

DVN SERIES

DUAL-LINK DVI-D, USB AND KVM SWITCH WITH K/M EMULATION



USER MANUAL

DVN-4Duo	4-Port Dual DVI-D KVM Switch with USB 2.0 Sharing
DVN-4Duo-DL	4-Port Dual DVI-D, USB KVM Switch with Emulation
DVN-4Quad	4-Port Quad DVI-D KVM Switch with USB 2.0 Sharing
DVN-4Quad-DL	4-Port Quad DVI-D, USB KVM Switch with Emulation
DVN-4Pro-DL	4-Port DVI-D KVM Switch with USB 2.0 Sharing and Audio



Designed and Manufactured in the USA

Smart-AVI

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

OVERVIEW

TECHNICAL SPECIFICATIONS	3
WHAT'S IN THE BOX?	4
FRONT AND REAR	4
INSTALLATION	5-9
TROUBLESHOOTING	10
TECHNICAL SUPPORT	10
LIMITED WARRANTY STATEMENT	11

TECHNICAL SPECIFICATIONS

VIDEO		
Format	DVI-D Single Link	
Maximum Pixel Clock	165 MHz	
Input Interface	DVN-4Pro-DL	(4) DVI-D 29-pin
	DVN-4Duo / DVN-4Duo-DL	(8) DVI-D 29-pin
	DVN-4Quad / DVN-4Quad-DL	(16) DVI-D 29-pin
Output Interface	DVN-4Pro-DL	(1) DVI-D 29-pin
	DVN-4Duo / DVN-4Duo-DL	(2) DVI-D 29-pin
	DVN-4Quad / DVN-4Quad-DL	(4) DVI-D 29-pin
Resolution	Dual-Link up to 2560x1600 (@60Hz) / Single-Link up to 1920x1200 (@60Hz)	
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	
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	Tactile Switch, with Seven Segment Display	
RS-232	Via Control @ 115200 bps	
Hot Keys	Via Keyboard	
OTHER		
Approvals	UL, CE, ROHS Compliant	
Operating Temperature	32-131°F (0-55 °C)	
Storage Temperature	-4-185 °F (-20-85 °C)	
Humidity	Up to 95%	
Emulation	Keyboard and Mouse	

WHAT'S IN THE BOX?

PART NO.	Q-TY	DESCRIPTION
DVN Unit	1	2/3/4-Port HDMI KVM with USB K/M and Audio
PS5VD4A	1	PS5VD4A Power Supply
User Manual	1	

