



HDMI удлинитель по витой паре с HDBaseT / Dr.HD EX 100 HBT KVM



Thank you for purchasing this product

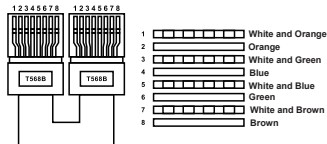
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

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.

Caution

The network cable connection method required for this product is direct connection. Please do not cross connect.



Direct Interconnection Method

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1. Introduction

This is a high-performance, long-reach HDBaseT extender, which can transmit HDMI™ and USB 2.0 signal to a long distance up to 100m/328ft over CAT5e/6 cable. Video resolution is up to 4K2K@60Hz (4:4:4). It converts the HDMI™ signal to standard HDBaseT signal and transmits it via LAN cable. CEC pass-through and PoC function are also supported.

The Extender can be widely used in other fields such as video conference system, multimedia signal broadcasting, HDMI™ signal extension, etc.

2. Features

- ☆ HDCP 2.3/2.2/1.x compliant
- ☆ Video bandwidth is up to 18Gbps
- ☆ Video resolution is up to 4K2K@60Hz (4:4:4), as specified in HDMI™ 2.0b
- ☆ The transmission distance is up to 100m/328ft via CAT5e/6 cable
- ☆ USB 2.0 signal transmission
- ☆ Support CEC pass-through
- ☆ HDMI™ audio formats: LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X
- ☆ Support audio de-embedding on the Receiver
- ☆ HDR, HDR10, HDR10+, Dolby Vision, HLG pass-through
- ☆ Bi-directional PoC (Power over Cable) function
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1× 4K60 HDMI™ over HDBaseT Extender (Transmitter)
- ② 1× 4K60 HDMI™ over HDBaseT Extender (Receiver)
- ③ 1× 24V/1A Locking Power Supply
- ④ 1× USB Cable (USB-A to USB-B)
- ⑤ 4× Mounting Ear
- ⑥ 8× Machine Screw
- ⑦ 1× User Manual

4. Specifications

Technical	
HDMI™ Compliance	HDMI™ 2.0b
HDCP Compliance	HDCP 2.3/2.2/1.x
Video Bandwidth	18Gbps
Video Resolution (Input & Output)	Up to 4K2K@60Hz (4:4:4) * All available resolutions are shown as follow.
Color Space	RGB_4:4:4, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
Color Depth	8/10/12-bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
CEC	Supported
HDMI™ Audio Format	LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X
Transmission Distance	100m/328ft for 4K2K@60Hz over CAT5e/6 cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Connection	
Transmitter	Input: 1× IN [HDMI™ Type A, 19-pin female] 1× USB HOST [USB-B, 4-pin female] Output: 1× HDBaseT OUT [RJ45] 1× OUT [HDMI™ Type A, 19-pin female] Control: 1× SERVICE [USB-C]
Receiver	Input: 1× HDBaseT IN [RJ45] Output: 1× OUT [HDMI™ Type A, 19-pin female] 2× USB 2.0 [USB-A, 4-pin female] 1× AUDIO OUT [3.5mm audio jack] Control: 1× SERVICE [USB-C]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter/Receiver: 120mm (W) × 78mm (D) × 24.5mm (H)
Weight	Transmitter: 290g; Receiver: 295g
Power Supply	DC 24V/1A; Support bi-directional PoC function
Power Consumption	(PoC) Transmitter: 4.8W; (PoC) Receiver: 7.1W
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)

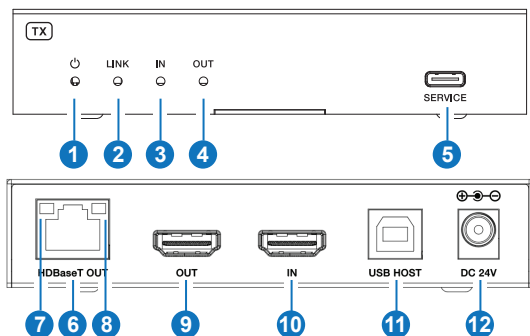
*** All available input/output resolutions:**

640x480p60Hz, 800x600p60Hz, 1024x768p60Hz, 1280x1024p60Hz, 1360x768p60Hz, 1440x900p60Hz, 1440x1050p60Hz, 1600x1200p60Hz, 720x480i59.94Hz(480i59), 720x480p59.94Hz(480p59), 720x576i50Hz(576i50), 720x576p50Hz(576p50), 1280x720p50Hz(720p50), 1280x720p59.94Hz(720p59), 1280x720p60Hz(720p60), 1920x1080i50Hz(1080i50), 1920x1080i59.94Hz(1080i59), 1920x1080i60Hz(1080i60), 1920x1080p23.98Hz(1080p23), 1920x1080p24Hz(1080p24), 1920x1080p25Hz(1080p25), 1920x1080p29.97Hz(1080p29), 1920x1080p30Hz(1080p30), 1920x1080p50Hz(1080p50), 1920x1080p59.94Hz(1080p59), 1920x1080p60Hz(1080p60), 3840x2160p23.98Hz(2160p23),

