

PART NO: 400-0221-001

VM2148/49AU

8-INPUT/OUTPUT STEREO AUDIO

CARDS FOR

V-MATRIX™

PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **VM2148/49AU**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **VM2148/49AU** and to prevent fire and shock hazard. Please read them carefully and heed all warnings.

1.1 GENERAL

- Qualified ALTINEX service personnel, or their authorized representatives must perform all service on these cards.

1.2 INSTALLATION

- To prevent fire or shock, do not expose this unit to rain or moisture. Do not place the **VM2148/49AU** in direct sunlight, near heaters or heat radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the **VM2148/49AU** carefully. Dropping or jarring can damage the card.
- Insert the card carefully into the slots of the V-Matrix™ without bending any edges.

1.3 CLEANING

- Clean only the connector area with a dry cloth. Never use strong detergents or solvents, such as alcohol or thinner. Do not use a wet cloth or water to clean the card. Do not clean or touch any component or PCB.

1.4 FCC / CE NOTICE

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated

in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

- Any changes or modifications to the unit not expressly approved by ALTINEX, Inc. could void the user's authority to operate the equipment.

ABOUT YOUR VM2148/49AU 2

VM2148AU 8 channels Audio Input Card

The **VM2148AU** is an 8 inputs Stereo Audio Card designed for use in a **V-Matrix™** enclosure. When installed in a **V-Matrix™** Basic Enclosure, these Audio Input cards enable the connection of eight audio sources. Each input on the card consists of Right and Left channels. This card can be used both for mono and stereo type audio signals. The input level control can be used to adjust signal level for each input.

The **VM2149AU** is an 8 outputs Stereo Audio Card designed for use in a **V-Matrix™** enclosure. When installed in a **V-Matrix™** Basic Enclosure, these Audio Output cards enable the connection of eight audio sources. Each output on the card consists of Right and Left channels. This card can be used both for mono and stereo type audio signals. The output can drive loads down to 600 ohms.

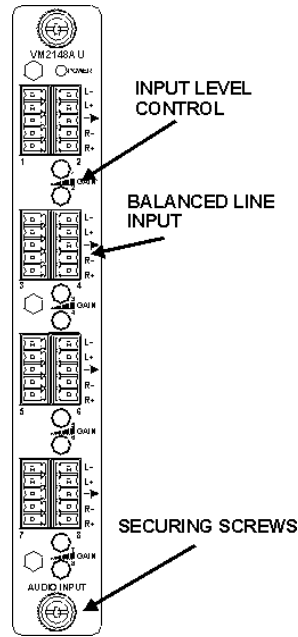
All input and output cards are “hot-swappable” with finger adjustable lock-down screws and secure, positive engagement card-edge connections.

TECHNICAL SPECIFICATIONS 3

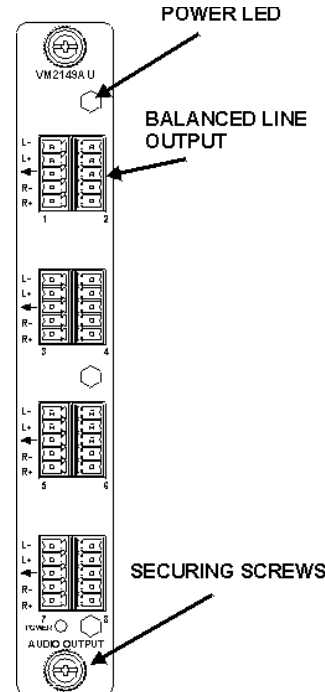
FEATURES/ DESCRIPTION	VM2148/49AU
Input	(8)
Connectors	5-pin terminal blocks
Type	Differential (Balanced)
Input Voltage	+/- 1.2V p-p max
Output Voltage	4V p-p max
Input Impedance	10k Ohms
Output Impedance	10 Ohms
CMRR	80dB @ 10Hz to 20KHz
Crosstalk	<80dB @ 1kHz (all channels hostile)
Signal-to-noise-ratio	>94dB
Bandwidth	10 Hz to 20,000 Hz
Gain Control on Inpu	0db to -60db
Signal Encoding	Stereo Format

