Ständer ermöglicht die interne Führung der Verbindungskabel.

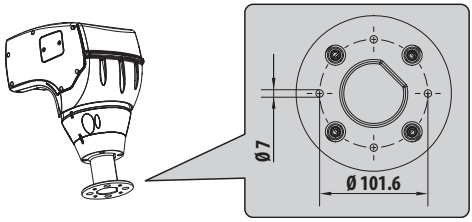

Fig. 04

6.4.2 Kabelführung

Die Verbindungskabel dürfen von außen nicht zugänglich sein. Außerdem muss das Kabel gegen Lösen durch Abziehen sachgerecht am Pfahl fixiert werden. So wird verhindert, dass es durch das hohe Gewicht unbeabsichtigt abgezogen wird und die Gerätesicherheit beeinträchtigt.

Die verwendeten Kabel müssen der Anlagenart angemessen sein.

Die Kabel so in die Halterung einführen, dass sie ungefähr 50cm hervorschauen

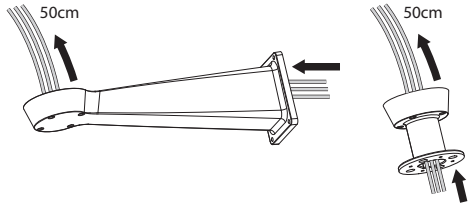

Fig. 05

7 Zusammenbau und Installation

Zusammenbau und Installation sind Fachleuten vorbehalten.

Dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen;in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen.

7.1 Installation

7.1.1 Anschließen der Kabel an die Basis

Unter keinen Umständen dürfen Änderungen oder Anschlüsse vorgenommen werden, die in diesem Handbuch nicht vorgesehen sind. Die Missachtung der Angaben, die das Handbuch zu den Anschlüssen macht, kann die Sicherheit von Personen und die Sicherheit der Anlage stark gefährden.

Die Vorverkabelungen des Produktes dürfen nicht verändert werden. Die Missachtung dieses Verbotes kann die Sicherheit des Personals und der Anlage stark gefährden. Außerdem führt sie zum Verlust der Gewährleistungsrechte.

Bewahren Sie ein Anschlussbild für die zukünftige Einsichtnahme auf.

Die Kabel in die Kabelhalter einführen und die Kabelhalter mit einem Anzugsmoment von 5Nm befestigen, während die Basis etwa 20cm von der Halterung entfernt gehalten wird. Die Kabelhalter eignen sich für Kabeldurchmesser zwischen 5 und 10mm.

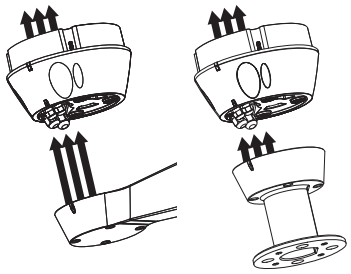

Fig. 06

7.1.2 Befestigung der Basis an der Halterung

Verwenden Sie die mit der Basis gelieferten Schrauben und Unterlegscheiben.

Nach der Positionierung der Dichtung (01) muss die Basis (02) auf der Halterung (03) befestigt werden. Verwenden Sie dazu die Schrauben (04), die Zahnscheiben (05) und die flachen Unterlegscheiben (06). Die O-Ringe gegen Schraubenverlust (07) einfügen.

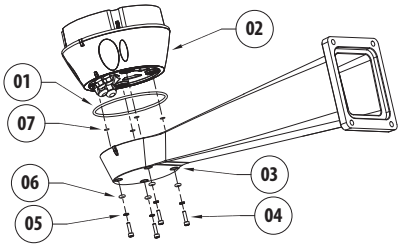

Fig. 07

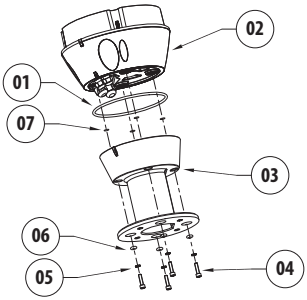

Fig. 08

Die 3 Markierungen auf der Basis an den Markierungen auf den Halterungen ausrichten, wie in der folgenden Abbildung dargestellt.

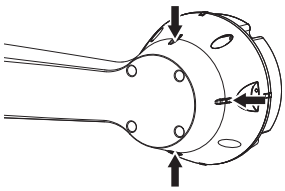

Fig. 09

Auf das Loch der Schrauben ein Gewindesicherungsmittel des Typs Loctite 243® auftragen.

Zur Fixierung ein Anzugsdrehmoment von 4Nm verwenden.

7.1.3 Anschluss der Stromversorgung

Die Einrichtung ist in Ausführungen mit unterschiedlichen Versorgungsspannungen erhältlich. Der tatsächliche Wert ist auf dem Kennzeichnungsschild des Produktes angeben.

Die Basis darf ausschließlich bei unterbrochener Stromversorgung und bei geöffneter Trennvorrichtung angeschlossen werden.

Im Zuge der Installation ist zu prüfen, ob die Merkmale der von der Anlage bereitgestellten Versorgung mit den erforderlichen Merkmalen der Einrichtung übereinstimmen.

Es ist zu prüfen, ob die Versorgungsquellen und die Anschlusskabel für den Systemverbrauch ausgelegt sind.

Das Erdungskabel muss um etwa 10mm länger sein, als die anderen beiden Kabel, um das ungewollte Lösen durch Ziehen des Kabels zu verhindern.

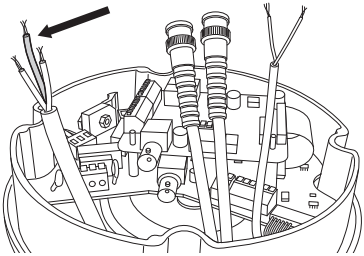

Fig. 10

Ferner muss das Versorgungskabel von einer Silikonummantelung (01) überzogen sein, die im Lieferumfang enthalten ist und mit dem zugehörigen Binder (02) fixiert wird. Außerdem müssen alle Signalkabel mit einem Kabelbinder zusammengefasst werden (03).

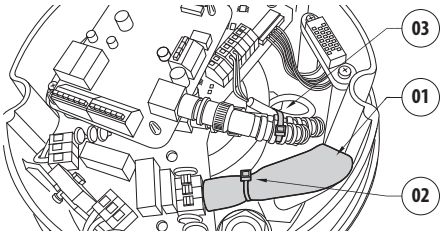

Fig. 11

Das Gebäude muss einen zweipoligen Schutzstromkreis mit maximal 20 A besitzen (elektromagnetisch und thermisch). Dieser Kreis muss auch einen zweipoligen Leistungsschalter umfassen, der darüber hinaus den Erdschlussstrom absichert (elektromagnetische und thermische Überstromauslösung + Differenzial) und einen Kontaktabstand von mindestens 3 mm aufweist.

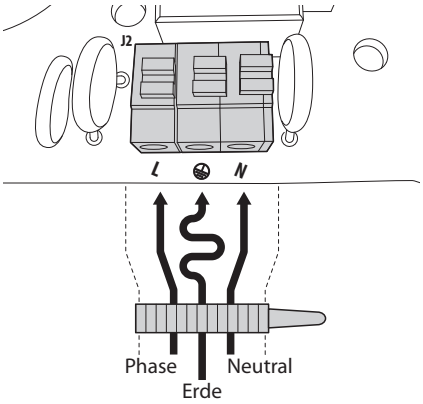

Fig. 12

Die Versorgungskabel sind der Klemme nach der folgenden Tabelle anzuschließen:

STROMVERSORGUNG ANSCHLUSS	
Spannung 24Vac	
Farbe	**Klemmen**
Vom Installierenden zu bestimmen	(N) Nullleiter
Vom Installierenden zu bestimmen	(L) Phase
Gelb/Grün	Erde
Spannung 230Vac	
Farbe	**Klemmen**
Blau	(N) Nullleiter
Braun	(L) Phase
Gelb/Grün	Erde
Spannung 120Vac	
Farbe	**Klemmen**
Blau	(N) Nullleiter
Braun	(L) Phase
Gelb/Grün	Erde

Tab. 01

Für die Produkte mit UL - Markierung, die für den nordamerikanischen Markt bestimmt sind, utilisieren ein UL listed - Speisetransformator der Klasse 2 verwenden.

Für den Anschluss der Versorgungsleitung die entsprechende Junction-box UPTJBUL verwenden. Für weitere Informationen siehe Bedienungs- und Installationshandbuch des Produktes.

7.1.4 Anschluss der Videokabel

Die Anlage gehört zum Typ CDS (Cable Distribution System), nicht an Kreisläufe SELV anschließen.

Zur Senkung der Brandgefahr dürfen nur Kabel benutzt werden, die mindestens der Größe 26AWG entsprechen.

7.1.4.1 Anschluss Hauptvideo

Das Videosignal liegt an den Steckverbindern J5 und J7 der Karte an. Verwenden Sie stets nur einen Steckverbinder.

Steckverbinder J5: Die Abschirmung und das Zentralkabel an die Klemmen **GND** und **CVBS** anschließen.

Steckbuchse J7: Das Koaxialkabel an die Buchse **BNC** (nicht im Lieferumfang enthalten), dann an die Buchse J7 anschließen.

Die Klemmen können Kabel mit Querschnitten zwischen 1.5mm² (AWG16) und 0,5mm² (AWG30) aufnehmen.

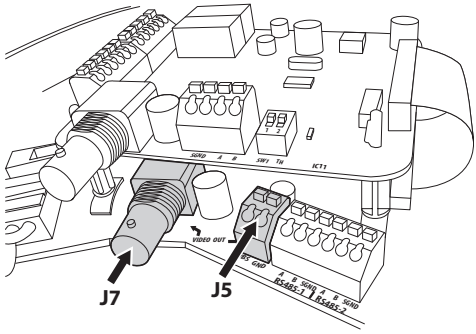

Fig. 13

7.1.4.2 Anschluss Sekundärvideo

Steckbuchse CN3: Das Koaxialkabel an die Buchse **BNC** (nicht im Lieferumfang enthalten), dann an die Buchse CN3 anschließen.

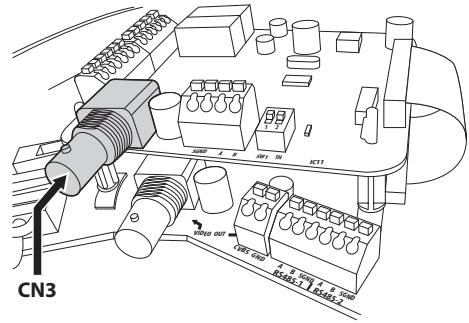

Fig. 14

7.1.4.3 Videosignalausgang (Version mit Doppelkamera)

Beschreibung der Videoausgänge:

- **Hauptvideo**: Der Hauptvideoausgang (Steckverbinder J5-J7, *Fig. 13, Seite 15*) wird benutzt, um das Videosignal des integrierten Moduls zu übertragen.
- **Sekundärvideo**: Der zweite Videoausgang (Steckverbinder CN3, *Fig. 14, Seite 15*) ermöglicht es, das Videosignal der Wärmebildkamera oder des integrierten Moduls zu wählen (*"10.11 Umschaltung des sekundären Videoausgangs", Seite 45*). Standardmäßig wird das von der Wärmebildkamera stammende Videosignal angezeigt.

7.1.4.4 Anschluss des Videokabels (Versionen mit nur einer Wärmebildkamera)

Beschreibung der Videoausgänge:

- **Hauptvideo**: Bei allen Modellen mit nur einer Wärmebildkamera wird der Hauptvideoausgang (Steckverbinder J5-J7, *Fig. 13, Seite 15*) benutzt, um das Videosignal der Wärmebildkamera zu übertragen.
- **Sekundärvideo**: Das sekundäre Videosignal (Steckverbinder CN3, *Fig. 14, Seite 15*) wird nicht benutzt.

7.1.5 Anschluss der Leitung für die Direktsteuerung der Wärmebildkamera RS485-3 (nur Versionen mit Doppelkamera)

Die Wärmebildkamera kann von außen über die serielle Leitung des Steckverbinders CN4 gesteuert werden (*"9.6.10 Menü Wärmebildkamera", Seite 39*).

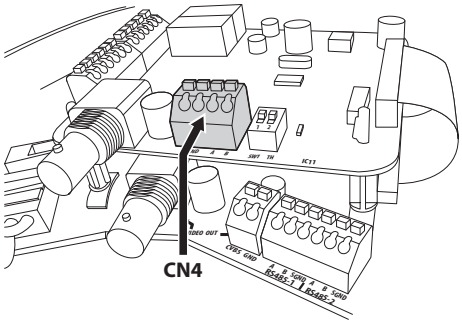

Fig. 15

7.1.6 Einstellung des DS1 Videoformats (nur Versionen mit Wärmebildkamera)

Dipschalter 1 ist dazu bestimmt, das Videoformat für das ausgehende Videosignal einzustellen.

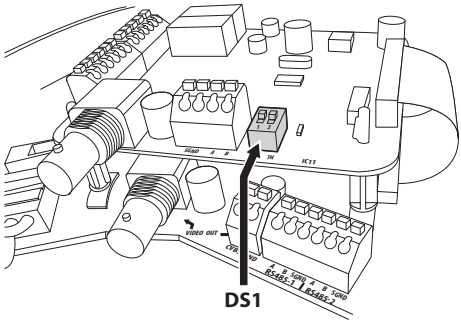

Fig. 16

CONFIGURATION DER (DS1)- VIDEO UND TELEMETRIE			
Beschreibung	**SW 1**	**SW 2**	**Konfiguration**
Video Format	ON	-	PAL Video Format
	OFF	-	NTSC Video Format

Tab. 02

Bei den Versionen mit Doppelkamera spielt die Stellung des Dipschalters keine Rolle.

7.1.7 Beschaltung der seriellen Leitung RS485-3 (DS1) mit Abschlusswiderstand

Mit Dipschalter 2 wird die Beschaltung der seriellen Leitung mit einem Abschlusswiderstand (120 Ohm) aktiviert.

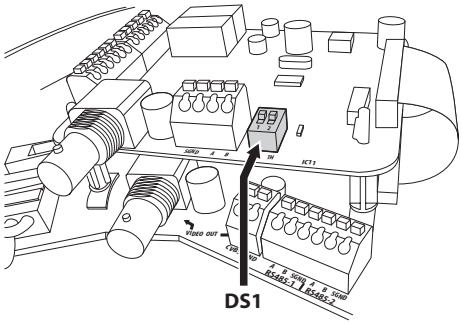

Fig. 17

CONFIGURATION DER (DS1)- VIDEO UND TELEMETRIE			
Beschreibung	**SW 1**	**SW 2**	**Konfiguration**
Endung der seriellen Leitung	-	ON	Endung RS485-3 frei
	-	OFF	Endung RS485-3 unfrei

Tab. 03

7.1.8 Anschluss der Telemetrieleitungen

Die Anlage gehört zum Typ TNV-1, nicht an Kreisläufe SELV anschließen.

Zur Senkung der Brandgefahr dürfen nur Kabel benutzt werden, die mindestens der Größe 26AWG entsprechen.

Das Produkt sieht zwei serielle Übertragungsleitungen RS485 (*Tab. 04, Seite 17*) vor, die je nach Stellung der Dipschalter 5 und 6 des Wählschalters **Seriell (DIP1)** der CPU Platine verschiedenartig eingerichtet werden können (*"7.1.14 Serielle Übertragungsleitungen (DIP1)", Seite 21*).

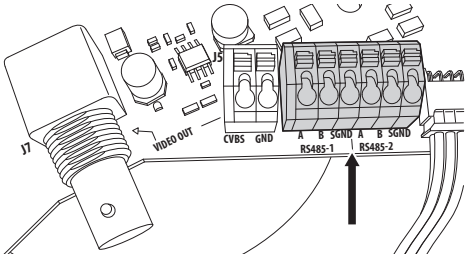

Fig. 18

SERIELLE LINIE	KLEMME	BESCHREIBUNG
RS485-1	A (+)	Linie RS485 (1)
	B (-)	Linie RS485 (1)
	SGND	Linienbegriff RS485-1
RS485-2	A (+)	Linie RS485 (2)
	B (-)	Linie RS485 (2)
	SGND	Linienbegriff RS485-2

Tab. 04

7.1.9 Anschluss der Alarme

Die Alarmkarte befindet sie sich in der Basis der Einheit, wie das folgende Bild zeigt.

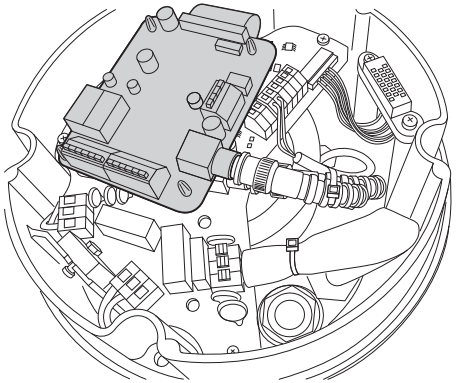

Fig. 19

Sie besitzt sechs Alarmkontakte und zwei Ausgangsrelais mit potenzialfreiem Kontakt. Folgende Alarmarten werden erkannt:

- Alarm mit potenzialfreiem Kontakt (5 Alarmeingänge verfügbar);
- Spannungsalarm (1 verfügbarer Alarmeingang, nur für die Standkontrolle des Schwimmers im Tank UPTWAS).

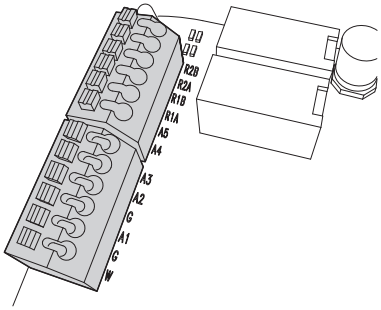

Fig. 20

KLEMME	BESCHREIBUNG
W	Alarm Schwimmer Washer *
G	Masse Alarm W oder Masse Alarme A1-A5
A1	Alarm 1 (potenzialfreier Kontakt)
G	Masse Alarme A1-A2-A3-A4 A5
A2	Alarm 2 (potenzialfreier Kontakt)
A3	Alarm 3 (potenzialfreier Kontakt)
A4	Alarm 4 (potenzialfreier Kontakt)
A5	Alarm 5 (potenzialfreier Kontakt) **

Tab. 05 * Alarmeingang ausschließlich für UPTWAS vorgesehen, Kontrolle Flüssigkeitsstand im Tank der Waschanlage.

Alle Alarme haben eine Reichweite von etwa 200 Metern, die sich mit einem nicht abgeschirmten Kabel eines Mindestquerschnitts von 0.25 qmm (AWG 24) erzielen lässt.

7.1.9.1 Anschluss Alarm mit potenzialfreiem Kontakt (Trockenkontakt)

Bei einem Alarm mit potenzialfreiem Kontakt (Alarme A1, A2, A3, A4, A5), ist der Anschluss wie folgt vorzunehmen:

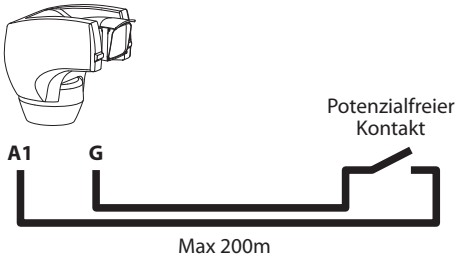

Fig. 21

Der Alarmschalter kann vom Typ NO (normalerweise offen) oder vom Typ NC (normalerweise geschlossen) sein.

Weitere Einzelheiten zur Konfiguration und Benutzung der Alarme in *"9.6.6.1 Menü Alarme", Seite 37*.

7.1.9.2 Relaisanschluss

Die Relais befinden sich in den Steckverbindern R1A und R1B (Relais 1) sowie R2A und R2B (Relais 2). Die Relais sind nicht gepolt, sodass es keine Rolle spielt, ob Klemme A oder B desselben Relais für Wechsel- oder Gleichspannungen benutzt wird.

KLEMME	BESCHREIBUNG
R1A	Relais 1 Klemme A
R1B	Relais 1 Klemme B
R2A	Relais 2 Klemme A
R2B	Relais 2 Klemme B

Tab. 06

Die Relais sind nur für niedrige Arbeitsspannungen (bis 30Vac oder 60Vdc) und mit einem Höchststrom von 2A verwendbar. Verwenden Sie ein Kabel mit einem Querschnitt, der der zu kontrollierenden Last angemessen ist. Die Klemme kann Kabel mit Querschnitten zwischen 0.5 und 1.5mm² aufnehmen (AWG 30-16).

