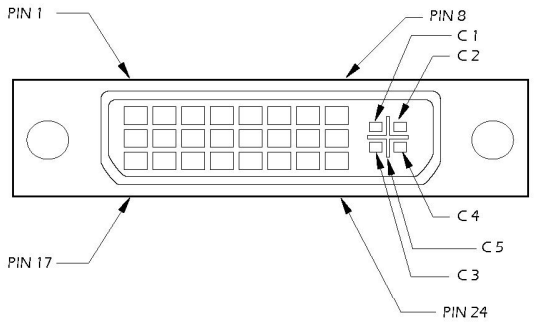
Technical Specifications

Video	
Video Amplifier Bandwidth	165 MHz
Input Video Signal	1.2 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Single Link Range	1080p/1920 x 1200
DVI Connector	DVI-I 29 pin female
Control	
Serial Controls	RS232, DB9 female connector
Power	
Power Supply	5VDC-3A
Physical	
Dimensions	12"W x 1.75"H x 7"D
Weight	4.05 lbs.



Pin #	Signal	Pin #	Signal
1	T.M.D.S Data 2-	16	Hot Plug Detect
2	T.M.D.S Data 2+	17	T.M.D.S Data 0-
3	T.M.D.S Data 2/4 Shield	18	T.M.D.S Data 0+
4	T.M.D.S Data 4-	19	T.M.D.S Data 0/5 Shield
5	T.M.D.S Data 4+	20	T.M.D.S Data 5-
6	DDC Clock	21	T.M.D.S Data 5+
7	DDC Data	22	T.M.D.S Clock Shield
8	Analog Vert. Sync	23	T.M.D.S Clock+
9	T.M.D.S Data 1-	24	T.M.D.S Clock -
10	T.M.D.S Data 1+		
11	T.M.D.S Data 1/3 Shield	C1	Analog Red
12	T.M.D.S Data 3-	C2	Analog Green
13	T.M.D.S Data 3+	C3	Analog Blue
14	+5V Power	C4	Analog Horz Sync
15	GND	C5	Analog Ground

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User Manual

DVI Router 4x4

With TCP/IP Control

Display content from any four computers on any four screens independently.

www.kvmswitchtech.com

Introduction

Our non-blocking matrix switch provides an easy and dynamic approach to creating multiple computer stations, each having the ability of accessing any one of the CPU's or displays instantly, either directly or remotely using RS232 commands and infrared.

The SmartAVI DVI 4x4 router provides single-link DVI operation at the maximum TMDS rate of 2 x 1.65 Gb/sec. at resolutions up to 1920x1200. The DVI signals can be transmitted through 190 feet of copper at the maximum TMDS rate on both the input and output sides of the switch.

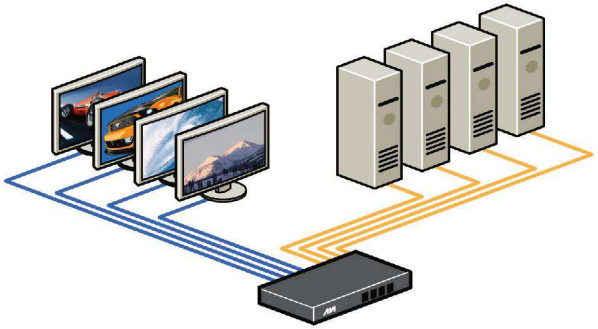
Features

- Increases your productivity by providing you with access to four computers from four workstations.
- 4x4 non-blocking, single-link DVI matrix switch.
- Supports DVI operation at the maximum TMDS rate of 2 x 1.65 Gb/s.
- Supports resolutions up to 1080p, 2K, and 1920 x 1200.
- Simultaneous 4x4 analog matrix switching at 380 MHz bandwidth.
- DVI transmission over 190 feet at the highest TMDS rate of 1.65 Gb/s.
- Control from either front panel or RS232.
- Available IR Remote.

What's in the box?

Description	Qty	Part Number
4x4 DVI Matrix	1	DVR4X4
5VDC 3A Power Supply	1	PS-5V3A-US
Optional Items		
IR eye with Remote	1	SM-EY2 and SMRMT2

Installation Diagram



DVI 4x4 Router Installation Diagram

Setting up control computer

1. Install DVR 4x4 control software
2. Connect a serial cable from DV Router to computer

Connecting The DVI Router

1. Connect the DVI male extension cable between the PC's and the 'video in' port of the DVI router.
2. Connect the DVI male/female extension cables between the monitors and the "DVI out" ports of router.
3. Connect the power cord and turn on the router.
4. Turn on the PC's and monitors.

Switching Channels via RS232

To set a crosspoint with RS232 you will need to send the following command;
`<CR>//MxxIyy<CR>`
Where `xx` after the `M` is the output (monitor) number and the `yy` after the `I` is the Input number 01-04.
If the command is accepted the router will acknowledge with `<CR>`
*`<CR>` = Carriage Return

Setting one input to display on all outputs

Use `00` as your output.
Example: To display input 2 on all outputs send
`<CR>//M00I02<CR>`

Setting up control computer

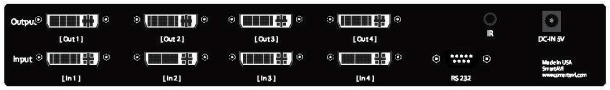
The DVI 4X4's learning mode makes it possible to "learn" the specifications of any monitor connected to it, giving it the ability to emulate a monitor even if none are attached. This learning feature makes it possible for your computer/server to boot up even if no monitors are attached.

To enter learn mode

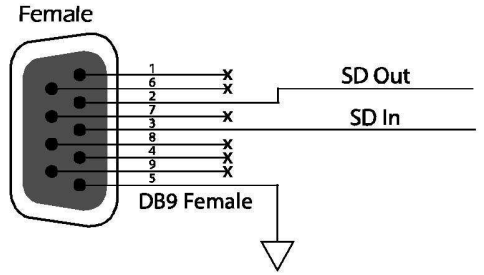
1. Press and hold both front panel buttons simultaneously for 2 seconds.
2. The word "Lern" will appear on the display.
3. Pressing the "Input select" button will scroll through the learning options.
   - LE-S will learn the specs of any monitor connected to Output 1.
   - LE-P will learn the specs of a PC monitor.
   - LE-A will learn the specs of an Apple monitor.
4. When the desired learn mode is displayed, press the "Output select" button to execute the learning feature and return to normal operation.

Front

Back



RS232 Connector Pinout



Serial Port Setup	
Baud Rate	9600
Data Bits	8
Parity	None
Stop Bits	1

DB9 Cable Pin Numbers	
Router (female)	PC (male)
2	3
3	2
5	5