



# 4K Ultra HD 8x9 Matrix for HDMI w/ HDCP 2.2, HDBaseT™ and POH

## GEF-UHD-89-HBT2

**HDMI 2.0**

**4K ULTRA HD**  
60Hz, 4:2:0

**4K CINEMA**  
DCI, 4096 x 2160, 30Hz

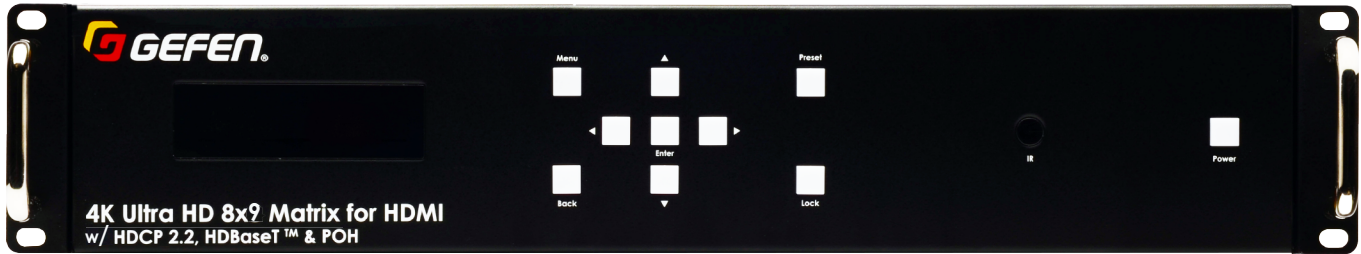
**IP Control**



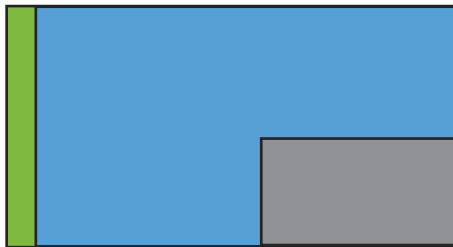
**HDCP 2.2**

**HDBT ASE™**

**POH**



The Gefen 4K Ultra HD 8x9 Matrix for HDMI w/ HDCP 2.2, HDBaseT 2.0, and POH routes eight 4K sources to any combination of nine 4K displays. It features eight HDMI inputs, one HDMI output for local viewing/monitoring, and eight HDBaseT™ 2.0 outputs. The HDBaseT™ 2.0 outputs extend AV and controls up to 100m at 4K to eight receivers installed at remote viewing locations. Gefen's implementation of the new HDBaseT 2.0 Colligo™ platform ensures an even more robust and resilient connection than the industry standard HDBaseT™. Resolutions up to 4K Cinema-DCI (4096 x 2160 at 24 or 30 Hz 4:4:4) and 4K Ultra HD (3860 x 2160 at 60 Hz, 4:2:0 or 30Hz 4:4:4) are supported. This product is compliant with the latest HDCP 2.2 protocol as well as the legacy HDCP 1.4. The Gefen 8x9 Matrix also supports 1080p Full HD, 1920 x 1200 (WUXGA), 3DTV, and Deep Color (up to 1080p resolution). Multichannel digital audio including 7.1 channels of LPCM and HBR (High Bit Rate) digital audio formats such as Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ are also passed through. HDBaseT™ extension between the matrix and the eight included receivers supports HDMI, 2-way IR, RS-232, and Ethernet. IR from viewing locations to the sources can be routed independent from video if need be. POH (Power Over HDBaseT™) technology provides power to the receiver units and other POH-class-compliant devices, using the same CAT-5 cable that extends the HDMI and control signals. The Gefen Syner-G™ software's Discovery and Show-Me features simplify initial IP configuration. This matrix can be controlled via front panel buttons, a handheld IR remote, electrical IR, RS-232, Telnet, UDP, and Gefen's intuitive and user-friendly web server interface. An easy-to-read, super-bright OLED front panel display indicates routing status and IP settings. The matrix comes in a rack-mountable enclosure with detachable rack-ears for shelf-top placement. Low profile, surface-mountable Receiver units fit in tight places and accommodate Gefen locking HDMI cables for secure connections