Für weitere Einzelheiten zur Konfiguration und Verwendung der Relais siehe *"9.6.6.1 Menü Alarme", Seite 37*.

7.1.9.3 Anschluss der Waschanlage

Um die Pumpe der Waschanlage UPTWAS mit ULISSE COMPACT THERMAL zu verbinden, richten Sie sich bitte nach der folgenden Anschlussmethode:

UPTWAS (STECKVERBINDER CN4)	ALARMKARTE ULISSE COMPACT THERMAL (STECKVERBINDER CN1)
CMD	R2A
GND	R2B

Tab. 07

Relais 2 wird in diesem Fall ausschließlich für die Aktivierung des Befehls Scheibenwaschpumpe auf der Karte UPTWAS verwendet (*"9.6.7 Menü Waschanlage", Seite 38*).

Wird der mit Schwimmer ausgestattete Tank verwendet, muss außerdem die folgende Verkabelung vorgenommen werden:

UPTWAS (STECKVERBINDER CN4)	ALARMKARTE ULISSE COMPACT THERMAL (STECKVERBINDER CN2)
ALM	W
ALM/G	G

Tab. 08

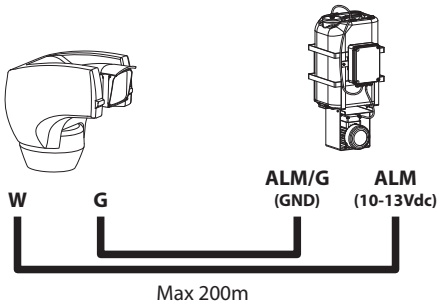

Fig. 22

Für weitere Einzelheiten zur Waschanlage siehe *"9.6.7 Menü Waschanlage", Seite 38*.

7.1.10 Montage der oberen Einheit

Den selbstzentrierenden Steckverbinder (01) der oberen Einheit ausrichten. Den seitlichen Überstand (02) in die Blickrichtung der Videokamera ausrichten. Die obere Einheit auf der Basis mit der Ausrichtung positionieren, wie in der Abbildung gezeigt.

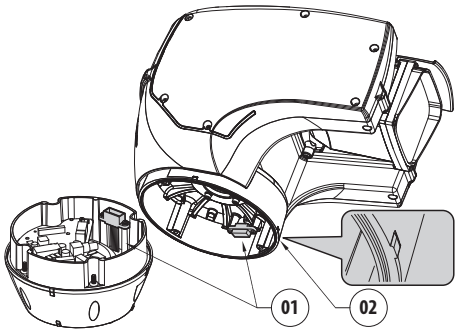

Fig. 23

Auf diese Weise sind die seitlichen Überstände auf der Basis und der oberen Einheit in der einzig möglichen Position ausgerichtet.

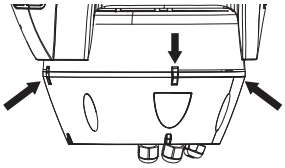

Fig. 24

Die obere Einheit (01) mit den Befestigungsschrauben (03), den Zahnscheiben (04) und den Flachscheiben (05) an der Basis (02) fixieren. Prüfen Sie, ob die Dichtung der Basis (06) vorhanden und in gutem Zustand ist.

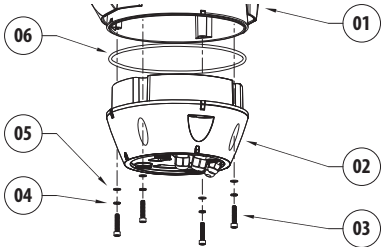

Fig. 25

Auf das Loch der Schrauben ein Gewindesicherungsmittel des Typs Loctite 243® auftragen.

Mit einem Anzugsmoment von 4Nm fixieren.

7.1.11 Konfiguration der Dip-Switch

Bevor die Einrichtung mit Strom versorgt wird, muss sie richtig mit den Dipschaltern innerhalb des Konfigurierungskläppchens konfiguriert werden. Sie wird durch Entfernen der Schrauben geöffnet, wie in der Abbildung dargestellt:

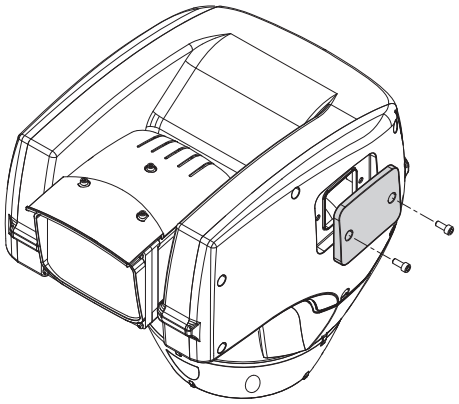

Fig. 26

Das folgende Schema zeigt die Dipschalter nach dem Öffnen des Konfigurierungskläppchens im oberen Teil.

Der nach oben zeigende Kipphebel des Dipschalters (SW) steht für den Wert 1 (ON), ein nach unten umgelegter Hebel steht für den Wert 0 (OFF).

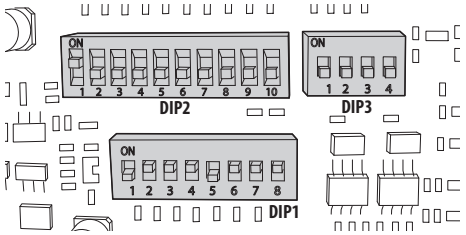

Fig. 27

7.1.12 Vorgabe des Einstellungsprüfmodus (DIP1)

- **SW 1=ON**: **Anzeige Konfiguration**. Nur verwenden, um die Konfiguration nach Vornahme der Einstellungen zu prüfen. Während des normalen Betriebes ist sicherzustellen, dass der kleine Hebel auf OFF steht (**SW 1=OFF**).

7.1.13 Einstellung der Baud Rate (DIP1)

Die Dipschalter 4, 3 und 2 werden benutzt, um die Kommunikationsgeschwindigkeit der Einrichtung gemäß der nachstehenden Tabelle vorzugeben.

EINSTELLUNG DER BAUD RATE (DIP1)						
Beschreibung	**SW 1**	**SW 2**	**SW 3**	**SW 4**	**SW 5-6-7-8**	**Konfiguration**
Auswahl baud-rate	-	ON	ON	ON	-	38400 baud
	-	OFF	ON	ON	-	19200 baud
	-	ON	OFF	ON	-	9600 baud
	-	OFF	OFF	ON	-	4800 baud
	-	ON	ON	OFF	-	2400 baud
	-	OFF	ON	OFF	-	1200 baud
	-	ON	OFF	OFF	-	600 baud
	-	OFF	OFF	OFF	-	300 baud
Visualisierung der Konfigura-tionen	ON		-	-	-	Visualisierung frei
	OFF		-	-	-	Visualisierung unfrei

Tab. 09

7.1.14 Serielle Übertragungsleitungen (DIP1)

Das Produkt besitzt zwei serielle Übertragungsleitungen RS485 und eine serielle Leitung RS232, die sich auf verschiedene Art und Weise durch die Stellung der Dipschalter 5 und 6 des Wählschalters **DIP1** konfigurieren lassen.

SERIELLE ÜBERTRAGUNGSLEITUNGEN (DIP1)					
Beschreibung	**SW 1-2-3-4**	**SW 5**	**SW 6**	**SW 7-8**	**Konfiguration**
Serielle Leitungen	-	ON	ON	-	*"7.1.14.1 Leitung RS485 TX/RX bidirektional", Seite 21*
	-	OFF	ON	-	*"7.1.14.2 Leitung 1 RS485 Empfang, Leitung 2 RS485 Wiederholung", Seite 21*
	-	ON	OFF	-	*"7.1.14.3 Leitung RS422 bidirektional", Seite 21*
	-	OFF	OFF	-	*"7.1.14.4 Leitung RS485 monodirektional", Seite 22*

Tab. 10

7.1.14.1 Leitung RS485 TX/RX bidirektional

Diese Art von Einstellung gestattet eine beidseitig gerichtete Half-Duplex-Übertragung auf der Leitung RS485-1.

Die serielle Leitung RS485-2 ist nicht benutzt.

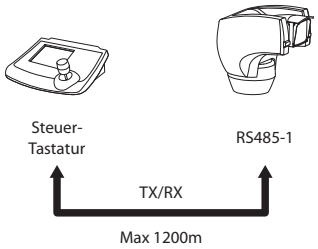

Fig. 28

7.1.14.2 Leitung 1 RS485 Empfang, Leitung 2 RS485 Wiederholung

Bei dieser Einstellung können mehrere Einrichtungen kaskadiert angeschlossen werden. Das Signal wird von jeder Einheit regeneriert und ist dadurch über eine erheblich größere Distanz übertragbar.

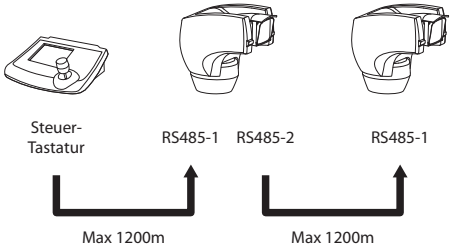

Fig. 29

Dies funktioniert nur mit einseitig gerichteten Protokollen.

In dieser Konfiguration lässt sich das Update der Firmware nicht von fern vornehmen.

7.1.14.3 Leitung RS422 bidirektional

Diese Einstellung gestattet die Full-Duplex-Kommunikation nach dem Standard RS422.

La ligne RS485-1 est toujours en réception (RS422-RX).

La ligne RS485-2 est toujours en transmission (RS422-TX).

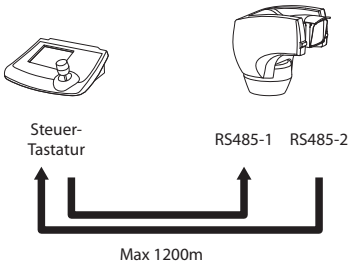

Fig. 30

7.1.14.4 Leitung RS485 monodirektional

Die erste Leitung (RS485-1) arbeitet mit den Einstellungen, die mit Hilfe der Dipschalter **Adresse**, **Baudrate** und **Protokoll** vorgegeben werden.

Die Leitung RS485-2 wird nicht benutzt.

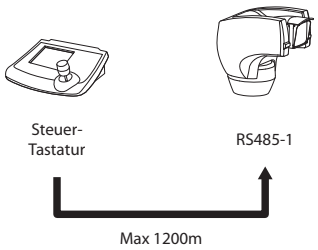

Fig. 31

Dies funktioniert nur mit einseitig gerichteten Protokollen.

In dieser Konfiguration lässt sich das Update der Firmware nicht von fern vornehmen.

7.1.15 Das Abschließen serieller Leitungen (DIP1) und Verbindungen

Auf der Karte sitzen zwei Dipschalter, die benutzt werden, um die Abschlussbeschaltung der seriellen Leitung zu konfigurieren.

Jede Peripherieeinheit, die am Leitungsende hängt, muss mit dem zugehörigen Dipschalter mit einem Abschlusswiderstand beschaltet werden, um zu vermeiden, dass entlang der Leitung Reflexionen und Deformationen auftreten.

Die Dipschalter 17 und 8 beschalten die seriellen Leitungen RS485-1 und RS485-2 jeweils mit einem Abschlusswiderstand.

DAS ABSCHLIESSEN SERIELLER LEITUNGEN (DIP1) UND VERBINDUNGEN				
Beschreibung	**SW 1-2-3-4-5-6**	**SW 7**	**SW 8**	**Konfiguration**
Endungen serielle Leitungen			ON	Endung RS485-2 frei
			OFF	Endung RS485-2 unfrei
		ON		Endung RS485-1 frei
		OFF		Endung RS485-1 unfrei

Tab. 11

7.1.16 Einstellung des Protokolls (DIP3)

Die Videopositionierungssysteme der Baureihe ULISSE COMPACT THERMAL können mit mehreren Protokollen gesteuert werden.

EINSTELLUNG DES PROTOKOLLS (DIP3)				
SW 1	**SW 2**	**SW 3**	**SW 4**	**Protokoll**
ON	OFF	ON	OFF	PANASONIC
OFF	OFF	ON	OFF	ERNITEC
OFF	ON	OFF	OFF	SENSORMATIC
ON	OFF	OFF	OFF	PELCO D
OFF	OFF	OFF	OFF	MACRO (VIDEOTEC)

Tab. 12

7.1.17 Einstellung der Adresse (DIP2)

Als Adresse von ULISSE COMPACT THERMAL kann eine Zahl von 1 bis 1023 festgelegt werden. Die Adresse wird nach dem Binärcode mithilfe der 10 Dipschalter von DIP2 vorgegeben (*"16 Anhang A - Tabelle Adressen Dipschalter", Seite 55*).

8 Einschaltung

Die Systeme der Baureihe ULISSE COMPACT THERMAL schalten sich ganz einfach mit Aufnahme der Stromversorgung ein und mit Unterbrechung der Stromversorgung aus.

Der automatische Vorheizvorgang (de-ice) könnte immer dann aktiviert werden, wenn das Gerät bei einer Umgebungstemperatur von unter 0°C in Betrieb genommen wird. Dieser Vorgang dient dazu, auch bei niedrigen Temperaturen den einwandfreien Betrieb der Einrichtungen sicherzustellen. Die Dauer liegt je nach Bedingungen zwischen 60 und 120 Minuten.

8.1 Vor dem Einschalten der Stromzufuhr

Zu kontrollieren ist, ob das System ULISSE COMPACT THERMAL und die anderen Anlagenkomponenten verschlossen sind, der direkte Kontakt mit spannungsführenden Teilen somit ausgeschlossen ist.

Nicht die Nähe der Einrichtung aufsuchen, wenn sie mit Strom gespeist ist. Tätigkeiten an der Einrichtung sind nur dann erlaubt, wenn die Stromversorgung unterbrochen ist.

Vergewissern Sie sich, dass alle Teile solide und zuverlässig befestigt sind.

Beim erstmaligen Einschalten ist es stets zweckmäßig, die korrekte Konfiguration der Einrichtung zu überprüfen.

Dazu ist es notwendig, die Stromversorgung zu unterbrechen. Dann die Schutzklappe über den Dipschaltern entfernen und den Hebel des Dipschalters für die **Anzeige Konfiguration** (**DIP1, SW1**) auf **ON** setzen.

Die Einrichtung mit Strom versorgen. Einige Sekunden später kann dann am Bildschirm die korrekte Konfiguration geprüft werden.

Nach Abschluss der Überprüfung die Einrichtung abschalten und den Hebel des Dipschalters für die **Anzeige Konfiguration** (**DIP1, SW1**).

Die Klappe schließen und die Einrichtung wieder speisen.

8.2 Liste der Kontrollen

Beim Hochfahren zeigt die Einrichtung die Liste der Kontrollen an, welche sie vor dem Wechsel in den Normalbetrieb durchführen muss.

```
EINSCHALTVORGANG
----------------------
Parameter Lesen......OK
Nullsuche............OK
Kamera...........36x.OK
Temperaturfuhler.....OK
IR-Strahler..........--
Scheibenwischer......--
Wahlfreie Karte......--
```

Fig. 32

Wird bei einer der Kontrollen ein Fehler gemeldet (ERR), setzen Sie sich bitte mit dem Kundendienst in Verbindung. "- -" bedeutet, dass der Schwenk-Neige-Kopf nicht mit der genannten Option ausgestattet ist.

9 Konfigurierung

9.1 Bildschirmmenü (OSM)

Während des normalen Betriebes der Einrichtung ULISSE COMPACT THERMAL kann das **Bildschirmmenü** aktiviert werden, um die erweiterten Funktionen mit der / den entsprechenden Taste(n) einzurichten ((siehe das Handbuch der verwendeten Tastatur oder *Tab. 14, Seite 47*).

Das **Bildschirmmenü** wird mit **Zoom Wide** (oder **Zoom-**) verlassen.

9.1.1 Verwendung des Steuerknüppels

Alle Menüvorgänge werden mit dem Steuerknüppel veranlasst.

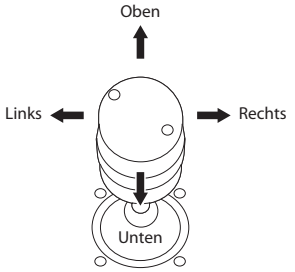

Fig. 33 Pan und Tilt.

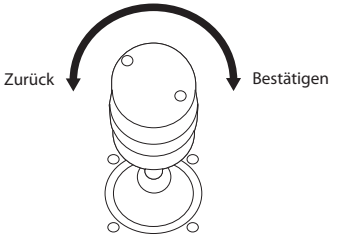

Fig. 34 Zoom wide und tele.

Bei Bedientastaturen mit zweiachsigem Steuerknüppel müssen die Knöpfe Zoom Wide und Zoom Tele verwendet werden, um die Befehle Zurück und Bestätigen zu generieren.

9.2 Das Bewegen innerhalb der Menüs

Jeder OSM-Bildschirm weist eine Liste mit Parametern oder Untermenüs auf, die vom Bediener angewählt werden können. Um die Parameter zu durchlaufen, wird der Cursor mit dem Steuerknüppel bewegt (auf und ab).

```
 ERWEITERT
------------------------
1 ZOOMGESCHW.     :  7
2>DIGITALZOOM     :  N
3 WIDE DYNAMIC    :  J
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  J
6 FOCUS                >
7 BELICHTUNG           >
8 INFRAROT             >
9 WEISSABGLEICH        >
```

Fig. 35

Das Symbol **>** am Zeilenende weist darauf hin, dass ein spezielles Untermenü vorhanden ist. Um es aufzurufen, reicht es aus, die entsprechende Menüoption zu bestätigen. Zum Verlassen des Untermenüs die Funktion **Escape** (**Zoom Wide**) benutzen.

```
 ERWEITERT
------------------------
1>ZOOMGESCHW.     :  7
2 DIGITALZOOM     :  N
3 WIDE DYNAMIC    :  J
4 HIGH RESOLUTION:  N
5 BACKLIGHT COMP.:  J
6 FOCUS                >
7 BELICHTUNG           >
8 INFRAROT             >
9 WEISSABGLEICH        >
```

Fig. 36

9.3 Änderung der Einstellungen

Den Cursor auf den zu ändernden Parameter bewegen und bestätigen. Das Feld beginnt zu blinken als Zeichen dafür, dass es geändert wird. Durch Bedienung des Steuerknüppels (auf und ab) werden die Wahlmöglichkeiten aufgezeigt.

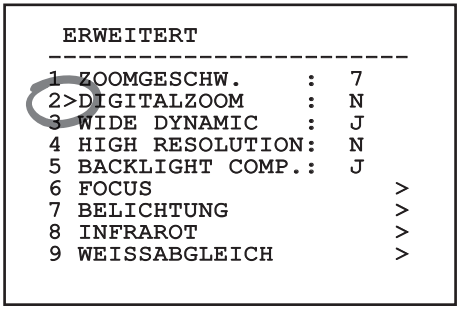

Fig. 37

Die gewählte Einstellung ist zu bestätigen.

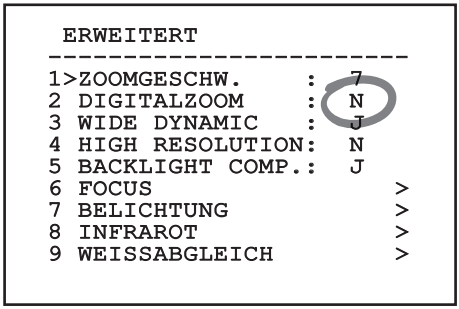

Fig. 38

Der Parameter hört auf zu blinken und bestätigt dadurch die Einstellung.

9.4 Ändern der Zahlenfelder

Den Cursor auf den zu ändernden Parameter bewegen und bestätigen.

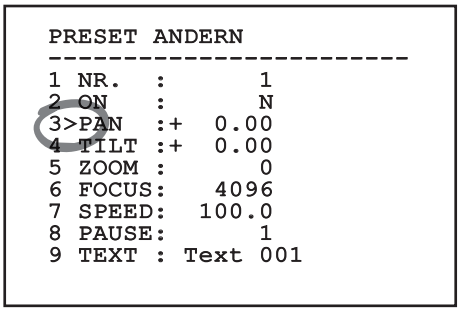

Fig. 39

Die erste Ziffer des gerade geänderten Zahlenfeldes blinkt und in der unteren Zeile wird gezeigt, welche Werte für das Feld zulässig sind. Das Feld mit dem Steuerknüppel aufsuchen (rechts und links) und das Vorzeichen oder den Zahlenwert ändern (auf und ab).

