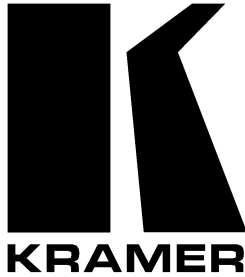


Kramer Electronics, Ltd.



USER MANUAL

Model:

VM-3A

Audio Distributor

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1 Introduction

Welcome to Kramer Electronics (since 1981): a world of unique, creative and affordable solutions to the infinite range of problems that confront the video, audio and presentation professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better! Our 500-plus different models now appear in 8 Groups¹, which are clearly defined by function.

Congratulations on purchasing your Kramer **VM-3A Audio Distributor**.

This product is ideal for the following typical applications:

- Audio duplication studios, delivering high quality audio duplicates
- Audio broadcast and production studios for signal distribution
- Presentation and multimedia audio distribution
- Field audio distribution

The package includes the following items:

- **VM-3A Audio Distributor**
- Power adapter
- This user manual²

2 Getting Started

We recommend that you:

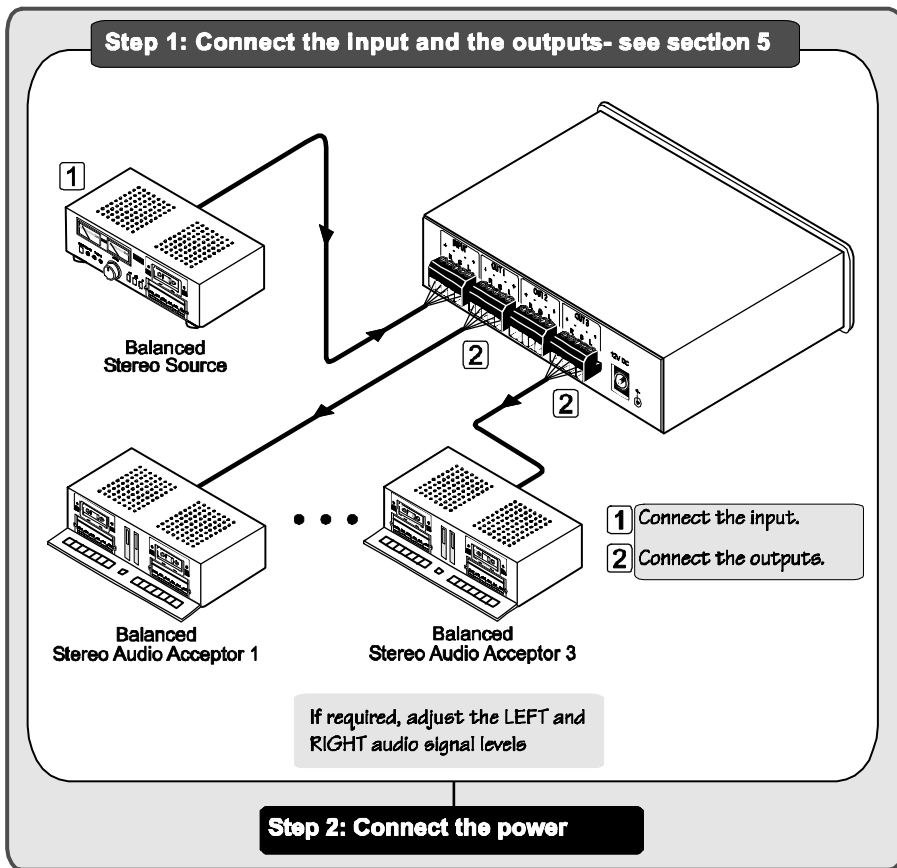
- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual

¹ GROUP 1: Distribution Amplifiers; GROUP 2: Video and Audio Switchers, Matrix Switchers and Controllers; GROUP 3: Video, Audio, VGA/XGA Processors; GROUP 4: Interfaces and Sync Processors; GROUP 5: Twisted Pair Interfaces; GROUP 6: Accessories and Rack Adapters; GROUP 7: Scan Converters and Scalers; and GROUP 8: Cables and Connectors

² Download up-to-date Kramer user manuals from the Internet at this URL: <http://www.kramerelectronics.com>

2.1 Quick Start

This quick start chart summarizes the basic setup and operation:



3 Overview

The **VM-3A** is a high quality 1:3 balanced stereo audio distribution amplifier. It accepts one balanced stereo input and distributes the signal to three identical outputs.

The **VM-3A**:

- Achieves a signal output level reaching up to 20dBm
- Has front panel left and right signal level trimmer controls
- Can function as a 1:3 unbalanced stereo audio DA

To achieve the best performance:

- Connect 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)
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality and position your Kramer **VM-3A** away from moisture, excessive sunlight and dust



Caution – No operator-serviceable parts inside unit.

Warning – Use only the Kramer Electronics input power wall adapter that is provided with this unit¹.

Warning – Disconnect power and unplug unit from wall before installing or removing device or servicing unit.

¹ For example: model number AD2512C, part number 2535-000251

4 Your Audio Distributor

Figure 1 illustrates the front and rear panels of the **VM-3A**. Tables 1 and 2 define the front and rear panels of the **VM-3A**, respectively.

