MSP318 v2

4K60 HDMI™ over Fiber Extender with USB



Specification

Revision History

Version	Date	Description	Revised by
V1.0	2025-11-30	First Release.	Fanny

Product Overview

This HDMI™ Extender can transmit HDMI™ signal up to 10km over a single-mode fiber cable, and video resolution is up to 4K2K@60Hz 4:4:4. Transmitter supports loop output and Receiver supports audio de-embedding. In addition, keyboard/ mouse transmission is also supported. It allows you to easily control the display device on the signal source side or control the signal source device on the display side with this extender.

This product has the advantages of strong anti-interference, high safety performance, small size and light weight, and has incomparable advantages in long-distance transmission.

Key Features

- Compliant with HDCP 2.2
- Video bandwidth is up to 18Gbps
- Video resolution is up to 4K2K@50/60Hz 4:4:4, as specified in HDMI™ 2.0b
- Transmission distance can be up to 10km over a single-mode fiber cable
- Support 3D video format
- HDR, HDR10, HDR10+, Dolby Vision, HLG pass-through
- 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
- Support loop output on Transmitter and audio de-embedding on Receiver
- USB 1.1 keyboard/mouse transmission
- Advanced EDID management
- Compact design for easy and flexible installation

Package Content

① 1× 4K60 HDMI™ over Fiber Extender (Transmitter)
② 1× 4K60 HDMI™ over Fiber Extender (Receiver)
③ 2× 5V/2A Multinational Locking Power Supply
④ 1× USB Cable (Type A to Type B, 1.5m)
⑤ 4× Mounting Ear
⑥ 8× Machine Screw (KM3*6)
⑦ 1× User Manual

Specifications

Connector	
Transmitter	Input: 1× IN [HDMI™ Type A, 19-pin female] Output: 1× OUT [HDMI™ Type A, 19-pin female] 1× LC FIBER OUT [LC female] Control: 1× USB HOST [USB-B, 4pin female] 1× SERVICE [USB-C, update port]
Receiver	Input: 1× LC FIBER IN [LC female] Output: 1× OUT [HDMI™ Type A, 19-pin female] 1× AUDIO OUT [3.5mm audio jack] Control: 1× SERVICE [USB-C, update port] 1× K&M [Dual-layer USB-A, keyboard & mouse transmission]

Performance	
HDMI™ Compliance	HDMI™ 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution (Input & Output)	1024×768@60 | 1280×720@50/60 | 1280×800@60 | 1360×768@60 | 1920×1080@50/60 | 1920×1200@60 | 3840×2160@25/30/50/60 | 4096×2160@50/60
Color Space	RGB | YCbCr_4:4:4 | YCbCr_4:2:2 | YCbCr_4:2:0
Color Depth	8/10/12-bit
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
HDR	HDR10, HDR10+, Dolby Vision, HLG
Fiber Optic	10G SFP+ module
Transmission Distance	Up to 10km over single-mode fiber cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge), ±4kV (Contact discharge)

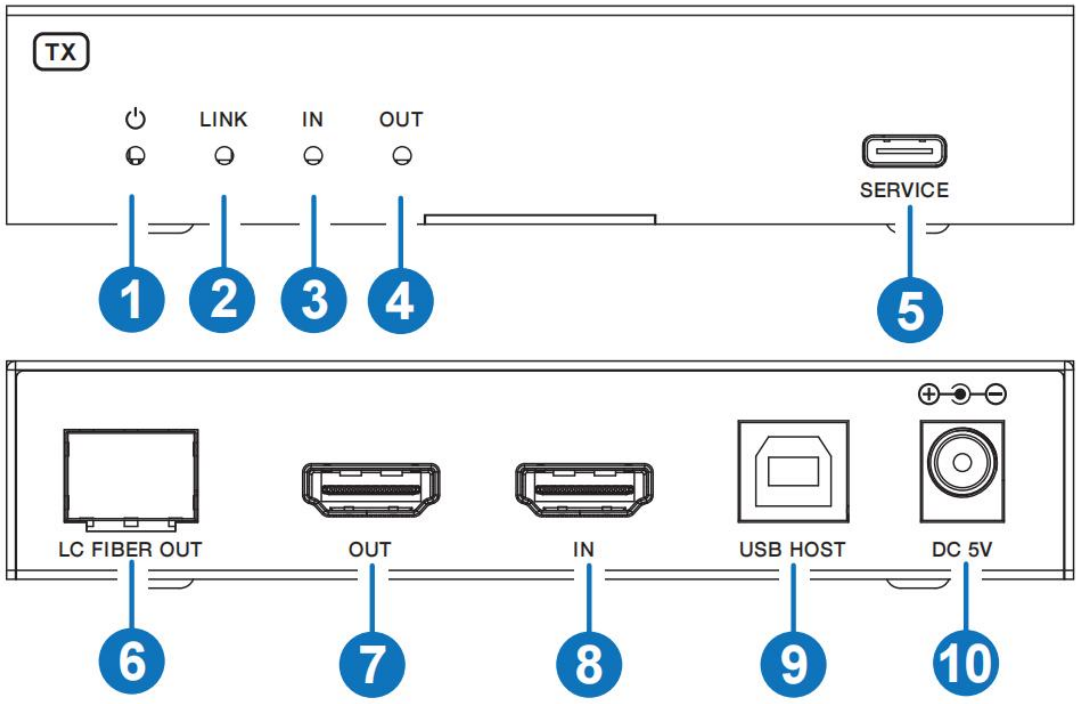
Power	
Power Supply	Input: AC 100~240V 50/60Hz Output: DC 5V/2A
Power Consumption	Transmitter: 3.85W (Max); Receiver: 3.3W (Max)

