

# GEFEN TOOLBOX

## Ultra HD 4x4 Matrix for HDMI

HDMI® 2.0

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

4K CINEMA  
DCI, 4096 x 2160

HDCP

Route four Hi-Def sources to four Ultra HD displays with FST, 3DTV, and 4K x 2K Ultra High-Definition support

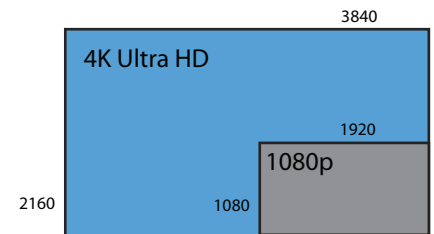
The GefenToolBox 4x4 Matrix for HDMI 4K x 2K is a compact and lightweight alternative to rack-mounted matrixes. It allows up to four Ultra High Definition 4K or 1080p Full HD sources to be routed to up to four Ultra HD displays. This product supports resolutions up to 4K (3840 x 2160 @ 60Hz 4:2:0 or 30Hz 4:4:4) and 4K Cinema (DCI) (4096 x 2160 @ 24 or 30Hz 4:4:4). Deep Color, 3DTV pass-through, and lossless audio formats such as LPCM 7.1, Dolby® TrueHD, and DTS-HD Master Audio™ are also supported. Each Ultra Hi-Def source can be routed to any of the connected displays using the front panel push-button controls, the included IR remote, RS-232 serial control interface, or through IP, using Telnet, UDP, and the built-in web server interface. LED indicators on the top panel display the current routing status, FST mode, audio configuration, and EDID settings.

### FST

Fast Switching Technology (FST) is a Gefen software implementation for HDMI products. FST eliminates the lengthy HDMI authentication process, and allows connecting/disconnecting or turning ON / OFF of HDTV displays without having these activities affect other displays in the same distribution system.

### How It Works

Connect up to four Ultra Hi-Def sources to the HDMI inputs on the matrix, using HDMI cables. Connect up to four Ultra HD displays to the HDMI outputs. Connect an Ethernet cable from the network to the RJ-45 connector to use the built-in web server or Telnet/UDP capability to control routing, EDID management, and other functions. Connect an RS-232 cable between an automation control device such as Gefen EXT-PACS or GTB-MINI-PACS and the matrix. Connect the included locking power supply to the matrix and to an available electrical outlet. Apply power to the sources and displays. The HD sources can now be routed to the displays using the front panel push-buttons, IR remote control, RS-232, Telnet, UDP, or web server interface.



### Features\*

- Routes four Ultra Hi-Def sources to four Ultra HD displays
- Supports resolutions up to Ultra HD 4K (3840 x 2160 @ 60Hz 4:2:0 or 30Hz 4:4:4), 4K Cinema (DCI) @ 24 or 30Hz 4:4:4, and 1080p Full HD
- HDMI 2.0 compliant
- HDCP 1.4 compliant
- Supports 12-bit Deep Color (up to 1080p Full HD)
- 3DTV pass-through
- Lip Sync pass-through
- Push button controls for Routing, FST Modes, Audio, and EDID management
- FST Technology speeds up HDCP authentication process
- Advanced EDID Management for rapid integration of sources 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)
- RS-232 Serial interface for remote control via 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 and IP ports
- Locking Power Supply
- Surface-mountable

### Specifications\*

- Maximum Pixel Clock: 300 MHz
- HDMI Input Connectors: (4) Type A 19-pin female, locking
- HDMI Output Connectors: (4) Type A 19-pin female, locking
- USB Port: (1) Mini-B
- RS-232 serial port: (1) DB-9, female
- Ethernet (IP Control) Port: (1) RJ-45
- Power Indicator: (1) LED, blue
- FST Indicators: (2) LED, green
- Audio Indicators: (2) LED, green
- EDID Indicators: (3) LED, green
- Routing Indicators: (16) LED, green
- FST Selector: (1) tact-type, recessed push-button
- Audio Selector: (1) tact-type, recessed push-button
- EDID Selector: (1) tact-type, recessed push-buttons
- Routing Selectors: (4) tact-type push-buttons
- IR Sensor: (1), on front panel
- IR Extender Port: (1) 3.5mm mini-stereo jack
- DC Power Connector: (1) Locking type
- Power Supply: 5V DC
- Power Consumption: 13 Watts (max.)
- Operating Temperature: +32 to 104 °F (0 to +40 °C)
- Dimensions (W x H x D): 6.9" x 11.9" x 1.0" (175mm x 302mm x 26mm)
- Shipping Weight: 6 lbs. (2.7 kg)



1080P  
PROGRESSIVE



GTB-HD4K2K-444-BLK

Gefen, LLC | 20600 Nordhoff Street, Chatsworth CA 91311 | Tel. (818) 772-9100 (800) 545-6900 | Fax (818) 772-9120 | [www.gefen.com](http://www.gefen.com)

\* Features and specifications are subject to change without notice.  
All trademarks and registered trademarks are properties of their respective owners  
Copyright© 2015 Gefen LLC.