EXT-UHDA-HBTL-RX

4K Ultra HD HDBaseT™ Receiver with Audio De-Embedder and POH

EXTEND HDMI WITH AUDIO BREAKOUT UP TO 70 M / 230 FT, OVER A SINGLE CAT-5

The Gefen EXT-UHDA-HBTL-RX is a high-performance HDBaseT™ Receiver that can extend HDMI up to 70 meters (230 feet) at 1080p and 40 meters (130 feet) at 4K, over a single CAT-5e cable. It also de-embeds analog L/R, TOSLINK® optical digital, and coaxial digital audio from the video for use with a separate audio system, enhancing the impact of presentations. This Receiver uses Gefen's implementation of the HDBaseT™ technology with enhanced functionality. It accommodates 10.2 Gbps of data throughput and 300 MHz TMDS Clock frequency, and supports HDMI 2.0 resolutions up to 4K Cinema-DCI (4096 x 2160 to 30 Hz 4:4:4) and 4K Ultra HD (3860 x 2160

to 60 Hz, 4:2:0, or 30 Hz 4:4:4), with HDCP 2.2 or 1.4. Highest performance multichannel digital audio including 7.1 channels of LPCM and HBR (High Bit Rate) digital audio formats, such as Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ are passed through to the HDMI output. The EXT-UHDA-HBTL-RX also extends RS-232 and 2-way IR when used with a compatible Sender unit, facilitating the control of A/V sources placed near the Sender from the viewing location, and sending commands from the head end to control the display or another device placed near the Receiver unit. It can also send RS-232 commands from a third-party controller placed by the Receiver, for switching, scaler controls, and EDID management of a compatible Sender unit. Bi-Directional HDBaseT™ standard POH (Power Over HDBaseT™) technology can supply power remotely from the Receiver unit to a compatible Sender unit, or it can pass power

from a compatible Sender unit to the Receiver, using the same CAT-5 cable that extends the HDMI signal. Only one of the two units will need a power supply. This feature simplifies installation in cases when an electrical outlet may not be available near the source or the display. The Receiver's small, ultra-low-profile enclosure can be securely surface-mounted and conveniently hidden away from sight behind the display. It also accommodates a Gefen locking power supply plug for secure connection.

Note:
Shielded (STP) CAT-5e or better cable is recommended. Unshielded (UTP) CAT-5e or better cable may be acceptable depending on cable quality but is not the preferred choice. Care should always be given to keep these cables away from power lines and other sources of electromagnetic interference.
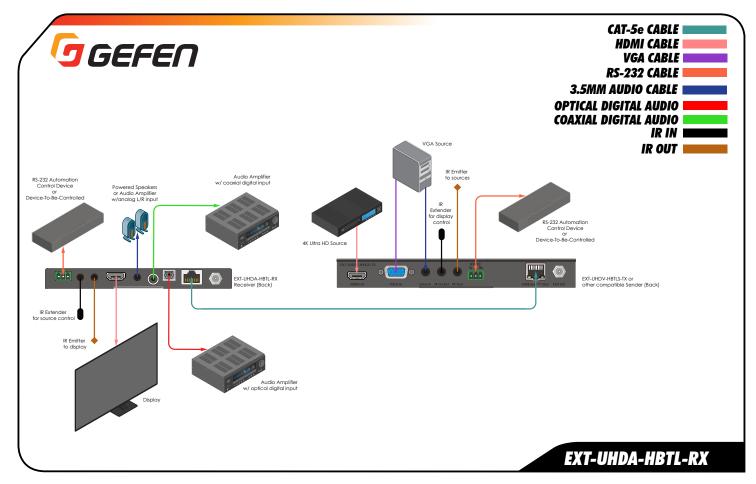
FEATURES*

- Supports 300 MHz TMDS Clock and data throughput of up to 10.2 Gbps
- Extends HDMI, 2-way IR, and RS-232 over a single CAT-5e:
  - 4K Ultra HD (3840 x 2160 @ 60 Hz, 4:2:0), up to 130 feet/40 meters (8-bit color)
  - 4K Ultra HD (3840 x 2160 @ 30 Hz, 4:4:4), up to 130 feet/40 meters (8-bit color)
  - 4K Cinema-DCI (4096 x 2160 @ 24 or 30 Hz 4:4:4), up to 130 feet/40 meters (8-bit color)
  - 1080p Full HD (60 Hz) or WUXGA (1920x1200 @ 60 Hz), up to 230 feet/70 meters (up to 12-bit Deep Color)
- HDMI Features Supported:
  - HDMI 2.0
  - HDCP 2.2 and 1.4
  - 12-bit Deep Color (at 1080p)
  - LPCM 7.1, Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ pass-through
  - 3DTV pass-through
  - CEC pass-through
  - Lip Sync pass-through
- RS-232 control of switching, scaler, and EDID management functions of a compatible Sender
- Bi-Directional RS-232 extension when used with a compatible Sender

- 2-way IR extension when used with a compatible Sender
- Digital (optical and coaxial) and Analog audio breakout
- Bi-Directional Power over HDBaseT™ (POH) provides power to the Receiver or a compatible Sender unit over the link cable - only one side will need external power
- Uses Gefen's implementation of HDBaseT™ technology with enhanced features
- Field-updateable firmware via RS-232 and using the Gefen Syner-G™ software
- Locking power connector
- Compact, ultra-low-profile enclosure is surface-mountable and can be hidden away

SPECIFICATIONS*

- Maximum TMDS Clock: 300 MHz
- Total Signal Bandwidth/Data Rate: 10.2 Gbps
- Video Output Connector: (1) HDMI Type A 19-pin, female
- Link Connector: (1) RJ-45, shielded
- L/R Analog Audio Output port: (1) 3.5mm mini-stereo jack
- Optical Digital Audio Output port: (1) TOSLINK®
- Coaxial Digital Audio Output port: (1) RCA, female
- RS-232 port: (1) 3-pin Phoenix
- IR In/Ext port: (1) 3.5mm mini-stereo jack
- IR Out port: (1) 3.5mm mini-mono jack

- IR Extender type: EXT-RMT-EXTIRN
- Power Indicator LED: (1) Blue
- Link Indicator LED: (1) Green
- HDCP Indicator LED: (1) Green
- RS-232 Pass-Thru/Prog Switch: (1) 3-position, slide-type
- Power Supply: (1) 12V DC, locking, 5.5mm barrel/2.1mm pin
- Power Consumption:
  - Not powering a Sender: 9W maximum
  - Powering a Sender: 22W maximum
- Operating Temperature: +32 to +122 °F (0 to +50 °C)
- Operating Humidity: 5% to 90% RH, non-condensing
- Storage Temperature: -4 to +185 °F (-20 to +85 °C)
- Storage Humidity: 0% to 95% RH, non-condensing
- MTBF: 50000 hours
- Overall Dimensions (W x H x D, not including the connectors):
  - Not including the mounting brackets: 6" x 0.65" x 4" (152mm x 17 x 100mm)
  - Including the mounting brackets: 7" x 0.65" x 4" (178mm x 17 x 100mm)
- Net Weight: 0.6 lbs. (0.27 kg)
- Shipping Weight: TBD

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