SM-EDPN-PRO

ADVANCED 4-PORT 4K KVM MULTIVIEWER

USER MANUAL

SM-EDPN-PRO-4S	4-Port Single-Head DP 4K KVM Multiviewer
SM-EDPN-PRO-4D	4-Port Dual-Head DP 4K KVM Multiviewer
SM-EDPN-PRO-4Q	4-Port Quad-Head DP 4K KVM Multiviewer

Designed and Manufactured in the USA

Smart-AVI

1-800-284-2131
www.smartavi.com

OVERVIEW

TECHNICAL SPECIFICATIONS

VIDEO		
Format	DisplayPort1.2	
Maximum Pixel Clock	165 MHz	
Input Interface	SM-EDPN-PRO-4S	(4) DisplayPort 20-pin (female)
	SM-EDPN-PRO-4D	(8) DisplayPort 20-pin (female)
	SM-EDPN-PRO-4Q	(16) DisplayPort 20-pin (female)
Output Interface	SM-EDPN-PRO-4S	(1) DisplayPort 20-pin (female)
	SM-EDPN-PRO-4D	(2) DisplayPort 20-pin (female)
	SM-EDPN-PRO-4Q	(4) DisplayPort 20-pin (female)
Resolution	3840 x 2160 @ 60 Hz	
Color Mode	24-bit	
DDC	5 volts p-p (TTL)	
Input Equalization	Automatic	
Input Cable Length	Up to 20 ft	
Output Cable Length	Up to 20 ft	
Data Rate	1.65 Gbps per color	
EDID Support	Full emulation & preloaded profiles	
AUDIO		
Input Interface	(4) 3.5 mm Stereo Audio	
Output Interface	(1) 3.5 mm Stereo Audio	
Impedance	600 Ohm	
Frequency Response	20 Hz to 20 kHz	
Nominal Level	0-1.0 V	
Common Mode	Rejection at 60 dB	
USB		
Signal Type	USB 2.0, 1.1, and 1.0 w/ internal hub	
Input Interface	(4) USB Type B (female)	
Output Interface	(2) USB Type A (female) for K/M emulation; (2) for USB 2.0 Transparent	
CONTROL		
Front Panel	Push Buttons with LED Indicators	
LAN	RJ45	
Hot Keys	Via Keyboard	
OTHER		
Power Adapter	External 120-240 VAC, Internal PSU	
Dimensions	17.0" W × 2.7" H × 8.69" D	
Weight	4.4 lbs	
Approvals	UL, CE, ROHS Compliant	
Operating Temperature	+32 to +104°F (0 to +40°C)	
Storage Temperature	-4 to 140°F (-20 to +60°C)	
Humidity	Up to 80% (No Condensation)	
Emulation	Keyboard and Mouse	

WHAT'S IN THE BOX?

PART NO.	Q-TY	DESCRIPTION
SM-EDPN-PRO Unit	1	4-Port Single/Dual/Quad-Head 4K KVM Multiviewer
	1	Power Cord (100-240 VAC)
	1/2/4	USB and DisplayPort cables
	1	User Manual

