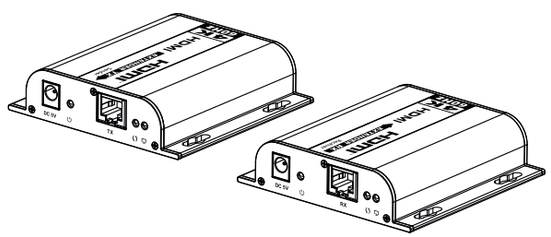
User manual

4K@60Hz HDMI EXTENDER



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 instructions:

1. Do not mix up the HDMI EXTENDER sender and HDMI EXTENDER receiver, and the IR blaster and IR receiver.
2. Do not plug-in/out the cables ,when it is in using.
3. Use DC 5V power supply only. Make sure the specification matched if using 3rd party DC adapters.
4. Support and compliant with IEEE802.3af international standard POE switch. The maximum wattage of the transmitter or receiver is 10W.

• Introduction

This product is a 4K@60Hz HDMI extender kit consisting of a sender and a receiver. The 4K@60Hz HDMI signal can be extended up to 120m via Category 6 and above network cables, supporting one-to-one connection, one-to-many connections via gigabit switch, or switch cascades. It also supports IR passback functions, and can be widely used in meetings, home entertainment, educational presentations, and other fields.

• Features

1. High-definition and low-latency transmission.
2. Support up to 4096 x 2160@60Hz resolution, backward compatible.
3. Compatible with Cat5/5e/6 or above network cables, transmission distance of Cat6 cable is 120 meters.
4. Support one-to-one or one-to-many connections through the gigabit switch.
5. Support IR passback (20~60kHz).
6. Firmware can be upgraded through Micro USB.
7. Lightning protection, surge protection, ESD protection.
8. Supports stable 24/7 operation.

• Package Contents



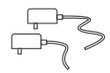
Sender x 1pc



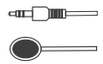
Receiver x 1pc



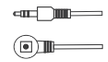
User Manual ×1pc



DC5V/1A ×2pcs
(POE version does not have this option)



IR blaster extension cable x1pc



IR receiver extension cable x1pc

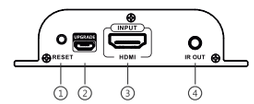
Note : above accessory ccontent is regular package for a kit. If buy HDMI extender TX or HDMI extender RX separately, the package contents would be different.

• Installation Requirements

1. HDMI source device(computer graphics card, DVD,PS3, HD monitoring equipment etc).
2. HDMI display device like SDTV, HDTV, projector with HDMI port.
3. Network cables : UTP/STP Cat5e/6 network cables, which following the standard of IEEE-568B.
   Transmission length: CAT5 80m/CAT5E 100m/CAT6 120m.

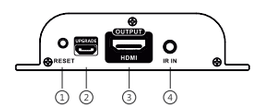
• Panel Description

1. HDMI EXTENDER TX (Sender)



① Reset
② Firmware upgrading
③ HDMI signal input
④ IR signal output to connect with blaster extension cable
⑤ Power input(DC 5V/1A)
⑥ Power Light
The indicator will turn on when the power is turned on
⑦ RJ45 signal output
⑧ Data transmission light
Light off: No data transmission
Steady on: The data is transmitting
⑨ Network link light
Light off: No Network connection
Steady on: Network connection is normal

2. HDMI EXTENDER RX(Receiver)



① Reset
② Firmware upgrading
③ HDMI signal output
④ IR signal input to connect with IR receiver extension cable
⑤ Power input(DC 5V/1A)
⑥ Power Light
The indicator will turn on when the power is turned on
⑦ RJ45 signal input
⑧ Data transmission light
Light off: No data transmission
Steady on: The data is transmitting
⑨ Network link light
Light off: No Network connection
Steady on: Network connection is normal

• Installation Procedures

1. How to make a Cat5e/6 network cable

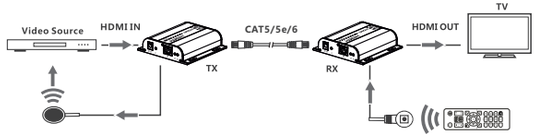
Follow the stanard of IEEE-568B:

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

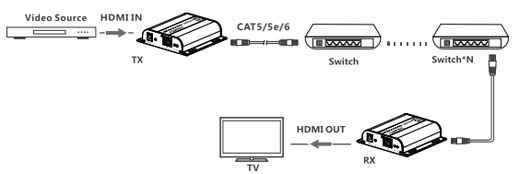


2. Connections

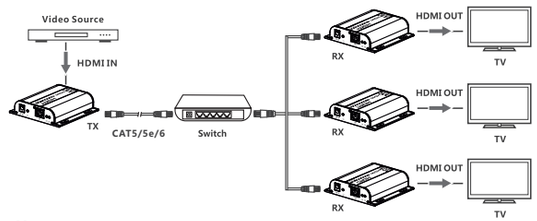
2.1 Point to Point connection: Up to 120 meters transmission distance over single CAT6.



2.2 LAN Switch Cascade Connection: By using the LAN switch/router to realize unlimited extension.



2.3 One-to-many Connection: By using network router/switch , one sender to several receivers, realize extender & splitter function.



Note:

1. If it is POE version, please use POE network router/switch.
2. It is recommended that Gigabit Ethernet switches (1000Mbps) be used in LAN.

3. IR User Guide

1) IR blaster extension cable should plug in the IR OUT port of the sender, IR receiver extension cable should plug in the IR IN port of the 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) Point the remote control at the receiving head of the IR receiver extension cable to operate.

• FAQ

Q : TV display "Waiting for connection ..." ?
A : Please check if the power supply of TX (Sender) and switches (if used) is connected, and make sure connecting cable is firmly.

Q : TV display "Please check the TX input signal" ?
A : 1) please check if there is a HDMI signal input of TX.
2) Try to connect the signal source directly to display device to see if there is singal output from source device or change the signal source, HDMI wire and try again.

Q : Display not fluent, not stable?
A : 1) Please check the cable length between the TX to switch, the switch to the RX and the connection between each level is within the required range.
2) Click the"reset"button on the TX/RX front panel, reset and reconnect.

• Specification

Item	Sender	Receiver
Video		
Input interface	1x HDMI	1x RJ45
Output interface	1x RJ45	1x HDMI
HDMI length	≤ 5m	≤ 5m
Maximum transfer rate	18Gbps	
Compatibility	HDMI 2.0	
	HDCP 1.4/HDCP 2.2	
Resolutions	4096x2160@24/30/50/60Hz, 3840x2160@24/30/50/60Hz, 1080P@24/25/30/50/60Hz, 720P@50/60Hz, 576P@60Hz, 480P@60Hz, 1920x1200, 1680x1050, 1600x900, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600	
Connection types	One-to-one connection One-to-many connection Switch cascading	
Transmission distance	CAT5 80m / CAT5E 100m / CAT6 120m	
Transmission latency	1080P: 80~130ms 4K@60Hz: 150~220ms	
Audio signal		
Input interface	1×HDMI	1×RJ45
Output interface	1×RJ45	1×HDMI
HDMI output	LPCM 2.0	
Command Signal		
IR interface	1x 3.5mm IR OUT	1x 3.5mm IR IN
IR receiving range	≤ 5m	
IR frequency	20kHz~60kHz	

Power		
Power Supply	DC 5V/1A	DC 5V/1A
Power Consumption	TX ≤ 3.5W	RX ≤ 2.5W
Operating Environment		
Working temperature	- 20℃~60℃	
Storage temperature	- 30℃~70℃	
Humidity	0~90%RH (no condensation)	
Physical Properties		
Housing	Aluminium	
Weight	156g	154g
Color	Black	
Dimensions	96.8(L)*94(W)*23.7(H)mm	
Protection	ESD protection 1a Contact discharge level 2 (±4KV) 1b Air discharge level 3 (±8KV) Implementation of the standard: IEC61000-4-2	
	Lightning protection, Surge protection	

Disclaimer

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