

# MXCORE-DX

Expandable DVI-D Video Matrix up to 32x32



MXCore-DX Series is an expandable DVI-D video router, capable of routing 1080p signals in configurations of 4x4 up to 32x32

## FEATURES

- Multiple EDID Support
- Programmable EDID from computer
- Automatic EDID learning from monitor
- Increases productivity by providing access to up to 32 computers from 32 workstations.
- 32 x 32 non-blocking, single-link DVI-D matrix switch
- Automatic output pre-emphasis and drive level
- Automatic receiver equalization
- Supports DVI-D operation at the maximum rate of 2x1.65 Gbps
- Supports resolutions up to 1080p, 2K and 1920x1200
- Control from either front panel or RS-232
- Available IR remote
- USB Control Available
- Ethernet control available
- Easy-to-use Windows based software



## THE MATRIX

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The MXCore-DX Series of DVI-D Matrix Routers allows you to distribute and route any DVI-D input source onto multiple DVI-D display devices. The MXCore-DX Series supports high resolutions up to 1080p, 2K and 1920x1200 with no loss of picture clarity and no ghosting of images.

The DVI-D cable is automatically equalized and can compensate the long distance by reducing the number of additional input signals. The Matrix supports DVI-D operation at the maximum TDMS rate of 2x1.65 Gb/s.

## APPLICATIONS

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

## HDMI MATRIX SWITCHING MADE EASY

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Users can locally switch between sources via the easy-to-operate front panel, or they can do so remotely through a RS-232, IR, or TCP/IP connection. The MXCore-DX Series can be controlled by SmartAVI's very own Windows®-based manager software, a cornerstone of all SmartAVI products.

## FLEXIBLE CONTROL

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MXCore-DX Series by SmartAVI can be controlled from the easily accessible LCD front panel and keypad that allows users to determine which inputs are connected to which outputs.

**RS232** - Controlling the MXCore-DX is effortless with SmartAVI's Windows®-based SmartControl software. Users can assign a unique name to each port on the Matrix along with a display for specific project requirements.

While all the functions of the Matrix are available locally on the front panel, SmartControl allows customization of all the Matrix's functions.

**IR** - Many system professionals prefer the IR control interface because it offers greater flexibility to manage the MXCore-DX at a distance. In some cases, the displays will not be visible from the Matrix, which would then make it necessary to control the Matrix with Infrared command signals.

**TCP/IP** - If users need to make changes instantly but can't be there in person, the Net-IP-Pro control module is the solution. SmartAVI's optional Net-IP-Pro module is effective for real-time remote control management. Simply connect the Net-IP-Pro module to the MXCore-DX Matrix while connected to the Internet and the Matrix can be controlled from anywhere in the world.

## EDID EMULATION

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Each input incorporates our unique "SmartEDID" programmable technology capable of learning video resolutions, audio settings and 3D data. The EDID memory of each display is stored in a single flash memory, giving users freedom to choose any EDID and emulation of any display. MXCore-DX Series enables DVI-D sources to continuously read the EDID of a monitor with full emulation at any given time.

The EDID management allows learning and saving of up to 100 displays, including audio. The MXCore-DX Series can learn EDID from any display device provided.

# SMARTAVI OFFERS MULTIPLE SOLUTIONS TO CONTROL THE MXCORE-DX SERIES

- Windows application
- Web based application
- Front panel switches and LCD
- Easy protocol for integration with the most common control systems such as: AMX, Creston, and more....

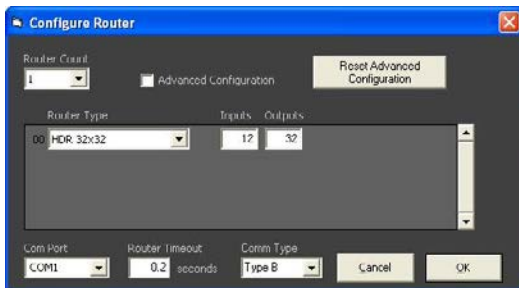
## SMARTCONTROL



SmartControl is the windows GUI application that enables users to control SmartAVI matrixes using graphic user interface without having to write the codes and send serial commands to the devices.

The software enables configuration of the size and type of the Matrix, including a preset defined at macro.

The software also enables identification by name for each source and display.



