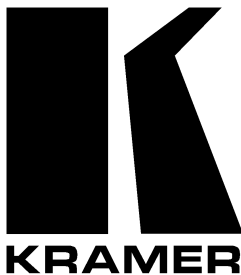


Kramer Electronics, Ltd.



USER MANUAL

Model:

VM-54A

3x1:18 or 1x1:54 Balanced Audio Stereo Distribution Amplifier

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1 Introduction

Dedication by Kramer Electronics since 1981, to the development and manufacture of high quality video/audio equipment, makes the Kramer line an integral part of the finest production and presentation facilities in the world. In recent years, Kramer has redesigned and upgraded most of the line, making the best even better!

The Kramer line of professional video/audio electronics is one of the most versatile and complete available, and is a true leader in terms of quality, workmanship, price/performance ratio and innovation. In addition to our high quality distribution amplifiers, we also offer excellent switchers and matrices, remote controllers, processors, interfaces and computer -related products. Congratulations on purchasing your Kramer **VM-54A** *Balanced Audio Stereo Distribution Amplifier*.

This product is ideal for the following typical applications:

- Duplication, production, or presentation systems requiring high quality audio signal distribution
- Audio production and broadcast studios
- Schools, retail outlets, sports bars, other point-of-sale and CCTV applications

The package includes the following items:

- **VM-54A** Balanced Audio Stereo Distribution Amplifier
- Power cord
- This user manual
- Kramer concise product catalog/CD

2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual

3 Overview

The **VM-54A** is a high quality 3x1:18 or 1:36 + 1:18 or 1x1:54 balanced stereo audio distribution amplifier.

In addition, the **VM-54A**:

- Includes audio bandwidth exceeding 80 kHz that ensures transparent performance
- Includes easy-to-connect detachable terminal block connectors
- Includes individual level controls for each of the 3 input channels (6 controls altogether)
- Is the perfect partner for the Kramer **VM-54** - a 3x1:18 or 1x1:54 video distribution amplifier

Achieving the best performance means:

- Connecting only good quality connection cables, thus avoiding interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Avoiding interference from neighboring electrical appliances that may adversely influence signal quality
- Positioning your Kramer **VM-54A** in a location free from moisture and away from excessive sunlight and dust

4 Your Balanced Audio Stereo Distribution Amplifier

Figure 1 illustrates the front and rear panels of the **VM-54A**. Tables 1 and 2 define the front and rear panels of the **VM-54A**, respectively.

