

AUDIO/VIDEO MATRIX SWITCH

Switch audio and video from many computers among multiple monitors and speakers



VEEMUX® SM-8X8-AV-LCD (Front and Back)

Features and Applications

The VEEMUX® SM-nXm-AV-LCD Audio/Video Matrix Switch routes audio and video from many computers to multiple displays (projectors, monitors, etc.) and speakers. This switch can drive standard VGA cables, thus eliminating the need for external interfaces and coax cable connections via BNC connectors.

Signals from a range of input sources can be distributed to various output devices. A single computer video output can be routed to one or more monitors. Each video output is buffered from each input, ensuring signal integrity throughout the system. When switching ports, the audio automatically mutes until the video has been synchronized. The audio can be muted on command.

- Configure and control the switch through Ethernet, serial port or front panel buttons.
- Matrix Control Software with Graphical User Interface (GUI control) is included.
- Equipped with Liquid Crystal Display (LCD) and RS232 Control.
- Switch VGA video directly.
- Each output provides one video signal and one stereo audio signal.
- Each input can be independently connected to any or all outputs.
- Video bandwidth is 200 MHz or greater.
- Supports 1920x1200 video resolution at a refresh rate of 85 Hz.
- Crestron® compatible.

The VEEMUX switch is the ideal solution for any application where information from many computers is being presented, such as:

- Classrooms.
- Boardrooms.
- Trade shows.
- Conference and entertainment facilities.
- Courtrooms.
- Command centers.
- Control rooms.

Specifications

Video Input

- Female 15-pin HD connectors.
- Impedance: 75 Ohms.

Video Output

- Female 15-pin HD connectors.
- 1920x1200 video resolution with no degradation.
- Impedance: 75 Ohms.
- Bandwidth: 200 Mhz, fully loaded.

Audio Input

- 3.5mm stereo audio jacks.
- Impedance: 10k Ohm.
- Maximum Input Level: 1 Vrms or 2.5Vp-p.

Audio Output

- 3.5mm stereo audio jack.
- Drives 8-Ohm speakers.
- Unbalanced Gain: user defined.
- Frequency Response: 20 Hz to 20 kHz, +/-0.5 dB.
- Total Harmonic Distortion + Noise: 0.01% at 1kHz.
- Gain Adjustment: -20 dB to +10 dB in 2 dB steps.
- 200 mW RMS of continuous power per output.
- When switching ports, audio mutes until video has been synchronized.

MTBF

- Over 41,000 hours.

AUDIO/VIDEO MATRIX SWITCH

Switch audio and video from many computers among multiple monitors and speakers

Specifications (Continued)

Power

- 110 or 220 VAC at 50 or 60 Hz.
 - The smaller models use AC adapters as their power source.
- Power consumption: 8x2: 10W, 8x4: 15W, 8x8: 20W, 16x2: 15W, 16x4: 15W, 16x8: 20W, 16x12: 25W, 16x16: 30W, 32x2: 20W, 32x4: 20W, 32x8: 25W, 32x16: 35W.

Regulatory Approvals

- CE, FCC, RoHS

Cables

- Interface cables between the computers and the switch are required for proper operation.
- Recommended NTI video cables:
 - VGA interface cable (VEXT-xx-MM).
 - VGA to BNC cable (VINT-5B-6).
- Recommended NTI audio cables:
 - SA-xx-MM.
- Cables not included.

Warranty

- Two years

Control Methods

Front Panel Interface

- Configuration and control can be done using the front panel buttons.
- Keypad allows selection of the input source to be routed to the desired outputs.
- LED Matrix Display visually shows which inputs are connected to which outputs. (Available on the 8x8, 16x8, 16x12, 16x16, 32x8 and 32x16 video matrix switches.)

RS232 Control

- Configuration and control can be done through the serial port.
- Baud rate: 1200 through 9600.
- Address up to 15 units with one serial port.
- Changes multiple input-to-output connections quickly and efficiently.

Commands

- RS - causes switch to reset so that IN1 connects to OUT1, IN2 connects to OUT2.
- CS - causes one INx/OUTx connection to occur.
- CA - causes all inputs to connect to specified output.
- RO - reads what input is connected to specified output.
- RU - reads size of matrix, reports number of inputs and number of outputs on specified switch.
- EA - set the IP address.
- EM - set the IP mask.
- EG - set the default gateway.
- ET - set the webserver timeout.

Ethernet

- Female RJ45 connector.
- 10/100 BaseT Ethernet interface.
- Supported protocol: HTTP, HTTPS, Telnet.
- Configuration and control can be done over the Internet via Web Server or Telnet.

