

Smart-AVI SM-DVN-4D Dual Head 4 Port DVI-I Dual Link KVM Switch User Guide

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LOGO

Smart-AVI SM-DVN-4D Dual Head 4 Port DVI-I Dual Link KVM Switch

FIG

Product Information

Technical Specifications

- **Video Format:** DVI Dual Link; DVI Single-Link; VGA
- **Maximum Pixel Clock:** 165 MHz
- **Input Interface:** (8) DVI-I 29-pin
- **Output Interface:** (2) DVI-I 29-pin
- **Resolution:** DVI Dual-Link: 2560 x 1600; DVI Single-Link: 1920 x 1200; VGA: 1920 x 1080
- **DDC Input Equalization:** Automatic
- **Input Cable Length:** Up to 20 ft.
- **Output Cable Length:** Up to 20 ft.
- **USB Signal Type:** USB 2.0, 1.1, and 1.0 w/internal hub
- **USB Input Interface:** (4) USB Type B
- **USB Output Interface:** (2) USB 1.1 Type A for KVM Devices, (2) USB 2.0 Type A Transparent
- **Audio Input:** (4) 3.5 mm Stereo Audio
- **Audio Output:** (1) 3.5 mm Stereo Audio
- **Power Requirements:** 12V DC, 2A power adapter with center-pin positive polarity

- **Operating Temperature:** N/A
- **Storage Temperature:** N/A
- **Humidity:** N/A
- **Front Panel Control:** Push Buttons with LED indicators
- **RS-232 Control:** Via Serial @ 115200 bps
- **Hot Keys Control:** Via Keyboard
- **Emulation:** Keyboard, Mouse and Video

Product Usage Instructions

EDID LEARN

The KVM is designed to learn a connected monitor's EDID upon power up. In the event of connecting a new monitor to the KVM, a power re-cycle is required.

SYSTEM CONTROL

There are three ways to control the SM-DVN: Keyboard HotKeys, RS-232 Serial Commands, and Front Panel Buttons. The settings for the serial connection are as follows: Baud rate: 115200; Data Bits: 8; Parity: None; Stop Bits: 1; Flow Control: None.

The following commands can be used:

Command	HotKey
Switch KVM [CT][CT][#]	RS-232 //m[#]
Audio Only [CT][CT]a[#]	//a[#]
KM Only [CT][CT]c[#]	//c[#]
USB Only [CT][CT]u[#]	//u[#]
Learn EDID [CT][CT]e	//e
SW Reset [CT][CT]r	N/A
Status Query	N/A
Current HK Trigger [Alt][Alt][Alt] x 0	N/A
Update HK Trigger [HK][HK] x [1 2 3]	//r //?? //hk

Chart Key: [CT] = Ctrl, [HK] = Current Hot Key Trigger, 1 = Ctrl (Default), 2 = Shift, 3 = Scroll Lock

HARDWARE INSTALLATION

1. Ensure that power is turned off or disconnected from the unit and the computers.
2. Use DVI cables to connect the DVI output ports from each computer to the corresponding DVI-I IN ports of the unit.
3. Use a USB cable (Type-A to Type-B) to connect a USB port on each computer to the respective USB ports of

the unit.

4. Optionally connect a stereo audio cable (3.5mm to 3.5mm) to connect the audio output of the computers to the AUDIO IN ports of the unit.
5. Connect monitors to the DVI-I OUT console ports of the unit using DVI cables.
6. Connect a USB keyboard and mouse in the two USB console ports.
7. Optionally connect stereo speakers to the AUDIO OUT port of the unit.
8. Finally, power on the KVM by connecting a 12VDC power supply to the power connector, and then turn on all the computers.

FAQ

Q: What is the maximum resolution supported by the KVM?

A: The maximum resolution supported is DVI Dual-Link: 2560 x 1600; DVI Single-Link: 1920 x 1200; VGA: 1920 x 1080.