Your Balanced Audio Stereo Distribution Amplifier

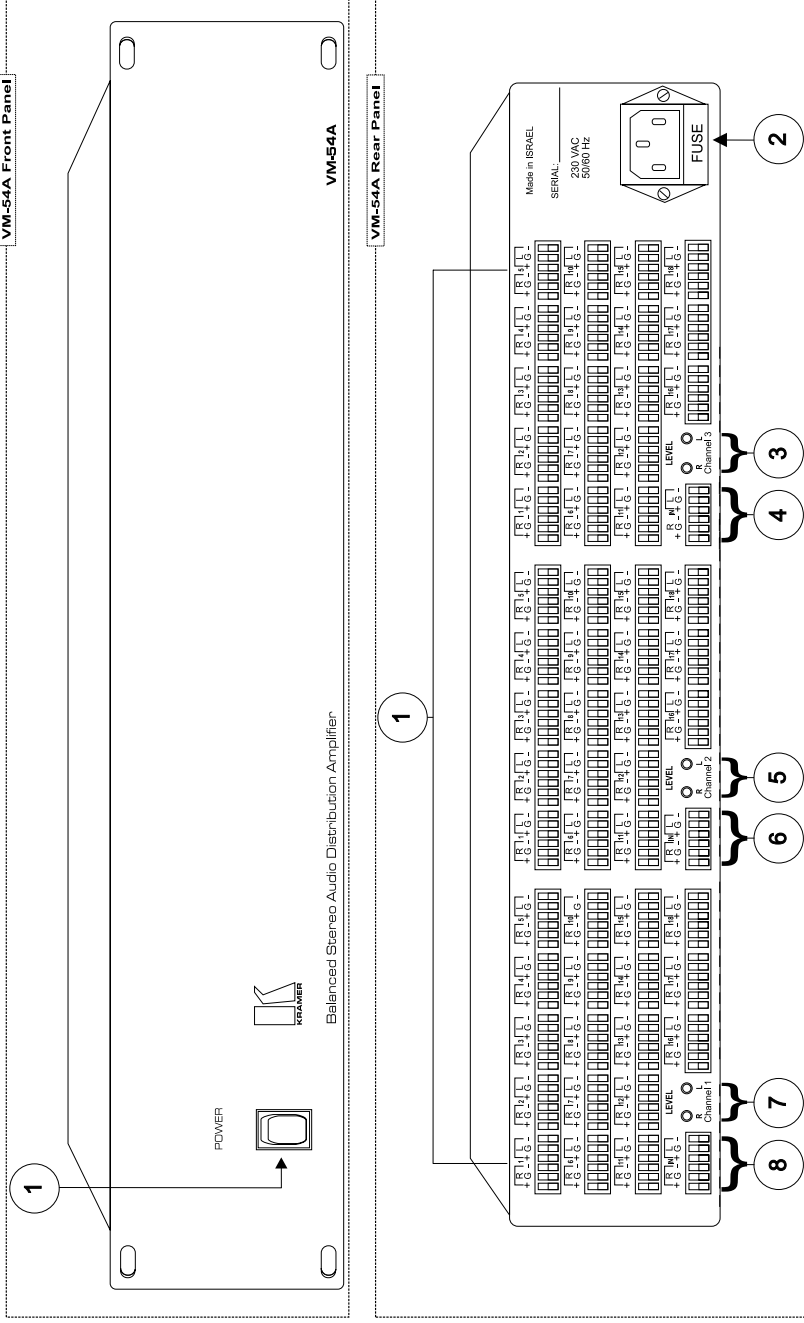


Figure 1: Balanced Audio Stereo Distribution Amplifier

Table 1: Front Panel Balanced Audio Stereo Distribution Amplifier Features

#	Feature	Function
1	Power Switch	Illuminated switch supplying power to the unit

Table 2: Rear Panel Balanced Audio Stereo Distribution Amplifier Features

#	Feature	Function
1	AUDIO Connectors	Audio outputs
2	Power Connector with Fuse	230 VAC, 50/60 Hz, (115V AC, U.S.A.) 10VA power inlet
3	LEVEL Channel 3	Level controls
4	AUDIO IN Connector	Audio input (for the 1:18) or Looping input ¹ (for the 1:54)
5	LEVEL Channel 2	Level controls
6	AUDIO IN Connector	Audio input (for the 1:18) or Looping input ¹ (for the 1:54)
7	LEVEL Channel 1	Level controls
8	AUDIO IN Connector	Audio input (for the 1:18) or Looping input ¹ (for the 1:54)

4.1 Connecting Your Balanced Audio Stereo Distribution Amplifier

To connect a VM-54A unit, connect the audio source(s) and audio acceptor(s)² to the rear panel, as Figure 2 and Figure 3 illustrate:

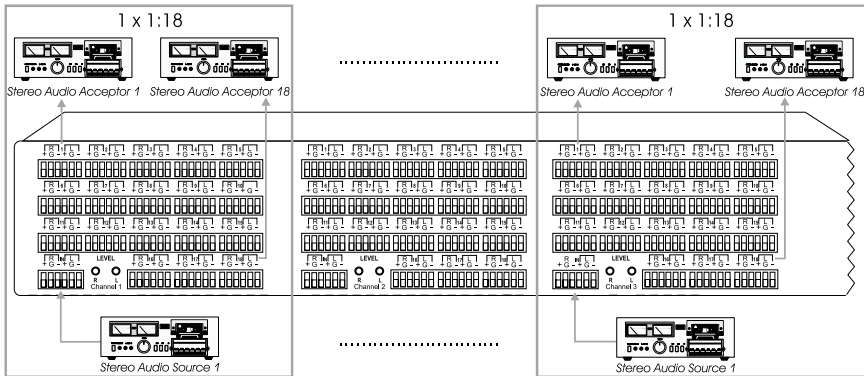


Figure 2: 3 x 1:18 Balanced Audio Stereo Distribution Amplifier

¹ Connect a looping cable between items 4, 6 and 8, as defined in Figure 1 and illustrated in Figure 3

² Switch OFF the power on each device before connecting it to your VM-54A. After connecting your VM-54A, switch on its power and then switch on the power on each device