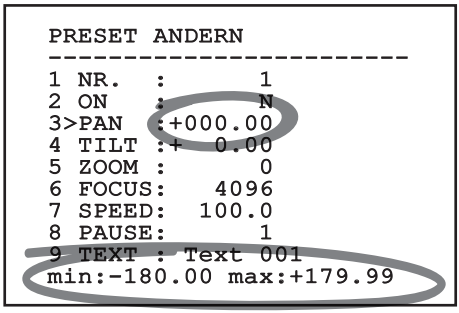

Fig. 40

Die vorgenommene Änderung bestätigen. Der Cursor kehrt wieder nach links zurück und die modifizierte Ziffer blinkt nicht. Das Feld wird automatisch auf den zulässigen Mindest- oder Höchstwert gesetzt, wenn versucht wird, einen Wert außerhalb des zulässigen Bereiches einzugeben.

9.5 Ändern von Texten

Den Cursor auf den zu ändernden Parameter bewegen und bestätigen.

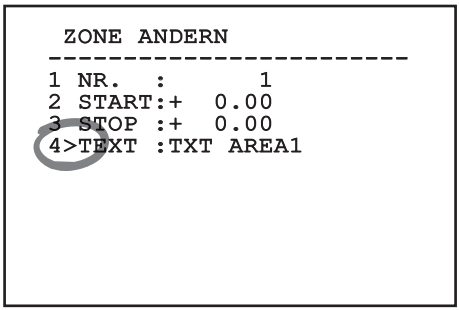

Fig. 41

Es erscheint die Bildschirmseite für die Bearbeitung des Textes. Das Symbol ↑ positioniert sich unter dem änderbaren Zeichen, während der Cursor > sich links vom einzugebenden Zeichen positioniert.

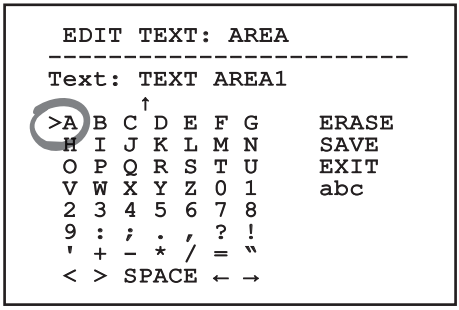

Fig. 42

Es ist möglich, mit dem Joystick innerhalb des Menüs zu navigieren.

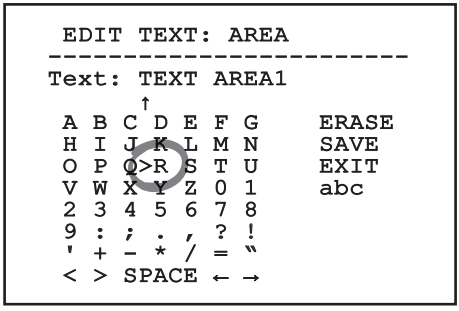

Fig. 43

Mit dem Befehl **Bestätigen** (**Zoom Tele**) wird das gewünschte Zeichen eingefügt.

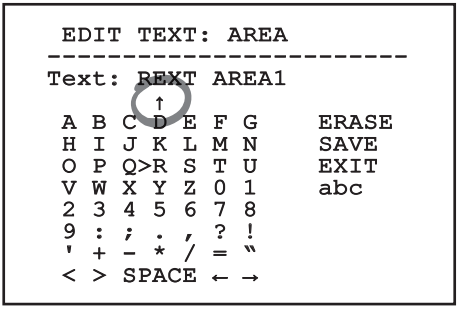

Fig. 44

Verwenden Sie:

- **ERASE**: zum Löschen der gesamten Textzeichenkette.
- **SAVE**: zum Speichern des neuen Textes.
- **EXIT**: zum Verlassen des Menüs.
- **abc**: zur Anzeige der Kleinbuchstaben.

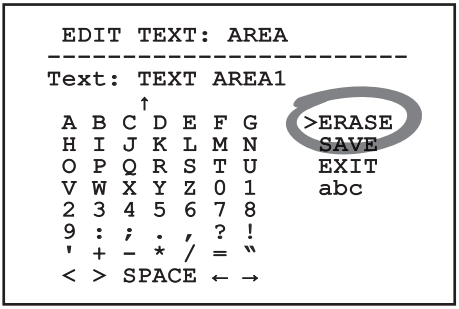

Fig. 45

Das Menü kann auch mit **Zoom Wide** verlassen werden.

9.6 Systemkonfigurierung

9.6.1 Hauptmenü

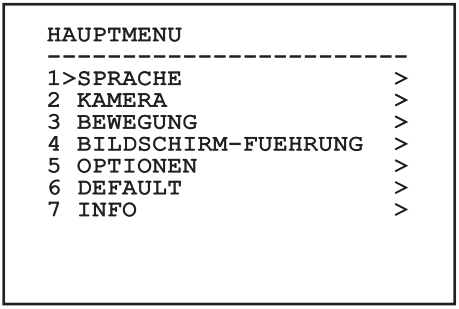

Fig. 46

9.6.2 Sprache

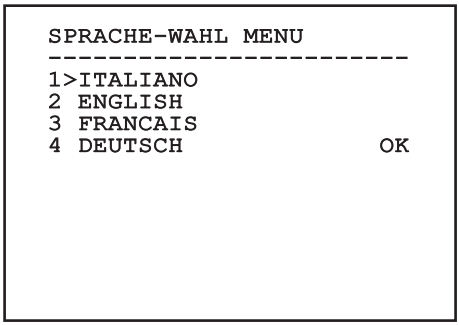

Fig. 47

9.6.3 Kameramenü

01. **Konfiguration**: Hier kann eine der für das Modul SONY vorgegebenen Konfigurationen gewählt werden. :
    - **Standard**: Normaler Kamerabetrieb.
    - **Low Light**: Betriebsart für schwach beleuchtete Umgebungen.
    - **Far Mode**: Betriebsart für weitläufige Bereiche mit Aktivierung des Proportional- und Digitalzooms.
    - **Custom**: Weist darauf hin, dass die Kameraparameter vom Benutzer manuell eingestellt worden sind.
02. **Zonenbetitelung**: Gestattet den Aufruf des Untermenüs für die Zonenbetitelung.
03. **Maskierung**: Für den Aufruf des Untermenüs für die dynamische Maskierung.
04. **Erweiterte**: Gestattet den Aufruf des Untermenüs für die Festlegung der erweiterten Parameter des Moduls SONY.

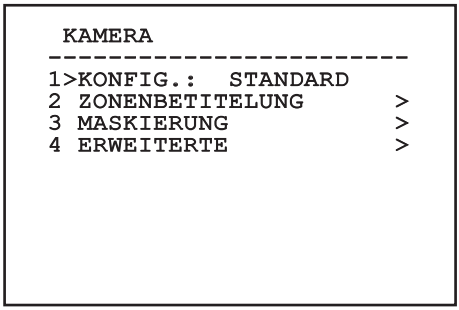

Fig. 48

9.6.3.1 Menü Zonenbetitelung

Diese Funktion gestattet die Festlegung von bis zu acht Zonen (verschiedener Größe), die sich betiteln lassen.

Im Menü **Zonenbetitelung** besteht Zugriff auf die folgenden Parameter:

01. **Aktivierung**: Hier kann die Bildschirmanzeige der Meldung aktiviert werden, die der erreichten Zone zugewiesen ist.
02. **Zone ändern**: Gestattet den Aufruf des Untermenüs für die Einstellung der Zonenparameter.

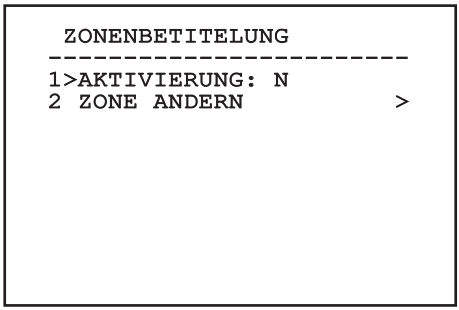

Fig. 49

9.6.3.2 Menü Zonenbetitelung (Zone Ändern)

Im Menü **Zone Ändern** können die folgenden Parameter festgelegt werden:

01. **Nummer**: Auswahl der zu ändernden Zone.
02. **Start**: Anfangsposition der Zone.
03. **Stop**: Endposition der Zone.
04. **Text**: Änderung des Textes, der angezeigt wird, wenn man sich innerhalb des Bereiches bewegt.

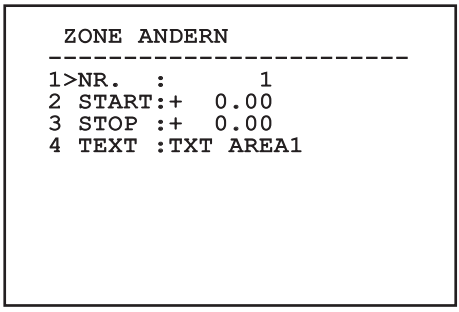

Fig. 50

Beispiel: Um die Betitelung der Zone 1 zu aktivieren, wenn sich die Vorrichtung zwischen +15° und +45° befindet, ist folgendermaßen vorzugehen:

- Die Zonenbetitelung aktivieren, indem man unter **Aktivierung** im Menü **Zonenbetitelung** ein **J** vorgibt.
- Für den Parameter **Nr** im Menü **Zone Ändern** den Wert **1** eingeben.
- Für den Parameter **Start** im Menü **Zone Ändern** den Wert **+15.00** vorgeben.
- Für den Parameter **Stop** im Menü **Zone Ändern** den Wert **+45.00** vorgeben.
- Falls gewünscht, den angezeigten Text mit der Option **Text** aus dem Menü **Zone Ändern** bearbeiten.

Wenn man die Parameter Start und Stop aus dem Menü Zone ändern auf den Wert Null setzt, wird die Anzeige der Betitelung deaktiviert. Bei Überlagerung mehrerer Bereiche ist die höhere Nummer ausschlaggebend.

Für die Definition der Bereiche folgen Sie dem Uhrzeigersinn, wie in der Abbildung gezeigt.

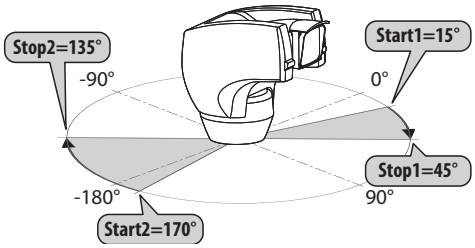

Fig. 51

Der Standardname und die Standardposition der Bereiche des Schwenk-Neige-Kopfes beziehen sich auf die vier Himmelsrichtungen. Die Position NORD wird mit dem Parameter Offset Pan des Bewegungsmenüs geändert (*"9.6.4 Menü Bewegung", Seite 33*).

9.6.3.3 Menü Maskierung

Die dynamische Maskierung ermöglicht die Vorgabe von bis zu 24 Masken, mit denen besondere benutzerdefinierte Bereiche verdunkelt werden.

Die Masken werden im Raum definiert und berücksichtigen die Zoomposition in der Horizontalen, der Vertikalen und der Tiefe zum Zeitpunkt der Einstellung.

ULISSE COMPACT THERMAL hält automatisch die Position und Größe der Maskierung in Abhängigkeit vom angezeigten Bereich konstant.

Es lassen sich bis zu 8 Masken gleichzeitig anzeigen.

Fährt man die Einrichtung mit Höchstgeschwindigkeit, werden die Zeiten für die Aktualisierung des Videosignals kritisch und es müssen Masken erstellt werden, die größer sind als das Objekt, damit dies während des Kameradurchlaufs länger ausgeblendet wird und nicht sichtbar ist.

Um die volle Funktionsfähigkeit zu gewährleisten, muss die Tiltposition der Maske zwischen -70 und +70 Grad liegen. Außerdem muss die Maske doppelt so groß sein, wie das abzudeckende Objekt (sowohl in der Höhe, als auch in der Breite).

Im Menü **Maskierung** können die folgenden Parameter festgelegt werden:

01. **Maskenfarbe**: Auswahl der Maskenfarbe.
02. **Masken ändern**: Aufruf des Untermenüs **Masken Ändern**, in dem die Parameter der dynamischen Maskierung festgelegt werden können.

```
 MASKIERUNG
------------------------
1>FARBE   :      BLAU
2 MASKEN ANDERN        >
```

Fig. 52

9.6.3.4 Menü Maskierung (Masken Ändern)

Nach dem Aufruf des Menüs **Masken Ändern** können die folgenden Parameter eingestellt werden:

01. **Maskennummer**: Zur Auswahl der zu ändernden Maske.
02. **Maske Aktivieren**: Aktiviert oder deaktiviert die ausgewählte Maske.
03. **Maske Ändern**: Gestattet die Erstellung oder Änderung einer Maske.

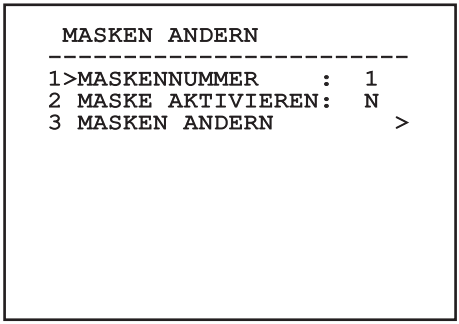

Fig. 53

Wählt man die Menüoption **Maske Ändern**, lassen sich neue Werte der ausgewählten Maske vorgeben.

9.6.3.5 Erstellen einer neuen dynamischen Maske

Mit der Option **Maske Nummer** aus dem Menü **Masken Ändern** (*Fig. 53, Seite 29*) eine nicht aktivierte Maske wählen. Um sie zu bearbeiten, wählen Sie bitte **Maske Ändern**.

Im folgenden Beispiel wird eine Blume maskiert.

- Den Knopf **Iris Close** drücken, um vom Modus **Maskierung** zum Modus **Kamera bewegen** zu wechseln.

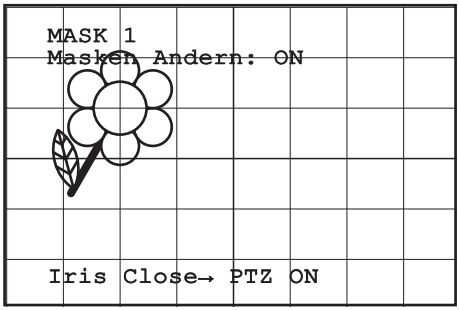

Fig. 54

- Mit dem Steuerknüppel der Bedientastatur die Vorrichtung ULISSE COMPACT THERMAL bewegen und bei Bedarf zoomen, bis die Blume auf dem Bildschirm zentriert ist.

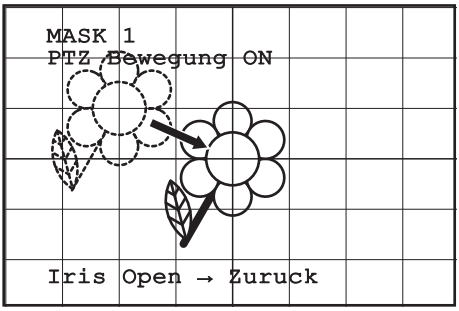

Fig. 55

- Wenn dieses Ergebnis vorliegt, den Knopf **Iris Open** drücken.

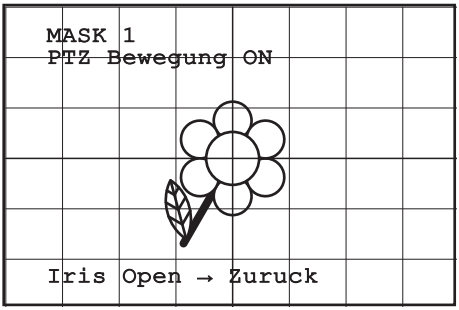

Fig. 56

- Es erscheint ein kleines Rechteck. Mit dem Steuerknüppel (**Pan und Tilt**) das Rechteck vergrößern, bis die gesamte Blume verdeckt ist.

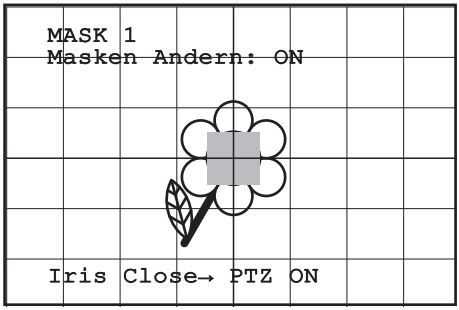

Fig. 57

- Wenn das gegeben ist, durch Drehen des Zooms auf Tele bestätigen.

9.6.3.6 Bearbeiten einer Maske

Mit der Option **Maske Nummer** aus dem Menü **Masken Ändern** (*Fig. 53, Seite 29*) eine aktivierte Maske wählen. Um sie zu bearbeiten, wählen Sie bitte **Maske Ändern**.

- Mit dem Steuerknüppel (**Pan und Tilt**) das Rechteck vergrößern oder verkleinern, bis die gewünschte Wirkung erzielt ist.

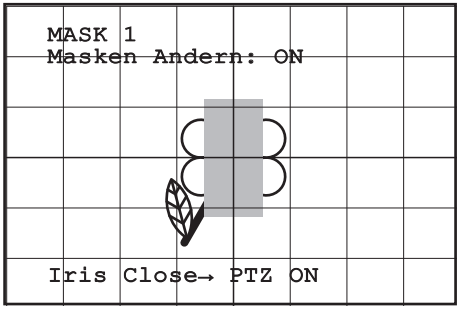

Fig. 58

- Durch Drehen des Zooms auf Tele bestätigen.

9.6.3.7 Menü Erweitert Konfiguriert

Mit diesem Menü kann das Modul von SONY konfiguriert werden.

01. **Zoom**: Aufruf des Untermenüs **Zoom**.
02. **Focus**: Aufruf des Untermenüs **Focus**.
03. **Belichtung**: Aufruf des Untermenüs **Belichtung**.
04. **Infrarot**: Aufruf des Untermenüs **Infrarot**.
05. **Weißabgleich**: Aufruf des Untermenüs **Weißabgleich**.
06. **Anderen**: Aufruf des Untermenüs **Anderen**.

Fig. 59

9.6.3.8 Menü Erweitert Konfiguriert (Zoom)

01. **Zoomgeschwindigkeit**: Einstellung der Zoomgeschwindigkeit. Der Geschwindigkeitsbereich liegt zwischen 0 (Mindestgeschwindigkeit) und 7 (Höchstgeschwindigkeit).
02. **Digitalzoom**: Hier kann der digitale Zoom aktiviert werden.

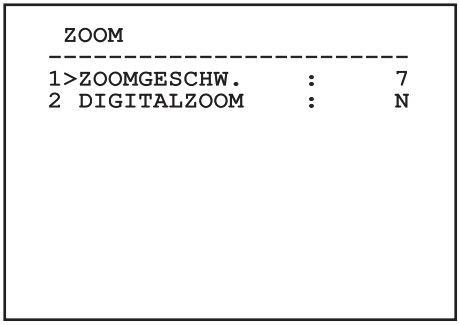

Fig. 60

9.6.3.9 Menü Erweitert Konfiguriert (Focus)

Im Menü **Focus** lassen sich die folgenden Parameter festlegen:

01. **Focus-Geschwindigkeit**: Einstellbar ist hier die Focusgeschwindigkeit. Die Geschwindigkeitswerte liegen in einem Bereich zwischen 0 (Mindestgeschwindigkeit) und 7 (Höchstgeschwindigkeit).
02. **Autofocus**: Ein- oder Ausschalten des Autofocus. Im eingeschalteten Zustand kann bei jeder Positionierung oder Bewegung des Zooms je nach ausgewählter Betriebsart automatisch der Autofocus aufgerufen werden.
03. **Art des Autofocus**: Hier lässt sich die Art des Autofocus vorgeben. Folgende Werte sind möglich:
    - **Normal**: Der Autofocus ist immer eingeschaltet.
    - **Intervall**: Aufruf der Autofocusfunktion in festgelegten Intervallen von 5 Sekunden.
    - **Trigger**: Aufruf des Autofocus bei jeder PTZ-Bewegung. Dies ist die empfohlene Lösung.
04. **Empfindlichkeit**: Einstellung der Empfindlichkeit. Folgende Werte sind möglich:
    - **Normal**: Fokussierung mit höherer Geschwindigkeit. Dies ist die empfohlene Lösung.
    - **Gering**: Verlangsamte Fokussierung. Hilfreich zur Stabilisierung des Bildes bei schlechten Lichtverhältnissen in der Umgebung.

```
 FOCUS
------------------------
1>FOCUSGESCHW.   :      2
2 AUTOFOCUS      :      N
3 AUTOFOCUS ART  :TRIGGER
4 EMPFINDLICHK.  : NORMAL
```

Fig. 61

9.6.3.10 Menü Erweitert Konfiguriert (Belichtung)

Nach dem Aufruf des Menüs **Belichtung** können die folgenden Parameter festgelegt werden:

01-05. **Modus**: Art der Belichtungssteuerung - Automatik, Manuell, Shutter, Iris und Bright.

