

**Product Introduce**

1. Do not mix up HDMI to RJ45 sender and RJ45 to HDMI receiver before installation.
2. Do not hot plug when it is working.
3. Use DC12V/1A power supply only. Make sure specification matched if using adapters not supplied by factory.
4. Static electricity will cause damage of the device, please do ESD protection when using the device.

**Introduce**

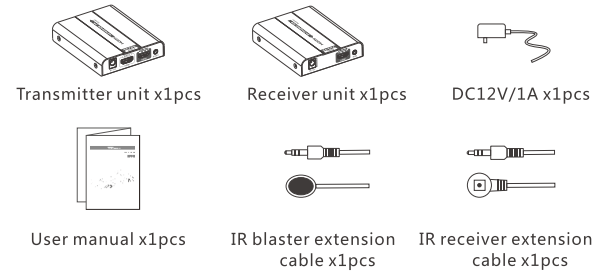
This HDMI Extender includes a transmitter unit and a receiver unit, allows HDMI signal to be transmitted up to 50 meters at 4Kx2K@30Hz, and up to 30 meters at 4Kx2K@60Hz long away via a single CAT6/6A/7 cable in a point-to-point configuration. It supports IR passback with a wide IR frequency 20-60KHz. Transmitter with a HDMI loop out, convenient for monitor at location. It supports receiver be powered from the transmitter (Connect power supply to the transmitter only), please note that this HDMI Extender can not use with switch or router. It is perfect for application of outdoor advertising, video clips, monitor system, home entertainment and conference, etc.

**Features**

1. Metal casing, stable and durable
2. Transmission over single CAT6/6A/7
3. Transmitter support one HDMI loop-out
4. Highest resolution support 4Kx2K@60Hz
5. Support HDMI2.0, compatible with HDCP2.2
6. Built in EDID pass back function to get better compatibility
7. Support IR passback function (IR range support 20~60KHz)
8. Support distance up to 50m when 4K@30Hz, and 30m when 4K@60Hz

9. Can be powered by network cable. It only needs to connect the 12V power on the transmitter unit, both transmitter and receiver start work.

**Package Contents**



**Installation Requirements**

1. HDMI source device (compute graphics card, DVD, PS3, )HD monitoring equipment etc.
2. HDMI display device like SDTV, HDTV, projector with HDMI port.
3. UTP/STP cat6/cat6A/cat7 cable. Follow standard IEEE-568B.

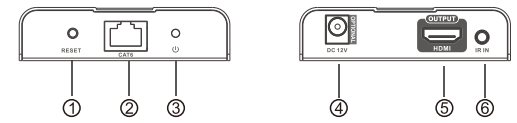
**Interfaces**

1. Transmitter unit (TX)



|                          |   |
|--------------------------|---|
| ① Reset button           | Press for restarting the unit   |
| ② RJ45 signal output     | Connect with CAT6 or better cable   |
| ③ Power signal indicator | The blue light indicates that the power is on. Red light indicates no image transmission, blue light indicates image transmission |
| ④ Power input            | Connect with DC12V/1A power adapter   |
| ⑤ HDMI signal input      | Connect with the source device  |
| ⑥ HDMI signal output     | Connect with HDMI display device  |
| ⑦ IR signal output       | Connect with IR blaster extension cable   |

2. Receiver unit (RX)



|                          |  |
|--------------------------|--|
| ① Reset button           | Press for restarting the unit  |
| ② RJ45 signal input      | Connect with CAT6 or better cable  |
| ③ Power signal indicator | The red light indicates that the power is on. Red light indicates no image transmission, blue light indicates image transmission |
| ④ Power input            | Connect with DC12V/1A power adapter(optional)  |
| ⑤ HDMI signal output     | Connect with the display device  |
| ⑥ IR signal input        | Connect with IR receiver extension cable   |

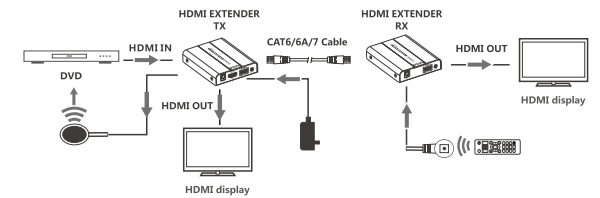
**Installation Procedures**

Follow the standard of IEEE-568B:

