# **TECHNICAL SPECIFICATIONS**

VIDEO		
Format	DVI-D Dual Link	
Maximum Pixel Clock	165 MHz	
Input Interface	(16) DVI-D 29-pin (female)	
Output Interface	(4) DVI-D 29-pin (female)	
Resolution	Dual-link: 2560x1600 Single-link: 1920x1080 @ 60Hz	
DDC	5 volts p-p(TTL)	
Input Equalization	Automatic	
Input Cable Length	Up to 20 ft.	
Output Cable Length	Up to 20 ft.	

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 keyboard and mouse emulation; (2) for USB 2.0 Transpar- ent

CONTROL	
Front Panel	Tactile Switch
RS-232	Via Control @ 115200 bps
Hotkeys	Via Keyboard

# **TECHNICAL SPECIFICATIONS**

OTHER		
Power	External 100-240 VAC/ 5VDC4A @20W	
Dimensions	12.5" W x 4.3" H x 6.4" D	
Weight	4.2 lbs.	
Approvals	UL, CE, ROHS Compliant	
Operating Temp.	32-131 °F (0-55 °C)	
Storage Temp.	-4-185 °F (-20-85 °C)	
Humidity	Up to 95%	
Emulation	Keyboard and Mouse	

# WHAT'S IN THE BOX

PART NO.	QTY	DESCRIPTION
DVN-4Quad-DL -S	1	DVNET-4Quad-DL, 4x4 DVI-D, USB 2.0, Audio Switch
Power Supply	1	PS5VDC4A
User Manual	1	



**Designed and Manufactured in the USA** 

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SmartAVI.com



# **DVNET-4Quad-DL**

4-PORT Quadl Dual-Link DVI-D, USB AND KVM SWITCH WITH KEYBOARD/ MOUSE EMULATION



Control 4 Computers (PC, Mac, or Linux) on Four Dual-Link Displays Up To 20 Feet Away with Keyboard/Mouse Emulation, Stereo Audio and USB 2.0

**USER MANUAL** 

# **INTRODUCTION**

The DVNET-4Quad-DL is a cross-platform switch capable of sharing four DVI-D monitors, stereo speakers, and USB 2.0 devices between 4 computers. It can also be controlled remotely via RS-232 commands or SmartAVI's SmartControlPro software at www.smartavi.com.

#### **FEATURES**

- Compatible with Windows, Mac and Linux Operating Systems
- Supports up to 2560x1600 digital video resolution over dual-link connection
- Uses universal DVI dual-link connectors
- Supports all USB 2.0 Devices (Flash drives, Printers, Cameras, Scanners, etc.)
- Supports USB keyboard and mouse emulation
- Balanced stereo audio output
- Front panel tactile switch with LCD display for local control
- RS-232 and web-based software control for remote control
- Flexible hotkey switching between devices

# **DDC LEARNING**

The DVNET-4Quad-DL is fully capable of "learning" and remembering what type of display monitor is connected to the unit. Programming the DDC (Display Data Channel) is accomplished using the two buttons located on the front panel.

To enter Learning Mode, simply press both the Scroll and Enter buttons at the same time until the display reads "Menu". By then pressing the Scroll button, you may cycle through the following DDC learning modes.

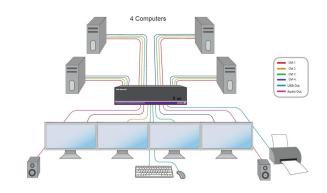
**Learn PC:** For PC computers; display up to 2560x1600.

**Learn Mac:** For Mac computers; display up to 2560x1600.

**Learn Screen:** To learn the type of display monitor connected to the "OUT" port.

\*\*To select a mode, press the Enter button

#### INSTALLATION DIAGRAM



# **CONNECTING THE DVNET-4Quad-DL**

- 1. Ensure that power is disconnected from DVNET-40uad-DL.
- Connect the DVI cables, USB cables (male-A to male-B), and audio cables from the computers to the respective ports on the DVNET-4Ouad-DL.
- 3. Optionally connect RS-232 for control functions.
- Connect the USB keyboard and mouse on the two USB ports on the right (close to the RS-232 port).

Note: The ports on the right are dedicated for keyboard and mouse emulation. The ports 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 the display monitors the *OUT* DVI connector on the DVNET-4Quad-DL.

# **CONTROLLING THE DVNET-4Quad-DL**

# **Front Panel Control**

To switch ports using the front panel, press either the *Enter* button to navigate up and *Scroll* button for down. **DDC learning** is also done through the front panel buttons.

# **RS-232 Control**

To switch ports using an RS-232 connection, use a male-to-female serial cable to connect a computer to the RS-232 port of the DVNET-4Quad-DL. Use terminal client software like **HyperTerminal** to connect to the DVNET-4Quad-DL. Make sure to use the standard communication mode of 115200 bps, 8, N, 1.

# **Hotkey Commands**

The Hotkey command is a keyboard sequence used to trigger an action on the DVNET-4Quad-DL through the use of the keyboard connected on the USB port of the DVNET-4Quad-DL. To activate the hotkey sequence, press the *CTRL* key twice and then enter the desired hotkey commands.

COMMANDS	HOTKEYS	RS-232 CONTROL
Switch all devices (KVM, USB 2.0, and Audio)	[CTRL], [CTRL], m, [port #], [ENTER]	'//m[port #][ENTER]'
Switch KVM only	[CTRL], [CTRL], c, [port #], [ENTER]	'// <b>c</b> [port #][ENTER]'
Switch audio <b>only</b>	[CTRL], [CTRL], <b>a</b> , [port #], [ENTER]	'// <b>a</b> [port #][ENTER]'
Reset DVNET-4Quad-DL	[CTRL], [CTRL], r, [ENTER]	'//r[ENTER]'