EXT-UHDV-KA-LANS-TX
EXT-UHDV-KA-LANS-RX

EXTEND AND DISTRIBUTE 4K HDMI, VGA, USB, RS-232, IR, AND 2-WAY AUDIO OVER A LOCAL AREA NETWORK

Gefen's Video over IP solutions continue our tradition of providing high performance, scalable, expandable, and secure AV routing and distribution over a standard Gigabit Local Area Network. The Gefen 4K Ultra HD and VGA KVM over IP extends HDMI, VGA, USB, 2-way audio, RS-232, and IR. Input resolutions up to 4K 60 Hz 4:2:0 and HDR, and output resolutions up to 4K 30 Hz 4:4:4 are supported along with HDCP 2.2 and 1.4, and 7.1 channels of HBR (High Bit Rate) lossless and LPCM digital audio.

The Gefen EXT-UHDV-KA-LANS-TX and RX feature HDMI and VGA inputs and outputs, and can support DVI when using Gefen HDMI-to-DVI cables. The Sender unit also features a VGA output for local monitoring of the source. The VGA input and output support VESA resolutions up to 1920x1200 at 60Hz (WUXGA). RS-232 and 2-way IR routing between the Sender and the Receiver units allows the transfer of IR commands and RS-232 communications among all sources and the displays. With HDMI and VGA selectable inputs, HDMI and VGA outputs, USB/KVM routing ability, 4K with HDR support, and an array of new cutting-edge enhancements, these Gefen Video over IP products fully address the ever-growing needs of systems integrators. PoE (Power over Ethernet) allows the new Sender and Receiver units to be powered through a standard PoE-enabled IP network switch, without the need for external power supplies. The video wall controller that is built into the Receivers accommodates any screen configuration up to 16x16 and provides great flexibility in sizing and manipulating live and signage content in demanding installations such as sports bars and restaurants, or in corporate, education, hospitality and retail establishments. Digital and analog audio break-out allows the audio from the HDMI output to be sent to a separate audio system, enhancing the impact of presentations in large venues. USB routing and the Receiver's USB hub with two USB 2.0 and two USB 1.1 ports accommodate touch panels, keyboard and mouse, and a variety of supported USB devices. This feature, along with analog audio inputs and outputs, make these products perfect to use in collaborative and interactive installations.

When used in conjunction with the EXT-CU-LAN Matrix Controller, system configuration is automated and quick. Enhanced network security by separating the control and AV networks is also made possible when used with EXT-CU-LAN. Other control options include front panel buttons, web server interface, Telnet, UDP, and the Gefen Keyboard Switching Controller software (available for download at www.gefen.com). Each cable run from a Sender to a Receiver or from a Sender or Receiver to the network switch can be up to 100 meters (330 feet). A built in 3-port Gigabit switch on each receiver allows the connection of additional receivers, providing daisy-chaining functionality. In applications such as digital signage, where there may be a need to replicate content on multiple displays throughout the installation, the ability to cascade receivers essentially removes the requirement for a cable to be connected directly to the main network switch, thereby extending the range of these units far beyond the limits of a point-to-point video distribution system.

The Sender and Receiver can be used as KVM extenders in a one-to-one system, or as nodes in a virtual matrix environment with a combination of just over 65,000 Sender and Receiver units where any source can be routed to any or all displays. The Sender features a 1U tall and half-rack-width enclosure, perfect for rack mounting using the Gefen EXT-RACK-1U-GRY rack tray (available separately). It can also be surface mounted or be placed on a shelf. The Receiver is also rack mountable using the rack tray, can be surface-mounted, or can be placed on a shelf. When used with the included IR Extender module, this low-profile unit can be hidden away behind a display or in the equipment closet.

FEATURES*

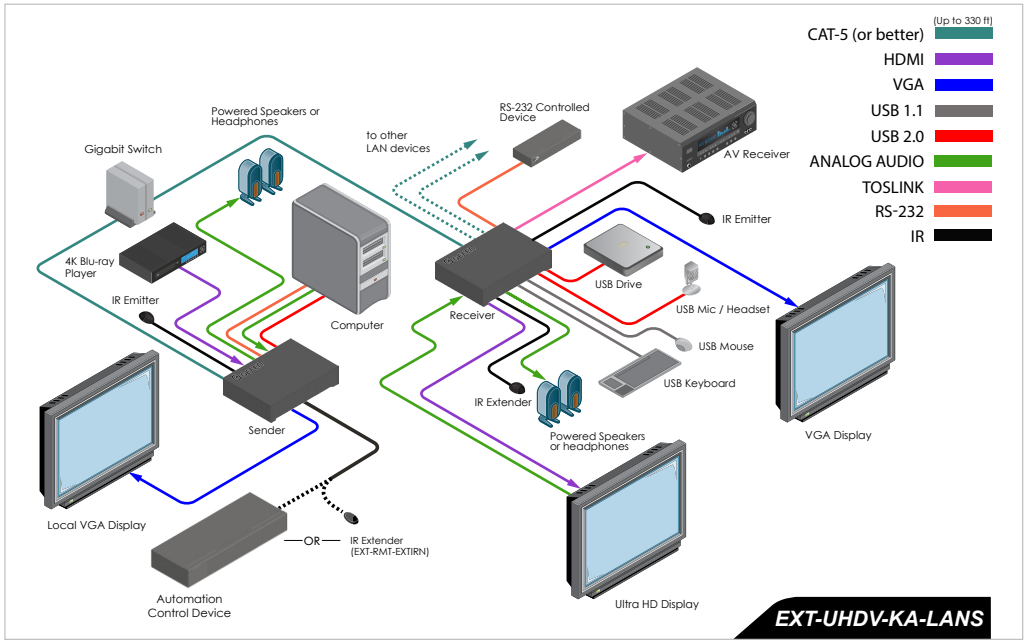
- Extends HDMI, VGA, USB, RS-232, bi-directional stereo analog audio, and IR over IP, using a Gigabit Local Area Network
- Supports input resolutions up to 4K 60Hz 4:2:0 on HDMI and up to 1920x1200, 60 Hz on VGA (WUXGA).
- Supports output resolutions up to 4K 30Hz 4:4:4 on HDMI and up to 1920x1200 60 Hz or 1080p Full HD on VGA
- Supported HDMI Features:
  - HDR
  - HDCP 2.2 and 1.4
  - Deep Color
  - Lip-Sync pass-through
- Supports uncompressed LPCM digital audio up to 7.1 channels
- Supports up to 7.1 channels of HBR (High Bit Rate) digital audio including Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™
- When used with Gefen DVI-to-HDMI cables (not included), supports the use of DVI sources and DVI displays up to 1080p Full HD and 1920x1200 (WUXGA)
- Built-in video wall controller accommodates any number of rows and columns up to 16x16
- Quick mass-firmware-update, automated configuration, and enhanced control capabilities and system security when used with the Gefen EXT-CU-LAN Matrix Controller
- Built-in web interface, Telnet, and UDP
- Compatible with the Gefen Keyboard Switching Controller software, available for download at www.gefen.com
- Supports 39,900 Senders and a combination of just over 65,000 Sender and Receiver units, depending on the network bandwidth and number of ports on your network switch
- Two USB 2.0 ports with data rates up to 480 Mbps and backward-compatibility with USB 1.1
- Two USB 1.1 ports for use with Human Interface Devices (H.I.D.)
- PoE (Power over Ethernet) allows the new Sender and Receiver units to be powered through a standard PoE-enabled IP network switch, without the need for external power supplies
- Three-port Gigabit Ethernet switch built into the Receiver unit
- Mode switch on Sender for sharpness or motion optimization of image
- Field-updatable firmware via EXT-CU-LAN controller or the built-in web server interface
- Locking power supply connectors
- Half-rack width Sender and Receiver enclosures are rack-mountable using EXT-RACK-1U-GRY
- Sender and Receiver can also be surface-mounted using the included L-brackets
- Low profile Receiver enclosure features an IR Extender port and can be hidden away behind the display

SPECIFICATIONS*

Video Input connector (Sender):	(1) HDMI Type A 19-pin, female, locking (1) HDMI VGA HD-15, female
Video Output connector (Sender):	(1) HDMI VGA HD-15, female
Video Output connector (Receiver):	(1) HDMI Type A 19-pin, female, locking (1) HDMI VGA HD-15, female
Line Input (Sender):	(1) 3.5mm mini-stereo jack
Line Output (Sender):	(1) 3.5mm mini-stereo jack
Line Input (Receiver):	(1) 3.5mm mini-stereo jack
Line Output (Receiver):	(1) 3.5mm mini-stereo jack
Optical Digital Audio Output (Receiver):	(1) TOSLINK®
USB Host Interface port (Sender):	(1) USB Type B, female
USB Device ports (Receiver):	(2) USB 2.0 Type A, female (2) USB 1.1 Type A, female
RS-232 port (Sender):	(1) DB-9, female
RS-232 port (Receiver):	(1) DB-9, male
IR Sensor (Receiver):	(1) Located on front panel
IR In/Ext (Sender/Receiver):	(1) 3.5mm mini-stereo jack
IR Out (Sender/Receiver):	(1) 3.5mm mini-mono jack
IR Extender type:	EXT-RMT-EXTIRN
Ethernet port (Sender):	(1) RJ-45, shielded, PoE
Ethernet ports (Receiver):	(3) RJ-45, shielded, 1 with PoE
Channel Up/USB-Request button (Receiver):	(1) tact-type
Channel Down button (Receiver):	(1) tact-type
HDMI/VGA Selector button (Receiver):	(1) tact-type
Mode button (Sender):	(1) tact-type, recessed
Reset button (Sender/Receiver):	(1) tact-type, recessed
Program button (Sender/Receiver):	(1) tact-type, recessed
Program Select switch (Sender/Receiver):	(1) slide-type, recessed
Link Indicator (Sender/Receiver):	(1) LED, green
Power Indicator (Sender/Receiver):	(1) LED, blue
Power Supply jack (Sender/Receiver):	5V DC, 2.5mm pin and 5.5mm barrel, locking
Power Requirement (Sender/Receiver):	5V DC or PoE
Power Consumption:	Sender: 8W Receiver: 19W
Operating Temperature (Sender/Receiver):	+32 to +122 °F (0 to +50 °C)
Operating Humidity (Sender/Receiver):	5% to 90% RH, non-condensing
Storage Temperature (Sender/Receiver):	-4 to +185 °F (-20 to +85 °C)
Storage Humidity (Sender/Receiver):	0% to 95% RH, non-condensing
MTBF:	Sender: 50000 hours Receiver: 50000 hours
Dimensions (W x H x D, without connectors or feet):	Sender: 8.4" x 1.7" x 4.3" (214mm x 43mm x 108mm) Receiver: 8.4" x 1.0" x 4.3" (214mm x 25mm x 108mm)
Unit Weight:	Sender: 1.7 lbs. (0.8 kg) Receiver: 1.5 lbs. (0.7 kg)
Shipping Weight:	Sender: 2.7 lbs. (1.3 kg) Receiver: 3.0 lbs. (1.4 kg)

NOTES:

1. When connecting through a Local Area Network, a managed gigabit switch is required. Jumbo frame support (8k or greater) and IGMP snooping must be enabled.
2. A dedicated LAN is not required but highly recommended.
3. When using HDCP-encrypted content, only the HDMI inputs and outputs can accept and display the content.



* Features and specifications are subject to change without notice.

1800 S McDowell Blvd. Petaluma CA 94954 - 800.472.5555