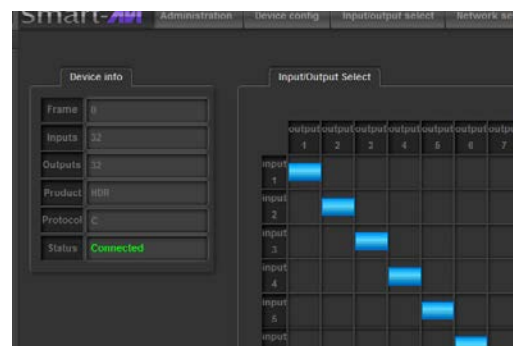
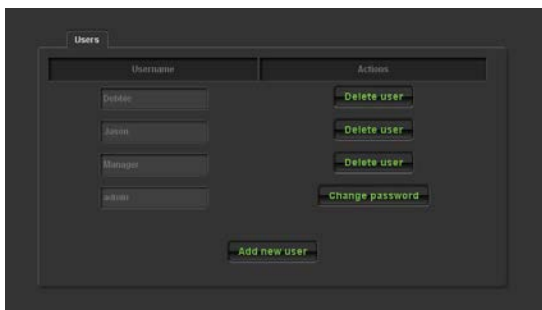
## NET-IP-PRO



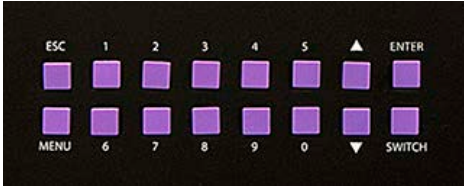
Net-IP-Pro gives the user full control of the matrixes from anywhere in the world through this advanced new web browser software.

Net-IP-Pro enables multiple users to control and configure the Matrix, including names of sources, names of displays, IP address and low level features of the Matrix.

The Net-IP-Pro enables the support of telnet for easy integration with other control systems.



## FRONT PANEL



The MXCore-DX front panel enables one to switch directly from the Matrix without the use of any software.

