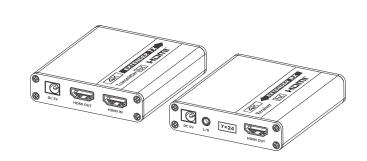
# **User Manual**

# **HDMI EXTENDER**

Point to Point Extender



#### Disclaimer

The product name and brand name may be registered trademark of related manufactures.  $^{\text{\tiny{M}}}$  and  $^{\text{\tiny{M}}}$  may be omitted on the user manual. The pictures in this user manual are just for reference. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.



The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

# Important Safety Notice

- Please distinguish the transmitter and receiver before installation.
- 2. Do not disassemble the machine to repair the product during the working process to avoid electric shock.
  - damage the equipment.
- 4. Do not expose the devices to rain, moisture and liquid.5. Use a 5V/2A DC adapter only. Make sure the specification matched

3. Please cut off the power before installation. Live installation may

#### Introduction

This HDMI Extender includes a transmitter unit and a receiver unit, allows the HDMI signal to be transmitted up to 70 meters using a Cat6/6A/7 network cable. It adopts a point-to-point connection configuration, supports bi-directional IR pass-back and 3.5 mm stereo audio output. It is perfect for outdoor advertising, monitor system, home entertainment, conference, etc.

#### Features

1. Zero latency.

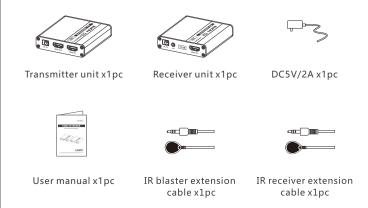
needed.

- 1. Zero latericy.
- 2. Support up to 4K@30Hz resolution.

if using 3rd party DC adapters.

- $3.\,Support\,CAT6/6A/7\,\,network\,cables,\,\,1080p@60Hz\,\,transmission\,\,distance$
- is up to 70 meters, 4K30Hz transmission distance is up to 40 meters.
- 4. Support bi-directional IR pass-back function ( $20 \sim 60 \text{KHz}$ ). 5. Support HDR10.
- 6. Support EDID passthrough.
- 7. Transmitter supports HDMI loop-out.
- 8. Receiver supports 3.5mm stereo audio output.
- 9. Lightning Protection, Surge Protection, ESD Protection.
- 10. Support PoC network cable power supply, only TX power supply is

### Package Contents

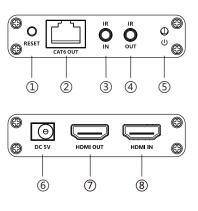


### Installation Requirements

- 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, It is recommended to select a network cable with less loss and crosstalk

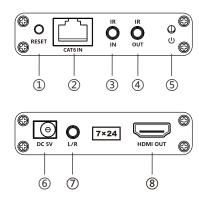
#### Interfaces

1. Transmitter (TX)



| 1   | Reset button           | Press to restart the device   |
|-----|------------------------|---|
| 2   | RJ45 signal output     | Output modulated HDMI signal.   |
| 3   | IR in                  | Connect the IR receiver extension cable to ensure that the remote control used is within the range of the IR receiving device.                                    |
| 4   | IR out                 | Connect the IR blaster extension cable, please keep the infrared transmitter as close as possible to the signal source device when using.                         |
| (5) | Power/Signal indicator | a. When power is on and no HDMI signal is transmitted, the indicator flashes.     b. When power is on and HDMI signal is transmitted, the indicator is always on. |
| 6   | DC 5V input            | Connect to the 5V/2A DC power adapter.  |
| 7   | HDMI output            | Connect to a local HDMI display device.   |
| 8   | HDMI input             | Connect to a HDMI source device.  |

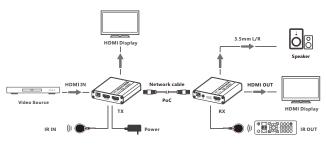
#### 2. Receiver (RX)



| 1   | Reset button           | Press to restart the device  |
|-----|------------------------|--|
| 2   | RJ45 signal input      | Input modulated HDMI signal.   |
| 3   | IR in                  | Connect the IR receiver extension cable to ensure that the remote control used is within the range of the IR receiving device.   |
| 4   | IR out                 | Connect the IR blaster extension cable, please keep the infrared transmitter as close as possible to the signal source device when using.  |
| (5) | Power/Signal indicator | <ul> <li>a. When power is on and no HDMI signal is transmitted, the indicator flashes.</li> <li>b. When power is on and HDMI signal is transmitted, the indicator is always on.</li> </ul> |
| 6   | DC5V input             | Connect to the 5V/2A DC power adapter.   |
| 7   | 3.5mm L/R out          | Connect headphones or power amplifiers to output stereo audio.   |
| 8   | HDMI output            | Connect to a HDMI display device   |

#### Installation Procedures

#### 1. Connection



**Note:** When using the 3.5mm stereo audio jack, please switch the audio output format of the signal source to PCM format.

