4K Ultra HD 600 MHz Matrixes with HDR and Audio De-Embedder

**EXT-UHD600A-44**

4K Ultra HD 600 MHz 4x4 Matrix with HDR and Audio De-Embedder

- Routes four 4K sources to four 4K displays
- Supports resolutions up to 4K Cinema-DCI (4096 x 2160 up to 60 Hz, 4:4:4), 4K Ultra HD (3840 x 2160 up to 60 Hz, 4:4:4) with HDR, 1080p Full HD, and WUXGA (1920x1200)
- Supports HDCP 2.2 and 1.4
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
- Supports Dolby Vision™ HDR
- Built-in Audio De-Embedders break out 2 channel analog, 2 channel PCM, and up to 5.1 channels of Bitstream audio from each HDMI output, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact.
- 4 independent scalers allow upscaling from 1080p to 4K on two outputs and downscaling from 4K to 1080p on the other two, maximizing compatibility in a mixed-resolution display system
- 2 USB power ports for use with sources requiring a USB power supply.
- Long Reach Power (LRP) provides 500 mA at 5V on pin 18 of HDMI outputs 1 and 2. Enables select extender devices to be powered through their HDMI input port
- Supports up to 7.1 channels of LPCM and HBR (High Bit Rate) digital audio including Dolby Atmos®, Dolby® TrueHD, DTS:X™ and DTS-HD Master Audio™
- Gefen Syner-G™ software simplifies initial IP configuration and EDID Management
- EDID Management for rapid integration of source and displays

**EXT-UHD600A-88**

4K Ultra HD 600 MHz 8x8 Matrix with HDR and Audio De-Embedder

- Routes eight 4K sources to eight 4K displays
- Supports resolutions up to 4K Cinema-DCI (4096 x 2160 up to 60 Hz, 4:4:4), 4K Ultra HD (3840 x 2160 up to 60 Hz, 4:4:4) with HDR, 1080p Full HD, and WUXGA (1920x1200)
- Supports HDCP 2.2 and 1.4
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
- Supports Dolby Vision™ HDR
- Built-in Audio De-Embedders break out 2 channel analog, 2 channel PCM, and up to 5.1 channels of Bitstream audio from each HDMI output, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact.
- Supports up to 7.1 channels of LPCM and HBR (High Bit Rate) digital audio including Dolby Atmos®, Dolby® TrueHD, DTS:X™ and DTS-HD Master Audio™
- Easy-to-read, super-bright OLED front panel display indicates routing status and IP settings
- Gefen Syner-G™ software simplifies initial IP configuration and EDID Management
- EDID Management for rapid integration of source and displays

**4K Ultra HD Matrixes**

**EXT-UHD-88**

4K Ultra HD 8x8 Matrix for HDMI

- Routes eight 4K Ultra HD sources to eight displays
- Supports resolutions up to 4K Cinema (DCI), 4K Ultra HD, 1080p Full HD and 1920x1200 (WUXGA)
- HDCP 2.2 & HDCP 1.4 compliant
- Supports 12-bit Deep Color (up to 1080p HD)
- 3DTV & Lip Sync pass-through
- Push button controls for Routing and Status
- Advanced EDID Management for rapid integration of sources and displays
- RS-232 Serial interface for remote control using a computer or automation control system
- Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD™ Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- IP control via Telnet, UDP, and the built-in web server interface
- IR remote control
- Gefen Syner-G™ software’s Discovery and Show-Me features simplify initial IP configuration
- Field-upgradeable firmware via web server interface
- Can be placed on a shelf or mounted in a standard 19-inch wide rack

**GEF-UHD-89-HBT2**

4K Ultra HD 8x9 Matrix for HDMI

- Routes eight 4K sources to nine displays
- Supports resolutions up to 4K Cinema-DCI, 4K Ultra HD, 1080p Full HD, and 1920x1200 WUXGA
- HDCP 2.2 and 1.4 compliant
- Extends HDMI, Ethernet, RS-232 & 2-way IR up to 330 feet
- 3D pass-through
- Lip Sync pass-through
- Power Over HBase™ (POH) powers receivers over link cables
- IR from viewing locations to sources can be routed along with or independent from video path
- IR remote control
- Advanced EDID Management for rapid integration of sources and displays
- RS-232 Serial interface for use with an automation control system
- IP control via Telnet, UDP, and the built-in web server interface
- Gefen Syner-G™ software’s Discovery and Show-Me features simplify initial IP configuration
- Field-updatable firmware via web server interface
- Can be placed on a shelf or mounted in a standard 19-inch wide rack
ToolBox 4K Ultra HD Matrixes

**GTB-HD4K2K-442-BLK**
4x2 Matrix for HDMI 4Kx2K
- Routes four Ultra HD sources to two Ultra HD displays
- Supports resolutions up to Ultra HD 4K, 4K Cinema (DCI) and 1080p Full HD
- HDMI 2.0 & HDCP 1.4 compliant
- Supports 12-bit Deep Color
- 3DTV & Lip Sync pass-through
- Push button controls for Routing, FST Modes, Audio, and EDID management
- FST Technology speeds up HDCP authentication
- Advanced EDID Management
  - Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD® Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- RS-232 Serial interface for remote control using a computer or automation control system
- IP control via Telnet, UDP, and the built-in web server interface
- IR remote control
- Field-upgradeable firmware via Mini-USB & IP ports
- Locking Power Supply
- Surface-mountable

**GTB-HD4K2K-444-BLK**
4x4 Matrix for HDMI 4Kx2K
- Routes four Ultra HD sources to four Ultra HD displays
- Supports resolutions up to Ultra HD 4K, 4K Cinema (DCI) and 1080p Full HD
- HDMI 2.0 & HDCP 1.4 compliant
- Supports 12-bit Deep Color (up to 1080 HD)
- 3DTV & Lip Sync pass-through
- Push button controls for Routing, FST Modes, Audio, and EDID management
- FST Technology speeds up HDCP authentication
- IP control via Telnet, UDP, and the built-in web server interface
- Advanced EDID Management
  - Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD® Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- RS-232 Serial interface for remote control using a computer or automation control system
- IR remote control
- Field-upgradeable firmware via Mini-USB & IP ports
- IR remote control
- Field-upgradeable firmware via Mini-USB & IP ports
- Locking Power Supply
- Surface-mountable

**GTB-HD4K2K-642-BLK**
6x2 Matrix for HDMI 4Kx2K
- Routes six Ultra HD sources to two Ultra HD displays
- Supports resolutions up to Ultra HD 4K, 4K Cinema (DCI) and 1080p Full HD
- HDMI 2.0 & HDCP 1.4 compliant
- Supports 12-bit Deep Color
- 3DTV & Lip Sync pass-through
- Push button controls for Routing, FST Modes, Audio, and EDID management
- FST Technology speeds up HDCP authentication
- IP control via Telnet, UDP, and the built-in web server interface
- Advanced EDID Management
  - Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD® Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- RS-232 Serial interface for remote control using a computer or automation control system
- IR remote control
- Field-upgradeable firmware via Mini-USB & IP ports
- Locking Power Supply
- Surface-mountable

**GTB-HD4K2K-848-BLK**
4K Ultra HD 8x8 Matrix for HDMI 4Kx2K
- Routes eight 4K Ultra HD sources to eight displays
- Supports resolutions up to 4K Cinema (DCI), 4K Ultra HD, 1080p Full HD and 1920x1200 (WUXGA)
- HDMI 2.0 & HDCP 1.4 compliant
- Supports 12-bit Deep Color (up to 1080p HD)
- 3DTV & Lip Sync pass-through
- Push button controls for Routing and Status
- Advanced EDID Management
  - Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD® Master Audio™
  - Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
  - RS-232 Serial interface for remote control using a computer or automation control system
  - IP control via Telnet, UDP, and the built-in web server interface
  - IR remote control
  - Gefen Syner-G™ software’s Discovery and Show-Me features simplify initial IP configuration
- Surface-mountable
ToolBox 4K Ultra HD Splitters

GTB-HD4K2K-142C-BLK
4K Ultra HD 1:2 Splitter for HDMI
- Specifically designed to support 10 layers of splitting/cascading in large video distribution and signage applications, supporting hundreds of displays
- Simultaneously displays any Ultra Hi-Def source on up to two Ultra HD displays
- Supports resolutions up to Ultra HD 4K, 4K Cinema (DCI) and 1080p Full HD
- HDMI 2.0 & HDCP 1.4 Compliant
- Supports 12-bit Deep Color (up to 1080p Full HD)
- 3DTV & Lip Sync pass-through
- FST Technology speeds up HDCP authentication
- Fast and Slow FST Modes
- Advanced EDID Management for rapid integration of source and displays
- Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- Field-upgradable firmware using Mini-USB port
- Locking Power Supply
- Surface-mountable