Environment	
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operating Humidity	20% - 80% (relative humidity, non-condensing)
Storage Humidity	10% - 90% (relative humidity, non-condensing)

Physical	
Housing	Metal Enclosure
Color	Black
Dimension	Transmitter / Receiver: 120mm [W] × 78mm [D] × 24.5mm [H]
Weight	Transmitter: 260g; Receiver: 256g

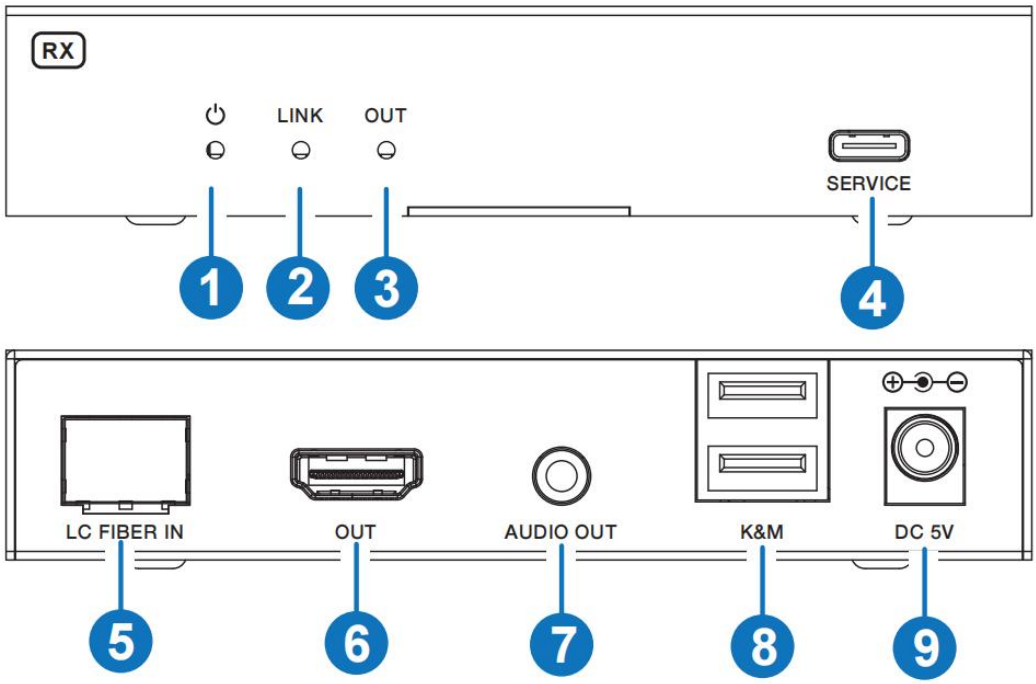
Appearance

Transmitter Panel



No.	Name	Description
1	POWER LED	The red LED lights up when the transmitter is powered on.
2	LINK LED	The green LED always lights up when the Transmitter and Receiver have a connection with normal optical fiber signal.
3	IN LED	The green LED lights up when a source signal is detected on IN port.
4	OUT LED	The green LED lights up when a display device is connected to the HDMI output port.
5	SERVICE	Firmware update port.
6	LC FIBER OUT	Fiber optic SFP port, connected to the LC FIBER IN port on Receiver via fiber optic cable.
7	HDMI OUT	HDMI signal loopout port, connected to a display device such as TV or monitor with HDMI cable.
8	HDMI IN	HDMI signal input port, connected to a source device such as DVD or PC with HDMI cable.
9	USB HOST	USB type B port, connected to a computer.
10	DC 5V	DC 5V/2A power input port.

