Product Datasheet

HDMI over Optical Fiber Extender with Audio Extracting

AHDEX-V201000F

Features

- HDMI 2.0b, HDCP 2.2 and DVI 1.0 compliant
- Support 18Gbps video bandwidth
- Support video resolution up to 4K2K@60Hz RGB/YCBCR 4:4:4
- HDMI audio formats: LPCM2/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby TrueHD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio,DSD
- Support 3D and HDR format video, does not support CEC control Transmission distance up to 3300 feet/1000 meters (over single-mode fiber cable) or 1000 feet/300 meters (over multi-mode fiber cable) (50/125um/OM3)
- Support bidirectional IR control, RS-232 pass-through and EDID management for simple and convenient control
- Transmitter supports loop output (sharing local HD video and audio) and audio embeding function
- Receiver supports audio extracting output function
- Compact design for easy and flexible installation

Package Contents

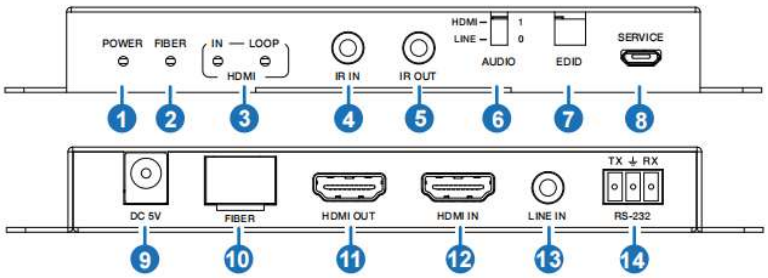
1. 1 x HDMI over Optical Fiber Extender (Transmitter)
2. 1 x HDMI over Optical Fiber Extender (Receiver)
3. 1 x IR Blaster cable (1.5 meters)
4. 1 x IR Wideband Receiver cable (1.5 meters)
5. 2 x 5V/1A Power adapter
6. 2 x 3-pin 3.81mm Phoenix connector

Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	480i ~1080p50/60Hz, 4Kx2K@24/30Hz, 4k2k@60Hz
Color Space	RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
Color Depth	8/10/12-bit (1080P60Hz) 8-bit (4K60Hz)
HDMI Audio Formats	LPCM2/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX,DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Transmission Distance	Up to 3300 feet/1000 meters over single-mode fiber cable Up to 1000 feet/300 meters over multi-mode fiber cable
IR Frequency	20KHz-60KHz
RS-232 Baud Rate	4800-115200bps
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1 x HDMI IN [Type A 19-pin female] 1 x LINE IN [3.5mm Stereo Mini-jack] 1 x IR IN [3.5mm Stereo Mini-jack] 1 x RS-232 [3.81mm Phoenix connector] 1 x SERVICE [Micro USB, Update port] Output: 1 x HDMI OUT [Type A 19-pin female] 1 x Optical Fiber Out [LC female] 1 x IR OUT [3.5mm Stereo Mini-jack]
Receiver	Input: 1 x Optical Fiber In [LC female] 1 x IR IN [3.5mm Stereo Mini-jack] 1 x SERVICE [Micro USB, Update port] Output: 1 x HDMI OUT [Type A 19-pin female] 1 x RS-232 [3.81mm Phoenixconnector] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x AUDIO OUT [3.5mm Stereo Mini-jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter / Receiver: 134mm [W] x 68mm [D] x 18mm [H]
Weight	Transmitter: 280g, Receiver: 278g
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	Transmitter: 3.85 W (Max), Receiver: 2.7 W (Max)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

