# DVR 16X16 MATRIX SOLUTION DVI ROUTER





# **16-port DVI-D Matrix Switch** with RS-232, IR, USB and TCP/IP Control

Display Content From Any 16 Computers On Any 16 Screens Independently Up To 30 Feet Away



www.smartavi.com



# SIMPLE APPLICATION

### **DVI-D Maxtrix Switching made Easy**

SmartAVI's non-blocking digital video matrix switch provides an easy and dynamic approach to creating up to 16 computer stations, each with the ability of accessing any one of the CPUs or displays instantly either directly or remotely, using RS-232 commands, IR, USB or TCP/IP. Our DVI router is controlled by Windows<sup>®</sup>-based software that is easy to understand and simple to use – a cornerstone of all SmartAVI products.

The SmartAVI DVI Router 16x16 provides single-link, DVI-D operation at the maximum TMDS rate of 2 x 1.65 Gbps at resolutions up to 1920 x 1200. The DVI-D signals can be transmitted through 30 feet of copper at the maximum TMDS rate on both the input and output sides of the switch.



**RS-232**: Controlling the DVI Router 16x16 has never been simpler with SmartControl software. With SmartControl, you can assign a unique name to each port on the AVRouter, as well as each display, customizing projects to meet your needs. Although all the functions of the matrix are available locally on the front panel of the DVI Router 16x16, using SmartControl allows for customization of all the matrix functions.



**USB**: Computers that do not have an RS-232 port can connect to the DVI Router 16x16 via SmartAVI's USB to RS-232 converter. Utilize all the control of an RS-232 control interface with the simple and common USB interface. This solution is perfect for laptops and newer computers that only have a USB port.

### **Features**

- Multiple EDID Support
- Programmable EDID from computer
- Automatic EDID learning from monitor
- Increases productivity by providing access to up to 16 computers from 16 workstations.
- 16 x 16 non-blocking, single-link DVI-D matrix switch
- Automatic output pre-emphasis and drive level
- Automatic receiver equalization
- Supports DVI operation at the maximum rate of 2 x 1.65 Gbps
- Supports resolutions up to 1920 x 1200
- Control from either front panel or RS-232
- Available IR remote
- USB Control Available
- Ethernet control available
- Easy-to-use Windows based software

### **Applications**

- Wall Displays
- Digital Signage
- Airports
- Dealer Rooms
- Control Rooms
- Audio/Visual Presentations
- Shopping Centers
- Security
- Point-of-Sale
- Hotels/Resorts
- KVM Switch



**IR**: Many system proffesionals prefer the IR control interface because it offers greater flexibility to manage the DVI Router 16x16 at a distance. In some cases, the displays will not be visible from the matrix. In these situations it is necessary to control the matrix with Infrared control.

SMTCP Smart-AM Video Matrix Control Over TCP/IP

**TCPIP**: Remote control is essential to real-time management of the DVI Router 16x16. SmartAVI's SMTCP module is the perfect solution to effective remote management. Simply connect the SMTCP module to the DVI Router 16x16 and connect from anywhere on the internet. When you need to make a change, but can't be there in person, the SMTCP makes remote control a snap.

# Application Diagram



**EDID UTILITY**: With SmartAVI's EDID Utility it is possible to upload multiple EDID to the Matrix. EDID is information sent by a display back to the computer, indicating the maximum resolution that display is capable of rendering. When controlling several displays, in this case up to 16, it is critical to be able to manage the EDID information. With our EDID utility, managing your displays is simple.



## **FLEXIBLE CONTROL**

# **SPECIFICATIONS**

VIDEO	
Format	DVI-D Single Line
Maximum Pixel Clock	165 MHz
Input Interface	(16) DVI-I 29-pin female
Output Interface	(16) DVI-I 29-pin female
Resolution	Up to 1920 x 1200
DDC	5 volts p-p(TTL)
Input Equalization	Automatic
Input Cable Length	Up to 30 ft.
Output Cable Length	Up to 30 ft.
OTHER	
Control	RS-232, IR, USB and TCP/IP via SMTCP
Power	Internal 100-240 VAC, 50-60 HZ, 60 Watts
Dimensions	19″W x 5.25″H (3U) x 7″D
Weight	10 lbs.
Approvals	UL, CE, ROHS Compliant

### RK-DVR-16x16 Front



#### RK-DVR-16x16 Rear



ORDERING INFORMATION	
Part No.	Description
DVR16X16	DVI-D 16X16 Router. Includes: [DVR16X16 & CCPWR06USA]

Many leading companies have recognized and embraced the innovation of SmartAVI's technologies and have successfully incorporated them into their organizations. Users of SmartAVI include:



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