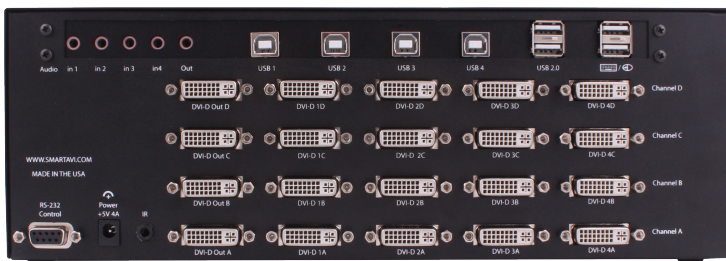
DVN-4DUO REAR



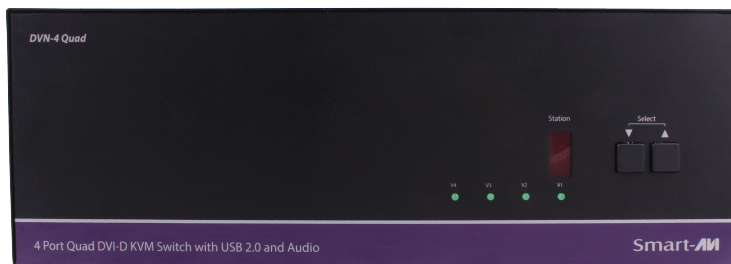
DVN-4DUO FRONT



DVN-4QUAD REAR

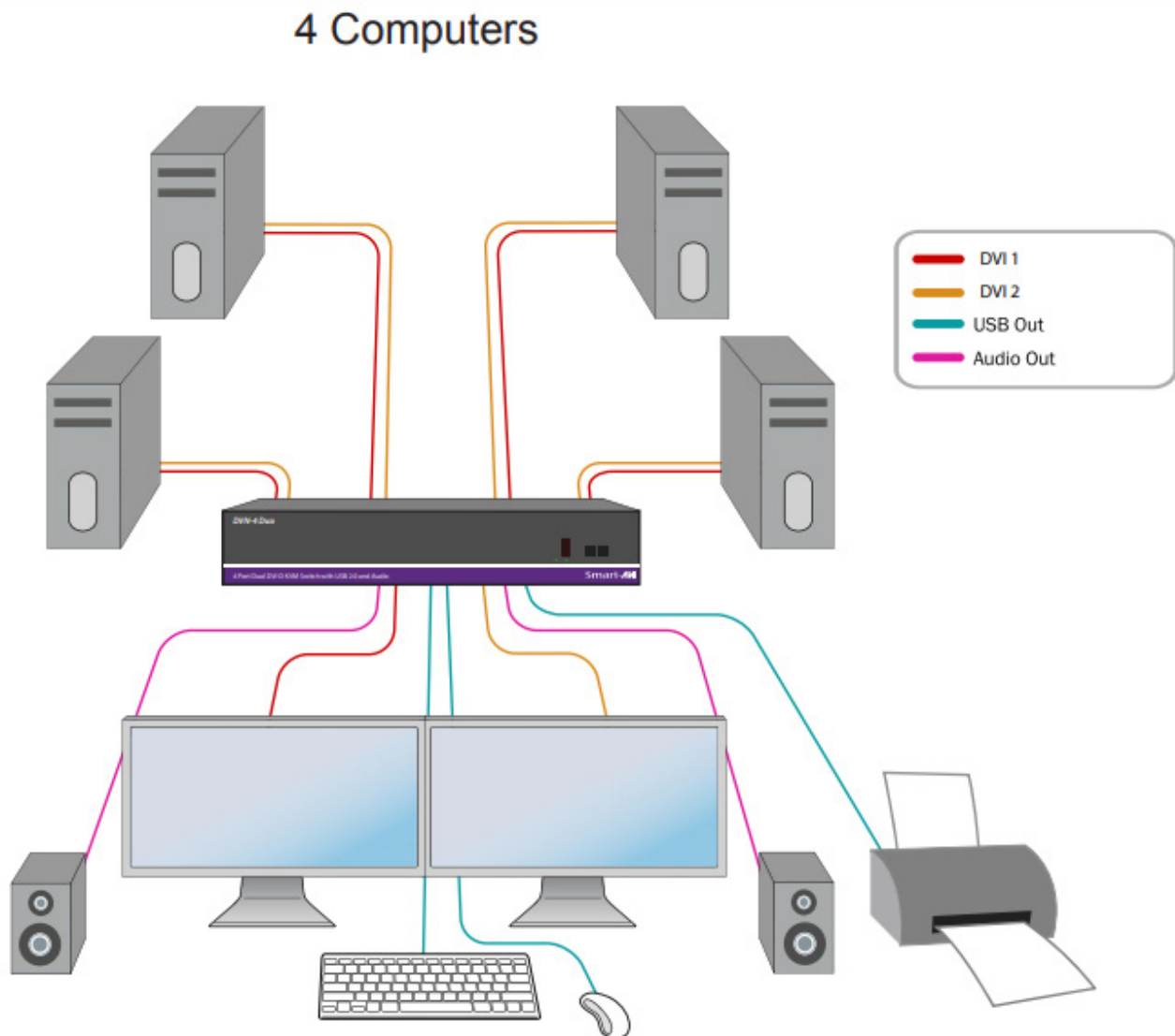


DVN-4QUAD FRONT



INSTALLATION

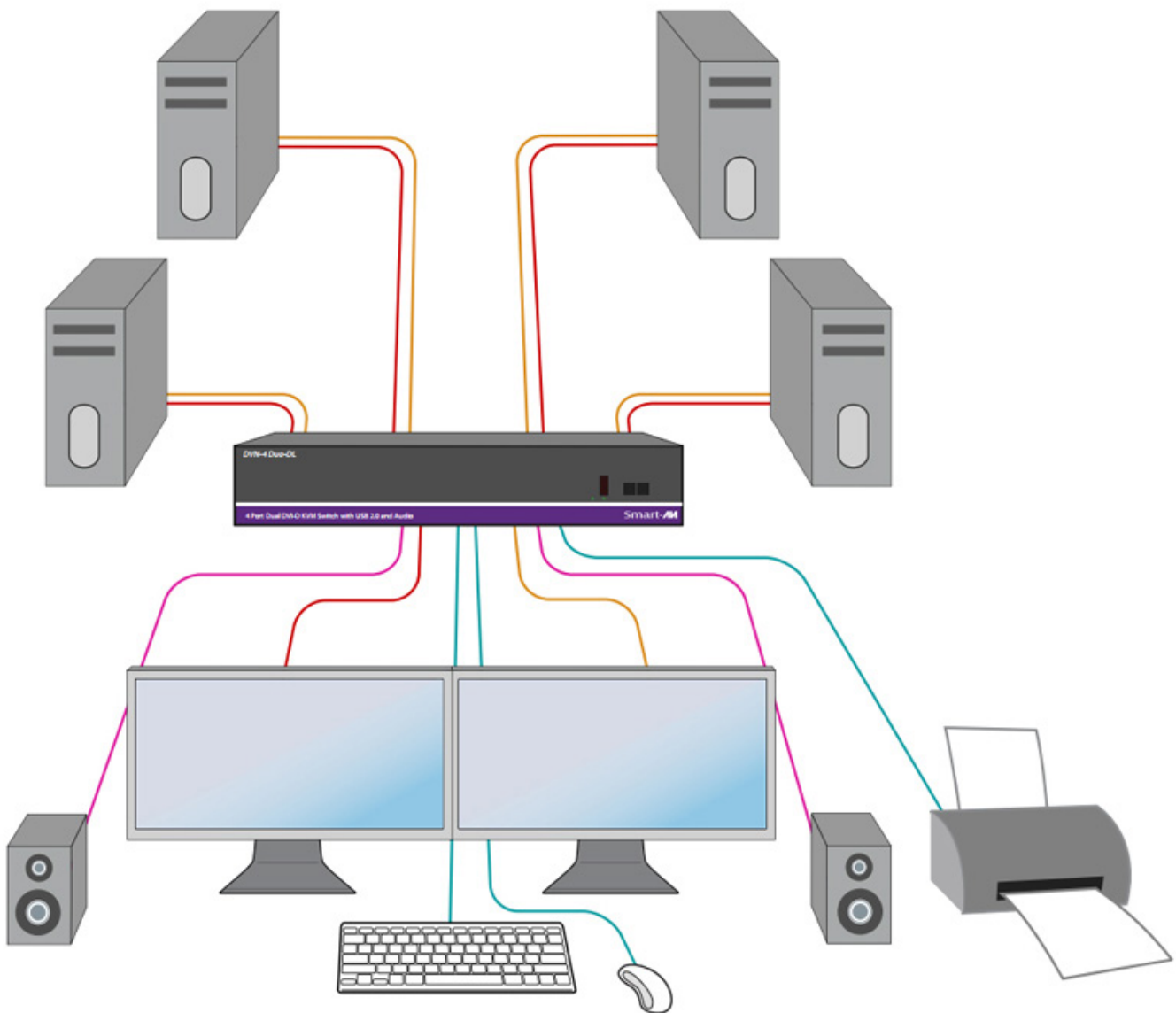
1. Ensure that power is disconnected from DVN-4Duo.
2. Connect the DVI cables, USB cables (male-A to maleB), and audio cables from the computers to the respective ports on the DVN-4Duo.
3. Optionally connect RS-232 for control functions.
4. Connect the USB keyboard and mouse on the two USB ports on the right (close to the RS-232 port).
Note: The 2 ports on the right are dedicated for keyboard and mouse emulation. The 2 on the left are for other USB peripherals (flash drives, printers, etc.)
5. Connect the speakers into the Audio Out port located above the USB ports.
6. Connect 2 display monitors the 2 DVI OUT connector on the DVN-4Duo.
7. Power on the DVN-4Duo.



