

Model Number 18122
40KM HDMI Optical Fiber Extender, 1080p@60Hz

User Manual

HDMI Optical Fiber Extender



Important Safety instructions:

1. Please pay attention to all the warnings and hints on this device.
2. Do not expose this unit to rain, moisture and liquid.
3. Do not repair or open this device without professional people' s guidance.
4. Make sure good ventilation openings to avoid product overheating damage.
5. Shut off power and make sure environment is safe before installation.
6. Use DC5V/2A only. Make sure the specification matched if using 3rd party DC adapters.

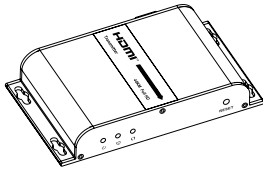
• INTRODUCTION

This fiber optic extender uses single-mode optic fiber (SMF) to transmit high-definition signals to a distance of 40km, and supports local loop-out and IR passback. It can be widely used in security monitoring, medical systems, commercial display and other fields.

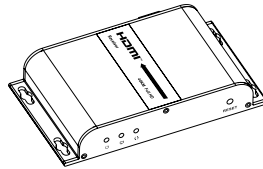
• Features

1. Supports 1.25Gbps single-mode optical fiber module with a maximum transmission distance of 40 km.
2. Supports resolution up to 1920x1080@60Hz.
3. Supports IR passback for remote control.
4. The transmitter supports HDMI loop-out for local monitoring.
5. Lightning Protection, Surge Protection, ESD Protection.
6. Wall Mounted design.

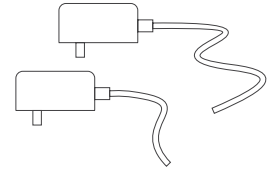
• Package Contents



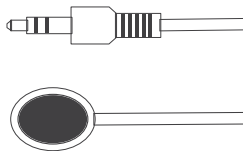
Transmitter×1pc



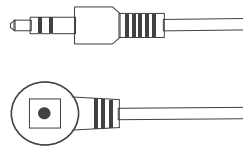
Receiver×1pc



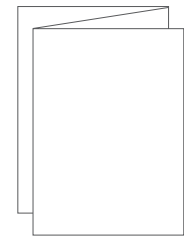
DC5V/2A×2pcs



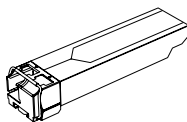
IR blaster extension
cable x1pc



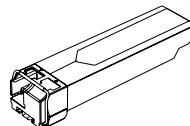
IR receiver extension
cable x1pc



User's manual
x1pc



SFP optical transceiver
(T1310/R1550nm)
x1pc



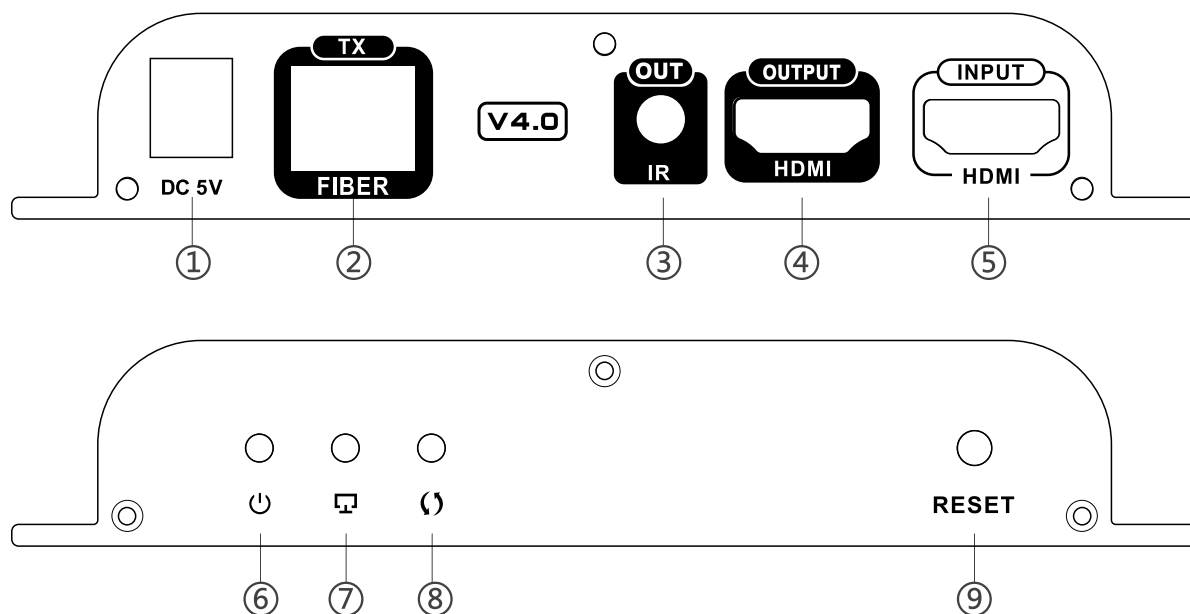
SFP optical transceiver
(T1550/R1310nm)
x1pc