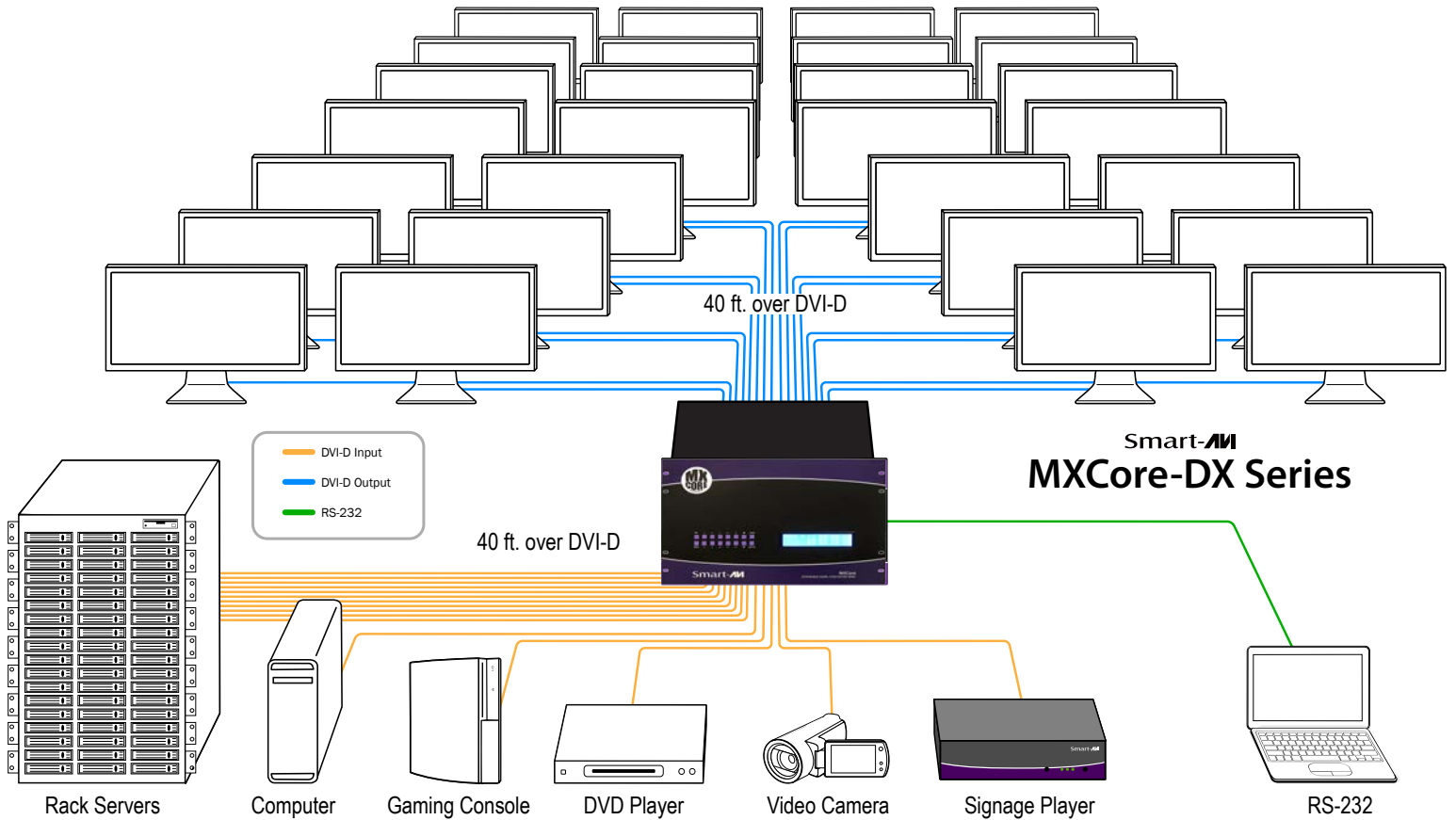


Its LCD (4x40) offers detailed information about the status of the switch at any given moment.

## THE PROTOCOL

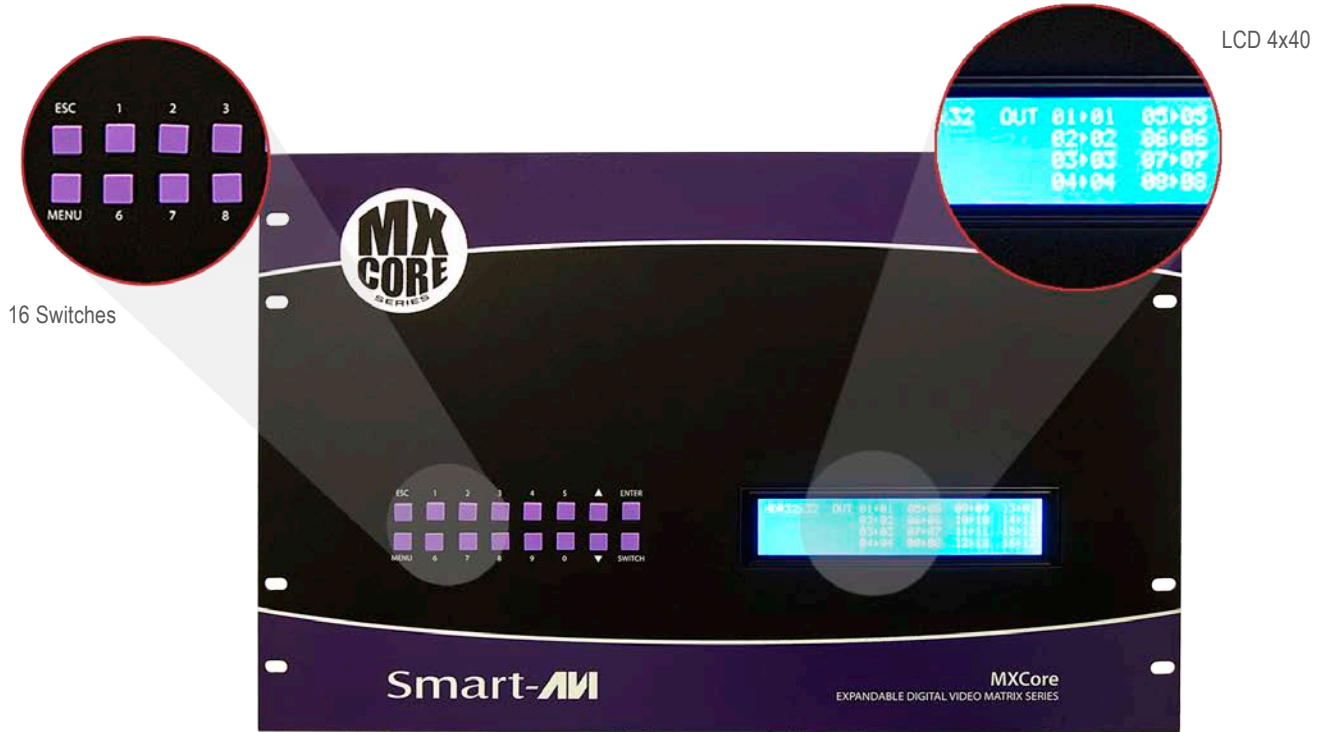
SmartAVI offers multiple protocols to control the Matrix, including easy protocols to integrate in short period of time and more advanced protocols with error-detecting code for secure switching.

