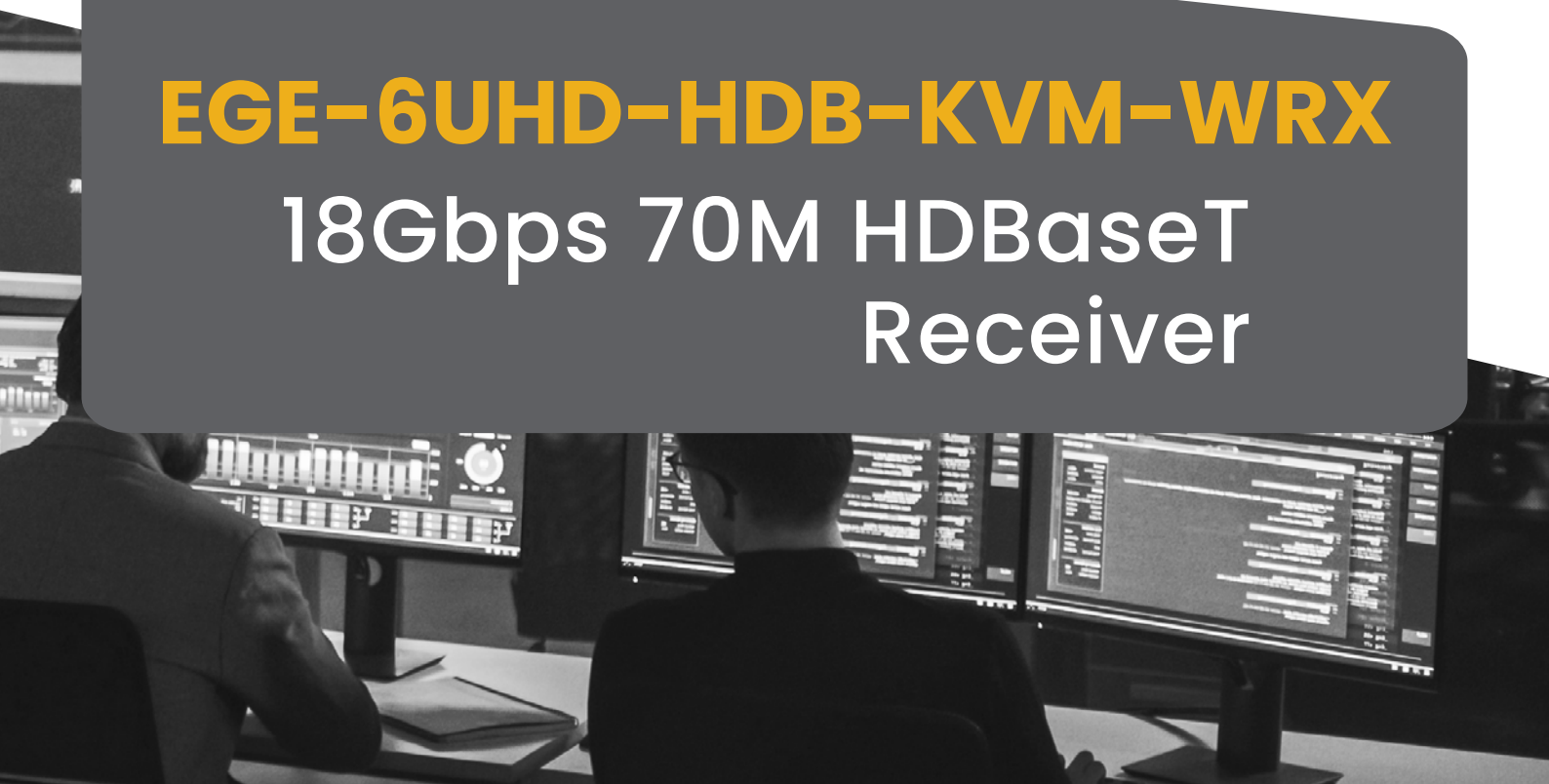
geratech®

EGE-6UHD-HDB-KVM-WRX

18Gbps 70M HDBaseT Receiver



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.

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1. Introduction

This 18Gbps 70M HDBaseT Receiver is designed to be used in conjunction with the HDBaseT Wall-plate. It can extend transmission distance up to 230ft / 70m for 1080p60Hz signal or 131ft / 40m for 4K2K@60Hz (4:4:4) signal. The video resolution is up to 4K2K@60Hz YUV 4:4:4. It supports two-way IR and RS-232 signal control and 24V POC function.