FRONT AND BACK
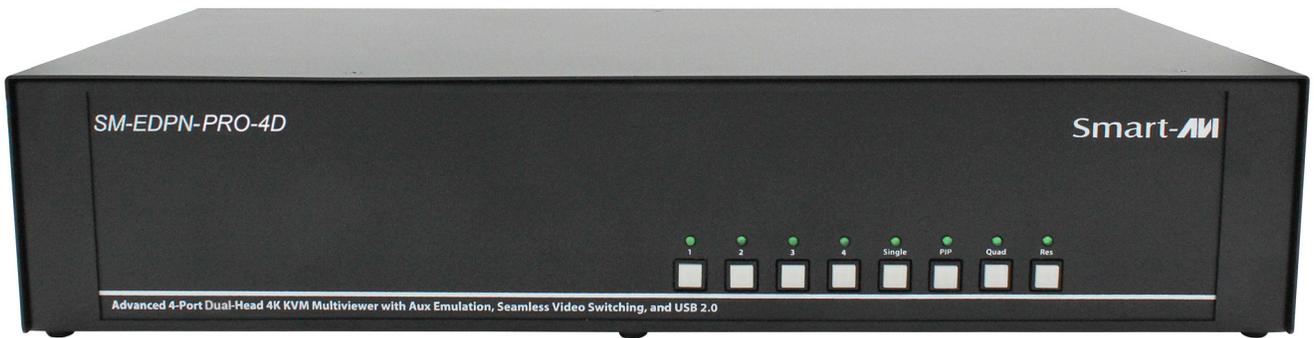

SM-EDPN-PRO-4S Back
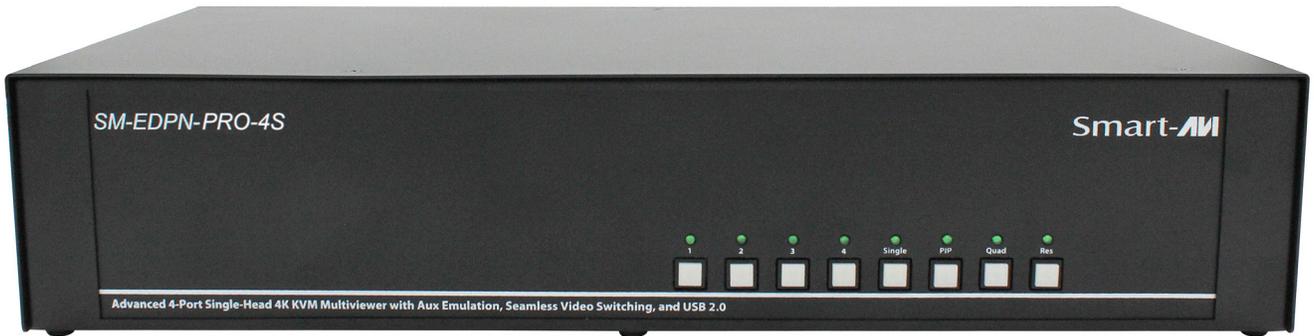
SM-EDPN-PRO-4S Front
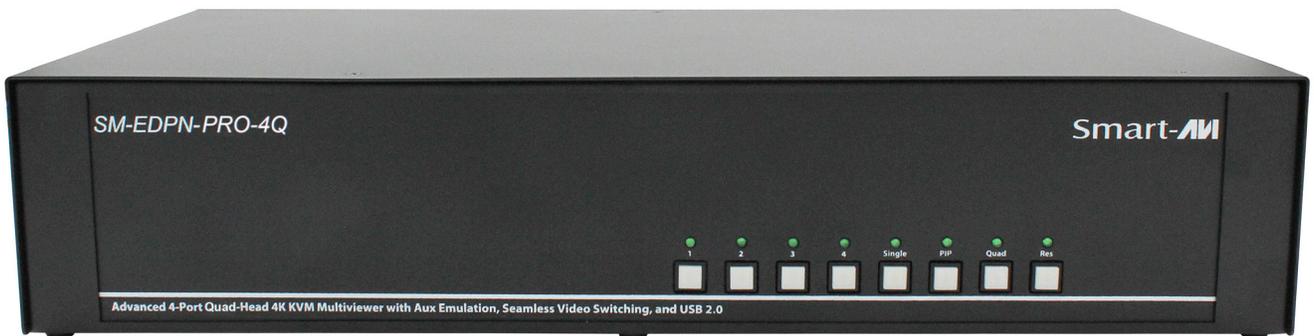
FRONT AND BACK (CONTINUED)

SM-EDPN-PRO-4D Back

SM-EDPN-PRO-4D Front

SM-EDPN-PRO-4Q Back

SM-EDPN-PRO-4Q Front

INSTALLATION

Follow these simple steps to set up your SM-EDPN-PRO and get it running smoothly. No special tools or software are required.

1. **Power Off Everything**
   Make sure the KVM and all connected computers are turned off before you start.
2. **Connect DisplayPort Cables**
   Use **DisplayPort (DP)** cables to connect the video outputs from each computer to the corresponding **DP IN** ports on the rear of the KVM.
3. **Connect USB Cables**
   Use **USB Type-A to Type-B** cables to connect a USB port from each computer to a **USB IN** port on the KVM.
4. (Optional) **Connect Audio**
   If you need audio, use **3.5 mm stereo audio cables** to connect each computer's sound output to the **AUDIO IN** ports on the KVM.
5. **Connect a Monitor**
   Attach your monitor to the **DP OUT** console port using a DisplayPort cable.
6. **Connect Keyboard and Mouse**
   Plug your keyboard and mouse into the **USB console ports** labeled **K/M OUT**.
7. (Optional) **Connect USB 2.0 Devices**
   You can also connect USB peripherals like printers or cameras to the **USB 2.0 OUT** ports.
8. (Optional) **Connect Speakers**
   Plug your speakers into the **AUDIO OUT** port to share sound from the active computer.
9. **Power On the KVM**
   Plug in the power cord and connect a **12VDC power supply**. Turn on all computers and your monitor.

