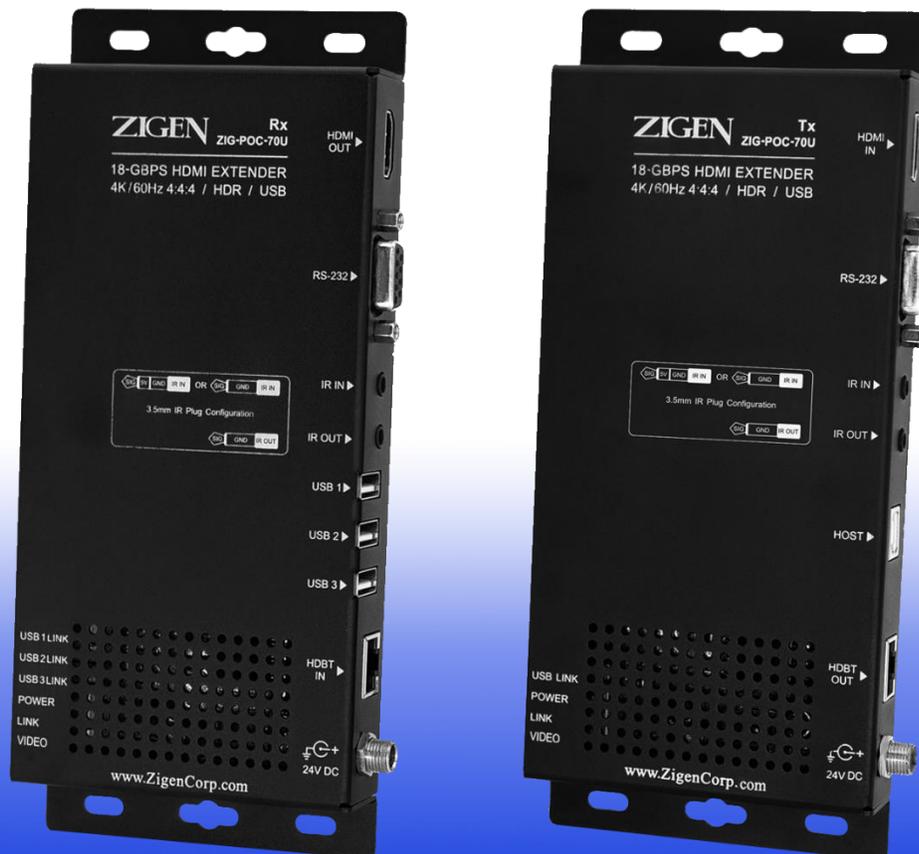


ZIGEN

COMPLETE HD/IP
CONNECTIVITY SOLUTIONS

ZIG-POC-70U

HDBaseT HDMI Extender



ZIG-POC-70U USER MANUAL

Important Safety Instructions

1. Do not use this product near water.
2. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
3. Do not install or place this product near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
4. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
5. Only use attachments/accessories specified by the manufacturer.
6. To reduce the risk of electric shock and/or damage to this product, never handle or touch this unit or power cord if your hands are wet or damp. Do not expose this product to rain or moisture.
7. Unplug this apparatus during lightning storms or when unused for long periods of time.
8. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
9. Batteries that may be included with this product and/or accessories should never be exposed to open flame or excessive heat. Always dispose of used batteries according to the instructions.

Warranty Information

Powered Product Warranty

Zigen warrants its powered products against any defects in materials and workmanship for a period of three years from the date of invoice. Touchscreen displays carry a one year parts and labor warranty. If a malfunction occurs during the warranty period, Zigen will repair or replace a product to its original operating condition. A return authorization number must be obtained from Zigen before products are returned for service.

Non-Powered and Cable Products - Lifetime Limited Performance Warranty

Zigen warrants that its non-powered products and cable products will be free from defects in material and workmanship for as long as you or your customer owns the product. All Zigen non-powered products and cables are designed and engineered to meet and exceed performance specifications. If, at anytime, the product fails due to manufacturer defect, Zigen will repair or replace the product to ensure that it meets original performance specifications. Reduced performance due to normal wear and tear, or damages caused by misuse or negligence will not be covered. Zigen will test and evaluate all non-powered and cable products claimed defective. Products must be shipped to Zigen, prepaid along with proof of purchase only after obtaining a Return Merchandise Authorization (RMA) number from Zigen. This statement of policy is in lieu of any other policy expressed or implied and no representative or person is authorized to assume any other liability or adopt any other policy for Zigen without our written consent.