PART NO.	DESCRIPTION
DVN-4DUO-S	4-Port Dual DVI-D, USB 2.0, Audio Switch. Includes: [DVN-4DUO-S, PS5VD4A-WLLMNT]

INSTALLATION (CONTINUE)

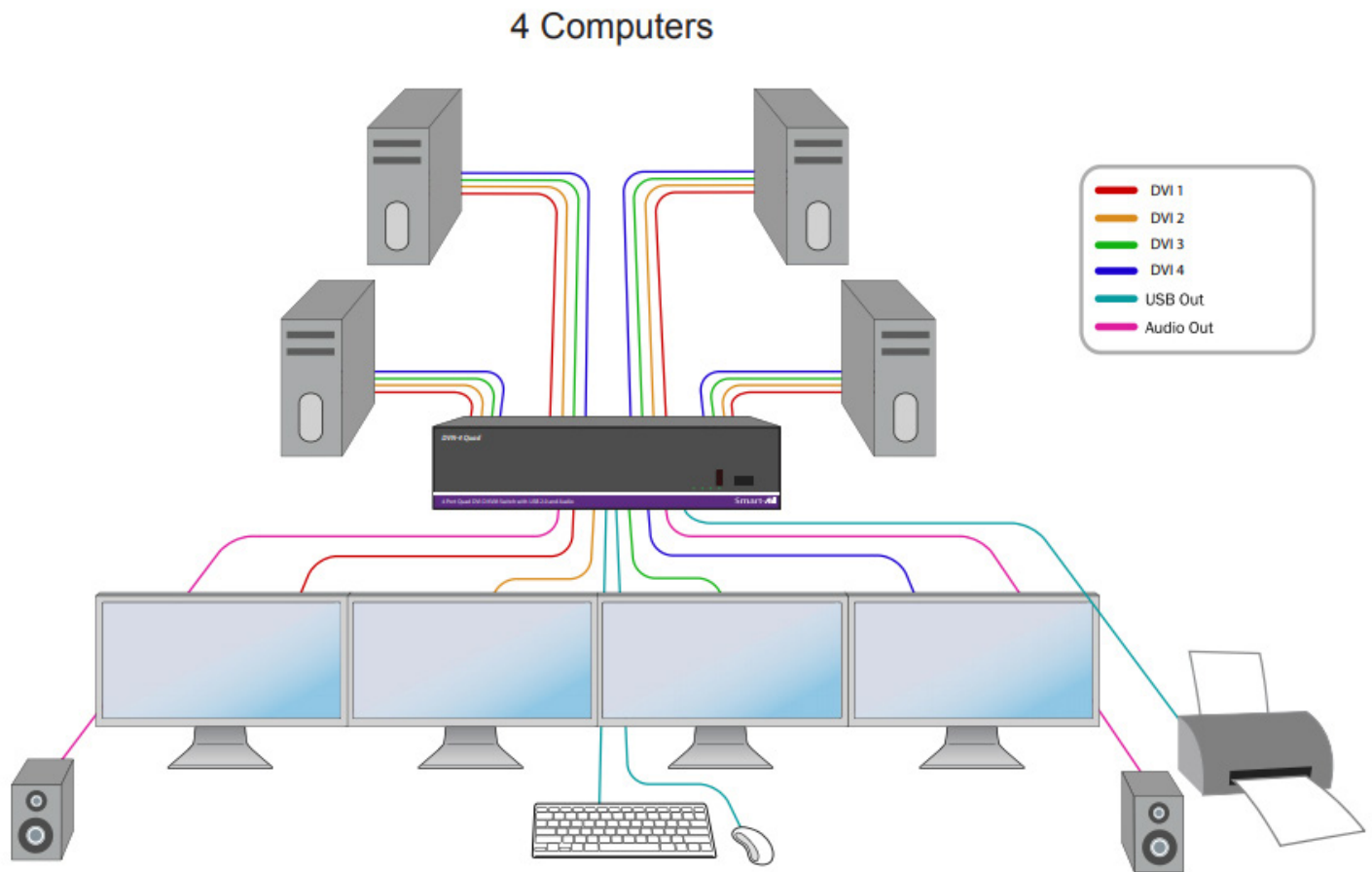
1. Ensure that power is disconnected from DVN-4Duo-DL.
2. Connect the DVI cables, USB cables (male-A to maleB), and audio cables from the computers to the respective ports on the DVN-4Duo-DL.
3. Optionally connect RS-232 for control functions.
4. Connect the USB keyboard and mouse on the two USB ports on the right (close to the RS-232 port).
Note: The 2 ports on the right are dedicated for keyboard and mouse emulation. The 2 on the left are for other USB peripherals (flash drives, printers, etc.)
5. Connect the speakers into the Audio Out port located above the USB ports.
6. Connect 2 display monitors the 2 DVI OUT connector on the DVN-4Duo-DL.
7. Power on the DVN-4Duo-DL.



