



4K60 Fiber Extender with Loop Out and Audio Embedding / De-Embedding



PureLink™
22-10 State Route 208
Fair Lawn, NJ 07410 USA
Tel: +1.201.488.3232
Fax: +1.201.621.6118
E-mail: sales@purelinkav.com

For order support, please contact your local dealer.
For technical support, please contact us at
support@purelinkav.com.

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1. Introduction

This HDMI Extender can extend HDMI signal up to 33000 feet/10 km (over single-mode fiber cable). It supports video resolution up to 4K2K@60Hz 4:4:4. The transmitter provides loop output, audio embedding and EDID management function. The receiver provides audio de-embedding. The HOD TIII offers bidirectional IR control and RS-232 signal pass-through. It can allow you to easily control the display device on the signal source side or control the signal source device on the display side when using this extender.

2. Features

- ☆ HDMI 2.0b, HDCP 2.2 and DVI 1.0 compliant
- ☆ 18Gbps video bandwidth
- ☆ Video resolution up to 4K2K@50/60Hz 4:4:4
- ☆ HDMI audio formats: LPCM 2 / 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
- ☆ 3D and HDR format video
- ☆ Transmission distance up to 33000 feet/10 km (over single-mode fiber cable)
**It is possible to use multi-mode fiber with these SFP modules*
- ☆ bidirectional IR control, RS-232 pass-through and EDID management for simple and convenient control
- ☆ Transmitter provides loop output and audio embedding function
- ☆ Receiver provides audio de-embedding
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1× 18Gbps HDMI over Optical Fiber Extender (Transmitter)
- ② 1× 18Gbps HDMI over Optical Fiber Extender (Receiver)
- ③ 1× IR Blaster cable (1.5 meters)
- ④ 1× IR Receiver cable (1.5 meters)
- ⑤ 2× 5V/1A Power adapter
- ⑥ 2× 3-pin 3.81mm Phoenix connector

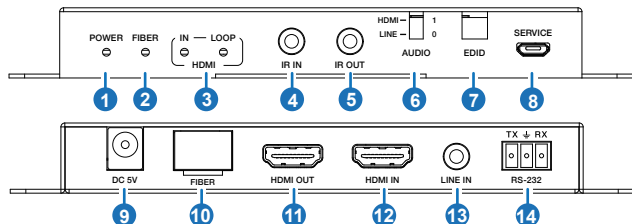
4. Specifications

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-bit, 10-bit, 12-bit
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 33000 feet/10 km over single-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 Phoenix connector] 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: 3.85W (Max.), Receiver: 2.7W (Max.)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

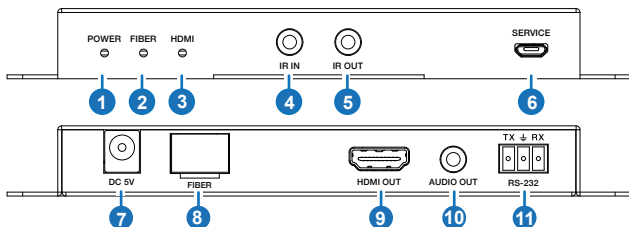
5. Operation Controls and Functions

5.1 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 input port.
10	FIBER	Connect the Transmitter optical fiber module, and transmit signals to the Receiver via an optical fiber cable.
11	HDMI OUT	HDMI signal loop output port, connected to HDMI display device such as TV or Projector with an HDMI cable.
12	HDMI IN	HDMI signal input port, connected to HDMI source device such as DVD or PC with an HDMI cable.
13	LINE IN	Audio signal input port, connected to audio source device.
14	RS-232	RS-232 signal pass-through port for transmitting RS-232 command signals between the Transmitter and Receiver.

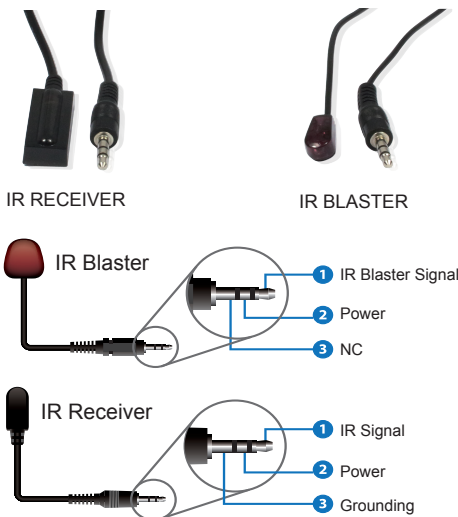
5.2 Receiver Panel



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, connected 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), connected 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.

