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.

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 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.

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.

SPECIFICATIONS

- Video Input connector (Sender):
- Video Output connector (Sender):
- Line Input (Sender):
- Line Output (Sender):
- Line Input (Receiver):
- Line Output (Receiver):
- Optical Digital Audio Output (Receiver):
- USB Host Interface port (Sender):
- USB Device ports (Receiver):
- RS-232 port (Sender):
- RS-232 port (Receiver):
- IR Sensor (Receiver):
- IR In/Ext (Sender/Receiver):
- IR Out (Sender/Receiver):
- IR Extender type:
- Ethernet port (Sender):
- Ethernet ports (Receiver):
- Channel up/USB-Request button (Receiver):
- Channel Down button (Receiver):
- HDMI/VGA Selector button (Receiver):
- Mode button (Sender):
- Reset button (Sender/Receiver):
- Program button (Sender/Receiver):
- Program Select switch (Sender/Receiver):
- Link Indicator (Sender/Receiver):
- Power Indicator (Sender/Receiver):
- Power Supply jack (Sender/Receiver):
- Power Requirement (Sender/Receiver):
- Power Consumption:
- Operating Temperature (Sender/Receiver):
- Operating Humidity (Sender/Receiver):
- Storage Temperature (Sender/Receiver):
- Storage Humidity (Sender/Receiver):
- MTBF:
- Dimensions (W x H x D, without connectors or feet):
- Unit Weight:
- Shipping Weight:
- 4K Blu-ray Player
- Gigabit Switch
- IR Extender (EXT-RMT-EXTIRN)
- Powered Speakers
- USB Mouse
- USB Keyboard
- Ultra HD Display
- HDMI/VGA HD-15, female
- HDMI Type A 19-pin, female, locking
- HDMI Type A 19-pin, female, locking
- HDMI Type A 19-pin, female, locking
- HDMI Type A 19-pin, female, locking
- HDMI Type A 19-pin, female, locking