AV Access

Simplify your life

HDEX40-L

50m 1080P HDMI Extender

User Manual

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Contact Us

Business inquiry: **services@avaccess.com**

Technical problems: **support@avaccess.com**

Important Safety Instructions

- Do not expose this device to rain, moisture, dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the device.
- 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 device (including amplifiers) that produce heat.
- Do not place sources of naked flames, such as lighted candles, on the unit.
- Clean this device only with dry cloth.
- Unplug this device 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

HDEX40-L is a 50m 1080P cost-effective HDMI extender, and offers the extension of full HD video, 2CH audio and IR pass through up to 50m/164ft along a single Cat X cable. With a feature set including transmission of uncompressed 1080p HD video@60Hz, stereo audio, one-way IR pass through and PoC (Power over Cat X cable).

With the PoC inside, the receiver can be powered by transmitter without additional power adaptor. It offers the added benefit of an incredibly low-profile for a greatly reduced form factor behind the screen for even more convenience and ease of installation at the display zone.

The Receiver offers manual EQ DIP settings to adjust transmissions by distance for optimal signal delivery to the display.

Features

- Simple and cost-effective HDMI Extender
- Uncompressed 1080P/60Hz up to 50 meters over Cat 6/6a/Cat 7 cable
- Uncompressed 1080P/60Hz up to 40 meters over Cat 5e cable
- HDMI 1.3b and HDCP1.4 compliance
- Independent HDMI equalization adjustment button on receiver.
- IR pass through from receiver to transmitter
- Built-in PoC, receiver can be powered by transmitter
- Built-in ESD: ±8kV (air-gap discharge) & ±4kV (contact discharge)
- Built-in Surge protection: Voltage ± 1kV
- Compact size for easy installation.

- Simply stick to TV by Velcro Hook/Loop Tape

Package Contents

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

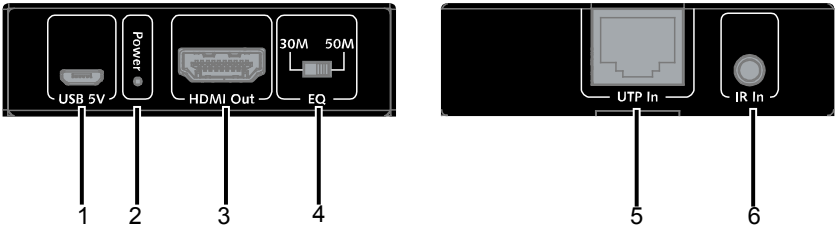
- Transmitter x 1
- Receiver x1
- Power Adapter (DC 5V 1A) x1
- IR Emitter x1
- IR Receiver (30 KHz ~ 50 KHz) x1
- Mounting Brackets (with Screws) x 4
- User Manual x 1

Panel

Transmitter

No.	Name	Description
1	DC 5V	Power input. Connect to the power adapter provided. The receiver can be powered by transmitter.
2	Power LED (Green)	ON: The transmitter is powered on. OFF: The transmitter is powered off.
3	HDMI In	Connect with HDMI source device
4	UTP Out	Connect to the receiver via Cat X cable.
5	IR Out	Connect to the IR emitter cable provided.

Receiver



No.	Name	Description
1	USB 5V	Connect to USB device to power for the receiver.
2	Power LED (Green)	ON: The receiver is powered on. OFF: The receiver is powered off.
3	HDMI Out	Connect an HDMI display.
4	EQ	Manual EQ DIP Switch: adjust the maximum transmission distance to 30m or 50m manually. 30m: The length of Cat X cable connected is less than or equal to 30m; 50m: The length of Cat X cable connected is more than 30m and less than or equal to 50m;
5	UTP In	Connect to transmitter via Cat X cable.
6	IR In	Connect to IR receiver cable provided.

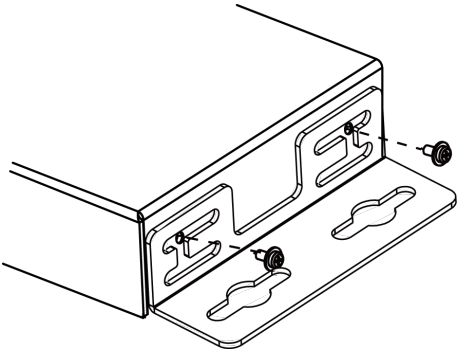
Installation and Application

Brackets Installation

Note: Before installation, please ensure HDEX40-L 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. The bracket height can be adjusted up/down or bracket face up or down.
2. The bracket is attached to the enclosure as shown.