06. **Auto Slowshutter**: Im eingeschalteten Zustand wird die Belichtungsdauer automatisch für einen effizienteren Nachtbetrieb erhöht.

07-08. **Kompensation, Kompensationswert**: Einstellung der Belichtungskompensation.

09. **Backlight-Kompensation**: Zum Einschalten der Funktion Backlight-Kompensation. Gestattet es, eventuelle dunkle Zonen im Bild besser zu sehen.

Im automatischen Modus kann auch die Backlightkompensation aktiviert werden. Das Menü konfiguriert sich dynamisch in Abhängigkeit von der gewählten Einstellung und weist die Parameter aus, die verändert werden können.

Die Art der Belichtungssteuerung wird auf alle Presetpositionen angewendet.

Die empfohlene Einstellung lautet **Automatik**.

```
 BELICHTUNG
------------------------
1> MODUS:            AUTO



6 AUTO SLOW SHUTTER :  J
7 KOMPENSATION      :  N
8 KOMPENSATIONSWERT :  7
9 BACKLIGHT COMP.   :  N
```

Fig. 62

In der folgenden Tabelle sind die Entsprechungen zwischen den eingegebenen Werten und der Wirkung auf die Optik des SONY-Moduls zusammengestellt.

WERT	SHUTTER		IRIS	GAIN	BELICHTUNG-KORREKTUR
	NTSC	PAL			
0	1/1	1/1	Zu	-3db	-10,5db
1	1/2	1/2	F28	0db	-9db
2	1/4	1/3	F22	2db	-7,5db
3	1/8	1/6	F19	4db	-6db
4	1/15	1/12	F16	6db	-4,5db
5	1/30	1/25	F14	8db	-3db
6	1/60	1/50	F11	10db	-1,5db

WERT	SHUTTER		IRIS	GAIN	BELICHTUNG-KORREKTUR
7	1/90	1/75	F9.6	12db	0db
8	1/100	1/100	F5	14db	1,5db
9	1/125	1/120	F6.8	16db	3db
10	1/180	1/150	F5.6	18db	4.5db
11	1/250	1/215	F4.8	20db	6db
12	1/350	1/300	F4	22db	7,5db
13	1/500	1/425	F3.4	24db	9db
14	1/725	1/600	F2.8	26db	10,5db
15	1/1000	1/1000	F2.4	28db	-
16	1/1500	1/1250	F2	-	-
17	1/2000	1/1750	F1.6	-	-
18	1/3000	1/2500	-	-	-
19	1/4000	1/3500	-	-	-
20	1/6000	1/6000	-	-	-
21	1/10000	1/10000	-	-	-

Tab. 13

9.6.3.11 Menü Erweitert Konfiguriert (Infrarot)

Im Menü **Infrarot** können die folgenden Parameter festgelegt werden:

01. **IR-Modus**: Wird hier OFF eingestellt, ist dauerhaft der Tagesmodus aktiviert (ein vorhandener Scheinwerfer wird mit Dämmerungsschalter oder dem zugehörigen Tastaturbefehl betätigt); wird ON eingestellt, ist dauerhaft der Nachtmodus aktiviert, wird **Auto** eingestellt, wird die automatische Umschaltung der Kamera aktiviert.
02. **Nacht Schwelle**: Stellt die Schwelle zur Erhebung der Lichtbedingungen für die Schaltung in den Nachtmodus ein. Niedrigere Werte entsprechen einem geringeren Leuchtkraftniveau.
03. **Verzogerung Nacht**: Stellt die in Sekunden ausgedrückte Zeit zur Erhebung der Dunkelbedingungen vor der Schaltung in den Nachtmodus ein.
04. **Tag Schwelle**: Stellt die Schwelle zur Erhebung der Lichtbedingungen für die Schaltung in den Tagmodus ein. Niedrigere Werte entsprechen einem geringeren Leuchtkraftniveau.
05. **Verzogerung Tag**: Stellt die in Sekunden ausgedrückte Zeit zur Erhebung der Lichtbedingungen vor der Schaltung in den Tagmodus ein.

Um falsche Schaltungen zu vermeiden ist es ratsam, die höchsten Werte sowohl für die Schwelle als auch die Verzögerung der Tagschaltung auszuwählen.

```
INFRAROT
------------------------
1>MODUS IR      :   AUTO
2 NACHT SCHWELLE:     5
3 VERZOGER.NACHT:     5
4 TAG SCHWELLE  :    20
5 VERZOGER. TAG :    30
```

Fig. 63

Das Menü konfiguriert sich eigenständig und dynamisch nach der gewählten Einstellung. Angezeigt werden die Parameter, auf die eingewirkt werden kann.

Es wird dringend vom automatischen Schaltungsmodus Day/Night des Moduls abgeraten, wenn die Schwenkvorrichtung während der Nachtzeit unvermittelten Lichtveränderungen, z.B. bei einer Patrol- Strecke oder beim Einschalten von zusätzlichen Beleuchtungsgeräten, unterworfen wird, da dies zahlreiche unerwünschte Schaltungen verursachen könnte und so die Funktionstüchtigkeit dieses Moduls beeinträchtigt würde.

9.6.3.12 Menü Erweitert Konfiguriert (Weißabgleich)

Nach dem Aufruf des Menüs **Weißabgleich** können die folgenden Parameter festgelegt werden:

01. **Modus**: Einstellbar ist die Steuerung des Weißabgleichs. Folgende Werte sind möglich:
    - **Automatisch**: Der Weißabgleich erfolgt automatisch. Diese Einstellung wird empfohlen.
    - **Manuell**: Die manuelle Einstellung der Rot- und Blaulichtverstärkung wird aktiviert.
    - **Outdoor**: Für Außenbereiche werden feste Werte für die Rot- und Blaulichtverstärkung vorgegeben.
    - **Indoor**: Für Innenbereiche werden feste Werte für die Rot- und Blaulichtverstärkung vorgegeben.
    - **ATW**: Einschalten des Auto Tracing White Balance.
02. **Rotwert**: Vorgabe des Wertes zur Rotlichtverstärkung.

03. **Blauwert**: Vorgabe des Wertes zur Blaulichtverstärkung.

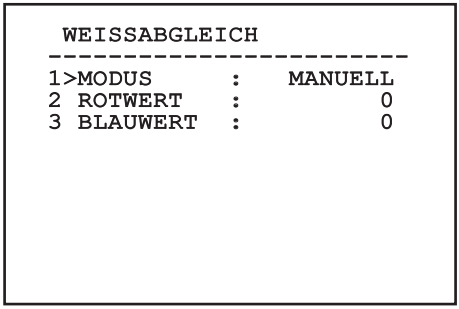

Fig. 64

Das Menü konfiguriert sich eigenständig und dynamisch nach der gewählten Einstellung und zeigt die Parameter an, auf die eingewirkt werden kann.

9.6.3.13 Menü Erweitert Konfiguriert (Anderen)

01. **Sharfe**: Einstellung der Bildschärfe.
02. **Hohe Auflosung**: Zum Einschalten der Funktion Hohe Auflosung. Das ausgehende Videosignal hat eine höhere Auflösung.
03. **Wide Dynamic**: Zum Einschalten der Funktion Wide Dynamic. Verbessert die Sicht, wenn der ins Bild genommene Bereich Zonen hat, die sehr viel heller sind als andere.
04. **Stabilisator**: Schaltet die elektronische Bildstabilisierungsfunktion ein.
05. **Progressive Scan**: Schaltet die Funktion Progressive Scan ein. Sie sorgt für ein stabileres Bild, wenn der Schwenk-Neige-Kopf mit einem Videoserver verbunden ist.
06. **Noise Reduction**: Zur Einstellung des Rauschunterdrückungspegels. Durch Anpassung des Parameters an die Umgebungsbedingungen lässt sich ein kontrastreicheres Bild erzielen.

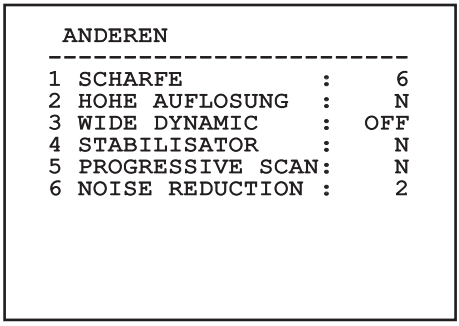

Fig. 65

9.6.4 Menü Bewegung

07. **Konfiguration**: Eine der vorgegebenen Konfigurationen des Schwenk-Neige-Kopfes kann eingestellt werden.
    - **Standard**: Normale Bewegungsgeschwindigkeit.
    - **Low Speed**: Modus **Low Speed**, in dem sämtliche Betriebsgeschwindigkeiten des Schwenk-Neige-Kopfes reduziert sind.
    - **Wind Mode**: Die Geschwindigkeit der Bewegungen wird so vorgegeben, dass sie an Umgebungen mit Vibrationen oder Windböen angepasst sind.
    - **High Perf**: Die Bewegungen werden mit der maximal möglichen Geschwindigkeit ausgeführt.
    - **Custom**: Weist darauf hin, dass die Bewegungsgeschwindigkeiten der Einheit vom Benutzer manuell eingestellt worden sind.
08. **Offset Pan**: Der Schwenk-Neige-Kopf hat eine Position von 0°, die mechanisch definiert ist. Die Funktion Offset Pan ermöglicht es, auf Softwareebene eine andere Position als 0° festzulegen.
09. **Manuelle Steuerung**: Ermöglicht den Zugriff auf die Untermenüs mit den Parametern, welche den manuellen Bewegungen der Einrichtung zugeordnet sind.
10. **Preset**: Ermöglicht den Zugriff auf die Untermenüs, welche die Änderung der Presetwerte ermöglichen.
11. **Patrol**: Ermöglicht den Aufruf der Untermenüs, welche die Änderung der Patrolwerte ermöglichen.
12. **Autopan**: Ermöglicht den Aufruf der Untermenüs für die Änderung der Autopanwerte.
13. **Bewegungsanforderung**: Ermöglicht den Aufruf des Untermenüs für die automatische Bewegungsanforderung.
14. **Erweiterte**: Gestattet den Aufruf des Untermenüs für die Festlegung der erweiterten Parameter.

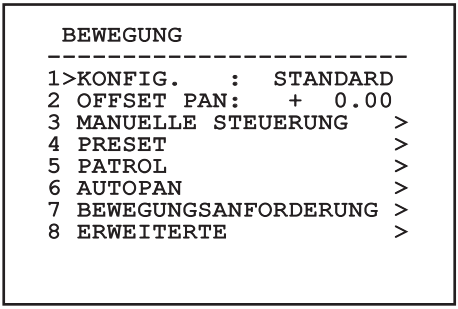

Fig. 66

9.6.4.1 Menü Handsteuerung

01. **Höchstgeschwindigkeit**: Hier kann die Höchstgeschwindigkeit bei manueller Steuerung vorgegeben werden..
02. **Fastmodus**: Zum Einschalten des **Fastbetriebes**. Wenn diese Option aktiviert wird, kann der Schwenk-Neige-Kopf durch Bewegung des Steuerknüppels bis zum Anschlag mit einer Geschwindigkeit schnell bewegt werden.
03. **Geschwindigkeit mit Zoom**: Zum Einschalten der **Geschwindigkeit mit Zoom**. Bei Aktivierung dieses Parameters wird die Geschwindigkeit für PAN und TILT automatisch in Abhängigkeit vom Zoomfaktor reduziert.
04. **Tilt-Faktor**: Reduzierfaktor für die manuelle Geschwindigkeit der Tiltachse.
05. **Autoflip**: Zur Aktivierung der Funktion Autoflip (der Schwenk-Neige-Kopf wird dabei automatisch um 180° gedreht, wenn die Tiltfunktion den Endanschlag erreicht). Dadurch wird die Verfolgung von Subjekten entlang von Fluren oder Straßen erleichtert.
06. **Bewegungsgrenzpunkte**: Ermöglicht den Aufruf des Menüs **Grenzpunkte**.

```
 HANDSTEUERUNG
------------------------
1>HOCHSTGESCHW.    :100.0
2 FASTMODUS        :    J
3 GESCHW. MIT ZOOM:     N
4 TILT FAKTOR      :    2
5 AUTOFLIP         :    J
6 BEWEGUNGSGRENZPUNKTE >
```

Fig. 67

9.6.4.2 Menü Handsteuerung (Grenzpunkte)

Im Menü **Grenzpunkte** lassen sich die folgenden Parameter festlegen:

01. **Grenzpunkte Pan**: Aktiviert die Grenzpunkte für die Funktion Pan (Kameraschwenk).
02. **Beginn Pan**: Vorgabe der Grenzposition zu Beginn des Kameraschwenks (Pan).
03. **Ende Pan**: Vorgabe der Grenzposition am Ende des Kameraschwenks (Pan).
04. **Grenzpunkte Tilt**: Aktiviert die Grenzpositionen der Tiltfunktion (Kameraneigung).
05. **Beginn Tilt**: Vorgabe der Grenzposition zu Beginn der Kameraneigung (Tilt).
06. **Ende Tilt**: Vorgabe der Grenzposition am Ende der Kameraneigung (Tilt).

```
 GRENZPUNKTE
------------------------
1>PAN          :        N
2 BEGINN PAN   : +  0.00
3 ENDE PAN     : +  0.00
4 TILT         :        N
5 BEGINN TILT  : +  0.00
6 ENDE TILT    : +  0.00
```

Fig. 68

9.6.4.3 Menü Preset

01. **Preset ändern**: Ermöglicht den Zugriff auf das Menü Preset ändern.
02. **Utility Preset**: Ermöglicht den Aufruf des Menüs Utility Preset.

```
 PRESET
------------------------
1>PRESET ANDERN         >
2 UTILITY PRESET        >
```

Fig. 69

9.6.4.4 Menü Preset (Preset Ändern)

Im Menü **Preset Ändern** können die folgenden Parameter festgelegt werden:

01. **Nummer**: Dies ist die Nummer des zu ändernden Preset.
02. **Aktivierung**: Zum Einschalten des Preset.
03. **Pan**: Pan-Position in Grad.
04. **Tilt**: Tilt-Position in Grad.
05. **Zoom**: Zoomposition.
06. **Focus**: Position des Fokus tags und nachts.
07. **Geschwindigkeit**: Die Geschwindigkeit, mit der die Position erreicht wird, wenn die Presetposition von der Patrol- und Scanfunktion aufgerufen wird.
08. **Pause**: Wartezeit in Sekunden vor Beginn der nachfolgenden Patrol- Bewegung.
09. **Text**: Der angezeigte Text bei Erreichen der Presetposition.

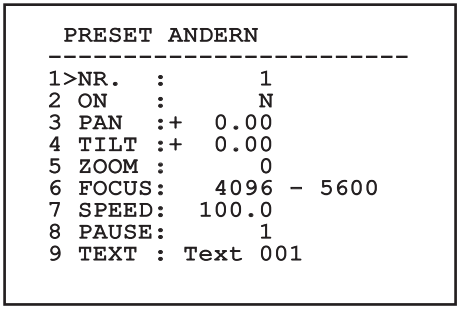

Fig. 70

Vom Menü aus lassen sich die Presetpositionen direkt speichern, wenn man den Befehl **Iris Close** übermittelt, der die Bewegungen des Schwenk-Neige-Kopfes aktiviert.

9.6.4.5 Menü Preset (Utility zPreset)

Nach dem Aufruf des Menüs **Utility Preset** können die folgenden Parameter festgelegt werden:

01. **A.Focus Tag**: Zum Einschalten des Autofokus beim Aufruf der Presets im Tagesmodus. Damit eine schnelle und saubere Fokussierung des Bildes garantiert ist, ist die automatische Fokussierung auszuschalten.
02. **A.Focus Nacht**: Zum Einschalten des Autofokus beim Aufruf der Presets im Nachtmodus. Es wird empfohlen, die automatische Fokussierung zu aktivieren, wenn der Schwenk-Neige-Kopf mit Infrarotscheinwerfer ausgestattet ist, denn der Brennpunkt variiert zwischen sichtbarem Licht und Infrarotlicht.
03. **Scan Geschwind.**: Diese Referenzgeschwindigkeit wird benutzt, wenn eine neue Presetposition mit der Funktion **Scan** aufgerufen wird.
04. **Standardgeschwindigkeit**: Änderung der Standardgeschwindigkeit beim Anfahren der Presetfunktionen. Auf diesen Wert greift die Funktion **Ges. Setzen?** zurück, um allen Vorwahlpositionen dieselbe Geschwindigkeit zuzuweisen.
05. **Standardpause**: Änderung der Standardpausendauer für die Presetpositionen. Auf diesen Wert greift die Funktion **Pause Setzen?** zurück, um allen Vorwahlpositionen dieselbe Pause zuzuweisen.
06. **Geschwindigkeit setzen**: Weist allen Vorwahlpositionen (Preset) die Standardgeschwindigkeit zu.
07. **Pause setzen**: Weist allen Vorwahlpositionen die Standardpause zu.

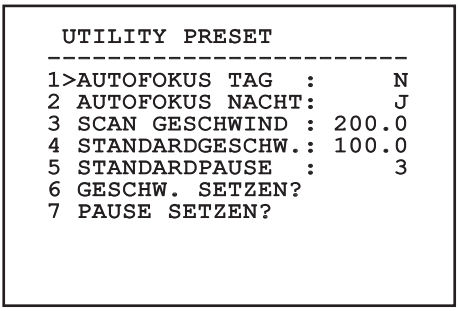

Fig. 71

9.6.4.6 Menü Patrol

01. **Erstes Preset**: Erste Vorwahlposition der Patrolsequenz.
02. **Letzes Preset**: Letzte Vorwahlposition der Patrolsequenz.
03. **Random Modus:** Aktiviert wird die zufällige Ausführung. Die Sequenz wird laufend neu berechnet.

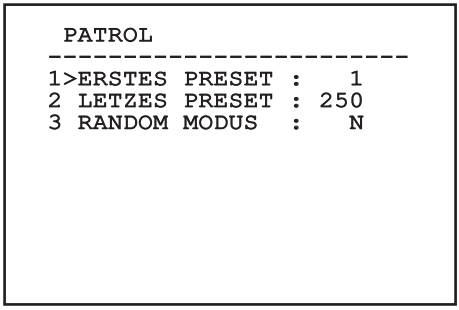

Fig. 72

9.6.4.7 Menü Autopan

01. **Preset Hin**: Anfangsposition des Autopan.
02. **Preset Zurück**: Endposition des Autopan.
03. **Geschwindigkeit Hin**: Geschwindigkeit für den Hinweg des Autopan.
04. **Geschwindigkeit Zurück**: Geschwindigkeit für den Rückweg des Autopan.

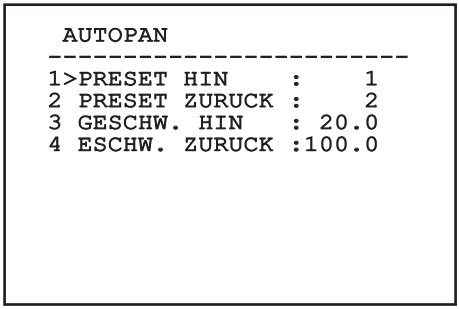

Fig. 73

9.6.4.8 Menü Bewegungsanforderung

ULISSE COMPACT THERMAL kann so eingestellt werden, dass die Einrichtung nach einer bestimmten Inaktivitätsdauer automatisch eine vom Bediener vorgegebene Bewegungsfunktion ausführt.

Im Menü können folgende Parameter festgelegt werden:

01. **Bewegungsart**: Auswahl der aufzurufenden Bewegungsart (None, Home, Autopan, Patrol, Tour 1, Tour 2, Tour 3).
02. **Bewegungsverzug**: Wartezeit (in Sekunden), die nach der Nichtbenutzung des Steuerknüppels vergehen muss, bevor die eingestellte Bewegung ausgeführt wird.