EDID LEARN

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Command	HotKey	RS-232
Switch KVM	[CT][CT][#]<CR>	//m[#]<CR>
Audio Only	[CT][CT]a[#]<CR>	//a[#]<CR>
KM Only	[CT][CT]c[#]<CR>	//c[#]<CR>
USB Only	[CT][CT]u[#]<CR>	//u[#]<CR>
Learn EDID	[CT][CT]e <CR>	//e <CR>
SW Reset	[CT][CT]r	//r <CR>
Status Query	N/A	//?? <CR>
Current HK Trigger	[Alt][Alt][Alt] x 0 <CR>	//hk <CR>
Update HK Trigger	[HK][HK] x [1 2 3] <CR>	N/A

Chart Key

- [CT] = Ctrl
 - <CR> = Carriage Return (Enter Key)
 - [HK] = Current Hot Key Trigger
- 1 = Ctrl (Default) | 2 = Shift | 3 = Scroll Lock

HARDWARE INSTALLATION

1. Ensure that power is turned off or disconnected from the unit and the computers.
2. Use DVI cables to connect the DVI output ports from each computer to the corresponding DVI – I IN ports of the unit.
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4. Optionally connect a stereo audio cable (3.5mm to 3.5mm) to connect the audio output of the computers to the AUDIO IN ports of the unit.
5. Connect monitors to the DVI-I OUT console ports of the unit using DVI cables.
6. Connect a USB keyboard and mouse in the two USB console ports.
7. Optionally connect stereo speakers to the AUDIO OUT port of the unit.
8. Finally, power on the KVM by connecting a 12VDC power supply to the power connector, and then turn on all the computers.

Note: You can connect up to 4 computers to the 4 port KVM.

FIG

TECHNICAL SPECIFICATIONS

VIDEO	
Format	DVI Dual Link; DVI Single-Link; VGA
Maximum Pixel Clock	165 MHz
Input Interface	(8) DVI-I 29-pin
Output Interface	(2) DVI-I 29-pin
Resolution	DVI Dual-Link: 2560 x 1600; DVI Single-Link: 1920 x 1200; VGA: 1920 x 1080
DDC	5 volts p-p (TTL)
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.

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 KVM Devices (2) USB 2.0 Type A Transparent
AUDIO	
Input	(4) 3.5 mm Stereo Audio
Output	(1) 3.5 mm Stereo Audio
POWER	
Power Requirements	12V DC, 2A power adapter with center-pin positive polarity
ENVIRONMENT	
Operating Temp	32° to 104° F (0° to 40° C)
Storage Temp	-4° to 140° F (-20° to 60° C)
Humidity	0-80% RH, non-condensing
CONTROL	
Front Panel	Push Buttons with LED indicators
RS-232	Via Serial @ 115200 bps
Hot Keys	Via Keyboard
OTHER	
Emulation	Keyboard, Mouse and Video

WHAT'S IN THE BOX

PART NO.	QTY	DESCRIPTION
SM-DVN-4D-S	1	Dual Head 4-Port DVI-I Dual Link KVM Switch with Audio and USB 2.0 Support.
PS12VDC2A	1	12V DC, 2A power adapter with center-pin positive polarity.
	1	Quick Start Guide

NOTICE

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Quick Start Guide

A full Manual can be downloaded from www.smartavi.com/SM-DVN-4D/

Documents / Resources

	<p>Smart-AVI SM-DVN-4D Dual Head 4 Port DVI-I Dual Link KVM Switch [pdf] User Guide SM-DVN-4D Dual Head 4 Port DVI-I Dual Link KVM Switch, SM-DVN-4D, Dual Head 4 Port DVI-I Dual Link KVM Switch, Head 4 Port DVI-I Dual Link KVM Switch, 4 Port DVI-I Dual Link KVM Switch, DVI-I Dual Link KVM Switch, Dual Link KVM Switch, Link KVM Switch, KVM Switch, Switch</p>
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References

- [Home - SmartAVI](#)
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- [User Manual](#)