

HDN-4Plus

4-Port 4K Ultra HD KVM Switch with USB 2.0 Sharing



Access and Control Four 4K Ultra HD Computers Using Only One USB Keyboard, USB Mouse and HDMI Monitor with Full Emulation

FEATURES

- Switches four Ultra HD sources to one Ultra HD display
- Supports resolutions up to 4K Ultra HD (3820x2160 @30Hz), including 1080p (@60Hz) full HD
- Uses HDMI 1.4 ports
- Supports 3DTV pass through
- Zero pixel loss with TMDS signal correction
- Supports all USB 2.0 devices, including keyboard and mouse
- Control Sun, Mac or PC workstations from one KVM console
- Offers SmartPreview picture-in-picture technology
- Rack mountable in a standard 19 inch rack
- Flash upgradable firmware
- S/PDIF digital audio output
- Supports LPCM 7.1, Dolby True HD, Dolby Digital Plus and DTS-HD Master Audio
- Supports control via RS-232
- Hot key commands for quick channel selection
- Independent (asynchronous) switching of KVM and peripheral USB ports. Users can scan a document and save in another computer
- Complete keyboard emulation for error free booting
- Front panel keys for manual switching
- Supports DVI sources/display with DVI-to-HDMI adaptors (not included)



4K/2K



OVERVIEW

HDN-4Plus is a dedicated multi-platform KVM switch capable of managing four computers through a single HDMI monitor, USB keyboard, USB mouse, and other USB 2.0 devices. This is the first KVM switch on the market that features support for 4K Ultra HD (3840x2160 @30Hz) workstations. The device also features SmartPreview technology, which enables simultaneous picture-in-picture monitoring of the other sources connected to switch. This helpful technology allows users to keep tabs on the other connected workstations without constantly needing to switch back and forth.

The USB emulation technology utilized by HDN-4Plus enables immediate hot key source switching through a remote USB keyboard and mouse. HDN-4Plus is HDMI 1.4 and HDCP compliant, which supports 4K Ultra HD resolutions and 12-bit deep color at 1080p @60Hz. RS-232 control and front panel switching are supported. The switch also transmits digital audio, including a separate S/PDIF digital audio output for increased flexibility.

SOURCE SWITCHING MADE EASY

The HDN-4Plus provides a simplified management approach for four Ultra HD equipped computers with HDMI and USB 2.0 outputs. This dynamic KVM console can be controlled keyboard hot keys or RS-232 commands, as well as directly through the console's easy-to-read front panel.

EDID LEARNING & PROGRAMMING

The HDN-4Plus features plug-and-play EDID, making the switch easy to implement in virtually any scenario. As soon as a user plugs in a monitor, the switch automatically learns and copies the EDID to all of the ports. The plug-and-play EDID helps make switching hassle free and simple.

FULL USB KEYBOARD AND MOUSE EMULATION

The USB keyboard and mouse emulation utilized by HDN-4Plus provides quick source switching via keyboard hot keys. HDN-4Plus simulates the presence of a keyboard and mouse for every attached computer through a USB cable. This is essential as it simulates the existence of the keyboard and mouse to all the computers in order to switch without interruptions.

