## **User Manual**

# **HDMI EXTENDER**

KVM Point to Point Extender





### • Important Safety Notice

- Do not mix up HDMI to RJ45 transmitter and RJ45 to HDMI receiver before installation.
- 2. Do not hot plug when it is working.
- Use DC5V-12V power supply only. Make sure specification matched if using 3rd party adapters.
- 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 70 meters at 4K resolution using a CAT6/6A/7 network cable. It is perfect for outdoor advertising, video clips, monitor system, home entertainment and conference, etc.

### Features

- 1. Zero latency.
- 4K@60Hz HDMI signal can be transmitted 70 meters through a CAT6/6A/7 network cable.
- 3. Supports up to 10 receivers in cascade, auto adapt to display resolution.
- The receiver can extract the digital audio from the transmitter through the S/PDIF port.
- 5. Support KVM function.
- 6. Supports HDR10, YUV4:4:4.
- 7. Supports EDID through, Auto downscaling.
- 8. Transmitter support one HDMI loop-out.
- 9. Supports audio formats (LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1CH).
- 10. Anti-lightning, anti-surge, anti-static protection.

## Package Contents







Transmitter unit x1pc Receiver unit x1pc DC5V/2A x2pcs







USB Cable x1pc

Mounting brackets x8pcs Screw x18pcs



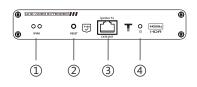
User manual x1pc

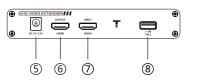
### Installation Requirements

- 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)

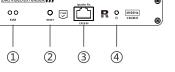


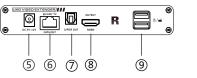


1	KVM Light	<ul> <li>a) Connected to the computer, the indicator lights on;</li> <li>b) No signal transmission, the indicator lights off; This is signal transmission, the indicator light flashes.</li> </ul>
2	Reset button	Press to restart the device
3	RJ45 signal output	Connect with network cable
4	Power/Signal indicator	a) There is power and no HDMI signal, the indicator will flash     b) There is HDMI signal, the indicator will light solid.
(5)	DC5V-12V input	Connect with DC5V-12V power adapter
6	HDMI output	Connect with HDMI display device
7	HDMI input	Connect with the source device
(8)	USB-A port	Connect with computer

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2. Receiver (RX)





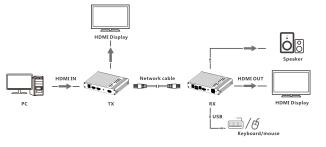
D	KVM Light	The mouse/keyboard is connected to the USB port, the indicator light is on
2)	Reset button	Press to restart the device
3)	RJ45 signal input	Connect with network cable
4)	Power/Signal indicator	a) There is power and no HDMI signal, the indicator will flash b) There is HDMI signal, the indicator will light solid
5)	DC5V-12V input	Connect with DC5V-12V power adapter
3)	RJ45 signal output	Connect with network cable
7)	S/PDIF out	Output digital audio signal
3)	HDMI output	Connect with HDMI display device
9	USB-A port	Connect with keyboard and mouse

2 3

### Installation Procedures

#### 1. Connection

### one to one:



#### one to many:

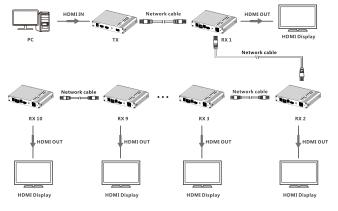
Disclaimer

The product name and brand name may be registered trademark of related manufactures. ™ and ® may be omitted on the user manual.

The pictures in this user manual are just for reference. The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are

trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.



Note: To ensure the quality of signal transmission, please use network cable within 50 meters when cascaded.

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

7-Brown/white 8-Brown

#### 2. Connection instruction

- 1) 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). If cascading is used, connect the CAT out port of the previous receiver to the CAT in port of the next receiver.
- 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.

## • FAQ

- Q: There is no output on screen when all connections are correct?
- A: 1) Please make sure the HDMI cables supports  $4K \times 2K$  if the output signal from the source device is  $4K \times 2K$  resolution.
- 2) Please check and make sure the network cable insert 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?
- 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
er Supply	Voltage/Current	DC5V-12V
	Power consumption	TX < 4W RX < 4W
MI formance I Interface	HDMI compliance	HDMI 2.0
	HDCP compliance	HDCP 2.2
	HDMI resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25/30Hz, 1280x960、1280x800、1280x768、1680x1050、1360x768、1360x768、1600x900、1024x768、800x600
MI	Supports audio formats	LPCM/DTS-H D/DTS-Audi / Dolby Digital 5.1CH
	Input and output TMDS signal	0.7~1.2Vp-p(TMDS)
formance Interface	Input and output DDC signal	5Vp-p(TTL)
interrace	Input cable length	≤8m(AWG24)
	Output cable length	≤8m(AWG24)
nsmission tance	CAT6/6A/7	≤70m
tection el	Electrostatic protection of the whole machine	1a Contact discharge level 3 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2
	Working temperature	-20~60℃
erating ironment	Storage temperature	-30~70℃
lioilillelli	Humidity (no condensation)	0~90%RH
dy perties	Dimension	150.0(L) x 107.0(W) x 28.4(H)mm
	Material	Aluminium alloy material + crystal panel
	Treatment process	Grit blast
	Color	Black
	Weight	TX: 260g RX:260g