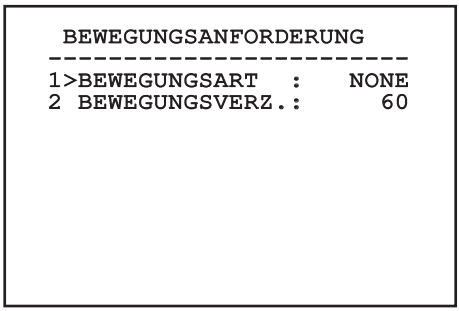

Fig. 74

9.6.4.9 Menü Erweiterte

01. **Statische Steuerung**: Aktiviert die Positionssteuerung nur, wenn die Schwenk-Neige-Einrichtung stillsteht.
02. **Dynamische Steuerung**: Aktiviert die Positionssteuerung nur, wenn die Schwenk-Neige-Einrichtung in Bewegung ist.
03. **Zyklisches Homing**: Bei Wert ungleich Null wird nach Ablauf der vorgegebenen Stundenzahl ein neuerlicher Homingvorgang vorgegeben.
04. **Sparmodus**: Reduziert das Drehmoment der Motoren, wenn der S-N-Kopf stillsteht. Nicht bei starkem Wind oder starken Vibrationen aktivieren.

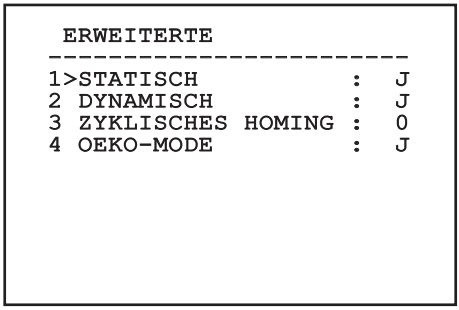

Fig. 75

9.6.5 Menü Anzeigen

01. **Position PTZ**: Wenn die Einstellung nicht auf OFF lautet, kann gewählt werden, wie auf dem Bildschirm die Positionen Pan, Tilt und Zoom angezeigt werden. Es kann eine bestimmte Anzeigedauer (1 S, 3 S und 5 S) oder eine Daueranzeige (CONST) gewählt werden.
02. **Name Preset**: Wenn die Einstellung nicht auf OFF lautet, kann gewählt werden, wie auf dem Bildschirm der Text angezeigt wird, welcher der zuletzt erreichten Presetposition zugeordnet ist. Es kann eine bestimmte Anzeigedauer (1 S, 3 S und 5 S) oder die Daueranzeige (CONST) gewählt werden.
03. **Name Zonen**: Lautet die Einstellung nicht auf OFF, kann gewählt werden, wie die den aktiven Zonen zugeordneten Texte angezeigt werden. Es kann eine bestimmte Anzeigedauer (1 S, 3 S und 5 S) oder die Daueranzeige (CONST) gewählt werden.
04. **ID Schwenk-Neige-Kopf**: Lautet die Einstellung nicht auf OFF, wird die ID des Schwenk-Neige-Kopfes angezeigt.
05. **Empfangene Befehle**: Lautet die Einstellung nicht auf OFF, kann der Modus gewählt werden, mit dem die empfangenen seriellen Befehle angezeigt werden. Es kann eine bestimmte Anzeigedauer (1 S, 3 S und 5 S) oder die Daueranzeige (CONST) gewählt werden.
06. **Delta Horizontal**: Bewegt die Menütexte zur besseren Textzentrierung horizontal.
07. **Delta Vertikal**: Bewegt die Menütexte zur besseren Textzentrierung vertikal.

```
 ANZEIGEN
------------------------
1>POSITION PTZ     :  1 S
2 NAME PRESET      :  3 S
3 NAME ZONEN       :  OFF
4 ID               :CONST
5 RX BEFEHLE       :CONST
6 DELTA HORIZONTAL:    3
7 DELTA VERTICAL   :    3
```

Fig. 76

9.6.6 Menü Optionen

01. **Deckenmontage**: Wird dieser Modus aktiviert, werden das Bild und die Direktionsbefehle umgekehrt.
02. **Alarme**: Gestattet den Zugriff auf das Alarmmenü.
03. **Waschanlage**: Gestattet den Zugriff auf das Menü Waschanlage.

```
 OPTIONEN
------------------------
1>DECKENMONTAGE:        N
2 ALARME                >
3 WASCHANLAGE           >
```

Fig. 77

9.6.6.1 Menü Alarme

01. **Alarme 1-5**: Sie ermöglichen den Aufruf der Menüs, in denen die Parameter der Alarme 1 bis 5 festgelegt werden können.
02. **Status Alarme**: Aufrufbar ist das Menü Status Alarme.

```
 ALARME
------------------------
1>ALARME 1              >
2 ALARME 2              >
3 ALARME 3              >
4 ALARME 4              >
5 ALARME 5              >
6 ALARMSTATUS           >
```

Fig. 78

Bei montiertem IR-Strahler ist Alarm 5 für den externen Dämmerungsschalter reserviert. Deshalb erscheint Alarm 5 nicht auf dem Bildschirm.

Vom Menü Alarme kann man auf eines der Menüs (Alarm 1-5) zugreifen und dort die Alarmparameter ändern.

In diesem Menü können die folgenden Werte vorgegeben werden:

01. **Art**: Eingestellt wird die Kontaktart: Normalerweise geschlossen (NC) oder normalerweise geöffnet (NO)
02. **Aktion**: Die Art der Aktion (Scan, Patrol, Autopan, Tour 1, Tour 2, Tour 3), die ULISSE COMPACT THERMAL ausführt, wenn der Alarm ausgelöst wird. Wählt man die Option Off, ist der Alarm deaktiviert.
03. **Nummer**: Das anzufahrende Preset, wenn die Art der Aktion für den Alarm Scan lautet.
04. **Text**: Die angezeigte Beschriftung, wenn der Alarm ausgelöst ist.

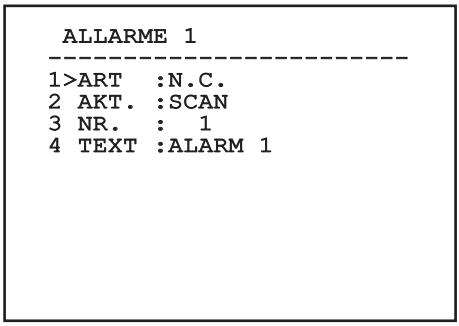

Fig. 79

Das Menü konfiguriert sich selbsttätig und dynamisch nach der getätigten Wahl und zeigt die Parameter, auf die eingewirkt werden kann.

Im Menü Alarme kann auf das Menü Status Alarme zugegriffen werden, in dem der Status des Eingangs der Alarme angezeigt wird (CLOSED Kontakt hergestellt, OPEN Kontakt nicht hergestellt).

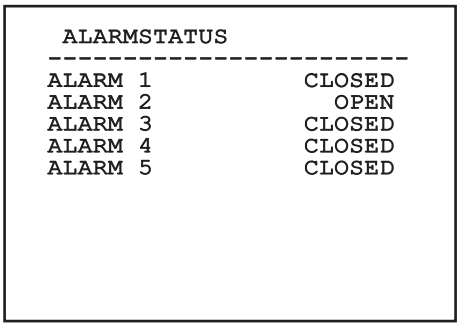

Fig. 80

9.6.7 Menü Waschanlage

ULISSE COMPACT THERMAL bietet die Möglichkeit, einen Scheibenwischer einzusetzen und eine Pumpe für die Scheibenreinigung zu betätigen.

Zur Einstellung der Waschanlage das Kameraobjektiv vor der Düse der Waschanlage positionieren.

Speichern Sie ein Preset (XY) für diese Position ab, die vom Schwenk-Neige-Kopf bei Aktivierung der Funktion WASHER aufgerufen wird.

Legen Sie vom Menü aus die folgenden Parameter fest:

01. **Ein**: Einschalten der Funktion Washer.
02. **Preset Düse**: Eingabe der Presetnummer (XY), die der Düse entspricht.
03. **Verzögerung Wischer On**: Festgelegt wird die Zeitspanne zwischen der Aktivierung der Pumpe und der Aktivierung des Scheibenwischers.
04. **Dauer Waschvorgang**: Festgelegt wird die Wischdauer.
05. **Verzögerung Wischer Off**: Festgelegt wird die Wischdauer ohne Wasser.

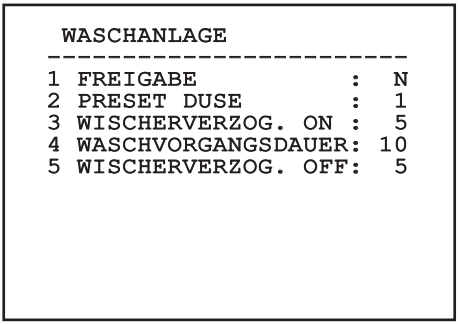

Fig. 81

Bei der Aktivierung der Funktion Washer ist die Verwendung von Relais 2 für das Einschalten der Pumpe reserviert. Dadurch besteht nicht mehr die Möglichkeit, Relais 2 einem Alarm zuzuweisen.

9.6.8 Menü Default

01. **Setup löschen**: Versetzt alle Parameter außer die Presetparameter in den ursprünglichen Zustand.
02. **Preset löschen**: Löscht alle gespeicherten Presetpositionen.

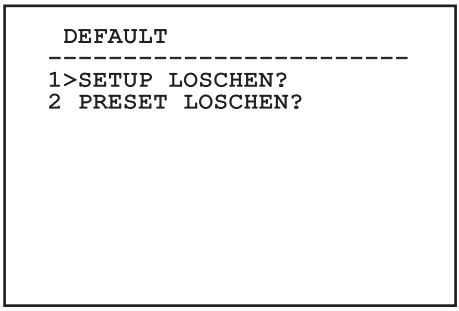

Fig. 82

Bei den oben beschriebenen Vorgängen gehen alle gespeicherten Daten verloren (z. B. Preset, Patrol, Autopan, Home...).

9.6.9 Menü Info

Das Menü ermöglicht es, die Konfiguration der Einrichtung und die Version der installierten Firmware zu prüfen.

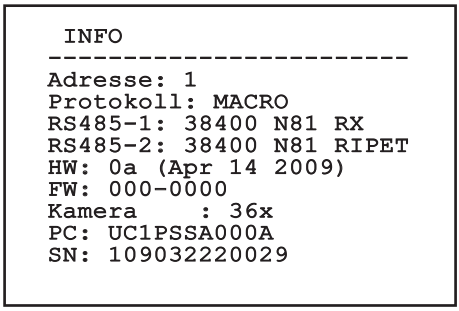

Fig. 83

9.6.10 Menü Wärmebildkamera

01. **Steuerung**: Vorgegeben wird die Art, wie die Wärmebildkamera gesteuert wird.
    - **Intern**: Die Konfiguration der Kamera wird vom Schwenk-Neige-Kopf gesteuert.
    - **Extern**: Die Konfiguration der Kamera wird über die serielle Leitung RS485-3 gesteuert (nur bei der Version mit Doppelkamera).
02. **Konfiguration**: Vorgegeben wird eine der vordefinierten Konfigurationen der Wärmebildkamera.
    - **Standard**: Hier wird die Standardkonfiguration der Wärmebildkamera eingestellt.
    - **High Gain**: Hier wird die Konfiguration eingestellt, die für eine bessere Bildauflösung gedacht ist.
    - **Isotherm**: Diese Konfiguration ist dafür gedacht, die Gegenstände innerhalb eines bestimmten Temperaturbereiches hervorzuheben (*"9.6.11 Menü Isotherme", Seite 43*).
    - **Custom**: Signalisiert, dass die Konfiguration der Wärmebildkamera vom Benutzer manuell gewählt worden ist.
03. **Flat Field-Korrektur**: Gestattet den Aufruf des Untermenüs für die Steuerung der Flat- Field-Korrektur.
04. **Videokonfiguration**: Gestattet den Aufruf des Untermenüs für die Steuerung der Videokonfiguration.
05. **Verstärkungssteuerung**: Gestattet den Aufruf des Untermenüs für die Steuerung der Verstärkungskontrolle.
06. **Konfiguration ROI**: Gestattet den Aufruf des Untermenüs für die Konfiguration der Funktion ROI.
07. **Wärmeanalyse**: Gestattet den Aufruf des Untermenüs für die Steuerung der Wärmeanalyse.
08. **Status**: Gestattet den Aufruf des Untermenüs mit den technischen Eigenschaften der Wärmebildkamera.

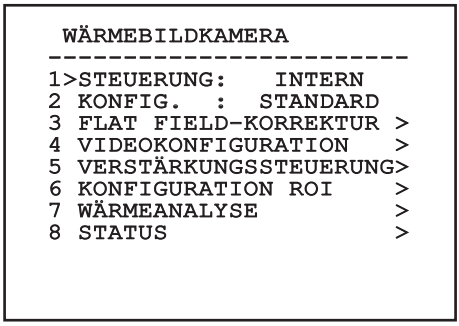

Fig. 84

9.6.10.1 Menü Flat-Field-Korrektur

Die Wärmebildkamera hat einen internen Mechanismus, der in bestimmten Zeitabständen die Bildqualität verbessert: Die Flat-Field-Korrektur (FFC). Diese Funktion hat die folgenden Parameter:

01. **Flat Field Auto**: Aktiviert die automatische oder manuelle Flat-Field-Korrektur. Wenn die automatische Korrektur aktiviert ist, führt die Kamera nach einer gegebenen Zeitspanne oder einer gegebenen Temperaturänderung eine FFC durch. Verwendet man umgekehrt die manuelle Korrektur, werden die Vorgänge der FFC vom Benutzer veranlasst. Es wird empfohlen, stets die automatische Korrektur zu verwenden.
02. **Intervall**: Die Zeitspanne, nach der eine FFC durchgeführt wird, wenn als dynamischer Verstärkungsbereich High vorgegeben ist. Die Zeitspanne wird in Frames ausgedrückt (33ms bei NTSC, 40ms bei PAL).
03. **Low Intervall**: Die Zeitspanne, nach der eine FFC durchgeführt wird, wenn als dynamischer Verstärkungsbereich Low vorgegeben ist. Die Zeitspanne wird in Frames ausgedrückt (33ms bei NTSC, 40ms bei PAL).
04. **Temperatur**: Dies ist die Temperaturänderung, nach deren Erreichen eine FFC durchgeführt wird, wenn als dynamischer Verstärkungsbereich High vorgegeben ist. Die Temperaturänderung wird in Intervallen von 0,1 °C ausgedrückt.
05. **Low Temperatur**: Eingestellt wird hier das Temperaturintervall, nach dem eine FFC durchgeführt wird, wenn der dynamische Verstärkungsbereich Low ist. Die Temperaturänderung wird in Intervallen von 0,1 °C ausgedrückt.
06. **Verstärkungsmodus**: Hier kann die Art des dynamischen Verstärkungsbereiches gewählt werden:
    - **High**: Diese Einstellung ist dazu bestimmt, den Kontrast zu maximieren. Besonders geeignet ist sie für Anwendungen mit Videoanalyse der Bilder.
    - **Low**: Bei dieser Einstellung ist der dynamische Bildbereich größer und der Kontrast kleiner. Sie ist besonders zur Identifizierung der wärmsten Bildelemente geeignet.
    - **Auto**: Bei dieser Einstellung kann die Kamera zwischen den Modi High und Low umschalten. Die Umschaltung basiert dabei auf dem gerade angezeigten Bild. Die Parameter des Menüs Verstärkungsänderungswerte (*"9.6.10.2 Menü Flat-Field-Korrektur (Verstärkungsänderungswerte)", Seite 41*) dienen dazu, das Verhalten dieses Modus zu modifizieren.
07. **FFC ausführen**: Veranlasst wird ein FFC-Vorgang.
08. **Werte Verstärkungskontrolle Schalt**: Gestattet den Aufruf des Untermenüs für die Steuerung der Verstärkungsänderungswerte.

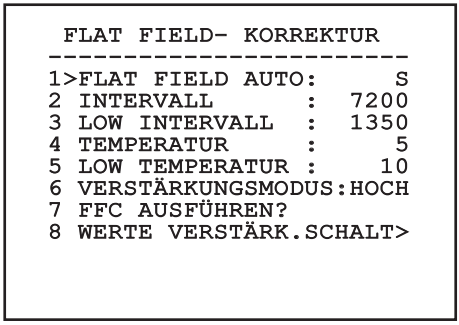

Fig. 85

Es wird empfohlen, die Standardwerte nicht zu ändern, weil sie so bemessen sind, dass sie unter allen Betriebsbedingungen eine hohe Bildqualität gewährleisten.

9.6.10.2 Menü Flat-Field-Korrektur (Verstärkungsänderungswerte)

Nach dem Aufruf des Menüs Verstärkungsänderungswerte lässt sich einer der folgenden Parameter vorgeben:

01. **Schwelle Hoch-Niedrig**: Für die Einstellung der Temperaturschwelle, auf die der **Population Hoch-Niedrig** Parameter zurückgreift, um in den Modus **Verstärkung Niedrig** umzuschalten. Der Wert wird in Grad Celsius ausgedrückt.
02. **Population Hoch-Niedrig**: Für die Einstellung der prozentualen Mindestpixelzahl, oberhalb derer die Umschaltung in den Modus **Verstärkung Niedrig** erfolgt.
03. **Schwelle Niedrig-Hoch**: Für die Einstellung der Temperaturschwelle, auf die der Parameter **Population Niedrig-Hoch** zurückgreift, um in den Modus **Verstärkung Hoch** umzuschalten. Der Wert wird in Grad Celsius ausgedrückt.
04. **Population Niedrig-Hoch**: Für die Einstellung der prozentualen Mindestpixelzahl, oberhalb derer die Umschaltung in den Modus **Verstärkung Hoch** erfolgt.

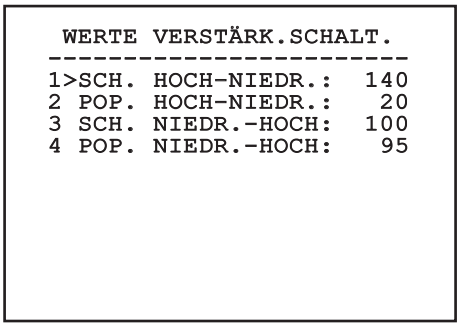

Fig. 86

Es wird empfohlen, die Standardwerte nicht zu ändern, weil sie so bemessen sind, dass sie unter allen Betriebsbedingungen eine hohe Bildqualität gewährleisten.

Die Einstellungen des Menüs Werte Verstärkungswechsel haben nur Wirkung, wenn der Verstärkungsmodus (*"9.6.10.1 Menü Flat-Field-Korrektur", page 40*) auf Auto gesetzt worden ist.

9.6.10.3 Menü Videokonfiguration

Nach dem Aufruf des Menüs Videokonfiguration lässt sich einer der folgenden Parameter einstellen:

01. **Polarität Lut**: Eingestellt wird die Koloration des von der Wärmebildkamera erfassten Bildes.
02. **Hinweis FFC**: Vorgegeben wird die Anzeigedauer eines farbigen Quadrates oben rechts auf dem Bildschirm, wenn eine FFC bevorsteht. Das Zeitintervall wird in Frames ausgedrückt (33ms bei NTSC, 40ms bei PAL). Ein Wert von unter 15 Frames deaktiviert automatisch diesen Hinweis.
03. **Digital-Zoom**: Eingestellt wird die Art des Zooms, der auf das Videosignal angewendet wird (OFF, Auto, 2x, 4x). Verwendet man den Modus Auto, passt sich der Zoom der Wärmebildkamera automatisch an den Zoom des SONY-Moduls an.
04. **Dynamic DDE**: Vorgegeben wird hier der Wert des Filters DDE, der dazu dient, die Schärfe der Umrisse zu verbessern. Die zu verwendenden, typischen Werte liegen zwischen 17 und 25. Bei einem Wert von 17 ist der Filter deaktiviert.
05. **Testsignal**: Aktiviert den Pattern-Test zur Prüfung der Kameraelektronik.

