

# User Manual



## MPTP-TUH43R

**18G KVM Extender Receiver over HDBaseT 3.0**



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Version: MPTP-TUH43R\_2025V1.0

## Product Introduction

Thanks for choosing the 18G KVM Extender Receiver. It can transmit up to 40m at 4K@60Hz and 70m at 4K@30Hz via CAT6A cable. It supports audio pass-through and two-way IR, USB extend and RS232 pass-through. 24V PoC feature allows the transmitter and the receiver can be powered from each other and only one power adapter is needed in system.

## Features

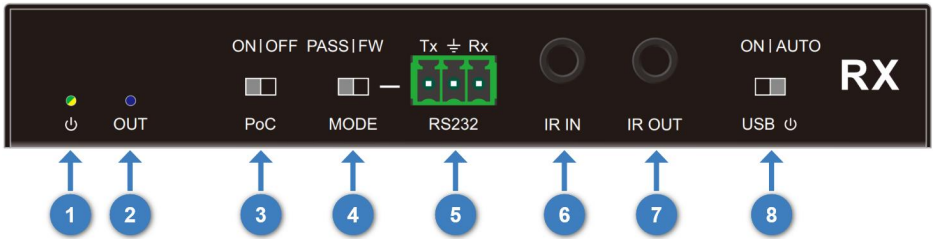
- 18Gbps high bandwidth, HDMI V2.0.
- HDMI video resolution up to 4K@60Hz 4:4:4, HDR10, Dolby Vision.
- Supports to transmit up to 40m at 4K@60Hz and 70m at 4K@30Hz.
- Two-way IR and RS232 pass-through.
- Supports two-way 24V PoC.
- Supports audio pass-through.

## Packing List

- |                                  |                                 |
|----------------------------------|---------------------------------|
| • 1x MPTP-TUH43R Receiver        | • 1x 3-pin Terminal Block       |
| • 2x Mounting Ears with 2 Screws | • 4x Rubber feet                |
| • 1x User Manual                 | • 1x Power Adapter (DC24V 1.5A) |

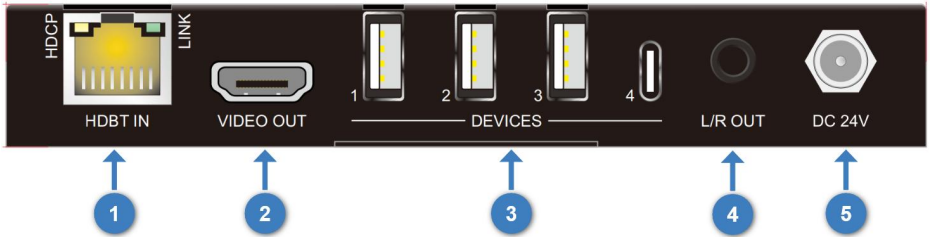
**Note:** Please contact your distributor immediately if any damage or defect in the components is found.

## Front Panel



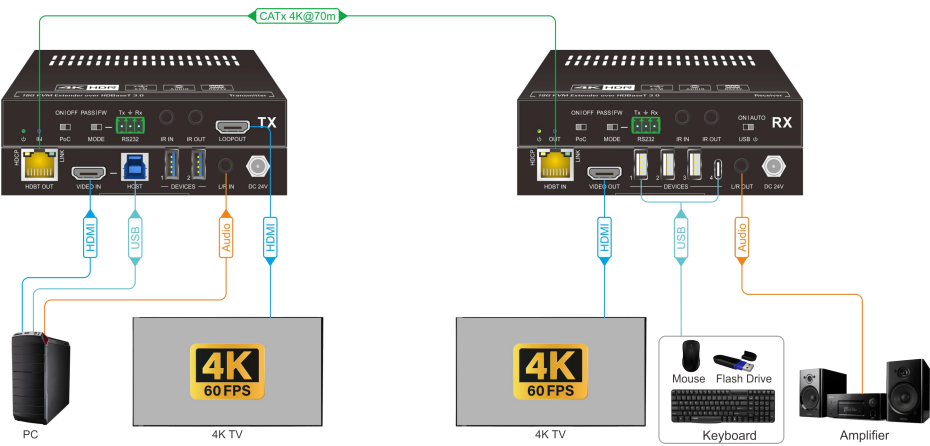
- ① **POWER LED:** Illuminates green when power is applied, yellow and green lights flash alternately when the current is too high. (When over the total current limitation for USB devices).
- ② **OUT LED:** Illuminates when there is a HDMI display device is connected to HDMI output port and when input source is detected.
- ③ **PoC:** DIP switch for PoC ON/OFF.
- ④ **MODE:** DIP switch for RS232 mode selection.
  - **PASS:** RS232 pass-through.
  - **FW:** Firmware upgrade.
- ⑤ **RS232:** 3-pin Phoenix socket, used for upgrading or pass-through.
- ⑥ **IR IN:** Connects to the IR receiver for IR pass-through.
- ⑦ **IR OUT:** Connects to the IR emitter for IR pass-through.
- ⑧ **USB POWER:** DIP switch for USB power management.
  - **ON:** USB device ports output power all the time;
  - **AUTO(Default):** Follow Host, USB device ports will only output power when a host is active connected.

