

# HDMI HDBaseT™ Receiver with Audio De-embedding / Bi-directional PoH

## VE2812PR

Featuring powerful Class A HDBaseT technology, the VE2812PR is a receiver for 4K HDMI video, audio, and control signals over a distance of up to 100 m via a Cat 5e / 6 / 6a or ATEN 2L-2910 Cat 6 cable. HDMI signal transmission extends further up to 150 m @ 1080p when the HDBaseT Long Reach Mode is enabled.

Designed to optimize flexibility, the VE2812PR ships with 2-way PoH capability, either allowing a PoH PD-enabled Tx (VE2812AT series is recommended) to be remotely powered by the locally powered VE2812PR, or enabling power distribution along the cable from a PoH PSE-enabled Tx (VE1812T is recommended) to the VE2812PR. Speaking of VE2812PR's audio de-embedding, audio signal can be extracted from the incoming HDMI source and then transmitted through Coaxial or Stereo output to external audio distribution systems. The VE2812PR gives users the extra convenience when it comes to extending control and communication signals via the built-in RS-232 and bi-directional IR ports. Plus, it is HDCP 2.2 compliant and supports HDMI specification features, such as 4K2K, 3D, Deep Color, and CEC for reliable transmission of high-quality uncompressed HDMI content.

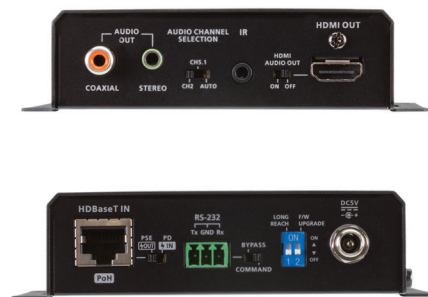
With all highlights packed in a compact enclosure, the VE2812PR assures easy and discreet installation, keeping the presentation space tidy. It is ideal for small / mid-sized areas where 4K HDMI and control signal transmission over a long distance is required, such as boardrooms, lecture halls, and digital signage applications.



Top View

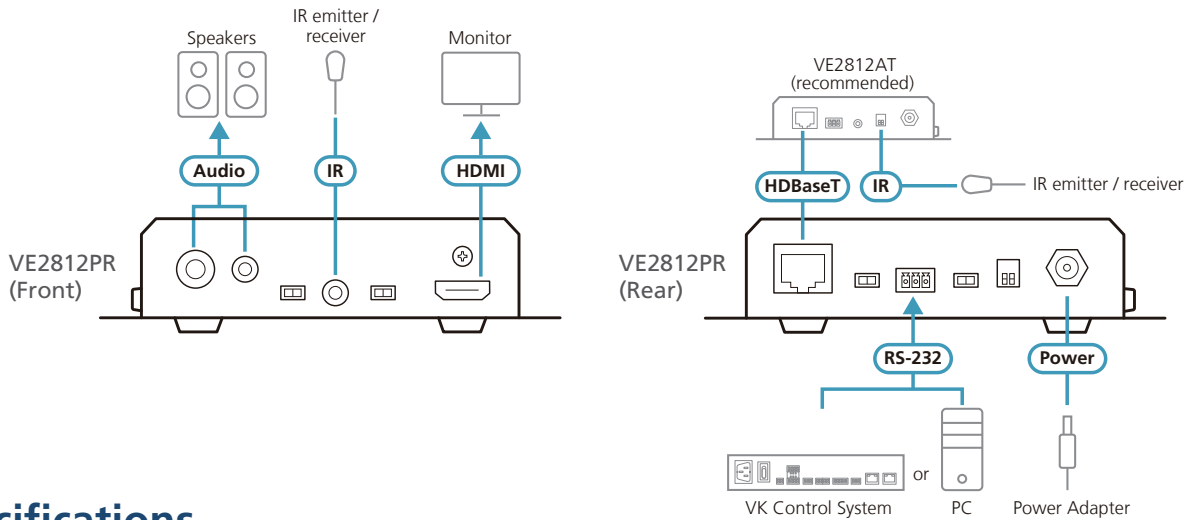


Side View



## Features

- Transmits 4K HDMI up to 100 m / 330 ft via a Cat 5e / 6 / 6a or ATEN 2L-2910 Cat 6 cable
- Transmits HDMI up to 150 m / 492 ft. @ 1080p in HDBaseT Long Reach Mode
- Bi-directional PoH :
  - allows a PoH PD-enabled Tx to be remotely powered by the locally powered VE2812PR
  - enables power distribution from a PoH PSE-enabled Tx to the VE2812PR over the cable
- Audio de-embedding — extracts audio stream from the HDMI source and delivers as a separate audio from HDMI to Coaxial S/PDIF, or Stereo audio output
- Supports Audio EDID Switching (2ch Stereo, 5.1ch Surround sound, and AUTO)
- RS-232 serial communication switch — switch between command mode and bypass mode for various application requirements
- Supports bi-directional IR signal transmission (IR transmission is processed one direction at a time)
- HDMI (3D, Deep Color, 4K); HDCP 2.2 compliant
- Firmware upgradable
- Built-in 8KV / 15 KV ESD protection
- Plug-and-play
- Rack-mountable using the VE-RMK1U



## Specifications

	VE2812PR
<b>Video Output</b>	
Interfaces	1 x HDMI Type-A Female (Black)
Impedance	100 Ω
Max. Distance	3 m
<b>Video</b>	
Max. Data Rate	10.2 Gbps (3.4 Gbps per lane)
Max. Pixel Clock	340 MHz
Compliance	HDMI (3D, Deep Color, 4K); HDCP 2.2 Compatible; Consumer Electronics Control (CEC)
Max. Resolution	*4K supported: 4096 x 2160 / 3840 x 2160 @ 60 Hz (4 : 2 : 0) ; 4096 x 2160 / 3840 x 2160 @ 30 Hz (4 : 4 : 4)
Max. Resolutions / Distance	Up to 4K @ 70 m (Cat 5e / 6) / 100 m (Cat 6a / ATEN 2L-2910 Cat 6); 1080p @ 100 m (Cat 5e / 6 / 6a)
<b>Audio</b>	
Output	1 x HDMI Type-A Female (Black); 1 x Mini Stereo Jack Female (Green); 1 x SPDIF Coaxial Female (Orange)
<b>Control</b>	
RS-232 Channel	Connector: 1 x Terminal Block, 3-Pole ; Type: DTE; Baud Rate: 115200, Data Bits: 8, Stop Bits:1, no parity and flow control
IR Channel	1 x Mini Stereo Jack Female (Black), bi-directional full range IR bypass channel
<b>Switches</b>	
Power Selected	1 x Slide Switch - PoH Power Selection: PSE / PD
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
<b>Connectors</b>	
Unit To Unit	1 x RJ-45 Female
Power	1 x DC Jack (Black) with locking ; 1 x RJ-45 Female, PoH PD & PSE supported
<b>Power Consumption</b>	
	DC5V:5.83W:27 PoH:7.28W:34
<b>Environmental</b>	
Operating Temperature	0 - 40 °C
Storage Temperature	-20 - 60 °C
Humidity	0 - 80 % RH, Non-Condensing
<b>Physical Properties</b>	
Housing	Metal
Weight	0.5 kg
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.)

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