• Installation Requirements

1. Source device with HDMI output port (computer graphics card, DVD, PS3, HD monitor equipment etc.)
2. Display device with HDMI input port (HDTV, projector).
3. HDMI cable and LC optical fiber cable.

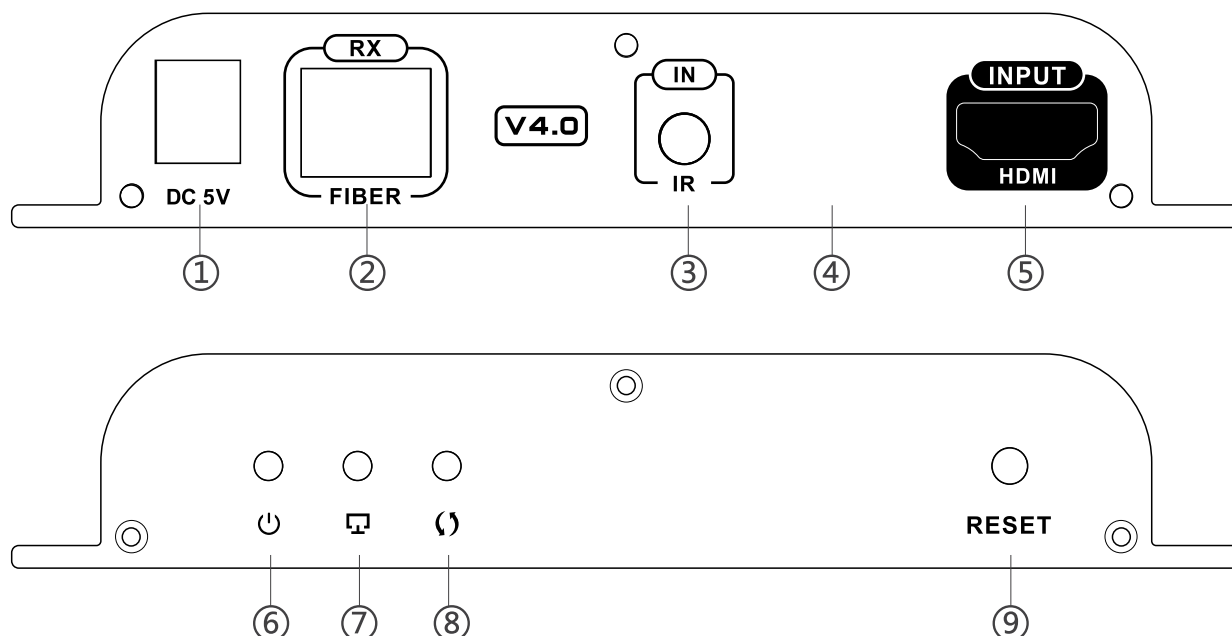
• Panel Description

1. HDMI Transmitter



①	Power input	Connect with DC5V power adapter
②	SFP port	Insert the SFP optical transceiver (T1310/R1550nm)
③	IR out	Connect with IR blaster extension cable
④	HDMI output	Connect with HDMI display device
⑤	HDMI input	Connect with the source device
⑥	Power indicator	The indicator will turn blue when power up
⑦	Connection indicator	The indicator flashes in green only when there is a connection between the transmitter and the receiver
⑧	Data transmission indicator	The indicator is steady green only when there is data transmission between the transmitter and the receiver
⑨	Reset button	Restart the device

