# 10inch touch quad DVR VIDEOPHONE 



KVR-A510/D510

## Cautions for Use

- This uniti is not designed for security purpose. Do not hande the unit with the wet hands. Do not place a pot with water or a small metal material on the Units.
Do not cover the ventilaing opening or put any metal maierial in the Do not cover the ventilaing opening or put any melal material in the units.
-During thunderstorms, avoid using this unit. There may be a remote isk
- Do not modify the unit.
. Open the main gate after checking ID it the
- thundestorms, avoid using this unit. There may be a remole risk lighing,
(1) Do not disassemble the back and cabinet cover. (1) Cautions for Abnormality - Change the damaged electric code.
!. Unplug this unit trom plus socket and refer servicing to an authorized service center when the following conditions occur:

1. Unlug this unit trom plus socket and refer servicing to an authorized sevice center when the following conditions occur:
-To prevent iniury, this apparatus must be securely attached to the floor/wall in accordance with the instalation instructions. Caution
(1) Safety Instructions, Warnings and Cautions of Each System - Do not disassemble this unit at will as this device is composed by precision parts. Do not touch or insert any foreign substances, tor example, sticker, magnetic, open
-Make U-type at the end of wires as the rain can effect on the system by following to

- Do not touch or insert any foreign substances, tor example, sticker, magnetic, opener and the iike
- Make U-type at the end of wires as the rain can effect on the system by ololowing the wires during the rainy season.
OVideophone
- Separate the $A C / D C$ lines with the hook of the wall-mounted type when installing. Connect the lines after peeling the wires properly
- Do not distribute signal line with $A C$ line. Use the designed driver to connect the lines to terminal Thin Ka - Things You Need to Know
-This product is designed as a home videoohone and caanot use continuuusy like monitor camera.
If there is temperature difference between inner part of camera and surrounding, dew condensation occurs on camera lens and may disturb image. II dew condensation is removed from camera lens, image quality recovers.
- White LED light examination range is narrower than camera shot range at nig
- White LED light examination range is narrower than camera shot range at night, so there is less amount of light at night than day. So it is difficult to see the face in low illumination condition due to noise increase on screen, but it is not from defect.
-Monitor screen (liquid crystal panel) is not in defect when some pixels always light or black out. - Monitor screen (liquid crystal panel) is not in defect when some pixels always light or black out.
- Please instal monitor and camera over 5 cm away. Also, avoid installing at a place wih too much noise, because

Please instal monitor and camera over 5 cm away. Also, avoid installing at a place with too much noise, because too much noise around camera causes phone call inferiority.
Do not place an object within 20 cm in front of monitor. It causes phone call inferiority, especially because microphone is installed at the top of monitor. - If strong light such as sunlight flows into camera module, screen saturation (or strange mark) and image shaking might occur.

- This is not a defect, so please do not install camera where a direct ray of light do not flow if possible. - This is not a defect, so please do not install camera where a direct ray of light do not flow if possible.
Cautions
- In some cases there is occurrence of product destruction, maltunction, noise mixing and picture quality deterioration due to mixing of other tool's sinduced
voltage or thunder with communication wiring of monitor/camera, monitor/extended monitor,

Do not wire with power line such as outdoor wiring or AC power, or phones and other tools.

- You cannot use it it you incorrecty wire the AC voltage between monitor/camera, monitor/extended monitor. Call the store or agency where you purchased

Outside power authorizing this product must be confirmed of product description and use rated voltage. Beware that if higher voltage is authorized, unfixable damage might be caused due to product destruction.
Power must be connected to domestic voltage (product

If connected to other motive power or inverter-type power, product destruction, noise mixing, and picture distortion may occur.

 - Do not install monitor in following places.
 (5) Place with a lot of gas, dust, smoke © Dangerous place with sprays of water or chemicals
Do not wipe with insecticide, drugs or chemicals such as thinner and alcohol, or it may damage
the surface of this product.
Beware of occurrence of image quality deterioration or malfunction trom cause of humidity due to
penetration of chemicals or water into camera' s urea resins.
As in the picture, it prevents temperature difference of camera (outside) and monitor (inside), and
removes dew condensation caused by humidity of camera window.
Camera must be instalded when wall cement is completel dry.
When product is installed in winter below -5 ' 5 , wait for approximately 2 hours to connect. Dew formation

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Camer must be installed when wall cement
When product is is installed in winter below -5 c' , wait forele approximately 2 hours to connect. Dew formation adiabatic substances, to
prevent air circulation


## Cautions for safety

 This Cautions for Safety may include items that are not contained in specifications of the product that consumer purchases,
If you need assistance with the set-up or operation, please contact with $\mathrm{A} / \mathrm{S}$ center.

The important marks in the manual.
To help our customers to understand this manual, to prevent any personal injury or property damage, some marks are used in the manual.
The marks and the drawing signs are below. Please, understand the marks before reading the manual.
The meaning of the drawing signs
Sign to show what not to do Mishandling the device with ignoring this sign may result in serious injury or death.
\} Mishandling the device with ignoring this sign may result physical injury or material damage.

## (1) Sign to tell you that you shoud follow the instuccions. 4 Sing to tell you that you need more attention including high voltages, electict shock, danger, warings)

| (1) Sign to tell you that you can't disassemble this unit. | es sign to tell you that you must unplug the unit. |
| :--- | :--- | :--- | :--- |

## 

0 Caulons $\begin{aligned} & \text { ot sel-up }\end{aligned}$

- The law limits distributing the power lines to an authorized person from government. The work from an unaurhtorized person cause fire or electric shock.
- Place this unit securely on a stable surface. Serious damate and/or injury may result if the unit falls.
- Place this unit securely on a stable surface. Serious damafe and/or injury may result if the unit falls,
- Do not set up this unit near the leaking place because it may expose you to dangerous voltages or other risks. - Even if your product is water proof, do not install it slanted place of water leakage, which can a short circuit.
- The work of distributing wires needs skills and experiences. So please, for assistance, contact your dealer or call service center. ! The communication lines should be built in being distant from the power source. This may result in the risk of fire, electric shock and communication disorder. - Keep the hook at the wall-mounted device safe. The hook may cause the physical injury.

