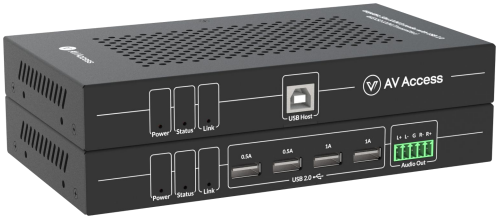
4K@60Hz 50m KVM Extender with USB 2.0

4KEX50-KVM



User Manual

AV Access

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Introduction

Overview

This product is a 50m HDMI 2.0 KVM extender kit. The kit supports visual lossless compression function, and it can transmit HDMI signal up to 4K@60Hz 4:4:4 8bit via a single Cat 5e or above cable. With one USB Host port in transmitter and four USB 2.0 Device ports in receiver, the kit also supports KVM Control. Two of the USB Device ports support 1A current output, which can be used with high-power USB devices, such as USB camera or USB hard disk. One-way PoC, only one power adapter is needed to be connected to the receiver to power both units.

Features

- HDMI 2.0 up to 4K@60Hz 4:4:4 8bit and HDCP 2.2 compatibility.
- Supports high refresh rates like 2560×1440@144Hz/120Hz and 1080P@240Hz/165Hz/144Hz/120Hz.
- Transmits HDMI signal along with USB 2.0 signal up to 50m/164ft over a single Cat 5e or above cable
- Supports visually lossless compression.
- Four USB 2.0 ports with full bandwidth up to 480Mbps on the receiver, and two of them support a maximum current output of 1A respectively, which can be connected with high-power USB device.
- Supports balanced de-embedded audio output.
- Supports one-way PoC, one power adapter is needed to be connected to the receiver to power both units.

Package Contents

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

- Transmitter x 1
- Receiver x1
- Power Adapter (DC 12V 3A) x 1
- USB 2.0 Type-A to Type-B Cable x 1
- Phoenix Male Connector (5-pin, 3.5mm) x 1
- Mounting Brackets (with Screws) x 8
- User Manual x 1

Panel

Transmitter



No.	Name	Description
1	Power LED	**On:** The device is powered on. **Off:** The device is powered off.
2	Status LED	**On:** HDMI data is being transmitted. **Off:** No signal.
3	Link LED	**On:** UTP link is normal. **Off:** No UTP link or link error.
4	USB Host	Connect to a host PC.
5	12V	Reserved. With one-way PoC supported, one power adapter is needed to be connected to the receiver to power both units.
6	HDMI In	Connect to an HDMI source.
7	UTP Out	Connect to UTP In port of the receiver.

Receiver

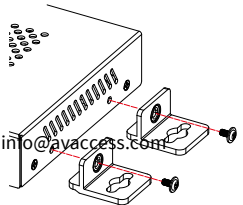


No.	Name	Description
1	Power LED	**On:** The device is powered on. **Off:** The device is powered off.
2	Status LED	**On:** HDMI data is being transmitted. **Off:** No signal.
3	Link LED	**On:** UTP link is normal. **Off:** No UTP link or link error.
4	USB Device	Connect to USB devices. **Note:** USB ports support the USB 2.0 standard with a maximum of 1A for the right two ports and 0.5A for the left two ports. Before connecting a USB 3.0 device, confirm the compatibility with USB 2.0.
5	Audio Out	Connect to an audio receiver. For outputting de-embedding audio of HDMI out.
6	12V	Connect to the power adapter provided. With one-way PoC supported, one power adapter is needed to be connected to the receiver to power both units.
7	HDMI Out	Connect to an HDMI display.
8	UTP In	Connect to UTP Out port of the transmitter.