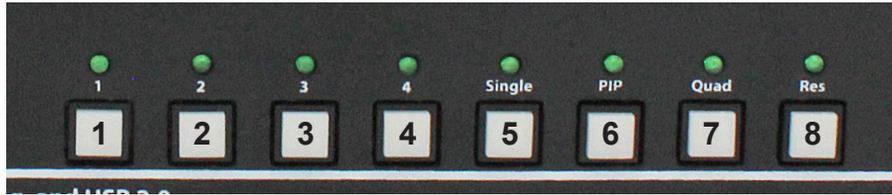**Note:** You can connect up to 4 on a 4-Port model.

A simplified connection diagram is shown below for reference.

——	VIDEO IN
——	VIDEO OUT
——	USB IN
——	USB K/M OUT
——	USB 2.0 OUT
——	AUDIO IN
——	AUDIO OUT
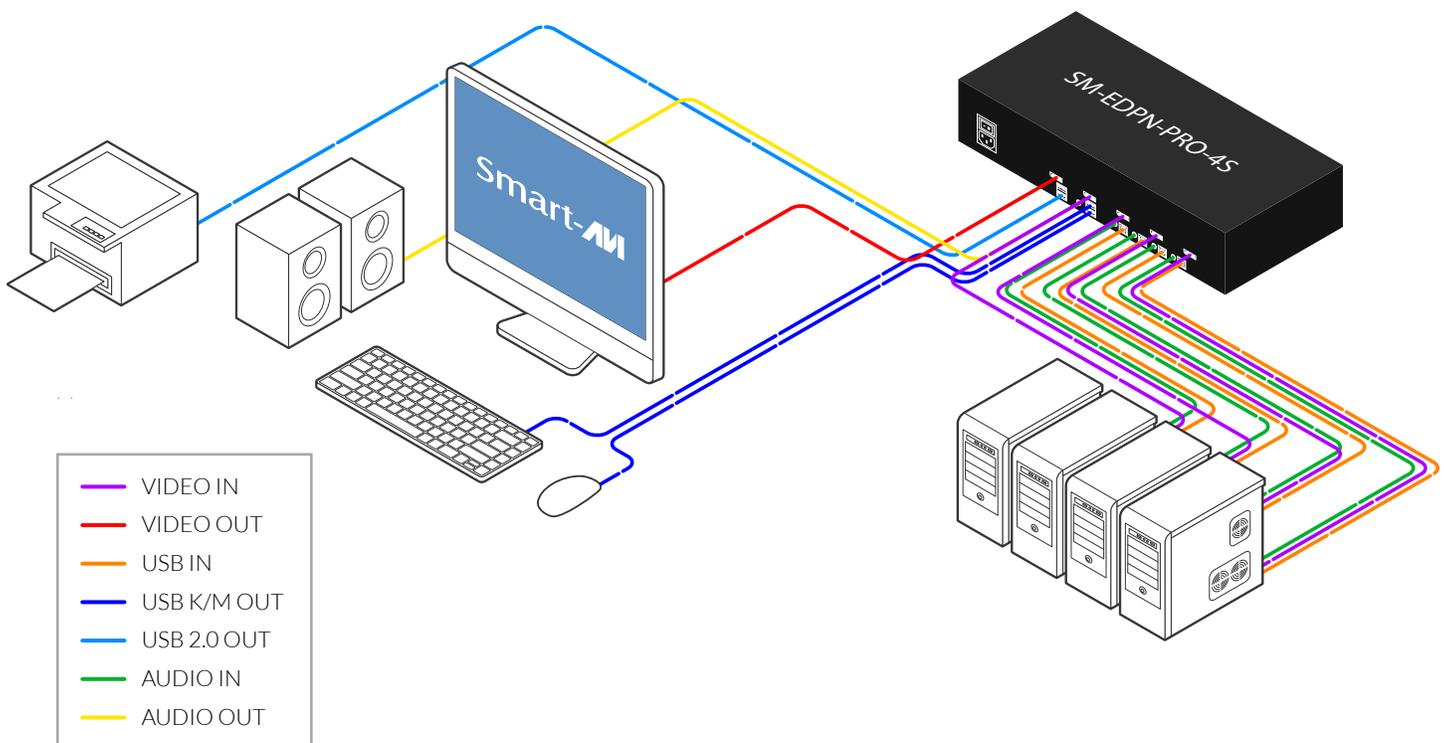
FRONT PANEL OVERVIEW