Think about the thickness and quality of wall material. The unqualified material may make the device fall.
! Set the device of the wall-mounted type not to fall. Falling from an earthquake causes personal injury.
Cautions for Repairs and Maintenance
! - Keep the inside of the device clean. Having the dust inside without any cleaning for a long time causes the fire. If necessary, contact your dealer or service center to get cleaning service.

- Unplug this device when you want to check the inside. If there is no plug, please, turn off the circuit breaker.
Unplug this device when you try to move it to another place. If the electric line is connected inside of the unit,
$\overrightarrow{\mathrm{e}}=$ - Unplug this device when you try to move it to another place. If the electric line is connected inside of the unit, please contact your dealer or service center. - Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning
- Danger of explosion if battery is inorrectly replaced. Replace only
- Danger of explosion if battery is inorrectly replaced. Replace only with the same or equivalent type.

AWarning

Warnings for Usage
Do not install this unit near the water and dust, for example, in a bathroom or near the washing machine. It caused fire and electic shock.

- Do not install this unit near the fire, for example, near kitchen sink, heater or the like. - Do not install near the noxious gar such as Hydrogen Sulfide, metal power and the like.
Do not install near the water and chemicals.
- Do not give any damage, break and modify the plug. Overloading, heating, pulling causes the damage.
- Do not place the plug near the heater. The damaged code causes fire and electric shock. Do not pull the power code when unplugging.
- The damaged code causes fire and eclectic shock. Must pull with plug. Do not touch with wet hands. It causes the electric shock.

Do not use the power terminal at the units to other electric device except the designed device,
Do not install the units at the leaking place if it doesn' thave any waterproof mark. Do not install the unit when the power is on.
Check
Do the wiring work by using the designed material
Connect the electric wire with the designed ways and ground.
Do not connect with any other devices except the designed devices to compose the system.

- Unplug electric wire and communication lines from the units before moving to another place.

Wire connecting to camera 4ea



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DVR VIDEOPHONE

Installation location Camera installation location
Camera installation in height Standard Camera installation in height Standard
camera installation height is when
lens is about $1,400 \mathrm{~mm}$ above the floor. lens is about $1,400 \mathrm{~mm}$ above the floor.
In this case, camera stack center (piping box) is above $1,390 \mathrm{~mm}$ above ground level.
Standard installation in height ※The above angel of view is based on the KC-MC24 camera.
The numbers very according to the type of camera.
Caution of camera installation
Avoid installing camera exposed to direct ray of light (and sun). Avoid instaling camera exposed to direct ray of light (and sun).
-Beware backlight and darkness of visitor' s face, which makes identification difficult. Beware backlight and darkness of visitor' s face, which makes
-Avoid installing camera in places such as the following picture. (1) Place illuminating sky as background
(2) Place with white wall reflecting direct ray of light
Remove wall-hanger bracket metal behind monitor.


 5) Plug monitor' s power plug into consent and check to see if the power switch is [ON]
on the left side of monitor.

Monitor installation location
Standard monitor installation height

Cradle (optional) connection:
connect by fitting in the groove at the monitor' $s$ backside and
the Cradle' $s$ groove.

※Precautions at the time of installation : Install so that the air ventilation hole at the back of the product does not get clogged. This could cause
malfunction due to the heating of the product.


50 Monitoring : move to video phone mode while at the main screen
(1) SD card innut section
(2) USB input section
(3) Monitor screen (LCD)
(4) CMIC 9) Speaking vol
(1) Power switch
Speaker

(5) Function key
(1) Monitoring Station call : monitor connected in an extended manner; page and call using the interphone
Emergency recording : forced recording of camera's image
Door opening : door opening function during call

$\Delta|\overrightarrow{\Delta x}\rangle$ Direction key : screen or cursor move while at the video phone, DVR, setting mode
DVR VIDEOPHONE
※ It is not possible to record urgently without SD CARD.


Paging and call from entrance $\begin{array}{ll}\text { Orange color borderine is generated on } & \begin{array}{l}\text { Camera at the entrance and call get } \\ \text { connected when the } \\ \text { the image of the camera at the entrance }\end{array}\end{array} \begin{aligned} & \text { Door opens when the or icon or } \\ & \text { pressed on during a call. }\end{aligned}$ $\begin{array}{ll}\text { when page comes from the camera at the } & \text { pressed on while page from the entrance } \\ \text { entran } & \text { (Enabled while at the state in which switch } \\ \text { is connected) }\end{array}$ is connected)
Operation time for door opening is up to
10 seconds. Modification is enabled at the
 Monitoring takes place for the entire screen
when the applicabble screen is touched once
more at this time Mon the applicable screen is louched once
when
more at this time. once more.
Mondtorn when icon or key
is pressed on after applicable screen is


[^0]

1) It is possible to close a gas valve only.
2) If a gas value is opened, it displays on the status display screen.
3) A button [GAS COSE] is activated.
4) If a user presses a button [GAS CLOSE], a gas valve is closed.
Curtain control
when curtain icon is pressed on while at the home control mode screen.
Move to
curtain setting


\footnotetext{

- Select closed room open (0) loading Curtain open
[7] Select open room cose (0) loading $\quad$ Curtain closed
- Cancel icon


1) It is possible to add or delete a curtain on the screen of 'CURTAIN SET' of menu 'SET'
2) Curtain Open/Close//Stop

- If a user selects a curtain to open and then presses a button [OPEN], the curtain comes to open.
- If a user selects a curtain to close and then presses a button [CLOSE], the curtain comes to close.
- If a user presses a button [STOP] during a curtain is working the curtain comes to stop.