Installation and Application

Brackets Installation

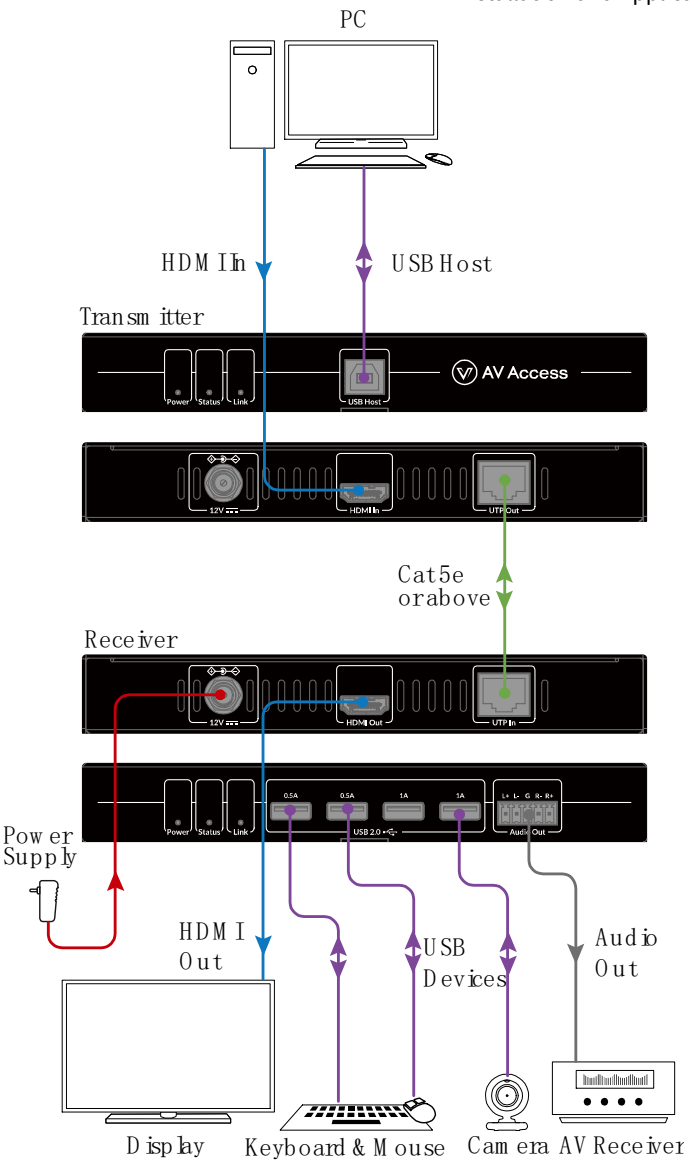
Note: Before installation, please ensure the extender is



disconnected from the power source.

1. Attach the installation bracket to the enclosure using the screws that were provided in the package separately. As shown in the figure.
2. Attach the brackets to the surface you want to hold the unit against using the screws (provided by others).

Application



Note:

- The Cat 5e or above cable used must be within 50m/164ft.
- With one-way PoC supported, one power adapter is needed to be connected to the receiver to power both units.

- USB devices connected with the receiver can be connected to the USB host PC connected with the transmitter.
- The two USB 2.0 ports supports 1A can be connected to high-power USB devices such as USB camera, USB hard disk.
- Audio Out port of receiver can output de-embedding audio from HDMI output.

Specifications

Technical	
Video Signal Type	HDMI with 4K@60Hz, 4:4:4 8bit, HDCP 2.2
Input/Output Resolution	4096 x 2160[2,5,6,7,8 (YUV 4:4:4)], 3840 x 2160[2,3,5,6,8 (YUV 4:4:4)], 2560x1600[8], 2560x1440[8,9,10], 1920x1200[8], 1920x1080P[8,9,10,11,12], 1680x1050[8], 1600x1200[8], 1600x900[8], 1440x900[8], 1366x768[8], 1360x768[8], 1280x1024[8], 1280x960[8], 1280x800[8], 1280x768[8], 1280x720[8], 1024x768[8], 800x600[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, 9 = 120 Hz, 10 = 144 Hz, 11 = 165 Hz, 12 = 240Hz **Note:** The only color depth all resolutions supported is 8bit.
Audio Format	**HDMI In/Out:** PCM 2.0; Compressed audio up to 5.1ch, including Dolby digital 5.1, DTS 5.1 and MPEG-4 audio v2 **Audio Out:** PCM 2.0
Max Data Rate	HDMI In/Out: 18 Gbps USB: 480Mbps

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	20% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Power Supply	DC 12V 3A
Power Consumption	32W (Maximum)
Device Dimensions (W x H x D)	Transmitter/Receiver: 180 mm ×25 mm ×100.2 mm/ 7.09'' x 0.98'' x 3.94''
Product Weight	Transmitter/Receiver: 0.33kg/0.73lb

Transmission Distance

Note: T568B straight-through Category cable is recommended.

Cable Type	Range	Supported Video
Cat 5e or above	50m/164ft	4K@60Hz 4:4:4 8bit
HDMI	Input/Output: 10m/33ft	1080P@60Hz 4K@30Hz 4:4:4 8bit
	Input/Output: 5m/16ft	4K@60Hz 4:4:4 8bit

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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