

## HDMI Extender 50m IR with POC

### DEAR CUSTOMER

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting product. Please keep this manual for future reference.

### 1.0 INTRODUCTION

The HDMI Extender over Single Cat5e/6 with IR extends high definition video and audio signals and IR, at a distance of up to 164ft/50m over a single Cat5e/6 cable. Features EDID management, which allows and encourages source and display “handshake” for seamless integration. With only one cost effective Cat5e/6 cable, high definition sources with HDMI outputs can be connected to high definition displays with HDMI inputs over long distances. Deep color video, DTS-HD or Dolby True HD audio is supported and compatible with the extender. In addition, the extender is also equipped with pass-through which allows for source control.

The extender includes two units: transmitting unit and receiving unit. The transmitting unit is used to capture the HDMI input with IR signals and carries the signals via one cost effective Cat5e/6 cable. The receiving unit is responsible for equalizing the transmitted HDMI signal and reconstructing IR control signals. The extender offers the most convenient solution for HDMI extension over a single Cat5e/6 with long distance capability, and is the perfect solution for any application

### 2.0 FEATURES

- 1.Aluminum housing,small size and light weight.
- 2.HDMI Loop out for Local Display,cascading via additional HDMI loop out port
- 3.copy EDID from receiver display or loop out display
- 4.Support power over cable function
- 5.1080p resolution up to 50m over a single Cat5e or Cat6 cable.
7. Allows HDMI Audio/Video and IR signals to be transmitted over a single Cat5e/6 cable.
- 8.Transmission Range: Extends 1080p resolution up to 164ft/50m over a single Cat5e or Cat6 cable.
- 9.Works with HDMI and HDCP compliant devices
- 10.Supports up to 1080p High Definition resolution.
- 11.Compact design for an easy and flexible installation.

### 3.0 PACKAGE

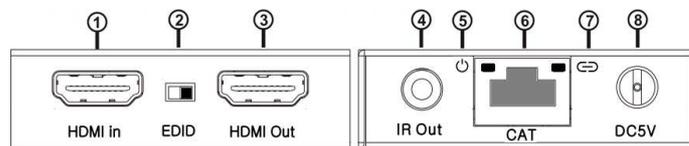
HDMI Transmitter .....	1pcs
HDMI Receiver .....	1pcs
IR Tx cable .....	1pcs
IR Rx cable .....	1pcs
5V1A DC Power Supply Adaptor.....	1pcs
User Manual .....	1pcs

## 4.0 SPECIFICATIONS

Video Bandwidth.....	Single-link	165Mhz
[4.95Gbps]		
Video Support.....	480i/480p/720p/1080i/1080p@60	
Audio Support.....	Surround Sound (up to 7.1 ch) or stereo digital audio	
Transmission Range.....	HD [1080p 24-bit color] – up to 50m [164ft]	
Input TMDS Signal.....	3.3 volts	
Input DDC Signal.....	5.0 volts/P-P	
ESD Protection.....	Human Body Model: ±8kv(air –gap discharge) ±4kv (contact charge)	
HDMI connector.....	Type A 19 pin female	
RJ-45 connector.....	WE/SS 8P8C	
3.5mm connector.....	(TX and RX) IR Receiver/IR Blaster	
Housing.....	Metal enclosure	
Power Supply.....	5V1A DC	
Power consumption.....	1.5 watts (TX); 1.0 watts (RX)	
Operation temperature.....	0°C to 40 °C/32°F to 104°F	
Storage temperature.....	-20°C to 60 °C/-4°F to 104°F	
Relative humidity.....	20~90 % RH (no condensation)	