PART NO.	DESCRIPTION
DVN-4DUO-DL-S	4-Port Dual DVI-D, USB 2.0, Audio Switch. Includes: [DVN-4DUO-S, PS5VD4A-WLLMNT]

INSTALLATION (CONTINUED)

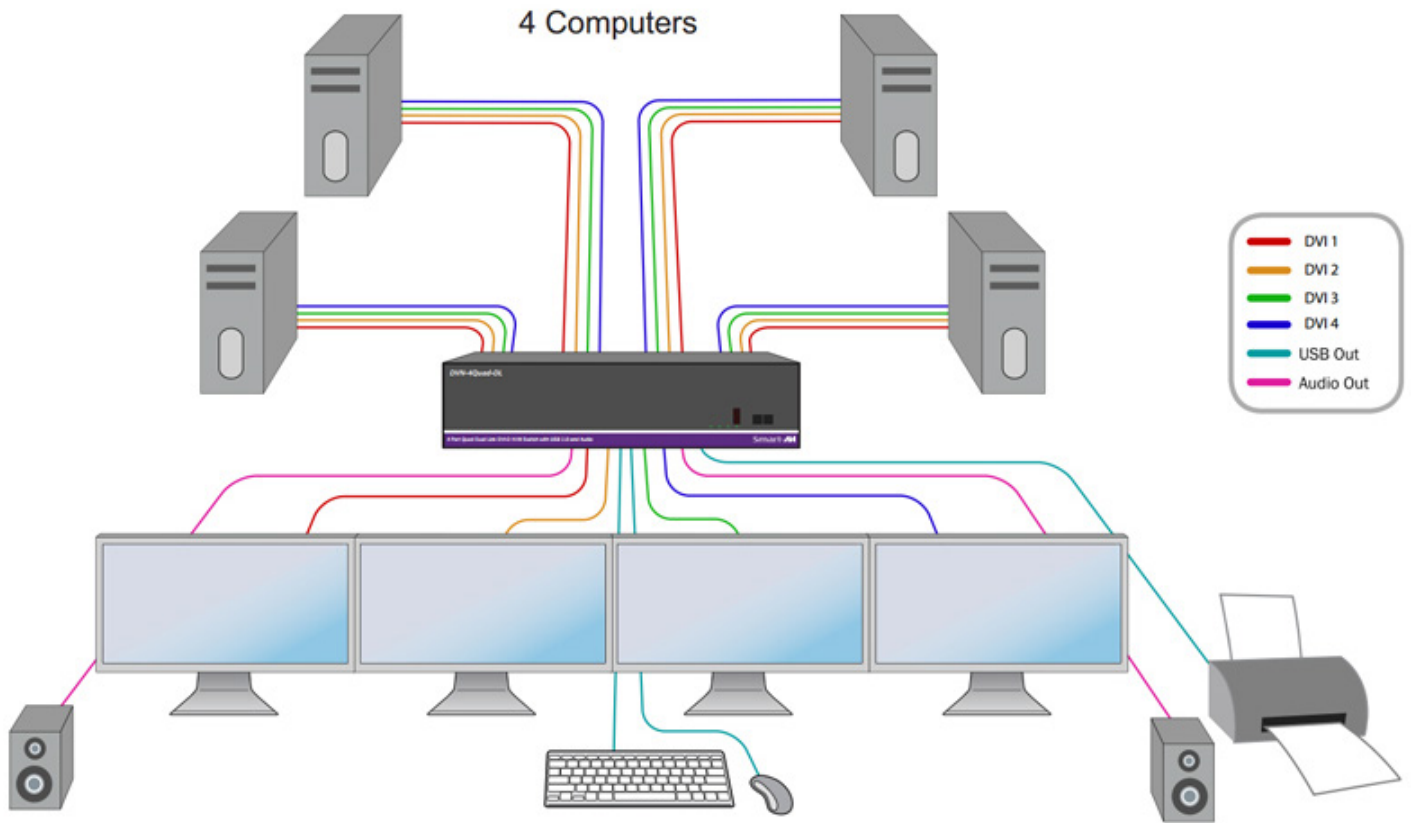
1. Ensure that power is disconnected from the DVN-4Quad.
2. Connect the DVI cables, USB cables (male-A to male-B), and audio cables from the computers to the respective ports on the DVN-4Quad.
3. Optionally connect RS-232 for control functions.
4. Connect the USB keyboard and mouse on the two USB ports on the right (close to the RS-232 port).
Note: The 2 ports on the right are dedicated for keyboard and mouse emulation. The 2 on the left are for other USB peripherals (flash drives, printers, etc.)
5. Connect the speakers into the Audio Out port located above the USB ports.
6. Connect 4 display monitors the 4 DVI OUT connector on the DVN-4Quad.
7. Power on the DVN-4Quad.



