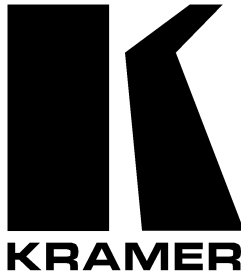


**Kramer Electronics, Ltd.**



# **USER MANUAL**

**Model:**

**VP-11**

*VGA/XGA Presentation Processor*

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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 presentation processors, we also offer excellent distribution amplifiers, remote controllers, switchers and matrices, interfaces and computer-related products.

Congratulations on purchasing your Kramer **VP-11** *VGA/XGA Presentation Processor*. This product is ideal for:

- Any professional multimedia and presentation application which demands full image control
- Color correction and image enhancement of projector images in public, educational and stage applications
- Special effects generation in video/data projection applications

The package includes the following items:

- **VP-11** VGA/XGA Presentation Processor
- 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

Your unique **VP-11** presentation processor solves specific high-resolution graphic signal problems, from VGA to UXGA. In addition, the **VP-11**:

- Converts VGA/SVGA/XGA/UXGA input signals to RGBHV signals on

## 6 BNC OUTPUT connectors<sup>1</sup>

- Includes a LOOP VGA/UXGA input (with a termination switch)
- Includes 2 VGA outputs
- Includes green or green + sync output

The **VP-11** lets you control:

- Horizontal and vertical sync shift<sup>2</sup>
- Definition / cable EQ.<sup>3</sup>
- Contrast<sup>4</sup>
- Black level (DC)<sup>5</sup>
- Red, green and blue signal levels<sup>6</sup>
- ID BIT<sup>7</sup>

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 **VP-81** in a location free from moisture and away from excessive sunlight and dust

## 4 Your VGA/XGA Presentation Processor

Figure 1 illustrates the front and rear panels of the **VP-11**. Tables 1 and 2 define the front and rear panels of the **VP-11**, respectively.

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1 RED, GREEN, BLUE, Hs, Vs and Cs (Hs and Vs)

2 For the RGBHV on BNCs output

3 For enhancing images and eliminating fine detail loss

4 Ideal for video and data projectors

5 For RGB DC offset control

6 For chroma correction and white balance control

7 For forcing certain notebook computers to output to the external VGA monitor

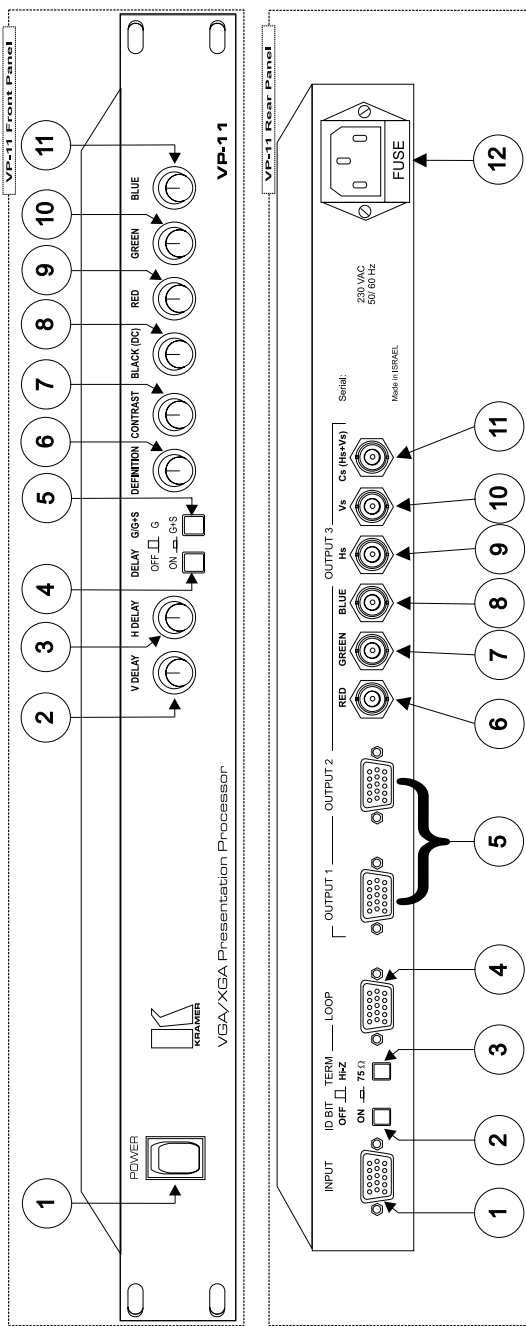


Figure 1: VP-11 VGA/XGA Presentation Processor

*Table 1: Front Panel VP-11 VGA/XGA Presentation Processor Features*

#	Feature	Function
1	Power Switch	Illuminated switch supplying power to the unit
2	V DELAY Knob	Adjusts the vertical display to compensate for delay problems due to long and/or unequal cables
3	H DELAY Knob	Adjusts the horizontal display to compensate for delay problems due to long and/or unequal cables <sup>1</sup>
4	DELAY Button	Pushing in sets DELAY to ON, releasing sets DELAY to OFF
5	G / G+S Button	Pushing in selects G+S (Green + Sync), releasing selects G
6	DEFINITION Knob	Adjusts the DEFINITION and cable equalization
7	CONTRAST Knob	Adjusts the CONTRAST
8	BLACK (DC) Knob	Adjusts the BLACK level / DC offset of the signal
9	RED Knob	Adjusts the RED
10	GREEN Knob	Adjusts the GREEN
11	BLUE Knob	Adjusts the BLUE