GTB-HD4K2K-144C-BLK
4K Ultra HD 1:4 Splitter for HDMI
- Specifically designed to support 10 layers of splitting/cascading in large video distribution and signage applications, supporting hundreds of displays
- Specifically designed to support 10 layers of splitting/cascading in large video distribution and signage applications, supporting hundreds of displays
- Supports resolutions up to 4K DCI (4096 x 2160 at 24 and 30 Hz), 4K Ultra HD (3840 x 2160 at 60 Hz, 4:2:0 color space), 1080p Full HD, and 1920x1200 WUXGA
- Supports 12-bit Deep Color at 1080p
- HDMI 2.0 and HDCP 1.4 compliant
- 3DTV pass-through
- Lip Sync pass-through
- FST Technology speeds up HDCP authentication process
- EDID Management and Audio Mode selectors for rapid integration of source and displays
- Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- Field-upgradable firmware using Mini-USB port
- Locking Power Supply
- Surface-mountable

GTB-HD4K2K-148C-BLK
4K Ultra HD 1:8 Splitter for HDMI
- Specifically designed to support 10 layers of splitting/cascading in large video distribution and signage applications, supporting hundreds of displays
- Simultaneously displays any Ultra Hi-Def source on up to eight Ultra HD displays
- Supports resolutions up to Ultra HD 4K, 4K Cinema (DCI) and 1080p Full HD
- HDMI 2.0 & HDCP 1.4 Compliant
- Supports 12-bit Deep Color (up to 1080p Full HD)
- 3DTV & Lip Sync pass-through
- FST Technology speeds up HDCP authentication
- Fast and Slow FST Modes
- Advanced EDID Management for rapid integration of source and displays
- Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- Field-upgradable firmware using Mini-USB port
- Locking Power Supply
- Surface-mountable

ToolBox 4K Ultra HD Switchers

GTB-HD4K2K-441-BLK
4x1 Switcher for HDMI 4Kx2K
- Switches between four Ultra Hi-Def sources to one Ultra HD display
- Supports resolutions up to Ultra HD 4K, 4K Cinema (DCI) and 1080p Full HD
- HDMI 2.0 & HDCP 1.4 Compliant
- Supports 12-bit Deep Color (up to 1080p Full HD)
- 3DTV & Lip Sync pass-through
- Push button control for routing sources to display
- Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD® Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- RS-232 Serial interface for remote control using a computer or automation control system
- IP control via Telnet, UDP, and the built-in web server interface
- IR remote control
- IR Extender port allows the unit to be mounted in a hidden location
- Field-upgradable firmware via Mini-USB and IP ports
- Locking Power Supply
- Surface-mountable
4K Ultra HD 600 MHz Splitters with HDR

**EXT-UHD600A-12-DS**

4K Ultra HD 600 MHz 1:2 Splitter with EDID Detective and Audio De-Embedder

- Supports 18.2 Gbps bandwidth and 600 MHz TMDS clock
- Splits a 4K 600 MHz source to two displays, 4K 600 MHz or 1080p
- Maximum Video Resolutions/Timing:
  - Pass-through
  - 4096 x 2160 (Cinema-DCI) up to 60 Hz, up to 4:4:4, 8-bit
  - 3860 x 2160 (4K Ultra HD with HDR) up to 60 Hz, up to 4:4:4, 8-bit

**EXT-UHD600-12**

Ultra HD 600MHz 1:2 Splitter for HDMI w/HDR

- Simultaneously displays an Ultra Hi-Def source on up to two Ultra HD displays
- Specifically designed to support multiple layers of splitting/cascading in large video distribution & signage applications, supporting hundreds of displays
- Supports resolutions up to 4K DCI-Cinema (4096 x 2160 at 60 Hz, 4:4:4 color space), 4K Ultra HD (3860 x 2160 at 60 Hz, 4:4:4 color space), 1080p Full HD, and 1920x1200 WUXGA
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 4:4:4
- Supports Dolby Vision™ HDR

**EXT-UHD600-14**

Ultra HD 600MHz 1:4 Splitter for HDMI w/HDR

- Simultaneously displays an Ultra Hi-Def source on up to four Ultra HD displays
- Specifically designed to support multiple layers of splitting/cascading in large video distribution & signage applications, supporting hundreds of displays
- Supports resolutions up to 4K DCI-Cinema (4096 x 2160 at 60 Hz, 4:4:4 color space), 4K Ultra HD (3860 x 2160 at 60 Hz, 4:4:4 color space), 1080p Full HD, and 1920x1200 WUXGA
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 4:4:4
- Supports Dolby Vision™ HDR

**EXT-UHD600-18**

Ultra HD 600MHz 1:8 Splitter for HDMI w/HDR

- Simultaneously displays an Ultra Hi-Def source on up to eight Ultra HD displays
- Specifically designed to support multiple layers of splitting/cascading in large video distribution & signage applications, supporting hundreds of displays
- Supports resolutions up to 4K DCI-Cinema (4096 x 2160 at 60 Hz, 4:4:4 color space), 4K Ultra HD (3860 x 2160 at 60 Hz, 4:4:4 color space), 1080p Full HD, and 1920x1200 WUXGA
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 4:4:4
- Supports Dolby Vision™ HDR

- Supports 12-bit Deep Color at 1080p 4:4:4
- 3DTV pass-through
- Lip Sync pass-through
- EDID Management and Audio Mode selectors for rapid integration of source and displays
- Supports LPCM 7.1, Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™
- Supports the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)
- Advanced EDID Management via USB, using the Gefen Syner-G™ software
- HDCP 2.2 and 1.4 compliant
4K Ultra HD 600 MHz Switchers with HDR

EXT-UHD600-41
4K Ultra HD 600MHz 4x1 Switcher

- Routes up to four Ultra Hi-Def sources to one Ultra HD display
- Supports resolutions up to 4K Cinema-DCI (4096 x 2160 up to 60 Hz, 4:4:4), 4K Ultra HD (3840 x 2160 up to 60 Hz, 4:4:4) with HDR, 1080p Full HD, and WUXGA (1920x1200)
- Supports HDCP 2.2 and 1.4
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
- Supports Dolby Vision™ HDR
- Supports 12-bit Deep Color at 1080p 4:4:4
- 3DTV pass-through
- Lip Sync pass-through
- Advanced EDID and HDCP Management via Web Server Interface for rapid integration of sources and display
- Supports up to 7.1 channels of LPCM and HBR (High Bit Rate) digital audio including Dolby Atmos®, Dolby® TrueHD, DTS:X™ and DTS-HD Master Audio™
- Supports the use of DVI sources and DVI displays up to 1080p Full HD and 1920x1200 (WUXGA), with HDMI-to-DVI adapters (not included)
- Configurable Automatic Input Switching selects the most recent connected or powered-up source
- Front panel push-button input selector routes one of the 4 connected sources to the display, or “Blocks” (turns off) the input
- RS-232 Serial interface for use with an automation control system
- IP control via Telnet, UDP, and the built-in web server interface
- IR remote control
- Small surface-mountable IR Extender module allows the switcher to be hidden away behind the display or in the equipment closet
- Gefen Syner-G™ software’s Discovery and Show-Me features simplify initial IP configuration
- In-field firmware update via web server interface
- Long Reach Power (LRP) provides 500 mA at 5V on pin 18 of HDMI output. Enables select extender devices to be powered through their HDMI input port
- Locking power connector ensures reliable operation
- Low-profile surface-mountable enclosure can be surface mounted, placed on a shelf, or hidden away behind the display

Multi-Format Extenders over CAT-5

EXT-UHDEV-HBTLS-TX
4K Ultra HD Multi-Format 2x1 HDBaseT™ Sender w/ Scaler, Auto-Switching, and POH

- Auto-Switch 4K HDMI and VGA (with scaler support).
- Extend HDMI, VGA, analog audio, RS-232, & Bi-Directional IR 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)
- Supports up to 1080p Full HD or 1920x1200 (WUXGA) up to 230 feet/70 meters (up to 12-bit Deep Color)
- Supports 300 MHz TMDS Clock and data throughput of up to 10.2 Gbps
- VGA scaling up to 1920 x 1200 with picture adjustments
- HDMI Features Supported:
  - HDMI 2.0
  - HDCP 2.2 and 1.4
  - 12-bit Deep Color
  - 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
- Automatic or user switching of HDMI and VGA inputs
- Analog L/R audio input for VGA
- Built-in volume control with mute
- Intuitive and powerful On Screen Display (OSD)
- RS-232 control
- RS-232 extension
- IR control using EXT-RMT-EXTIRN IR Extender (available separately)
- IR extension from Sender to Receiver and from Receiver to Sender
- Bi-Directional Power over HDBaseT™ (POH) provides power to the Sender or a compatible Receiver unit over the link cable - only one side will need external power
- Uses Gefen’s implementation of HDBaseT™ technology with enhanced features
- Works with Gefen Syner-G™ software
- Advanced EDID Management
- Field-updateable firmware via mini-USB port
- Locking power connector
- Small, low-profile enclosure is surface mountable and can be hidden away

Recommended Receiver: EXT-UHDA-HBTL-RX
Multi-Format Extenders over CAT-5

EXT-UHDV-WP-HBTLS-TX

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

- 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

Recommended Receiver: EXT-UHDA-HBTL-RX

- RS-232 control of switching, scaler, and EDID management functions
- Bi-Directional RS-232 extension when used with a compatible Receiver
- Power over HDBaseT™ (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 HDBaseT™ technology with enhanced features
- Advanced EDID Management for rapid integration of source and display
- Works with Gefen Syner-G™ software
- 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

EXT-UHDA-HBTL-RX

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

- 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
  - Analog L/R audio input for VGA

Recommended Senders: EXT-UHHDV-HBTLS-TX & EXT-UHHDV-WP-HBTLS-TX

- 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
- Works with Gefen Syner-G™ software
- 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
HDMI Extenders over CAT-5

**GTB-UHD600-HBT**

4K Ultra HD 600 MHz HDBaseT™ Extender w/ HDR, RS-232, 2-way IR, and POL

- Supports 18.2 Gbps bandwidth and 600 MHz TMDS clock
- Extends HDMI, RS-232, & Bi-Directional IR over a single CAT-5e/CAT-6A:
  - 4K Ultra HD (3840 x 2160 to 60 Hz, 4:4:4), up to 264 feet/80 meters (8-bit color)
  - 4K Cinema (DCI) (4096 x 2160 to 60 Hz 4:4:4), up to 264 feet/80 meters (8-bit color)
  - 1080p Full HD (60 Hz) and WUXGA (1920 x 1200 to 60 Hz), up to 330 feet/100 meters (up to 12-bit Deep Color)
- HDMI Features Supported:
  - HDMI 2.0 (full bandwidth to 18 Gbps/600 MHz)
  - HDR (High Dynamic Range) 10-bit Deep Color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
  - Dolby Vision™ HDR
  - HDCP 2.2 and 1.4
  - 12-bit Deep Color (at 1080p)
  - Uncompressed LPCM digital audio up to 7.1 channels
  - HBR (High Bit Rate) digital audio up to 7.1 channels, including Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™
  - 3DTV pass-through
  - CEC pass-through
- Lip Sync pass-through
- Supports the use of DVI sources and DVI displays up to 1080p Full HD and WUXGA (1920x1200), with Gefen CAB-DVI2HDMI-LCK DVI-to-HDMI cables (not included)
- RS-232 2-way link between Sender and Receiver
- IR extension from Sender to Receiver and from Receiver to Sender
- Gefen’s Bi-Directional POL provides power to the Sender or the Receiver unit over the link cable - only one side will need external power
- Uses Gefen’s implementation of HDBaseT™ technology with proprietary algorithms and enhanced features
- Works with Gefen Syner-G™ software
- Advanced EDID Management
- Firmware update via RS-232, using Gefen Syner-G™
- Locking power connector
- Surface mountable
- Plug & Play – no configuration or set-up required for most applications
- Compact enclosures are easy to install and can be hidden away

**GTB-UHD600-HBTL**

4K Ultra HD 600 MHz HDBaseT™ Extender w/ HDR, 2-way IR, and POL

- Supports 18.2 Gbps bandwidth and 600 MHz TMDS clock
- Extends HDMI & Bi-Directional IR over a single CAT-5e/CAT-6A:
  - 4K Ultra HD (3840 x 2160 to 60 Hz, 4:4:4), up to 132 feet/40 meters (8-bit color)
  - 4K Cinema (DCI) (4096 x 2160 to 60 Hz 4:4:4), up to 132 feet/40 meters (8-bit color)
  - 1080p Full HD (60 Hz) and WUXGA (1920 x 1200 to 60 Hz), up to 200 feet/60 meters (up to 12-bit Deep Color)
- HDMI Features Supported:
  - HDMI 2.0 (full bandwidth to 18 Gbps/600 MHz)
  - HDR (High Dynamic Range) 10-bit color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
  - Dolby Vision™ HDR
  - HDCP 2.2 and 1.4
  - 12-bit Deep Color (at 1080p)
  - Uncompressed LPCM digital audio up to 7.1 channels
  - HBR (High Bit Rate) digital audio up to 7.1 channels, including Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™
  - 3DTV pass-through
  - CEC pass-through
- Lip Sync pass-through
- Supports the use of DVI sources and DVI displays up to 1080p Full HD and WUXGA (1920x1200), with Gefen CAB-DVI2HDMI-LCK DVI-to-HDMI cables (not included)
- Gefen’s Bi-Directional POL provides power to the Sender or the Receiver unit over the link cable - only one side will need external power
- Uses Gefen’s implementation of HDBaseT™ technology with proprietary algorithms and enhanced features
- Works with Gefen Syner-G™ software
- Advanced EDID Management
- Firmware update via RS-232 port, using Gefen Syner-G™
- Locking power connector
- Surface mountable
- Plug & Play – no configuration or set-up required for most applications
- Compact enclosures are easy to install and can be hidden away
HDMI Extenders over CAT-5

**GTB-UHD-HBTL**
4K Ultra HD HDBaseT™ Extender w/ 2-way IR and POL

- Extends HDMI & 2-way IR over a single CAT-5e/ CAT-6A:
  - 4K Ultra HD and 4K DCI-Cinema (60 Hz, 4:2:0 or 24/30 Hz, 4:4:4), up to 130 feet/40 meters (8-bit color)
  - 1080p Full HD (60 Hz), up to 230 feet/70 meters (up to 12-bit Deep Color)
- Supports HDMI 2.0, HDCP 2.2 and 1.4, 12-bit Deep Color (1080p), 3DTV pass-through, CEC pass-through, and Lip Sync pass-through
- LPCM 7.1, Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ pass-through
- Uses Gefen’s implementation of HDBaseT™ technology with enhanced features
- IR extension from Sender to Receiver and from Receiver to Sender
- Gefen Bi-Directional POL feature provides power to the Sender or the Receiver unit over the link cable - only one side will need external power
- Advanced EDID Management

**GTB-UHD-HBT**
4K Ultra HD HDBaseT™ Extender w/ RS-232, 2-way IR and POL

- Extends HDMI, RS-232, & 2-way IR over a single CAT-5e/CAT-6A:
  - 4K Ultra HD and 4K DCI-Cinema (60 Hz, 4:2:0 or 24/30 Hz, 4:4:4), up to 330 feet/100 meters (8-bit color)
  - 1080p Full HD (60 Hz), up to 330 feet/100 meters (up to 12-bit Deep Color)
  - 1080p Full HD (60 Hz), up to 495 feet/150 meters (8-bit color)
- Supports HDMI 2.0, HDCP 2.2 and 1.4, 12-bit Deep Color (1080p), 3DTV pass-through, CEC pass-through, and Lip Sync pass-through
- LPCM 7.1, Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ pass-through
- Uses Gefen’s implementation of HDBaseT™ technology with enhanced features
- IR extension from Sender to Receiver and from Receiver to Sender
- Gefen Bi-Directional POL feature provides power to the Sender or the Receiver unit over the link cable - only one side will need external power
- Advanced EDID Management

**EXT-UHD-CAT5-ELRPOL**
4K Ultra HD HDBaseT™ Extender w/ Ethernet, RS-232, 2-way IR and POL

- Extends HDMI, Ethernet, RS-232, & 2-way IR over a single CAT-5e/CAT-6A:
  - 4K Ultra HD and 4K DCI-Cinema (60 Hz, 4:2:0 or 24/30 Hz, 4:4:4), up to 330 feet/100 meters (8-bit color)
  - 1080p Full HD (60 Hz), up to 330 feet/100 meters (up to 12-bit Deep Color)
  - 1080p Full HD (60 Hz), up to 495 feet/150 meters (8-bit color)
- Supports HDMI 2.0, HDCP 2.2 and 1.4, 12-bit Deep Color (1080p), 3DTV pass-through, CEC pass-through, and Lip Sync pass-through
- LPCM 7.1, Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ pass-through
- Uses Gefen’s implementation of HDBaseT™ technology with enhanced features
- IR extension from Sender to Receiver and from Receiver to Sender
- Gefen Bi-Directional POL feature provides power to the Sender or the Receiver unit over the link cable - only one side will need external power
- Advanced EDID Management

*This product supports sources up to 4K 300 MHz (60 Hz 4:2:0 or 30 Hz 4:4:4). It is not compatible with sources that are capable of HDR or 4K 600 MHz (60 Hz 4:4:4).*
HDMI Extenders over CAT-5

**EXT-UHDA-HBT2**
4K Ultra HD HDBaseT 2.0 Extender
- Extends HDMI, Ethernet, RS-232, 2-way IR & 2-way Audio over a single CAT-5e
- Extends 4K Ultra HD video up to 330 feet
- Extends 1080p video up to 495 feet
- Supports HDMI 2.0, HDCP 2.2 and 1.4
- 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

**GTB-UHD-HBT2**
4K Ultra HD HDBaseT 2.0 Extender
- Extends HDMI, RS-232 & 2-way IR over a single CAT-5e
- Extends 4K Ultra HD video up to 330 feet
- Extends 1080p video up to 495 feet
- Supports HDMI 2.0, HDCP 2.2 and 1.4
- IR extension from Sender to Receiver and from Receiver to Sender
- POH (Power Over HDBaseT™) feature provides power to the Receiver unit over the link cable - only the Sender unit 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

**EXT-HDKVM-ELR**
HD KVM ELR Extender over one CAT-5
- Extends HDMI and USB over a single CAT-5e up to 330 feet/100 meters:
  - Supported resolutions include:
    - 4K Ultra HD (3840 x 2160 @ 60Hz, 4:2:0 or 30Hz, 4:4:4)
    - 4K Cinema (DCI) (4096 x 2160 @ 24 or 30Hz 4:4:4)
    - 1080p Full HD
- Supports HDMI 2.0, HDCP 1.4 compliant, 12-bit Deep Color (at 1080p), 3DTV pass-through, CEC pass-through, and Lip Sync pass-through
- LPCM 7.1 audio, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD® Master Audio™ pass-through
- Supports up to 30 Mbps when using USB 2.0
- Backward-compatible with USB 1.1
- EDID management for rapid integration of source and display devices
- Uses Gefen’s implementation of HDBaseT™ technology with enhanced features
- Locking power supplies
- 1U tall, half-rack width enclosures are rack-mountable using EXT-RACK-1U-GRY
DVI Extenders Over CAT-5

**EXT-DVIKA-HBT2**

DVI KVM HDBaseT 2.0 Extender

- Extends DVI, USB, RS-232 & 2-way Audio over a single CAT-5e Cable
- Extends 1080p Full HD up to 495 feet
- Extends 1920x1200 (WUXGA) up to 495 feet
- Extends HDMI, USB, RS-232, and 2-way Audio over a single CAT-5e
- Extends 4K Ultra HD video up to 330 feet
- Extends 1920x1200 (WUXGA) up to 495 feet
- Supports HDMI 2.0, HDCP 2.2 and 1.4
- Analog L/R Stereo Audio extension from Sender to Receiver and from Receiver to Sender
- Receiver audio input accommodates a microphone or a line level audio source
- POH (Power Over HDBaseT™) feature provides power to Sender unit over the link cable - only the Receiver 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
- 1U tall, half-rack width enclosures are rack-mountable using EXT-RACK-1U-GRAY

**EXT-DVI-1CAT5-SR**

HDBaseT™ Lite DVI Extender over one CAT5

- Extends DVI up to 230 feet (70 meters) over one CAT-6a cable
- Extends DVI up to 200 feet (60 meters) over one CAT-5e cable
- Supports resolutions up to 1920 x 1200 (WUXGA)
- EDID management for rapid integration of source and display
- HDCP compliant
- Uses Gefen’s implementation of HDBaseT™ technology with enhanced features
- Locking power supplies
- Surface-mountable

**EXT-DVI-1CAT5-ELR**

HDBaseT™ DVI Extender over one CAT5

- Extends DVI up to 495 feet (150 meters) over one CAT-5e cable
- Supports resolutions up to 1080p Full HD and 1920 x 1200 (WUXGA)
- EDID management for rapid integration of source and display
- Enable/Disable switches for HPD pass-through
- Power-Save (Green Mode) selector switch
- 150m/100m range selector switch configures the extender for maximum range (150 meters) or maximum bandwidth
- HDCP compliant
- Uses Gefen’s implementation of HDBaseT™ technology with enhanced features
- Locking power supplies
- Surface-mountable
4K HDMI Extenders Over Fiber

EXT-UHD600-1SC
4K 600 MHz HDMI Extender over one SC-terminated Fiber
- Supports 18.2 Gbps bandwidth and 600 MHz TMDS clock
- Extensions up to 200m (660 feet) over one SC-terminated multi-mode OM3 or better (50/125um) fiber-optic cable
- Supports resolutions up to 4K Cinema-DCI (4096 x 2160 up to 60 Hz, 4:4:4), 4K Ultra HD (3840 x 2160 up to 60 Hz, 4:4:4) with HDR, 1080p Full HD, and WUXGA (1920x1200)
- Supports HDCP 2.2 and 1.4
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
- Dolby Vision™ HDR
- Supports 12-bit Deep Color at 1080p Full HD (60 Hz 4:4:4)
- Supports Dolby Vision™ HDR
- 3DTV pass-through
- 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™
- Supports the use of DVI sources and DVI displays up to 1080p Full HD and WUXGA (1920x1200), with Gefen CAB-DVI2HDMI-LCK DVI-to-HDMI cables (not included)
- Sturdy metal construction of the enclosures help provide immunity against Electro-Magnetic Interference (EMI) and radiated noise (RFI).
- Plug & Play – no configuration or set-up required for most applications
- Compact enclosures are easy to install and can be hidden away

EXT-HDRS2IR-4K2K-1FO
4K Ultra HD Extender over one Fiber w/ RS-232 and 2-way IR
- Extends HDMI, RS-232, and Bi-Directional IR over a single strand fiber-optic cable
- Extends 4K Ultra HD (3840 x 2160) @ 60Hz, 4:2:0, or 30Hz, 4:4:4 up to:
  - 3300 feet (1000 meters) over 50/125um OM3e/OM4 fiber
  - 500 feet (150 meters) over 50/125um (OM3) fiber
  - 165 feet (50 meters) over 62.5/125um (OM1) fiber
- Extends 1080p Full HD (1920 x 1080) @ 60Hz up to:
  - 6600 feet (2000 meters) over 50/125um OM3e/OM4 fiber
  - 1000 feet (300 meters) over 50/125um (OM3) fiber
  - 330 feet (100 meters) over 62.5/125um (OM1) fiber
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
- Dolby Vision™ HDR
- Supports 12-bit Deep Color at 1080p Full HD (60 Hz 4:4:4)
- Supports 3DTV pass-through
- Lip Sync pass-through
- Supports HDMI 2.0, HDCP 1.4 compliant, 12-bit Deep Color (at 1080p), 3DTV pass-through, and Lip Sync pass-through
- LPCM 7.1 audio, Dolby® TrueHD, and DTS-HD Master Audio™ pass-thru
- Auto Virtual EDID
- Automatic calibration based on the type and length of fiber optic cable
- Full duplex RS-232 up to 115200 baud
- Firmware upgradeable via USB
- Herently immune to electromagnetic interference (EMI)
- Locking power supplies
- Surface-mountable
- Sturdy metal construction of the enclosures help provide further immunity against Electro-Magnetic Interference (EMI) and radiated noise (RFI).
- Plug & Play – no configuration or set-up required for most applications
- EQ switches on Sender & Receiver ensure compatibility with most sources & displays
- Medical Safety (EN 60601-1) & EMC Compliant (EN 60601-1-2) when used with two EXT-PS52AU-M-1.3-6-AL power supplies (available separately)
- HDCP 2.2, HDCP 1.4, and DPCP compliant

4K DisplayPort™ Extenders Over Fiber

EXT-DP-4K600-1SC
DisplayPort™ 1.2 Extender over one SC-Terminated Fiber Optic Cable
- Supports Full-Bandwidth 4K 60 Hz 4:4:4 (600 MHz)
- Fully compliant with DisplayPort 1.2 standard
- Supports WUXGA (4K; 3840x2400), 4K Ultra HD (3840 x 2160), and 4K Cinema - DCI (4096 x 2160) at 60Hz, 4:4:4
- Extension up to 200m (660 feet) over one (1) SC-terminated multi-mode OM3 or better (50/125um) optic cable
- Supports DisplayPort Auxiliary/FC channel
- Supports DisplayPort Multi-stream technology
- Compact enclosures are easy to install and can be hidden away.
- Supports 18.2 Gbps 600 MHz TMDS clock
- Supports resolutions up to 4K Cinema-DCI (4096 x 2160) up to 60 Hz, 4:4:4, 4K Ultra HD (3840 x 2160) up to 60 Hz, 4:4:4 with HDR, 1080p Full HD, and WUXGA (1920x1200)
- Supports HDCP 2.2 and 1.4
- Supports HDR (High Dynamic Range) 10-bit Deep Color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
- Dolby Vision™ HDR
- Supports 12-bit Deep Color at 1080p Full HD (60 Hz 4:4:4)
- Supports Dolby Vision™ HDR
- 3DTV pass-through
- 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™
- Supports the use of DVI sources and DVI displays up to 1080p Full HD and WUXGA (1920x1200), with Gefen CAB-DVI2HDMI-LCK DVI-to-HDMI cables (not included)
- Sturdy metal construction of the enclosures help provide immunity against Electro-Magnetic Interference (EMI) and radiated noise (RFI).
- Plug & Play – no configuration or set-up required for most applications
- Compact enclosures are easy to install and can be hidden away

EXT-DP-4K600-1SC
DisplayPort™ 1.2 Extender over one SC-Terminated Fiber Optic Cable
- Supports Full-Bandwidth 4K 60 Hz 4:4:4 (600 MHz)
- Fully compliant with DisplayPort 1.2 standard
- Supports WUXGA (4K; 3840x2400), 4K Ultra HD (3840 x 2160), and 4K Cinema - DCI (4096 x 2160) at 60Hz, 4:4:4
- Extension up to 200m (660 feet) over one (1) SC-terminated multi-mode OM3 or better (50/125um) optic cable
- Supports DisplayPort Auxiliary/FC channel
- Supports DisplayPort Multi-stream technology
- Compact enclosures are easy to install and can be hidden away.
AV Over IP

EXT-UHDKA-LANS-TX
EXT-UHDKA-LANS-RX
GEN 2.0
4K Ultra HD HDMI KVM over IP

- Extends HDMI, USB, RS-232, 2-way analog audio, and IR, using a Gigabit Local Area Network
- Independent video, USB, RS-232, IR, and audio routing (future firmware update)
- Backward-compatible with first generation Gefen AV over IP products
- Supports input resolutions up to 4K 60Hz 4:2:0
- Supports output resolutions up to 4K 30Hz 4:4:4
- Supported HDMI Features:
  - HDR
  - HDCP 2.2 and 1.4
  - Deep Color
  - Lip-Sync
  - Uncompressed LPCM digital audio up to 7.1 channels
  - 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)
  - Video output on Sender unit for local monitoring of the source
  - KM Emulation feature facilitates real-time, simultaneous Keyboard and Mouse control of each source from all connected workstations
  - Integrated scaler ensures maximum compatibility and best possible viewing experience with different contents and displays
  - Built-in video wall controller accommodates any number of rows and columns up to 16x16
  - Built-in Audio De-Embedder on Receiver breaks out 2 channel analog, 2 channel PCM, and up to 5.1 channels of Bitstream audio from the HDMI signal, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact
  - MFU (Mass-Firmware-Update), quick and automated configuration, and enhanced control capabilities and system security when used with the Gefen EXT-CU-LAN Matrix Controller
  - Enhanced API for added functionality with third-party control systems
  - 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 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 with KM Emulation, for use with Human Interface Devices (H.I.D.)
  - 802.3af standard 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
  - Two-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
AV Over IP

EXT-DVIKA-LANS-TX
EXT-DVIKA-LANS-RX
GEN 2.0
4K Ultra HD DVI KVM over IP

- Extends DVI, USB, RS-232, 2-way analog audio, and IR, using a Gigabit Local Area Network
- Independent video, USB, RS-232, IR, and audio routing (future firmware update)
- Backward-compatible with first generation Gefen AV over IP products
- Supports input and output resolutions up to 1920 x 1200 (WUXGA) and 1080p Full HD
- Video output on Sender unit for local monitoring of the source
- KM Emulation feature facilitates real-time, simultaneous Keyboard and Mouse control of each source from all connected workstations
- Integrated scaler ensures maximum compatibility and best possible viewing experience with different contents and displays
- Built-in video wall controller accommodates any number of rows and columns up to 16x16
- Built-in Audio De-Embedder on Receiver breaks out 2 channel analog, 2 channel PCM, and up to 5.1 channels of Bitstream audio from the HDMI signal, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact
- MFU (Mass-Firmware-Update), quick and automated configuration, and enhanced control capabilities and system security when used with the Gefen EXT-CU-LAN Matrix Controller
- Enhanced API for added functionality with third-party control systems
- Built-in web interface, Telnet, and UDP
- Support 39,900 Senders and a combination of 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 with KM Emulation, for use with Human Interface Devices (H.I.D.)
- 802.3af standard 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
- Two-port Gigabit Ethernet switch built into the Receiver unit
- Mode switch on Sender for sharpeness 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

EXT-DPKA-LANS-TX
EXT-DPKA-LANS-RX
GEN 2.0
4K DisplayPort™ KVM over IP

- Extends DisplayPort™, USB, RS-232, 2-way analog audio, and IR, using a Gigabit Local Area Network
- Independent video, USB, RS-232, IR, and audio routing (future firmware update)
- Backward-compatible with first generation Gefen AV over IP products
- Supports input resolutions up to 4K 60Hz 4:2:0
- Supports output resolutions up to 4K 30Hz 4:4:4
- Supports HDCP 2.2 and 1.4
- KM Emulation feature facilitates real-time, simultaneous Keyboard and Mouse control of each source from all connected workstations
- Integrated scaler ensures maximum compatibility and best possible viewing experience with different contents and displays
- Built-in video wall controller accommodates any number of rows and columns up to 16x16
- Built-in Audio De-Embedder on Receiver breaks out 2 channel analog, 2 channel PCM, and up to 5.1 channels of Bitstream audio from the HDMI signal, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact
- MFU (Mass-Firmware-Update), quick and automated configuration, and enhanced control capabilities and system security when used with the Gefen EXT-CU-LAN Matrix Controller
- Enhanced API for added functionality with third-party control systems
- 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 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 with KM Emulation, for use with Human Interface Devices (H.I.D.)
- 802.3af standard 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
- Two-port Gigabit Ethernet switch built into the Receiver unit
- Mode switch on Sender for sharpeness 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
AV Over IP

**EXT-VGAKA-LANS-TX**
**EXT-VGAKA-LANS-RX**
**GEN 2.0**

VGA KVM over IP

- Extends VGA, USB, RS-232, 2-way analog audio, and IR, using a Gigabit Local Area Network
- Independent video, USB, RS-232, IR, and audio routing (future firmware update)
- Backward-compatible with first generation Gefen AV over IP products
- Supports input and output resolutions up to 1920 x 1200 (WUXGA) and 1080p Full HD
- Video output on Sender unit for local monitoring of the source
- KM Emulation feature facilitates real-time, simultaneous Keyboard and Mouse control of each source from all connected workstations
- Integrated scaler ensures maximum compatibility and best possible viewing experience with different contents and displays
- Built-in video wall controller accommodates any number of rows and columns up to 16x16
- MFU (Mass-Firmware-Update), quick and automated configuration, and enhanced control capabilities and system security when used with the Gefen EXT-CU-LAN Matrix Controller
- Enhanced API for added functionality with third-party control systems
- 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 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 with KM Emulation, for use with Human Interface Devices (H.I.D.)
- 802.3af standard 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
- Two-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

**EXT-UHDV-KA-LANS-TX**
**EXT-UHDV-KA-LANS-RX**
**GEN 2.0**

4K Ultra HD HDMI and VGA KVM over IP

- Extends HDMI, VGA, USB, RS-232, bi-directional stereo analog audio, and IR over IP, using a Gigabit Local Area Network
- Independent video, RS-232, IR, and audio routing (future firmware update)
- 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

**www.gefen.com**
Controller software, available for download at www.gefen.com

Device Drivers: Available at www.gefen.com

For more information, visit www.gefen.com or call 1-800-735-2559.
EXT-UHD-LANS-TX  
EXT-UHD-LANS-RX  
GEN 2.0  
4K Ultra HD HDMI over IP

- Extends HDMI, RS-232, analog audio, and IR, using a Gigabit Local Area Network
- Independent video, RS-232, IR, and audio routing (future firmware update)
- Backward-compatible with first generation Gefen AV over IP products
- Supports input resolutions up to 4K 60Hz 4:2:0
- Supports output resolutions up to 4K 30Hz 4:4:4
- Supported HDMI Features:
  - HDR
  - HDCP 2.2 and 1.4
  - Deep Color
  - Lip-Sync
  - Uncompressed LPCM digital audio up to 7.1 channels
  - 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)
- Integrated scaler ensures maximum compatibility and best possible viewing experience with different contents and displays
- Built-in video wall controller accommodates any number of rows and columns up to 16x16
- Built-in Audio De-Embedder on Receiver breaks out 2 channel analog, 2 channel PCM, and up to 5.1 channels of Bitstream audio from the HDMI signal, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact
- MFU (Mass-Firmware-Update), quick and automated configuration, and enhanced control capabilities and system security when used with the Gefen EXT-CU-LAN Matrix Controller
- Enhanced API for added functionality with third-party control systems
- 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 over 65,000 Sender and Receiver units, depending on the network bandwidth and number of ports on your network switch
- 802.3af standard 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
- Two-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
- Low-profile, 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

EXT-ADA-LAN-TX  
EXT-ADA-LAN-RX  
GEN 2.0  
Digital and Analog Audio over IP

- Extends digital and analog audio, RS-232, and IR, using a Gigabit Local Area Network
- Independent audio, RS-232, and IR routing (future firmware update)
- Backward-compatible with first generation Gefen AV over IP products
- Distributes L/R analog, 2 channel PCM, and up to 5.1 channels of Bitstream audio
- Coaxial and Optical (TOSLINK®) S/PDIF Digital Audio Inputs and Outputs
- MFU (Mass-Firmware-Update), quick and automated configuration, and enhanced control capabilities and system security when used with the Gefen EXT-CU-LAN Matrix Controller
- Enhanced API for added functionality with third-party control systems
- 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 over 65,000 Sender and Receiver units, depending on the network bandwidth and number of ports on your network switch
- 802.3af standard 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
- Two-port Gigabit Ethernet switch built into the Receiver unit
- Field-updatable firmware via EXT-CU-LAN controller or the built-in web server interface
- Locking power supply connectors
- Low-profile, 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
AV Over IP

EXT-CU-LAN
Matrix Controller

- Detects, configures, and controls all Gefen Video and KVM over IP products
- Built-in web server allows access from any web-enabled device, including phones, tablets, and PCs
- Two Ethernet ports with independent IP and MAC Addresses allow segregation of Video/KVM LAN and control LAN, and help provide separate security layers for administrators and end-users
- Seamless integration with Gefen Syner-G™ software allows for quick installation and configuration on a network
- Automatic assignment of IP addresses for all Gefen Video and KVM over IP devices on a network
- Front panel control push-buttons/display, handheld IR remote, and web server interface allow easy and convenient end-user operation
- Automation control system interface via Telnet and UDP
- POE (Power Over Ethernet) on LAN 1 port eliminates the need for an external power supply
- Password-protected independent user and administrative access
- Easy to read 2 line/20 characters per line Liquid Crystal Display
- System Configuration Upload/Download function
- Plug-and-Play installation with little to no set-up
- Locking power supply connector
- 2U tall rack-mountable enclosure, detachable rack ears included
- Slanted front panel for ergonomic push-button access and display visibility when placed on a table

EXT-DVIKVM-LAN-L
DVI KVM over IP w/ Local DVI Output

- Extends DVI, USB, RS-232, and stereo analog audio over IP, using a Gigabit Local Area Network
- Any combination of HDMI, DVI, and VGA Senders and Receivers can be used together to create a "Virtual Matrix"
- Supports resolutions up to 1080p Full HD and 1920 x 1200 (WUXGA)
- Supports a local DVI monitor at Sender side
- Supports 4 USB devices at Receiver side, with 500mA current capability per port, USB 2.0 data rates up to 480 Mbps, and backward-compatibility with USB 1.1
- Any of the Senders within a network can be accessed by any Receiver unit via a web browser on a mobile device or computer, or by using the Gefen Keyboard Switching Controller software (available for download at www.gefen.com)
- Supports a total of just over 65,000 Sender and Receiver units, depending on the network bandwidth and number of ports on your network switch
- Three-port Ethernet switch built into the Receiver unit
- + and - / Select buttons on Receiver unit allow selection of multiple Senders
- USB button on Receiver unit allows multiple Receivers to access a USB host computer
- Mode button on Sender for sharpness or motion optimization of image
- Easy-to-use web server interface for quick system set-up and firmware upgrade
- Locking power supply connectors
- 1U tall, half-rack width enclosures are rack-mountable using EXT-RACK-1U
- Surface mounting brackets included
# Wireless HDMI

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Features</th>
</tr>
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</table>
| **EXT-WHD-1080P-LR** | Wireless Extender for HDMI 5GHz Long Range                                   | - Wireless extension of HDMI up to 100 feet  
- Supports resolutions up to 1080p Full HD, up to 7.1 channels of LPCM digital audio, and up to 5.1 channels of Dolby® and DTS® formats  
- Transmits through obstacles – does not require line-of-sight  
- Long Range 5GHz performance makes it ideal for multi-room use  
- IR Back Channel for source control with carrier frequency selector  
- Uncompressed High Definition A/V from source to display  
- Less than 1 frame latency  
- AES 128 Encryption  
- Compatible with legacy DVI displays  
- Includes Sender & Receiver Units  
- Handheld IR remote for easy setup and operation  
- Works with Gefen Syner-G™ software  
- Firmware update via Mini-USB port  
- WHDI 1.0, FCC Part 15, IC, and ETSI-compliant  
- Up to eight Sender units can be accessed by a Receiver, one at a time, using its handheld remote control  
- Additional Sender units available separately |

| **EXT-WHD-1080P-SR** | Wireless Extender for HDMI 5GHz Short Range                                 | - Wireless extension of HDMI up to 33 feet  
- Supports resolutions up to 1080p Full HD, up to 7.1 channels of LPCM digital audio, and up to 5.1 channels of Dolby® and DTS® formats  
- Transmits through obstacles – does not require line-of-sight  
- Uncompressed High Definition A/V from source to display  
- Less than 1 frame latency  
- AES 128 Encryption  
- Includes Sender & Receiver Units  
- Handheld IR remote for easy setup and operation  
- Works with Gefen Syner-G™ software  
- Firmware update via Mini-USB port  
- WHDI 1.0, FCC Part 15, IC, and ETSI-compliant  
- Up to eight Sender units can be accessed by a Receiver, one at a time, using its handheld remote control  
- Additional Sender units available separately |

| **GTV-WHD-60G** | Wireless Extender for HDMI 60GHz                                             | - Wireless extension of HDMI up to 33 feet  
- Supports resolutions up to 1080p Full HD  
- Uncompressed High Definition A/V from source to display  
- Near zero latency (less than one frame)  
- Specifically designed for in-room operation only  
- Operates in the uncluttered 60GHz frequency region, minimizing the chances of interference from household devices such as cordless phones or WiFi equipment  
- Works with Gefen Syner-G™ software  
- Field upgradable via USB port |

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*Images and logos not included in text.*
USB, RS-232, and Audio Extenders

**GTB-USB2.0-4LR-BLK**
USB 2.0 LR 4-Port Extender
- Extends USB 2.0 up to 330 feet
- Supports 480 Mbps using USB 2.0
- Backward-compatible with USB 1.1 devices
- Receiver supports up to four (4) USB devices
- Uses industry-standard CAT-5, CAT-5e, or CAT-6 cable
- True plug-and-play, 100% hardware solution with no drivers required
- Power only required on Sender unit
- Sturdy metal construction of the enclosures help provide immunity against Electro-Magnetic Interference (EMI) and radiated noise (RFI)
- Compact enclosures are easy to install and can be hidden away

**EXT-USB2.0-SR**
USB 2.0 SR Extender over one CAT-5
- Extends USB 2.0 peripherals up to 165ft (50m) away from a computer
- Supports USB 1.1 and 2.0
- Uses industry-standard CAT-5e or better cable
- Supports all major operating systems -- Windows, macOS and Linux
- True plug-and-play, 100% hardware solution with no drivers required
- Can support the full 480 Mbps speed of USB 2.0
- Receiver supports a powered USB connection up to 2A at 5V
- Sturdy metal construction of the enclosures help provide immunity against Electro-Magnetic Interference (EMI) and radiated noise (RFI)
- Compact enclosures are easy to install and can be hidden away

**EXT-USB2.0-LR**
USB 2.0 Extender
- Operate USB 2.0 peripherals up to 330ft from a computer
- Supports low and high-speed USB
- Uses industry-standard CAT5, CAT5e, or CAT6 cable
- Supports all major operating systems – Windows, Mac OS X and Linux
- True plug-and-play, 100% hardware solution with no drivers required
- Operates at full 480 Mbps speed when running in USB 2.0 mode
- Receiver supports up to 2 USB powered connections at 500 mA each

**EXT-RS232**
RS232 Extender
- Extends any RS-232 compliant device up to 1000 feet from the computer
- Supports the full 9-pin RS-232 standard with a maximum data transfer rate of 115,200 baud
- Perfect for digital signage applications
- Only one CAT-5e cable required for extension
- Power only required on Sender unit

**EXT-DIGAUD-141**
Digital Audio Extender
- Extends any S/PDIF and TOSLINK® digital audio device up to 330 feet from the source
- Supports multichannel digital audio like Dolby® Digital 5.1, DTS, and Dolby® TrueHD
- Supplies clear digital audio over long distances as if connected locally
- Streamlines audio installations by allowing source devices to be located in off-site or unseen rack
- One CAT-5e cable used for extension
- Audio is transmitted digitally for zero signal loss

**EXT-AUD-1000**
Audio Extender
- Extends any unbalanced analog audio device up to 1000 feet from the source
- One CAT-5e cable used for extension
- Bidirectional transmission for speaker and mic
Presentation Switchers

EXT-4K300A-MF-41-HBTLS
4K Ultra HD Multi-Format 4x1 Scaler/Switcher w/ Auto-Switching & HDBaseT™ Output

- Inputs:
  - 1x HDMI
  - 1x DisplayPort™
  - 1x DVI
  - 1x VGA

- Outputs:
  - 1x HDMI
  - 1x HDBaseT™
  - 1x L/R Analog

- HDMI and DisplayPort™ inputs support up to 300 MHz TMDS clock and 10.2 Gbps data throughput
- VGA and DVI feature scaling up to 1920 x 1200 with picture adjustment capabilities

EXT-4K600A-MF-51-HBTLS
4K Ultra HD Multi-Format 5x1 Scaler/Switcher w/ Auto-Switching & HDBaseT™ Output

- Inputs:
  - 3x HDMI
  - 1x DisplayPort™
  - 1x VGA
  - 5x L/R Analog
  - 1x Mic or Line Level Balanced with 48V Phantom Power

- Outputs:
  - 1x HDMI
  - 1x HDBaseT™
  - 1x L/R Analog
  - Independent video and audio switching

- Supports up to 600 MHz TMDS clock and 18 Gbps data throughput
- HDMI and DisplayPort™ inputs support up to 4K 60 Hz 4:4:4

- Scaling on all inputs to 3840 x 2160 30 Hz 4:4:4 with picture adjustment capabilities
- Balanced and single-ended microphone support with audio ducking feature

EXT-MFP
Multi-Format Presentation Switcher

- Independent and configurable video routing for HDMI, DVI, VGA, DisplayPort, Composite, and audio
- Supports input and output resolutions up to 1080p
- Full HD & 1920 x 1200 (WUXGA)
- HDCP compliant
- HDMI, DisplayPort, DVI, VGA, and Composite Video inputs
- DisplayPort input is compatible with Mac and PC computers
- TOSLINK® optical digital, S/PDIF coaxial digital, and two analog L/R audio inputs
- Each audio source can be independently assigned to any video source
- Audio sources can be temporarily switched away from their assigned video sources
- On-screen display (OSD) menu and web server interface allow easy set-up & control

- IP control via Telnet, UDP, and web server interface
- RS-232 Serial interface for use with an automation control system
- Independent IR control of up to four units in proximity, using distinct command sets
- Password-protected user and administrative access
- Works with Gefen Syner-G™ software
- Advanced EDID Management for rapid integration of sources and displays
- Assignable input naming
- System Configuration Upload/Download function
- Plug-and-Play installation with little to no set-up
- Locking power supply connector
- Rack-mountable using EXT-RACK-1U-GRY (available separately)
- Surface-mountable using the included L-brackets
Converters & Scalers

**GTV-COMPSVID-2-HDMIS**  
Composite to HDMI Scaler
- Inputs S-Video or Composite Video at 480i or 576i resolutions
- Outputs HDMI video at resolutions of up to 1080p
- Input resolution is automatically detected while the output resolution and refresh rate can be selected via the on-screen display (OSD) menu system and front panel push-buttons
- 48MB frame buffer for frame rate conversion
- Scales Composite Video and S-Video to HDMI with embedded audio
- Supports video output resolutions for computer equipment at up to 1920x1200

**EXT-DVI-2-VGAN**  
DVI to VGA Converter
- Enables DVI source to be displayed on VGA monitor or projector
- Supports resolutions up to 1920x1200
- EDID Management for rapid integration of source and display
- Built-in EDID switch allows choice between local EDID and external EDID

**EXT-VGA-DVI-SC**  
VGA to DVI Scaler/Converter
- Converts and scales VGA to DVI
- Input resolutions up to 1920 x 1200 (WUXGA)
- Output resolutions up to 1080p60 and 1920 x 1200 (WUXGA)
- On-screen display (OSD) menu allows easy set-up and control
- Aspect Ratio Control: Full Screen, Panoramic, Letter/Pillar, Extract/Crop
- USB port for use with Gefen Syner-G™
- Test Pattern Generator for quick system configuration
- Gefen Syner-G™ simplifies in-field firmware updates and advanced EDID management including custom input timings
- Wide power supply operating range (6V to 24V DC)
- Locking power supply connector
- Surface mountable

**EXT-VGAA-HD-SC**  
VGA & Audio to HD Scaler/Converter
- Converts and scales VGA and L/R analog audio to HDMI
- Input resolutions up to 1920 x 1200 (WUXGA)
- Output resolutions up to 1080p60 and 1920 x 1200 (WUXGA)
- On-screen display (OSD) menu allows easy set-up and control
- Aspect Ratio Control: Full Screen, Panoramic, Letter/Pillar, Extract/Crop
- Test Pattern Generator for quick system configuration
- Embeds 2-channel analog stereo audio in HDMI signal
- Gefen Syner-G™ simplifies in-field firmware updates and advanced EDID management including custom input timings
- USB port for use with Gefen Syner-G™
- Wide power supply operating range (6V to 24V DC)
- Locking power supply connector
- Surface mountable
Converters & Scalers

**EXT-3G-HD-C**
HDMI to 3GSDI Converter
- Converts SDI to HDMI resolutions up to 1080p60
- Output resolutions up to 1080p Full HD
- HDMI (YCbCr 4:4:4) or DVI (RGB 4:4:4) output modes
- Supports up to 10 bit color on input and output
- Up to LPCM 7.1 audio support
- Mini USB port for use with Gefen Syner-G™
- Wide power supply operating range (6V to 24V DC)

**EXT-HD-3G-C**
3GSDI to HDMI Converter
- Converts up to 1920 x 1200 (WUXGA) & 1080p Full HD
- Output resolutions up to 1080p Full HD
- HDMI (YCbCr 4:4:4) or DVI (RGB 4:4:4) output modes
- Supports HDMI 12 bit color and SDI 10-bit color
- Up to LPCM 7.1 audio support
- Mini USB port for use with Gefen Syner-G™
- Wide power supply operating range (6V to 24V DC)

**EXT-HDVGA-3G-SC**
HDMI & VGA & Audio to 3GSDI Converter
- Converts and scales HDMI and VGA and L/R analog audio to SDI
- Supports resolutions up to 1920x1200
- Aspect Ratio Control: Full Screen, Panoramic, Letter/Pillar, Extract/Crop
- Test Pattern Generator for system configuration
- Gefen Syner-G™ simplifies in-field firmware updates and advanced EDID management including custom input timings

![Converter & Scaler Image](Image)
## Audio Converters

### GTV-DIGAUD-2-AAUD
**Digital Audio to Analog Adapter**
- Converts S/PDIF or TOSLink digital audio signals to analog L/R audio
- Digital interpolation filter and digital to analog converter (DAC)
- Accepts uncompressed digital audio as input
- Samples at 32, 44.1, 48 and 96 KHz
- 2-channel LPCM (Linear Pulse Code Modulation)
- 24-bit S/PDIF incoming bitstream on left and right channels
- Compact and easy to install