5.3 IR Pin Definition

IR Receiver and Blaster pin's definition as below:

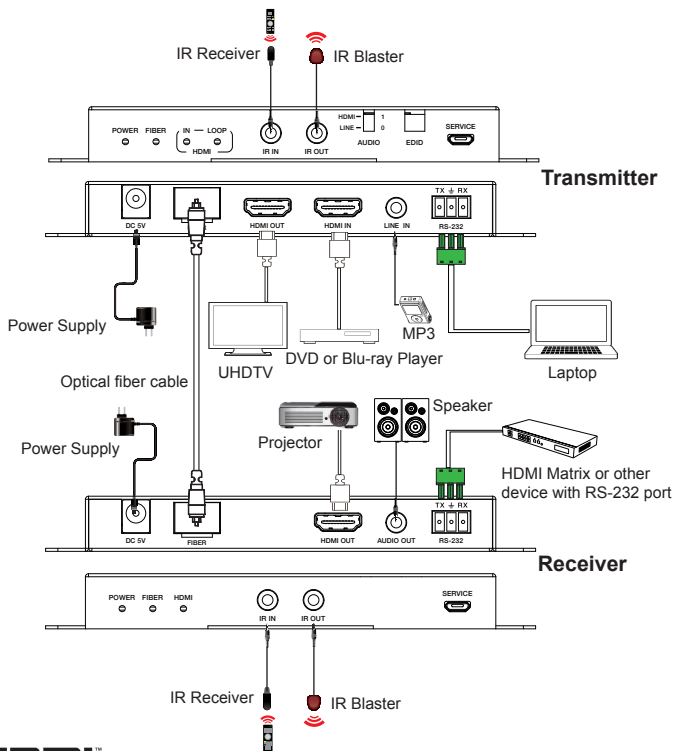


5.4 Optical Fiber Module



- ① SFP-BL32TG-10DC is the optical fiber module of the Transmitter.
- ② SFP-BL23TG-10DC is the optical fiber module of the Receiver.

6. Application Example



HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Warranty

PureLink Five (5) Year Limited Warranty for PureStream™ Branded Products Only
Dtrovision, LLC. (hereinafter “PureLink”) warrants its HDTools and PureStream™ branded products (hereinafter “Product”) purchased directly from PureLink or Dealer shall be free from defects in workmanship and materials, under normal use and service, for a period of five (5) years on parts and five (5) years on labor. Any repaired or replaced equipment related to Product shall be covered only under the remaining portion of the warranty. This warranty has no relationship to and exists independently of any warranty offered by Dealer. This warranty is a limited warranty and gives you specific legal rights. You may also have other rights which vary from state to state.

TERMS & CONDITIONS

PureLink shall repair or replace the Product if it develops a material fault during the period of warranty, on condition that i) the Product has only been subject to normal use in a domestic or commercial environment in a manner consistent with its specification and functionality, ii) the Product has been cared for reasonably and only subjected to reasonable wear and tear, iii) the defect has not been caused by willful or negligent abuse or neglect, or any accident or improper installation procedure, iv) the serial number of the Product has not been altered or removed. This warranty only applies to the original purchaser, and shall be the exclusive remedy to the original purchaser. PureLink shall not be liable for any damages whatsoever caused by Product or the failure of Product to perform, including incidental or consequential damages. PureLink shall not be liable for any claim made by a third party or made by the purchaser for a third party. Except as expressly set forth in this warranty, PureLink makes no other warranties, expressed or implied, including any implied warranties of merchantability and fitness for a particular purpose. PureLink expressly disclaims all warranties not satisfied in this limited warranty. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.



WARRANTY RETURNS/REPAIRS/EXCHANGES

No merchandise may be returned without prior authorization from PureLink, and a Return Materials Authorization (RMA) number. Failure to comply with these conditions will result in rejection of the returned merchandise. Any warranty service on Products must be arranged through Dealer. Authorized returns must be shipped freight prepaid and fully insured to PureLink, Fair Lawn, NJ USA, with the RMA number clearly marked on the outside of all shipping boxes and containers. PureLink reserves the right at its sole discretion to refuse any shipments arriving freight collect or without an RMA number. Any authorized returned merchandise must be accompanied by a note describing the reason for return, along with contact information including name, phone number, return mailing and shipping addresses, e-mail address, and RMA number. On any products returned and accepted with an RMA number, return freight charges following repair of items under warranty shall be paid by PureLink, shipping by the standard ground carrier of its choice.

ADVANCE WARRANTY REPLACEMENTS

PureLink's advance replacement service offers a Replacement Unit upon request - free of charge for eligible products purchased less than one (1) year of the warranty claim. Products purchased more than one (1) year prior to the warranty claim do not qualify for advance replacement services. Advance replacement requests must be validated by a member of PureLink's Technical Support Team. Replacement units may be new or refurbished and are subject to availability. PureLink is responsible for shipping the Replacement Unit to your designated location by standard ground service. All other shipping methods will be the responsibility of the Dealer. Original Unit Return – the Original Unit must be returned within thirty (30) calendar days of the return authorization date. Failure to return the Original Unit within this period will be subject to a minimum 15% re-stocking fee. Dealer is solely responsible for the shipping of the Original Unit to PureLink.



TO MAKE A WARRANTY CLAIM

To make a warranty claim, promptly notify PureLink within the warranty periods described above by calling PureLink's Technical Support Department at 1-201-488-3232. PureLink, in its sole discretion, will determine what action, if any, is required under this warranty. Most problems can be corrected over the phone through close cooperation between Customer and a PureLink technician. To better enable PureLink to address a warranty claim, please have the Product's serial and model numbers. If PureLink, in its sole discretion, determines that an on-site visit or other remedial action is necessary, PureLink may send a representative to Customer's site.

CUSTOMER SERVICE

Technical support inquiries can be submitted electronically through the PureLink website at www.purelinkav.com. For immediate assistance please contact PureLink's Customer Care Team at +1 (201) 488-3232.