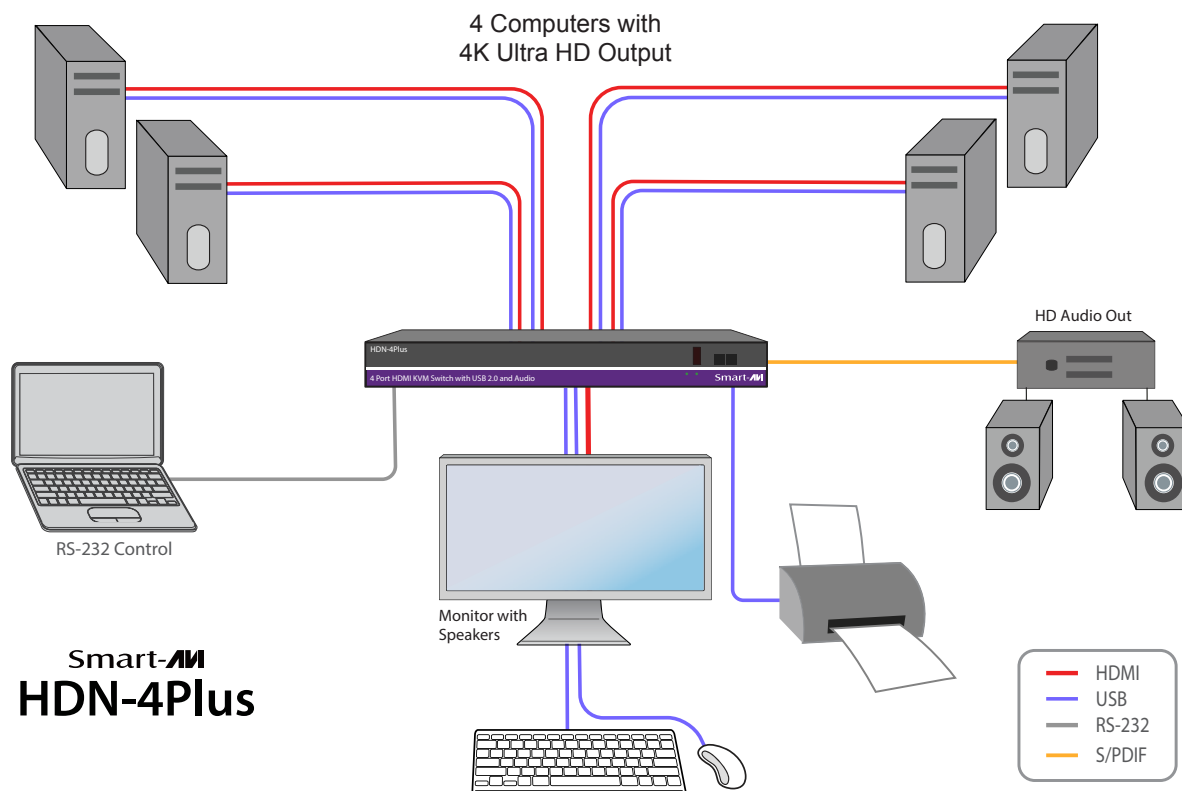
REAL-WORLD APPLICATIONS

The HDN-4Plus has a broad range of applications, but the main function is to centralize the access of up to four computers that support Ultra HD displays in a single workstation. Not only does it function as a KVM console, but it also supports USB 2.0 functionality. This allows users to access nearly USB device, including those not supported by other KVM switches. The HDN-4Plus is the ideal solution for medical, industrial, studio and defense applications, where it is not practical or safe to have multiple CPUs in the vicinity of the workstation.

PCs are increasingly equipped with 4K Ultra HD video cards. Managing 4K content isn't just the future of PC and network management, it's the technology of today. With four times the resolution of 1080p, there's nothing on the market that compares to 4K. The HDN-4Plus is equipped with HDMI ports that can handle 4K Ultra HD video content, as well as 1080p and 3D video. No matter what kind of HD content a user needs to manage at their workstation, the HDN-4Plus can handle it.

- Server Collocation
- Digital Signage
- Education
- Airports
- Dealer Rooms
- Control Rooms
- Audio/Visual Presentations
- Shopping Centers
- Hotels/Resorts
- KVM Switches

DIAGRAM



FLEXIBLE CONTROL

RS-232: Any external device or program supporting RS-232 can control the HDN-4Plus. The HDN-4Plus uses very simple protocol that enables easy integration with other devices.

USB/KEYBOARD: Hot keys enable the user to switch and control all the different functions of the KVM system.

FLEXIBLE SHARING

INDEPENDENT SIMULTANEOUS DEVICE SELECTION: Flexibility is key with the HDN-4Plus. It enables the use of a USB keyboard and mouse of one computer while other USB peripherals such as scanners and printers are connected to other computer sources. HDN-4Plus maintains the ability to switch all connected devices to any one of the computer sources as with any other KVM switches.

SPECIFICATIONS



HDN-4Plus Front



HDN-4Plus Rear

VIDEO	
Format	HDMI 1.4
Maximum Pixel Clock	300 MHz
Input Interface	(4) HDMI (female)
Output Interface	(1) HDMI (female)
Resolution	Up to 4Kx2K (3840x2160 @30Hz) 1080P @60Hz and 1080P 3D @60Hz
DDC	5 volts p-p (TTL)
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
Bandwidth Frequency	10.2Gbps
USB	
Signal Type	USB 2.0, 1.1, and 1.0 w/ internal hub
Input Interface	(4) USB Type B
Output Interface	(2) USB 1.1 Type A for keyboard and mouse (2) USB 2.0 Type A Transparent

CONTROL	
Front Panel	Tactile Switches
RS-232	Via Control @ 9600 bps
Hot keys	Via Keyboard
Emulation	Keyboard and mouse only
OTHER	
Power	External 100-240 VAC/ 5VDC4A @ 20W
Consumption	20 W (Max)
Dimensions	1.71" H x 6.34" D x 12.5" W
Weight	3.5 lbs
Approvals	UL, CE, ROHS Compliant
Operating Temp.	-5 to +35°C(+23 to +95°F)
Storage Temp.	-4-185 °F (-20-85 °C)
Humidity	5 to 90%RH (No Condensation)

ORDERING INFORMATION

Part No.	Description
HDN-4Plus-S	4-Port 4K Ultra HD HDMI and USB 2.0 Switch. Includes: [HDN-4Plus & (PS5VDC4A)]



Designed and Manufactured in the USA

www.smartavi.com

Tel: 800.AVI.2131 • 818.503.6200 • 11651
Vanowen St. North Hollywood, CA. 91605

Smart-AVI
SMART AUDIO VIDEO INNOVATION