Table 1. VM2148/49AU

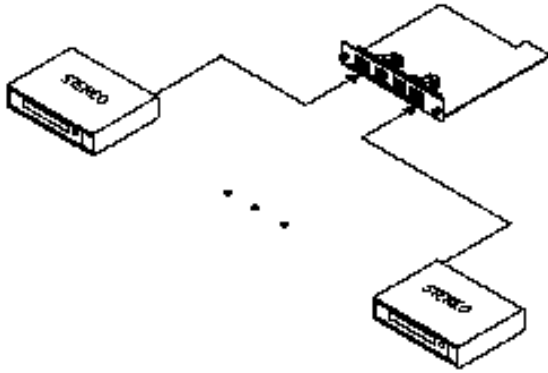
PRODUCT DESCRIPTION 4



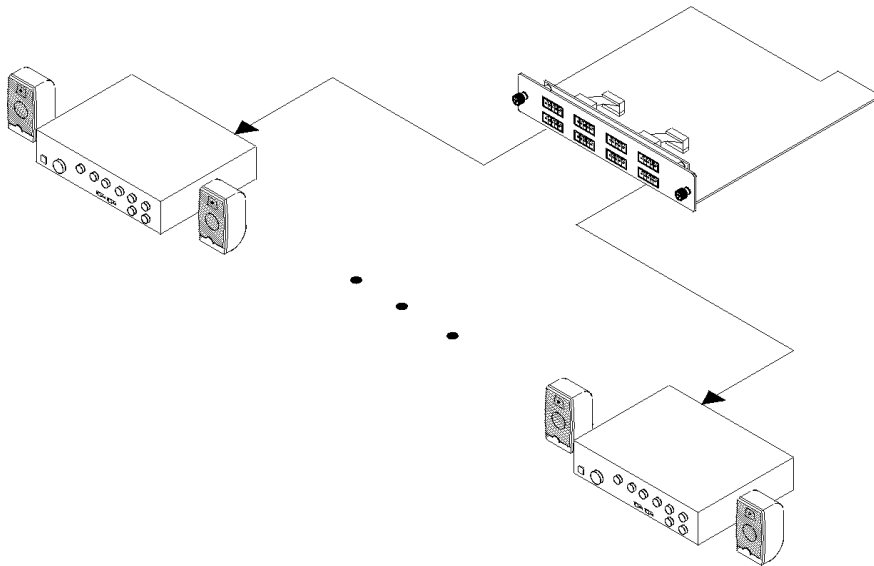
VM2148AU connectors and controls



VM2149AU connectors



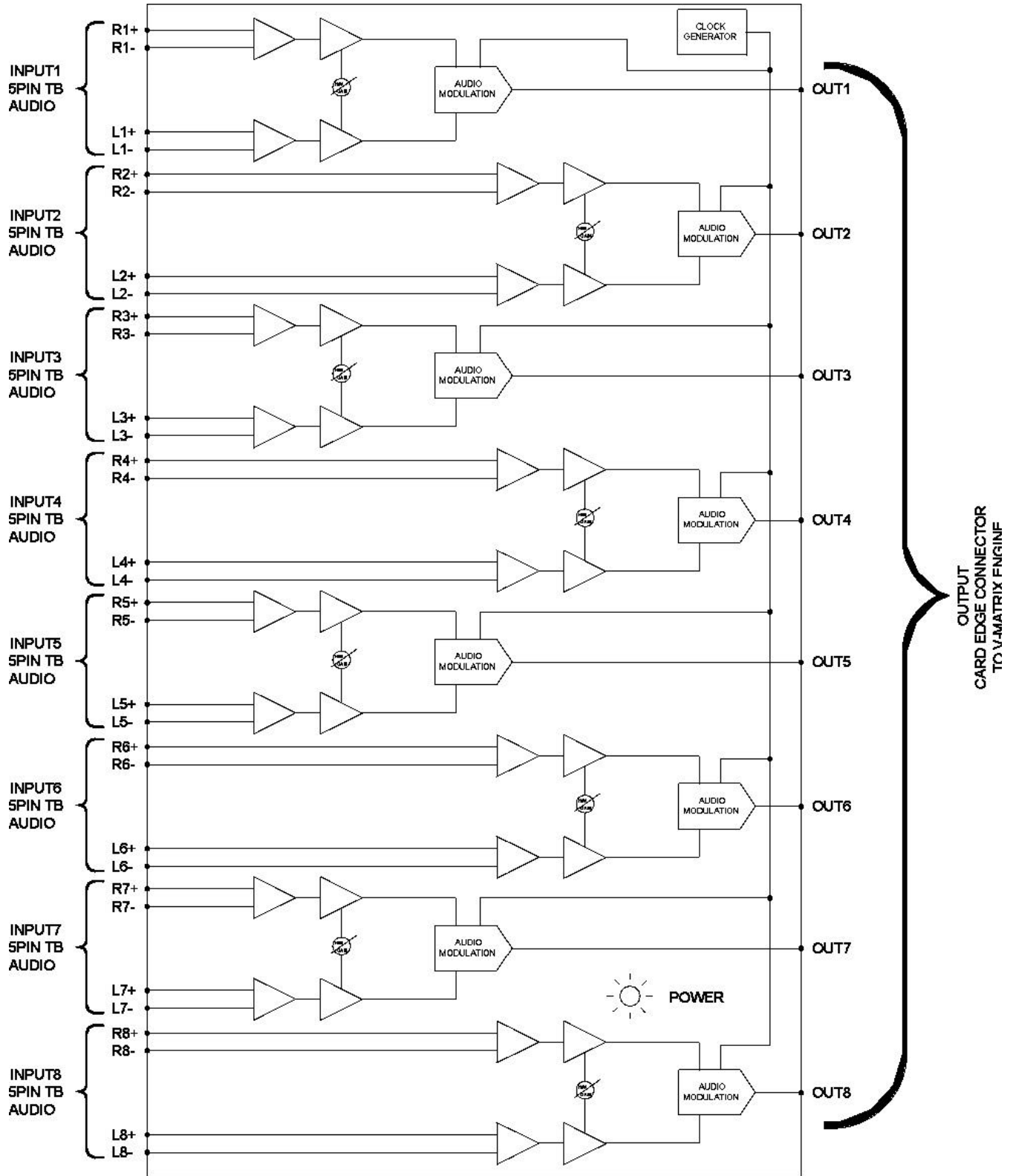
VM2148AU can be driven by any analog audio source. The signals can be balanced or unbalanced.



VM2149AU output is balanced line level output. It can drive balanced or unbalanced audio line.

