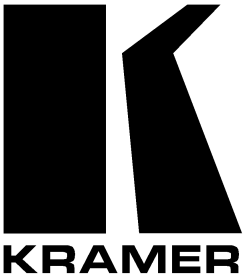
Kramer Electronics, Ltd.



USER MANUAL

Model:

VP-242

XGA Switcher / 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 switchers and matrices, and distribution amplifiers, we also offer excellent remote controllers, presentation processors, interfaces and computer-related products. Congratulations on purchasing your Kramer Tools **VP-242** *XGA Switcher / Distribution Amplifier*. This product is ideal for:

- Any professional display system requiring a 2x1 switcher and a high quality 1:4 DA
- Multimedia and presentation sources and acceptors selection and signal distribution
- Schools, businesses and points of sale

The package includes the following items:

- **VP-242** *XGA Switcher / Distribution Amplifier*
- Power adapter (12V DC Input)[1]
- This user manual[2] and the 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

Your high performance **VP-242** *XGA Switcher / Distribution Amplifier* is a high-resolution 2x1 XGA switcher and 1:4 distribution amplifier for VGA/SVGA/XGA/UXGA signals.

1 As an option, you can purchase the Kramer VA-50P 6 Port Universal 12-Volt Power Supply, enabling you to supply power to up to 6 Kramer devices that require 12VDC

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

The **VP-242** *XGA Switcher / Distribution Amplifier* includes:

- ID BIT control for both inputs
- LEVEL and EQ. rotary controls for the outputs
- Video bandwidth that exceeds 400 MHz, ensuring transparent operation in all graphics and presentation applications

In addition, the **VP-242** *XGA Switcher / Distribution Amplifier* is housed in a new enlarged Kramer TOOLS enclosure, its width that of a desktop PC cover, thus occupying very little space.

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 Kramer **VP-242** in a location free from moisture and away from excessive sunlight and dust

4 Your XGA Switcher / Distribution Amplifier

Figure 1 and Table 1 define the **VP-242** *XGA Switcher / Distribution Amplifier*:

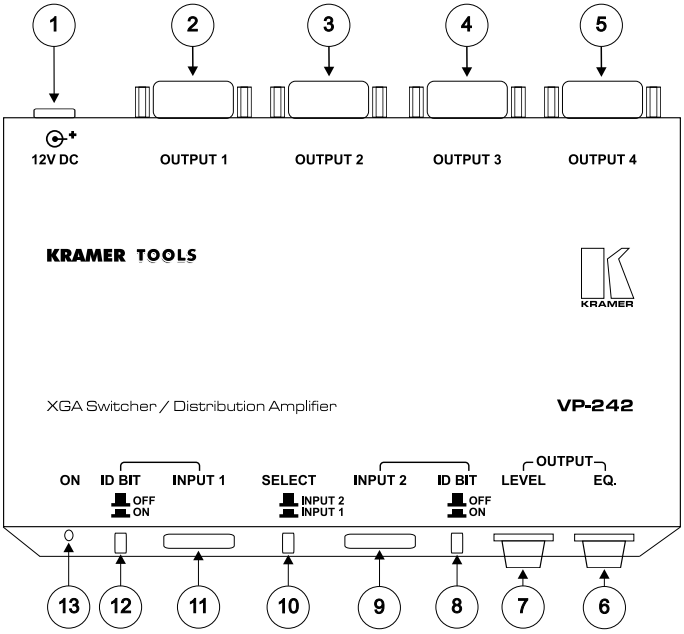

Figure 1: VP-242 XGA Switcher / Distribution Amplifier

Table 1: Features and Functions of the VP-242 XGA Switcher / Distribution Amplifier