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.

IR Cable Operation

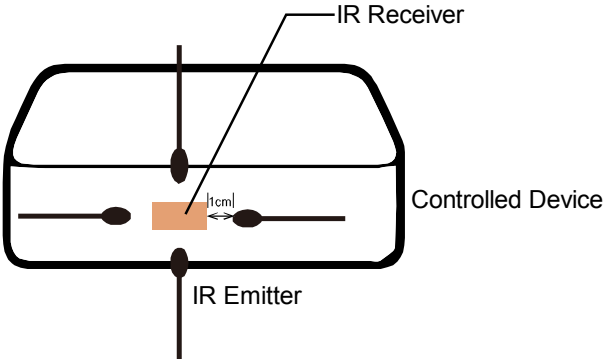
Cable Type

- IR Emitter: Connect to the "IR Out" port of the device.

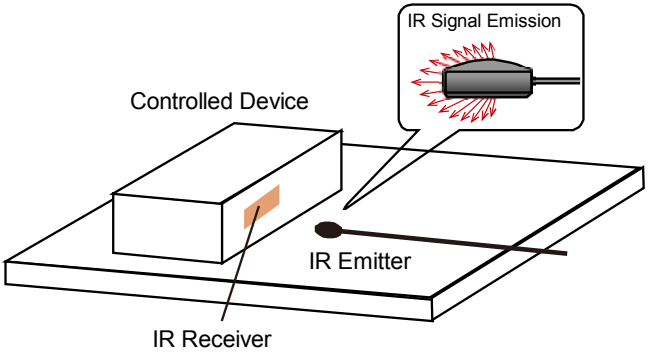
- Broadband IR Receiver (30-50 KHz): connect to the "IR In" port of the device.

Using the IR Emitter

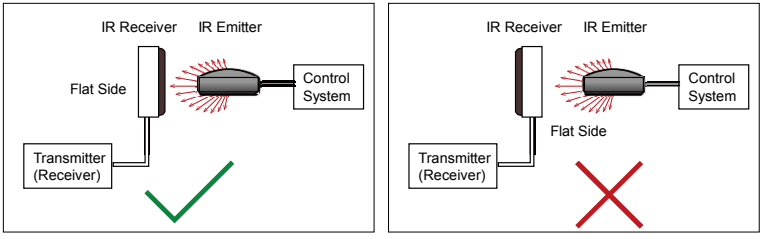
1. Insert the IR emitter plug into the “IR Out” jack located on the transmitter or receiver.
2. Example 1: Attach the IR emitter head directly with the adhesive tape provided near the IR receiver window (e.g. at the distance of 1cm) on the device you want to control.



Example 2: You can also place the IR emitter in front of the IR receiver window on the controlled device.

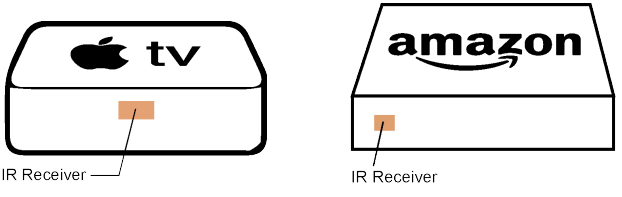


Example 3: When connected to control system, ensure the IR emitter is over against the IR receiver's front side instead of its flat side (see below picture):



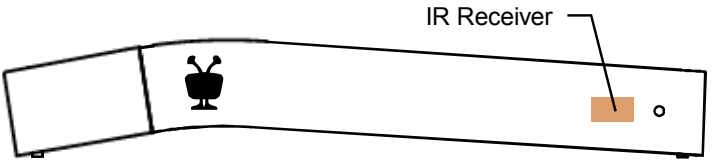
Please refer to your device's user guide to find out where the IR receiver is on your connected device.

For example, the IR receiver for Apple TV/Amazon Fire TV/TIVO BOLT is shown as below:



Apple TV (3rd/4th generation)

