



# **HDBaseT Extender kit 70m with RS232 Model: E70C**

**User Manual**

**VER 1.0**

## 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, lightning 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

Thank you for purchasing this HDBaseT Extender kit 70m with PoC/RS232/HDCP2.2. This is a HDBaseT Extender set consist of of transmitter and receiver. It distributes HDMI signal via CAT5e/CAT6 cable at 70m/PoC, and enables IR and RS232 pass-through to control local source device from remote or far-end display.

## 2. Features

- ☆ Supports HDMI 1.4 & HDCP 2.2
- ☆ Maximum transmission distance is up to 40m for 4K×2K, and 70m for 1080p
- ☆ Supports bi-directional IR and RS232 pass-through for long-distance control
- ☆ Supports bi-directional PoC for simplified wiring
- ☆ Supports CEC
- ☆ Features DIP switcher for choosing Control or Update mode

## 3. Package Contents

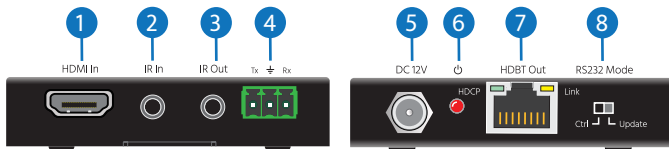
- ① 1× Transmitter
- ② 1× Power adaptor (12V DC,1A)
- ③ 1× Wideband IR Receiver cable
- ④ 1× Receiver
- ⑤ 4× Mounting ears
- ⑥ 2× 3-Pin Phoenix Connector
- ⑦ 1× Wideband IR Emitter cable
- ⑧ 1× User Manual

## 4. Specifications

Technical	
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 2.2
Bandwidth	10.2Gbps
Video Resolutions	Up to 4K×2K@60Hz 4:2:0
Transmission Mode	HDBaseT
Transmission Distance	1080P≤70m; 4K×2K≤40m
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
Connections	
Transmitter ports	Input: 1×HDMI Type A [19-pin female] Output: 1×HDBT Out [RJ45] Control: 1×IR In [3.5mm Stereo Mini-jack] 1×IR Out [3.5mm Stereo Mini-jack] 1×RS232 [Phoenix connector]
Receiver ports	Input: 1×HDBT Out [RJ45] Output: 1×HDMI Type A [19-pin female] Control: 1×IR In [3.5mm Stereo Mini-jack] 1×IR Out [3.5mm Stereo Mini-jack] 1×RS232 [Phoenix connector]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	TX/RX: 120mm (W)×74mm (D)×16mm (H)
Weight	TX/RX: 240g
Power Supply	Input: AC100~240V 50/60Hz Output: DC12V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	10W (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)

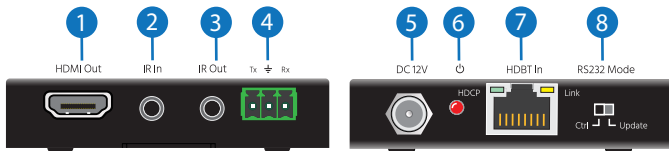
## 5. Operation Controls and Functions

### 5.1 Transmitter Panel



Number	Name	Function description
1	HDMI In	Connect with HDMI source.
2	IR In	Work with far-end IR Out port, connect with 12V IR Receiver to collect IR signal to control far-end display device from local.
3	IR Out	Work with far-end IR In port, connect with 12V IR Emitter to send IR signal to control input source device from remmote.
4	RS232 connector	If one is connected with control device (e.g.PC), and the other should be connected with the third-party that need to be controlled.
5	DC 12V	Support bi-directional PoC, one of ports should be connected with 12V DC 1A power adaptor.
6	Power LED	OFF: No power. Red: DC power present
7	HDBT Out	Connect to the HDBT In socket on Receiver.
8	RS232 Mode switch	Ctrl — RS232 pass-through control mode. Update — Update Valens IC program, connect a PC to the RS232 port, and then double-click the update file (.bat).

## 5.2 Receiver Panel



Number	Name	Function description
1	HDMI Out	Connect with HDMI display.
2	IR In	Work with far-end IR Out port, connect with 12V IR Receiver to collect IR signal to control far-end display device from local.
3	IR Out	Work with far-end IR In port, connect with 12V IR Emitter to send IR signal to control input source device from remmote.
4	RS232 connector	If one is connected with control device (e.g.PC), and the other should be connected with the third-party that need to be controlled.
5	DC 12V	Support bi-directional PoC, one of ports should be connected with 12V DC 1A power adaptor.
6	Power LED	OFF: No power. Red: DC power present
7	HDBT In	Connect to the HDBT Out socket on Transmitter.
8	RS232 Mode switch	Ctrl — RS232 pass-through control mode. Update — Update Valens IC program, connect a PC to the RS232 port, and then double-click the update file (.bat).

## 6. Application Example