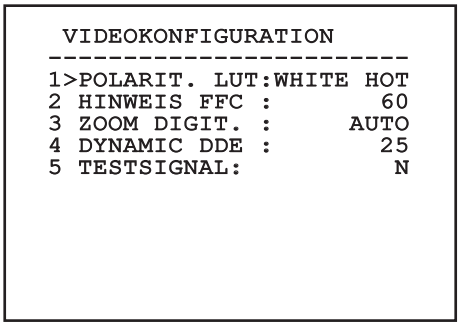

Fig. 87

9.6.10.4 Menü Verstärkungssteuerung

Nach dem Aufruf des Menüs Konfiguration Verstärkungskontrolle kann einer der folgenden Parameter eingestellt werden:

01. **Algorithmus**: Hier wird die Art der automatischen Verstärkungskontrolle (AGC) für die Bildoptimierung eingestellt. Folgende Algorithmen stehen zur Wahl:
    - **Automatik**: Der Kontrast und die Helligkeit des Bildes werden bei einer Änderung der Umgebungsbedingungen automatisch eingestellt. Dabei wird das Histogramm der Graustufen ausgeglichen. Das Bild kann modifiziert werden, indem man den Wert der Parameter ITT Mean, Max Gain und Plateau Value ändert. Dieser Algorithmus ist standardmäßig eingestellt und wird für den normalen Betrieb der Wärmebildkamera empfohlen.
    - **Once Bright**: Der eingestellte Helligkeitspegel ist der Durchschnitt aus den Bildhelligkeitswerten, wenn diese Position gewählt wird. Das Bild kann durch Änderung des Parameterwertes Kontrast geändert werden.
    - **Auto Bright**: Der eingestellte Helligkeitspegel ist der Durchschnitt aus den Bildhelligkeitswerten. Dieser Pegel wird in Echtzeit aktualisiert. Das Bild kann modifiziert werden, indem man die Werte der Parameter Kontrast und Kompensation ändert.
    - **Manuell**: Die Kontrast- und Helligkeitspegel werden vom Benutzer manuell eingestellt.
    - **Linear-Histogramm**: Der Kontrast und die Helligkeit des Bildes werden mit einer linearen Übertragungsfunktion optimiert. Das Bild kann modifiziert werden, indem man den Wert der Parameter ITT Mean, Max Gain ändert.
02. **Plateau-Wert**: Eingestellt wird der maximale Wert der Bildpunkte, die in einer Graustufe enthalten sein können.
03. **Durchschnitt ITT**: Eingestellt wird der Durchschnittspunkt der Grauskala.
04. **Max Verstärkung**: Eingestellt wird die maximale Verstärkung des AGC.
05. **Kontrast**: Eingestellt wird der Bildkontrastpegel.
06. **Helligkeit**: Vorgegeben wird der Bildhelligkeitspegel.
07. **Kompensation**: Eingestellt wird der Kompensationsgrad der Bildhelligkeit.

```
 VERSTÄRKUNGSSTEUERUNG
------------------------
1>ALGORITHMUS :      AUTO
2 PLATEAU VAL.:       150
3 MITTELWERT ITT :    127
4 MAX VERSTÄRKUNG:      8
5 KONTRAST    :        32
6 HELLIGKEIT  :      8192
7 KOMPENSATION:   +     0
```

Fig. 88

Das Menü konfiguriert sich dynamisch selbst in Abhängigkeit von der ausgeführten Wahl. Gezeigt werden die veränderbaren Parameter.

9.6.10.5 Menü Konfiguration ROI

Nach dem Aufruf des Menüs Konfiguration ROI kann der Bereich, der von Interesse ist (region of interest - ROI) geändert werden, der vom Algorithmus AGC genutzt wird, um die Kontrast- und Helligkeitspegel für das Bild zu berechnen.

01. **P1 Links**: Einstellung der linken Grenze ROI.
02. **P1 Oben**: Einstellung der oberen Grenze ROI.
03. **P2 Rechts**: Einstellung der rechten Grenze ROI.
04. **P2 Unten**: Einstellung der unteren Grenze ROI.

```
 KONFIGURATION ROI
------------------------
1>P1 LINKS       : -  160
2 P1 HOCH        : -  128
3 P2 RECHTS      : +  160
4 P2 UNTEN       : +  128
```

Fig. 89

9.6.10.6 Menü Wärmeanalyse

01. **Messpunkt**: Gestattet den Aufruf des Untermenüs für die Konfiguration des Messpunktes.
02. **Isotherme**: Gestattet den Aufruf des Untermenüs für die Bestimmung der Isotherme.

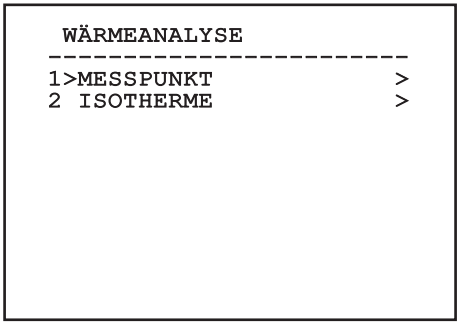

Fig. 90

9.6.10.7 Menü Wärmeanalyse (Messpunkt)

Nach dem Aufruf des Menüs Messpunkt kann einer der folgenden Parameter eingestellt werden:

01. **Modus**: Aktiviert die Anzeige der gemäß den 4 Pixeln in der Bildmitte gemessenen Temperatur (in Grad Celsius oder Fahrenheit). Die Option OFF deaktiviert die Anzeige.
02. **Digital**: Aktiviert die Anzeige des zugehörigen Symbols auf dem Bildschirm.
03. **Thermometer**: Aktiviert die Anzeige des zugehörigen Symbols auf dem Bildschirm.

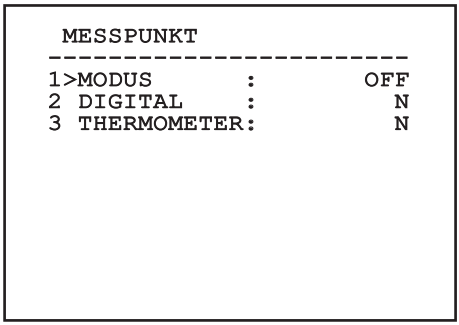

Fig. 91

9.6.11 Menü Isotherme

Nach dem Aufruf des Menüs Isotherme kann eine spezielle Koloration für Objekte aktiviert werden, die innerhalb des vorgegebenen Temperaturbereiches liegen. Die Funktionsparameter sind die Folgenden:

01. **Ein**: Aktiviert die Isothermen-Funktion.
02. **Modus**: Ausgewählt wird der Modus, in dem das Intervall ausgedrückt wird (als prozentualer Anteil oder in Grad Celsius).

03-05. **Oben**: Gibt die obere Grenze der Isothermenfunktion vor.

03-05. **Unten**: Gibt die untere Grenze der Isothermenfunktion vor.

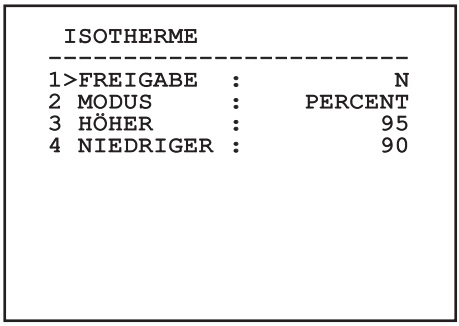

Fig. 92

Das Menü konfiguriert sich eigenständig in Abhängigkeit von der getätigten Einstellung. Die veränderbaren Parameter werden angezeigt.

9.6.12 Menü Status

Nach dem Aufruf des Menüs Status können die technischen Eigenschaften der Wärmebildkamera in Erfahrung gebracht werden.

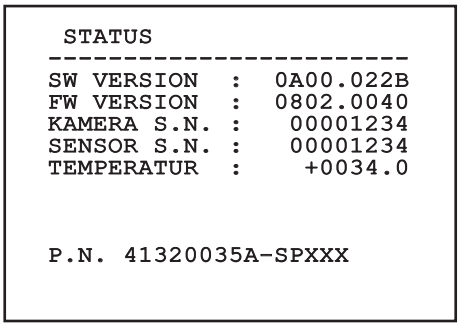

Fig. 93

10 Anleitung für den normalen Betrieb

Wird die Wärmebildkamera für längere Zeit auf die Sonne gerichtet, kann dies irreparable Schäden an ihrem Sensor verursachen.

10.1 Statusanzeige Schwenk-Neige-Kopf

Während des normalen Betriebes zeigt der Schwenk-Neige-Kopf nach Wahl des Benutzers auf dem Monitor die wie erläutert organisierten Daten. Die Anzeige kann ein- und ausgeschaltet werden, wie in *"9.6.5 Menü Anzeigen", Seite 37* beschrieben.

```
        NORTH/EAST
ID: 1               12345



AL 1: Alarm 1
Pan : -  5.56
Tilt: +120.01
Zoom:  36.00x
Preset: Text 001
E7-PRESET UMKONFIGURIERT
```

Fig. 94

NORTH/EAST: Name des Bereiches, in dem man sich befindet;

ID: 1: Empfängeradresse;

12345: Die vollständige Liste der bestehenden Alarme;

AL 1: Alarm 1: Der Text des letzten Alarms;

Pan: - 5.56/Tilt: +120.01/Zoom: 36.00x: Die aktuelle Position von Pan, Tilt und Zoom;

Preset: Text 001: Der Name des ausgewählten, aktiven Preset;

E7-PRESET UMKONFIGURIERT: Das folgende Feld zeigt die während des Systembetriebs gefundenen Fehler oder die über serielle Leitung empfangenen Befehle an (nur für die empfangenen Befehle kann die Anzeige ein- oder ausgeschaltet werden).

10.2 Speicherung der aktuellen Position (Preset)

10.2.1 Schnellspeicherung

Mit der Bedientastatur kann die aktuelle Position gespeichert werden (für weitere Informationen siehe das Handbuch der verwendeten Tastatur).

Während des Speichervorgangs kann die Geschwindigkeit beim Anfahren des Preset mit den Tasten Focus Far / Focus Near sowie die Wartezeit mit den Tasten Iris Open / Iris Close geändert werden.

```
------------------------
PRESET SETZEN
Focus fur Geschw-wechsel
Iris zur Dauer-Aenderung
Joystick zum Beenden
------------------------
Geschw. : 100gr/s
Pause   :   5s
Pan : -  5.56
Tilt: +120.01
Zoom:   36.00x
```

Fig. 95

10.2.2 Speichern vom Menü aus

Siehe *"9.6.4.3 Menü Preset", Seite 34*.

10.3 Aufrufen einer Position (Scan)

Mithilfe der Bedientastatur kann eine zuvor gespeicherte Position aufgerufen werden (für weitere Informationen siehe das Handbuch der verwendeten Tastatur).

10.4 Aktivierung Patrouille (Patrol)

Mit der Bedientastatur kann die automatische Patrouillenfunktion aktiviert werden (für weitere Informationen siehe das Handbuch der verwendeten Tastatur oder *Tab. 14, Seite 47*.

Die Deaktivierung erfolgt durch Bewegung des Joysticks oder durch den Aufruf eines anderen Bewegungstyps.

Für die Konfiguration der Patrolfunktion siehe *"9.6.4.6 Menü Patrol", Seite 36*.

10.5 Aktivierung Autopan

Mit der Bedientastatur kann die Funktion Autopan aktiviert werden (für weitere Informationen siehe das Handbuch der verwendeten Tastatur oder *Tab. 14, Seite 47*).

Zur Deaktivierung kann der Joystick bewegt oder ein anderer Bewegungstyp aufgerufen werden.

Für die Konfiguration der Autopanfunktion siehe *"9.6.4.7 Menü Autopan", Seite 36*).

10.6 Aufruf einer Strecke (Tour)

Die Betriebsart Tour ermöglicht es, einen zuvor registrierten Streckenverlauf ständig abzufahren.

Der Schwenk-Neige-Kopf kann bis zu 3 Touren von jeweils maximal 2 Minuten speichern.

Zur Speicherung einer Tour auf der Tastatur das Spezialpreset der zu speichernden Tournummer eingeben (*Tab. 14, Seite 47*).

Um die Aufzeichnung der Tour zu erleichtern, begrenzt der Schwenk-Neige-Kopf automatisch die Geschwindigkeit von **Pan und Tilt** nach dem Zoomfaktor.

Während der Aufzeichnung der Tour wird die verbleibende Aufzeichnungsdauer in Prozent angezeigt, wie aus der Abbildung ersichtlich ist.

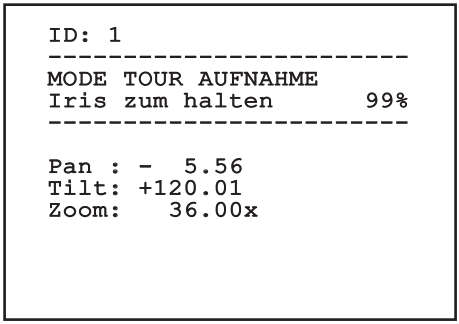

Fig. 96

Mit der Taste Iris Open oder Iris Close kann die Aufzeichnung unterbrochen werden.

Um die Wiedergabe einer Tour zu starten, geben Sie auf der Tastatur das Spezialpreset bezüglich der anzuzeigenden Tournummer ein (*Tab. 14, Seite 47*).

10.7 Aufruf der Homeposition

Mit der Bedientastatur kann die zuvor gespeicherte Homeposition aufgerufen werden (Scan Nr.1) (für weitere Informationen siehe das Handbuch der verwendeten Tastatur).

10.8 Aktivierung Scheibenwischer (Wiper)

Der Scheibenwischer ist bei Aussentemperaturen unter 0°C oder bei Glas nicht zu betätigen.

Zum Ein- oder Ausschalten des Scheibenwischers siehe das Handbuch der Tastatur oder *Tab. 14, Seite 47*.

Der Scheibenwischer schaltet sich automatisch aus, wenn er laufen gelassen wird.

10.9 Aktivierung Waschanlage (Washer)

Der Scheibenwischer ist bei Aussentemperaturen unter 0°C oder bei Glas nicht zu betätigen.

Zur Aktivierung der Waschanlage siehe das Handbuch der Tastatur oder die *Tab. 14, Seite 47*.

Für die Konfiguration der Waschanlage siehe *"9.6.7 Menü Waschanlage", Seite 38*.

10.10 Reboot der Einrichtung

Mit der Bedientastatur lässt sich der Befehl für den Reboot der Einrichtung absenden (für weitere Informationen siehe das Handbuch der verwendeten Tastatur oder die *Tab. 14, Seite 47*).

10.11 Umschaltung des sekundären Videoausgangs

Zur Auswahl des Videosignals (des integrierten Moduls oder der Wärmebildkamera) siehe die Befehle **Video 2 integriertes Modul** und **Video 2 Wärmebildkamera** (*Tab. 14, Seite 47*).

10.12 Manuelle Korrektur Fokussierung eines Preset

Mit dem Befehl Scan das Preset aufrufen, dessen Fokussierung geändert werden soll; die Fokussierung mit den Tasten Focus Far / Focus Near ändern, ohne die Position Pan/Tilt/Zoom zu ändern. Dann das Preset mit dem Befehl Preset speichern.

Die manuelle Presetkorrektur ist nur wirksam, wenn die Felder Autofocus Tag/Nacht deaktiviert sind (*Fig. 71, Seite 35*).

SPEZIALBEFEHLE					
Befehl	**Protokoll**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Tour 1 Aufzeichnung Start	Preset 77-speichern	Preset 77-speichern	Preset 77-speichern	Preset 77-speichern	Preset 77-speichern
		Pattern 2-speichern	Start Pattern Speicherung 3		Preset 47-speichern
Tour 2 Aufzeichnung Start	Preset 78-speichern	Preset 78-speichern	Preset 78-speichern	Preset 78-speichern	Preset 78-speichern
		Pattern 3-speichern			Preset 48-speichern
Tour 3 Aufzeichnung Start	Preset 79-speichern	Preset 79-speichern	Preset 79-speichern	Preset 79-speichern	Preset 79-speichern
		Pattern 4-speichern			Preset 50-speichern
Tour 1 Start	Preset 80-speichern	Preset 80-speichern	Preset 80-speichern	Preset 80-speichern	Preset 80-speichern
		Pattern 2	Einschalten pattern 3		Preset 51-speichern
Tour 2 Start	Preset 81-speichern	Preset 81-speichern	Preset 81-speichern	Preset 81-speichern	Preset 81-speichern
		Pattern 3			Preset 52-speichern
Tour 3 Start	Preset 82-speichern	Preset 82-speichern	Preset 82-speichern	Preset 82-speichern	Preset 82-speichern
		Pattern 4			Preset 53-speichern
Tour Record Stop	Iris Open/Close	IrisOpen/Close	Iris Open/Close	Iris Open/Close	Iris Open/Close
		Ack	Speicherung neue Pattern		
Wiper Start	Preset 85-speichern	Preset 85-speichern	Preset 85-speichern	Preset 85-speichern	Preset 85-speichern
	Aux 3 ON	Aux 3 ON	Aux 3 ON	Aux 3 ON	Preset 54-speichern
	Wip+				
Wiper Stop	Preset 86-speichern	Preset 86-speichern	Preset 86-speichern	Preset 86-speichern	Preset 86-speichern
	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Aux 3 OFF	Preset 55-speichern
	Wip-				
Washer	Preset 87-speichern	Preset 87-speichern	Preset 87-speichern	Preset 87-speichern	Preset 87-speichern
	Aux 4 ON	Aux 4 ON	Aux 4 ON	Aux 4 ON	Preset 56-speichern
	Was+				

SPEZIALBEFEHLE					
Befehl	**Protokoll**				
	MACRO	PELCO D	SENSORMATIC	ERNITEC	PANASONIC
Nachtmodus on	Preset 88-speichern	Preset 88-speichern	Preset 88-speichern	Preset 88-speichern	Preset 88-speichern
					Preset 57-speichern
Nachtmodus off	Preset 89-speichern	Preset 89-speichern	Preset 89-speichern	Preset 89-speichern	Preset 89-speichern
					Preset 58-speichern
Reboot Einrichtung	Preset 94-speichern	Preset 94-speichern	Preset 94-speichern	Preset 94-speichern	Preset 94-speichern
	Ini+		Faster+ Zoom out+ Focus far+ Iris open		Preset 61-speichern
Aktivierung OSM	Preset 95-speichern	Preset 95-speichern	Preset 95-speichern	Preset 95-speichern	Preset 95-speichern
	Men+		Iris open+ Focus+ Zoom out		Preset 46-speichern
Patrol Start	Preset 93-speichern	Preset 93-speichern	Preset 93-speichern	Preset 93-speichern	Preset 93-speichern
	Pat+	Pattern	Einschalten pattern 1	Einschalten patrol	Preset 60-speichern
Patrol Stop	Preset 92-speichern	Preset 92-speichern	Preset 92-speichern	Preset 92-speichern	Preset 92-speichern
	Joystick	Joystick	Joystick	Joystick	Joystick
	Pat-				Preset 59-speichern
Autopan Start	Preset 99-speichern	Preset 99-speichern	Preset 99-speichern	Preset 99-speichern	Preset 99-speichern
	Apa+	Pattern 1	Einschalten pattern 2	Einschalten autopan	Preset 63-speichern
Autopan Stop	Preset 96-speichern	Preset 96-speichern	Preset 96-speichern	Preset 96-speichern	Preset 96-speichern
	Joystick	Joystick	Joystick	Joystick	Joystick
	Apa-				Preset 62-speichern
FCC betätigen	Preset 74-speichern	Preset 74-speichern	Preset 74-speichern	Preset 74-speichern	Preset 74-speichern
					Preset 43-speichern
Video 2 Thermalkamera	Preset 75-speichern	Preset 75-speichern	Preset 75-speichern	Preset 75-speichern	Preset 75-speichern
					Preset 44-speichern
Video 2 integriertes Modul	Preset 76-speichern	Preset 76-speichern	Preset 76-speichern	Preset 76-speichern	Preset 76-speichern
					Preset 45-speichern

Tab. 14

11 Wartung und Reinigung

11.1 Wartung

Die Wartung von ULISSE COMPACT THERMAL darf nur von Fachleuten vorgenommen werden, die befähigt sind, an elektrischen Schaltkreisen tätig zu werden.

11.1.1 Firmware-Update

Bei Bedarf kann die Firmware des Schwenk-Neige-Kopfes aktualisiert werden. Weitere Auskünfte erteilt das Kundendienstcenter von Videotec.

Die Firmware kann an Ort und Stelle mit dem zugehörigen Kabel aktualisiert werden, das dem Lieferumfang des Schwenk-Neige-Kopfes beiliegt. Sie kann aber auch von fern (nur Protokolle MACRO/ VIDEOTEC und PELCO D) mit einem USB-Wandler – seriell 485 (nicht im Lieferumfang enthalten) aktualisiert werden.

11.1.2 Konfigurationsklon

Bei Bedarf kann die Konfiguration des Schwenk-Neige-Kopfes gespeichert werden. Weitere Auskünfte erteilt das Kundendienstcenter von Videotec.