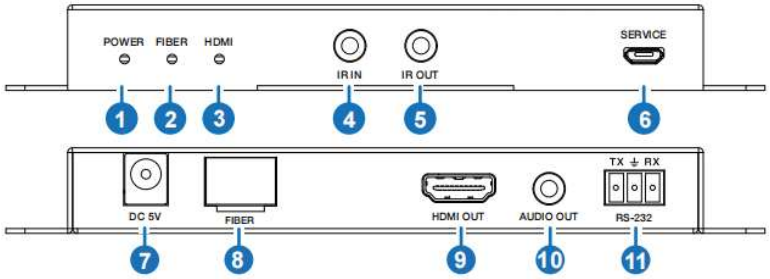
Operation Controls and Functions

Transmitter Panel



No.	Name	Function Description
1	Power LED	The power indicator is always on when the Transmitter is powered on.
2	FIBER LED	The optical fiber connection indicator is always on when the Transmitter and Receiver establish a normal optical fiber signal connection.
3	HDMI LED	IN: The HDMI signal input indicator is always on when there is signal input on the HDMI IN port.
		LOOP: The HDMI loop output indicator is always on when the HDMI OUT port of the Transmitter outputs signals to the HDMI display device.
4	IR IN	Connect to IR Receiver cable. The IR signal will send to the IR OUT port of the Receiver.
5	IR OUT	Connect to IR Blaster cable. The IR signal is from the IR IN port of the Receiver.
6	AUDIO switch	Switch to select audio signal source (HDMI IN or LINE IN). When there is no video signals input, audio signals can be transmitted separately.
7	EDID DIP switch	Dial the switch to set EDID. 11: Copy RX HDMI OUT 10: Copy TX HDMI LOOP OUT 01: 4K60_2CH 00: 1080P_2CH
8	SERVICE port	Firmware update port.
9	DC 5V	DC 5V/1A power supply port
10	FIBER	Connect the Transmitter optical fiber module, and transmit signals to the Receiver via an optical fiber cable.
11	HDMI OUT	HDMI video loop output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
12	HDMI IN	HDMI signal input port, connect to HDMI source device such as DVD or PC with an HDMI cable.
13	LINE IN	Audio signal input port, connect to audio source device such as MP3.
14	RS-232	RS-232 signal pass-through port for transmitting RS-232 command signals between the Transmitter and Receiver.

Receiver Panel



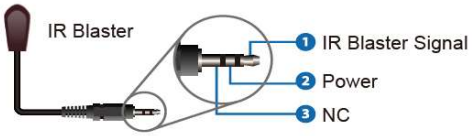
No.	Name	Function Description
1	Power LED	The power indicator is always on when the Receiver is powered on.
2	FIBER LED	The optical fiber connection indicator is always on when the Transmitter and Receiver establish a normal optical fiber signal connection.
3	HDMI LED	The HDMI signal output indicator is always on when the HDMI OUT port of the Receiver outputs signals to the HDMI display device.
4	IR IN	Connect to IR Receiver cable. The IR signal will send to the IR OUT port of the Transmitter.
5	IR OUT	Connect to IR Blaster cable. The IR signal is from the IR IN port of the Transmitter.
6	SERVICE port	Firmware update port.
7	DC 5V	DC 5V/1A power supply port
8	FIBER	Connect the Receiver optical fiber module, and receive signals from the Transmitter via an optical fiber cable.
9	HDMI OUT	HDMI signal output port, connect to HDMI display device such as HDTV or Projector with an HDMI cable.
10	AUDIO OUT	Audio signal extracting output port (extract the HDMI OUT audio signal), connect to audio output device such as amplifier or speaker.
11	RS-232	RS-232 signal pass-through port for transmitting RS-232 command signals between the Transmitter and Receiver.

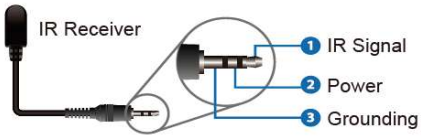
IR Pin Definition

IR Receiver and Blaster pin's definition is as below:

IR RECEIVER

IR BLASTER

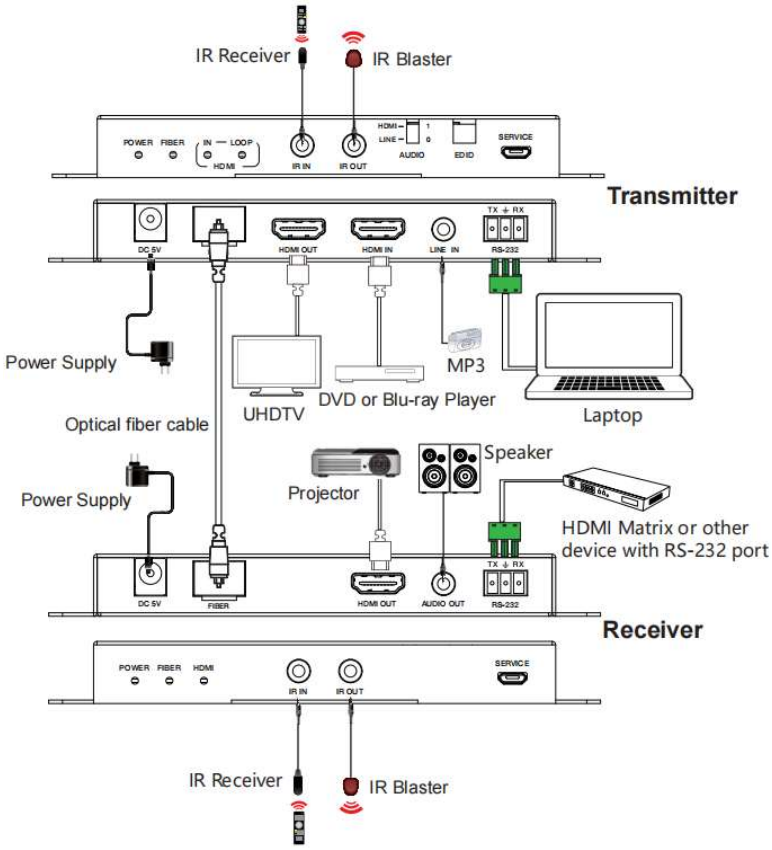




Optical Fiber Module

① SFP-BL**35T1**-02DC is the optical fiber module of the Transmitter.
② SFP-BL**531T**-02DCis the optical fiber module of the Receiver.

Application Example



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