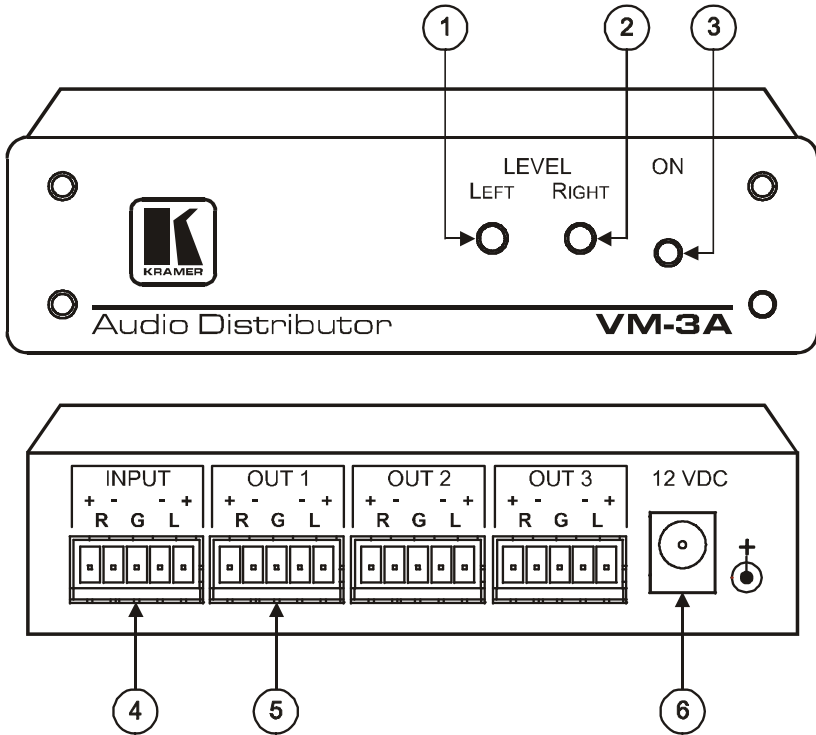


Figure 1: VM-3A Audio Distributor

Table 1: Front Panel VM-3A Audio Distributor Features

#	Feature	Function
1	LEFT LEVEL Trimmer	Adjusts ¹ the left output signal level
2	RIGHT LEVEL Trimmer	Adjusts ¹ the right output signal level
3	ON LED	Illuminates when receiving power

Table 2: Rear Panel VM-3A Audio Distributor Features

#	Feature	Function
4	INPUT Detachable Terminal Block Connector	Connects to the audio source
5	OUT Detachable Terminal Block Connector	Connects to the audio acceptor (from 1 to 3)
6	12 VDC	+12V DC connector for powering the unit

¹ Insert a screwdriver into the small hole and carefully rotate it, trimming the appropriate output level

5 Connecting Your Audio Distributor

To connect¹ the **VM-3A**, as illustrated in the example in Figure 2, do the following:

1. Connect the balanced stereo audio source to the INPUT terminal block connector.
2. Connect the OUT terminal block connectors (from 1 to 3) to up to three balanced stereo audio acceptors².
3. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity (not illustrated in Figure 2).
4. If required, adjust LEFT and RIGHT audio signal levels.

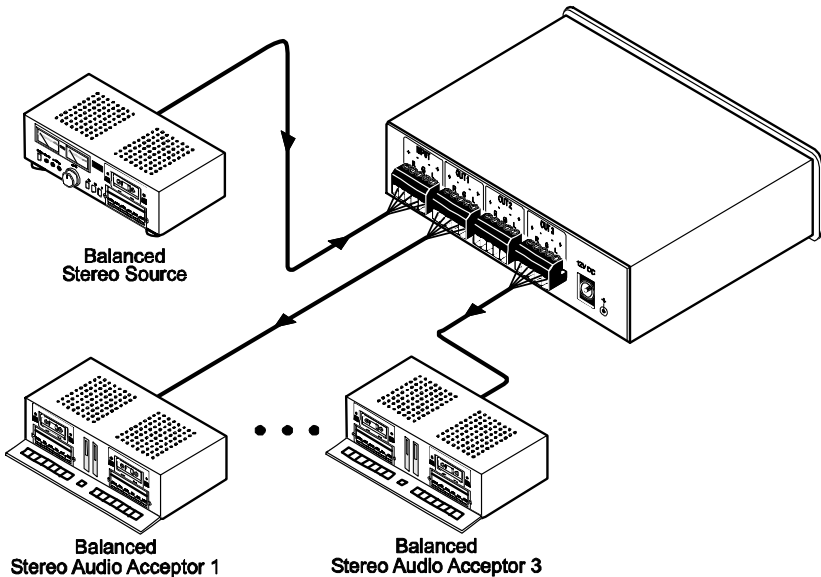


Figure 2: Connecting the VM-3A Audio Distributor

1 Switch OFF the power on each device before connecting it to your VM-3A. After connecting your VM-3A, switch on its power and then switch on the power on each device

2 You do not have to connect all the outputs

6 Technical Specifications

Table 3 includes the technical specifications.

Table 3: VM-3A Audio Distributor Technical Specifications

INPUT:	1 balanced audio stereo +4dBm/100k on detachable terminal blocks
OUTPUTS:	3 balanced audio stereo +4dBm/50Ω on detachable terminal blocks
MAX. OUTPUT LEVEL:	20dBm
BANDWIDTH (-3dB):	>100 kHz
S/N RATIO:	87dB
CONTROL:	Output level control: - 0.5dB to +8.6dB
COUPLING:	DC
AUDIO THD + NOISE:	0.024%
POWER SOURCE:	12 VDC 48mA
DIMENSIONS:	11.7cm x 6cm x 3.2cm (4.6" x 2.4" x 1.3") W, D, H
WEIGHT:	0.28 kg (0.62 lbs.) approx.
ACCESSORIES:	Power supply
OPTIONS:	Rack adapter

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 seven 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 you 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.



For the latest information on our products and a list of Kramer distributors, visit our Web site: www.kramerelectronics.com, where updates to this user manual may be found. We welcome your questions, comments and feedback.



Caution

Safety Warning:

Disconnect the unit from the power supply before opening/servicing.



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