3) All Curtains Open/Close

- If a user presses a button [Open All] or [Close All], all currains come to open or close.

4) Time Reservation告 | Nannown |
| :---: |
| If a scenario is added on the screen of 'SET' |
| a red dot is generated on the top of a curtain. |

## Relay unit control




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Lighting setting

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$\begin{aligned} & \text { 1. Lighting Room Add or Delete } \\ & \text { 1) There is no any room at the begin }\end{aligned}$
$\begin{aligned} & \text { 1. Lighting Room Add or Delete } \\ & \text { 1) There is no any room at the beginning. } \\ & \text { 2) If a user presses an icon of a room and then presses a button [ADD], a room is added. } \\ & \text { 3) A room name starts from 'Name } 1 \text { '. }\end{aligned}$
$\begin{aligned} & \text { 3) A reom naximum number of rooms to be generated is } 18 \text { rooms. } \\ & \text { 4) Room ID is automatically given by increasing from 'O' one by one in tums. } \\ & \text { 5) To delete a room, select a room to delete and then press a button [DELETE]. } \\ & \text { 7) A room starts being deleted from the last one. }\end{aligned}$
$\begin{aligned} & \text { 2. Light Add or Delete } \\ & \text { 1) Select a room to add a } \\ & \text { 2) II a user presses a but } \\ & \text { 3) The maximum number }\end{aligned}$
$\begin{aligned} & \text { 1) Select a room to add a light. } \\ & \text { 2) If a user presses a button [ADD] after pressing a light (a general light / a dimmer light), a light is added. } \\ & \text { 3) The maximum number of lights to add in a room is } 4 \text { lights. } \\ & \text { 4) To delete a light, select a light to delete and then press a button [DELETE]. }\end{aligned}$
$\begin{aligned} & \text { 3. Room Name Modify } \\ & \text { 1) If a user presses a button [KEYBOARD] after selecting a room, a keyboard to input a room name is popped up. } \\ & \text { 2) If a user presses a button [OK] after inputting a room name, it is modified. }\end{aligned}$
3) English is applicable to input a room name only
$\begin{aligned} & \text { 2) It is possible to select [EACH] or [ALL] for a room and a light. } \\ & \text { 3) A user should select ''Daily' or 'Weekly' on the screen of 'Weekly Select' after selecting a room or a light., } \\ & \text { 4) If a user selects 'Daily' , it runs everyday, and if he/she selects 'Weekly'. a user can select a day of the week to run a reservation. } \\ & \text { 5) A user should select a menu 'Time Select' after completing the setting of 'Weekly Select'. } \\ & \text { 6) If a user wants to tum on or off a light, he/she can select a button [EACH] or [ALL]. } \\ & \text { 7) A box 'ON' means a time to turn on a light and a box 'OFF' does a time to turn off it. } \\ & \text { 8) If a user presses a time after checking a box 'ON or 'OFF', the color of time turns blue. } \\ & \text { 9) If the color of time turns blue, press a time button on the top according to the time when a user wants. } \\ & \text { 10) The figure of time is automatically controlled by pressing a time button. } \\ & \text { 11) A user should press a button [SAVE] after setting a time completely to save the time set. } \\ & \text { 12) If a time is completely reserved, a red dot is generated right on the light. } \\ & \text { 5. Button [TEST] } \\ & \text { 1) If a user presses a button [TEST], he/she can make a test about the motion of a light on the screen of 'SET'. } \\ & \text { 2) If a user presses a button [TEST], a pop-up screen is activated and it goes to a test mode. } \\ & \text { 3) If a user presses a button [EACH] for a light, an icon of the light turns light and the light turns on. } \\ & \text { 4) If a user presses a button [EACH] again, the light turns off. } \\ & \text { 5) On [TEST] mode, a button [ALL] is changed to [ALL ON]. } \\ & \text { 6) If a user presses a button [ALL ON], all lights tum on. } \\ & \text { 7) If all lights turn on, a button [ALL ON] is changes to [ALL OFF]. } \\ & \text { 8) If a user presses a button [ALL OFF], all lights turn off. } \\ & \text { 9) Only, a scenario motion runs on a control screen only. } \\ & \text { 10) If a user presses a button [TEST] again, he/she can exit from a [TEST] mode. }\end{aligned}$

2. Curtain Name Modify

1) If a user presses a button [KEYBOARD] after selecting a curtain, a keyboard to input a curtain name is popped up.
2) If a user presses a button [OK] after inputting a curtain name, it is modified. 2) If a user presses a button [OK] after inputting a cu
3) English is applicable to input a curtain name only. 3. Time Reserve
4) It it possible to reserve a time to each curtain.
5) It sossible to select a button [EACH] or [ALL] to
6) 4) If a user selects 'Daily', it runs everyday, and if he/she selects 'Weekly' 'a woely Select' 5) A user should select menu is possible to select a time to open or close each or all curtains.
b) 7) A box 'OPEN' means a time to open a curtain and a box 'CLOSE' does a time to close it.
1) If a user presses a time on the right side atter checking a box 'OPEN' or 'CLOSE', the color of time turns blue. 9) It the color of time tums blue, press a t time buttion on the top according to the time when a user wants.
2) The figure of time is automatically controlled by pressing a time button. 10) The figure of time is automatically controlled by pressing a time button.
3) A user should press a button $[$ SAV E] after setting a time completely to save the time set.
4) If a time is completely reserved, a red dot is generated right on the light.