2. Features

- HDMI2.0b, HDCP 2.2 / 1.x and DVI 1.0 compliant
- Support 18Gbps video bandwidth
- Support video resolution up to 4K2K@60Hz YUV 4:4:4
- The transmission distance can be extended up to 70m / 230ft at the resoution of 1080P@60Hz, or 40m / 131ft at 4K2K@60Hz 4:4:4 via a single CAT6/6a cable
- Support USB signal, bi-directional IR and RS-232 control signal passthrough
- Support USB KVM function
- Support POC (Power over Cable) function
- Compact design for easy and flexible installation

3. Package Contents

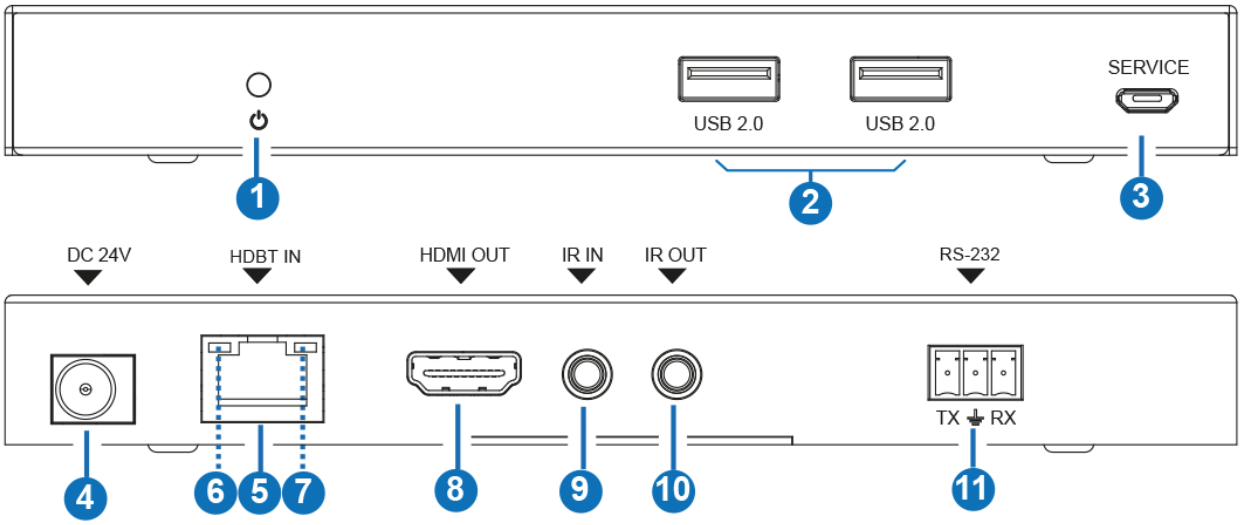
- 1 x 18Gbps HDBaseT Receiver
- 1 x IR Blaster cable (1.5 meters)
- 1 x IR Receiver cable (1.5 meters)
- 1 x 3pin-3.81mm Phoenix Connector (male)
- 2 x Mounting Ears
- 4 x Machine Screws
- 1 x 24V/1A Locking Power Adapter
- 1x User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b

HDCP Compliance	1HDCP 2.2 / 1.x
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@60Hz YUV 4:4:4
USB Compliance	USB 2.0
USB Transfer Rate	Transmission rate up to 480mb/s, USB1.1 compliant
Transmission Distance	70m via a single CAT6 cable
Color Space	RGB, YCbCr4:4:4, YCbCr4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit (1080P@60Hz) 8-bit (4K2K@60Hz YUV4:4:4) 8-bit, 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:2/4:2:0)
HDR	HDR10, HDR10+, HLG
HDMI Audio Format	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
Connection	
Receiver	Input: 1×HDBT IN [RJ45 with lights] 1×IR IN [3.5mm Stereo Mini-jack] 1×SERVICE [Micro-USB jack] Output: 1×HDMI OUT [TypeA, 19-pin female] 1×RS-232 [Phoenix jack] 1×IR OUT [3.5mm Stereo Mini-jack] 2×USB [USB-A, 4-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	165mm (W)×88.3mm (D)×20mm (H)
Weight	165g
Power Supply	DC 24V/1A; Support POC function
Power Consumption	7.5W (max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