Operating Your Balanced Audio Stereo Distribution Amplifier

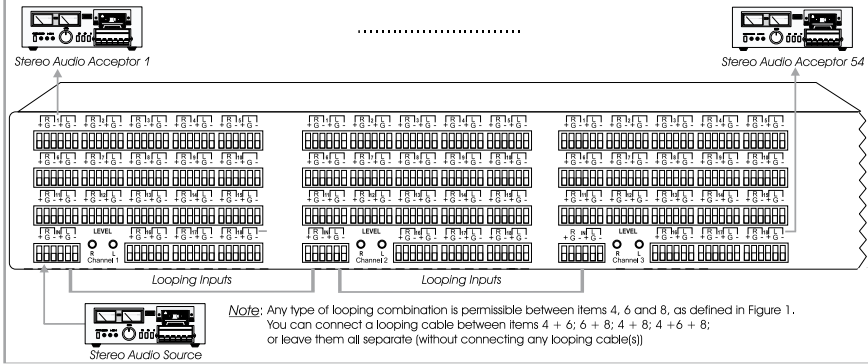


Figure 3: 1 x 1:54 Balanced Audio Stereo Distribution Amplifier

5 Operating Your Balanced Audio Stereo Distribution Amplifier

When the machine is turned on, after connecting your **VM-54A**, as section 4.1 describes, the audio input(s) is/are buffered to the audio outputs.

6 Technical Specifications

Table 3 includes the technical specifications:

Table 3: Technical Specifications of the Balanced Audio Stereo Distribution Amplifier

Inputs:	3 balanced audio stereo +4dBm / 50kΩ on detachable terminal blocks
Outputs:	3x18 balanced audio stereo +4dBm / 50Ω on detachable terminal blocks
Audio Bandwidth:	80 kHz -3dB
Max. Output Level:	>25 Vpp
Gain Control Range:	+0.2 to +9.2 dB
Audio S/N:	85 dB
THD + Noise:	<0.017%
2nd Harmonic:	<0.002%
Crosstalk:	<- 81 dB
Coupling:	AC
Dimensions:	19-inch (W), 7-inch (D) 2U (H) rack-mountable
Power Source:	230 VAC, 50/60 Hz, (115VAC, U.S.A.) 10VA
Weight:	3.5 kg (7.8 lbs.) approx.
Accessories:	Power cord

LIMITED WARRANTY

Kramer Electronics (hereafter *Kramer*) warrants this product free from defects in material and workmanship under the following terms.

HOW LONG IS THE WARRANTY

Labor and parts are warranted for three years from the date of the first customer purchase.

WHO IS PROTECTED?

Only the first purchase customer may enforce this warranty.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

1. Any product which is not distributed by Kramer, or which is not purchased from an authorized Kramer dealer. If you are uncertain as to whether a dealer is authorized, please contact Kramer at one of the agents listed in the web site www.kramerelectronics.com.
2. Any product, on which the serial number has been defaced, modified or removed.
3. Damage, deterioration or malfunction resulting from:
 - i) Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
 - ii) Product modification, or failure to follow instructions supplied with the product
 - iii) Repair or attempted repair by anyone not authorized by Kramer
 - iv) Any shipment of the product (claims must be presented to the carrier)
 - v) Removal or installation of the product
 - vi) Any other cause, which does not relate to a product defect
 - vii) Cartons, equipment enclosures, cables or accessories used in conjunction with the product

WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR

We will pay labor and material expenses for covered items. We will not pay for the following:

1. Removal or installations charges.
2. Costs of initial technical adjustments (set-up), including adjustment of user controls or programming. These costs are the responsibility of the Kramer dealer from whom the product was purchased.
3. Shipping charges.

HOW YOU CAN GET WARRANTY SERVICE

1. To obtain service on your product, you must take or ship it prepaid to any authorized Kramer service center.
2. Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage, and should be included in any shipment of the product. Please also include in any mailing a contact name, company, address, and a description of the problem(s).
3. For the name of the nearest Kramer authorized service center, consult your authorized dealer.

LIMITATION OF IMPLIED WARRANTIES

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

EXCLUSION OF DAMAGES

The liability of Kramer for any effective products is limited to the repair or replacement of the product at our option. Kramer shall not be liable for:

1. Damage to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or:
2. Any other damages, whether incidental, consequential or otherwise. Some countries may not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from place to place.

NOTE: All products returned to Kramer for service must have prior approval. This may be obtained from your dealer.

This equipment has been tested to determine compliance with the requirements of:

- EN-50081: "Electromagnetic compatibility (EMC);
generic emission standard.
Part 1: Residential, commercial and light industry"
- EN-50082: "Electromagnetic compatibility (EMC) generic immunity standard.
Part 1: Residential, commercial and light industry environment".
- CFR-47: FCC Rules and Regulations:
Part 15: "Radio frequency devices
Subpart B – Unintentional radiators"

CAUTION!

- Servicing the machines can only be done by an authorized Kramer technician. Any user who makes changes or modifications to the unit without the expressed approval of the manufacturer will void user authority to operate the equipment.
- Use the supplied DC power supply to feed power to the machine.
- Please use recommended interconnection cables to connect the machine to other components.



**The list of Kramer distributors appears on our web site:
www.kramerelectronics.com**

We welcome your questions, comments and feedback.

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