Amazon Fire TV

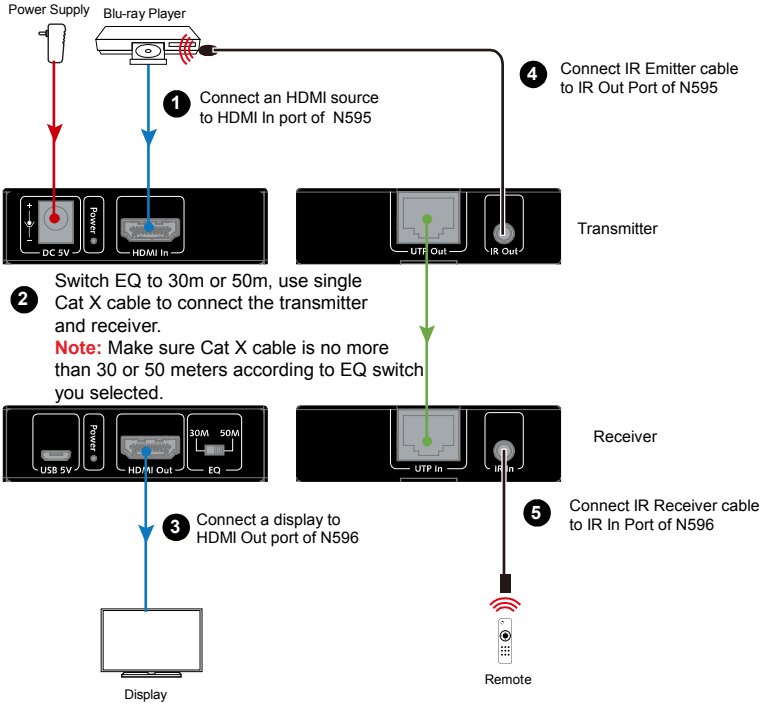


TIVO BOLT

Note: Products from AV Access do not support Bluetooth control, the introduction above applies to device with IR control capability only. Here is a list about different devices' control method.

No.	Device	Control Method
1	NVDIA 2571 Player	Bluetooth/USB
2	Amazon Fire TV with UHD HDR	Bluetooth
3	**Amazon Fire TV**	**IR**
4	ROKU Ultra Player	Bluetooth
5	**Apple TV 3rd**	**IR**
6	**Apple TV 4th**	**IR**
7	Apple 4K TV 5th	Bluetooth
8	Xbox one S	Bluetooth/USB
9	Xbox one X	Bluetooth/USB
10	**TIVO BOLT**	**IR**
11	NINTENDO SWITCH HAC-001 Game Console	Bluetooth/USB
12	PS4 Pro	Bluetooth/USB
13	Blu-ray Player	**IR**

Application



Installation requirements

- HDMI source devices: With HDMI output interface, DVD, PS3, STB, PC etc.
- Display devices: With HDMI input port, SDTV, HDTV, projector etc.
- Cat X cables: UTP/STP Cat5e/6/6a cable, which following the standard of IEEE-568B.

Specifications

Technical	
Video Signal Type	HDMI 1.3b with HDCP 1.4
Input/Output Resolution Support	1920x1080I[8], 1920x1080P[8], 1080x720P[8], 720x568P[8], 720x568I[8] ,720x480P[8], 720x480I[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 = 60 Hz;
Audio Format Supported	PCM 2.0
Max Data Rate	6.75 Gbps
General	
Operating Temperature	0°C to + 45°C (32 to + 113 °F)
Storage Temperature	-20 to +70°C (-4 to + 158 °F)
Humidity	20% to 90%, non-condensing
Power Consumption (Maximum)	2.5W (pair)
Device Dimensions (W x H x D)	70 mm ×20 mm ×70.2 mm/ 2.75'' x 0.79'' x 2.76''
Product Weight	Transmitter/Receiver: 0.2kg/0.44lb

Transmission Distance

Cable Type	Range	Supported Video
HDMI	Input/Output: 5m/16ft	1080P@60Hz
Cat 5e	40m/131ft	1080P@60Hz
Cat 6/6a/7	50m/164ft	

Trouble Shooting

Steps of Regular Troubleshooting Routine

1 **Power:** Please make sure all devices are powered on. (source, extender, display devices)

2 **Indicator:** Please make sure LED indicators of transmitter and receiver are normal according to user manual.

3 **Devices**: Please make sure picture can be shown normally when connecting source to display devices directly.

4 **Cable**: Plug in and out HDMI/Cat X/USB cable or try another HDMI/Cat X/USB cable.

- Cat 5e/6/6a cable is recommended.
- Please make sure Cat X cable is less than 50m/164ft.
- Please make sure the two connectors of one Cat X cable are same standard (IEEE 568B).

5 **Compatibility:** Please test other source and display devices to determine whether it is a compatibility issue.

Typical Questions

How to deal with cutting off when you connect USB device to receiver?

- Please make sure your USB device is working normally.
- Please insert the power adapter to receiver power port instead of transmitter since the PoE is not able to power on your USB device such as hard disk.

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.

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