

HDMI Fiber Optical Extender

User manual

VER:1.2

Thank you for purchasing this product. For optimum performance and safety, please read the instruction carefully before connecting, operating or adjusting this product. Please keep the manual for future reference.

1.Introduction

The HDMI Fiber Optical Extender is a tool which can extend your HDMI signal over 3300feet/1000meters to a compatible display. This product works with any HDMI source and supports resolutions up to 4K Ultra HD. It also supports Transfer Bidirectional Infrared control signal and RS232 control signal. So you can control the Source from the Sink side which is 3300feet/1000meters outside, also you can control the Sink from the Source side which is 3300feet/1000meters outside using the HDMI Extender. The Automatic Virtual EDID feature allows automatic copying of the Extended Display Identification Data (EDID) to the sender unit for continuous availability to the source.

2. Features

- Supports HDMI1.4, HDCP2.2 and compatibility DVI.
- Supports video resolutions up to 4Kx2K@60Hz(4:2:0),4Kx2K@30Hz, 1080p@120Hz, and 1080p 3D.
- Supports long distance transmission up to 3300feet/1000meters over single-mode fiber cable and up to 1000 feet/300 meters over multimode fiber cable (50/125μm/OM3) .
- Supports HD audio formats: LPCM2/5.1/7.1 CH, Dolby Digital, DTS, Dolby. TrueHD, DTS-HD Master Audio and more.
- Transfer Bidirectional Infrared control signal together with the HDMI signal.
- Transfer Bidirectional RS232 control signal together with the HDMI signal.
- Supports smart EDID management.
- Locking power supplies.

3. Package

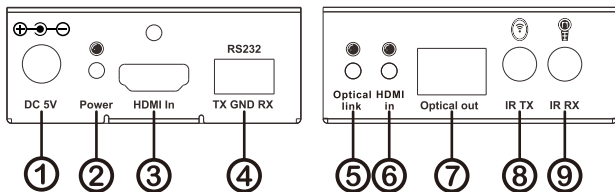
- HDMI Fiber Optical Extender Transmitter ----- 1PCS
- HDMI Fiber Optical Extender Receiver ----- 1PCS
- Fiber module TX ----- 1PCS
- Fiber module RX ----- 1PCS
- Wideband IR Tx ----- 2PCS
- Wideband IR Rx ----- 2PCS
- 5V/1A DC power adaptor ----- 2PCS
- Operation Manual ----- 1PCS
- Phoenix male jack ----- 2PCS
- Mounting ears ----- 4PCS

4. Specifications

Maximum Pixel Clock	300 MHz
Supports video resolutions up to	4Kx2K@60Hz(4:2:0)
Transmitter	
Input Ports	1x HDMI, 1xIR in, 1xRS232
Output Ports	1xIR out,1xOptical
Receiver	
Input Ports	1xIR in,1xOptical
Output Ports	1x HDMI,1xIR out, 1xRS232
Power Supply	DC 5V 1A
ESD Protection	± 8kV (air-gap discharge)
Human Body Model	± 4kV (contact discharge)
Dimensions (mm)	100(W) X 65 (D) X 25.6 (H)
Weight	210g/TX, 210g/RX
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (Non-condensing)
Power Consumption (Max)	2.2W/TX, 2W/RX

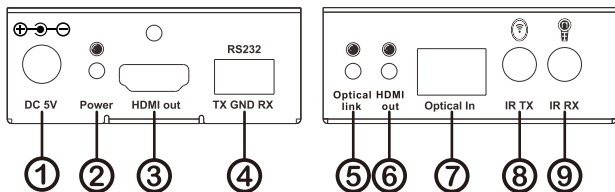
5. Unit Layout & Description

5.1 Transmitter Front and Rear Panel



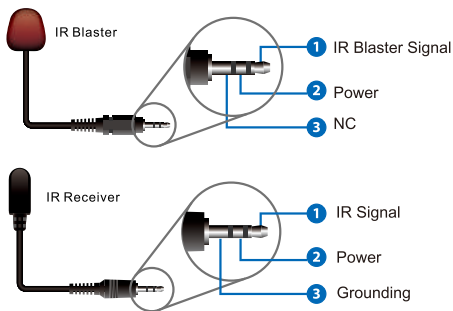
- 1. DC 5V:** Plug the 5V DC power supply into the unit.
- 2. Power:** illuminates when power has been supplied to the unit.
- 3. HDMI In:** This slot is where you connect the HDMI source.
- 4. Rs232 TX/RX:** Connect to a PC or Laptop with 3-pin Relay cable for the transmission of RS-232 commands.
- 5. Optical link:** illuminates when the Transmitter and Receiver through optical fiber cable connection good.
- 6. HDMI in:** illuminates when HDMI source has been supplied to the unit.
- 7. Optical out:** Connect Receiver with a single-mode fiber cable or multimode fiber cable.
- 8. IR TX:** Connect with Wideband IR Tx.
- 9. IR RX:** Connect with Wideband IR Rx

5.2 Receiver Front and Rear Panel



- 1. DC 5V:** Plug the 5V DC power supply into the unit.
- 2. Power:** illuminates when power has been supplied to the unit.
- 3. HDMI out:** This slot is where you connect to a HDMI equipped TV/monitor.
- 4. Rs232 TX/RX:** Connect to a PC or Laptop with 3-pin Relay cable for the transmission of RS-232 commands.
- 5. Optical link:**illuminates when the Transmitter and Receiver through optical fiber cable well connected.
- 6. HDMI out:** illuminates when HDMI display device has been connected to the unit.
- 7. Optical in:** Connect Transmitter with a single-mode fiber cable or multimode fiber cable.
- 8. IR TX:** Connect with Wideband IR Tx.
- 9. IR RX:** Connect with Wideband IR Rx.

5.3 IR Cable Pin Assignments



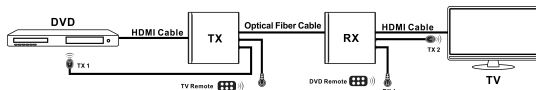
5.4 Optical module instruction



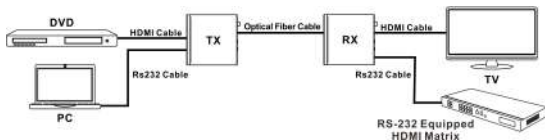
- ① SFP-BL35T1-02DC is TX optical module.
- ② SFP-BL53T1-02DC is RX optical module.

6. Connection Diagram

6.1 Bidirectional Infrared control Application Example



6.2 Bidirectional RS232 control Application Example



7. Application Example

