HDBase-T Lite Extender

4KEX70-L



User Manual

AV Access

Introduction

Overview

This product is a slim transmitter receiver pair which is designed to extend HDMI 1080P@60Hz signals up to 70m/230ft and 4K@60Hz signals up to 40m/131ft via a single Cat 6a/7 cable. The transmitter and receiver can supply power to each other reciprocally. When either side is plugged in the power, both sides are powered on. You can control the source from the display's location or control the display from source's location via IR pass-through function. The transmitter and receiver are easy to install. They are space saving and offer solutions for home, office, digital entertainment centers, control centers, conference rooms, school and corporate training environments.

Features

- Slim appearance and space saving.
- Bi-directional POE, when either side (transmitter or receiver) is plugged in the power, both sides are powered on.
- Transfers bi-directional infrared control signal together with the HDMI signal.
- Via Cat 6a/7 cables, 4Kx2K@60Hz (4:2:0) output up to 40m/131ft, 1080P@60Hz up to 70m/230ft.
- Via Cat 5e cable, 4Kx2K@60Hz (4:2:0) output up to 35m/115ft, 1080P@60Hz up to 60m/197ft.
- HDMI 1.4 with 4K and HDCP 2.2 compliant.
- Supports Bi-directional RS232 pass through.

Package Contents

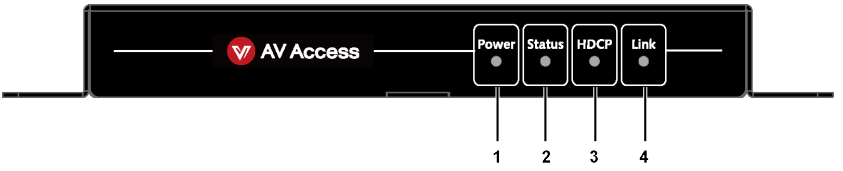
Before you start the installation of the product, please check the package contents:

- Transmitter x 1
- Receiver x1
- Power Adapter (DC 18V 1A) x1
- IR Emitter x1
- IR Receiver (30 KHz ~ 50 KHz) x1
- Phoenix Connectors (3.5mm, 3 Pins) x 2
- User Manual x 1

Panel

Front Panel

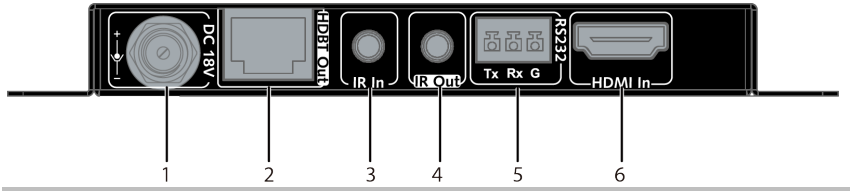
Transmitter & Receiver



No.	Name	Description
1	Power	**On:** The device is powered on. **Off:** The device is powered off.
2	Status	**Blinking:** The device is working properly. **Off**: The device is not working properly.
3	HDCP	**On:** HDCP protected content is being transmitted. **Blinking:** Non-HDCP protected content is being transmitted. **Off:** No content is being transmitted.
4	Link	**On:** Link between transmitter and receiver has been established. **Off/Blinking:** Connection exceptions exist between transmitter and receiver.

