

ZIGEN

COMPLETE HD/IP
CONNECTIVITY SOLUTIONS

ZIG-POEPRO-100A

HDBaseT HDMI Extender



ZIG-POEPRO-100A 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

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Reseda CA 91335
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Features

- Supports 4K@60Hz 4:4:4
- Supports HDR-10
- Supports Dolby Vision 4K@ 30Hz
- Supports HDMI 2.0
- Supports HDCP 2.2
- Supports ARC
- Supports 3D pass-through
- Supports CEC pass-through
- Supports RS-232(Bi-direction transfer)
- Supports all frequency band IR control
- Supports all digital audio modes
- Supports 4K/60Hz 4:4:4 at 100-meter / 330-feet

Specifications

Function	TX	RX
HDMI Connector	HDMI A-Type Female x 1	
RJ-45 Connector	RJ-45 Jack x 1	
RS232 Connector	DB9 Female x 1	
IR IN	3.5 ψ Stereo Jack x 1	
IR OUT	3.5 ψ Stereo Jack x 1	
LED	4-in 1 LED Stack	
DC Jack	48-v	None
Max. Resolution	4K@60Hz / 4:4:4	
Cable Distance	4K/60Hz 100 m (Max.)	1080P/60Hz 100 m (Max.)
Power Adapter (Min.)	DC 48-V with lock	
Power consumption	25W (MAX)	
Operating Temperature	0 ~ +55°C	
Storage Temperature	-10 ~ +50°C	
Relative Humidity	0% ` 90%	
External Power Supply	Input: 100VAC~240VAC, 50/60Hz; 48-VDC 0.5A	
Enclosure	Metal	
Weight	405g	410g
Dimensions (LxHxW)	182 x 20 x 114 mm	

Packing List

The ZIG-POEPRO-100A is packaged with the following items:

- 1x Transmitter (ZIG-POEPRO-100A “Tx”)
- 1x Receiver (ZIG-POEPRO-100A “Rx”)
- 1x Power adapter DC 48V with lock
- 1x IR Receiver
- 1x User Manual
- 8x foot pads

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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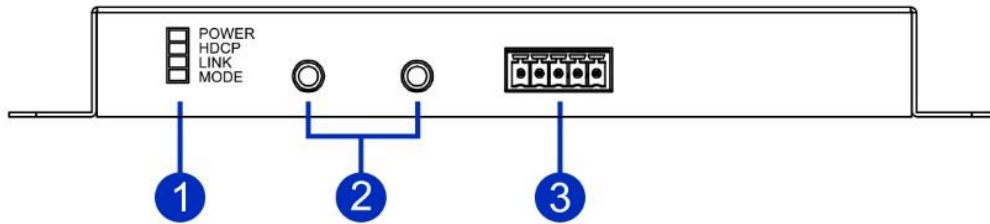
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Connection

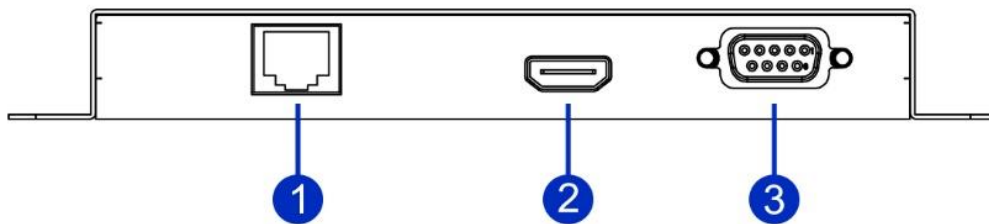
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Receiver Front & Back Panel

- 1 LED LIGHTS** - POWER / HDCP / LINK / MODE
- 2 IR** - IR OUT (for IR emitter) AND IR IN (for IR receiver)
- 3 PHOENIX CONNECTOR** – For 3rd party peripherals

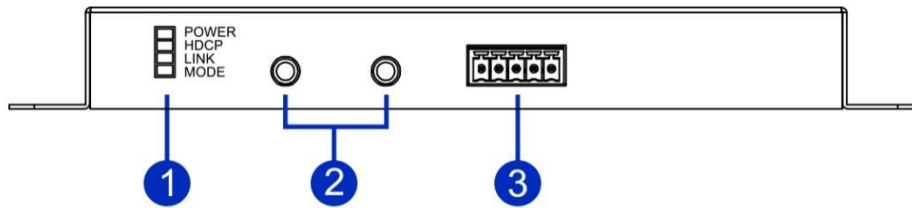


- 1 HDBT** - Connect using a CAT-6a cable.
- 2 HDMI OUT** – Connect with HDMI source.
- 3 RS-232** - Connect an RS-232 cable from this port to an RS-232 device.