- 1-Orange/white
- 2-Orange
- 3-Green/white
- 4-Blue
- 5-Blue/white
- 6-Green
- 7-Brown/white
- 8-Brown



**2. Connection**



[ NOTE ] : Power from the transmitter unit

**3. Connection instruction**

- 1) Connect source device to Transmitter unit (TX), and display device to Receiver unit (RX) via HDMI cables.
- 2) Connect Transmitter unit (TX) and Receiver unit (RX) via network cables (CAT6,CAT6A or CAT7).
- 3) Plug the power supply to transmitter unit only, each unit will power up then initialize it self, when connection between TX unit and RX unit is built, the RX unit will read the EDID of the connected display device, and sends it back to the TX unit through the network cable, then source can accept and read the EDID from TX unit, the source can then cater it's output to send only resolutions and features that are compatible with the attached display device.
- 4) After connecting with the power supply, the RX unit will detect the EDID of the display/TV, and then send the EDID information back

to the TX unit, so the source device would feed the most suitable format of HDMI signal to the connected display/TV. However, if the EDID of the display/TV is damaged or it can not be detected correctly, then the source device would feed HDMI signal according to the built-in EDID of the HDMI extender.

**[NOTE]:** It is recommended to use a length range within 15~50m network cable. If the CAT6 cable is too short, there may be no display output because of the signal is too strong. If the CAT6 cable is too long, the output may be with poor quality.

#### 4. IR User Guide

- 1) IR blaster extension cable should plug in the IR OUT port of TX (transmitter) of HDMI extender, and the IR receiver extension cable should plug in the IR IN port of RX(receiver) of this HDMI extender.
- 2) The emitter of IR blaster should as close as possible to the IR receiver window of the signal source device.
- 3) Using the IR remote controller of the signal source device towards the IR receiver (connected to the RX unit), to remote control source media playback.

#### • FAQ

- Q: There is no output on screen when all connections are correct?
- A: 1) Please check and make sure the display/monitor supports the HDMI signal which fed out from the source device.
- 2) Please make sure the HDMI cables supports 4Kx2K if the output signal from the source device is 4Kx2K resolution.
- 3) Please check and make sure the network cable insert to the RJ45 port well.
- 4) Restart the transmitter or receiver by pressing the reset button.

- Q: Black screen happened on the display/monitor?
- A: 1) Please check and make sure the length of the network cable

within the usable range:

- CAT6 within 50m@4Kx2K@30Hz,
- CAT6 within 30m@4Kx2K@60Hz

2) Reset the transmitter unit for re-built the connection.

- Q: The color comes abnormity or there is no audio output?
- A: Reset the transmitter unit for re-build the connection.

#### • Specification

| Items                          |   | Specification   |
|--------------------------------|---|---|
| Power Supply                   | Voltage/Current                               | DC12V/1A  |
|                                | Power consumption                             | TX: 4W RX: 6W   |
| HDMI Performance And Interface | HDMI compliance                               | HDMI2.0   |
|                                | HDCP compliance                               | HDCP2.2   |
|                                | HDMI resolution                               | 480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840x2160@24/25/30/60Hz |
|                                | Supports audio formats                        | LPCM/DTS-HD/Dolby-AC3   |
|                                | Maximum transfer rate                         | 18Gbps  |
|                                | Input and output TMDS signal                  | 0.5 ~ 1.5Vp-p(TMDS)   |
|                                | Input and output DDC signal                   | 5Vp-p(TTL)  |
|                                | Input cable length                            | ≤8m(AWG24)  |
| Output cable length            | ≤8m(AWG24)                                    |   |
| Protection Level               | Electrostatic protection of the whole machine | 1a Contact discharge level 3<br>1b Air discharge level 3 Implementation of the standard: IEC61000-4-2           |
| Operating Environment          | Working temperature                           | 0 ~ 50°C  |
|                                | Storage temperature                           | -10 ~ 70°C  |
|                                | Humidity (no condensation)                    | 0 ~ 90%   |

|                 |                   |  |
|-----------------|-------------------|--|
| Body Properties | Dimension         | 101.1(L) x 81.6(W) x 20.6(H)mm           |
|                 | Material          | Aluminium alloy material + crystal panel |
|                 | Treatment process | Grit blast                               |
|                 | Color             | Black                                    |
|                 | Weight            | TX: 190g, RX: 190g                       |

#### 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.

# HDMI Extender

## User manual

4Kx2K  
60Hz

