HDMI 2.0 Extender over Fiber

4KEX300-F

User Manual

AV Access

Table of Contents

Introduction **2**

Overview 2

Features 2

Package Contents 2

Panel 3

Installation **5**

RS232 Pass Through **6**

Specification **7**

Warranty **8**

Introduction

Overview

This product is a slim HDMI transmitter receiver set. It supports resolutions up to 4K@60Hz 4:4:4 8bit and HDCP 2.2, transporting HDMI signals up to 300m/1000ft over a duplex OM3 multi-mode optical fiber cable. The kit supports bi-directional IR/RS232 pass through via DIP Switch settings, enabling users to control the source or display devices at either the transmitter or receiver side with ease.

The transmitter and receiver are easy to install. They are space saving and offer ideal solutions for homes, offices, digital entertainment centers, control centers, conference rooms, schools and corporate training environments, etc.

Features

- Supports resolutions up to 4K@60Hz 4:4:4 8bit and HDCP 2.2.
- Supports HDR (High Dynamic Range) format.
- Transmission distance up to 1000ft/300m via a duplex OM3 optical fiber cable.
- Supports bi-directional IR/RS232 pass through via DIP Switch settings.
- Multi-channel PCM, Dolby and DTS HD audio supported up to 7.1.
- Slim profile, space saving and easy-to-install.

Package Contents

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

- Transmitter x 1
- Receiver x 1
- 10Gbps 850nm MM SFP+ Module x 2
- Power Supply (DC 12V 0.5A) x 2
- IR Emitter x 1
- Broadband IR Receiver (30-50 KHz) x 1
- Phoenix Male Connector (3.5mm, 3 Pins) x 2
- Mounting Bracket x 4
- User Manual x 1

Panel

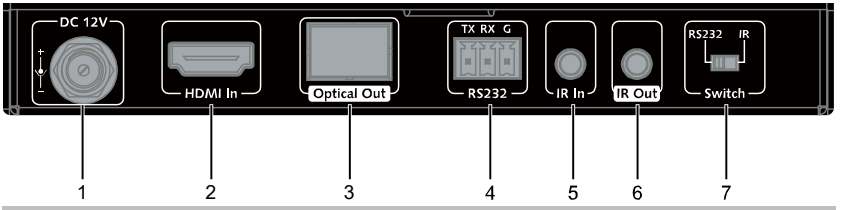
Front Panel

Transmitter/Receiver

No.	Name	Description
1	Power LED	**On:** The device is powered on. **Off:** The device is powered off.
2	Status LED	**Blinking:** The device is working properly. **Off:** The device is not working properly.
3	HDCP LED	**On:** HDCP protected content is being transmitted. **Blinking:** Non-HDCP protected content is being transmitted. **Off:** No content is being transmitted.
4	Link LED	**On:** The link between transmitter and receiver is normal. **Blinking:** The link between transmitter and receiver is abnormal. **Off:** No link.

Rear Panel

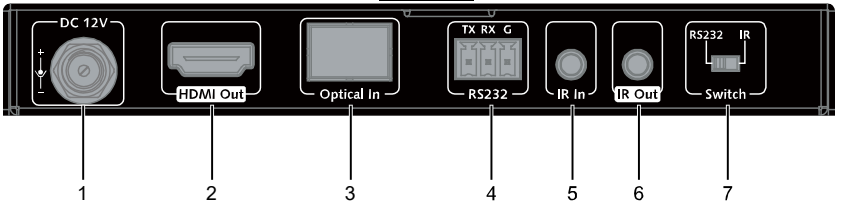
Transmitter



No.	Name	Description
1	DC 12V	Connect to the DC 12V power adapter provided.
2	HDMI In	Connect to HDMI source such as a Blu-ray.
3	Optical Out	Connect to the Optical In port of the receiver via a duplex OM3 multimode optical fiber cable.
4	RS232	For RS232 pass through.

No.	Name	Description
5	IR In	Connect to the supplied IR receiver. Secure the IR receiver with adhesive.
6	IR Out	Connect to the supplied IR emitter. Secure the IR emitter on the IR receiving sensor of source device with adhesive.
7	Switch	Switch to RS232 or IR mode. **RS232:** For RS232 pass through. **IR:** For IR pass through.