[^2]

Moves to DVR language page when language setting icon is pressed on while at the setting mode screen.
Sets up to desired language.


1.2. Playback Buttons
If you select search mode, the status will be shown in the upper side of screen.
How to use Playback bar
MENU $>$ SEARCH $>$ select
MENU > SEARCH > select Search mode you want.

- Playback mode changing will be $\times 8$, twice will be $\times 32$ then 3 times select is $\times 128$.
Select $\square$ button to stop playback and go back to live mode.

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& \text { 1.3. Other Icons } \\
& \text { 1.3.1. CHANNEL ICON }
\end{aligned}
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|  | Now status | -This rectangular show the now status of playback. <br> -If you select $>$, the mark will be changed to $>$, <br> -And the mark will show $\gg$, when $>$ is selected |
| :---: | :---: | :---: |
| 44 | Backward | - Control backward speed. <br> - Move frame by frame reversely in pause mode |
| - | Play | - Play the recorded data |
| II | Pause | - Pause the playing data |
| $\stackrel{ }{*}$ | Fast Forward | - Control forward speed. <br> - Move frame by frame forwardly in pause mode |
| - | Stop | Stop the playback and go to Live mode |
|  | Quick Search | - If you select this Icon, the Search sub-menu will pop up |


|  | Now status | $\begin{array}{l}\text {-This rectangular show the } \\ \text {-If you select } \\ \text {-And the the mark }\end{array}$ |
| :--- | :--- | :--- |
| 44 | Backward | $\begin{array}{l}\text { - Control backward show sped } \\ \text { - Move frame by frame re }\end{array}$ |
|  | Play | - Play the recorded data |$| \begin{array}{ll}\text {-Pause the playing data }\end{array}$


. 1.3.2. SCREEN SHOW STATUS
You can select how screen will display.
In Live MODE, there are 4 modes : Single, PIP, Sequence, Quad

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| 1.5. | Sequence mode |
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|  | - If you select SEQ button in case of FULL or QUAD screen mode, screen(s) will rotate automatically. <br> - Default value of cannel changing interval is 2 or 3 seconds. <br> - User can select interval time from 1 to 99 seconds at SETUP > DISPLAY > LIVE-SEQ(FULL) <br> - User can select desired channel to display |
|  | Digital-ZOOM <br> Only in live mode, digital zoom function will work. <br> - In full screen(1ch), select the icon in the top middle. Then, it gets into digital zoom mode. <br> - If you select ZOOM key again, Zoom-Area window will be generated and you can move it to different position by touch screen or direction keys on the machine. <br> - Move the area to position we want. Touch the area to enlarge it. <br> - To get out of digital zoom mode, please press the DVR mode key on the machine. |
|  |  |

In play mode, there are 2 modes: Single, Quad
1.3.3. SD CARD STATUS
It shows the usage of SD card in percentage.
1.3.4. USB ICON
It shows the usage of SD card in percentage.
1.3.4. USB ICON
This Icon will be shown after you attach USB into DVR,
1.3.5. SD CARD MOUNTING/REMOVAL ICON
Select this icon when you input SD card for mounting. (If mounting is not done, recording is not Starting). Select this icon when you remove SD card. (If removal is not done, it could cause damage SD card)
1.3.6. ENTERING MENU INCON
To enter menu, select this icon or press DVR mode key on the machine.
1.3.7. NETWORK ICON
This Icon will be shown while someone access DVR through Network with CMS, or Web-viewer.
1.4. PIP mode (picture in picture)
In case of full screen display mode, you can see other camera with a small window.
(1) Select screen mode icon and select PIP mode.

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(2) If you select PIP button again in PIP mode, the position of two screens will change each other.
(3) Select Ch no. in PIP mode to change small screen to desired screen.
(4) Touch the screen or press direction keys to move small screen to desired position.

Use touch screen or direction keys on the right side of KVR to select DVR menu or set up.



3. SETUP MENU
Select "MENU ENTERING" icon or press DVR mode key to get into menu.
When you select Display Icon, display menu is divided into
4 sub-menus;
OSD, LIVE-SEQ(FULL), SPOT-SEQ(FULL) and DEINTERLACE

3.1.1. OSD


- CAMERA NAME - Show camera name on screen.
- CAMERA NUMBER - Show each number of cameras on the screen.
- CAMERA BOARDER - Show outline of channel.
- LANGUAGE - Select OSD language.
- OSD HIDE - Hide all OSD, time, or Icon bar
- AUTO HIDE - Hide status bar automatically during not using DVR.
- LEFT MARGIN - Move the OSD position of leftmost(E.g. Camera no, Name, Network, USB, etc) - RIGHT MARGIN - Move the OSD position of rightmost (E.g. SD card, CH Status)
- TOP MARGIN - Move the OSD position to top (E.g. SD card, CH status)
- BOTTOM MARGIN - Move the OSD position of bottom (E.g. Time-bar)
Margin value accept the numbers from 00 to 99 .