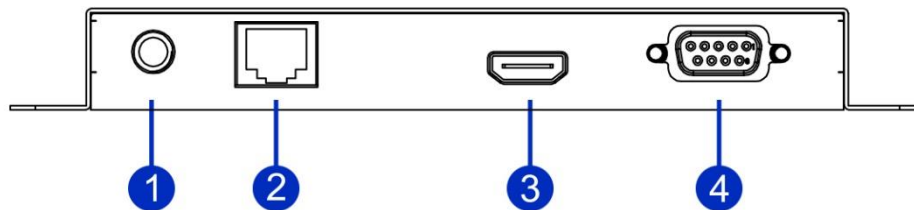


Transmitter Front & Back Panel

- 1 LED LIGHTS** - POWER / HDCP / LINK / MODE
- 2 IR** - IR OUT (for IR emitter) AND IR IN (for IR receiver)
- 3 PHOENIX CONNECTOR** – For 3rd party peripherals



- 1 48V DC** - power adaptor.
- 2 HDBT** - Connect using a CAT-6a cable.
- 3 HDMI IN** - Connect with HDMI source.
- 4 RS-232** – Connect an RS-232 cable from this port to an RS-232 device.



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.

IR Receiver Cable Directions

Plug the IR receiver into the ZIG-POEPRO100-RX “IR IN” port and place the IR receiver so you can point to it easily with your IR remote controller.

The IR receiver is designed to work on the “Rx” receive side of the extender.

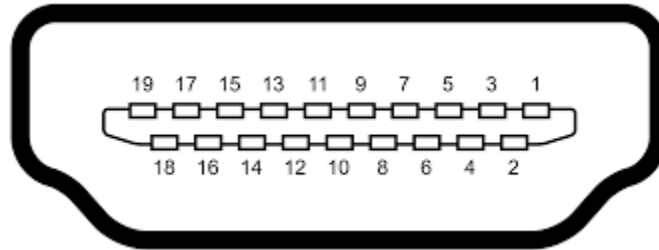
The IR input on the “Tx” transmitter side is designed to receive commands directly from control processor and is not intended to be used in conjunction with IR receiver.

If your setup requires you to install and send IR receiver target on the “Tx” transmitter side of the extender; we recommend using third party IR targets such as Xantech / Niles and these may be directly powered from “Tx” transmitter phoenix block.

IR Emitter Directions:

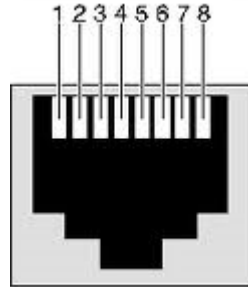
Plug any third party IR emitter into the ZIG-POEPRO-100-TX “IR OUT” port and place the IR sensor directly on the IR window on the front panel of the source device you intend to control.

Captive Screw Connections



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	Utility/HEAC+
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 / HEAC-
10	TMDS Clock +		

RJ-45 Wiring Information & Coding



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



HDBaseT Receiver



CAT-6a Recommended
Extend HDMI signals up to
100 meter / 330 feet 4k



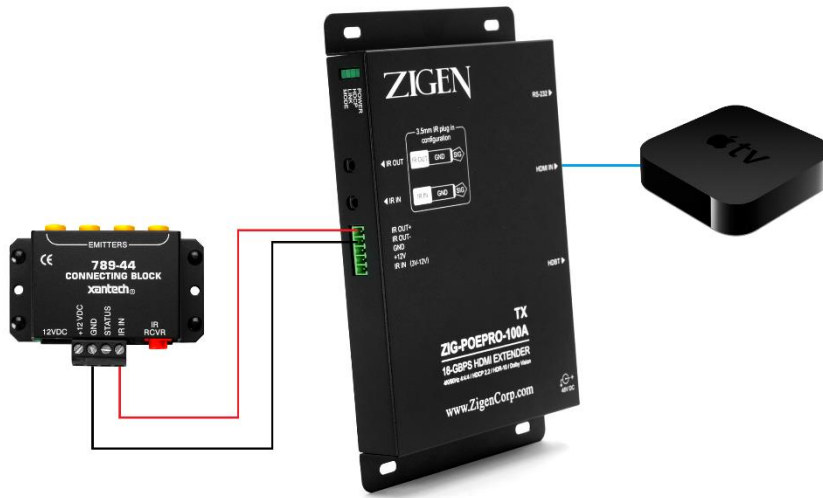
HDMI IN



HDMI OUT



3rd Party Peripheral Connection Example



System Diagram