Return Policy

If you would like to return a Zigen product, it can be done within 30 days of purchase for a full refund, less shipping and handling. Zigen will not be responsible for shipping and handling of product returns. Returns will only be accepted of products with proof of purchase, products in the original packaging with zero to minimal use and a Return Merchandise Authorization RMA number provided by Zigen.

Contacting Zigen

Technical Support

Tel: (818) 654-5252

Fax: (818) 654-5355

8:00AM - 5:00PM (PST)

Email

info@zigencorp.com

Web

www.zigencorp.com

Mailing Address

Zigen Corp.
c/o Customer Service
16135 Wyandotte Street
Lake Balboa CA 91406
USA

Features

- Autonomous EDID management
- HDBaseT technology
- Supports 18-Gbps
- Supports HDR-10
- Supports HDMI 2.0
- HDCP 2.2 compliant
- USB 2.0 (3-port hub)
- POC Technology
- Supports CEC pass-through
- Supports Bi-directional IR
- Supports Bi-directional RS-232
- Extend 1080p signal up to 70 meters/ 230 ft.
- Extend 4K/60Hz 4:4:4 signal up to 40 meters/ 130 ft.

Specifications

Function				
HDMI Connector	HDMI A-Type Female x 1			
RJ-45 Connector	RJ-45 Jack x 1			
RS232 Connector	DB9 Female x 1			
IR IN	3.5ψ Stereo Jack x 1			
IR OUT	3.5ψ Stereo Jack x 1			
LED	4			6
USB-2.0	USB-B x 1			USB-A x 3
DC Jack	24-v			24-v
Max. Resolution	4K@60Hz / 4:4:4			
Cable Distance	4K/60Hz 40 m (Max.)		1080P/60Hz 70 m (Max.)	
Power Adapter (Min.)	DC 24-V with lock			
Power consumption	20W (MAX)			
Operating Temperature	0 ~ +50°C			
Storage Temperature	-10 ~ +50°C			
Relative Humidity	0% ~ 90%			
External Power Supply	Input: 100VAC~240VAC, 50/60Hz; 24VDC 1.25A			
Enclosure	Aluminum			
Weight	Tx	185g	Rx	190g
Dimensions (LxHxW)	168.0W x 21.4H x 84.0D mm			

Packing List

The ZIG-POC-70U is packaged with the following items:

- 1 x Transmitter
- 1 x Receiver
- 1 x 24V DC Power Adaptor
- 1 x IR Receiver
- 1 x IR Emitter
- 1 x User Manual

If any of these products are not present upon first opening of the package, please contact Zigen or your reseller.

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Zigen, Corp. Reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.



This product uses UL-Listed power supplies



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The ZIG-POC-70U is an ultra-thin HDMI2.0 and USB 2.0 Extender set. This extender set consists of transmitter and receiver. It extends 1080p/4K HDMI with USB-2.0 and bi-directional IR/RS-232 signal over single CAT-6a cable up to 70m /40m using (PoC). This extender is equipped with visually lossless video compression technology called (DSC) to ensure HD lossless transmission of HDR-10 and 4K@60Hz/4:4:4 over CAT-6a cable.

Transmitter Front Panel

- 1 **USB LINK** - blue LED light
- 2 **POWER** - blue LED light
- 3 **LINK** - blue LED light
- 4 **VIDEO**- blue LED light



Transmitter Back Panel

1 24-V DC

Support bi-directional PoC.

2 HDBT OUT

Connect using a CAT-6a cable.

3 USB HOST

Connect Host PC to be controlled.

4 IR OUT

Connect IR emitter to send IR signal to control the source device.

5 IR IN

Connect IR receiver to receive IR signal from IR remote to control far-end display device.

6 RS-232

Connect the RS232 control device (e.g. PC) or a third-party device to be controlled.

7 HDMI IN

Connect to HDMI source.



