

# 4K HDMI USB KVM Switch: 4-, 8-, 16-, 24- and 32-Port

UNIMUX™

## Control up to 32 Ultra-HD 4Kx2K 30Hz HDMI USB computers from one USB keyboard, USB mouse and 4K HDMI monitor

- Supports Ultra-HD 4Kx2K resolutions to 3840x2160 (30Hz) and HDTV resolutions to 1080p (60Hz).
- Features NTI's patented true autoboot USB switching – all attached computers can be booted simultaneously.
- Compatible with USB computers (PC, SUN and MAC) with HDMI outputs.
  - Use DVI-HD-xM-MM cables to connect a DVI computer.
- Control the switch through the front panel buttons, keyboard commands, OSD, or RS232.
- Two transparent USB 2.0 ports (low/full/high speed), in addition to keyboard and mouse ports, for connecting USB devices such as printers, game controllers, USB flash drives, touch screen monitors, whiteboards, etc.
- High quality steel construction.
- Flash upgradeable.
- Rackmount kit included.
- Cable management tray included.



### UNIMUX-HD4K-16 (Front & Back)

The UNIMUX™ HDMI USB KVM Switch allows a user to control up to 32 Ultra-HD 4Kx2K 30Hz USB computers with one USB keyboard, USB mouse and 4K HDMI monitor. Dedicated internal microprocessors emulate keyboard and mouse presence to each attached CPU 100% of the time so all computers boot error-free.

## Specifications

### Hosts

- Female HDMI-A connectors.
- Female USB Type B connectors.
- Supports USB-enabled computers (PC, SUN, and MAC) with HDMI video.
- Multiplatform support: Windows 7/8/10/11, Windows Server 2008/2012/2016/2019/2022, Linux, FreeBSD, and MAC OS 10/11/12/13.
- Compliant with HDMI 1.4 and HDCP 1.4 standards.

### Monitor

- Supports Ultra-HD 4Kx2K resolutions to 3840x2160 (30Hz) and HDTV resolutions to 1080p (60Hz).
- One female HDMI-A connector.
- Compliant with HDMI 1.4 and HDCP 1.4 standards.

### Devices

- Two female USB 1.1 Type A connectors for keyboard and mouse.
  - Supports full-speed (12 Mbps) or low-speed (1.5 Mbps) USB keyboard and mouse.
  - Compatible with most USB keyboards and mice, including USB IntelliMouse®.
  - Keyboard and mouse are hot-pluggable.
  - Supports SUN and MAC extra keys.
- Two transparent female USB 2.0 Type A connectors for additional USB devices.
  - Supports high-speed (480 Mbps), full-speed (12 Mbps) and low-speed (1.5 Mbps) USB devices including, but not limited to, touchscreens monitors, CAC card readers, printers, scanners, and thumb drives.

### Power

- 100 to 240 VAC at 50 or 60 Hz via IEC connector.

Power Consumption			
Model	Power (W)	Model	Power (W)
UNIMUX-HD4K-4	5	UNIMUX-HD4K-24	15
UNIMUX-HD4K-8	5	UNIMUX-HD4K-32	20
UNIMUX-HD4K-16	10		

### Dimensions

- UNIMUX-HD4K-4/8/16 WxDxH:
  - Without supplied rackmount kit: 15.32x6.82x1.75 in (389x173x44 mm)
  - With supplied rackmount kit: 19x6.82x1.75 in (483x173x44 mm)
- UNIMUX-HD4K-24/32 WxDxH:
  - Without supplied rackmount kit: 15.32x6.82x3.5 in (389x173x88 mm)
  - With supplied rackmount kit: 19x6.82x3.5 in (483x173x88 mm)
- Cable tray adds an additional 3" to the depth.

### Cables

- Interface cables between the computers/display and the switch are required for proper operation. (Cables not included)
- Use HD-xx-MM cable to connect an HDMI computer or display.
  - HD-3/6/10-MM supports resolutions to 4K@30Hz.
  - HD-15/25/30/50-MM supports resolutions to 1080p.
- Use HD-ACT-xx-MM 4K HDMI Active Cables to connect an HDMI computer or display up to 100 feet.
  - Supports 4K@30Hz up to 100 feet on output connections and up to 75 feet on input connections.
  - For MAC computers, supports up to 1080p@60Hz.
- Use DP-HD-xx-MM to connect a 4K@30Hz DisplayPort computer up to 10 feet.
- Use a USB2-AB-x-5T male USB Type A to male USB Type B interface cable to connect a USB computer to the switch.
- 5-foot (1.5-meter) CAT5e patch cable and RJ45F-DB9F adapter included for RS232 control.