- 4K Cinema-DCI (4096 x 2160)
- 4K Ultra HD (3840 x 2160)
- 1080p Full HD (1920 x 1080)



**1080P**  
PROGRESSIVE



Advanced  
**EDID**  
Management

## Features\*

- Routes eight 4K sources to nine displays
- Supports resolutions up to 4K Cinema-DCI (4096 x 2160 at 24 or 30 Hz), 4K Ultra HD (3860 x 2160 at 60 Hz, 4:2:0 color space), 1080p Full HD, and 1920x1200 WUXGA
- HDCP 2.2 and 1.4 compliant
- Extends HDMI, Ethernet, RS-232, and 2-way IR up to 100 meters (330 feet)
- Supports 12-bit Deep Color (up to 1080p Full HD)
- 3D pass-through
- Lip Sync pass-through
- IR from viewing locations to sources can be routed along with or independent from video path
- Push button front panel controls
- Advanced EDID Management for rapid integration of sources and displays
- Pass-through of LPCM 7.1 and HBR (High Bit Rate) audio formats such as 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)
- 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
- 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

## Specifications\*

- Maximum Pixel Clock: 300 MHz
- Matrix:
  - HDMI Input Connectors: (8) Type A 19-pin female, locking
  - HDMI Output Connector: (1) Type A 19-pin female, locking
  - HDBaseT™ 2.0 POH Output Connectors: (8) RJ-45
  - RS-232 serial port - control: (1) DB-9, female
  - RS-232 serial ports - extension: (8) 3.5mm mini-stereo jack
  - IR In/Ext Ports - extension: (9) 3.5mm mini-stereo jack
  - IR In/Ext Port - control: (1) 3.5mm mini-stereo jack
  - IR Out Ports - extension: (9) 3.5mm mini-mono jack
  - Ethernet Port - IP Control & extension: (1) RJ-45
  - AC Power Inlet: (1) IEC type
  - IR Extender type: EXT-RMT-EXTIRN (not included)
  - IR Sensor: (1), located on front panel
  - Display: OLED, 2 rows, 20 characters per row
  - Power Button/Indicator: (1) tact-type, bi-color blue/orange backlight
  - Control Buttons/Indicators: (7) tact-type, blue backlight
  - Power Supply: 100V to 240V AC
  - Rack mounting requirements: Standard 19" rack, 2U high
  - Dimensions (excluding rack ears and connectors, W x H x D): 17.25" x 3.5" x 15.75" (440mm x 89mm x 400mm)
  - Net Unit Weight: 22 lbs. (10.0 kg)
- Receiver:
  - HDMI Output Connector: (1) Type A 19-pin female, locking
  - HDBaseT™ 2.0 POH Input Connector: (1) RJ-45
  - RS-232 serial port - extension: (1) 3.5mm mini-stereo jack
  - IR In/Ext Port - extension: (1) 3.5mm mini-stereo jack
  - IR Out Port - extension: (1) 3.5mm mini-mono jack
  - Ethernet Port - extension: (1) RJ-45
  - IR Extender type: EXT-RMT-EXTIRN (not included)
  - Dimensions (excluding brackets and connectors, W x H x D): 3.50" x 0.65" x 5.65" (88mm x 16mm x 143mm)
  - Net Unit Weight: 0.6 lbs. (0.25 kg)
- System:
  - Power Consumption: 175W
  - Operating Temperature: +32 to +122 °F (0 to +50 °C)
  - Operating Humidity: 5% to 90% RH, non-condensing
  - Storage Temperature: -4 to +140 °F (-20 to +60 °C)
  - Storage Humidity: 5% to 95% RH, non-condensing
  - MTBF: 50000 hours
- Package Contents: (1) Matrix  
(8) Receivers  
Assorted accessories
- Shipping Weight: 28 lbs. (12.75 kg)



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