Receiver Front Panel

- 1 **USB 1 LINK** - blue LED light
- 2 **USB 2 LINK** - blue LED light
- 3 **USB 3 LINK** - blue LED light
- 4 **POWER** - blue LED light
- 5 **LINK** - blue LED light
- 6 **VIDEO** - blue LED light



Receiver Back Panel

1 24V DC

Support bi-directional POC.

2 HDBT IN

Connect using a CAT-6a cable.

3 USB 3

Connect mouse, keyboard or other USB device to control the Host PC.

4 USB 2

Connect mouse, keyboard or other USB device to control the Host PC.

5 USB 1

Connect mouse, keyboard or other USB device to control the Host PC.

6 IR OUT

Connect IR emitter to send IR signal to control the display device.

7 IR IN

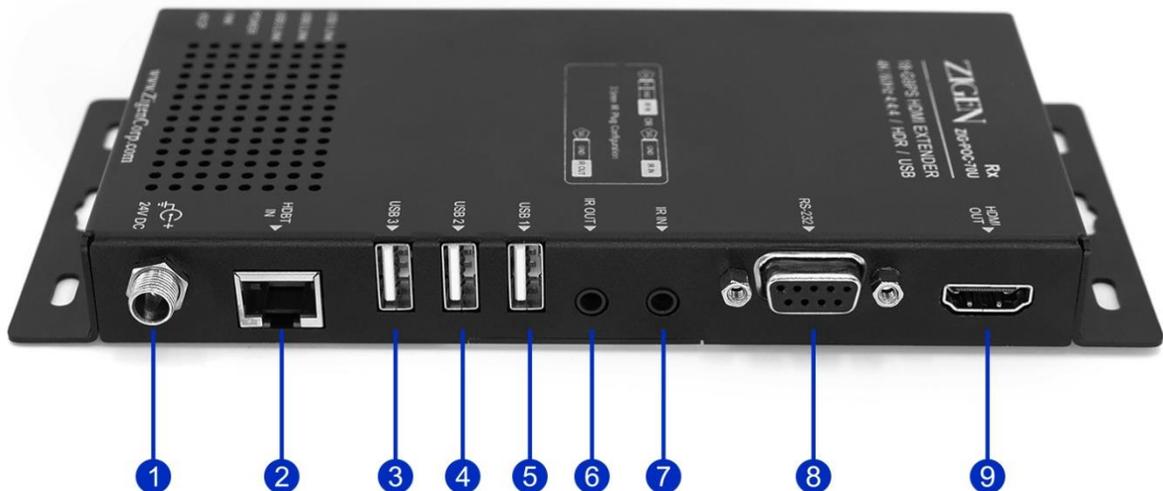
Connect IR receiver to receive IR signal from IR remote to control far-end source device.

8 RS-232

Connect the RS232 control device (e.g. PC) or a third-party device to be controlled.