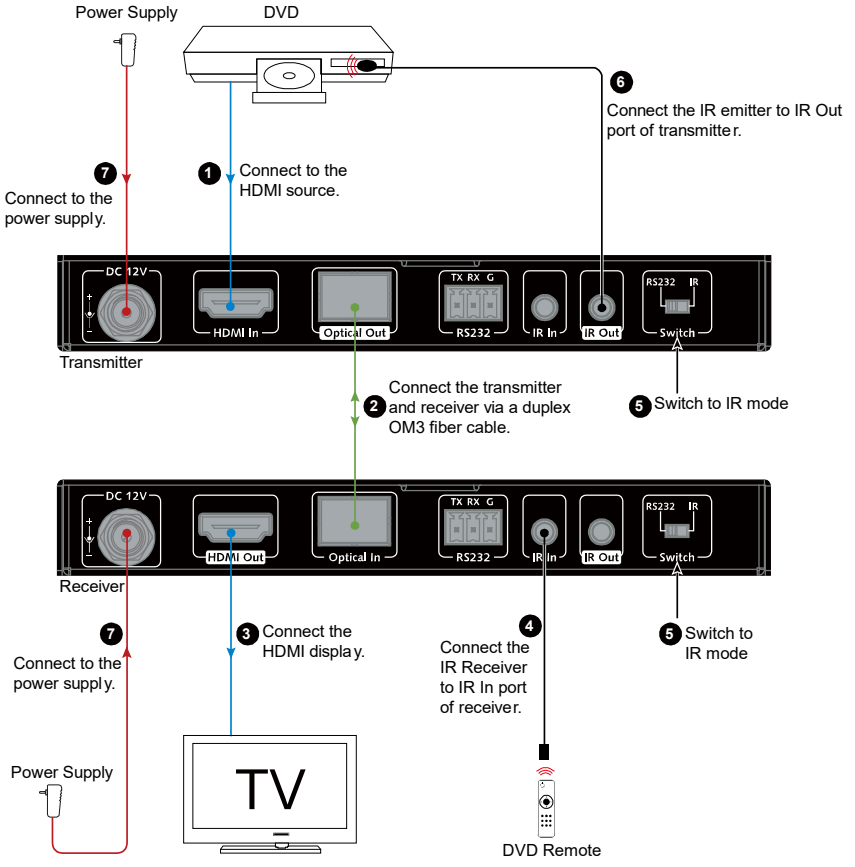
Receiver



No.	Name	Description
1	DC 12V	Connect to the DC 12V power adapter provided.
2	HDMI Out	Connect to an HDMI display device.
3	Optical In	Connect to the Optical Out port of the transmitter via a duplex OM3 multi-mode optical fiber cable.
4	RS232	For RS232 pass through.
5	IR In	Connect to the supplied IR receiver. Secure the IR receiver with adhesive.
6	IR Out	Connect to the supplied IR emitter. Secure the IR emitter on the IR receiving sensor of source device with adhesive.
7	Switch	Switch to RS232 or IR mode. **RS232:** For RS232 pass through. **IR:** For IR pass through.

