

## 4KEX60-H2 4K@60 444 HDMI Extender



**User Manual** 

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### **Important Safety Instructions**

- Do not expose this apparatus to rain, moisture, dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.
- Do not install or place this unit in a bookcase, built-in cabinet, or in another confined space. Ensure the unit is well ventilated.
- To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, or similar items.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not place sources of naked flames, such as lighted candles, on the unit.
- Clean this apparatus only with dry cloth.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Protect the power cord from being walked on or pinched, particularly at plugs.
- Only use attachments/accessories specified by the manufacturer.
- Refer all servicing to qualified service personnel.

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## Introduction

### **Overview**

Thank you for purchasing this product. For proper installation and optimum performance, please read the instructions in this manual carefully.

4KEX60-H2 is a slim transmitter receiver set with HDCP 2.2 compatibility. It supports resolutions up to 4K@60Hz 4:4:4 8bit, and transmits UHD video, HD audio up to 35m/115ft over a Cat 6 or above cable. It also supports bi-directional PoC and one-way IR pass-through.

### **Features**

- Supports video resolutions up to 4K@60Hz 4:4:4 8bit and HDCP 2.2.
- Over a Cat 6/6a/7 cable, transmits 4K@60Hz 4:4:4 8bit up to 35m/115ft.
- Over a Cat 5e/6/7 cable, transmits 1080P@60Hz up to 50m/164ft.
- Supports multichannel audio up to PCM 7.1, Dolby TrueHD and DTS-HD Master Audio.
- Supports one-way IR pass-through from receiver to transmitter.
- Supports bi-directional PoC, one power adapter at either transmitter or receiver side can power both units.
- Slim profile for easy installation.

## **Package Contents**

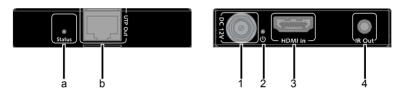
Before you start the installation of the product, please check the package contents:

- 4KEX60-H2 Extender x 1
- Power Supply (DC 12V 1A) with US Pins x 1

- IR Emitter x 1
- IR Receiver x 1
- Mounting Brackets (with Screws) x 4
- User Manual x 1

## **Panel**

### **Transmitter**



No.	Name	Description
a	Status LED	Lights when there's HDMI input.
b	UTP Out	Connect transmitter to receiver via a Cat 5e/6/7 cable.
1	DC 12V	Connect to DC 12V power adapter provided.
2	Power LED	Lights when the device has power.
3	HDMI In	Connect to an HDMI source device.
4	IR Out	Connect to an IR emitter provided.

### Receiver



No.	Name	Description
a	Status LED	Lights when there's HDMI output.
b	UTP In	Connect receiver to transmitter via a Cat 5e/6/7 cable.
1	DC 12V	Connect to DC 12V power adapter provided.
2	Power LED	Lights when the device has power.
3	HDMI Out	Connect to an HDMI display.
4	IR In	Connect to an IR receiver provided.

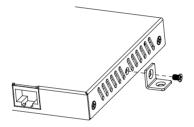
# **Installation and Application**

### **Brackets Installation**

**Note:** Before installation, please ensure the kit is disconnected from the power source.

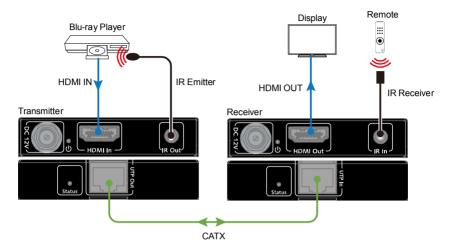
#### Steps to install the device in a suitable location:

- 1. Attach the installation bracket to the enclosure using the screws that were provided in the package separately.
- 2. When unit is mounted upside down under the table like below picture.



- 3. Repeat steps 1-2 for the other side of the unit.
- 4. Attach the brackets to the surface you want to hold the unit against using the screws (provided by others).
- 5. Repeat steps 1~4 to install the receiver.

# **Application**



Note: Connect a broadband IR receiver to IR In and an IR emitter to IR Out.

# **Specification**

Video		
Input/Output Signal Type	HDMI 2.0b, HDCP 2.2, 3D	
Input/Output Resolution Supported	Up to 4096x2160@60Hz, including	
	4K@60Hz/4K@30Hz/1080P/1080i/720P	
Maximum Data Rate	HDMI: 18Gbps	
Maximum Pixel Clock	600MHz	
Audio		
	Fully supports audio formats in HDMI 2.0 specification,	
Audio format supported	including PCM, Dolby TrueHD, Dolby Atmos, DTS-HD	
	Master Audio, DTS:X	
General		
Operating Temperature	0 °C to + 45°C (32°F to + 113 °F)	
Storage Temperature	-20 °C to +70°C (-4°F to +158 °F)	
Humidity	10% to 90%, non-condensing	
	Human Body Model:	
ESD Protection	±8kV (air-gap discharge)/	
	±4kV (contact discharge)	
Product Supply	DC 12V 1A	
Power Consumption (Max)	6.48W (Pair, PoC)	
Product Dimension	70mm × 15.2mm × 90mm / 2.76" × 0.60" × 3.54" (Each for	
Product Dimension	TX/RX)	
Product Weight	0.15kg/0.33lb (Each for TX/RX)	

#### **Transmission Distance**

Note: T568B straight-through Category cable is recommended.

Cable Type	Range	Supported Video
Cat 5e/6	50m/164ft	1080P@60Hz
Cat 6a/7	50m/164ft	
	35m/115ft	4K@30 4:4:4
Cat 6/6a/7		4K@60 4:2:0
		4K@60 4:4:4
HDMI	Input/Output: 49ft/15m	4K@30Hz, 1080P@60Hz
	Input/Output: 16ft/5m	4K@60Hz 4:4:4

# **Trouble Shooting**

#### 1. No Power

- Ensure the power is on.
- Ensure you use the power adapter provided in the package.

#### 2. No Picture or Video Flash

- Ensure all devices are on, and all cables are qualified and connected properly. Ensure all the cables' length are within the maximum distance (refer to Specification table).
- Ensure all the LED indicators are normal.
- When connecting source to display directly, ensure them can work properly.
- Ensure the input resolution is supported by the device.

#### 3. Weak or Not Working IR Signal

- Ensure the devices support IR control (not Bluetooth/WIFI).
- Ensure you use the IR cables provided in the package, and install them correctly according to the Application Diagram.
- Pay attention to the control angle and distance.

IR Cable	IR Emitter	IR Receiver	
Suggested Angle	0°	0°	
Distance (Max)	30cm	8m	

 When work with the third-party device, ensure it follows the pin definition below.





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# **Warranty**

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access Technology Limited shall charge for the service(s) claimed for the product if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

- The original serial number (specified by AV Access Technology Limited)
  labeled on the product has been removed, erased, replaced, defaced or is
  illegible.
- 2. The warranty has expired.
- 3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an AV Access Technology Limited authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
- 4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
- 5. The service, configuration and gifts promised by salesman only but not covered by normal contract.
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