Receiver Panel

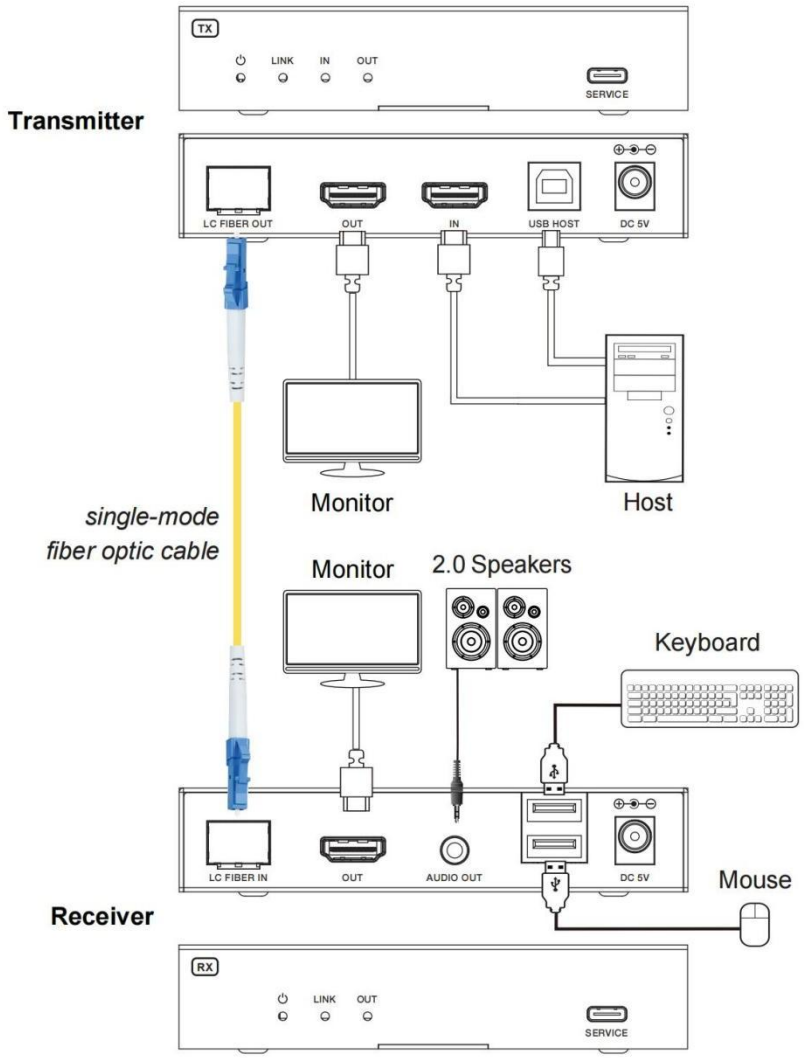


No.	Name	Description
1	Power LED	The red LED lights up when the receiver is powered on.
2	LINK LED	The green LED always lights up when the Transmitter and Receiver have a connection with normal optical fiber signal.
3	OUT LED	The green LED lights up when a display device is connected to the HDMI output port.
4	SERVICE	Firmware update port.
5	LC FIBER IN	Fiber optic SFP port, connected to the LC FIBER OUT port on Transmitter via fiber optic cable.
6	HDMI OUT	HDMI signal output port, connected to a display device such as TV or monitor with HDMI cable.
7	AUDIO OUT	Analog audio de-embedding output port, connected to an audio device.
8	K&M	USB 1.1 type A ports, connected to a keyboard and mouse.
9	DC 5V	DC 5V/2A power input port.

EDID

If the two HDMI output ports on TX and RX are all connected to display devices, it will compare the sink EDIDs, and then select the lower one. If only one end is connected, it will copy the EDID from the corresponding sink.

Application



Notes and Cautions

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Order Codes

Product Code	Item
610-0318-02-0	MSP 318 V2　4K60 HDMI™ over Fiber Extender with USB

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