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\begin{aligned}
& \text { (1) Select camera. } \\
& \text { (2) Select SET Icon. } \\
& \text { (3) PTZ control screen of the camera will appear. } \\
& \text { (4) Move pan, tilt, zoom in/out to desired point. } \\
& \text { (5) Select Advance icon } \\
& \text { Select any other position on screen or press MENU Key to cancel. } \\
& \text { (6) if you like to cancel the setting, please select the CLE icon of the channel will be cleared. If } \\
& \text { you select "clear all" icon, all value of channels will be cleared. } \\
& \text { NOTE } \\
& \text { - System records a certain position of PTZ device. } \\
& \text { - Before using this function, please make sure that camera supports preset. } \\
& \text { - Total } 64 \text { preset points can be saved to each channel. }
\end{aligned}
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3.2.5. SCAN POINT

- CAMERA - Select
- CAMERA - Select a specific camera to set up SCAN points.
- LIST - Create another SCAN list
- LIST - Create another SCAN list
- CLEAR ALL - Cancel all saved scan points.
NOTE
In SCAN point menu, you can set up PTZ tour route(SCAN-LIST) using saved PRESET position.
You can create 4 scan lists for each camera. You should setup PTZ protocol and PRESET Positions before setting Scan-List.


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3.2 .5 \text { CRAN DOINT. }
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- preset - Select desired preset position.


## EX) If you set as left,

Camera 1 will move to saved position as follows, PRESET1 (3sec) $\rightarrow$ PRESET3 (3sec) $\rightarrow$ PRESET4 (3sec) $\rightarrow$ PRESET5 $(3 \mathrm{sec}) \rightarrow$ Repeat.....

- COLOR/SATURATION - Adjust saturation of camer
- COLOR/SATURATION - Adjust saturation of camera.
- DEFAULT - Set all values to factory default.
- CAMERA - Select camera to set up color. - BRIGHT- Adjust bright of camera.
- CONTRAST - Adjust contrast of camera.


NOTE : You can set "REC MODE" at SETUP > RECORDING > MISC.

- All channels would be changed according to selected resolution or quality or frame rate.
- REMAIN $X X X$ / $X X X$ / $X x X$
- Indicate the remaining frame number to record based on each resolution.

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3.2.7. POSITION
Camera image can be larger than frame of DVR. In that case, use this function to adjust image.

When you select Record Icon, Record menu is divided
into 4 sub-menus;
3.3. RECORD

Parameter, Schedule, Watermark, and MISC
3.3.1. PARAMETER

- RESOLUTION - Use this menu to specify the size of a screen to be recorded.
EVENT
You can select the recording picture quality and frame rate for EVENT situation.
Activated when "REC MODE" is EVENT or motion/sensor recording according to schedule. Each channel can be selected each different picture quality and frame rate
schedule.
- You can select the recording picture quality and frame rate for NORMAL situation.
- Activated when "REC MODE" is CONTINOUS or continuous recording according to sC - Each channel can be selected each different picture quality and frame rate
-The frame rate in Normal mode can not exceed that in Event mode.
If the frame rate of Event is set up as 8 , and that of Norma mode can not exceed 8 .
3.3,3. WATER-MARK
If you select ON in water-mark window, the recording data will include water-mark. Data Verification can be checked in the backup-viewer whether falsified or not.
3.3.4. MISC
- SENSITIVITY - Set the sensitivity of motion detection.
Sensitivity degree : $0<1<2<\ldots . . .<9$
- ALARM-OUT - Set the alarm-out when motion is detected.



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 - ALARM-OUT - Set the alarm-out when a signal is detected.- RECORD - Select channel to record when a signal is detected from Sensor. - TYPE - Select sensor type to match sensor type you have.

3.4.2. SENSOR

3.4.3. E-MAIL
When below events happen, which will be notified to the registered email address by E-mail. You can register three email address. Please remind that you can select event type after selecting Event email is ON .

- OVERWRITE
If you select ON in overwrite, the oldest recorded files will be overwritten by newly recorded
data when SD card becomes full.
If you select OFF in overwrite, the DVR will not record anything more when SD card becomes full. OVERWRITE ON/OFF will be applied to external HDD if external is connected.
We recommend that you select ON .
AUTO-DELETE
The data before assigned date will be deleted according to the date you input.
The value of 0 (zero) disables AUTO-DELETE function. REC MODE
Schedule - System records according to recording schedule Continue - Continuous recording all the time for all channels
Event - Event (motion/sensor) recording all the time for all channels.

NOTE : Event works when event in menu was selected at first, so you should set recording schedule to record a event and then set Record mode to EVENT : SETUP $\rightarrow$ RECORD $\rightarrow$ MISC $\rightarrow$ REC MODE $\rightarrow$ EVENT)

3.4. EVENT
the area to detect motion

3. 4.1. MOTION
whole area.

- PART - Select a block.

Mirroring : The same data being recorded in SD card will be recorded in external HDD. For instance, if SD card is $32 G B$ \& external HDD is $500 G B$, external HDD will keep recorded data until SD card overwrites 15 times. Because external HDD records same data as SD card does, it can protect data more strongly.
If you want to format external HDD in this menu, HDD is formatted as file system FAT32 and backup viewer is copied in external HDD.

FORMAT : Select FORMAT button. After completion of FORMAT, data will be recorded as FAT32 file system and backup viewer file will automatically be copied in the external HDD. SHOW : Select SHOW button and you can check file lists saved in external HDD.


| From : DVR@dvr.com |
| :--- |
| To : anyone@gmail.com |
| Sent: Friday, July 24, 2009 6:11 PM |
| Subject: EVENT MESSAGE |
| [2009/07/24 18:10:11] [testdvr/192.168.001.121] MOTION ch 1 ON |

select SCHEDUEL as the value of EVENT E-MAIL in E-mail MENU. You can get email from DVR according to schedule you select date or time.

