4K@60Hz HDMI Extender with Loop Out

4KEX70L-H2



User Manual

AV Access

Table of Contents

Introduction **2**
- Overview 2
- Features 2
- Package Contents 2
- Panel 3
  - Transmitter 3
  - Receiver 4

Application **5**

Specifications **6**

Warranty **7**

Introduction

Overview

This product is a cost-effective slim transmitter and receiver kit with HDCP 2.3 compatibility. It supports resolutions up to 4K@60Hz 4:4:4 8-bit, and transmits UHD video, HD audio and IR signals up to 70m/230ft over a Cat 6 or higher cable. It also supports bi-directional PoC.

Features

- Supports video resolutions up to 4K@60Hz 4:4:4 8bit and HDCP 2.3.
- Transmits HDMI and IR signals up to 70m/230ft via a Cat 6/6A/7 cable.
- Supports multichannel audio up to PCM 7.1, Dolby Atmos and DTS:X.
- Supports bi-directional IR passthrough between the transmitter and receiver.
- 2-pin switches for EDID and ARC configuration.
- Supports bi-directional PoC, one power adapter at either the transmitter or receiver can power both units.
- Slim profile and easy installation.

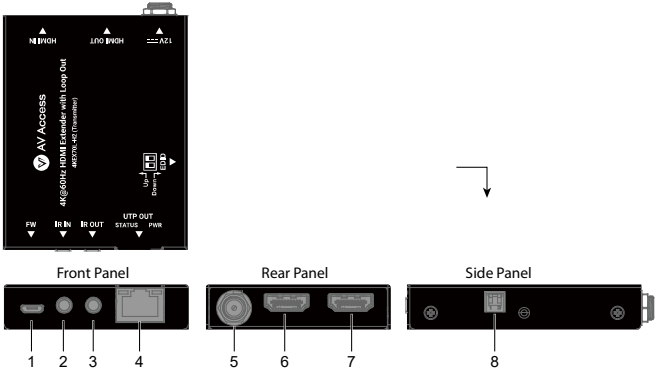
Package Contents

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

- Extender Set x 1
- Power Adapter (DC 12V 1A) x 1
- IR Emitter x 1
- Broadband IR Receiver (30-50 kHz) x 1
- Mounting Brackets (with Screws) x 4
- User Manual x 1

