4K Ultra HD HDBaseT 2.0 Extender
with Ethernet, RS-232, 2-way IR, 2-way Audio, and Bi-Directional POH
EXT-UHDA-HBT2

The EXT-UHDA-HBT2 uses Gefen's implementation of the latest HDBaseT™ 2.0 technology to extend HDMI up to 330 feet (100m) at 4K, using one CAT-5e cable. 1080p Full HD and 1920 x 1200 (WUXGA) 8-bit video can be extended up to 495 feet (150 meters). The new HDBaseT™ 2.0 Colligo™ platform provides additional features such as 2-way audio extension and ensures an even more robust and resilient connection than the industry standard HDBaseT™. Resolutions up to 4K DCI-Cinema (4096 x 2160 @ 30 Hz 4:4:4) and 4K Ultra HD (3840 x 2160 @ 60 Hz 4:2:0) along with 7.1 channels of LPCM and HBR (High Bit Rate) lossless digital audio are supported. Supported HBR formats include Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™. Ethernet connection for a Smart TV can be extended from the source side to the viewing location without the need to run a separate cable. RS-232 and 2-way IR are transferred between the Sender and the Receiver to control the A/V source and the display. TOSLINK® Optical Digital Audio can be sent from the viewing location back to the source and analog audio can be extended from the source side to the Receiver. Bi-Directional POH (Power Over HDBaseT™) technology provides power from the Sender to the Receiver and vice versa, using the same CAT-5 cable that extends the HDMI and control signals. Only one of the two units needs an external power supply. The POH standard ensures compatibility with other POH class-compliant devices. The Gefen Syner-G™ software with its powerful EDID Management capabilities speeds up configuration, performs real-time performance audits via Link Monitoring, and simplifies in-field firmware updates. Low profile, surface-mountable Sender and Receiver units fit in tight places and accommodate Gefen locking HDMI cables for secure connections.

Installation Tip: Shielded (STP) CAT-5e or better cable is recommended. Unshielded (UTP) CAT-5e or better cable may be acceptable depending on cable quality, but results could vary. Care should always be taken to keep the link cable away from power lines and other sources of electromagnetic interference.

Features*
- Extends HDMI, Ethernet, RS-232, 2-way IR, and 2-way Audio over a single CAT-5e
  - 4K Ultra HD (3840 x 2160 @ 60Hz, 4:2:0, 8-bit), up to 330 feet/100 meters
  - 4K Ultra HD (3840 x 2160 @ 30Hz, 4:4:4, 8-bit), up to 330 feet/100 meters
  - 4K DCI-Cinema (4096 x 2160 @ 30Hz 4:4:4, 8-bit), up to 330 feet/100 meters
  - 1080p Full HD (1920 x 1080 @ 60Hz, 4:4:4, 12-bit), up to 330 feet/100 meters
  - 1080p Full HD (1920 x 1080 @ 60Hz, 4:4:4, 8-bit), up to 495 feet/150 meters
  - WUXGA (1920 x 1200 @ 60Hz, 8-bit), up to 495 feet/150 meters
- HDMI Features Supported:
  - HDMI 2.0 up to 4K 60Hz, 4:2:0, 8-bit color
  - HDCP 2.2 and 1.4
  - 12-bit Deep Color
  - LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ pass-through
  - 3DTV pass-through
  - CEC pass-through
  - Lip Sync pass-through
- IR extension from Sender to Receiver and from Receiver to Sender
- TOSLINK® Optical Digital Audio extension from Receiver to Sender
- Analog L/R Stereo Audio extension from Sender to Receiver
- Bi-Directional POH (Power Over HDBaseT™) feature provides power to the Sender or the Receiver unit over the link cable - only one side needs external power
- Advanced EDID Management via Gefen Syner-G™ software
- Link Quality Monitoring via Gefen Syner-G™ software
- In-field firmware update via USB, using Gefen Syner-G™ software
- Locking power connector
- Low profile, surface-mountable enclosures

Specifications*
- Maximum Pixel Clock: 300 MHz
- Video Input connector (Sender): (1) HDMI Type A 19-pin, female, locking
- Video Output connector (Receiver): (1) HDMI Type A 19-pin, female, locking
- Link connector (Sender/Receiver): (1) RJ-45, shielded, female
- Ethernet port (Sender/Receiver): (1) RJ-45, shielded, female
- RS-232 port (Sender): (1) DB-9, female
- RS-232 port (Receiver): (1) DB-9, male
- Optical Digital Audio Input connector (Receiver): (1) TOSLINK®, female
- Optical Digital Audio Output connector (Sender): (1) TOSLINK®, female
- Analog L/R Stereo Audio Input connector (Sender): (2) RCA, female
- Analog L/R Stereo Audio Output connector (Receiver): (2) RCA, female
- IR Ext/In port (Sender/Receiver): (1) 3.5mm mini-stereo jack
- IR Extender type: EXT-RMT-EXTIRN
- IR Out port (Sender/Receiver): (1) 3.5mm mini-mono jack
- USB port (Sender/Receiver): (1) Mini-B (for Gefen Syner-G™ interface)
- Power/Video/Link Indicator LEDs (Sender/Receiver): (1) Blue, (1) Amber, (1) Green
- Power Supply connector (Sender/Receiver): (1) 48V DC, locking
- Power Consumption (Sender and Receiver combined): 14W
- 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
- Dimensions (W x H x D, Sender/Receiver, not including connectors): 8.4" x 1" x 4" (214mm x 25mm x 100mm)
- Net Weight (Sender/Receiver): 0.75 lbs (0.35 kg) each
- Shipping Weight: 4.5 lbs. (2.0 kg)

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Version A1