### Environmental

- Operating temperature: 32 to 100°F (0 to 38°C).
- Storage temperature: -22 to 140°F (-30 to 60°C).
- Operating and storage relative humidity: 5 to 90% non-condensing RH.

### Regulatory Approval

- CE, RoHS
- TAA compliant

### Warranty

- Two years

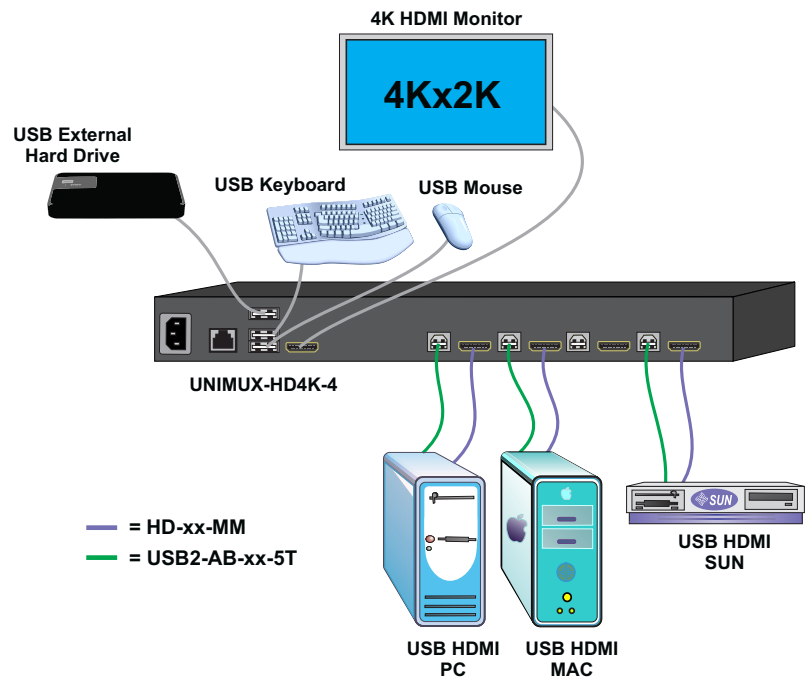
# 4K HDMI USB KVM Switch: 4-, 8-, 16-, 24- and 32-Port UNIMUX™

Control up to 32 Ultra-HD 4Kx2K 30Hz HDMI USB computers from one USB keyboard, USB mouse and 4K HDMI monitor

## Specifications (Continued)

MTBF			
NTI Part#	Hours	NTI Part#	Hours
UNIMUX-HD4K-4	58,898	UNIMUX-HD4K-24	40,491
UNIMUX-HD4K-8	56,054	UNIMUX-HD4K-32	34,691
UNIMUX-HD4K-16	46,406		

## Configuration and Cable Illustration



## Control Methods

### Front Panel Interface

- LEDs indicate currently selected port and mode of operation.
- Hold in any button for more than five seconds to go into Scan, Broadcast or Command Mode.
  - In Normal Operating Mode, the user can directly operate the selected computer with transparent presence of the NTI switch.
  - Scan Mode automatically and sequentially displays the video from each powered on computer for 5-255 seconds.
  - Broadcast Mode allows the user's keystrokes to be sent to all powered on computers. (Broadcast Mode is not available for MACs.)
  - Command Mode allows the user to give instructions to the switch through his/her keyboard. Keystrokes are not passed to the computer.

### 4K HDMI USB KVM Switch Models

NTI Part#	# of CPUS	NTI Part#	# of CPUS
UNIMUX-HD4K-4	4	UNIMUX-HD4K-24	24
UNIMUX-HD4K-8	8	UNIMUX-HD4K-32	32
UNIMUX-HD4K-16	16		

### RS232 Control

- Female RJ45 connector.
- Baud rate: 1200 to 115200.
- Commands
  - **CS** – connect output (user) port to specific input (CPU) port.
  - **CB** – change baud rate.
  - **RO** – reads what input is connected to the output.
  - **RU** – reads unit size.
  - **RV** – return firmware version.

### On Screen Display (OSD)

- Select computers by name with the On Screen Display (OSD).
- Use keyboard or mouse to operate the switch from menus superimposed onto the monitor.
- Names can be up to 30 characters long.
- Help screen assists user with the OSD.
- OSD is built into the switch – no need to install additional hardware or software.
- OS and software-independent.

### Keyboard

- Scan, Broadcast and Command Modes are available from the keyboard using hot keys.
- Use the keyboard to command the switch box to select ports or configure the Scan delay.
- Type <Ctrl>+<'> (or <Compose>+<'>) to go into Command Mode.
- Press <Esc> to leave Command Mode and return to Normal or Scan Mode.