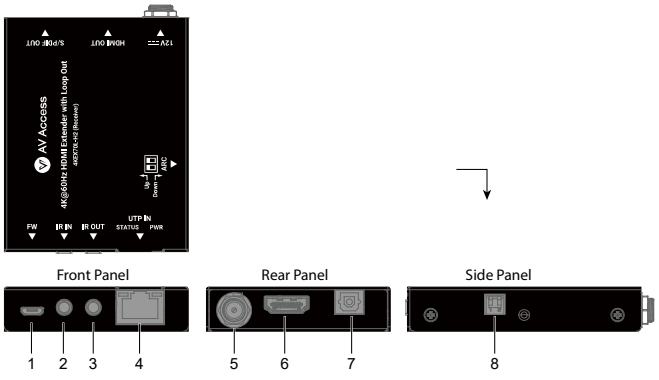
Panel

Transmitter



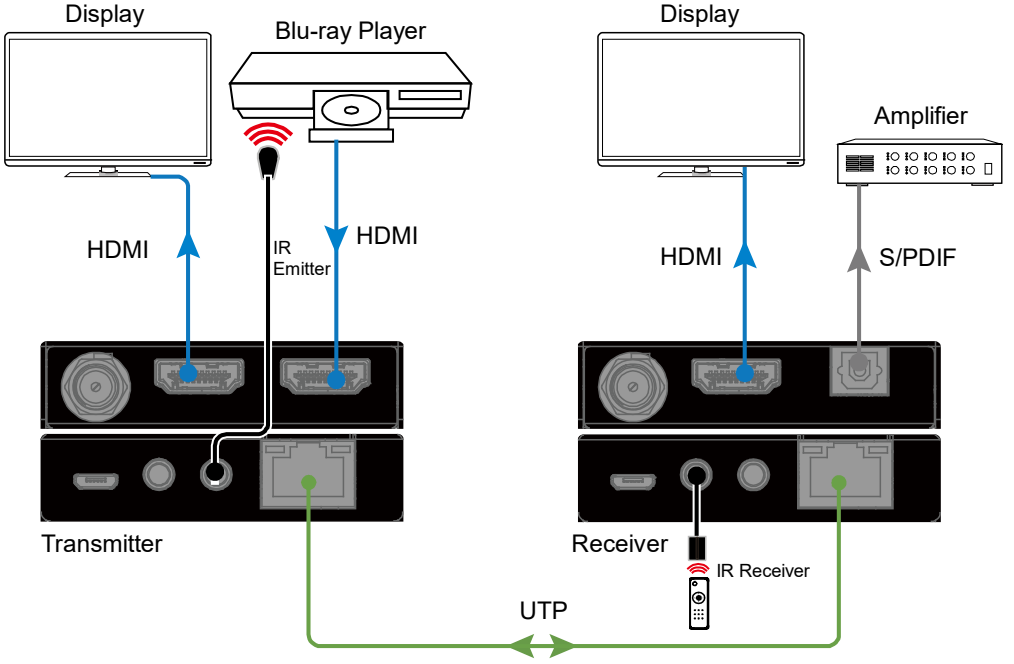
#	Name	Description
1	FW	Micro USB port. Connect to a PC for firmware upgrades.
2	IR IN	Connect to the IR receiver provided.
3	IR OUT	Connect to the IR emitter provided.
4	UTP OUT	RJ-45 port with LED indicators. Connect to the UTP IN port of the receiver using a Cat 6/6A/7 cable. • **STATUS** (Green): On when an HDMI signal is transmitted. • **PWR** (Orange): On when the device is powered on.
5	12V	Connect to the included power adapter. With bi-directional PoC support, one power adapter connected to either the transmitter or receiver can power both units.
6	HDMI OUT	Connect to an HDMI display.
7	HDMI IN	Connect to an HDMI source.
8	EDID	2-pin switch for EDID management (0 = up, 1 = down): • **00**: Copy EDID from the transmitter (TX). • **01**: Use fixed 1080P@60 as input EDID. • **10**: Use fixed 4K@60 as input EDID. • **11**: Copy EDID from the receiver (RX) (default).

Receiver



#	Name	Description
1	FW	Micro USB port. Connect to a PC for firmware upgrades.
2	IR IN	Connect to the IR receiver provided.
3	IR OUT	Connect to the IR emitter provided.
4	UTP IN	RJ-45 port with LED indicators. Connect to the UTP OUT port of the transmitter using a Cat 6/6A/7 cable. • **STATUS** (Green): On when an HDMI signal is transmitted. • **PWR** (Orange): On when the device is powered on.
5	12V	Connect to the included power adapter. With bi-directional PoC support, one power adapter connected to either the transmitter or receiver can power both units.
6	HDMI OUT	Connect to an HDMI display.
7	S/PDIF OUT	Connect to an audio receiver (e.g. an amplifier).
8	ARC	2-pin switch for ARC control (0 = up, 1 = down): • **00**: De-embed audio output (default). • **01/11**: Enable ARC audio output.

Application



Specifications

Technical	
Input/Output Signal Type	HDMI 2.0, HDCP 2.3
Input/Output Resolutions	Supports VESA and SMPTE resolutions up to 4K@60Hz (4:4:4), including 3840x2160@60Hz, 4096x2160@50Hz, 4K@30Hz, 3840x1080@60Hz, 3440x1440@60Hz, 2560x1600@60Hz, 2560x1440@60Hz, 2560x1440@50Hz, 1080P@120Hz, 1080P@100Hz, 1080P@75Hz, 1080P@60Hz, 720P@60Hz
Maximum Data Rate	18Gbps
Maximum Pixel Clock	600MHz
Audio Formats	• HDMI: Supports multichannel audio up to PCM 7.1, including PCM 2.0/5.1/7.1ch, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS 5.1, DTS-HD Master Audio and DTS:X • S/PDIF: PCM 2.0ch, Dolby Digital, DTS 5.1

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	Human-body Model: ±8kV (Air-gap discharge) / ±4kV (Contact discharge)
Power Supply	DC 12V 1A, PoC
Power Consumption	4.2W (Max, per pair via PoC)
Device Dimensions (W x H x D)	2.48'' x 0.59'' x 3.15'' (63mm × 15mm × 80mm) each for TX/RX
Product Weight	0.29lb (0.13kg) each for TX/RX

Transmission Distance

Note: A T568B straight-through Category cable is recommended.

Cable Type	Range	Supported Video
Cat 6/6A/7	230ft (70m)	1080P@60Hz 4K@60Hz
HDMI	Input/Output: 49ft (15m)	1080P@60Hz
	Input/Output: 33ft (10m)	4K@60Hz
	Input: 33ft (10m) Output: 49ft (15m)	4K@30Hz

Warranty

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access 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) 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 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 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: sales@avaccess.com
Customer/Technical Support: support@avaccess.com



AV Access

Elevating your life