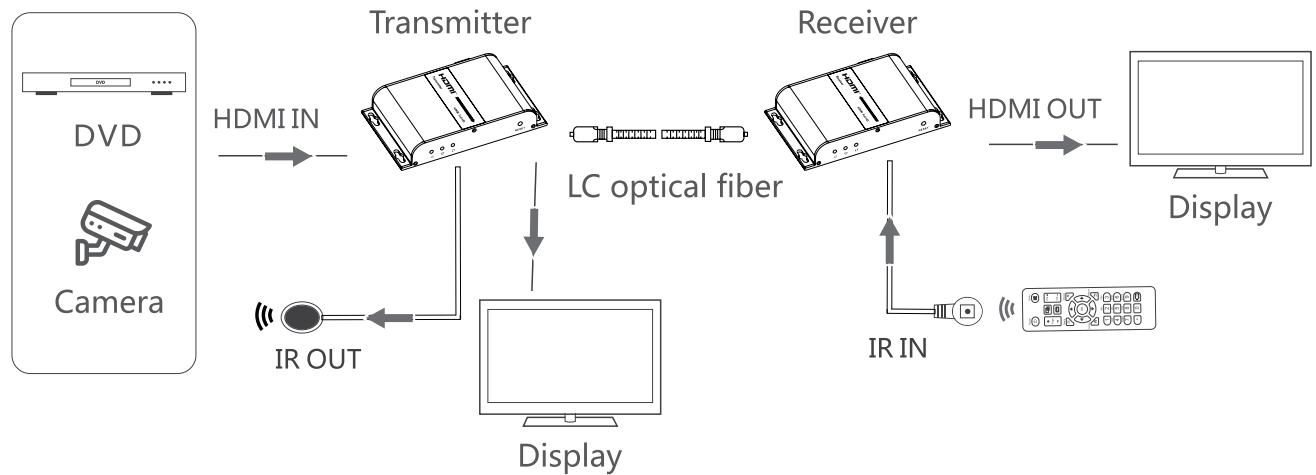
2. HDMI Receiver



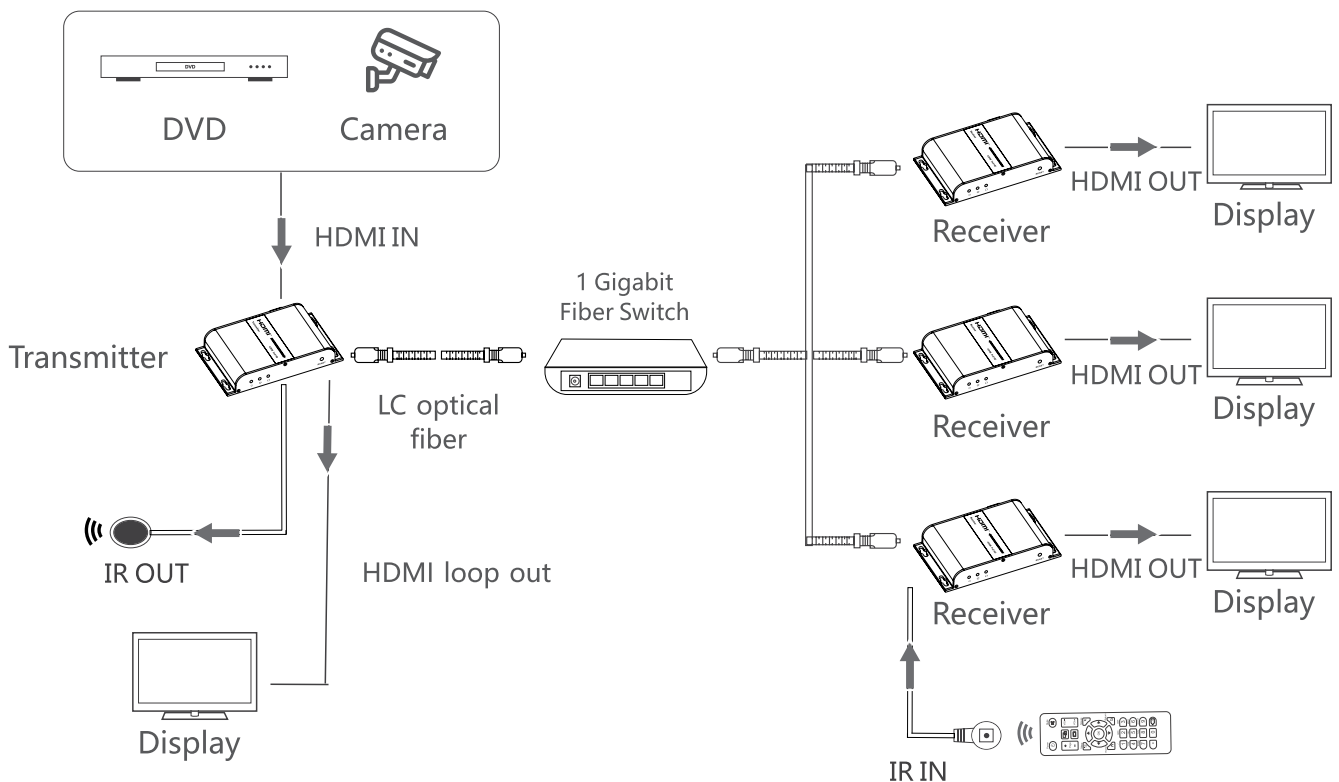
①	Power input	Connect with DC5V power adapter
②	SFP port	Insert the SFP optical transceiver (T1550/R1310nm)
③	IR in	Connect with IR receiver extension cable
④	HDMI output	Connect with HDMI display device
⑤	Power indicator	The indicator will turn blue when power up
⑥	Power indicator	The indicator will turn blue when power up