### 3.4.5. ALARM SCHEDULE

If you select the date or time you want, the Buzzer goes off, after the value of alarm-out was chosen as any value in each sub menu of EVENT, when the related things happen during the selected times.-


- PRE-REC TIME - Enter recording time $(0-30 \mathrm{sec})$ before the time when event occurs
- POST-REC TIME - Enter recording time $(0-120 \mathrm{sec})$ after the time event occurs.
- BUZZER - Buzzer will be sounded when alarm is out , if ON is selected.
- DWELL TIME - Enter the duration time of alarm out when event occurs.

| Resolution | Normal | Frame |
| :---: | :---: | :---: |
|  | Basic |  |
| $176^{*} 144$ | Normal | $1,2,3$, |
| $360^{*} 288$ | High | $6,12,25$ |
|  | Best |  |


3.6.3. DDNS
NOTE : Before setting DDNS, you should be registered on the website at http://ddnscctv.com Please refer below for details.


- USER ID - Enter your site ID be registered on website
- PASSWORD - Enter your site PASSWORD be registered on website
After setup of DDNS, select TEST Icon to verify the connection to DDNS site.

3.6.1. SETUP
Basically, you can choose one among STATIC, DHCP, and ADSL(PPPOE). If you choose DHCP mode, DVR system gets IP address automatically from IP router if connected, and If you choose STATIC mode, input IP address which is connected to DVR.
If you use ADSL model, select ADSL and enter PPPOE ID and PASSWORD. If you don't know ID and

If you select "ON" in dual streaming, you can set up the network transfer rate differently with the recording rate. Note that network transmission rate will be max. 120 fps at CIF resolution if it is ' ON '.
If you select "OFF" in dual streaming, the network transfer rate follows the recording rate.
3.6.2. STREAM


4) Input domain name you wish to create and click Request Domain button.
Domain name can be created with combinations of alphabets, numbers and marks.
(You must not put a mark on first letter of domain name.)
5) Click Logout button after domain name has been successfu
6) You can log on with E-mail and password you registered.


 to set port forwarding in router with the selected web, client port on DVR. For more details, please refer to the manual of your router.

 Please remind that the system will reboot, when you change the time zone. - TIME SYNC
This function is for synchronizing the time of DVR periodically with that of the connected server by every hour.
Select TEST and press ENTER button to check if time sever is working.
If this function is selected, DVR refer the time of Time zone every one hour,
And then time of DVR will be changed to match that of time server.
E.g. time.kriss.re.kr (www.time.kriss.re.kr $\rightarrow$ X)

- CHANGE TIME - Time will be changed by manual if the
- CHANGE TIME - Time will be changed by manual if the time server is not selected.
3.7.3. PASSWORD
There are 2 users who can control DVR (ADMIN, USER). In this menu, you can modify password for the
users. You can also check ON/OFF for SETUP, LOGIN, RECORD, SEARCH, BACKUP and checked functions would require password when you want to get into them. with that of the connected server by
- SERVER IP - Enter IP address of time server.
3.6.5. ACCESS LIST
Registered IP address is allowed to access DVR. If you set at least one IP address, then only entered
Client IP address(es) would be allowed to access DVR. However, if you do not register any client IP address, any clients can access DVR.

egister up to 4 users that can access to DVR remotely via network (CMS, Web and mobile phone application) -Default ID : USER1, USER2, USER3, USER4 -Password : 0000



### 3.6.6. USER


3.7. SYSTEM
When you select SYSTEM Icon, SYSTEM menu is divided into 5 sub-menus; CONFIG, TIME, INPUT DEVICE, USER and UPGRADE



3.7.1. CONFIG
You can save(import) system setting values to USB device or can load(export) system setting values from USB device in order to make other DVR(s) as same setting values .

- CONFIG IMPORT- Load the saved configuration file from USB device and input to product. - CONFIG EXPORT- Save present system configuration values to USB device.
- DEFAULT - Change setting value to factory default.
correct SERVER IP and FILE NAME and press ENTER button to input new information by text input Dialog box.


(2) Then, move the pointer to OK and press ENTER button.

It is the start point to play back the data
(1) If you select SEARCH BY CALENDAR, the calendar will appear as the below.


$$
\begin{aligned}
& \text { (4) Select OK and press ENTER button. } \\
& \text { NOTE }
\end{aligned}
$$

- The color of Date is gray if there is no any recording. But the color of date turns Black when the recording data of that date exists.



### 3.7.4. KEY-TONE

Select ON/OFF for key-tone sound.

### 3.7.5. UPGRADE

If you open this menu, you can see the current firmware version of DVR. If you would like to upgrade firmware of DVR, please follow the below steps. If you select upgrade icon, the small upgrade window will pop up There are two ways; USB UPGRADE, NETWORK UPGRADE.
NOTE : There is two methods to upgrade the DVR system.

- USB UPDATE - Upgrade the DVR system by using USB memory stick.
- NETWORK UPDATE - Upgrade the DVR system through Internet.


6) It will take some minutes to upgrade, and then DVR will be rebooted automatically after upgrade is finished.
) Copy provided firmware file to your USB memory stick
(2) Attach USB Memory which includes Firmware into USB Port.
(3) Enter UPGRADE icon to upgrade firmware, then small windows will appear
(4) Please select OK Icon and the message dialogue to confirm will popup,
7) And please select OK, or CANCEL to proceed.