*Table 2: Rear Panel VP-11 VGA/XGA Presentation Processor Features*

#	Feature		Function
1	INPUT Connector		Connects to the VGA/XGA HD15 input
2	ID BIT Button		Pushing in sets ID BIT to <i>ON</i> (when outputting a VGA signal from a notebook to an external VGA monitor <sup>2</sup> ), releasing sets ID BIT to <i>OFF</i>
3	TERM Button		Pushing in selects 75 $\Omega$ , releasing selects <i>Hi-Z</i> <sup>3</sup>
4	LOOP Connector		For looping to increase output availability
5	OUTPUT 1 / OUTPUT 2 Connectors		Connect to the VGA/XGA HD15 outputs
6	OUTPUT 3	RED BNC Connector	Amplified and buffered red signal output
7		GREEN BNC Connector	Amplified and buffered green signal output. When the <i>G / G+S</i> button is pushed in, the GREEN BNC connector includes Sync <sup>4</sup>
8		BLUE BNC Connector	Amplified and buffered blue signal output
9		Hs BNC Connector	Amplified and buffered horizontal sync signal output
10		Vs BNC Connector	Amplified and buffered vertical sync signal output
11		Cs (Hs + Vs) BNC Connector	Amplified and buffered composite (horizontal and vertical) sync signal output
12	Power Connector with Fuse		230 VAC, 50/60 Hz, (115 VAC, U.S.A.) 4.2 VA max power inlet

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1 Data delay problems, especially with long RGBHV cables, occur when electronic signals travel via coaxial cable and the picture shifts mainly in the horizontal axis (due to unequal delays between the sync signals and data). Center the picture by adjusting the potentiometers for Vertical and Horizontal sync

2 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

3 For looping select Hi-Z

4 Some machine formats include the vertical and horizontal sync on the GREEN signal

## 4.1 Connecting Your VGA/XGA Presentation Processor

Connect<sup>1</sup> the **VP-11**, as Figure 2 illustrates:

1. Connect the HD15M PC Graphics (VGA) Source<sup>2</sup> connector to the HD15F VGA/XGA INPUT.
2. Connect the HD15F VGA/XGA LOOP connector to the HD15M (Looped) Local Monitor connector and release the TERM switch to Hi-Z<sup>3</sup>.
3. Connect the HD15F VGA/XGA OUTPUT 1 connector to the HD15M VGA Monitor connector.
4. Connect the HD15F VGA/XGA OUTPUT 2 connector to the HD15M VGA Monitor connector.
5. Connect the 6 BNC Output connectors to the data projector or (remote monitor).

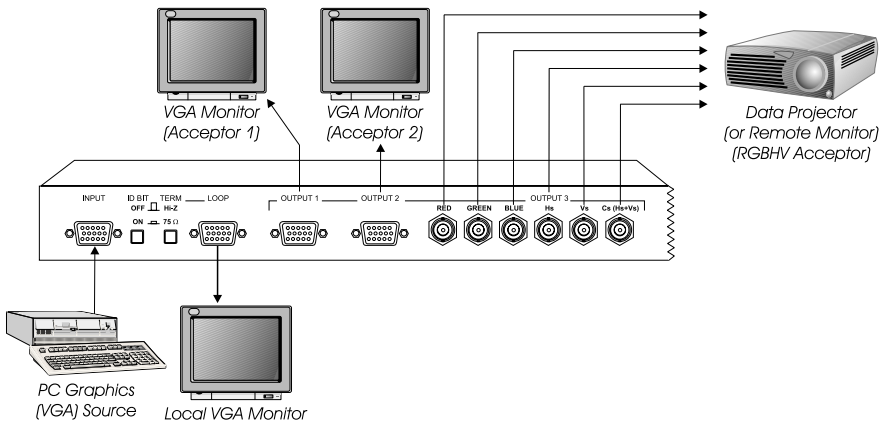


Figure 2: VP-11 VGA/XGA Presentation Processor Connections

## 5 Operating Your VGA/XGA Presentation Processor

After connecting your **VP-11**, as section 4.1 describes, the VGA INPUT signal automatically outputs to the 2 VGA OUTPUTS and converts to the RGBHV OUTPUT.

<sup>1</sup> Switch OFF the power on each device before connecting it to your VP-11. After connecting your VP-11, switch on its power and then switch on the power on each device

<sup>2</sup> Or notebook, when the ID Bit is set to ON

<sup>3</sup> If no looping is required, push in the TERM button to the 75 ohm position

## 6 Technical Specifications

Table 3 includes the technical specifications:

*Table 3: Technical Specifications of the VP-11 VGA/XGA Presentation Processor*

Inputs:	Analog red, green, blue signals - 0.7 Vpp / 75 $\Omega$ , H & V syncs, TTL level looping on HD15F connectors with a termination switch and ID Bit control switch
Outputs:	Two analog red, green, blue signals - 0.7 Vpp / 75 $\Omega$ , H & V syncs, TTL level on HD15F connectors One analog red, green, blue signals - 0.7 Vpp / 75 $\Omega$ , H, V and Cs syncs, TTL or analog level on BNC connectors
Video Bandwidth:	300 MHz -3dB
Video S/N Ratio:	72 dB
Diff. Gain:	0.13%
Diff. Phase:	0.04 Deg.
K-Factor:	<0.05%
Control:	R, G, B: -0.8 to +5.1 dB; black (DC offset): -1.3 to + 1 Volt; contrast: 0 to +7.7dB; definition: 0 to +5.7 dB @ 5.8 MHz. Delay enable switch, G/G+sync switch, H & V delay controls
Dimensions:	19-inch (W), 7-inch (D) 1U (H) rack-mountable
Power Source:	230 VAC, 50/60 Hz, (115 VAC, U.S.A.) 4.2 VA max
Weight:	2.6 kg. (5.7 lbs.) approx.
Accessories:	Power cord



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## 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](http://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](http://www.kramerelectronics.com)**

**We welcome your questions, comments and feedback.**

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