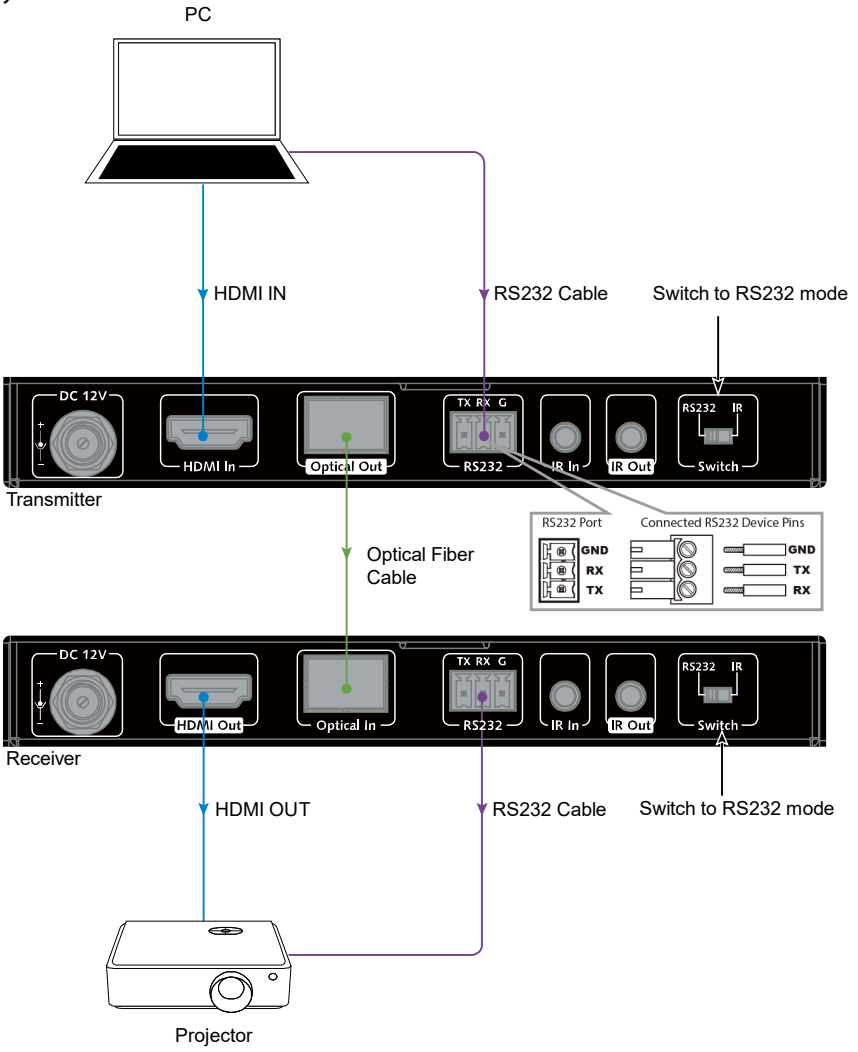
Installation

Note: Ensure the fiber cable length is within 300m/1000ft.



RS232 Pass Through

The RS232 ports provide a channel to pass through protocol commands to control third party devices such as your source or display. Switch the panel DIP Switch to RS232, and then connect RS232-enabled devices (such as a computer and a projector) to the transmitter and receiver respectively via RS232 cables. Please refer to the following pin definition of RS232 during your installation.



Specification

Technical	
Video Signal Type	HDMI 2.0, HDCP2.2
Input/Output Resolution Supported	800x600[8], 1024x768[8], 1280x768[8], 1280x800[8], 1280x960[8], 1280x1024[8], 1360x768[8], 1366x768[8], 1440x900[8], 1600x900[8], 1600x1200[8], 1680x1050[8], 1920x1080[8], 1920x1200[8], 3840x2160P[2,3,5,6,8], 4096x2160P[2,3,5,6,8] 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
Audio Format	Stereo, PCM2.0/5.1/7.1, Dolby TrueHD and DTS HD Master Audio
Fiber Type	Duplex Multi-mode 850nm OM3 Fiber
Fiber Connector Type	LC to LC
Maximum Data Rate	18Gbps

General	
Operation 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%, 10% to 90%, non-condensing
ESD Protection	± 8kV(Air-gap discharge)/ ± 4kV(Contact discharge)
Surge Protection	Voltage: ±1 kV
Power Consumption (Max)	Transmitter: 3.9W Receiver: 3.5W
Device Size (W x H x D)	150 mm×20 mm×74.4 mm/5.91”x 0.79”x 2.93”
Product Weight	Transmitter: 0.30kg/0.66lb Receiver: 0.30kg/0.66lb

Transmission Distance

Cable Type	Range	Supported Video
Optical Fiber	300m/1000ft	4K@60Hz 4: 4: 4 8bit
HDMI	Input/Output:15 m/50ft	1080P@60Hz
	Input/Output:10m/33ft	4K@30Hz
	Input/Output: 3m/10ft 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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