



V-Matrix™



Introduction
Enclosure
Engine
Power Supply
Input Cards
Output Cards

ALTINEX V-Matrix™ is a modular matrix switcher configurable to any matrix size from 8x8 to 128x128 (in increments of 8) and capable of switching RGBHV, RGBS, RGSB, component video, S-video, composite video, stereo/mono audio and twisted pair signals. The universal Matrix Engine® is designed to switch any combination of signal types within the same enclosure. The V-Matrix provides non-blocking routing of input signals to compatible output devices without changing the signal format.

The modularity of the V-Matrix allows quick upgrades and easy maintenance. All input and output cards, Matrix Engine, dual power supply and the processing card can be removed and replaced without removing the V-Matrix from a rack. The design of the V-Matrix is so advanced that it allows rapid replacement of any removable component within the switcher.

The V-Matrix provides the unique ability to combine multiple matrixes within the same switcher. Video and audio can be installed side by side. Twisted pairs and RGB can share the same chassis. This flexibility provides an opportunity to design a robust and highly space efficient AV systems.

Control of the V-Matrix is done using a RS-232 port or optional front panel interface. Free AVSnap® software is available for a customized GUI (Graphical User Interface) running on a PC to fit any customer's demands. The protocol for input/output selection is simple to understand and learn. Optional TCP/IP adapter is available for network enabled control. (part no: AC301-201)



The building blocks of a V-Matrix system include the main enclosure, dual power supply, the Matrix Engine, input cards and output cards.



VM2210BE**VM2210BE:** V-Matrix Enclosure**VM2128ME:** V-Matrix Matrix Engine**VM2218PS:** V-Matrix Power Supply**Common features:**

Switch capability 128x128 (Analog)

RS-232 Control (2400, 9600 bauds)

AC power 95~265V

Enclosure: 10U (17.5in) high, 19-inch rack wide

Triple fan/chimney construction for ultra-cool operation

3 AC power outlets for additional convenience

Easily replaceable dual AC/DC power supply

1600x1200/component resolution compatibility

16 slots available for input cards (8 in each)

16 slots available for output cards (8 out each)

Optional vertical interval switching (VIS): **VM2401VS****VM2128ME****VM2218PS****VM2141AU****V-Matrix 8-In Mono Audio Card****Common features:**

Mono audio format

20Hz to 20kHz bandwidth

Balanced/single-ended inputs

Terminal blocks for ease of installation

Used with VM2142AU audio output card

*Uses 1 input slot in the V-Matrix enclosure***VM2142AU****V-Matrix 8-Out Mono Audio Card****Common features:**

Mono audio format

20Hz to 20kHz bandwidth

Terminal blocks for ease of installation

Balanced/single-ended outputs

Used with VM2141AU audio input card

Uses 1 output slot in the V-Matrix enclosure

VM2148AU



V-Matrix 8-In Stereo Audio Card

Common features:

- Stereo audio format
- 20Hz to 20kHz bandwidth
- Input level control
- Terminal blocks for ease of installation
- Balanced/single-ended inputs
- Used with VM2149AU audio output card

Uses 1 input slot in the V-Matrix enclosure

VM2149AU



V-Matrix 8-Out Stereo Audio Card

Common features:

- Stereo audio format
- 20Hz to 20kHz bandwidth
- Balanced/single-ended inputs
- Terminal blocks for ease of installation
- Used with VM2148AU audio input card

Uses 1 output slot in the V-Matrix enclosure

VM2143VS



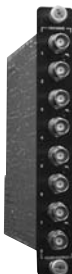
V-Matrix 8-In Video/Sync Card

Common features:

- BNC inputs
- VGA through UXGA signal format
- Component video compatible
- 75 Ohms analog impedance for video input signals
- 2 kOhms sync impedance for sync input signals
- S/PDIF compatible
- Ground loop isolated input
- Compatible with video and sync
- Selectable AC/DC couplings
- Selectable high/low input impedance
- Used with VM2144VS video output card

Uses 1 input slot in the V-Matrix enclosure

VM2144VS



V-Matrix 8-Out Video Card

Common features:

- BNC outputs
- VGA through UXGA signal format
- Component video compatible
- 75 Ohms input/output
- S/PDIF compatible
- Used with VM2143VS video input card

Uses 1 output slot in the V-Matrix enclosure

VM2145SS**V-Matrix 8-Out Sync Card****Common features:**

- BNC outputs
- VGA through UXGA signal format
- TTL sync compatible
- 75 Ohms input/output
- Used with VM2143VS video/sync input card

Uses 1 output slot in the V-Matrix enclosure

VM2146UX**V-Matrix 8-Out Video/Sync Card****Common features:**

- BNC outputs
- VGA through UXGA signal format
- Component video compatible
- TTL sync compatible
- Compatible with video and sync
- 75 Ohms input/output
- S/PDIF compatible
- Used with VM2143VS video input card

Uses 1 output slot in the V-Matrix enclosure

VM2381CF**V-Matrix 8-In Twisted Pair Card, Single Channel (1TP)****Common features:**

- VGA through UXGA signal format
- RGB compatible
- Component video compatible
- NTSC/PAL/SECAM compatible
- Works with all current ALTINEX twisted pair products

Uses 1 input slot in the V-Matrix enclosure

VM2382CF**V-Matrix 8-Out Twisted Pair Card, Single Channel (1TP)****Common features:**

- VGA through UXGA signal format
- RGB compatible
- NTSC/PAL/SECAM compatible
- Works with all current ALTINEX Twisted Pair products
- Used with VM2381CF TP input card

Uses 1 output slot in the V-Matrix enclosure

VM2005BP**V-Matrix Blank Cover Plate****Common features:**

- Sea covers per pack

Uses 1 slot in the V-Matrix enclosure