5. Operation Controls and Functions



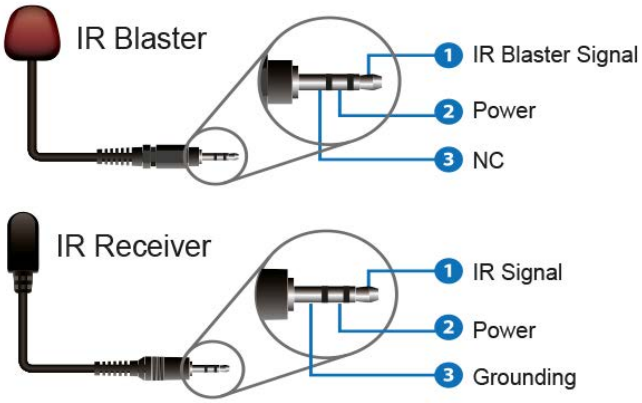
No.	Name	Function Description
1	Power LED	The power LED is on when the Receiver is powered on.
2	USB 2.0	Two USB 2.0 ports. Connect to USB devices.
3	SERVICE	Firmware update port.
4	DC 24V	DC 24V power input port. *Note that both the transmitter and receiver support POC function, it means that either Transmitter or Receiver is connected to 24V/1A power supply, the other doesn't need power supply.*
5	HDBT IN	RJ45 connector for connecting the HDBT OUT port of Transmitter with CAT6/6a cable.
6	Connection Signal Indicator (Green)	Illuminating: Transmitter and Receiver are in good connection status. Flashing: Transmitter and Receiver are in poor connection status. Dark: Transmitter and Receiver are not connected.4
7	Data Signal Indicator (Orange)	Illuminate: HDMI signal with HDCP. Flash: HDMI signal without HDCP. Dark: No HDMI signal.
8	HDMI OUT	HDMI signal output port. Connect to HDMI display devices with HDMI cable.
9	IR IN	Connect to the IR receiver cable. The IR signal will send to the IR OUT port of the Transmitter.
10	IR OUT	Connect to the IR blaster cable, the IR signal is from IR IN port of the Transmitter.
11	RS-232	3-pin Phoenix connector for RS-232 command transmission. The RS-232 command will pass-through between the Transmitter and Receiver.

6. IR Pin Definition

IR Receiver and Blaster pin's definition is as below:

IR RECEIVER

IR BLASTER

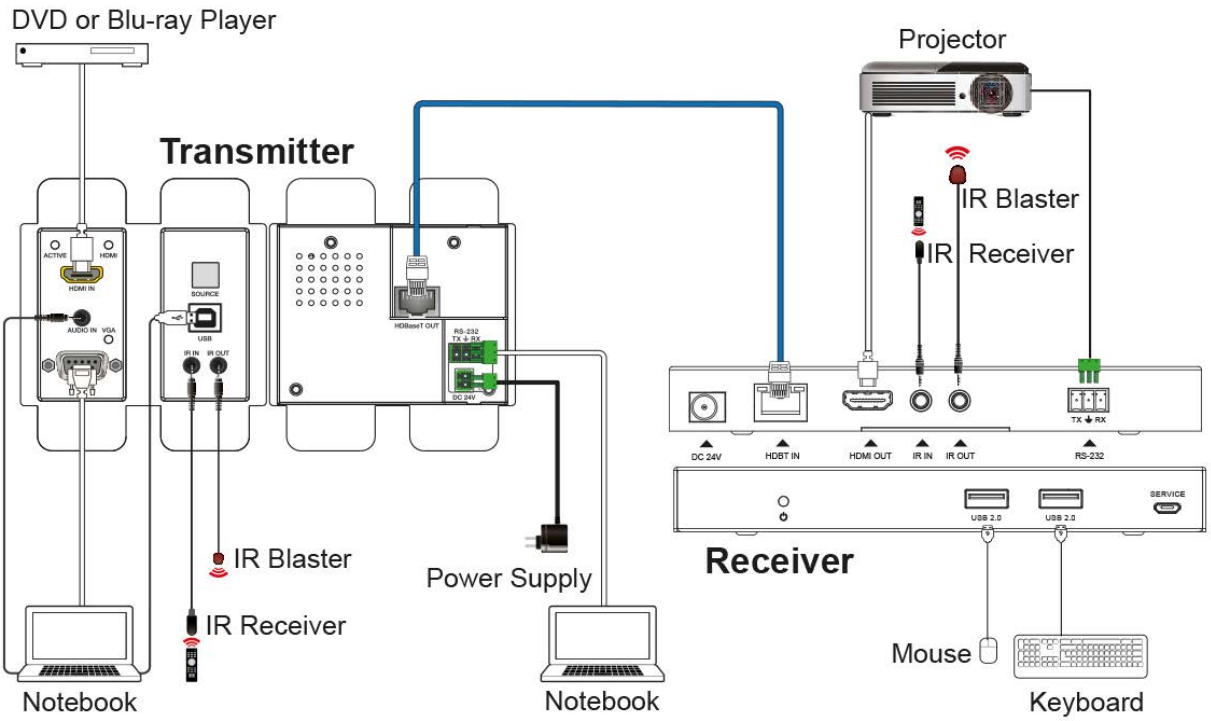


Note:

When the angle between the IR receiver and the remote control is ± 45 °, the transmission distance is 0-5 meters;

When the angle between the IR receiver and the remote control is ± 90 °, the transmission distance is 0-8 meters.

7. Application Example



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