PART NO.	DESCRIPTION
DVN-4QUAD-S	4-Port Quad DVI-D, USB 2.0, Audio Switch. Includes: [DVN-4QUAD-S, PS5VD4A-WLLMNT]

INSTALLATION (CONTINUE)

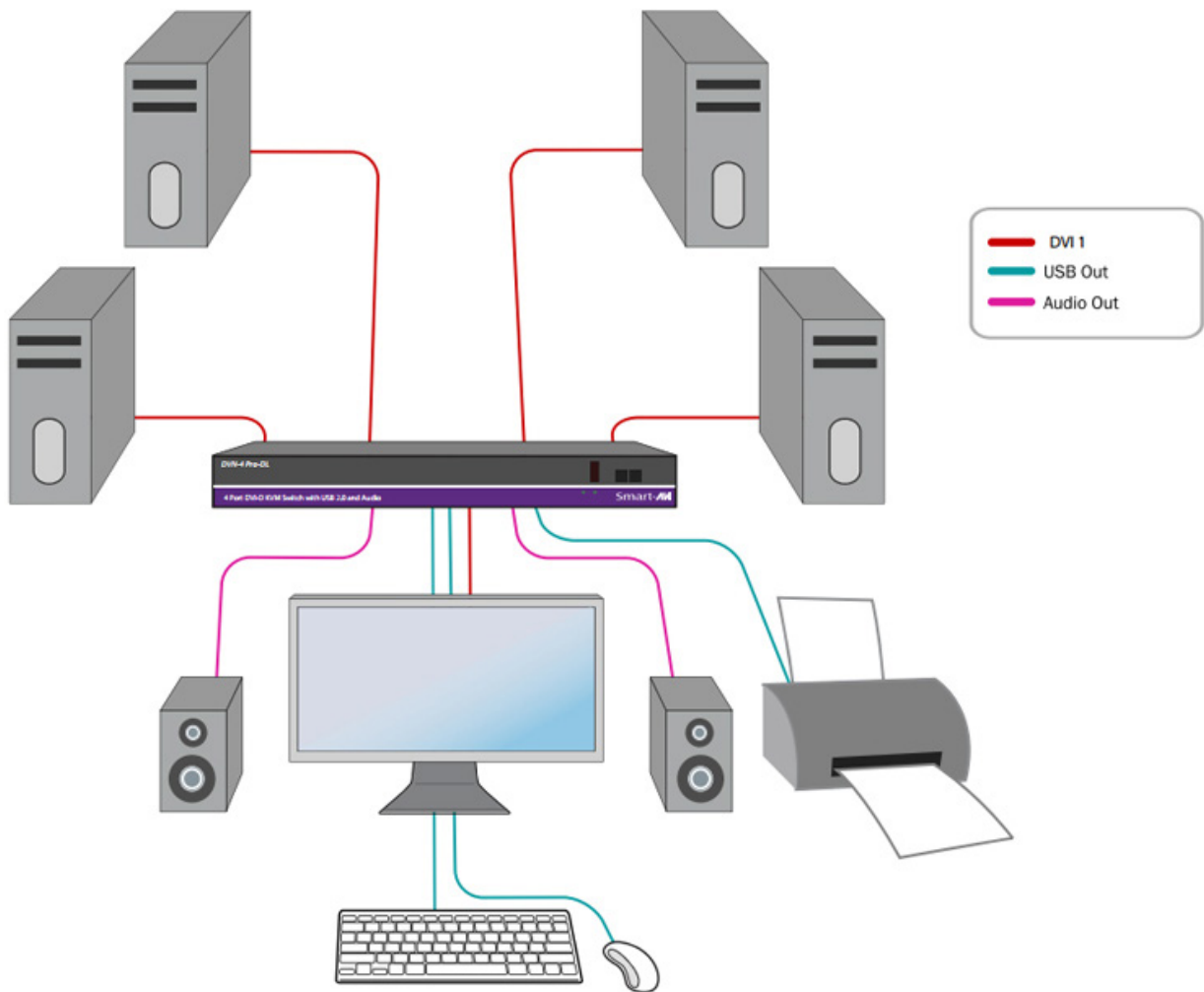
1. Ensure that power is disconnected from DVN-4Quad-DL.
2. Connect the DVI cables, USB cables (male-A to maleB), and audio cables from the computers to the respective ports on the DVN-4Quad-DL.
3. Optionally connect RS-232 for control functions.
4. Connect the USB keyboard and mouse on the two USB ports on the right (close to the RS-232 port).
Note: The 2 ports on the right are dedicated for keyboard and mouse emulation. The 2 on the left are for other USB peripherals (flash drives, printers, etc.)
5. Connect the speakers into the Audio Out port located above the USB ports.
6. Connect 4 display monitors the 4 DVI OUT connector on the DVN-4Quad-DL.
7. Power on the DVN-4Quad-DL.



PART NO.	DESCRIPTION
DVN-4QUAD-DL-S	4-Port Quad DVI-D, USB 2.0, Audio Switch. Includes: [DVN-4DUO-S, PS5VD4A-WLLMNT]

INSTALLATION (CONTINUE)

1. Ensure that power is disconnected from DVN-4Pro-DL.
2. Connect the DVI cables, USB cables (male-A to maleB), and audio cables from the computers to the respective ports on the DVN-4Pro-DL.
3. Optionally connect RS-232 for control functions.
4. Connect the USB keyboard and mouse on the two USB ports on the right (close to the RS-232 port).
Note: The 2 ports on the right are dedicated for keyboard and mouse emulation. The 2 on the left are for other USB peripherals (flash drives, printers, etc.)
5. Connect the speakers into the Audio Out port located above the USB ports.
6. Connect display monitor the DVI OUT connector on the DVN-4Pro-DL.
7. Power on the DVN-4Pro-DL.



PART NO.	DESCRIPTION
DVN-4PRO-DL-S	4-Port Single DVI-D, USB 2.0, Audio Switch. Includes: [DVN-4PRO-S, PS5VD4A-WLLMNT]

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 extent 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 extent 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

NOTICE

The information contained in this document is subject to change without notice. SmartAVI makes no warranty of any kind with regard to this material, including but not limited to, implied warranties of merchantability and fitness for particular purpose. SmartAVI will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. No part of this document may be photocopied, reproduced, or translated into another language without prior written consent from SmartAVI, Inc.

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