The front panel gives you complete control. Each button is labeled and backlit to make operation intuitive.

BUTTON	LABEL	PURPOSE
1–4	Input Select	Choose which computer(s) to view or control
5	Single	Shows one source full screen
6	PiP	Displays two sources (Picture-in-Picture)
7	Quad	Displays all four sources on screen
8	Res	Opens the resolution selection menu

Understanding the Lights
- **Blue Button Backlights** show which inputs or modes are active.
- **Green LEDs (below buttons 1–4)** show which computer currently has keyboard and mouse control.

Blue Backlights
- **Single Mode**: One input (1–4) is lit.
- **PiP Mode**: Two inputs are lit.
- **Quad Mode**: All four are lit.
- **Unsupported Modes**: Only buttons 1–4 light up; others stay off.

Green LEDs
- Indicate the **active keyboard/mouse control channel**.
- Only one green LED can be on at a time.

USING THE FRONT PANEL

Switching Modes
- Press **Single**, **PiP**, or **Quad** to change viewing layouts.
- In **Single Mode**, use buttons 1–4 to pick which input to view.
- In **PiP Mode**, press **PiP** again to choose which two inputs appear together.

Adjusting Resolution
1. Press **Res**. The button will blink blue.
2. Buttons **1–5** will light up, representing resolution options.
3. Press one of the lit buttons to choose your output resolution.
4. The selected button blinks three times to confirm.
5. If you don't make a selection within 5 seconds, the menu closes automatically.
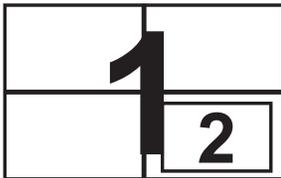
VIEWING MODES

The front panel gives you complete control. Each button is labeled and backlit to make operation intuitive.
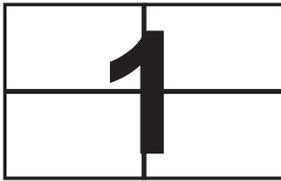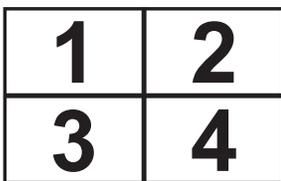
SINGLE MODE
One full-screen input. Ideal for focused work.

PIP MODE
Displays two inputs — one main and one inset window. You can pick which two computers are shown.

QUAD MODE
Displays all four sources together in a fixed 1.

KEYBOARD, USB, AND SERIAL CONTROLS

The SM-EDPN-Pro can be operated through your keyboard or an RS-232 connection. These shortcuts let you control video, audio, USB, and system settings easily.
Serial Settings: 115200 baud, 8 data bits, no parity, 1 stop bit, no flow control.

FUNCTION	KEYBOARD SHORTCUT	RS-232 COMMAND	DESCRIPTION
Switch to Single View	[CTRL] [CTRL] y [port #]	//y [port #]	Show one input full-screen
Show PiP View	[CTRL] [CTRL] p [port #] [port #]	//p [port #] [port #]	Display two sources at once (main + inset)
Show Quad View	[CTRL][CTRL] q	//q	Display all four sources on screen
Change Resolution	[CTRL][CTRL] s [1-5]	//s [1-5]	Adjust video output resolution
Change EDID	[CTRL][CTRL] e [1-7]	//e [1-7]	Select EDID mode or preset
Switch Video + USB + Audio	[CTRL] [CTRL] [port #]	//m [port #]	Switch all connections to selected input
Switch Audio Only	[CTRL][CTRL] a [port #]	//a [port #]	Change only the audio channel
Switch Keyboard/ Mouse Only	[CTRL][CTRL] c [port #]	//c [port #]	Switch KM control without changing video
Switch USB Only	[CTRL][CTRL] u [port #]	//u [port #]	Switch USB data devices
Learn All EDIDs	[CTRL][CTRL] e	//e	Capture display settings from connected monitors
Lock All EDIDs	[CTRL][CTRL] l	//l	Prevent EDID changes during operation
Trigger Hotplug	[CTRL][CTRL] h	//h	Reconnect USB devices without rebooting
Reset System	[CTRL][CTRL] r [ENTER]	//r	Reboot the KVM
Factory Reset	[CTRL][CTRL] f	//f	Restore factory default settings

Tip: Press the Ctrl key twice to start any command sequence.

