

# EXT-UHDV-WP-HBTL5-TX



4K Ultra HD Multi-Format 2x1 HDBaseT™ Wall-Plate Sender  
with Scaler, Auto-Switching, and POH



## AUTO-SWITCH 4K ULTRA HD HDMI AND VGA, SCALE, AND EXTEND UP TO 70 M / 230 FT, OVER A SINGLE CAT-5

The Gefen EXT-UHDV-WP-HBTL5-TX is a high-performance solution in standard US electrical wall-plate form factor for switching 4K Ultra HD HDMI and VGA inputs, and extending them up to 70 meters (230 feet) at 1080p and 40 meters (130 feet) at 4K, over a single CAT-5e cable. Switching between the HDMI and VGA can be set to Automatic or be done manually via the front panel button or RS-232. It supports 10.2 Gbps of data throughput and 300 MHz TMDS Clock frequency, accepting HDMI 2.0 signals up to 4K 60 Hz 4:2:0 or 4K 30 Hz 4:4:4. This extender uses Gefen's implementation of the HDBaseT™ technology with enhancements such as Advanced EDID Management. The HDMI input accommodates 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

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 VGA input features a companion L/R analog audio input, and accepts VESA and CEA resolutions up to WUXGA (1920 x 1200 to 60 Hz, 4:4:4) and 1080p Full HD (1920 x 1080 at 60 Hz, 4:4:4). A powerful built-in scaler can upscale lower resolution VGA signals with legacy aspect ratio to widescreen WUXGA, ensuring stunning presentations and smooth switching transitions between the HDMI and the VGA sources. The EXT-UHDV-WP-HBTL5-TX extends RS-232 when used with a compatible Receiver unit such as the Gefen EXT-UHDA-HBTL-RX, facilitating the control of A/V sources placed near the Sender from the viewing location, and sending automation commands to the display or another device placed near the Receiver unit. It also accepts RS-232 commands for switching, scaler controls, and EDID management from a third-party controller placed near the Sender or remotely by the Receiver. HDBaseT™ standard POH (Power Over HDBaseT™) technology

powers the Sender remotely from the Receiver unit, using the same cable that extends the HDMI signal. This feature simplifies installation in many cases where supplying power directly to the wall-plate is not practical. Alternatively, if powering the wall-plate Sender from the Receiver unit is not feasible, a separately available power supply can be hard-wired to a detachable "captive-screw" Phoenix connector on the back of the wall-plate. The Sender uses the North American standard 2-gang wall-plate form factor and can work with most "open-back" low-voltage installation brackets and table boxes. It is compatible with most standard North American Decora® wall-plates (a white-colored wall-plate is included). It also accommodates Gefen locking HDMI cables for secure and reliable connections.

