



# **Operating Instructions**

### Thank you for purchasing this product

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

### Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

#### **Table of Contents**

1. 111110000011011	
2. Features	1
3. Package Contents	
4. Specifications	
5. Operation Controls and Functions	
5.1 Transmitter Panel	4
5.2 Receiver Panel	
6. Application Example	

#### 1. Introduction

This 18Gbps HDMI Extender can extend HDMI HD signal to a distance up to 230ft / 70m via a single CAT6/6a cable, which can achieve zero-delay, uncompressed long-distance transmission between the transmitter and receiver. Video resolution is up to 4K2K@60Hz. The Extender supports KVM signal pass-through, which can remote control source device at display device. It supports EDID copy pass-through function between the source device and display device. It supports POC function.

This Extender can be widely used in multi-media conference halls, TV teaching and large-screen displays.

#### 2. Features

- ☆ HDMI2.0b and HDCP 2.2 compliant
- ☆ Support 18Gbps video bandwidth
- ☆ Support video resolution up to 4K2K@60Hz RGB/YCBCR 4:4:4
- ☆ The transmission distance can be extended up to 230ft / 70m via a single CAT6/6a cable
- ☆ Support HDR, HDR10, HDR10+, Dolby Vision, HLG
- ☆ Audio formats: LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+)
- ☆ Support 3.5mm analog audio de-embedding, audio is output through the L/R OUT port of the receiver
- ☆ EDID copy pass-through function between the source device and display device
- ☆ Support bi-directional POC (Power over Cable) function
- ☆ With USB KVM pass-through function, USB1.1 compliant, support remote-control by keyboard and mouse
- ☆ Compact design for easy and flexible installation

### 3. Package Contents

- ① 1 × 18Gbps HDMI Extender (Transmitter)
- ② 1 × 18Gbps HDMI Extender (Receiver)
- 3 1 × USB-A to USB-B Cable (1.5 meters)
- 4 4 × Mounting Ears
- ⑤ 8 × Machine Screws (KM3\*4)
- 6 1 × 12V/1A Locking Power Adapter
- 7) 1 × User Manual

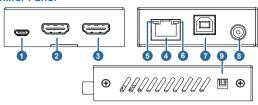
### 4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@60Hz RGB/YCBCR 4:4:4
Transmission Distance	4K2K@60Hz 4:4:470m, 1080P70m (CAT6 cable)
Color Space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+)

Connection				
Transmitter	Input: 1 × HDMI IN [TypeA, 19-pin female] Output: 1 × HDMI OUT [TypeA, 19-pin female] 1 × CAT OUT [RJ45] Control: 1 × SERVICE [Micro-USB jack] 1 × USB port [Type-B jack]			
Receiver	Input: 1 × CAT IN [RJ45] Output: 1 × HDMI OUT [TypeA, 19-pin female] 1 × L/R OUT [3.5mm Stereo Mini-jack] Control: 1 × SERVICE [Micro-USB jack] 2 × USB port [Type-A jack]			
Mechanical				
Housing	Metal Enclosure			
Color	Black			
Dimensions	Transmitter / Receiver: 90mm (W)×68mm (D)×22mm (H)			
Weight	Transmitter: 170g, Receiver: 169g			
Power Supply	DC 12V/1A; Support bi-directional POC function			
Power Consumption	4.2 W (max)			
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F			
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F			
Relative Humidity	20~90% RH (non-condensing)			

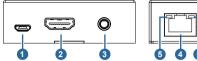
## 5. Operation Controls and Functions

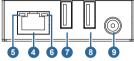
#### **5.1 Transmitter Panel**



No.	Name	Function Description
1	SERVICE	Firmware update port.
2	HDMI OUT	HDMI signal loop output port. Connect to HDMI display devices with HDMI cable.
3	HDMI IN	HDMI signal input port. Connect to HDMI source device with HDMI cable.
4	CAT OUT	RJ45 connector for connecting the CAT IN port of the Receiver with CAT6/6a cable.
5	Data Signal Indicator (Yellow)	Illuminating: HDMI signal with HDCP.     Flashing: HDMI signal without HDCP.     Dark: No HDMI signal.
6	Link Signal Indicator (Green)	Illuminating: Transmitter and Receiver are in good connection status.     Flashing: Transmitter and Receiver are in poor connection status.     Dark: Transmitter and Receiver are not connected.
7	PC	Connect to PC. The computer can be accessed and controlled remotely through the USB port of the receiver (KVM function).
8	DC 12V	DC 12V/1A power input port.  Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply.
9	EDID DIP switch	Use the DIP switch to set EDID. (Switching to the upper end indicates 1; switching to the lower end indicates 0.)  11 - EDID information is copied from the display at the RX.  10 - EDID is preset to 4K@60Hz 2.0CH  01 - EDID is preset to 1080p 2.0CH  00 - EDID information is copied from the HDMI OUT at the TX.

#### 5.2 Receiver Panel

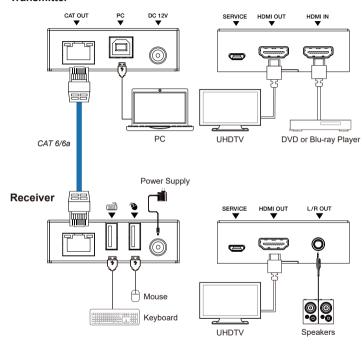




No.	Name	Function Description
1	SERVICE	Firmware update port.
2	HDMI OUT	HDMI signal output port. Connect to HDMI display devices with HDMI cable.
3	L/R OUT	Analog audio output port, used for audio de-embedding output.
4	CAT IN	RJ45 connector for connecting the CAT OUT port of the Transmitter with CAT6/6a cable.
5	Data Signal Indicator (Yellow)	Illuminating: HDMI signal with HDCP.     Flashing: HDMI signal without HDCP.     Dark: No HDMI signal.
6	Link Signal Indicator (Green)	Illuminating: Transmitter and Receiver are in good connection status.     Flashing: Transmitter and Receiver are in poor connection status.     Dark: Transmitter and Receiver are not connected.
7	Keyboard port	Connect to the keyboard.
8	Mouse port	Connect to the mouse.
9	DC 12V	DC 12V/1A power input port.  Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply.

### 6. Application Example

#### **Transmitter**





The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries