

TECHNICAL SPECIFICATIONS

VIDEO	
Format	DisplayPort 1.2
Resolution	3840 x 2160 @ 60 Hz
Maximum pixel clock	165 MHz
Color mode	24-bit
Data rate	1.65 Gbps per color
DDC	5 volts p-p (TTL)
Input equalization	Automatic
Cable length	Up to 20 ft in and out
Console monitors	Digital and analog
AUDIO	
Output interface	(1) 3.5 mm stereo
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 with internal hub
Output interface	(2) Type A for K/M emulation (2) Type A for USB 2.0 transparent
CONTROL	
Front panel	Push buttons with LED indicators
RS-232	DB9 female, 115200, N, 8, 1, no flow control
Hot keys	Via keyboard
Emulation	Keyboard and mouse
POWER AND ENVIRONMENT	
Power adapter	External 100-240 VAC / 12 VDC 3A @ 24 W
Operating temp.	+32 to +104 F (0 to +40 C)
Storage temp.	-4 to 140 F (-20 to +60 C)
Humidity	Up to 80%, no condensation
Approvals	UL, CE, RoHS compliant

All DisplayPort connectors are 20-pin female. The audio output, the USB console ports, RS-232 and power are the same on every model. Port counts per model are on the front panel of this guide.

WHAT IS IN THE BOX

QTY	DESCRIPTION
1	SM-EDPN unit
1	12 VDC 3A power adapter, center-pin positive polarity
1	Quick Start Guide

FRONT PANEL CONTROL

Press the button for the computer you want. The LED for that port lights up. There are two to eight buttons depending on the model.



SM-EDPN-8S shown - one button and LED per computer.

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TECHNICAL SUPPORT

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SM-EDPN SERIES

ADVANCED 2 / 4 / 8-PORT DP KVM SWITCH



QUICK START GUIDE

One guide for the whole series - every model shares the same controls, commands and connections.

MODEL	PCS	HEADS	DP IN	DP OUT	AUDIO IN	USB IN
SM-EDPN-2S	2	1	2	1	2	2
SM-EDPN-2D	2	2	4	2	2	2
SM-EDPN-2Q	2	4	8	4	2	2
SM-EDPN-4S	4	1	4	1	4	4
SM-EDPN-4D	4	2	8	2	4	4
SM-EDPN-4Q	4	4	16	4	4	4
SM-EDPN-8S	8	1	8	1	8	8



Full manual & specifications

Scan for the complete user manual, drawings and the rest of the EDPN range.
smartavi.com/category/products/kvm-solutions/kvm-switches/?f=edpn

Designed and Manufactured in the USA

Smart-**AVI**

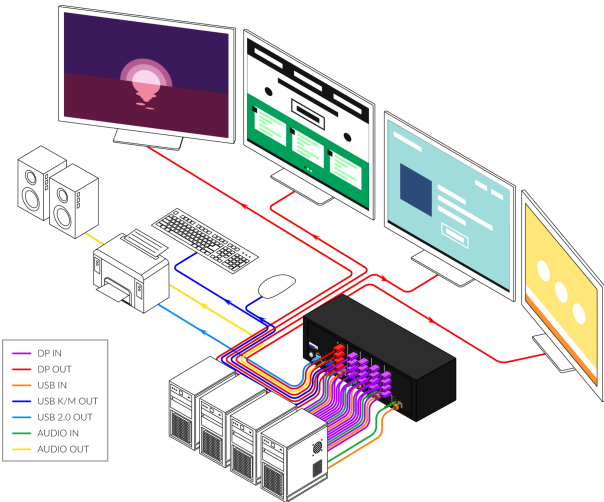
HARDWARE INSTALLATION

- 1. Make sure power is off or disconnected from the unit and from the computers.
- 2. Use a DP cable to connect the DP output of each computer to the matching **DP IN** port on the unit.
- 3. Use a USB cable (Type-A to Type-B) from a USB port on each computer to the matching **USB** port on the unit.
- 4. Optionally connect a 3.5 mm stereo cable from each computer audio output to the matching **AUDIO IN** port.
- 5. Connect the console monitor to the **DP OUT** port using a DP cable.
- 6. Connect a USB keyboard and mouse to the two USB console ports.
- 7. Optionally connect stereo speakers to the **AUDIO OUT** port.
- 8. Power the KVM with the 12 VDC supply, then turn on the computers.

DUAL AND QUAD-HEAD UNITS

All of one computer DP outputs go to one channel. **The DP IN connectors belonging to the same channel are arranged vertically.** Connect a monitor to each DP OUT console port - the DP IN ports on a row switch to the DP OUT of the same row.

Connect up to 2 computers to a 2-port model, 4 to a 4-port model and 8 to an 8-port model.



Typical connections - SM-EDPN-4Q shown

SYSTEM CONTROL

There are three ways to control the SM-EDPN: **keyboard hotkeys**, **RS-232 serial commands** and the **front panel buttons**. All three reach every setting.

For serial control use HyperTerminal or any terminal application with these settings:

Baud rate	115200
Data bits	8
Parity	None
Stop bits	1
Flow control	None

The unit reports its information over serial when it starts up.

COMMANDS

COMMAND	HOTKEY	RS-232
Switch USB, video and audio	[CT][CT] [#] <CR>	//m [#] <CR>
Switch audio only	[CT][CT] a [#] <CR>	//a [#] <CR>
Switch KM only	[CT][CT] c [#] <CR>	//c [#] <CR>
Switch USB only	[CT][CT] u [#] <CR>	//u [#] <CR>
Learn all EDIDs	[CT][CT] e <CR>	//e <CR>
Learn one EDID	[CT][CT] e [#] <CR>	//e [#] <CR>
Lock all EDIDs	[CT][CT] l <CR>	//l <CR>
Lock one EDID	[CT][CT] l [#] <CR>	//l [#] <CR>
Trigger hotplug	[CT][CT] h <CR>	//h <CR>
Reset software	[CT][CT] r <CR>	//r <CR>
Factory defaults	[CT][CT] f <CR>	//f <CR>
Get port status	N/A	///? <CR>

[CT] = Ctrl, the default hotkey trigger • <CR> = Enter • [#] = port number

CUSTOM HOTKEY TRIGGER

The default trigger is **Ctrl + Ctrl**. It can be changed to Ctrl (left or right), Alt, Shift (left or right), Caps Lock, Scroll Lock or F1 - F12.

Change the trigger	Hotkey + Hotkey + x + [new key]
View the trigger	///?? <CR>
Reset the trigger	Factory defaults command

Example - to change a Shift trigger to Scroll Lock, press Shift + Shift + x + Scroll Lock.

REAR PANEL



SM-EDPN-8S shown. Every model carries the same console block on the left - power, console USB, console audio and K/M - with RS-232 on the right.

EDID

LEARNING AN EDID

The EDID of the monitors on the DP OUT ports is learned automatically at power-up. While the unit is running it can also be learned two ways:

All monitors	[CT][CT] e <CR> or //e <CR>
One monitor	[CT][CT] e [1-4] <CR> or //e [1-4]

LOCKING AN EDID

Once the right EDID is learned, lock it so it is not re-learned at power-up or by a learn command.

Lock all	[CT][CT] l <CR> or //l <CR>
Lock one	[CT][CT] l [1-4] <CR> or //l [1-4]

The only way to remove an EDID lock is a factory restore: [CT] [CT] f <CR> or //f <CR>

PRESET EDID PROFILES

Emulate a common display with no monitor connected:

LABEL	RESOLUTION	HOTKEY	RS-232
KVMHD	1920 x 1080 @ 60 Hz	[CT][CT] d e 1	//de1
KVM4K30	3840 x 2160 @ 30 Hz	[CT][CT] d e 2	//de2
KVM4K60	3840 x 2160 @ 60 Hz	[CT][CT] d e 3	//de3
DUAL 3MP+	1640 x 2048	[CT][CT] d e 4	//de4
DUAL 3MP	1536 x 2048	[CT][CT] d e 5	//de5
6MP	3280 x 2048	[CT][CT] d e 6	//de6
5MP	2560 x 2048	[CT][CT] d e 7	//de7

A preset profile overrides a learned monitor EDID. To go back, use the learn command with that monitor connected.

After any EDID change, trigger a hotplug so the computers re-read the display: [CT][CT] h <CR> or //h <CR>

IF SOMETHING IS NOT WORKING

- **No power** - check the adapter is seated and reads about 12 VDC.
- **No video** - check the cables, connect the computer straight to the monitor to prove both work, then restart it.
- **No keyboard or mouse** - check the console port and the USB cable to that computer, and try another USB port.
- **No audio** - check the audio cables and the computer audio output setting.

Full troubleshooting is in the user manual - scan the code on the front panel of this guide. Product enquiries, warranty and technical help: info@smartavi.com • support@smartavi.com