

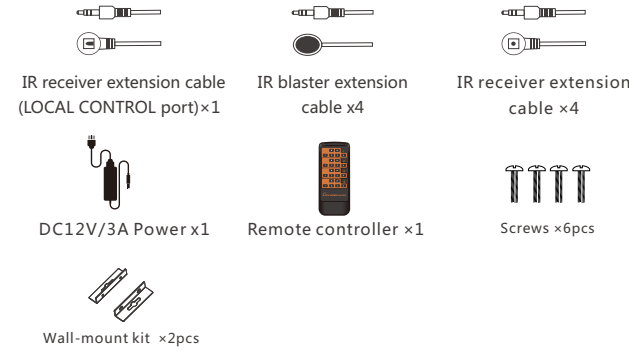
**IMPORTANT SAFETY NOTICE**

- Please read below safety instructions carefully before installation and operation:
1. Please pay attention to all the warnings and hints on this device.
  2. Do not expose this unit to rain, moisture and liquid.
  3. Do not put any stuff into the device.
  4. Do not repair the device or open the enclosure without professional person guidance to avoid electronic shock.
  5. Make sure good ventilation openings to avoid product overheating damage.
  6. Shut off power and make sure environment is safe before installation.
  7. Do not plug-in/out the network cables and IR cables when it is in using to avoid cables damage.
  8. Use DC12V/3A only. Make sure the specification matched if using 3<sup>rd</sup> party DC adapters.

**PRODUCT INTRODUCTION**

This product is a 4x4 HDMI Matrix Switch over network cable, with 4 HDMI inputs, 4 RJ45 output and 4 HDMI loop-out. 4 HDMI outputs send the high definition audio/video signals to 4 HDTV displays at local site, and at the same time, 4 RJ45 outputs transmit and extend the audio/video signals to 4 HDTV displays in 40 meters far away via 4 receivers. RS232 control, Ethernet control, button control and remote control make switching/ setting the input and output easily. This product is perfect for security system, digital monitoring system, school education system, exhibition center, multimedia conference, command system etc.

**PACKAGE CONTENTS**



**FEATURES**

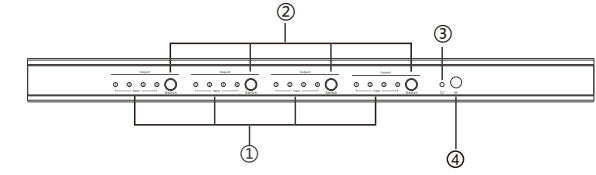
1. Plug and play
2. Support 20~60KHz IR pass back
3. Support intelligent EDID management
4. Support resolution up to 1080p@60Hz
5. Transmitter supports four HDMI loop-out
6. Transmission distance is up to 40 meters by CAT6/6A/7
7. Support to switch and select input source device and output display by both remote control and button on unit device
8. Support IR remote control, Ethernet control and RS232 control
9. Can be powered by network cable. It only needs to connect the 12V power supply on the transmitter unit, both transmitter and receivers start work.

**INSTALLATION REQUIREMENT**

1. HDMI source device (DVD, PS3, Set top box, PC etc)
2. HDMI display device like SDTV, HDTV, and projector with HDMI port.
3. UTP/STP CAT6/6A/7 cable, follow standard IEEE-568B.

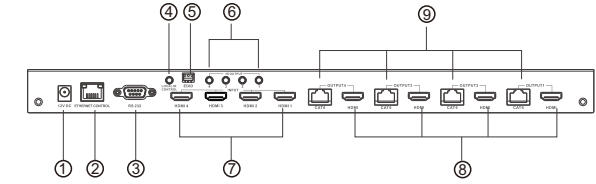
**PANEL DESCRIPTION**

**1. Matrix Transmitter unit (TX) Front Panel**



- ① HDMI input indicator
- ② Switch: To select HDMI input
- ③ Power indicator
- ④ IR Receiving window

**Back Panel**



- ① DC12V Power Input
- ② Ethernet Control
- ③ RS232 Serial Port
- ④ LOCAL CONTROL PORT: Connect with receiver extension cable, receive signal from controller
- ⑤ EDID
- ⑥ IR outputs for IR Blasters
- ⑦ HDMI Inputs
- ⑧ HDMI local outputs
- ⑨ RJ45 signal output

**2. Receiver unit (RX)**



- ① LENGTH: for adjusting to the length of network cable
- ② RJ45 signal input
- ③ RJ45 indicator led keeps on with HDMI signal transmission flashes with no signal transmission
- ④ DC5V power input(OPTIONAL)
- ⑤ HDMI signal output
- ⑥ IR signal input to connect with IR receiver extension cable

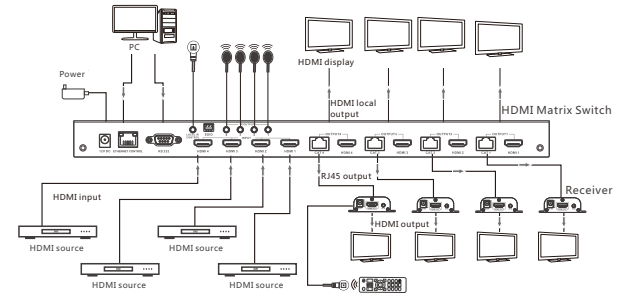
**INSTALLATION PROCEDURES**

**1. How to make a CAT6/6A/7 network cable**

- Follow the standard of IEEE-568B:
- 1- White/Orange
  - 2- Orange
  - 3- White/Green
  - 4- Blue
  - 5- White/Blue
  - 6- Green
  - 7- White/Brown
  - 8- Brown



