



100M HDBaseT HDMI Extender over single CAT5e/CAT6/CAT6A

EB-100-TR

User Manual

Ver 3



1. Features

- ◆ Extend HDMI/Control up to 100m over one Cat 5e/ Cat 6/Cat 6A cable;
- ◆ With a little switch on the side for being optional to disable and enable POC easily;
- ◆ Support HDMI up to 4K@60HZ(4:2:0);
- ◆ HDCP 2.2 Compliant, support 3D/48 bit;
- ◆ All connectors on one side for easier installation;
- ◆ Bi-directional RS-232,IR&LAN;
- ◆ Power both units from TX or RX side with POC;
- ◆ Status LED for all connections on front.
- ◆ EDID pass-through straightly.
- ◆ Support 7.1 DTS Master HD, Dolby True HD.

2. Panels

Transmitter



- A: DC 12V input port
- B: POC function OFF/ON switch
- C: RJ45 output port
- D: HDMI input port
- E: 3-pin RS232 port
- F: IR transmitter port

G: IR receiver port

H: **POWER:** The indicator will light up when power on

I: **LINK:** It will light up when the transmitter and receiver connected successfully, flicking means connection is not stable, off means the connection is failed.

J: **MODE:** It will flick once per second if the system runs good, on the contrary, it will be off or light up.

Receiver



A: DC 12V input port

B: POC function OFF/ON switch

C: RJ45 input port

D: HDMI output port

E: 3-pin RS232 port

F: IR transmitter port

G: IR receiver port

H: **POWER:** The indicator will light up when power on

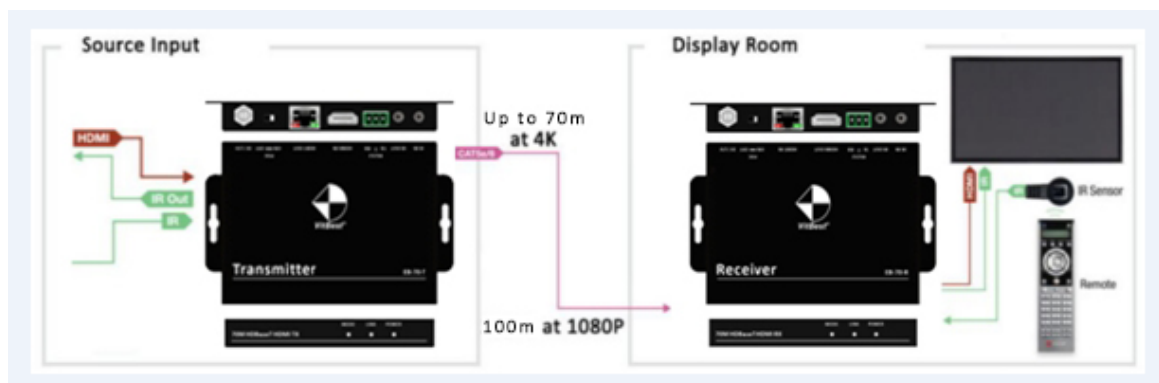
I: **LINK:** It will light up when the transmitter and receiver connected successfully, flicking means connection is not stable, off means the connection is failed.

J: **MODE:** It will flick once per second if the system runs good, on the contrary, it will be off or light up.

3. Specification

Model	EB-100-T	EB-100-R
Input	1*HDMI, 1*RS232, 1*IR-TX, 1*IR-RX	1*HDBaseT
Output	1*HDBaseT	1*HDMI, 1*RS232, 1*IR-TX, 1*IR-RX
Standard	HDMI 1.4 / HDCP 2.2	
Resolution	1920x1200, 1680x1050, 1360x768, 1280x800, 1920x1080, 1600x900, 1366x768, 1280x720, 1024x576, 1920x1200, 1680x1050, 1360x768, 1280x800, 4096x2160@30Hz, 3840x2160@30Hz	
Color Space	1080p: 36Bit Deep Color 4K: 24Bit True Color, 4:2:2	
Bandwidth	10.2Gbps	
Transmission Distance	CAT5e/6/6A cable: 100m(1080p60Hz 4:4:4) CAT6/6A cable: 70m(4K60Hz 4:2:0)	
Dimension	115×84×16 (mm)	
Weight	120g	
Power	AC: 100-240V 50/60Hz 2A Max DC: 12V 2A	
Consumption	≤11W	
Working Humidity	10%-90%	
Working Temperature	0℃-50℃	
Storage Temperature	-20℃-75℃	

4. Connection Diagram



5. RJ-45 connector

Suggest to use twisted shield pair 24AWG cable, the bandwidth at least 400MHz, and crystal connector.



TIA/EIA-T568B	
Pin	Wire Color
1	White-orange
2	Orange
3	White-green
4	Blue
5	White-blue
6	Green
7	White-brown
8	Brown