## Rear Panel



- ① **HDBT IN**: RJ45 port to connect the HDBT input port of receiver by CAT6A Ethernet cable. The LINK LED(green LED) illuminates when there is a valid HDBaseT link between the transmitter and the receiver. The HDCP LED(yellow LED) illuminates when the video contains HDCP content, and the HDCP LED flashes when there is no HDCP.
- ② **VIDEO OUT**: Connects to HDMI display device.
- ③ **DEVICE**: 3x type-A USB 2.0 ports and 1x type-C USB 2.0 port share 2A for USB devices (e.g. Mouse, Keyboard and Camera) connection to control the PC which is connected to the HOST port of receiver.
- ④ **L/R OUT**: 3.5mm jack for audio output.
- ⑤ **DC 24V**: DC connector for the power adapter connection.

# System Connection



# Technical Specification

| MPTP-TUH43R                  |   |
|------------------------------|---|
| <b>Video</b>                 |   |
| Input                        | (1) HDBT IN   |
| Input Connector              | (1) RJ45  |
| Input Resolution             | Up to 4K@60Hz 4:4:4   |
| Output                       | (1) VIDEO OUT   |
| Output Connector             | (1) Type-A female HDMI  |
| Output Resolution            | Up to 4K@60Hz 4:4:4   |
| <b>Audio</b>                 |   |
| Output                       | (1) L/R OUT   |
| Output Connector             | (1) 3.5mm jack  |
| Audio Format                 | 3.5mm Audio: PCM 2CH  |
| Frequency Response           | 20Hz ~ 20KHz, $\pm 3\text{dB}$  |
| Max Output Level             | 2.0Vrms $\pm 0.5\text{dB}$ . 2V = 16dB headroom above -10dBV (316mV) nominal consumer line level signal         |
| THD+N                        | < 0.05% (-80dB), 20Hz~20KHz bandwidth, 1kHz sine at 0dBFS level (or max level)                                  |
| SNR                          | > 85dB, 20Hz-20kHz bandwidth  |
| Crosstalk Isolation          | > 70dB, 10kHz sine at 0dBFS level (or max level before clipping)  |
| L-R Level Deviation          | < 0.3dB, 1kHz sine at 0dBFS level (or max level before clipping)  |
| Frequency Response Deviation | < $\pm 0.5\text{dB}$ , 20Hz – 20kHz   |
| Output Load Capability       | 1K $\Omega$ and higher (Supports 10x paralleled 10K $\Omega$ loads)   |
| Stereo Channel Separation    | >70dB@1KHz  |
| <b>Devices</b>               |   |
| Devices Connector            | (3) USB-A,(1) USB-C   |
| USB Version                  | USB 2.0   |
| Devices Power                | 2A Total  |
| <b>Control</b>               |   |
| Control Part                 | (4) DEVICE,(1) PoC Switch, (1) MODE Switch, (1) RS232,(1) IR IN, (1) IR OUT, (1) USB power Switch               |
| Control Connector            | (3) Type-A USB 2.0<br>(1) Type-C USB 2.0<br>(3) 2-pin DIP Switch<br>(2) 3.5mm Jacks<br>(1) 3-pin Terminal Block |
| <b>General</b>               |   |

|                        |  |
|------------------------|--|
| Bandwidth              | 18Gbps   |
| HDMI Standard          | 2.0  |
| HDCP Version           | Input: HDCP 2.2, HDCP 1.4 compliant;<br>Output: Follows the source's HDCP version. |
| Two-way PoC            | Supported two-way 24V  |
| HDMI V2.0 Cable Length | 4K@60Hz 4:4:4 ≤ 5m, 4K@60Hz 4:2:0 ≤ 10m, 1080P ≤ 15m.                              |
| Transmission Standard  | HDBaseT  |
| Transmission Distance  | 4K@60 4:4:4 ≤ 40m<br>4K@30 4:4:4 ≤ 70m   |
| Operation Temperature  | -10 to +55°C (+14° to +131°F)  |
| Storage Temperature    | -25 to +70°C (-13° to +158°F)  |
| Relative Humidity      | 10% to 90%, Non-condensing   |
| Power Supply           | DC24V 1.5A   |
| Power Consumption      | 28W (Max)  |
| Dimension (W*H*D)      | 140mm x 21.5mm x 110mm   |
| Net Weight             | 360g   |

**Note:** Please use high-qualified HDMI cable fully compliant with HDMI V2.0 for reliable transmission and connection.