### 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\*

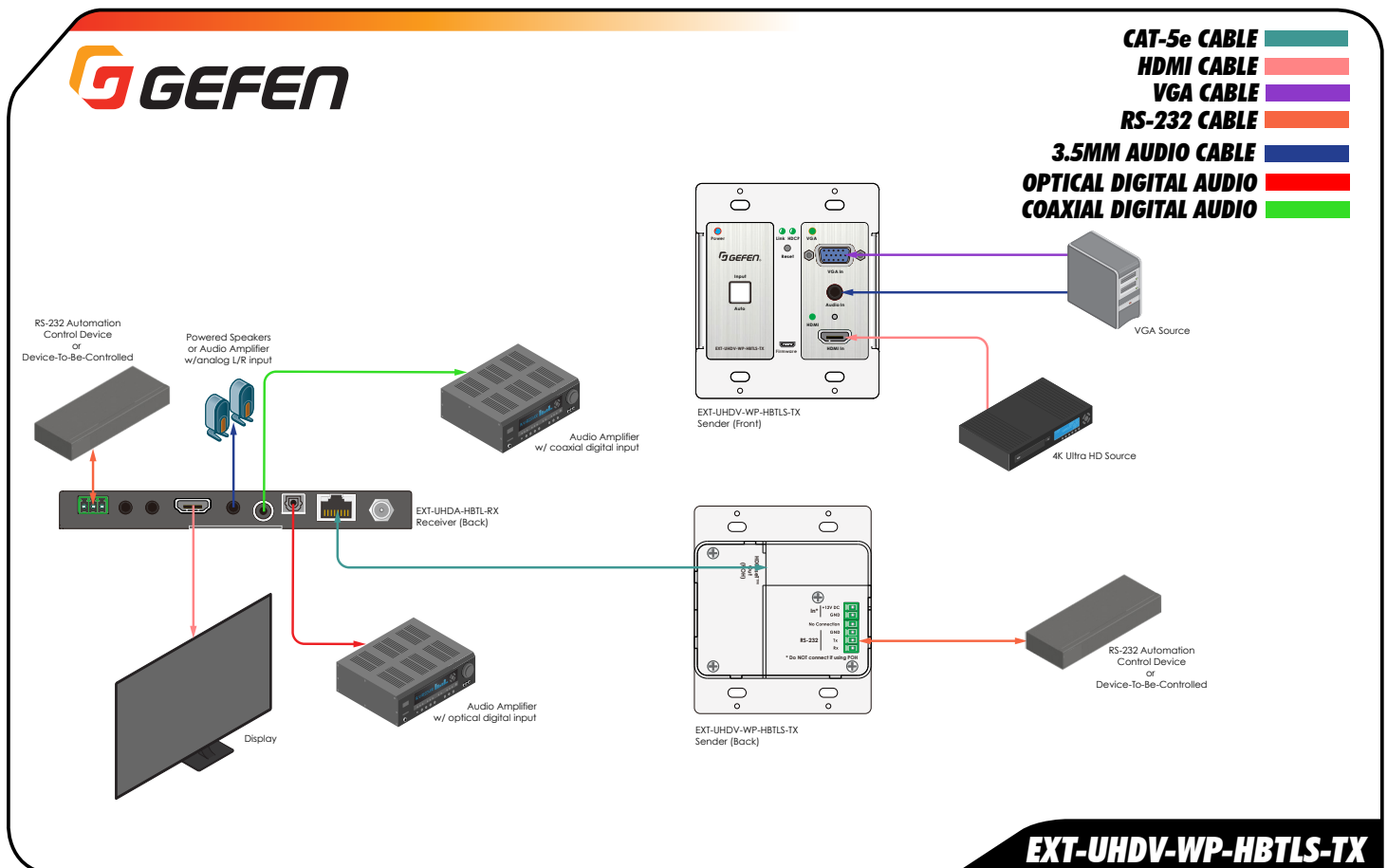
- Supports 300 MHz TMDS Clock and data throughput of up to 10.2 Gbps
- Automatic switching of 4K HDMI and VGA
- Manual switching of 4K HDMI and VGA via front panel button or RS-232
- VGA scaling up to 1920 x 1200 with picture adjustments
- Extend HDMI, VGA with analog audio, and RS-232 over a single 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 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
- Analog L/R audio input for VGA

- RS-232 control of switching, scaler, and EDID management functions
- Bi-Directional RS-232 extension when used with a compatible Receiver
- Power over HDBase™ (POH) provides power to the Sender from a compatible Receiver over the link cable
- Sender can also be locally powered using the 2-pin Phoenix connector on back panel
- Uses Gefen's implementation of HDBase™ technology with enhanced features
- Advanced EDID Management for rapid integration of source and display
- Field-updateable firmware via mini-USB port, using the Gefen Syner-G™ software
- North American standard 2-gang wall-plate form factor
- Works with most standard North American 2-gang Decora® wall-plates (white wall-plate is included)
- Works with most North American 2-gang table boxes and "open-back" low-voltage installation brackets

- Link Connector: (1) RJ-45, shielded
- RS-232 port: (1) 4-pin Phoenix
- DC In port: (1) 2-pin Phoenix
- Firmware Update port: (1) USB-Mini-B, female
- Power Indicator LED: (1) Blue
- Link Indicator LED: (1) Green
- HDCP Indicator LED: (1) Green
- HDMI Input Indicator LED: (1) Green
- VGA Input Indicator LED: (1) Green
- Auto-Manual Switch: (1) tact-type
- Power Requirement: Powered through POH from a compatible Receiver (recommended), or via the Phoenix connector on back panel, using a hard-wired 12V 1~2A DC power supply
- Recommended Power Supply (sold separately): EXT-PS121.5AIP-3P-6 (DC plug needs to be removed)
- Power Consumption: 6W 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): 3.5" x 4.2" x 1.74" (89mm x 104.5mm x 44mm)
- Mounting Cavity Dimensions (W x H x D, behind the mounting plate): 3.6" x 2.8" x 2" (92mm x 72mm x 50mm)
- Net Weight: 0.6 lbs (0.27 kg)
- Shipping Weight: TBD

## SPECIFICATIONS\*

- Recommended Receiver: EXT-UHDA-HBTL-RX
- Maximum TMDS Clock: 300 MHz
- Total Signal Bandwidth/Data Rate: 10.2 Gbps
- Video Input Connector:
  - (1) HDMI Type A 19-pin, female, locking
  - (1) VGA HD-15, female
- L/R Analog Audio Input port:
  - (1) 3.5mm mini-stereo jack



\* Features and specifications are subject to change without notice.

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