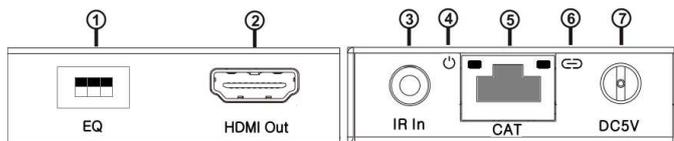
## 5. Panel descriptions

### 5.1 Transmitting unit



1. HDMI in: This slot is where you connect the HDMI output port of your source equipment such as DVD/Blu-ray players or Set-Top-Box with an HDMI cable.
2. EDID: The switch can switch copy EDID function, switch to right position, the extender will copy hdmi loop out display EDID information to source. Switch to left position, the extender will copy Receiver display EDID to source.
3. HDMI out: This slot is to connect the HDMI in put of your display such as an HDTV.
4. IR out: Connect the IR Blaster cable included in the package for IR signal transmission. Place the IR blaster in direct line-of-sight of the equipment to be controlled.
5. Power LED: This LED will illuminate when the device is connected with power supply.
6. CAT: Connect the CAT output of the transmitter with the CAT input of the receiver with CAT5E/6 cable.
7. Link LED: This LED will illuminate when the device is connected to HDMI source.
8. DC 5V: Connect from 5V DC power supply into the unit and connect the adaptor to an AC outlet.

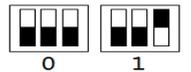
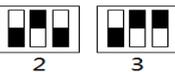
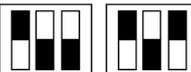
## 5.2 Receiver unit



1. EQ switcher: HDMI Receiver equalizer switcher.
2. HDMI out: This slot is to connect the HDMI input port of your display such as an HDTV.
3. IR in: Connect to the IR Receiver for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR receiver.
4. Power LED: This LED will illuminate when the device is connected with power supply.
5. CAT: Connect the CAT input of the receiver with the CAT output of the transmitter with CAT5E/6 cable.
6. Lock LED: This LED will illuminate when the HDMI signal from the transmitter is stable.
7. DC 5V: Connect from 5V DC power supply into the unit and connect the adaptor to an AC outlet.(For POC function, the receiver does not need power supply)

## 5.3 RX Equalizer distance adjust

If you see flickering or blinking image on the display, adjust the EQ switch to improve the cable skew. MAX stands for the strongest HDMI signal level for the longest possible transmission length while MIN stands for the weakest HDMI signal level for short transmission length. Adjust the signal level from MIN to MAX until desired video quality is displayed .

Recommended EQ setting			
Position	Cable Length	Position	Cable Length
 0      1	under 15m (49.5ft)	 2      3	15-30m (49.5 ft - 99ft)
 4      5	30-40m (99ft - 132ft)	 6      7	40-50m(132ft – 164ft)

## 6.CONNECTION DIAGRAM



## 7. CONNECT AND OPERATE

Connect a source such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI input on the Transmitting unit.

2. Connect a display such as an HDTV or HD Projector to the HDMI output on the Receiving unit.
3. Connect a single Category 5e/6 up to 164ft/50m to the output of the Transmitting unit, and the other end to the input of the Receiving unit.
4. For power, plug both the Transmitting unit and Receiving unit with the included power supplies.
5. Power on each device in the same sequence (receiver and transmitter will already be powered when either unit is plugged in.)

At this point the display connected should display the source signal connected to the extender set. If no signal is being displayed, check the receiver EQ switcher. If a display is having difficulty receiving a signal, see EDID section and perform EDID learning or access the display's menu and adjust the resolution (lowest to highest until signal is displayed). A 24 Hz vertical refresh rate may work better than 60 Hz or higher. Use the source remote at the receiver emitter to test IR functionality. If the IR remote function is not responding, check the emitters to ensure they are placed correctly and are plugged into the correct IR jacks on the Extender set receiving and transmitting units.

Wideband IR(30KHz---60KHz) introduction



IR BLASTER (TX)

To control the source: Plug IR Blaster into IR TX port of transmitter unit; place blaster in front of the IR eye of the source.

IR RECEIVER (RX)

To control the source: Plug IR Receiver into IR RX port of receiver unit; place receiver at or near display.