CUSTOM HOTKEY TRIGGERS

You can customize which key combination activates the KVM hotkey system. By default, the trigger is the **Left Ctrl** key pressed twice.

Available Trigger Keys
You can assign any of the following keys to act as your trigger: - Ctrl (Left / Right) - Alt - Shift (Left / Right) - Caps Lock - Scroll Lock - F1 through F12

Viewing the Current Trigger
To check which hotkey trigger is currently set: - Send the RS-232 command: / + / + ? + ? + [Enter].

Changing the Trigger Key
To change the hotkey trigger: 1. Press the current hotkey twice. 2. Press x. 3. Press the new key you want to assign as the trigger.

Example: If your current trigger is Shift, and you want to change it to Scroll Lock, type: [Shift] + [Shift] + x + [Scroll Lock].

To reset the trigger to default (Ctrl + Ctrl), perform a factory reset or use the Factory Defaults command.

RESOLUTION AND EDID PRESETS

Output Resolution Presets (Res Button or //s[N])

NUMBER	RESOLUTION
1	3840×2160p60
2	3840×2160p30
3	2048×2048p60
4	1920×1080p60
5	1360×768p60

EDID Presets (//e[N])

NUMBER	EDID NAME
1	4K60-2.0
2	4K30-2.0
3	2048×2048
4	1080p60-2.0
5	1360×768
6	AUTO
7	USER

EDID (Extended Display Identification Data) helps your computers recognize the monitor's capabilities. The KVM saves and emulates this information so that resolutions and window layouts stay stable when switching inputs.

TROUBLESHOOTING

No Power
- Make sure that the power adapter is securely connected to the power connector of the unit.
- Check the output voltage of the power supply and make sure that the voltage value is around 12VDC.
- Replace the power supply.

No Video
- Check if all the video cables are connected properly.
- Connect the computer directly to the monitor to verify that your monitor and computer are functioning properly.
- Restart the computers.

Keyboard is not working
- Check if the keyboard is properly connected to the unit.
- Check if the USB cables connecting the unit and the computers are properly connected.
- Try connecting the USB on the computer to a different port.
- Make sure that the keyboard works when directly connected to the computer.
- Replace the keyboard.

Mouse is not working
- Check if the mouse is properly connected to the unit.
- Try connecting the USB on the computer to a different port.
- Make sure that the mouse works when directly connected to the computer.
- Replace the mouse.

No Audio
- Check if all the audio cables are connected properly.
- Connect the speakers directly to the computer to verify that the speakers and the computer audio are functioning properly.
- Check the audio settings of the computer and verify that the audio output is through the speakers.

TECHNICAL SUPPORT

For product inquiries, warranty questions, or technical questions, please contact info@smartavi.com.

LIMITED WARRANTY STATEMENT

A. Extent of limited warranty
SmartAVI, Inc. warrants to the end-user customers that the SmartAVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

SmartAVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:

      a. Improper or inadequate maintenance or modifications
      b. Operations outside product specifications
      c. Mechanical abuse and exposure to severe conditions

If SmartAVI receives, during applicable warranty period, a notice of defect, SmartAVI will at its discretion replace or repair defective product. If SmartAVI is unable to replace or repair defective product covered by the SmartAVI warranty within reasonable period of time, SmartAVI shall refund the cost of the product.

SmartAVI shall have no obligation to repair, replace or refund unit until customer returns defective product to SmartAVI.

Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

SmartAVI limited warranty is valid in any country where the covered product is distributed by SmartAVI.

B. Limitations of warranty
To the extant allowed by local law, neither SmartAVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the SmartAVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

C. Limitations of liability
To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extant allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will SmartAVI or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

D. Local law
To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

Smart-AVI
SMART AUDIO VIDEO INNOVATION

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