

Kramer Electronics, Ltd.



USER MANUAL

Model:

VM-42

Video Switcher - Distributor

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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, and switchers and matrices, like the **VM-42 Video Switcher - Distributor**, we also offer excellent presentation processors, interfaces, remote controllers and computer-related products.

Congratulations on purchasing your Kramer **VM-42 Video Switcher - Distributor**. This product is ideal for using with:

- Small studio video distribution applications
- Video switching and routing in studios, stores and showrooms
- A preview and input multiplier for video switchers and mixers

The package includes the following items:

- **VM-42 Video Switcher - Distributor**
- 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 unique and versatile **VM-42 Video Switcher - Distributor** combines the functions of a composite video switcher and a distribution amplifier. The **VM-42 Video Switcher - Distributor** is a 4x1 vertical interval switcher, with each of the 4 inputs also operating as a 1:2 distribution amplifier.

The **VM-42 Video Switcher - Distributor** is linkable in any of the following combinations:

- 4 x 1 Switcher
- 1 x 1:8 DA
- 4 x 1:2 DA
- 2 x 1:4 DA
- 1 x 1:6 + 1 x 1:2 DA

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 and positioning your **VM-42 Video Switcher - Distributor** in a location free from moisture and away from excessive sunlight and dust

4 Your Video Switcher - Distributor

Figure 1 and Tables 1 and 2 define the **VM-42 Video Switcher – Distributor**:

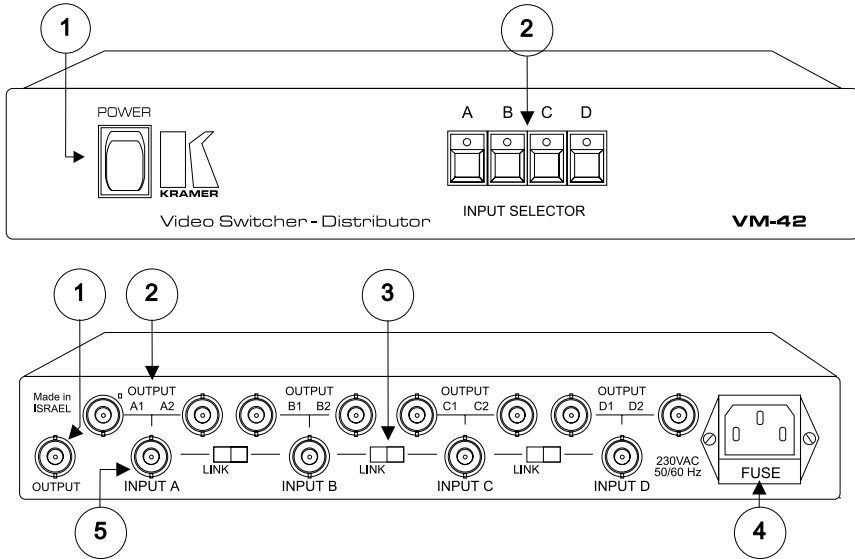


Figure 1: VM-42 Video Switcher - Distributor

Table 1: Front Panel Features and Functions of the VM-42 Video Switcher - Distributor

#	Feature	Function
1	POWER Switch	Illuminated switch supplying power to the unit
2	INPUT SELECTOR Buttons	Select the video source (from A to D)

Table 2: Rear Panel Features and Functions of the VM-42 Video Switcher - Distributor

#	Feature	Function
1	OUTPUT BNC Connector	Connects to a monitor or other acceptor for previewing sources
2	OUTPUT BNC Connectors	Connect to up to 2 acceptors for each of the 4 pairs of outputs (A1/A2, B1/B2, C1/C2, D1/D2)
3	LINK Switch	Push to the left to select LINK when joining several inputs
4	Power Connector with Fuse	230 VAC 50/60 Hz (115 VAC, U.S.A.) power inlet
5	INPUT BNC Connector	Connects to the composite video source (A, B, C, D)

5 Using a Video Switcher - Distributor

Figure 2 illustrates the following different combinations with which you can use your VM-42 Video Switcher – Distributor:

- 4 x 1 Switcher
- 1 x 1:8 DA
- 4 x 1:2 DA
- 2 x 1:4 DA
- 1 x 1:6 + 1 x 1:2 DA

5.1 Connecting the Video Switcher - Distributor

To connect a **VM-42 Video Switcher – Distributor** unit, do the following:

1. Connect the composite video sources to the appropriate INPUT connectors - A, B, C and/or D.
2. Connect the composite video acceptors to the appropriate OUTPUT connectors - A1, A2, B1, B2, C1, C2, D1 and/or D2.
3. Set the LINK switch as required. Refer to section 5.2.