## APPLICATION DIAGRAM

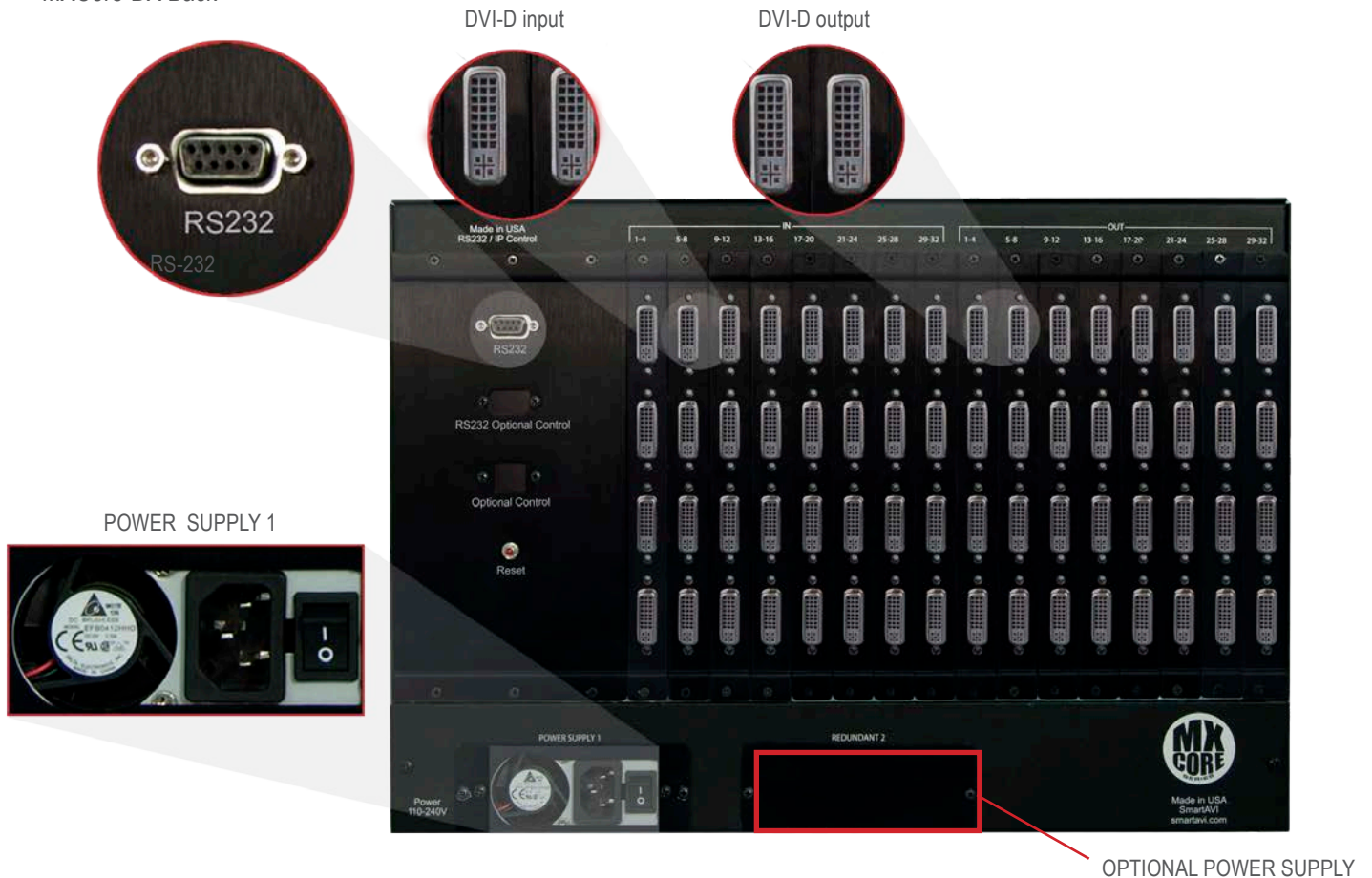


# FRONT AND BACK

MXCore-DX Front



MXCore-DX Back



# SPECIFICATIONS



MXCore-DX Input Card



MXCore-DX Output Card

VIDEO	
Video Amplifier Bandwidth	3.2G
Input Video Signal	Video (TMDS) 0.5~1.0Vpp
Input DDC Signal	5 volts
Signal Supports	DVI-D Standard, DVI-D and HDCP compliant
Pixel Rates	Clock frequency beyond 165Mpix/second
Format	4:4:4 and 4:2:2 data input formats
Resolution	Up to 1080p, 2K and 1920 x 1200
Input Cards	4x DVI Female
Output Cards	4x DVI Female
Input Slots	8 cards of 4 DVI-D input each
Output Slots	8 cards of 4 DVI-D input each
Video Type	RGB/YCBCR : 24/30/36-bits, YCBCR: 8/10/12/16/20/24-bits
POWER SUPPLY	
	50/60Hz, 100~230 VAC
Consumption	300W

CONTROLS	
IR	38Khz RC5
Front	2x8 keyboard with 4x40 LCD
RS232	9600bps, Software flow DB9 Female
TCP/IP	Webserver, Telnet
OTHER	
Working Temperature	0°C~+55°C
Storage Temperature	10%~90%
Weight	10Kg
DIMENSIONS	
17.125" x 12" x 12"	
WEIGHT	
20 lbs.	

ORDERING INFORMATION	
Part No.	Description
MXC-DX08X16S	MXCORE-DX Expandable DVI-D 8X16 Matrix Switcher. Includes: [MXC-DX08X16, SM-CSW, and CCPWR06]
MXC-DX08X32S	MXCORE-DX Expandable DVI-D 8X32 Matrix Switcher. Includes: [MXC-DX08X32, SM-CSW, and CCPWR06]
