VE2812R

HDMI HDBaseT Receiver with Audio De-Embedding (4K@100m) (HDBaseT Class A)

The VE2812R is a high-quality HDMI HDBaseT Receiver featuring audio de-embedding function. Powered by HDBaseT™ technology, the VE2812R can receive 4K HDMI signals up to 100 m over a single Cat 5e/6/6a or ATEN 2L-2910 Cat 6 cable.With HDBaseT Long Reach Mode enabled, it can deliver HDMI signals up to a maximum range of 150 meters @ 1080p.

The VE2812R's audio de-embedding function extracts the audio signal from the HDMI and converts it into Coaxial S/PDIF or Stereo Audio signal and delivers to an audio system that is separated from the display. Compatible with HDMI (3D, Deep Color, 4k) and HDCP 2.2, the VE2812R ensures reliable transmission of high-quality uncompressed HDMI signals.

The VE2812R is recommended to be deployed in paired with the VE2812T. The VE2812R can carry on IR/RS-232 from the VE2812T, allowing users to remotely control the VE2812T unit through RS-232 command mode via input port switching. The solution is deal for a variety of settings, such as meeting rooms, digital educational environment or wherever high video quality is required.
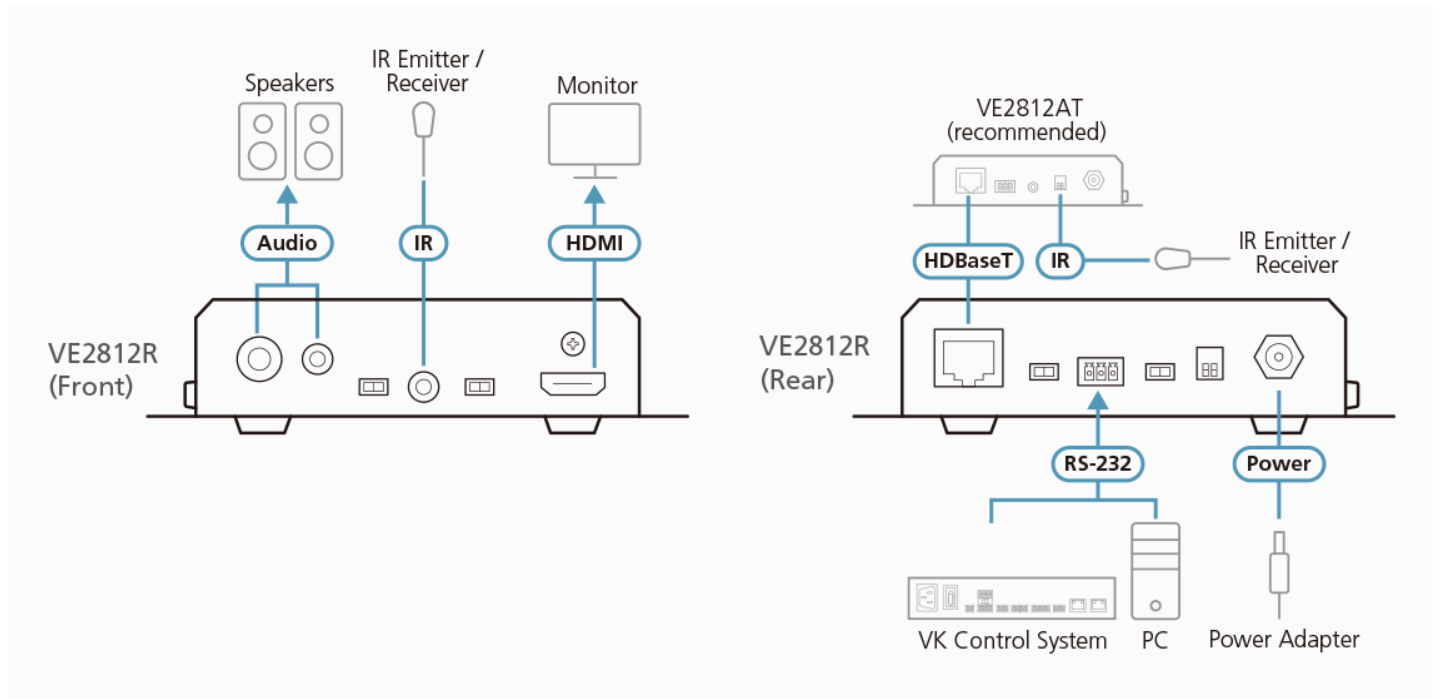
Features

- Superior video quality
  - 4K HDMI up to 100 m via a single Cat 5e/6/6a or ATEN 2L-2910 Cat 6 cable
  - 1080p up to 150 m via a single Cat 5e/6 cable in HDBaseT Long Reach Mode
- HDMI (3D, Deep Color, 4K); HDCP 2.2 compliant
- Supports Audio EDID Switching (2ch Stereo, 5.1ch Surround sound, and AUTO)
- Supports Audio De-Embedding – extracts audio stream from an HDMI source and delivers as a separate audio from HDMI, Coaxial S/PDIF, or Stereo audio output
- Features RS-232 Serial Communication Switch – Command mode and Bypass mode to meet application requirements
- Supports bi-directional IR signal transmission - two way IR protocol delivery by one IR port; IR transmission is processed one direction at a time
- Firmware upgradable
- Built- in 8KV / 15 KV ESD protection
- Plug-and-play
- Rack-mountable using the VE-RMK1U

Specifications

Video Output	
Interfaces	1 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	3 m (2L-7D03H)
Video	
Max. Data Rate	10.2Gbps (3.4Gbps per lane)
Max. Pixel Clock	340 MHz
Compliance	HDMI (3D, Deep Color, 4K) HDCP2.2 Compatible Consumer Electronics Control (CEC)

Max. Resolution	*4K supported: 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0); 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)
Max. Resolutions / Distance	Up to 4K@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@100m (Cat 5e/6/6a)
Audio	
Output	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x SPDIF Coaxial Female (Orange)
Connectors	
Unit To Unit	1 x RJ-45 Female
Power	1 x DC Jack (Black) with locking
Control	
RS-232	Connector: 1 x Terminal Block, 3 pole; Type: DTE Baud Rate: 115200, Data Bits:8, Stop Bits:1, no parity and flow control
IR	1 x Mini Stereo Jack Female (Black)
Power Consumption	DC5V:4.98W:43BTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Switches	
HDMI Mute	1 x Slide Switch - HDMI Audio ON/OFF
Audio EDID Selection	1 x Slide Switch - Audio Output Format Selection: 2ch / 5.1ch / AUTO
Mode Selection	1 x Slide Switch - RS-232 Bypass or Command mode Selection
Long Reach Mode Switch	1 x Slide Switch - Long Reach mode ON/OFF
Firmware Upgrade	1 x Slide Switch - Firmware Upgrade mode ON/OFF
Environmental	
Operating Temperature	0 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	0.46 kg (1.01 lb)
Dimensions (L x W x H) with bracket	14.53 x 12.30 x 3.00 cm (5.72 x 4.84 x 1.18 in.)
Dimensions (L x W x H) without bracket	13.60 x 10.10 x 2.90 cm (5.35 x 3.98 x 1.14 in.)

Diagram