

User Manual

Milestone PRO

MP-TP-T70S-H1

18G HDMI 2.0 Extender over CAT5e/6



All Rights Reserved

Version: MP-TP-T70S-H1_2020V1.0

1. Product Introduction

The MP-TP-T70S-H1 is a point-to-point HDMI extender set for HDMI V2.0 and IR signals; this kit supports 4K/UHD video @ 60Hz with 4:4:4 Chroma sampling, as well as HDMI data rates up to 18Gbps and HDCP 2.2 compliant. The MP-TP-T70S-H1 provides HDMI transmission up to 230 feet (70 meters) for 4K@60Hz 4:4:4, or 262 feet (80 meters) for 1080p over single CAT5e/6 cable. It supports bi-directional IR, RS232 and 12V PoC, and automatic video resolution down-scaling.

1.1 Features

- Supports HDMI V2.0, up to 4K@60Hz 4:4:4, HDR 10, 18G, HDCP 2.2/2.3.
- Extends 4K HDMI signal up to 230 feet (70 meters), or 1080p HDMI signal up to 262 feet (80 meters) over a single CAT5e/6 cable.
- Supports video resolution down-scaling, the 4K input can be automatically degraded to 1080p output on receiver for compatibility with legacy 1080p display device.
- HDMI loop out on transmitter.
- Bi-directional IR and RS232 pass-through.
- Supports bi-directional 12V PoC, only one power supply required.
- Features visually lossless compression with no latency.
- Smart EDID management and CEC Enabled.
- Compact design, easy to install and simple to operate.

1.2 Package List

- 1x Transmitter (Tx)
- 1x Receiver (Rx)
- 1x IR Receiver
- 1x IR Emitter
- 2x 3-pin Terminal Blocks
- 1x Power Adaptor (12V DC 1A)
- 1x Quick Operation Guide

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

2. Panel Description

Transmitter Panel Description



1. **CAT OUT:** Connects to the CAT IN port of receiver by CATx cable. It supports 12V PoC and the transmitter can be powered from the receiver. The green LED illuminates when power is applied. The orange LED illuminates when there is a valid HDMI signal input.
2. **IR IN:** Connects to IR receiver for IR pass-through.
3. **IR OUT:** Connects to IR emitter for IR pass-through.
4. **RS232:** Connects to RS232 control device (e.g. PC) or a third-party device to be controlled for RS232 pass-through.
5. **DISPLAY:** Connects to local HDMI display device.
6. **SOURCE:** Connects to HDMI source device.
7. **EDID:** 3-pin DIP switch for EDID setting.
 - **MERGE:** If there are two display devices in this system, the unit will output the video with the lower resolution in this mode to ensure video can be shown on both displays.
 - **BYPASS:** The source device learns the EDID from the remote display connected to the Receiver's HDMI output.
 - **COPY Tx:** The source device learns the EDID from the local display connected to the Transmitter's HDMI loop output.
8. **DC 12V:** DC connector for the power adapter connection.

Receiver Panel Description



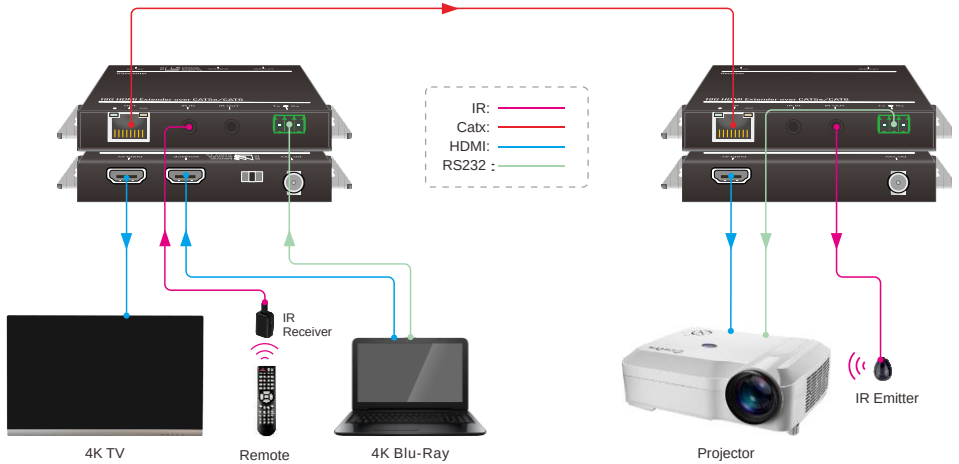
1. **CAT IN:** Connects to the CAT OUT port of transmitter by CATx cable. It supports 12V PoC and the receiver can be powered from the transmitter. The green LED illuminates when power is applied. The orange LED illuminates when there is a valid HDMI signal input.
2. **IR IN:** Connects to IR receiver for IR pass-through.
3. **IR OUT:** Connects to IR emitter for IR pass-through.
4. **RS232:** Connects to RS232 control device (e.g. PC) or a third-party device to be controlled for RS232 pass-through.
5. **DISPLAY:** Connects to HDMI display device.
6. **DC 12V:** DC connector for the power adapter connection.

3. Specification

Transmitter	
Input	(1) SOURCE
Input Connector	(1) 19-pin type-A female HDMI
Output	(1) DISPLAY, (1) CAT OUT
Output Connector	(1) 19-pin type-A female HDMI, (1) RJ45
Control	(1) IR IN, (1) IR OUT, (1) RS232
Control Connector	(2) 3.5mm mini jacks, (1) 3-pin terminal block
Receiver	
Input	(1) CAT IN
Input Connector	(1) RJ45
Output	(1) DISPLAY
Output Connector	(1) 19-pin type-A female HDMI
Control	(1) IR IN, (1) IR OUT, (1) RS232
Control Connector	(2) 3.5mm mini jacks, (1) 3-pin terminal block
General	
Video Resolution	Up to 4K@60Hz 4:4:4, HDR 10
Color Space	RGB, Rec. 601, and rec. 709 BT2020
HDMI Audio Format	LPCM 7.1 audio, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, and DTS-HD® Master Audio™ pass-through.
Transmission Distance	4K: 15 to 70 meters (49 to 230ft) 1080p: 15 to 80 meters (49 to 262ft)
HDMI Version	2.0
HDCP Version	Up to 2.2 (The HDCP content of TX HDMI output follows the remote RX display device's.)
EDID	EDID Setting by 3-pin DIP Switch
Power Supply	Input: 100 to 240V AC, 50/60Hz; Output: 12V DC 1A
Power Consumption	5.6W (Max)
Operation Temperature	-5 to +55°C (+23° to +131°F)
Storage Temperature	-25 to +70°C (-13° to +158°F)
Relative Humidity	10% to 90%, Non-condensing
Dimensions (W*H*D)	100mm x 16mm x 80mm (without mounting ears) 127mm x 16mm x 80mm (with mounting ears)
Net Weight	Tx/Rx: 185g

Note: The extender set does not support HBR audio.

4. Connection Diagram



Note:

- The IR and RS232 commands cannot be triggered simultaneously.
- The CATx cable length should not be less than 15 meters for best video output.