9 HDMI OUT

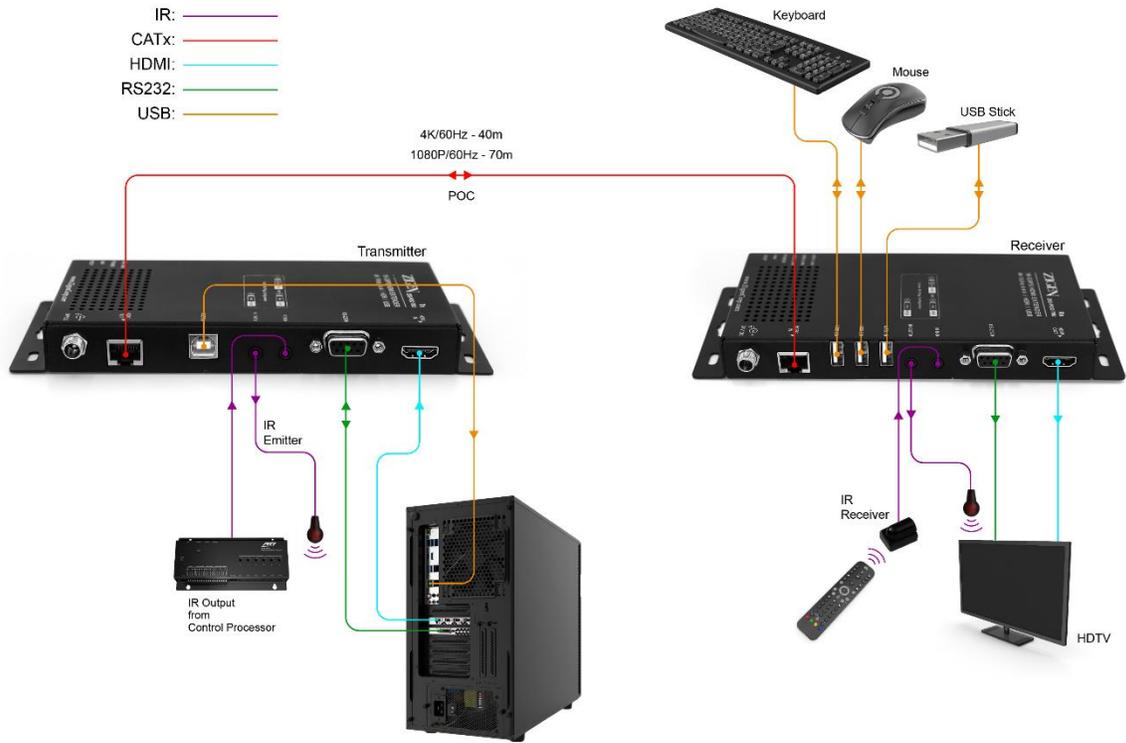
Connect to HDTV Display



1. Be sure to turn OFF source and TV.
2. Connect the HDMI extension cable between HD Source and HDMI In port of the Transmitter.
3. Connect the HDMI extension cable between the HDTV and the HDMI Out port of the Receiver.
4. Connect Cat-6a cable between the Transmitter Link port and the Receiver Link port of the Receiver.
5. Connect the Power adapter to the Receiver or Transmitter and power up the extender
6. Turn on the HD source and HDTV.

System Diagram

Get Started



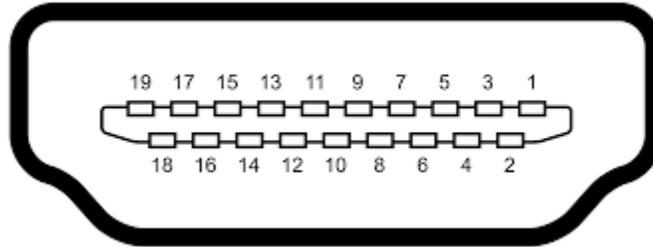
IR Receiver Cable Directions

Plug the IR receiver into the ZIG-POC-70U-Tx “IR IN” port and place the IR receiver so you can point to it easily with your IR remote controller.

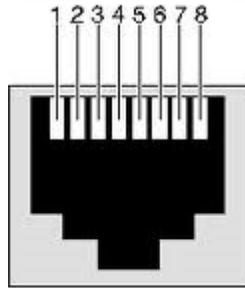
IR Emitter Directions:

Plug any third party IR emitter into the ZIG-POC-70U-Tx “IR OUT” port and place the IR sensor directly on the IR window on the front panel of the device you intend to control.

HDMI Connector Signal Pin Out



Pin	Signal	Pin	Signal
1	TMDS Data 2+	11	TMDS Clock Shield
2	TMDS Data 2 Shield	12	TMDS Clock -
3	TMDS data 2 -	13	CEC
4	TMDS Data 1+	14	Reserved (N.C. on device)
5	TMDS Data 1 Shield	15	SCL
6	TMDS Data 1 -	16	SDA
7	TMDS Data 0+	17	DDC/CEC Ground
8	TMDS Data 0 Shield	18	+5 power
9	TMDS Data 0 -	19	Hot Plug Detect (HPD)
10	TMDS Clock +		



Looking into connector

Conductor Identification	RJ-45 Plug Pin Assignment	Color Code for Conductor
Pair 1	5	White-Blue
	4	Blue
Pair 2	1	White-Orange
	2	Orange
Pair 3	3	White-Green
	6	Green
Pair 4	7	White-Brown
	8	Brown

One-to-One System Connection Example

HDBaseT Transmitter



↑
RS-232
HDMI IN



HDBaseT Receiver



↓
RS-232
HDMI OUT



CAT5e / CAT6 / CAT6a
Extend HDMI signals up to
4K@60Hz: 40 meters/ 130 ft.
1080p : 70 meters/ 230 ft.

