Route Ultra-HD 4Kx2K 60Hz 4:4:4 18Gbps HDMI video and audio signals from 16 video sources to 16 displays.

- Configure and control the switch through front panel buttons, Ethernet, IR remote control, or RS232.
- Supports Ultra-HD 4Kx2K resolutions (4096x2160 and 3840x2160 @24/30/60Hz YUV 4:4:4), HDTV resolutions to 1080p, and computer resolutions to 1920x1200 (WUXGA).
- Each input can be independently connected to any or all outputs.
- HDCP 2.2 and 1.4 compliant.
- HDMI features supported:
  - HDMI 2.0
  - Dolby TrueHD, DTS-HD Master Audio, Dolby Digital, DTS 7.1 and LPCM audio passthrough
  - YUV 4:4:4, 4:2:2, and 4:2:0
  - 12-bit Deep Color
  - HDR
  - 3D
  - Bandwidth up to 600 Mhz (18 Gbps)
- EDID learning for the support of any HDMI display device.
- Selectable built-in EDID table.
- Compact 1RU design
- Cable management tray included.

VEEMUX® SM-16X16-HD4K (Front & Back)

The VEEMUX® 16x16 4K HDMI Video Matrix Switch routes digital 4Kx2K HDMI video and audio signals from 16 HDMI video sources (computers, Blu-Ray players, satellite receivers, etc) to 16 displays (monitors, 4K TV's, projectors, etc).

- **Resolutions to Ultra-HD 4Kx2K 60Hz 4:4:4**
- **18Gbps bandwidth**
- **HDMI 2.0, HDCP 2.2**
- **IR, RS232, Ethernet control**
- **16x16 in compact, 1RU case**

Specifications

Video Input

- 16 female HDMI input connectors.
- Compatible with computers and UHD video sources (satellite receivers, Blu-Ray players, etc) with HDMI video.
- Supports HDCP 2.2/1.4
- Multiplatform support: Windows 2000/XP/Vista/7/8/10, Windows Server 2000/2003/2008/2012, Solaris, Linux, FreeBSD, and MAC OS 9/10.

Video Output

- 16 female HDMI output connectors.
- Supports Ultra-HD 4Kx2K resolutions (4096x2160 and 3840x2160 @24/30/60Hz RGB/YUV 4:4:4), HDTV resolutions to 1080p, and computer resolutions to 1920x1200 (WUXGA).
- Supports HDCP 2.2/1.4
- Max data rate: 18Gbps

Protocols

- HTTP, HTTPS
- TCP/IP, DHCP, UDP, ARP, TLS v1.2
- IPV4

Power

- Input: 100 to 240 VAC at 50 or 60 Hz via IEC connector. (Country-specific power supply cable included.)
- Power consumption: 150W max

Environmental

- Operating temperature: 32 to 104°F (0 to 40°C).
- Storage temperature: -20 to 140°F (-30 to 60°C).
- Operating and Storage Relative Humidity: 17 to 90% non-condensing RH.

Warranty

- Two years

Dimensions

- WxDxH (in):
  - Without cable management tray: 19x14.56x1.75 in (483x370x44 mm).
  - With cable management tray: 19x18.36x1.75 in (483x466x44 mm).

Cables

- Interface cables between the video sources/displays and the switch are required for proper operation.
  - Supports cable lengths to 20 feet for 4Kx2K resolutions at 60Hz and lengths to 50 feet for 1080p at 60Hz.
    - Cables longer than 50 feet can be used for 1080p displays provided they have a built-in video equalizer (also known as "active HDMI cables").
- Use HD-xx-MM HDMI cables to connect an HDMI source or display.
  - HD-3/6/10/15/20-MM supports resolutions to 4Kx2K.
  - HD-30/50/75/100-MM supports resolutions to 1080p.
    - HD-75/100-MM have a built-in digital video equalizer for extending HD signals up to 1080p at 60Hz. These cables are directional, with one plug end marked for the display.
- Cables not included.

Regulatory Approvals

- CE, RoHS
- TAA compliant

Compatible NTI Products

- Combine NTI's extenders, switches, splitters and cables for complex applications
  - 4K HDMI Extender via One CATx (ST-C64K-300)
    - Supports resolutions up to 4k@30hz
  - 4K HDMI Active Optical Cable (HD4K18GB-FO-xxM-MM)

NTI® NETWORK TECHNOLOGIES INCORPORATED

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Route Ultra-HD 4Kx2K 60Hz 4:4:4 18Gbps HDMI video and audio signals from 16 video sources to 16 displays.

Control Methods

Ethernet Control

- Standard control method.
- Configuration can be done over the Internet via Web server or Telnet.
- Female RJ45 connector.
- 10/100 BaseT Ethernet interface.
  - **Web Server**
    - Security is ensured by password and user configurable timeout.
    - Up to 25 users can access the web page at one time.
    - The user can access the following pages:
      - Switch page: allows the user to connect any input to any output, save and recall up to ten connections.
      - Administration pages: administrator can access pages for system configuration, network configuration, naming video inputs/outputs, scanning sequence, DDC options, changing password, and updating firmware.
      - Standby Mode page: allows the user to quickly place the switch in standby mode.
      - Support page: provides links to the product manual and firmware downloads webpage.
      - Reboot page: allows the user to quickly reboot the switch.
  - **Telnet**
    - Security is ensured by password.
    - Up to 25 users can access the telnet connection at one time.
    - Commands are similar to RS232 commands.
    - The telnet server listens on ports 2000 and 2005.
      - Port 2000 is for an operator telnet session.
      - Port 2005 is intended for a software control type session using raw TCP communication.

Front Panel Interface

- Standard control method.
- Configuration and control can be done using the front panel buttons.
- Keypad allows selection of the input source to be routed to the desired outputs.

RS232 Control

- Standard control method.
- Configuration and control can be done through the serial port.
  - Female RJ45 connector.
- Control the switch using the NTI Switch Control Program with Graphical User Interface (GUI control) via RS232.

Infrared Remote Control

- Standard control method
- Transmitter can be up to 30 feet (9.1 meters) away.
- Control up to 15 switches with one remote.
- Power: Two AAA batteries (included).

Configuration and Cable Illustration

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