**2. Connection**



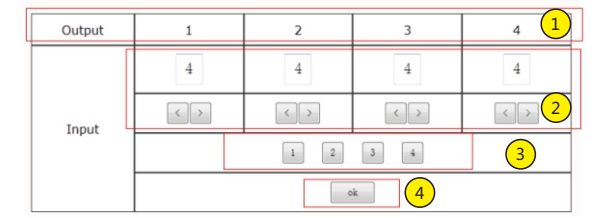
**Connection instruction**

- 1) Connect HDMI source devices to the transmitter(matrix) inputs via HDMI cables.
- 2) If using the HDMI loop-output, connect the HD display devices to the outputs on the transmitter(matrix) via HDMI cables.
- 3) Connect the receiver units to the transmitter(matrix) via network cable, and connect the HD display devices to the HDMI outputs of the receiver units
- 4) If using the IR function, connect the IR blaster to the IR OUT on the transmitter(matrix), and the IR receiver cable to IR IN on the receiver.
- 5) Plug the power supply into the Matrix power socket and plug the power adaptor into a mains socket.

**3. PC Control**

The Ethernet RJ45 port is the link for TCP/IP controls, connect to an active ethernet link with an RJ45 terminator cable.

**HDMI 4x4 Matrix Setting**



Login in IP 192.168.1.200 in a browser (If you can not open the file in a browser, please keep try in other browser), then will enter above interface.

- ① The Outputs (TV side) are fixed and cannot be changed.
- ② Change the Input to display that onto the specified Output TV.
- ③ These buttons will force the chosen HDMI Input onto all Output TVs.
- ④ Press OK to confirm.

#### 4. RS232 Control:

Connect to a PC or control sytem with D-Sub 9-pin cable for the transmission of RS232 commands.

Baudrate: 9600

Command:

1) Switch Command: ZWXXXXXXXXSW

ZW	XXXXXXXX	SW
1st byte	2nd byte--output 1,2,3,4,5,6,7,8 for input port For this product, there are only 4 outputs, so the last byte use" XXXX" to replace. Eg; 1)Command ZW1234XXXXSW means select output 1,2,3,4 for input 1,2,3,4 port 2)Command ZW1111XXXXSW means select output 1,2,3,4 for input 1 port	3rd byte

2) Read status command:ZRXXXXXXXXSW

When you send the read status command to HDMI matrix, if success, it will return the status with command RDXXXXXXXXXSW, eg., if return RD1234XXXXSW, it means output 1,2,3,4 for input 1,2,3,4 port.

If return RD1111XXXXSW, it means all output 1,2,3,4 for input 1 port.

#### 5. EDID management

Please note: the Default EDID is 1080p@60Hz 2.1CH therefore the HDMI Receiver will output the video & audio according to this. If your display supports a different resolution and/or audio channel, please adjust the EDID as below:



Switch UP: use the Arabic numeral "1" to represent



Switch DOWN: use the Arabic numeral "0" to represent

Mode	DIP 1	DIP 2	DIP 3	EDID Info
1	1	0	0	480P@60Hz 2.1CH
2	0	0	0	480P@60Hz 7.1CH
3	1	1	0	720P@60Hz 2.1CH
4	0	1	0	720P@60Hz 7.1CH
5	1	1	1	Default: 1080P@60Hz 2.1CH
6	0	1	1	1080P@60Hz 7.1CH
7	1	0	1	1080i@60Hz 2.1CH
8	0	0	1	1080i@60Hz 7.1CH

#### • FAQ

Q: No output on screen?

A: 1) Firstly, please check and make sure the power supply is connected well. Then, check and make sure all cables are connected correctly.

2)Please check and make sure the right HDMI input port of the TV/ screen has been chosen.

3)Please check and make sure there is HDMI signal to be fed into transmitter unit, and check whether the receiver unit has been connected well with the display device.

Q: Output image with snow point?

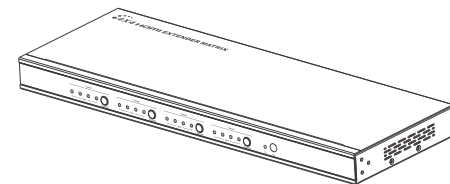
A: Change the HDMI cable between the transmitter unit and the source device, it will be better to use a shorter HDMI cable for re-testing.

#### • SPECIFICATIONS

Items	Specifications
Video Resolutions(Max)	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz
HDCP	1.4
CAT Outputs	4xHDMI, 4x RJ45
Network cable	CAT6、CAT6A、CAT7
Transmission Distance	40m
IR	20 ~ 60 KHz
HDMI	1.3
RS232	9 pin serial port seat
Power Consumption	TX < 23W , RX < 3W
Operating Temperature	0~50 °C
Power	DC12V/ 3A
Dimensions	TX: 411.0(L) x 146.0(W) x 31.5(H) mm RX: 71.6(L) x 66.6(W) x 22.6(H)mm
Weight	TX : 1530g , RX : 80g

## 4X4 HDMI Matrix Switch

User manual



#### Disclaimer

\*The product name and brand name may be registered trademark of related manufacturers.TM and ® may be omitted on the user manual. The pictures on the user manual are just for reference, and there may be some slight difference with the real products. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.