MXC-DX12X16S	MXCORE-DX Expandable DVI-D 12X16 Matrix Switcher. Includes: [MXC-DX12X16, SM-CSW, and CCPWR06]
MXC-DX12X32S	MXCORE-DX Expandable DVI-D 12X32 Matrix Switcher. Includes: [MXC-DX12X32, SM-CSW, and CCPWR06]
MXC-DX16X08S	MXCORE-DX Expandable DVI-D 16X8 Matrix Switcher. Includes: [MXC-DX16X08, SM-CSW, and CCPWR06]
MXC-DX16X12S	MXCORE-DX Expandable DVI-D 16X12 Matrix Switcher. Includes: [MXC-DX16X12, SM-CSW, and CCPWR06]
MXC-DX16X16S	MXCORE-DX Expandable DVI-D 16X16 Matrix Switcher. Includes: [MXC-DX16X16, SM-CSW, and CCPWR06]
MXC-DX16X32S	MXCORE-DX Expandable DVI-D 16X32 Matrix Switcher. Includes: [MXC-DX16X32, SM-CSW, and CCPWR06]
MXC-DX32X08S	MXCORE-DX Expandable DVI-D 32X8 Matrix Switcher. Includes: [MXC-DX32X08, SM-CSW, and CCPWR06]
MXC-DX32X12S	MXCORE-DX Expandable DVI-D 32X12 Matrix Switcher. Includes: [MXC-DX32X12, SM-CSW, and CCPWR06]
MXC-DX32X16S	MXCORE-DX Expandable DVI-D 32X16 Matrix Switcher. Includes: [MXC-DX32X16, SM-CSW, and CCPWR06]
MXC-DX32X32S	MXCORE-DX Expandable DVI-D 32X32 Matrix Switcher. Includes: [MXC-DX32X32, SM-CSW, and CCPWR06]



Designed and Manufactured in the USA

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