Die Speicherung / Zurücksetzung kann an Ort und Stelle mit dem zugehörigen Kabel vorgenommen werden, das dem Lieferumfang des S-N-Kopfes beiliegt oder aber von fern (nur Protokolle MACRO/ VIDEOTEC und PELCO D) mit einem USB-Wandler – seriell 485 (nicht im Lieferumfang enthalten).

11.1.3 Austausch der Schmelzsicherungen

Damit ein ständiger Brandschutz garantiert wird, sind die Sicherungen nur in dem gleichen Typ und Wert zu ersetzen.

Auf der Anschlussplatine befinden sich zwei Schmelzsicherungen.

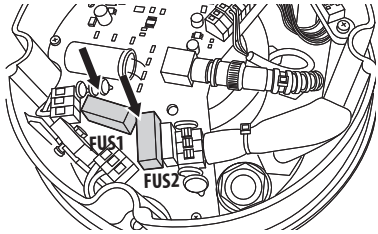

Fig. 97

Ihre Werte hängen von der Versorgungsspannung ab.

SPANNUNG	FUS 1	FUS 2
24Vac 50/60Hz	T 4A L 250V 5x20	T 6.3A H 250V 5x20
120Vac 50/60Hz	T 4A L 250V 5x20	T 4A H 250V 5x20
230Vac 50/60Hz	T 4A L 250V 5x20	T 2A H 250V 5x20

Tab. 15

11.2 Reinigung

Die Schwenk-Neige-Köpfe ULISSE COMPACT THERMAL bedürfen keiner aufwendigen Wartung. Für die Reinigung des Gerätes Neutralreiniger und nicht schleifende Tücher benutzen. Es sei daran erinnert, dass die Einrichtung wasserundurchlässig ist.

11.2.1 Reinigung des Glases und der Kunststoffteile (PC)

Es werden empfohlen verwässerte neutrale Seifen oder spezifische Produkte zur Reinigung der Brillenlinsen zusammen mit einem weichen Tuch.

Zu vermeiden sind Äthylalkohol, Lösungsmittel, hydrierte Kohlenwasserstoffe, starke Säuren und Alkali. Diese Produkte können die behandelte Oberfläche beschädigen.

12 Müllentsorgungsstellen

Dieses Symbol und das entsprechende Recycling-System gelten nur für EULänder und finden in den anderen Ländern der Welt keine Anwendung.

Ihr Produkt wurde entworfen und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wiederverwendet werden können.

Dieses Symbol bedeutet, daß elektrische und elektronische Geräte am Ende ihrer Nutzungsdauer von Hausmüll getrennt entsorgt werden sollen.

Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen Sammelstelle oder im Recycling Centre.

In der Europäischen Union gibt es unterschiedliche Sammelsysteme für Elektrik- und Elektronikgeräte.

13 Troubleshooting

Fordern Sie Fachleute für die Arbeiten an, wenn:

- Die Einheit nach einem Sturz beschädigt ist.
- Die Leistungen der Einheit merklich abgefallen sind.
- Die Einheit trotz der Befolgung sämtlicher Ausführungen in diesem Handbuch nicht korrekt funktioniert.

PROBLEM	MÖGLICHE URSACHEN UND LÖSUNGEN
Die Einrichtung ist aus und gibt keine Lebenszeichen von sich.	**Falsche Verkabelung, Schmelzsicherungen durchgebrannt.** Anschlüsse prüfen, Überprüfung der Sicherungen auf Durchgang und im Schadensfall Austausch durch Sicherungen mit den tabellarisch genannten Werten. Bei wiederholten Schäden an den Schmelzsicherungen wenden Sie sich bitte an eine der angeschlossenen Kundendienststellen.
Die vorgegebenen Preset-Positionen entsprechen nicht dem aufgenommenen Bereich.	**Verlust der absoluten Referenzposition.** Der S-N-Kopf von der Tastatur aus kalibrieren (siehe das entsprechende Handbuch) oder durch Aus- und Wiedereinschalten ein Geräte-Reset vornehmen.

Auf dem Monitor wird das von der ULISSE COMPACT THERMAL aufgenommene Bild **Nicht** angezeigt, sondern ein Bildschirm mit dem folgenden Aussehen:
`Adresse : 1`
`Protokoll : MACRO`
`RS485-1: 38400 N81 RX`
`RS485-2: 38400 N81 REPEAT`
`232 : NUR FW UPGRADE`
`HW: 000-0001`
`FW: 0a (Jun 4 2009)`
`DIP1.1: VIS. KONFIG. ON`
	Anzeige Konfiguration-Dipschalter (DIP1, SW1).
	Den Schwenk-Neige-Kopf ausschalten, den Kipphebel des Dipschalters absenken (**DIP1, SW1**). Das Gerät wieder einschalten.

Beim Einschalten bleibt die Schwenk-Neige-Einrichtung blockiert, die folgende Bildschirmseite erscheint:
`Adresse : 1`
`ENTFROSTUNGSVERF.`
`LAUFEND...`
`BLEIBENDE MINUTE: 59`
	Die Umgebungs-temperatur ist sehr niedrig.
	Ende des Vorheizvorgangs abwarten. Wenn die Umgebungs-temperatur zu niedrig ist, blockiert die ULISSE COMPACT THERMAL und zeigt den folgenden Bildschirm:
	`Adresse : 1`
	`ENTFROSTUNGSVERF.`
	`------------------------`
	`GEBLOCK ES-SYSTEM`
	`TEMPERATURE ZU NIEDRIG`
	`------------------------`

Fehler **E1-AUTOPAN NICHT BEGRENZT**.	**Die beiden als Begrenzungspunkte verwendeten Presets sind nicht programmiert worden.** Die beiden Presets programmieren und anschließend das Konfigurationsmenü der Funktion Autopan aktualisieren (*"10.2 Speicherung der aktuellen Position (Preset)", Seite 44* und *"9.6.4.7 Menü Autopan", Seite 36*).
Fehler **E2-SCHEIBENWISCHER BLOCKIERT**.	**Scheibenwischer blockiert oder defekt.** Prüfen, ob der Scheibenwischer sich ungehindert bewegen kann. Wenn das Problem fortbesteht, den Kundendienst hinzuziehen.
Fehler **E3-PATROL OHNE PRESET** oder Fehler **E4-PATROL NUR 1 PRESET.**	**Die Presets sind nicht programmiert worden.** Zwei oder mehr Presets programmieren, dann das Konfigurationsmenü der Funktion Patrol aktualisieren (*"10.2 Speicherung der aktuellen Position (Preset)", Seite 44* und *"9.6.4.6 Menü Patrol", Seite 36*).
Fehler **E5-IR TEMP. ZU HOCH** oder Fehler **E6-IR DEFEKT**.	**Fehlfunktion des Infrarotstrahlers.** Kundendienst hinzuziehen.
Fehler **E7-PRST. NICHT KONFIGURIERT**.	**Aufruf eines nicht programmierten Preset.** Das Preset mit dem zugehörigen Befehl speichern (*"10.2 Speicherung der aktuellen Position (Preset)", Seite 44*).
Fehler **E8-TOUR NICHT KONFIGURIERT**.	**Aufruf einer nicht programmierten Tour.** Die Tour mit dem zugehörigen Befehl speichern (*"10.6 Aufruf einer Strecke (Tour)", Seite 45*).
Fehler **E9-TEMP. ZU NIEGRIG**	**Die Umgebungstemperatur ist zu niedrig. Die Bewegungen des S-N-Kopfes sind blockiert, um mechanische Schäden zu vermeiden.**
Alarme **AL6 :WASSERSTAND NIEDRIG**	**Niedriger Stand der Scheibenwaschflüssigkeit.** Den Pumpenbehälter mit Scheibenwaschflüssigkeit befüllen.

Tab. 16

14 Technische Daten

Die Anlage gehört zum Typ TNV-1, nicht an Kreisläufe SELV anschließen.

Zur Senkung der Brandgefahr dürfen nur Kabel benutzt werden, die mindestens der Größe 26AWG entsprechen.

14.1 Allgemeines

Konstruktion aus Aluminiumdruckguß und Technopolymer

Pulverlackierung mit Epoxydpolyester, Farbe RAL9002

Fensterscheibe aus Germanium für die Wärmebildkamera

Installationsfreundlich dank selbstzentrierendem Stecker

Kein mechanisches Spiel

Dynamische Kontrollsystem von Positionierung

14.2 Mechanik

2 Kabelschellen M16 und 2 Kabelschellen M12

Rundum-Schwenk

Neigung von -90° bis +90°

Schwenkgeschwindigkeit einstellbar: von 0.1° bis 200°/s

Neigegeschwindigkeit Auf-Ab einstellbar: von 0.1° bis 200°/s

Genauigkeit bei der Anfahrt von Vorwahlpositionen: 0.05°

14.3 Elektrik/Video

Eingangsspannung:

- 230Vac, 50/60Hz,
- 24Vac, 50/60Hz
- 120Vac, 50/60Hz

Stromaufnahme:

- 230Vac, 0.4A
- 24Vac, 4A
- 120Vac, 0.8A

Leistungsaufnahme:

- 40W Schwenk-Neige-Kopf unbewegt, bei ausgestellter Heizung
- 60W in Bewegung, bei ausgestellter Heizung
- 125W Spitzenverbrauch am Zündung, bei laufender Heizung

Maße Eingangskabel: AWG 16 (24Vac) -18 (120/230Vac)

Maße Signalkabel: AWG 20-26

Videoleitungen: Koaxialkabel (1Vpp, 75Ohm)

Funktionen: Autopan, Preset, Patrol, Tour (max 3), Autoflip

Max. Anzahl Vorwahlpositionen:

- Protokoll AMERICAN DYNAMICS: 95*
- Protokoll ERNITEC: 250
- Protokoll PANASONIC: 250
- Protokoll PELCO D: 99*
- Protokoll VIDEOTEC MACRO: 250
- 250 nur von OSD (On Screen Display)

16-stellige Zeichenkette für die Betitelung der Bereiche und Vorwahlpositionen

I/O Alarm-Karte (Option):

6 Alarmeingänge

- 2 Relais-Ausgänge (2A 30Vac/60Vdc max)

14.4 Kamera

VERFÜGBARE WÄRMEBILDKAMERAS						
	THERMAL CAMERA 35MM		THERMAL CAMERA 25MM		THERMAL CAMERA 9MM	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Detector	Uncooled Vanadium Oxide microbolometer (VOx)					
Auflösung	320x256	320x240	320x256	320x240	320x256	320x240
Pixelgröße	25µm					
Spektrale Empfindlichkeit - langwelligen Infrarot (LWIR)	From 7.5µm to 13.5µm					
Interne Auslöser (nur für Sensor-Ausgleich)	Video stop < 1sec.					
Digital Detail Enhancement (DDE)	Ja		Ja		Ja	
Digitaler Zoom	2x, 4x					
Image Frequenz	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps
Temperaturbereich der Szenen	-40°C ÷ +160°C (-40°F ÷ +320°F)					
Horizontaler Sehfeld	13°		18°		48°	
Vertikaler Sehfeld	10°		14°		37°	
F-number	F/1.4		F/1.4		F/1.25	
Thermische Empfindlichkeit (NEdT)	< 50mK zu f/1.0					
Mann (Anerkennung / Erkennung / Identifizierung)	780m / 190m / 97m		560m / 140m / 70m		205m / 56m / 26m	
Auto (Anerkennung / Erkennung / Identifizierung)	2150m / 560m / 280m		1550m / 400m / 200m		590m / 150m / 74m	

Tab. 17

VERFÜGBARE ANALOG-KAMERAS				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X HOHE EMPFINDLICHKEIT	
	PAL	NTSC	PAL	NTSC
Optischer Zoom	36x		28x	
Wide Dynamic Range (Fix/Auto)	Ja		-	
Progressive SCAN	Ja		-	
Digitale Bildstabilisierung	Ja		Ja	
Weißabgleich	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)			
Horizontale Hochauflösung	Bis zu 550 TV-Linien			
Day-Night (Auto ICR)	Ja			
Bildaufnehmer	1/4" EXView HAD CCD		1/4" Super HAD CCD II	
Effektive Pixelzahl	~ 440000 pixel	~ 380000 pixel	~ 440000 pixel	~ 380000 pixel
Min. Nacht- Beleuchtung (ICR ON) (tipisch)	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
Min. Tag- Beleuchtung (ICR OFF) (tipisch)	0.1 Lux / 1/3s	0.1 Lux / 1/4s	0.16 Lux / 1/3s	0.16 Lux / 1/4s
Automatischer Anstieg der Belichtungszeit, um die Nachtüberwachung zu verbessern	Ja			
Geräuschabstand	Größer als 50 dB			
Belichtungsregelung (AE)	Automatisch, Verschlusspriorität, Blendepriorität, Beleuchtungstärkepriorität und Manuell			
Gegenlichtausgleich	On/Off			
Sphärische Maskierung (3D) von Privatzonen mit automatischer Aktualisierung	Ja			
Privatzonenmaskierung	On/Off (24 Positionen)			
Höchstzahl der anzeigbaren Maskierungsblöcke	8			

VERFÜGBARE ANALOG-KAMERAS				
	SONY DAY/NIGHT 36X		SONY DAY/NIGHT 28X HOHE EMPFINDLICHKEIT	
	PAL	NTSC	PAL	NTSC
Auflösung der Maskierungsblöcke	160x120 HxV			
Masquage	Bis zu 15 Maskierungstypen: 14 Farbe oder Mosaik			
Fokussiersystem	Auto (Empfindlichkeit: Normal, Gering), Trigger PTZ, Manuell			
Neue "intelligente" Objektivsteuerung	Modular-Technik von SONY für das automatische Linsenreset			
Hohe Zoom-Kapazität und weitreichender horizontaler Blickwinkel	Ja			
Optischer Zoom	36x, f=3.4 (Weitwinkel) bis 122.4mm (Tele) / F1.6 bis F4.5		28x, f=3.5 (Weitwinkel) bis 98mm (Tele) / F1.35 bis F3.7	
Digitalzoom	12x (432x mit optischem Zoom)		12x (336x mit optischem Zoom)	
Gesichtswinkel (A)	57.8 Grade (Weitwinkel) bis 1.7 Grade (Tele)		55.8 Grade (Weitwinkel) bis 2.1 Grade (Tele)	
Mindestentfernung des Objektes	320mm (Weitwinkel) bis 1500mm (Tele)		10mm (Weitwinkel) bis 1500mm (Tele)	
Elektronische Iris- Geschwindigkeit	1/1 ÷ 1/10000s			

Tab. 18 SONY ist ein eingetragenes Warenzeichen der SONY Corporation, Japan. EXView HAD ist ein eingetragenes Warenzeichen der SONY Corporation.

14.5 Kommunikation

Durch OSD konfigurierbar

Serielle Schnittstelle RS485 half duplex, RS422 full duplex und kaskadierte Konfiguration

Fernaktualisierung der Firmware an der Konsole (nur Protokolle VIDEOTEC MACRO und PELCO D)

Bis zu 1023 Einheiten über Dipschalter adressierbar

14.6 Protokolle

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO sind eingetragene Markenzeichen.

Die Einheit kann über Schnittstellen mit Produkten verbunden werden, die nicht von VIDEOTEC produziert sind. Es ist möglich, dass die Protokolle sich geändert haben oder die in einer anderen Konfiguration von früher von VIDEOTEC getesteten Einheiten sind. Deshalb empfiehlt VIDEOTEC vor jeder Installation einen Test. VIDEOTEC lehnt die Haftung für etwaige Installationskosten hervorgerufen durch Kompatibilitätsprobleme hervorgerufen ab.

14.7 Umgebung

Für innere / äußere Installationen

Betriebstemperatur: -40°C / + 60°C

Impulsfestigkeit: Bis zu 2KV zwischen zwei Leitungen, bis zu 4KV zwischen Leitung und Erde (Klasse 4)

14.8 Zertifizierungen

CE EN60950-1, EN61000-6-3 and EN50130-4

FCC part 15, Class A

IP66 EN60529

UL bestätigt

UL Canadian Safety Standards listed

NEMA 4X

15 Technische Zeichnungen

Maßangabe in Millimeter.

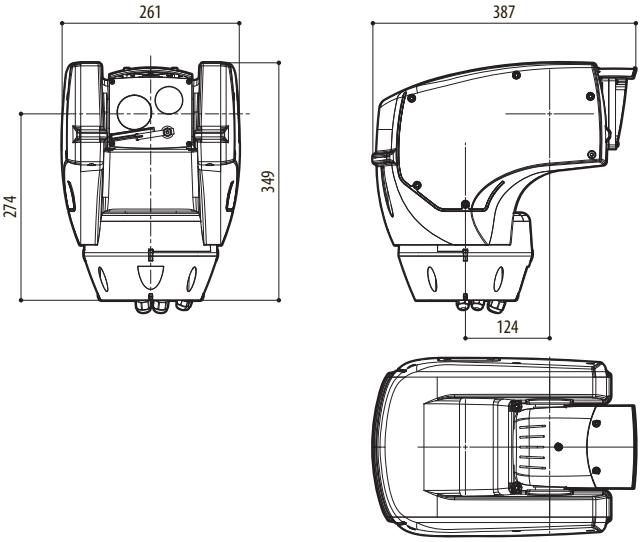

Fig. 100 ULISSE COMPACT THERMAL

16 Anhang A - Tabelle Adressen Dipschalter

Nachstehend sind alle Kombinationsmöglichkeiten aufgelistet.

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse unfähige	Adresse 512
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 1	Adresse 513
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 2	Adresse 514
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 3	Adresse 515
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 4	Adresse 516
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 5	Adresse 517
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 6	Adresse 518
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Adresse 7	Adresse 519
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 8	Adresse 520
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 9	Adresse 521
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 10	Adresse 522
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Adresse 11	Adresse 523
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 12	Adresse 524
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 13	Adresse 525
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 14	Adresse 526
ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Adresse 15	Adresse 527
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 16	Adresse 528
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 17	Adresse 529
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 18	Adresse 530
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Adresse 19	Adresse 531
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 20	Adresse 532
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 21	Adresse 533
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 22	Adresse 534
ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Adresse 23	Adresse 535
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 24	Adresse 536
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 25	Adresse 537
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 26	Adresse 538
ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Adresse 27	Adresse 539
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 28	Adresse 540
ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 29	Adresse 541
OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 30	Adresse 542
ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	Adresse 31	Adresse 543
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 32	Adresse 544
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 33	Adresse 545
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 34	Adresse 546
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Adresse 35	Adresse 547
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 36	Adresse 548
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 37	Adresse 549
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 38	Adresse 550
ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	Adresse 39	Adresse 551
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 40	Adresse 552
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 41	Adresse 553
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 42	Adresse 554
ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	Adresse 43	Adresse 555

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 44	Adresse 556
ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 45	Adresse 557
OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 46	Adresse 558
ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF	Adresse 47	Adresse 559
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 48	Adresse 560
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 49	Adresse 561
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 50	Adresse 562
ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	Adresse 51	Adresse 563
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 52	Adresse 564
ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 53	Adresse 565
OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 54	Adresse 566
ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF	Adresse 55	Adresse 567
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 56	Adresse 568
ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 57	Adresse 569
OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 58	Adresse 570
ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF	Adresse 59	Adresse 571
OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 60	Adresse 572
ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 61	Adresse 573
OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 62	Adresse 574
ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	Adresse 63	Adresse 575
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 64	Adresse 576
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 65	Adresse 577
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 66	Adresse 578
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Adresse 67	Adresse 579
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 68	Adresse 580
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 69	Adresse 581
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 70	Adresse 582
ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Adresse 71	Adresse 583
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 72	Adresse 584
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 73	Adresse 585
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 74	Adresse 586
ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Adresse 75	Adresse 587
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 76	Adresse 588
ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 77	Adresse 589
OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 78	Adresse 590
ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF	Adresse 79	Adresse 591
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 80	Adresse 592
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 81	Adresse 593
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 82	Adresse 594
ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	Adresse 83	Adresse 595
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 84	Adresse 596
ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 85	Adresse 597
OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 86	Adresse 598
ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF	Adresse 87	Adresse 599
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 88	Adresse 600
ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 89	Adresse 601
OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 90	Adresse 602

