

DVDO



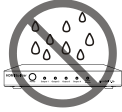
DVDO-KVME-1
4K KVM Extender over IP

User Manual

Version: V1.0.0



Important Safety Instructions



1. Do not expose this apparatus to rain, moisture, dripping or splashing and do not place objects filled with liquids, such as vases, on the apparatus.



6. Clean this apparatus only with dry cloth.



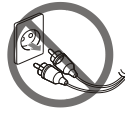
2. Do not install or place this unit in a bookcase, built-in cabinet or in any other confined space. Ensure the unit is well ventilated.



7. Unplug this apparatus during lightning storms or when unused for long periods of time.



3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.



8. Protect the power cord from being walked on or pinched particularly at plugs.



4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



9. Only use attachments / accessories specified by the manufacturer.



5. Do not place sources of naked flames, such as lighted candles, on the unit.



10. Refer all servicing to qualified service personnel.

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Introduction

DVDO-KVME-1 is a 4K KVM extender set over IP. It can extend 4K video (with zero latency) and USB 2.0 signals over long distances. It also supports plug and play.

Features

- IP based, 1 Gigabit network supports 4K video.
- Supports video resolution up to 4K@30Hz.
- Supports HDCP 1.4.
- Supports 7.1-channels audio.
- Supports EDID limited copy.
- Supports the distance up to 120m (395ft) with Cat 5e/6/6a/7 cable. Using network switches, the distance can be extended without limit.
- Supports up to three USB 2.0 devices connection for full feature USB 2.0 applications.
- Supports 4-pin DIP switch for more sets works in a same network up to 16 sets.

Package Contents

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

- DVDO-KVME-1 (Transmitter Receiver Set) x 1
- DC 12V 1A Power Adapters (with US, UK, EU, AU Pins) x 2
- USB 2.0 Type-A to Type-B Cable (1.5m) x 1
- Mounting Brackets (with Screws) x 4
- User Manual x 1

Specifications

Transmitter

Technical	
Input/Output	1 x HDMI IN (19-pin female HDMI Type-A) 1 x USB HOST (female USB Type-B) 1 x 4-Pin DIP Switch 1 x DC 12V connector with locking 1 x LAN (RJ45)
Input Signal Type	HDMI 1.4b
Input Resolution Supported	640x480 ⁸ , 800x600 ^{8,10} , 1024x768 ^{8,10} , 1280x720 ^{6,7,8,9,10} , 1280x768 ^{8,10} , 1280x800 ^{8,10} , 1280x960 ^{8,10} , 1280x1024 ^{8,10} , 1360x768 ⁸ , 1366x768 ⁸ , 1440x900 ^{8,10} , 1600x900 ⁸ , 1600x1200 ⁸ , 1680x1050 ^{8,10} , 1920x1080 ^{1,2,3,4,5,6,7,8,9,10} , 1920x1200 ⁸ , 3840x2160P ^{2,3,5} 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 = at 100 Hz, 10 = at 120 Hz
Input Audio Format Supported	PCM 2.0 / 2.1 / 5.1 / 7.1, Dolby Digital 5.1 ch, Dolby Digital Plus, Dolby TrueHD, DTS 5.1 ch, DTS-HD High Resolution Audio, DTS-HD Master Audio
Maximum Data Rate	9 Gbps
Maximum Pixel Clock	300 MHz
Output Signal Type	Compressed IP streams
Transmission Distance	Cat 5e or above: 120m/395ft HDMI: 15m/49ft

General	
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing
Storage Temperature	-20 to +70°C (-4 to +158 °F), 10% to 90%, non-condensing
ESD Protection	Human Body Model: ±8kV (air-gap discharge)/ ±4kV (contact discharge)
Power Supply	DC 12V 1A
Power Consumption	<2.5 W
Unit Dimensions (W x H x D)	112mm × 17.8mm × 65.2mm / 4.41" × 0.70" × 2.57"
Unit Weight (without accessories)	0.18kg/0.40lb