## C

3.7.5.1 USB UPGRADE
Please select USB upgrade in upgrade window
3.7.5.2. Network upgrade
Please select network upgrade in upgrade window
(1) Select UPGRADE , then small window will appear. (2) Select NETWORK UPGRADE and press ENTER button.
(3) Check out whether Server IP and FILE NAME are
(3) Check out whether Server IP and FILE NAME are correct. If shown information is wrong,

- When you select the date which turned Black, the time bar will be shown including white,
and red rectangular on Hour and Minutes.
White bar does not include recording data, and the data exist in red color.
If you select one red rectangular of Hour bar, its color changed to brown, and the color of
minute bar will be changed to red if there is recording data in those minutes.
And then, if you select one of these rectangular, the starting point is selected to play the
recording data. The data will be played back when you select OK icon.
- Using arrow icons at the end of HOUR/MIN bar, you can adjust hour or time for search.
- 10 .
4.3. SEARCH BY EVENT
(1) If you select SEARCH BY EVENT, the following window will appear. (2) Enter desired start time and end time to find EVENT. (3) Select desired channel to search for.
(4) Select desired event type to search for. (5) Select SEARCH button and press ENTER button.

4.4. GO TO FIRST : Play starts from oldest recorded data.
4.5. GO TO LAST : Play starts from latest recorded data.

5. FUNCTION


5.1


[^4]
(1) If you want to go to a specific PRESET-position, select "GO" button.
(2) If you want to scan PRESET-positions, select "SCAN" button
NOTE

- The PRESET-positions are set by PRESET menu [MENU $\rightarrow$ SETUP $\rightarrow$ CAMERA $\rightarrow$ PRESET] - The SCAN-lists are set by SCAN-POINT menu [MENU $\rightarrow$ SETUP $\rightarrow$ CAMERA $\rightarrow$ SCAN-POINT]
- OSD MENU shown in accordance with Camera's OSD.
If OSD is not supported by Camera, OSD MENU does not work.
- OSD Control function supports only for "Pelco-D" protocol


## 6. OSD OFF

If you select OSD OFF in MAIN MENU, something displayed on screen will disappear according to your selection on OSD MENU
You can get more information on this below.
[ SETUP $\rightarrow$ DISPLAY $\rightarrow$ OSD $\rightarrow O$ OSD HIDE $\rightarrow$ EACH PARAMETER ]

## 7. REC

Please Check whether the value of date and time is properly set.
Check if SD card is formatted. (if external HDD is connected, please format external HDD too) [SD card /external FORMAT : SETUP > STORAGE >> SD FORMAT or AUTO-BACKUP]
5.3. Backup
You can back up the data you want to store or keep to USB Device.
For USB backup, connect USB device to USB port of DVR system.


- Select ON/OFF for audio out or select volume.
- Audio works only at full screen mode.
- Audio doesn't work in videophone mode.

?

- SEARCH - If you select SEARCH Icon, you can see log list in DVR.
- System requirements for PC
Operating system : Windows XP / Vista / Windows7
CPU : Dual core or Higher
Ram : At least 1GB (2GB or higher memory recommended)
VGA : 128MB graphic memory or More


## 1-2-1 Find CMS installing program, and execute it.

$\underset{\infty}{\infty}$

8.1. General information

- CMS program is an application with which users not only watch and control remote DVRs, but also receive video/audio data or alarm signals with LAN, WAN environment.
- CMS enables users who care about security to manage full information from all the wireconnected DVRs. All security administrators can control all situations even in emergency with easy operation in their PC.
- Main features of CMS program is as follows,

Various screen mode supported. ( $1,4,6,8,9,16,25,36,49,64$ screen mode) Remote controlling DVR setting value / PTZ camera

- Change configuration values of DVR remotely

8. Network access (CMS, Web viewer)

### 8.4.2. DVR LIST <br> $\infty$

DVR LIST shows the information of the registered DVR in CMS.
To register DVR in CMS, please follow the below steps;
After you input PW in Login window, you can see operating CMS program.
You can make DVR list to connect and all camera of the DVR will be displayed in the connection.
) Please select ALL $\square$ All and then click ADD folder ICON.
2) Please input Group name, then the group name will be created as tree of ALL.
) Please select the group name and then click add
folder ICON again, and then the Site window will pop up.


8.4.1. ICONS in initial screen
8.4.1.1. Screen division option


S/W displays the channel mode automatically according to channel quantity of connected DVRs. Also, you can select the channel mode among 4 / 9 / 16 / 64 channel mode. You can see full scree mode by clicking maximize button


You can see one channel mode by double clicking.
8.4.3.1. Making display List
To make the list to display the channel from more than one DVR, please make the display list. 1) Please click "PRE LIST" on window.

3) After selecting group, click ADD 自 button


8.4.3. PRE LIST
It is the function to make the list to display the channel from more than one DVR.


PRELIST
1SI7ษ^ด


8.4.4. PTZ control


At DVR LIST : You can control PTZ after selecting the DVR of the PTZ camera.
At PRELST : You can control PTZ after selecting the Camera.
KOcom | $56 \mid$

1) Event Popup
When event triggered in local DVR, Video will be showed as full screen.
( DVR should be set on EVENT Mode first )

When Event triggered, it gives beep sound in CMS PC.
2) High Light
The channel had Event is shown with the color on the border for following events such as 'Video Loss', 'Motion Detected' and 'Sensor Activated.


- Alram Out
If you select Alarm out, CMS indicates it on Log window when Alarm out happens in DVR.
- System
If you select System, CMS indicates it on Log window when HDD is failed in DVR.
8.4.8.2. Network

1) This function indicates that video will be hidden or not in Live Display mode.
If you select 'Covert OFF', video will not be showed same as you set it in local DVR. 2) Waiting Time

Event notification will be worked as 'Popup Video' 'Beep Sound' and 'High Light.

8.4.9.RPB (Remote Playback)
It is search function to playback recorded data of remote DVR you connect from CMS. (2) Click mom button to move to remote playback mode. (3) Select data and time(hour/minute).
(4) Then, click play button to play.