3840x2160p24Hz(2160p24), 3840x2160p25Hz(2160p25), 3840x2160p29.97Hz(2160p29), 3840x2160p30Hz(2160p30), 3840x2160p50Hz(2160p50), 3840x2160p59.94Hz(2160p59), 3840x2160p60Hz(2160p60), 4096x2160p23.98Hz, 4096x2160p24Hz, 4096x2160p25Hz, 4096x2160p29.97Hz, 4096x2160p30Hz, 4096x2160p50Hz, 4096x2160p59.94Hz, 4096x2160p60Hz

5. Operation Controls and Functions

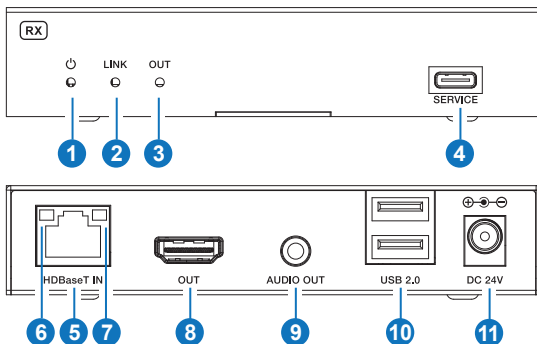
5.1 Transmitter Panel



No.	Name	Function Description
1	PWR LED	The red LED lights up, when the Transmitter is powered on.
2	LINK LED	The green LED lights up, when Transmitter and Receiver are connected normally.
3	IN LED	The green LED lights up, when the HDMI IN port is connected to a source device and the input signal is detected.
4	OUT LED	The green LED lights up, when the HDMI OUT port is connected to a display device normally.
5	SERVICE	USB-C port, used for firmware update.

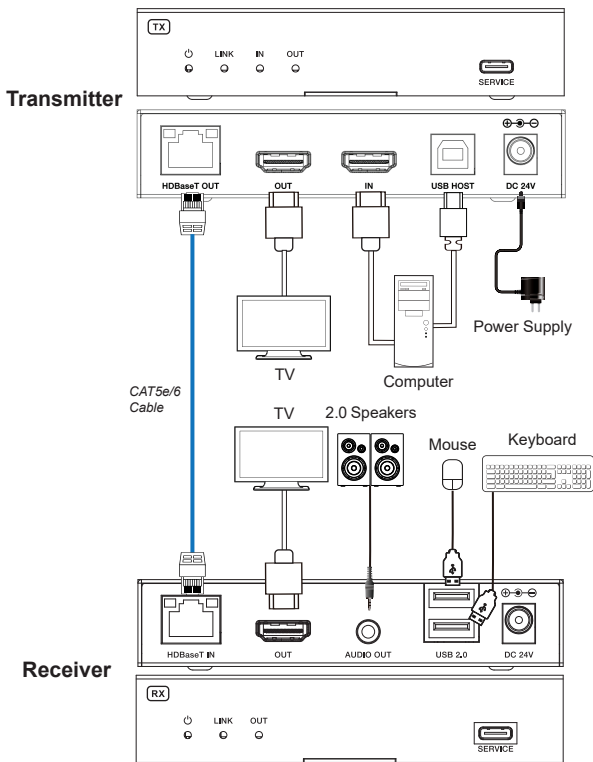
No.	Name	Function Description
6	HDBaseT OUT	HDBaseT output port, connected to the HDBaseT IN port on the Receiver with CAT cable.
7	Link Signal Indicator (Green)	- On: Transmitter and Receiver are connected and linked. - Off: Transmitter and Receiver are not connected.
8	Data Signal Indicator (Yellow)	- On: HDMI signal with HDCP. - Flashing: HDMI signal without HDCP. - Off: No HDMI signal.
9	HDMI OUT	HDMI loopout port, connected to display device with HDMI cable.
10	HDMI IN	HDMI signal input port, connected to source device with HDMI cable.
11	HOST	USB host port, connected to a PC.
12	DC 24V	DC 24V/1A power input port. <i>Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 24V/1A power supply, the other doesn't need power supply.</i>

5.2 Receiver Panel



No.	Name	Function Description
1	PWR LED	The green LED lights up, when the Receiver is powered on.
2	LINK LED	The green LED lights up, when Transmitter and Receiver are connected normally.
3	OUT LED	The green LED lights up, when the HDMI OUT port is connected to a display device normally.
4	SERVICE	USB-C port, used for firmware update.
5	HDBaseT IN	HDBaseT input port, connected to the HDBaseT OUT port of the Transmitter with CAT cable.
6	Link Signal Indicator (Green)	▪ On: Transmitter and Receiver are connected and linked. ▪ Off: Transmitter and Receiver are not connected.
7	Data Signal Indicator (Yellow)	▪ On: HDMI signal with HDCP. ▪ Flashing: HDMI signal without HDCP. ▪ Off: No HDMI signal.
8	HDMI OUT	HDMI signal output port, connected to display device such as TV or monitor with HDMI cable.
9	AUDIO OUT	Analog audio output port, connected to an audio device.
10	USB 2.0 DEVICE	USB 2.0 type A ports, connected to USB 2.0 devices such as keyboard and mouse.
11	DC 24V	DC 24V/1A power input port. <i>Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 24V/1A power supply, the other doesn't need power supply.</i>

6. Application Example



HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

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