5.2 Setting the LINK Switch

To join more than one INPUT, do the following:

- Push the LINK switch that is located between 2 inputs, to the left
The INPUT to the right of the LINK switch combines with the INPUT to the left

5.3 Previewing Connected Sources

To preview a source, do the following:

- Connect the OUTPUT connector to a monitor
- Press the appropriate *INPUT SELECTOR* button (from A to D)
The monitor displays the selected video source

6 Technical Specifications

Table 3: Technical Specifications of the VM-42 Video Switcher - Distributor

Inputs:	4 composite video, 1Vpp / 75Ω, on BNC type connectors
Outputs:	4x2 composite, linkable to become 2x4, 1x6+1x2, 1x8 1Vpp / 75Ω on BNC type connectors 1 switch-selected composite video 1Vpp / 75Ω on a BNC type connector
Video Bandwidth:	200 MHz -3dB
Crosstalk:	-40 dB @ 10MHz
Coupling:	DC / AC
Diff. Gain:	0.12%.
Diff. Phase:	0.11 Deg
S/N Ratio:	-73dB
K-Factor:	<0.05%
Max. Video Output:	2 Vpp
Power Source:	230 VAC, 50/60 Hz (115VAC, U.S.A.) 4.6 VA
Dimensions:	24.5 cm x 18 cm x 4.5 cm (9.6" x 7" x 1.7"), W, D, H
Weight:	1.5 kg. (3.3 lbs.) approx.
Accessories:	Power cord
Options:	19" rack adapter RK-MEDN kit (holds one unit in a vertical space)

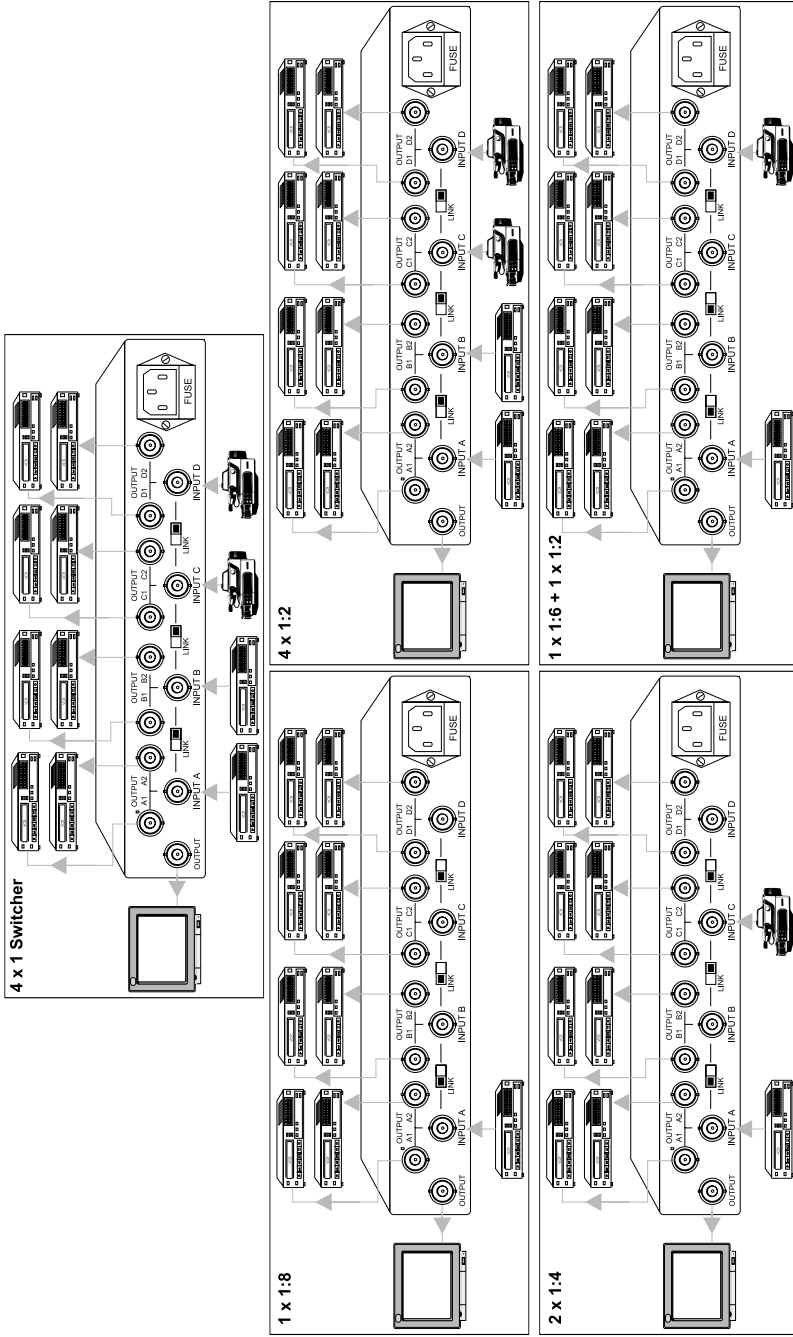


Figure 2.: Different VM-42 Video Switcher - Distributor Combinations

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 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.



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

We welcome your questions, comments and feedback.

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