2) Event Viewer
If you select the Event Viewer on the bottom of window, you can see the log information.

8.4.8.4. Monitoring
Monitoring Rotating is sequence of channels. You can set up rotating time as seconds and this is how to use it. On initial screen mode, select auto change button and sequence mode gets activated. In case of 16ch DVR, if you select 4ch screen mode, it rotates by 4 channels. ( $1^{\text {st: }}$ ch1, 2,3,4-2 ${ }^{\text {nd }}: \mathrm{ch} 5,6,7,8-$ ) If you select 9 ch screen mode, it rotates by 9 channels.
( $1^{\text {st }}:$ ch1 $, 2,3,4,5,6,7,8,9-2^{\text {nd }}:$ ch10, $11,12,13,14,15,16,1,2 \sim$ )

8.4.11.2. Record Property
You can check or modify recording setup values of remote DVR
You can adjust resolution, Quality and frame rate
to record.

SW upgrade : F/W upgrade of remote DVR via CMS
Config Upload: You can change config data to DVR
Config Download: You can get config data from DVR
Remote Reboot: You can reboot DVR

8.4.11.7. HDD
$\qquad$
Mobile Viewer in Smart phone 2) iPhone : if you click $\checkmark$ button, DVR List window will be showed with DVR name as you type. 3) Android : if you click $\checkmark$ button, DVR List window will be showed with DVR name as you type.

> 4. Mobile Viewer

1) iPhone : Click 'DVR Name' you created in DVR List, our mobile viewer will be showed as below. 2) Android : Click 'DVR Name' you created in DVR List and click $\square$ button, our mobile viewer will be showed as below you created in DVR List

: zoom in in 1ch screen mode, $\Theta$ : zoom out in 1ch screen mode


## 田 <br> : 1ch screen mode, <br> Close : close live screen

 $\square$
$\frac{5}{2}$
$\frac{1}{2}$
$\frac{2}{2}$品 $0 \rightarrow 2$

5. How to set \& edit DVR List

aViewer V1.0
2010/06/12
We support Mobile Viewer, named 'aViewer' for iPhone and 'DVRoid' for Android smart phones in order for you to access the DVR. 1. How to install
You can download and install aViewer(iPhone) / DVRoid(Android). 1) iPhone : Click App Store in iPhone -> Search "aViewer" -> Click "aViewer" free icon -> Click Install
2) Android : Click Market in Android $\rightarrow$ Search "DVRoid" -> Click "DVRoid" free icon $\rightarrow$ Click Install Then aViewer(iPhone)/ DVRoid(Android) icon will be created in your Mobile Phone.


1) 'Edit DVR List' menu will be showed. You need to register DVR what you wish to access remotely.

- DVR name: Input any name what you wish.
Address: Input DVR IP address or host name.
- Port: Input DVR port number which same as DVR you set in Setup->Network->Client->Client Port. - User ID \& Password: Input User ID and Password same as DVR you registered.
Kосом 168 |



How to use photo converter


2) Click $\bar{\square}$ button to designate path and open picture file that you wish to convert size. Then, picture image shows up on the left.

3) In case there are picture files more than 1 , click $\sqrt{\square}$ button and select all the files you wish to convert. Designate SAVE DIRECTORY and click $\Rightarrow$ button. Then, all the selected files will be converted at a time. Click ■ button to stop converting in progress of convert.


[^0]:    Entrance monitoring This is the function that is used to monitor
    the entrance only by confirming the image the entrance only by confirming the image
    without calling.
    Monitoring takes place while borderine gets

    Monitoring takes place while borderline gets
    generated when the screen of the camera
    at the entrance is touched once on the
    

[^1]:    ) It is possible to add or delete a light on the screen of 'LIGHT SET' of menu 'SET' - If a user presses a button [EACH] meaning each light, the light turns on, and if a user presses it again, the light turns off. If a user presses a button [ON/OFF] in the room, all lights are turned on and a button changes from [ON] to [OFF].
    I
    4) All Lights On/Off 5) Group Light On/Off
    -Select rooms to form a group.
    St

    - If a user presses a a button [on all] on the top, the lights in all rooms selected are tumed on.
    - I a wser presses a button [Off all] on the top. the lights in all rooms selected are tumed off. - To release grouping, press a button [SELECT GROUP] once again.

[^2]:    4. TEST Button
    1) If a user presses a button [TTST], he/she can make a test about the motion of a curtain on the screen of 'SET'.
    2) if a user presses a button [TEST]. a pop-up screen is activated and it goes to a [TEST] mode, 2) If a user presses a button [TEST], a poD-up Screen is activated and it goes to a [TEST] mode.
    3) if a user presses a button [ [PEN] or [CLOSE] atter pressing a button [EACH] for a curtain, the curtain becomes run.
    4) if a user presses a button [OPEN] or [CLOSE] ater pressing a button [ALL], al curtains become open or close. 5) Only a scenario motion runs on a control screen only,
    5) If a user presses a button [TEST] again, he/she can exit from a [TEST] mode.
[^3]:    3.3.2. SCHEDULE
     - Specify the weekly schedule for each camera (hourly based)

    - CONTINUOUS: Recording video continuously 24 hours a day.
    - EVENTS : Recording video when event(Motion/Sensor/Video Loss) is triggered. - CONT + EVENTS : Recording video when continuous or event is operated.

    If there is no event, it will record video as continuous mode and
    If there is event, it will record video as event mode as you set.
    NOTE : The time in the first column of each line means $00: 00-00: 59$.

[^4]:    5.1.2. PTZ ADVANCE