Receiver

Technical	
Input/Output	1 x LAN (RJ45) 1 x HDMI OUT (19-pin female HDMI Type-A) 3 x USB DEVICE (female USB Type-A) 1 x 4-Pin DIP Switch 1 x DC 12V connector with locking
Input/Output Signal Type	Compressed IP streams
Output Resolution Supported	640x480 ⁸ , 800x600 ^{8,10} , 1024x768 ^{8,10} , 1280x720 ^{6,7,8,9,10} , 1280x768 ^{8,10} , 1280x800 ^{8,10} , 1280x960 ^{8,10} , 1280x1024 ^{8,10} , 1360x768 ⁸ , 1366x768 ⁸ , 1440x900 ^{8,10} , 1600x900 ⁸ , 1600x1200 ⁸ , 1680x1050 ^{8,10} , 1920x1080 ^{1,2,3,4,5,6,7,8,9,10} , 1920x1200 ⁸ , 3840x2160P ^{2,3,5} , 4096x2160P ^{2,3,5} 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 = at 100 Hz, 10 = at 120 Hz
Output Audio Format Supported	PCM 2.0 / 2.1 / 5.1 / 7.1, Dolby Digital 5.1 ch, Dolby Digital Plus, Dolby TrueHD, DTS 5.1 ch, DTS-HD High Resolution Audio, DTS-HD Master Audio
Maximum Data Rate	9 Gbps
Maximum Pixel Clock	300 MHz
Transmission Distance	Cat 5e or above: 120m/395ft HDMI: 15m/49ft
USB Consumption	Not more than 0.5A per USB port is recommended

General	
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing
Storage Temperature	-20 to +70°C (-4 to +158 °F), 10% to 90%, non-condensing
ESD Protection	Human Body Model: ±8kV (air-gap discharge)/ ±4kV (contact discharge)
Power Supply	DC 12V 1A
Power Consumption	< 4W (without USB Consumption)
Unit Dimensions (W x H x D)	112mm × 17.8mm × 65.2mm / 4.41" × 0.70" × 2.57"
Unit Weight (without accessories)	0.18kg/0.40lb

Panel Description

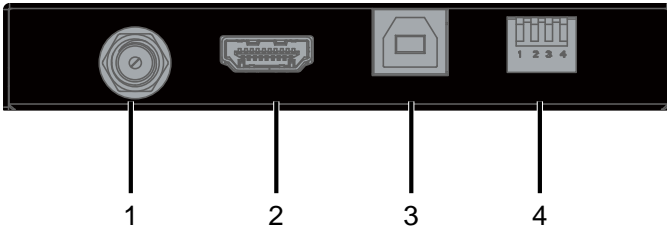
Transmitter

Front Panel



No.	Name	Description
1	LAN	Connect to a receiver or an Ethernet Switch for streaming media output.
2	Link LED	LED On: The transmitter is paired with the receiver successfully.
3	Power LED	LED On: The device is powered on.

Rear Panel



No.	Name	Description
1	DC 12V	Connect to the DC 12V 1A power adapter provided.
2	HDMI In	Connect to an HDMI source.
3	USB Host	Connect a type A to type B USB cable between this port and the USB port of a desktop or a laptop. This port is USB 2.0 compliant.

No.	Name	Description
4	Channel ID	<p>This DIP switch consists of four manual switches, which are used to route the transmitter to receiver based on their positions. For more information, see “Using DIP Switch to Perform Routing” section.</p> <p>Note:</p> <ul style="list-style-type: none"> By default, each individual switch is in the up position. If you change the positions of the DIP switches on transmitter/receiver, you must restart the transmitter/receiver for the changes to take effect.

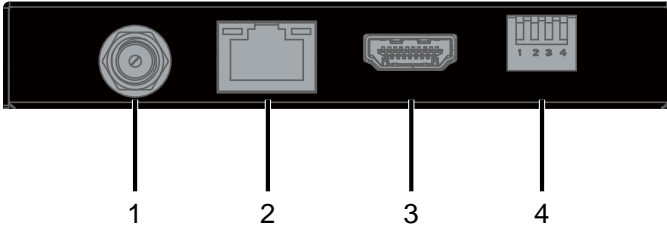
Receiver

Front Panel



No.	Name	Description
1	USB Device	Connect to up to three USB devices (e.g. keyboard, mouse and Udisk).
2	Link LED	LED On: The receiver is paired with the transmitter successfully.
3	Power LED	LED On: The device is powered on.

Rear Panel



No.	Name	Description
1	DC 12V	Connect to the DC 12V 1A power adapter provided.
2	LAN	Connect to a transmitter or an Ethernet Switch for streaming media input.
3	HDMI Out	Connect to an HDMI display device.
4	Channel ID	This DIP switch consists of four manual switches, which are used to route the transmitter to receiver based on their positions. For more information, see “Using DIP Switch to Perform Routing” section.