The network cable should follow the standard of IEEE-568B. It is recommended to select a network cable with less loss and crosstalk.

1-Orange/white 2-Orange 3-Green/white

4-Blue 5-Blue/white 6-Green

o dict

7-Brown/white 8-Brown



#### 2. Connection instruction

 Connect the source device to the HDMI in port of the transmitter with an HDMI cable, and connect the HDMI out port of the receiver to the display device with another HDMI cable.

- 2 ) Connect the CAT out port of the transmitter and the CAT in port of the receiver via a network cable (CAT6/CAT6A/CAT7).
- 3 ) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
- 4) Plug the power supply into the device to get started.

[NOTE]: It is recommended to use a length range within 2~70m network cable. If the cable is too short, there may be no display output because the signal is too strong. If the cable is too long, the output may be with poor quality.

#### 3. IR User Guide

- 1) IR blaster extension cable should plug in the IR OUT port of the transmitter or receiver, IR receiver extension cable should plug in the IR IN port of the transmitter or receiver.
- 2) The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.
- 3 ) Face the receiving head of the IR receiver extension cable to the user for convenient remote control.

### • FAQ

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A: 1) Please make sure the HDMI cables support the resolution of the output signal from the source device.

Q: There is no output on screen when all connections are correct?

- 2) Please check and make sure the network cable inserts to the Rj45 port well.
- 3) Restart the transmitter or receiver by pressing the reset button.
- Q: Black screen happened on the display/monitor?
- A: 1) Check if the length of the cable is within the specified range.
  2) Reset the transmitter to re-built the connection.
- Q: The display shows unusual color or no sound?
- Q. The display shows unusual color of he sound.
- A: 1) Reset the transmitter or receiver to re-built the connection.
  - 2) Check if the HDMI cables are connected well.3) Reconnect the network cable.

## Specification

|                                      | Items   | Specification   |
|--------------------------------------|---|---|
| Power Supply                         | Voltage/Current                               | DC5V/2A   |
| Power Supply                         | Power consumption                             | TX<4W RX<4W   |
|                                      | HDMI compliance                               | HDMI 1.4  |
|                                      | HDCP compliance                               | HDCP 1.4  |
| HDMI<br>Performance<br>And Interface | HDMI resolution                               | 800x600, 1024x768, 1280x720,<br>1280x960, 1366x768, 1440x900,<br>1680x1050, 1920x1080, 480i@60Hz,<br>480p@60Hz, 576i@50Hz,<br>576p@50Hz, 720p@50/60Hz,<br>1080i@50/60Hz,<br>1080p@24/25/30/50/60Hz,<br>3840x2160@24/25/30Hz |
|                                      | Supports audio formats                        | PCM, LPCM, DTS HD, DTS Audio  |
|                                      | Input and output TMDS signal                  | 0.7~1.2Vp-p(TMDS)   |
|                                      | Input and output DDC signal                   | 5Vp-p(TTL)  |
|                                      | Input cable length                            | ≤8m(AWG24)  |
|                                      | Output cable length                           | ≤8m(AWG24)  |
| Transmission<br>Distance             | Cat6/6A/7                                     | 1080p@60Hz transmission 70 meters<br>4K@30Hz transmission 40 meters   |
| Protection<br>Level                  | Electrostatic protection of the whole machine | Implementation of the standard:<br>IEC61000-4-2<br>1a Contact discharge Level 2 (±4KV)<br>1b Air discharge Level 3 (±8KV)   |
|                                      | Working temperature                           | -20~60℃   |
| Operating<br>Environment             | Storage temperature                           | -30~70℃   |
| Environment                          | Humidity (no condensation)                    | 0~90%RH   |
|                                      | Dimension                                     | 75.0(L) x 80.0(W) x 18.0(H)mm   |
|                                      | Material                                      | Aluminum alloy material + crystal panel   |
| Body                                 | Treatment process                             | Grit blast  |
| Properties                           | Color   | Black   |
|                                      | Weight  | TX: 160g RX:160g  |