#	Feature	Function
1	*12V DC*	+12V DC connector for powering the unit
2	*OUTPUT 1* HD15F Connector	Connects to the video acceptor 1
3	*OUTPUT 2* HD15F Connector	Connects to the video acceptor 2
4	*OUTPUT 3* HD15F Connector	Connects to the video acceptor 3
5	*OUTPUT 4* HD15F Connector	Connects to the video acceptor 4
6	*OUTPUT EQ.* Control Knob	Adjusts the video (equalization) compensation
7	*OUTPUT LEVEL* Control Knob	Adjusts the video signal level
8	*INPUT 2 ID BIT* Button	Pushing in selects the ID BIT of input 2, releasing deactivates the ID BIT[1]
9	*INPUT 2* HD15F Connector	Connects to the video source 2
10	*SELECT* Button	Releasing selects INPUT 2; pushing in selects INPUT 1
11	*INPUT 1* HD15F Connector	Connects to the video source 1
12	*INPUT 1 ID BIT* Button	Pushing in selects the ID BIT of input 1, releasing deactivates the ID BIT[1]
13	*ON* LED	Illuminates when receiving power

5 Using the XGA Switcher / Distribution Amplifier

To connect your **VP-242** *XGA Switcher / Distribution Amplifier*, as the example in Figure 2 illustrates, do the following:

1. Connect up to 4 HD15F outputs to the respective acceptors, 1-4.
2. Connect up to 2 sources to the respective inputs:
   - Connect source 1 (for example, a PC) to the INPUT 1 HD15F connector and release the INPUT 1 ID BIT button.
   - Connect source 2 (for example, a notebook) to the INPUT 2 HD15F connector and push in the INPUT 2 ID BIT button.
3. Set the SELECT button, as follows:
   - Release the SELECT button to route the INPUT 2 signal to up to 4 acceptors
   - Push in the SELECT button to route the INPUT 1 signal to up to 4 acceptors
4. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.
5. Adjust the video EQ. (equalization) compensation and the video signal level, as required, to overcome losses in the connecting cables and achieve the highest quality picture.

1 Sometimes notebook computers refuse to output a VGA signal to an external VGA monitor. By setting the ID Bit to ON (and using pin # 4 on the VGA connector that is normally unused), the notebook will output to an external VGA monitor

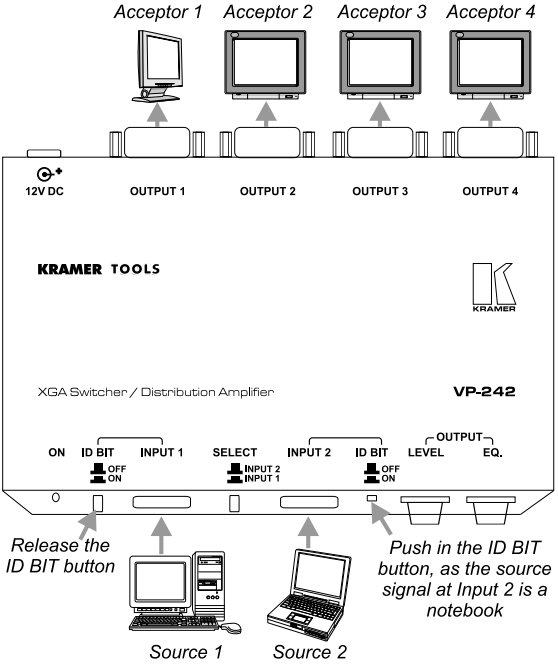

Figure 2: VP-242 XGA Switcher / Distribution Amplifier Connections

6 Technical Specifications

Table 2 includes the technical specifications:

Table 2: Technical Specifications of the VP-242 XGA Switcher / Distribution Amplifier

INPUTS:	2 VGA/UXGA on HD15F connectors
OUTPUTS:	4 VGA/UXGA on HD15F connectors
MAX. OUTPUT LEVEL:	2.5 Vpp / 75 ohms
BANDWIDTH (-3dB):	410 MHz
DIFF. GAIN:	0.05%
DIFF. PHASE:	0.03 Deg.
K-FACTOR:	<0.05%
S/N RATIO:	73 dB
CROSSTALK:	- 61 dB
CONTROLS:	Level: -1 to +6 dB; EQ.: 0 to +8dB @ 5 MHz.
COUPLING:	DC
POWER SOURCE:	12 VDC, 100 mA
DIMENSIONS:	19 cm x 13.5 cm x 2.5 cm (7.5” x 5.3” x 0.98”) W, D, H.
WEIGHT:	0.6 kg. (1.32 lbs.) Approx.
ACCESSORIES:	12 VDC power supply

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.

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

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P/N: 2900-002058 REV 2