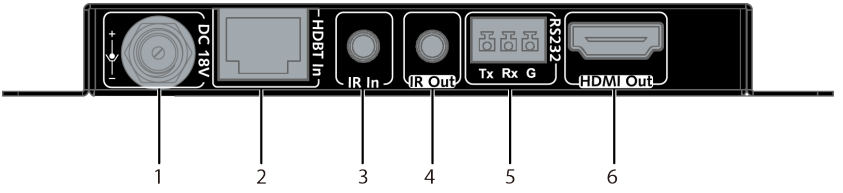
Rear Panel

Transmitter



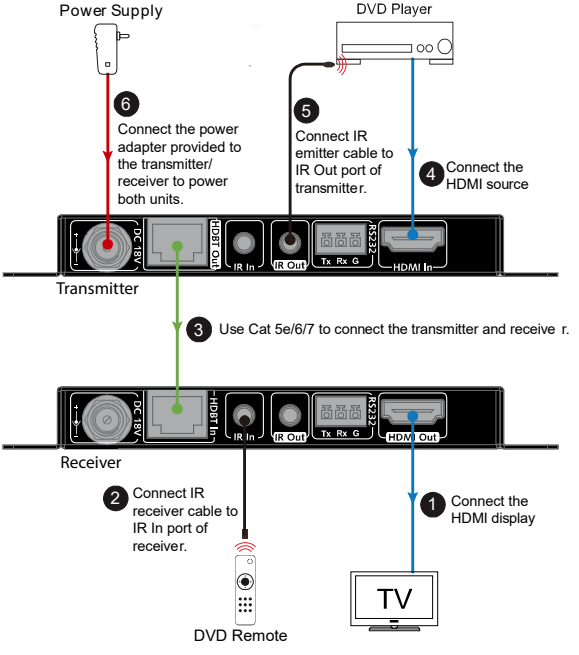
No.	Name	Description
1	DC 18V	Connect to a DC 18V 1A power adapter. **Note:** If transmitter is connected to a power supply, the receiver is adapter free.
2	HDBT Out	Connect to the receiver via a Cat5e/6 cable.
3	IR In	Connect to an IR receiver cable. Secure the IR receiver with adhesive.
4	IR Out	Connect to an IR emitter cable. Secure the IR emitter on the IR receiving sensor of source device with adhesive.
5	RS232	RS232 pass-through
6	HDMI In	Connect to a source device via an HDMI cable.

Receiver



No.	Name	Description
1	DC 18V	Connect to a DC 18V 1A power adapter. **Note:** If receiver is connected to a power supply, transmitter is adapter free.
2	HDBT In	Connect to the transmitter via a Cat5e/6 cable.
3	IR In	Connect to an IR receiver cable. Secure the IR receiver with adhesive.
4	IR Out	Connect to an IR emitter cable. Secure the IR emitter on the IR receiving sensor of display device with adhesive.
5	RS232	RS232 pass-through.
6	HDMI Out	Connect to a display via an HDMI cable.

Application



Specifications

Technical	
Video Signal Type	HDMI 1.4, HDCP2.2
Audio Format	Stereo, PCM 2.1/5.1/7.1, DTS, Dolby, pass through
Input/Output Resolution Support	SMPTE: 1280x720P[1,2,3,4,5,6,7,8], 1920x1080I[6,8], 1920x1080P[1,2,3,4,5,6,7,8], 3840x2160[2,3,5,6,8], 4096x2160[2,3,5,6,8] VESA: 800x600[8], 1024x768[8], 1280x768[8], 1280x800[8], 1280x960[8], 1280x1024[8], 1360x768[8], 1366x768[8], 1400x1050[8], 1440x900[8], 1600x900[8], 1600x1200[8], 1680x1050[8], 1920x1200[8] 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = at 60 Hz; **NOTE:** 4096x2160/3840x2160@50Hz/60Hz is based on chroma sub-sampling 4:2:0 8-bit only
Maximum Data Rate	10.2Gbps

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
ESD Protection	±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Surge Protection	Voltage: ±1 kV
Power Consumption (Maximum)	≤8.88 W (Pair)
Device Dimensions (W x H x D)	108.8 mm ×15 mm ×64.2 mm/ 4.29'' x 0.59'' x 2.52''
Product Weight	TX/RX: 0.18kg/0.40lb

Transmission Distance

Note: We recommend the use of T568B straight-through Category cables.

Cable Type	Range	Supported Video
HDMI	Up to 15m/50ft	1080P@60 Hz
	HDMI In: Up to 10m/33ft HDMI Out: Up to 15m/50ft	4K@30Hz 4:4:4 4K@60 Hz 4:2:0
CAT5e/CAT6	60 m/197ft	1080P@60 Hz 36 bpp
	35 m/115ft	1080P@60 Hz 48 bpp 1080P@60 Hz 3D 3840 x 2160@60 Hz 4:2:0
CAT6a/CAT7	70 m/230ft	1080P@60 Hz 36 bpp
	40 m/131ft	1080P@60 Hz 48 bpp 1080P@60 Hz 3D 3840 x 2160@60 Hz 4:2:0

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.

1. 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.
6. AV Access Technology Limited preserves the right for interpretation of these cases above and to make changes to them at any time without notice.

Thank you for choosing products from AV Access.

If you have any question, please contact us via the following emails:

General Enquiry: info@avaccess.com

Customer/Technical Support: support@avaccess.com



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