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF	Adresse 91	Adresse 603
OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 92	Adresse 604
ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 93	Adresse 605
OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 94	Adresse 606
ON	ON	ON	ON	ON	OFF	ON	OFF	OFF	Adresse 95	Adresse 607
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 96	Adresse 608
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 97	Adresse 609
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 98	Adresse 610
ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	Adresse 99	Adresse 611
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 100	Adresse 612
ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 101	Adresse 613
OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 102	Adresse 614
ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	Adresse 103	Adresse 615
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 104	Adresse 616
ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 105	Adresse 617
OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 106	Adresse 618
ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF	Adresse 107	Adresse 619
OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 108	Adresse 620
ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 109	Adresse 621
OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 110	Adresse 622
ON	ON	ON	ON	OFF	ON	ON	OFF	OFF	Adresse 111	Adresse 623
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 112	Adresse 624
ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 113	Adresse 625
OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 114	Adresse 626
ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	Adresse 115	Adresse 627
OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 116	Adresse 628
ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 117	Adresse 629
OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 118	Adresse 630
ON	ON	ON	OFF	ON	ON	ON	OFF	OFF	Adresse 119	Adresse 631
OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 120	Adresse 632
ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 121	Adresse 633
OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 122	Adresse 634
ON	ON	OFF	ON	ON	ON	ON	OFF	OFF	Adresse 123	Adresse 635
OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	Adresse 124	Adresse 636
ON	OFF	ON	ON	ON	ON	ON	OFF	OFF	Adresse 125	Adresse 637
OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	Adresse 126	Adresse 638
ON	ON	ON	ON	ON	ON	ON	OFF	OFF	Adresse 127	Adresse 639
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 128	Adresse 640
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 129	Adresse 641
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 130	Adresse 642
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	Adresse 131	Adresse 643
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 132	Adresse 644
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 133	Adresse 645
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 134	Adresse 646
ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	Adresse 135	Adresse 647
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 136	Adresse 648
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 137	Adresse 649

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 138	Adresse 650
ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	Adresse 139	Adresse 651
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 140	Adresse 652
ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 141	Adresse 653
OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 142	Adresse 654
ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	Adresse 143	Adresse 655
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 144	Adresse 656
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 145	Adresse 657
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 146	Adresse 658
ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	Adresse 147	Adresse 659
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 148	Adresse 660
ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 149	Adresse 661
OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 150	Adresse 662
ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF	Adresse 151	Adresse 663
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 152	Adresse 664
ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 153	Adresse 665
OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 154	Adresse 666
ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF	Adresse 155	Adresse 667
OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 156	Adresse 668
ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 157	Adresse 669
OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 158	Adresse 670
ON	ON	ON	ON	ON	OFF	OFF	ON	OFF	Adresse 159	Adresse 671
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 160	Adresse 672
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 161	Adresse 673
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 162	Adresse 674
ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	Adresse 163	Adresse 675
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 164	Adresse 676
ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 165	Adresse 677
OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 166	Adresse 678
ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF	Adresse 167	Adresse 679
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 168	Adresse 680
ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 169	Adresse 681
OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 170	Adresse 682
ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Adresse 171	Adresse 683
OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 172	Adresse 684
ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 173	Adresse 685
OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 174	Adresse 686
ON	ON	ON	ON	OFF	ON	OFF	ON	OFF	Adresse 175	Adresse 687
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 176	Adresse 688
ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 177	Adresse 689
OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 178	Adresse 690
ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF	Adresse 179	Adresse 691
OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 180	Adresse 692
ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 181	Adresse 693
OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 182	Adresse 694
ON	ON	ON	OFF	ON	ON	OFF	ON	OFF	Adresse 183	Adresse 695
OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 184	Adresse 696

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 185	Adresse 697
OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 186	Adresse 698
ON	ON	OFF	ON	ON	ON	OFF	ON	OFF	Adresse 187	Adresse 699
OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	Adresse 188	Adresse 700
ON	OFF	ON	ON	ON	ON	OFF	ON	OFF	Adresse 189	Adresse 701
OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	Adresse 190	Adresse 702
ON	ON	ON	ON	ON	ON	OFF	ON	OFF	Adresse 191	Adresse 703
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 192	Adresse 704
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 193	Adresse 705
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 194	Adresse 706
ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	Adresse 195	Adresse 707
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 196	Adresse 708
ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 197	Adresse 709
OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 198	Adresse 710
ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF	Adresse 199	Adresse 711
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 200	Adresse 712
ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 201	Adresse 713
OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 202	Adresse 714
ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF	Adresse 203	Adresse 715
OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 204	Adresse 716
ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 205	Adresse 717
OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 206	Adresse 718
ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	Adresse 207	Adresse 719
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 208	Adresse 720
ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 209	Adresse 721
OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 210	Adresse 722
ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF	Adresse 211	Adresse 723
OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 212	Adresse 724
ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 213	Adresse 725
OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 214	Adresse 726
ON	ON	ON	OFF	ON	OFF	ON	ON	OFF	Adresse 215	Adresse 727
OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 216	Adresse 728
ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 217	Adresse 729
OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 218	Adresse 730
ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	Adresse 219	Adresse 731
OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	Adresse 220	Adresse 732
ON	OFF	ON	ON	ON	OFF	ON	ON	OFF	Adresse 221	Adresse 733
OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	Adresse 222	Adresse 734
ON	ON	ON	ON	ON	OFF	ON	ON	OFF	Adresse 223	Adresse 735
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 224	Adresse 736
ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 225	Adresse 737
OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 226	Adresse 738
ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF	Adresse 227	Adresse 739
OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 228	Adresse 740
ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 229	Adresse 741
OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 230	Adresse 742
ON	ON	ON	OFF	OFF	ON	ON	ON	OFF	Adresse 231	Adresse 743

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 232	Adresse 744
ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 233	Adresse 745
OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 234	Adresse 746
ON	ON	OFF	ON	OFF	ON	ON	ON	OFF	Adresse 235	Adresse 747
OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	Adresse 236	Adresse 748
ON	OFF	ON	ON	OFF	ON	ON	ON	OFF	Adresse 237	Adresse 749
OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	Adresse 238	Adresse 750
ON	ON	ON	ON	OFF	ON	ON	ON	OFF	Adresse 239	Adresse 751
OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 240	Adresse 752
ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 241	Adresse 753
OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 242	Adresse 754
ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	Adresse 243	Adresse 755
OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	Adresse 244	Adresse 756
ON	OFF	ON	OFF	ON	ON	ON	ON	OFF	Adresse 245	Adresse 757
OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	Adresse 246	Adresse 758
ON	ON	ON	OFF	ON	ON	ON	ON	OFF	Adresse 247	Adresse 759
OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	Adresse 248	Adresse 760
ON	OFF	OFF	ON	ON	ON	ON	ON	OFF	Adresse 249	Adresse 761
OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	Adresse 250	Adresse 762
ON	ON	OFF	ON	ON	ON	ON	ON	OFF	Adresse 251	Adresse 763
OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	Adresse 252	Adresse 764
ON	OFF	ON	ON	ON	ON	ON	ON	OFF	Adresse 253	Adresse 765
OFF	ON	ON	ON	ON	ON	ON	ON	OFF	Adresse 254	Adresse 766
ON	ON	ON	ON	ON	ON	ON	ON	OFF	Adresse 255	Adresse 767
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 256	Adresse 768
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 257	Adresse 769
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 258	Adresse 770
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	Adresse 259	Adresse 771
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 260	Adresse 772
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 261	Adresse 773
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 262	Adresse 774
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	Adresse 263	Adresse 775
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 264	Adresse 776
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 265	Adresse 777
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 266	Adresse 778
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	Adresse 267	Adresse 779
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 268	Adresse 780
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 269	Adresse 781
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 270	Adresse 782
ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	Adresse 271	Adresse 783
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 272	Adresse 784
ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 273	Adresse 785
OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 274	Adresse 786
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	Adresse 275	Adresse 787
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 276	Adresse 788
ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 277	Adresse 789
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 278	Adresse 790

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON	Adresse 279	Adresse 791
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 280	Adresse 792
ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 281	Adresse 793
OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 282	Adresse 794
ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	Adresse 283	Adresse 795
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 284	Adresse 796
ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 285	Adresse 797
OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 286	Adresse 798
ON	ON	ON	ON	ON	OFF	OFF	OFF	ON	Adresse 287	Adresse 799
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 288	Adresse 800
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 289	Adresse 801
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 290	Adresse 802
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	Adresse 291	Adresse 803
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 292	Adresse 804
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 293	Adresse 805
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 294	Adresse 806
ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON	Adresse 295	Adresse 807
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 296	Adresse 808
ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 297	Adresse 809
OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 298	Adresse 810
ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON	Adresse 299	Adresse 811
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 300	Adresse 812
ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 301	Adresse 813
OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 302	Adresse 814
ON	ON	ON	ON	OFF	ON	OFF	OFF	ON	Adresse 303	Adresse 815
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 304	Adresse 816
ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 305	Adresse 817
OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 306	Adresse 818
ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	Adresse 307	Adresse 819
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 308	Adresse 820
ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 309	Adresse 821
OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 310	Adresse 822
ON	ON	ON	OFF	ON	ON	OFF	OFF	ON	Adresse 311	Adresse 823
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 312	Adresse 824
ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 313	Adresse 825
OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 314	Adresse 826
ON	ON	OFF	ON	ON	ON	OFF	OFF	ON	Adresse 315	Adresse 827
OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	Adresse 316	Adresse 828
ON	OFF	ON	ON	ON	ON	OFF	OFF	ON	Adresse 317	Adresse 829
OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	Adresse 318	Adresse 830
ON	ON	ON	ON	ON	ON	OFF	OFF	ON	Adresse 319	Adresse 831
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 320	Adresse 832
ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 321	Adresse 833
OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 322	Adresse 834
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	Adresse 323	Adresse 835
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 324	Adresse 836
ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 325	Adresse 837

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 326	Adresse 838
ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON	Adresse 327	Adresse 839
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 328	Adresse 840
ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 329	Adresse 841
OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 330	Adresse 842
ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON	Adresse 331	Adresse 843
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 332	Adresse 844
ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 333	Adresse 845
OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 334	Adresse 846
ON	ON	ON	ON	OFF	OFF	ON	OFF	ON	Adresse 335	Adresse 847
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 336	Adresse 848
ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 337	Adresse 849
OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 338	Adresse 850
ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON	Adresse 339	Adresse 851
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 340	Adresse 852
ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 341	Adresse 853
OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 342	Adresse 854
ON	ON	ON	OFF	ON	OFF	ON	OFF	ON	Adresse 343	Adresse 855
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 344	Adresse 856
ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 345	Adresse 857
OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 346	Adresse 858
ON	ON	OFF	ON	ON	OFF	ON	OFF	ON	Adresse 347	Adresse 859
OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	Adresse 348	Adresse 860
ON	OFF	ON	ON	ON	OFF	ON	OFF	ON	Adresse 349	Adresse 861
OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	Adresse 350	Adresse 862
ON	ON	ON	ON	ON	OFF	ON	OFF	ON	Adresse 351	Adresse 863
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 352	Adresse 864
ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 353	Adresse 865
OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 354	Adresse 866
ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON	Adresse 355	Adresse 867
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 356	Adresse 868
ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 357	Adresse 869
OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 358	Adresse 870
ON	ON	ON	OFF	OFF	ON	ON	OFF	ON	Adresse 359	Adresse 871
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 360	Adresse 872
ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 361	Adresse 873
OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 362	Adresse 874
ON	ON	OFF	ON	OFF	ON	ON	OFF	ON	Adresse 363	Adresse 875
OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	Adresse 364	Adresse 876
ON	OFF	ON	ON	OFF	ON	ON	OFF	ON	Adresse 365	Adresse 877
OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	Adresse 366	Adresse 878
ON	ON	ON	ON	OFF	ON	ON	OFF	ON	Adresse 367	Adresse 879
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 368	Adresse 880
ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 369	Adresse 881
OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 370	Adresse 882
ON	ON	OFF	OFF	ON	ON	ON	OFF	ON	Adresse 371	Adresse 883
OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	Adresse 372	Adresse 884

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	OFF	ON	OFF	ON	ON	ON	OFF	ON	Adresse 373	Adresse 885
OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	Adresse 374	Adresse 886
ON	ON	ON	OFF	ON	ON	ON	OFF	ON	Adresse 375	Adresse 887
OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	Adresse 376	Adresse 888
ON	OFF	OFF	ON	ON	ON	ON	OFF	ON	Adresse 377	Adresse 889
OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	Adresse 378	Adresse 890
ON	ON	OFF	ON	ON	ON	ON	OFF	ON	Adresse 379	Adresse 891
OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	Adresse 380	Adresse 892
ON	OFF	ON	ON	ON	ON	ON	OFF	ON	Adresse 381	Adresse 893
OFF	ON	ON	ON	ON	ON	ON	OFF	ON	Adresse 382	Adresse 894
ON	ON	ON	ON	ON	ON	ON	OFF	ON	Adresse 383	Adresse 895
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 384	Adresse 896
ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 385	Adresse 897
OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 386	Adresse 898
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	Adresse 387	Adresse 899
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 388	Adresse 900
ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 389	Adresse 901
OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 390	Adresse 902
ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	Adresse 391	Adresse 903
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 392	Adresse 904
ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 393	Adresse 905
OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 394	Adresse 906
ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON	Adresse 395	Adresse 907
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 396	Adresse 908
ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 397	Adresse 909
OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 398	Adresse 910
ON	ON	ON	ON	OFF	OFF	OFF	ON	ON	Adresse 399	Adresse 911
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 400	Adresse 912
ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 401	Adresse 913
OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 402	Adresse 914
ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON	Adresse 403	Adresse 915
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 404	Adresse 916
ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 405	Adresse 917
OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 406	Adresse 918
ON	ON	ON	OFF	ON	OFF	OFF	ON	ON	Adresse 407	Adresse 919
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 408	Adresse 920
ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 409	Adresse 921
OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 410	Adresse 922
ON	ON	OFF	ON	ON	OFF	OFF	ON	ON	Adresse 411	Adresse 923
OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	Adresse 412	Adresse 924
ON	OFF	ON	ON	ON	OFF	OFF	ON	ON	Adresse 413	Adresse 925
OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	Adresse 414	Adresse 926
ON	ON	ON	ON	ON	OFF	OFF	ON	ON	Adresse 415	Adresse 927
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 416	Adresse 928
ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 417	Adresse 929
OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 418	Adresse 930
ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON	Adresse 419	Adresse 931

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 420	Adresse 932
ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 421	Adresse 933
OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 422	Adresse 934
ON	ON	ON	OFF	OFF	ON	OFF	ON	ON	Adresse 423	Adresse 935
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 424	Adresse 936
ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 425	Adresse 937
OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 426	Adresse 938
ON	ON	OFF	ON	OFF	ON	OFF	ON	ON	Adresse 427	Adresse 939
OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	Adresse 428	Adresse 940
ON	OFF	ON	ON	OFF	ON	OFF	ON	ON	Adresse 429	Adresse 941
OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	Adresse 430	Adresse 942
ON	ON	ON	ON	OFF	ON	OFF	ON	ON	Adresse 431	Adresse 943
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 432	Adresse 944
ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 433	Adresse 945
OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 434	Adresse 946
ON	ON	OFF	OFF	ON	ON	OFF	ON	ON	Adresse 435	Adresse 947
OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	Adresse 436	Adresse 948
ON	OFF	ON	OFF	ON	ON	OFF	ON	ON	Adresse 437	Adresse 949
OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	Adresse 438	Adresse 950
ON	ON	ON	OFF	ON	ON	OFF	ON	ON	Adresse 439	Adresse 951
OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	Adresse 440	Adresse 952
ON	OFF	OFF	ON	ON	ON	OFF	ON	ON	Adresse 441	Adresse 953
OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	Adresse 442	Adresse 954
ON	ON	OFF	ON	ON	ON	OFF	ON	ON	Adresse 443	Adresse 955
OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	Adresse 444	Adresse 956
ON	OFF	ON	ON	ON	ON	OFF	ON	ON	Adresse 445	Adresse 957
OFF	ON	ON	ON	ON	ON	OFF	ON	ON	Adresse 446	Adresse 958
ON	ON	ON	ON	ON	ON	OFF	ON	ON	Adresse 447	Adresse 959
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 448	Adresse 960
ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 449	Adresse 961
OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 450	Adresse 962
ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	Adresse 451	Adresse 963
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 452	Adresse 964
ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 453	Adresse 965
OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 454	Adresse 966
ON	ON	ON	OFF	OFF	OFF	ON	ON	ON	Adresse 455	Adresse 967
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 456	Adresse 968
ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 457	Adresse 969
OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 458	Adresse 970
ON	ON	OFF	ON	OFF	OFF	ON	ON	ON	Adresse 459	Adresse 971
OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	Adresse 460	Adresse 972
ON	OFF	ON	ON	OFF	OFF	ON	ON	ON	Adresse 461	Adresse 973
OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	Adresse 462	Adresse 974
ON	ON	ON	ON	OFF	OFF	ON	ON	ON	Adresse 463	Adresse 975
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 464	Adresse 976
ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 465	Adresse 977
OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 466	Adresse 978

EINSTELLUNG DER ADRESSE (DIP2)										
SW 1	**SW 2**	**SW 3**	**SW 4**	**SW 5**	**SW 6**	**SW 7**	**SW 8**	**SW 9**	**SW 10 (OFF)**	**SW 10 (ON)**
ON	ON	OFF	OFF	ON	OFF	ON	ON	ON	Adresse 467	Adresse 979
OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	Adresse 468	Adresse 980
ON	OFF	ON	OFF	ON	OFF	ON	ON	ON	Adresse 469	Adresse 981
OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	Adresse 470	Adresse 982
ON	ON	ON	OFF	ON	OFF	ON	ON	ON	Adresse 471	Adresse 983
OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	Adresse 472	Adresse 984
ON	OFF	OFF	ON	ON	OFF	ON	ON	ON	Adresse 473	Adresse 985
OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	Adresse 474	Adresse 986
ON	ON	OFF	ON	ON	OFF	ON	ON	ON	Adresse 475	Adresse 987
OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	Adresse 476	Adresse 988
ON	OFF	ON	ON	ON	OFF	ON	ON	ON	Adresse 477	Adresse 989
OFF	ON	ON	ON	ON	OFF	ON	ON	ON	Adresse 478	Adresse 990
ON	ON	ON	ON	ON	OFF	ON	ON	ON	Adresse 479	Adresse 991
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 480	Adresse 992
ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 481	Adresse 993
OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 482	Adresse 994
ON	ON	OFF	OFF	OFF	ON	ON	ON	ON	Adresse 483	Adresse 995
OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	Adresse 484	Adresse 996
ON	OFF	ON	OFF	OFF	ON	ON	ON	ON	Adresse 485	Adresse 997
OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	Adresse 486	Adresse 998
ON	ON	ON	OFF	OFF	ON	ON	ON	ON	Adresse 487	Adresse 999
OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	Adresse 488	Adresse 1000
ON	OFF	OFF	ON	OFF	ON	ON	ON	ON	Adresse 489	Adresse 1001
OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	Adresse 490	Adresse 1002
ON	ON	OFF	ON	OFF	ON	ON	ON	ON	Adresse 491	Adresse 1003
OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	Adresse 492	Adresse 1004
ON	OFF	ON	ON	OFF	ON	ON	ON	ON	Adresse 493	Adresse 1005
OFF	ON	ON	ON	OFF	ON	ON	ON	ON	Adresse 494	Adresse 1006
ON	ON	ON	ON	OFF	ON	ON	ON	ON	Adresse 495	Adresse 1007
OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	Adresse 496	Adresse 1008
ON	OFF	OFF	OFF	ON	ON	ON	ON	ON	Adresse 497	Adresse 1009
OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	Adresse 498	Adresse 1010
ON	ON	OFF	OFF	ON	ON	ON	ON	ON	Adresse 499	Adresse 1011
OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	Adresse 500	Adresse 1012
ON	OFF	ON	OFF	ON	ON	ON	ON	ON	Adresse 501	Adresse 1013
OFF	ON	ON	OFF	ON	ON	ON	ON	ON	Adresse 502	Adresse 1014
ON	ON	ON	OFF	ON	ON	ON	ON	ON	Adresse 503	Adresse 1015
OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	Adresse 504	Adresse 1016
ON	OFF	OFF	ON	ON	ON	ON	ON	ON	Adresse 505	Adresse 1017
OFF	ON	OFF	ON	ON	ON	ON	ON	ON	Adresse 506	Adresse 1018
ON	ON	OFF	ON	ON	ON	ON	ON	ON	Adresse 507	Adresse 1019
OFF	OFF	ON	ON	ON	ON	ON	ON	ON	Adresse 508	Adresse 1020
ON	OFF	ON	ON	ON	ON	ON	ON	ON	Adresse 509	Adresse 1021
OFF	ON	ON	ON	ON	ON	ON	ON	ON	Adresse 510	Adresse 1022
ON	ON	ON	ON	ON	ON	ON	ON	ON	Adresse 511	Adresse 1023

Tab. 19

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