

# ZIGEN

COMPLETE HD/IP  
CONNECTIVITY SOLUTIONS

## Zigen ZIG-RAE

18G HDMI Repeater and Audio Extractor



4K 60 Hz 4:4:4  
HDCP 2.2

ZIG-RAE USER MANUAL  
REVISION 2017.11.01

# 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, Inc. 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, Inc. will repair or replace a product to its original operating condition. A return authorization number must be obtained from Zigen, Inc. before products are returned for service.

## Non-Powered and Cable Products - Lifetime Limited Performance Warranty

Zigen, Inc. 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 the 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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# Features

- Supports stereo balanced L/R audio, analog RCA, and coaxial digital audio output ports.
- Supports three audio modes: PASS, BITSTREAM, and PCM.
- HDMI input supports HDCP2.2, and the output supports HDCP1.4.
- Supports HDMI2.0 4K@60Hz/4:4:4 HDR, EDID & CEC pass-through.
- The transmission rate is up to 18Gbps.

# Packing List

The ZIG-RAE is packaged with the following items:

- 1 x ZIG-RAE HDMI Repeater and Audio Extractor
- 1 x Power Adaptor(12VDC,1A)
- 1 x 5-pin Phoenix Connector
- 4 x Plastic Cushions
- 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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# ZIG-RAE Introduction

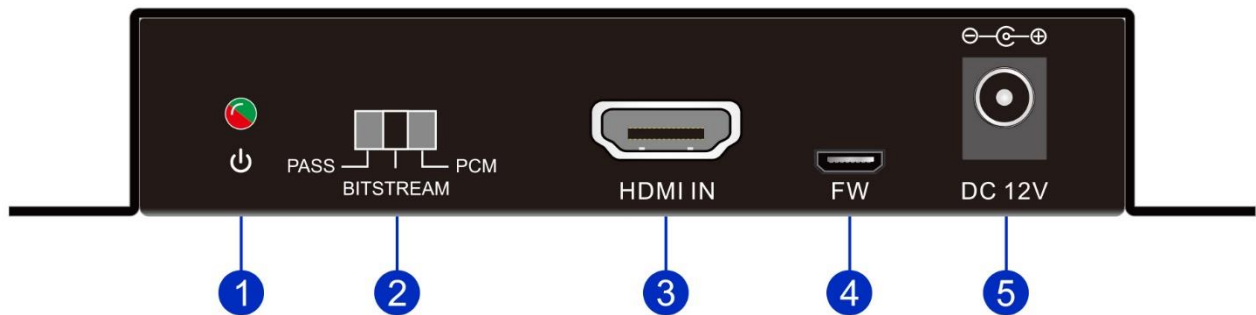
The ZIG-RAE is a simple HDMI2.0 audio de-embedder and extractor. Audio is extracted from HDMI input and the output on stereo balanced L/R audio, analog RCA, and coaxial digital audio connectors.

It supports 4K@60Hz/4:4:4 HDR, EDID & CEC pass-through, transmission rate is up to 18Gbps. The slide switch on the front panel allows selection of different audio modes to ensure compatibility with different receivers.

*\* The ZIG-RAE extracts 2-Channel PCM audio only.*



# ZIG-RAE Front Panel Description



## Front Panel

**1 Bicolor LED:** RED when powered on, GREEN when HDMI signal input.

### **2 Audio Modes Switcher:**

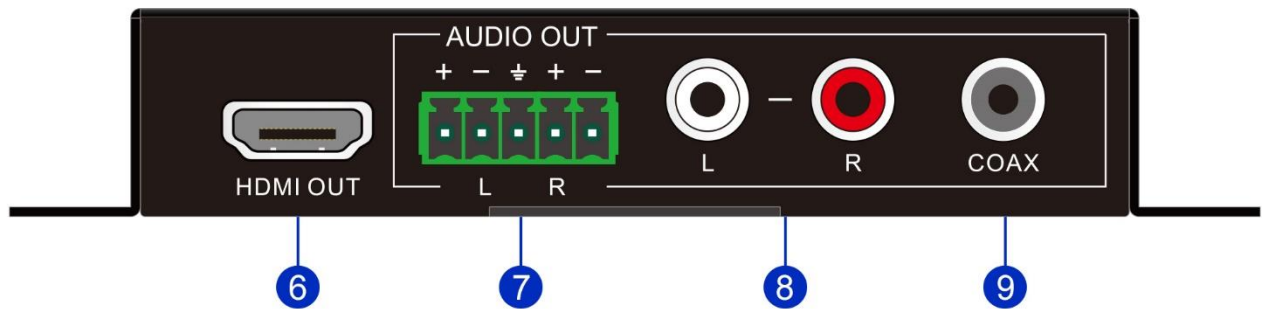
- PASS (default): The source device obtains its EDID from display.
- BITSTREAM: If the display only supports PCM, and the format of audio source is DTS/Dolby, the switcher should be turned to BITSTREAM to ensure the DTS/Dolby audio can be sent via HDMI and coaxial digital audio ports (⑥&⑨), there will be no audio output on analog ports(⑦&⑧).
- BITSTREAM: If the format of source audio is PCM, and needs to be DTS/Dolby: Slide switch to PASS mode(⑦&⑧).
- PCM: If the digital audio need to be output via analog audio ports (⑦&⑧), the switcher should be positioned to PCM, and the coaxial audio port (⑨) will also output PCM audio.

**3 HDMI IN:** Connect to HDMI source.

**4 FW:** Firmware upgrade.

② **5 DC 12V:** Connect with the included power adaptor.

# ZIG-RAE Back Panel Description



## Back Panel

- 6 HDMI OUT:** Connect with HDMI display.
- 7 BALANCED AUDIO:** Stereo balanced L/R audio output.
- 8 RCA (L+R):** analog RCA audio output..
- 9 COAX:** Coaxial digital audio output.

# Application Diagram (sample)



# Specifications

| <b>Video</b>       |  |
|--------------------|--|
| Input              | (1) HDMI   |
| Input Connector    | (1) 19-pin type-A female HDMI 2.0, HDCP 2.2                        |
| Output             | (1) HDMI   |
| Output Connector   | (1) 19-pin type-A female HDMI 2.0, HDCP 1.4                        |
| <b>Audio</b>       |  |
| Output             | (1) Stereo balanced audio L/R; (1) Analog audio L+R ; (1) COAX     |
| Output Connector   | (1) 5-Pin phoenix connector; (1) RCA ; (1) Coaxial audio connector |
| Audio Format       | Support Dolby D (True HD) / DTS (HD-Master Audio) / PCM            |
| <b>General</b>     |  |
| Max data rate      | 18 Gbit/s  |
| Max Resolution     | 4Kx2K@60Hz 4:4:4   |
| Temperature        | -10~55℃  |
| Reference Humidity | 10% ~ 90%  |
| Power Consumption  | 3 W (Max)  |
| Power Supply       | Input: 100VAC~240VAC, 50/60Hz; Output: 12VDC 1A                    |
| Dimension (W*H*D)  | 129mm x 21.5mm x 77 mm   |
| Net Weight         | 244g   |