

## • Important Safety Instructions:

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 DC5V/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.

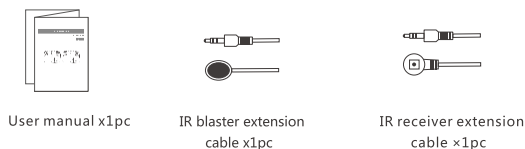
## • Introduction

This HDMI Extender includes a transmitter unit and a receiver unit, allows HDMI signal to be transmitted up to 60 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. It is perfect for application of outdoor advertising, video clips, monitor system, home entertainment and conference, etc.

## • Features

1. Support HDMI2.0, compatible with HDCP2.2
2. Highest resolution support 4Kx2K@60Hz
3. Transmission over single CAT6/6A/7
4. Support IR passback function (IR range support 20~60KHz)
5. Support distance up to 60m when 4K@30Hz, and 30m when 4K@60Hz
6. Plug and play
7. Metal casing, stable and durable

## • Package Contents

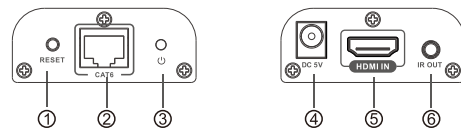


## • Installation Requirements

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

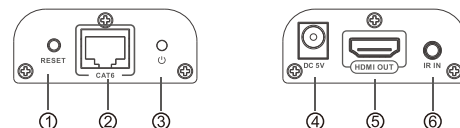
### 1. Transmitter unit(TX)



|                      |                                     |
|----------------------|-------------------------------------|
| ① Reset button       | Press for restarting the unit       |
| ② RJ45 signal output | Connect with network cable          |
| ③ Power indicator    | LED indicator turn on when power on |

|                     |   |
|---------------------|---|
| ④ DC5V input        | Connect with the power supply           |
| ⑤ HDMI signal input | Connect with the source device          |
| ⑥ 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 network cable               |
| ③ Power indicator    | LED indicator turn on when power on      |
| ④ DC5V input         | Connect with the power supply            |
| ⑤ HDMI signal output | Connect with the display device          |
| ⑥ IR signal input    | Connect with IR receiver extension cable |

## • Installation Procedures

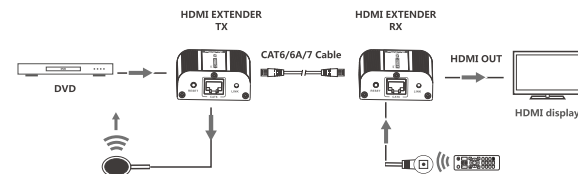
### 1. How to make a Cat6 network cable?

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



## 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) All devices connect with power supply, 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 device can accept and read the EDID from TX unit, the source can then cater its output to send only resolutions and features that are compatible with the attached display device.

## 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) Controller power supplies, this HDMI extender works.

## • 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 4K×2K if the output signal from the source device is 4K×2K 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 60m@4K×2K@30Hz,
- CAT6 within 30m@4K×2K@60Hz

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

**Q:** The color comes abnormally or there is no audio output?

**A:**Reset the transmitter unit for re-built the connection

|                       |   |   |
|-----------------------|---|---|
| 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 |
|                       | Working temperature                           | 0 ~ 50°C  |
| Operating Environment | Storage temperature                           | -10 ~ 70°C  |
|                       | Humidity (no condensation)                    | 0 ~ 90%   |
| Body Properties       | Dimension                                     | 77.49(L) x 56.15(W) x 22.66(H)mm  |
|                       | Material                                      | Aluminium alloy material + crystal panel  |
|                       | Treatment process                             | Grit blast  |
|                       | Color   | Black   |
|                       | Weight  | TX:80g, RX:80g  |
| Reliability           | Mean time between failures (MTBF)             | >30000 Hours  |

## • Specification

| Items                          | Specification                |   |
|--------------------------------|------------------------------|---|
| Power Supply                   | Voltage/Current              | DC5V/1A   |
|                                | Power consumption            | TX: 2.5W RX: < 3W   |
| 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 4Kx2K 24/25/30/60/Hz |
|                                | 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)                   |   |

## Disclaimer

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## HDMI Extender

### User manual

4Kx2K  
60Hz