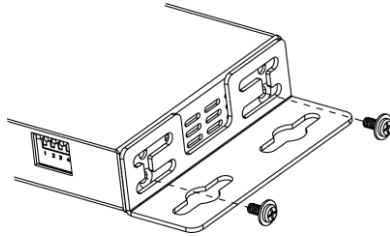
Installation and Wiring

Installation

Note: Before installation, ensure the devices are 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. The bracket is attached to the enclosure as shown.

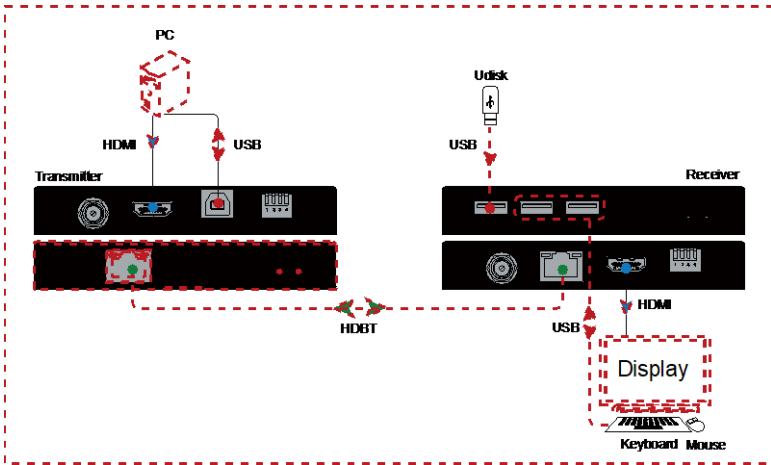


3. Repeat steps 1-2 for the other side of the unit.
4. Attach the brackets to the surface you want to hold the unit against using the screws (provided by others).
5. Repeat above steps for another unit.

Wiring

Application 1 - Connect Transmitter to Receiver Directly

The DVDO-KVME-1 could be connected directly with a Cat 5e or above cable. As a normal extender set, it extends the HDMI and USB signals over a long distance up to 120m/395ft.

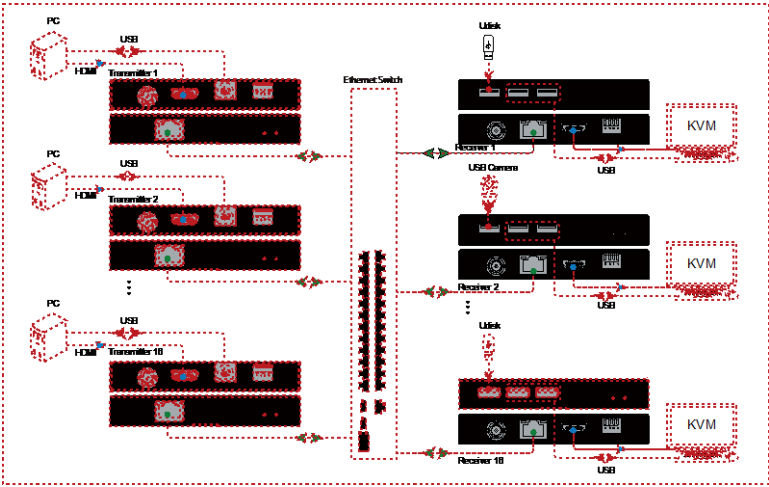


Application 2 - Connect through Ethernet Switch

The DVDO-KVME-1 could be connected through one or more network switches. With the 4-pin DIP switch, it could connect to 16 extender sets in a same network without the VLAN settings, and extend the HDMI and USB signals to an unlimited distance.

Note:

- HDMI cables' length must be within 15m/49ft.
- One transmitter can only be paired with one receiver individually in the same network, i.e. only one set DIP switch of transmitter and receiver can be set to the same position.



Troubleshooting

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

- Ensure your USB device is working normally.
- Connect the power adapter to the receiver's power port instead of transmitter since PoE may not provide enough power to your USB device (e.g. a hard disk).

Warranty Terms and Conditions

For the following cases we shall charge for the service(s) claimed for the products if the product is still repairable and the warranty becomes unenforceable or inapplicable.

1. The original serial number (specified by us) 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 authorized service partner.
4. 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.
5. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
6. The service, configuration and gifts promised by sales representative only but not covered by normal contract.
7. We reserve the right for interpretation of these cases above and to make changes to them at any time without notice.

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