

# **USER MANUAL**

## **HDMI Extender 20km over Fiber**

(Support multipoint to multipoint, IR control, 1080P)

JHS23 FIBER 4K

#### 1.Introduction

HDMI extender over fiber is a device transmitting HD audio and video signal via Single Mode or Multi Mode Fiber Cable. It transmits your HD display with the high resolutions up to 20km away from your HDMI or DVD source by using one fiber cable. At the same time, it's also convenient to transmit HDMI audio and video signal by point-to-point mode.

#### 2. Features & Specifications



- Support HDMI1.3/HDCP1.1&1.2
- > Support point-to-point mode, multipoint-to-multipoint mode and cascade connection mode.
- > Support signal mode fiber and multi mode fiber transmit
- Support one way IR extension.
- > Pure hardware design, plug and play, do not need to install additional software

Video Resolutions	480p,720p,1080p
Audio	Sample rate:32kHz,44.1kHz,48kHz
IR remote control	38kHz;NEC
HDMI	HDMI 1.3
HDCP	HDCP 1.2
Power adapter	DC5V/1A
Power consumption	HDMI Sender:3W HDMI receiver:3W
Size(L-W-H)	163*86*24mm
Weight	250g x 2
Operating Temperature/Humidity	0°C-70°C/10%-80%RH(no condensation)
Storage Temperature/Humidity	-10°C-80°C/5%-90%RH(no condensation)

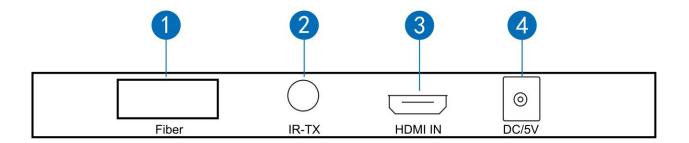
## 3. Package Contents

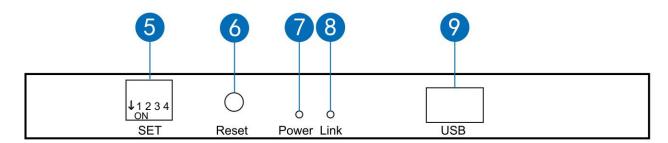
Before attempting to use this unit, please check the package and make sure the following items are contained in the shipping carton:

- 1) one piece of HDMI fiber extender transmitter
- 2) one piece of HDMI fiber extender receiver
- 3) Two pieces of DC 5V power supply
- 4) One pair of IR transmitter and receiver
- 5) User's Manual

## 4. Physical interface diagram

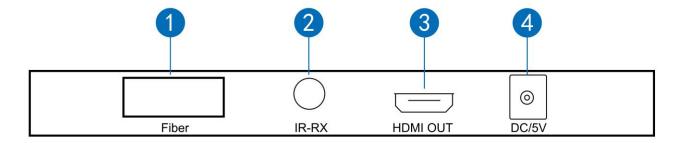
**HDMI Transmitter** 

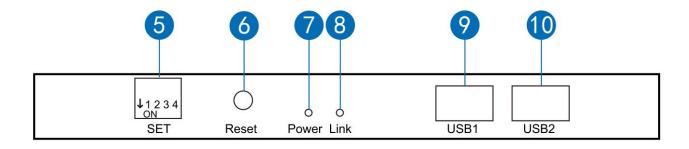




- 1. Fiber-- SC type fiber port
- 2. IR-TX-- IR transmitter port
- 3. HDMI IN-- HDMI input
- 4. DC/5V--5V Power Interface
- 5. SET--multipoint to multipoint setting
- 6. Reset-- Reset button
- 7. Power-- power adapter indicator
- 8. Link-- System working indicator
- 9. USB-- USB port(connect to PC)

#### **HDMI** Receiver





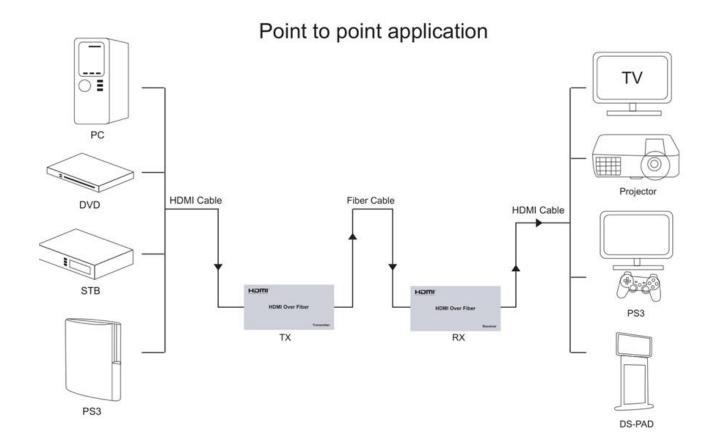
- 1. Fiber-- SC type fiber port
- 2. IR-RX-- IR receiver port
- 3. HDMI OUT-- HDMI output
- 4. DC/5V--5V Power Interface
- 5. SET--multipoint to multipoint setting
- 6. Reset-- reset button
- 7. Power-- power adapter indicator
- 8. Link-- System working indicator
- 9. USB1-- USB device 1( connect to keyboard or mouse)
- 10.USB2-- USB device 2 (connect to keyboard or mouse)

#### 5. Connection and operation

- 1) Connect the HDMI signal to the HDMI Transmitter with HDMI cable
- 2) Connect the HDMI receiver to the HDTV display with HDMI cable.
- 3) Use one fiber cable up to 20km to connect the SC type port of Transmitter and SC type port of Receiver.
- 4) Connect the "IR receiver "into "IR-TX" port on transmitter, and "IR transmitter" into the "IR-RX" on receiver, and make sure the IR transmitter aims at IR receiver of the controlled device if you need the IR control function.
- 5) Connect two pieces of 5V power supply to the transmitter and receiver, power supply for the equipment and the LED indicator light on. When status lamp on and flicker, equipment starts normal.
- 6) Multipoint to multipoint match setting: when multiple TXs and multiple RXs connect to the switch, the fiber extender can match based on "SET" setting (eg: "SET" of TX is 0001, "SET" of RX is 0001).

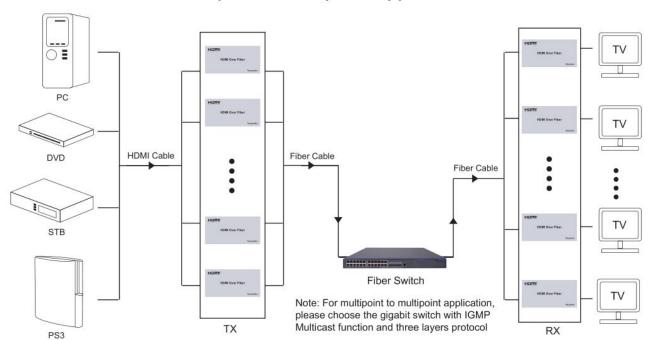
### 6.Application diagrams

Application 1: point to point application



Application 2: multipoint to multipoint application

#### multipoint to multipoint application



Note: For multipoint to multipoint application, please choose the gigabit switch with IGMP Multicast function and three layers protocol