### GTV-AAUD-2-DIGAUD
**Analog to Digital Audio Adapter**
- Converts analog L/R signals to digital S/PDIF or TOSLink
- Compact and easy to install
- Simple to Operate
- Supports 48 kHz output sampling frequency
- Coaxial and optical output ports
- Right and Left RCA Stereo input ports
- Supports optical cable run of up to 5 meters (15 feet)
- Signal To Noise Ratio: >90dB (20Hz-20kHz A weight filter)
- THD+N < 0.01% at 1kHz at reference level
- Frequency Response: < +/- 0.5dB 20Hz-20kHz

### GTV-DD-2-AA
**Digital Audio Decoder**
- Converts S/PDIF or TOSLINK digital audio to L/R analog audio
- Digital interpolation filter and digital to analog converter (DAC)
- Supports up to 6 channels (up to 5.1 Surround) of audio encoded in Dolby Digital
- Auto samples at frequencies of 32, 44.1, 48 KHz
- 24-bit incoming bitstream on left and right channels
- Allows listening to digital audio sources on legacy analog sound systems
- Compact and easy to install

### GTV-DIGAUDT-141
**Digital Audio Translator**
- Compact size and easy to install
- Supports amplification of audio signal and extends distance for both output formats
- Supports two-way conversion: Coaxial to TOSLINK, or TOSLINK to Coaxial
- Supports input audio signal from two channels up to 5.1 channels
- Select one input and send audio to both coax and TOSLINK outputs simultaneously
### EDID Detectives

**EXT-HD-EDIDPN**  
HDMI Detective Plus

- Supports resolutions up to 1080p Full HD and 1920x1200 (WUXGA)
- USB port for advanced programming of features such as EDID management
- Configurable EDID using Gefen Syner-G™ software suite, downloadable from Gefen website
- DDC Re-clocking
- Records the EDID from a display

- 6 pre-programmed EDID profiles
- 6 user-programmable EDID banks for copying/uploading EDIDs
- Selectable HDCP pass-through
- Field updatable firmware via USB port
- Compact and portable

**EXT-HDBOOST-141**  
Booster for HDMI with EDID Detective

- Extends copper HDMI cables up to 115 feet at 4K Ultra HD and 4K Cinema (DCI)
- Extends copper HDMI cables up to 150 feet at 1080p Full HD Supported resolutions include 4K Ultra HD, 4K Cinema, 1080p Full HD, and 2048 x 1536 (QXGA)
- USB port for advanced programming of features such as video equalization, pre-emphasis, and EDID management
- Configurable EDID using Gefen Syner-G™ software suite, downloadable from Gefen website

- DDC Re-clocking
- EQ adjustment for best results with varying cable types and lengths
- Can record the EDID from a display
- 6 pre-programmed EDID profiles
- 6 user-programmable EDID banks for copying/uploading EDIDs
- Selectable HDCP pass-through
- Field updatable firmware via USB port
- Compact and portable

**EXT-DVI-EDIDP**  
DVI Detective Plus

- Supports resolutions up to 1920x1200, 2K, and 3840x2400 (Dual Link)
- Quick and easy way to store EDID information from any DVI display
- Provides a virtual EDID to maintain active monitor status when switching away from a source
- HDCP pass-through

- Records the EDID from a display
- 5 pre-programmed EDID profiles
- EDID write protection switch
- No power is required after initial programming
- Compact and portable
Seamless and Multiview Switchers and Video Wall Controllers

**EXT-UHD600A-MVSL-41**

4K Ultra HD 600 MHz 4x1 Multiview Seamless Switcher w/ Audio De-Embedder

- Seamless switcher scales and sizes each of the four inputs, and outputs them one at a time or as windows on a single display
- Input resolution (per input) up to 1080p Full HD
- Output resolution up to 4K Ultra HD 600 MHz (60 Hz, 4:4:4)
- HDCP 1.4 compliant
- Seamlessly switching ensures no switching delay and no picture loss during transitions
- Default predefined Multiview window arrangements can be accessed via front panel preset push-buttons and all other available interfaces
- Custom user-configurable Multiview window layouts can be accessed via front panel preset push-buttons and all other available interfaces
- User-selectable playback of HDMI audio content from any of the four inputs
- Built-in Audio De-Embedder breaks out 2 channel analog audio from the HDMI signal, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact
- Controllable via front panel controls, IR, IP (web server interface, Telnet, and UDP), and RS-232
- Enhanced API for added functionality with third-party control systems
- Easy to use on-screen Graphical User Interface (GUI) and web server interface
- Handheld IR remote control and IR Extender input on back panel
- Field-updatable firmware via mini-USB port and Gefen Syner-G™ software
- Locking power supply connector
- 1U tall rack-mountable enclosure, rack ears included

**EXT-HD-VWC-144**

HD Video Wall Controller

- Create a 2x2 video wall from any Hi-Def source, using four HDTV displays
- Split and scale a single Hi-Def source to four displays
- Input and output resolutions up to 1080p Full HD and 1920x1200 (WUXGA)
- HDCP compliant
- Advanced Bezel Compensation feature provides compatibility with virtually any screen frame width, and allows for accurate display of the image
- Controllable via front panel, IR, IP (web server interface, Telnet, and UDP), and RS-232
- Easy to use on-screen Graphical User Interface (GUI) and web server interface
- Handheld IR remote control
- Field-upgradeable firmware via web server interface
- USB port (reserved for future product enhancements)
- Locking power supply connector
- 1U tall rack-mountable enclosure, rack ears included

**EXT-UHD600A-VWC-14**

4K Ultra HD 600 MHz Video Wall Controller w/ Audio De-Embedder

- Create a 2x2 video wall from a 4K Ultra HD 600 MHz source, using four HD displays
- Input resolution up to 4K Ultra HD 600 MHz (60 Hz, 4:4:4)
- Output resolution (per display) up to 1080p Full HD
- HDCP 2.2 and 1.4 compliant
- Advanced Bezel Compensation feature provides compatibility with virtually any screen frame width, and allows for accurate display of the image
- Built-in Audio De-Embedder breaks out 2 channel analog audio from the HDMI signal, allowing the audio content to be sent to external amplifiers and music distribution systems for added impact
- Controllable via front panel, IR, IP (web server interface, Telnet, and UDP), and RS-232
- Enhanced API for added functionality with third-party control systems
- Easy to use on-screen Graphical User Interface (GUI)
- Advanced web server interface using an external computer
- Handheld IR remote control
- Field-upgradeable firmware via web server interface
- USB port (reserved for future product enhancements)
- Locking power supply connector
- 1U tall rack-mountable enclosure, rack ears included
Seamless and Multiview Switchers
and Video Wall Controllers

EXT-HD-MVSL-441
Multiview Seamless Switcher

- Seamless switcher scales and sizes each of the four inputs, and outputs them one at a time or as windows on a single display.
- Input and Output resolutions up to 1080p Full HD and 1920x1200 (WUXGA).
- HDCP compliant.
- Seamless switching ensures no switching delay and no picture loss during transitions.
- Default pre-configured Multiview window arrangements can be accessed via five front panel preset push-buttons.
- Custom user-configurable Multiview window layouts can be accessed via five front panel preset push-buttons.
- Locking power supply connector.

EXT-HD-SL-444
4x4 Seamless Matrix for HDMI

- Seamless matrix scales each of its four inputs, and routes them to any or all of the four outputs without frame loss.
- Input and Output resolutions up to 1080p Full HD and 1920x1200 (WUXGA).
- HDCP compliant.
- Seamless switching ensures no switching delay and no picture loss during transitions.
- Ten user-configurable routing presets can be accessed via front panel push-buttons.
- Controllable via front panel controls, IR, IP (web server interface, Telnet, and UDP), and RS-232.

- User-selectable playback of HDMI audio content from any of the four inputs.
- Controllable via front panel controls, IR, IP (web server interface, Telnet, and UDP), and RS-232.
- Easy to use on-screen Graphical User Interface (GUI) and web server interface.
- Handheld IR remote control and IR Extender input on back panel.
- Field-upgradable firmware via web server interface.
- USB port (reserved for future product enhancements).
- 1U tall rack-mountable enclosure, rack ears included.

- Easy to use on-screen Graphical User Interface (GUI).
- Handheld IR remote control and IR Extender input on back panel.
- Field-upgradable firmware via web server interface.
- USB port (reserved for future product enhancements).
- Locking power supply connector.
- 1U tall rack-mountable enclosure, rack ears included.