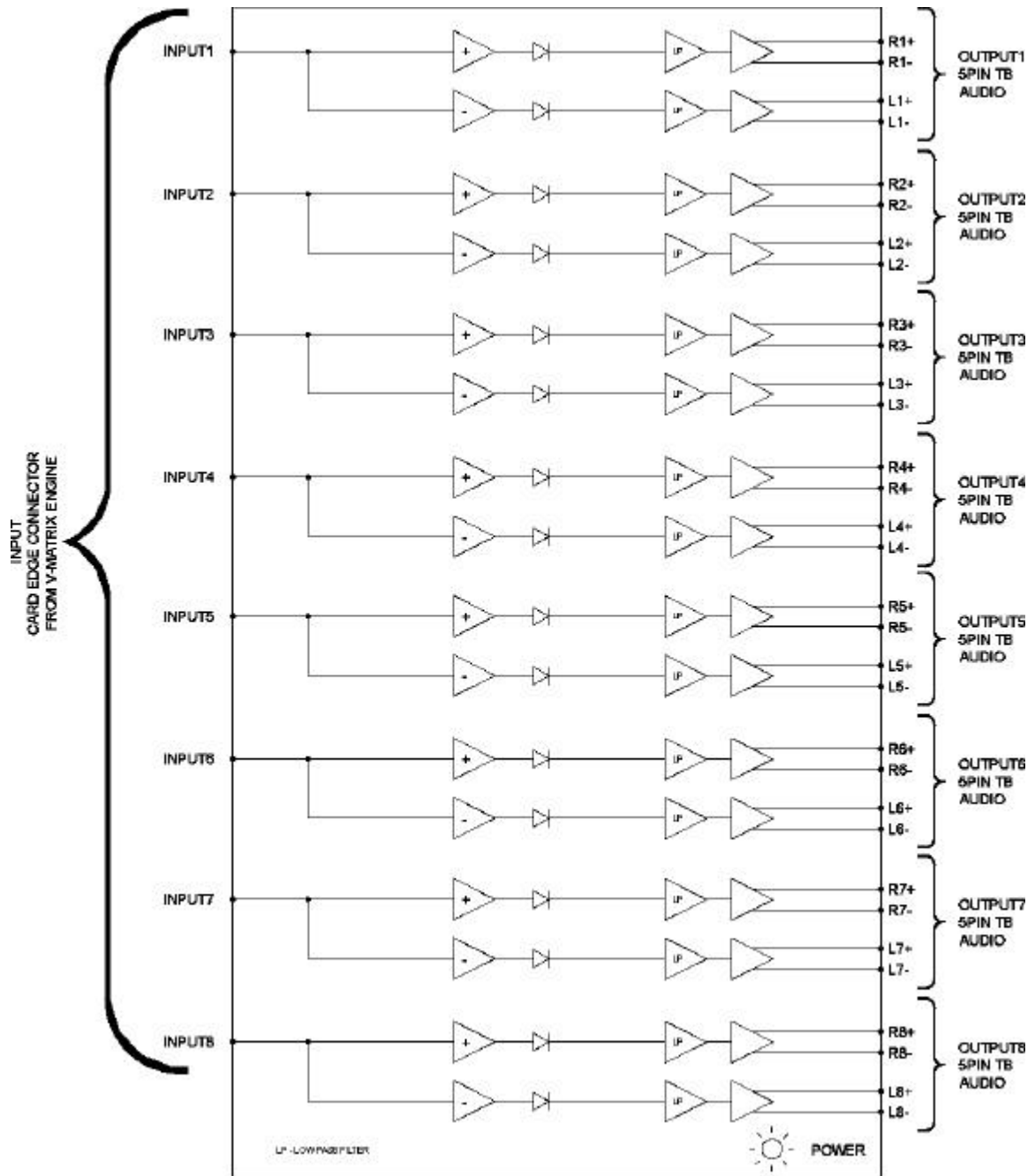
VM2148AU BLOCK DIAGRAM

6



3

OUTPUT
CARD EDGE CONNECTOR
TO V-MATRIX ENGINE



INSTALLING YOUR VM2148/49AU 8

Step 1. Slide the **VM2148/49AU** and the **VM2142AU** into available slots in the V-Matrix™ Enclosure. Make sure that the cards fit into place. Secure the cards to the V-Matrix™ by tightening the retainer screws located on the top and bottom of each cover plate.

Step 2. Connect audio cables from the audio source to the input connector of the **VM2148AU**. Connect the output connectors of the **VM2149AU** to the audio equipment through an audio cable.

OPERATION 9

The **VM2148/49AU** will operate successfully as long as the card is installed properly and other technical specifications are followed.

TROUBLESHOOTING GUIDE 10

We have carefully tested and have found no problems in the supplied **VM2148/49AU**; however, we would like to offer suggestions for the following:

- Make sure that power is connected to the enclosure and also check to see if the **VM2148/49AU** is pushed in all the way.
- If there is no sound, check the source and make sure that it is working at an appropriate volume level and all source connections are correct.
- Make sure that cables are connected properly. Also, make sure that the continuity and wiring are good.

Make sure that the destination amplifier is powered. Set the volume of the destination amplifier to a reasonable level.

Make sure that the source signal level is high enough so that the destination amplifier does not have to provide excessive amplification and thereby distort the signal.

If there is problem with the **VM2148/49AU** please call ALTINEX at (714) 990-2300.

ALTINEX POLICY 11

9.1 LIMITED WARRANTY

Please see Altinex Inc. web site for detailed warranty statement.

9.2 RETURN POLICY

Please see Altinex Inc. web site for detailed return policy statement.

9.3 CONTACT INFORMATION

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