Web Server

- Password (optional SSL encryption) and Administrator configurable timeout to ensure security.
- Up to 25 users can be logged into the web page at one time.
- Users and administrators can access the following pages:
 - ◆ Switch page - connect any input to any output, save and recall up to 100 connection configurations, force compensation on all ports. Ports can be listed in order by port name or port number.
 - ◆ Port scanning page - scan any or all input ports. Adjustable dwell time.
 - ◆ Change Password page - administrator and users can change their password (passwords are between 5 and 16 characters long inclusive).
 - ◆ Help page - review documentation on the usage of the web interface.
 - ◆ Update Webserver page - restart the webserver to resynchronize all settings with the Veemux proper.
 - ◆ Logout page - view currently active users and logout of the web interface.
- The Administrator can access the following Administrative only pages:
 - ◆ Web Setup page - configure IP address, subnet mask and timeout.
 - ◆ Serial Setup page - configure serial speed and serial settings.
 - ◆ Ports Settings page - assign names to video and audio inputs and outputs.
 - ◆ Update Firmware page - load firmware updates to the webmux product.

Telnet

- Security is ensured by the Administrative password.
- Commands are similar to RS232 commands.



330.562.1999
Worldwide fax



sales@ntigo.com



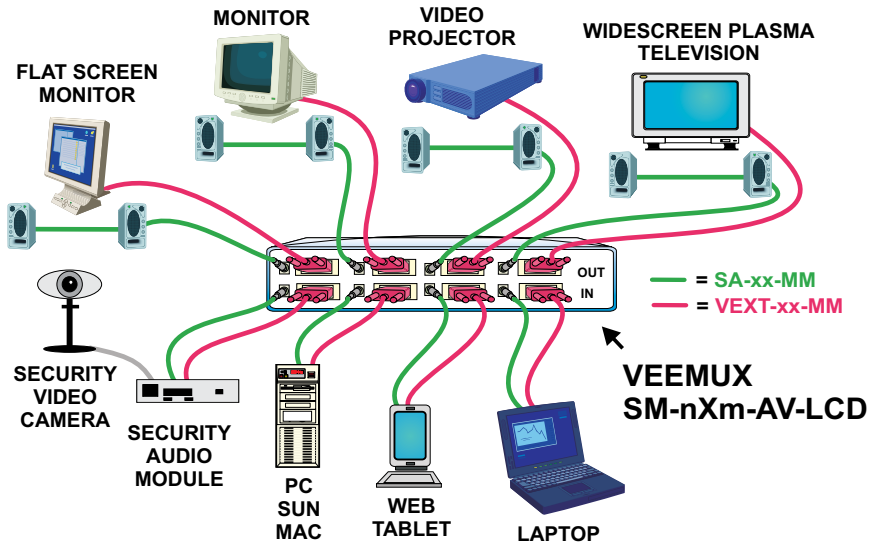
www.networktechinc.com

©2006-2007, NTI
All rights reserved

AUDIO/VIDEO MATRIX SWITCH

Switch audio and video from many computers among multiple monitors and speakers

Configuration and Cable Illustration of VEEMUX Audio/Video Matrix Switch



Ordering Specifications

Audio/Video Matrix Switch

This example explains the VEEMUX switch part number by breaking it down into the available options. When ordering, choose the options that you require.

Number of Inputs (Computers) Number of Outputs (Monitors) Audio/Video Optional Control Method

SM - \overline{n} X \overline{m} - AV - LCD - \overline{IR}

"n" = 4, 8, 16, 32 "m" = 2, 4, 8, 12, 16 LCD = Liquid Crystal Display Standard IR = Infrared

Audio/Video Matrix Switch Models				
NTI Part #	# of Audio/Video Inputs (n)	# of Audio/Video Outputs (m)	Rack Units	Rack Size WxDxH (in)
SM-8X2-AV-LCD	8	2	2RU	19x10x3.5
SM-8X4-AV-LCD	8	4	2RU	19x10x3.5
SM-8X8-AV-LCD	8	8	2RU	19x12x3.5
SM-16X2-AV-LCD	16	2	2RU	19x10x3.5
SM-16X4-AV-LCD	16	4	2RU	19x10x3.5
SM-16X8-AV-LCD	16	8	3RU	19x12x5.25
SM-16X12-AV-LCD	16	12	3RU	19x12x5.25
SM-16X16-AV-LCD	16	16	3RU	19x12x5.25
SM-32X2-AV-LCD	32	2	4RU	19x12x7
SM-32X4-AV-LCD	32	4	4RU	19x12x7
SM-32X8-AV-LCD	32	8	4RU	19x12x7
SM-32X16-AV-LCD	32	16	4RU	19x12x7