⑦	Connection indicator	The indicator flashes in green only when there is a connection between the transmitter and the receiver
⑧	Data transmission indicator	The indicator is steady green only when there is data transmission between the transmitter and the receiver
⑨	Reset button	Restart the device

3. Connection and operation

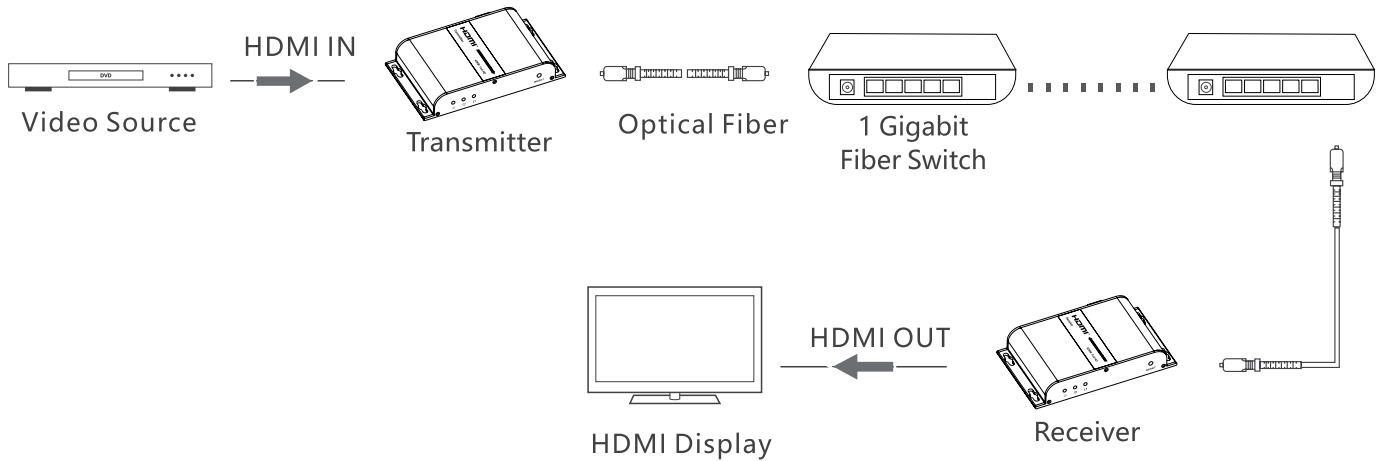
3.1 One-to-one connection:



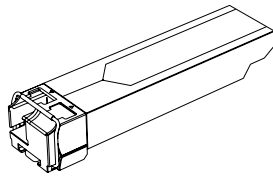
3.2 One-to-many connection:



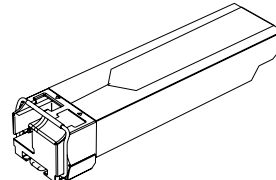
3.3 Switch cascading:



3.4 SFP optical transceivers



T1310/R1550nm



T1550/R1310nm

- 1) Please insert the SFP optical transceivers (T1310/R1550nm, blue) into the transmitter' s SFP port.
- 2) Please insert the SFP optical transceivers (T1550/R1310nm, yellow) into the receiver' s SFP port.
- 3) Please use LC connector, fiber Length range $\leq 40\text{km}$.
- 4) If you need to replace the SFP optical transceiver, please choose a universal transceiver with a transmission rate of 1.25 Gbps.

3.5 IR

- 1) IR blaster extension cable should plug in the IR OUT port of the transmitter and receiver; IR receiver extension cable should plug in the IR IN port of the transmitter and receiver.
- 2) The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.
- 3) Face the receiving head of the IR receiver extension cable to the user to facilitate remote control.

• FAQ

Q: TV display "waiting for connection" on the bottom right corner?

A: Please check if the power supply of TX (sender) and the fiber optic cables are well connected.

Q: TV display "HDBiTT Reminder: Please check the TX input signal" ?

A: 1) please check if there is an HDMI signal input of sender TX.

2) Try to connect the source device directly with display device to see if there is signal output from source device or change the source device and HDMI cables to retest.

Q: Display not fluent and stable?

A: Click "reset" button on the TX/RX panel or reconnect power.

Disclaimer

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We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.

• Specification

Item	Specification
Power supply	DC5V/2A
Power consumption	TX<3W RX<3W
HDMI Version	HDMI1.3, compatible with HDCP1.4
Support resolution	480i@60Hz、480p@60Hz、576i@50Hz、576p@50Hz、720p@50/60Hz、1080i@50/60Hz、1080p@50/60Hz
DDC signal voltage	5Vp-p(TTL)
Center wavelength	1310/1550 nm
Connector type	LC
Transmission rate	1.25Gbps
Optical fiber type	SMF
Transmission distance	≤40km
Output light power	±3dB
input light power	±3dB
Receive sensitivity	≤-23dBm
Return loss	12dBm
IR remote control	Frequency Range: 20~60KHz
Protection Level	Implementation of the standard: IEC61000-4-2 1a Contact discharge level 4 (8KV) 1b Air discharge level 4 (15KV)
Working temperature	-20°C ~ 60°C
Storage temperature	-30°C~70°C
Relative humidity	0~90%RH
Enclosure material	Aluminum alloy
Product dimension	138.0 (L) x 81.5 (W) x 24.0 (H) mm
Weight	Tx: 180g RX: 180g
Color	Black