# Kramer Electronics, Ltd.



# **USER MANUAL**

## Model:

VA-100P-5

Power Supply

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### 1 Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront the video, audio, presentation, and broadcasting professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better! Our 1,000-plus different models now appear in 11 groups<sup>1</sup> that are clearly defined by function.

Congratulations on purchasing your Kramer VA-100P-5 *Power Supply*, which is ideal for any audio video system using multiple 5V operated products, as well as battery replacement for field/battery operated equipment.

The package includes the following items:

- VA-100P-5 Power Supply unit
- 10 DC-to-DC cables, and a power cord
- This user manual<sup>2</sup>

### 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
- Use Kramer high performance high resolution cables<sup>3</sup>

### 2.1 Quick Start

This quick start chart summarizes the basic setup and operation steps.

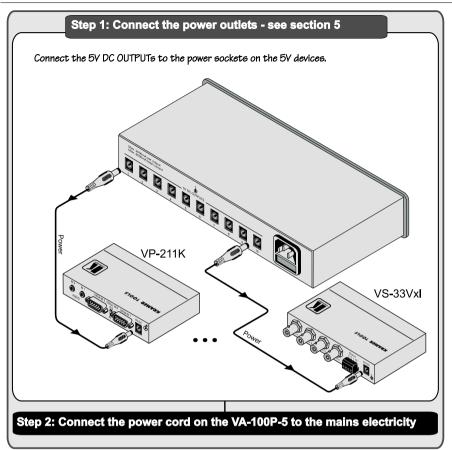
<sup>3</sup> The complete list of Kramer cables is on our Web site at http://www.kramerelectronics.com



<sup>1</sup> GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Matrix Switchers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Twisted-Pair Solutions; GROUP 6: Specialty AV Products; GROUP 7: Scan Converters and Scalers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters; GROUP 11: Sierra Products

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

Overview



#### 3 Overview

The Kramer **VA-100P-5** *Power Supply* is an efficient 10-outlet switching power supply that can output 5V DC to up to 8A, or a maximum of 2A per output (up to 4 outputs at any one time). It can supply 800mA to each of the 10 outputs simultaneously.

In addition, the VA-100P-5:

- Is designed to operate Kramer products that use an external 5V DC power transformer
- Replaces up to 10 individual 5V DC power supplies for Kramer TOOLS™, Kramer PicoTOOLS™, and Kramer 5V DC Desktop models

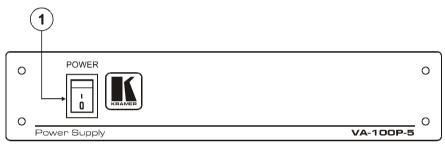
- Can be rack-mounted in a 19" rack<sup>1</sup> and then conveniently used to power up to ten 5V operated products mounted on the same rack<sup>2</sup>
- Is fed from a 100-240 VAC universal switching power supply and is housed in a half 19" enclosure

Take care to ensure that the polarity of the unit which is to be connected matches that of the **VA-100P-5**, that is, that positive = center pin.

To achieve the best performance we recommend positioning your **VA-100P-5** away from moisture, excessive sunlight and dust.

### 4 Your Power Supply

Figure 1 and Table 1 define the VA-100P-5 *Power Supply*:



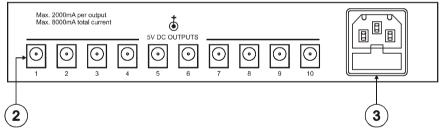


Figure 1: VA-100P-5 Power Supply

Table 1: Features and Functions of the VA-100P-5 Power Supply

#	Feature	Function
1	POWER Switch	Illuminated switch for turning the unit ON or OFF
2	5V DC Power OUTPUTS	Connect to the power socket on a 5V DC unit (from 1 to 10). Can output 5V DC to up to 8A or a maximum of 2000mA per output (up to 4 outputs at the same time). It can supply 800mA to each of the 10 outputs simultaneously
3	Power Connector with FUSE	AC connector enabling power supply to the unit

<sup>1</sup> Using the Kramer RK-1 rack kit

<sup>2</sup> The complete list of Kramer rack mounts is on our Web site at http://www.kramerelectronics.com



### 5 Using the Power Supply

To use your **VA-100P-5**, as the example in Figure 2 illustrates, do the following:

- Connect up to 10 power outlets, using DC-to-DC cables<sup>1</sup>. The example in Figure 2 illustrates how to connect the 5V DC OUTPUT 1 power outlet to the 5V DC power socket on the Kramer VP-211K Automatic UXGA / Audio Switcher, and how to connect the 5V DC OUTPUT 10 power outlet to the 5V DC power socket on a Kramer VS-33Vxl 3x1 Video Switcher.
- 2. Connect the power cord to the mains electricity.

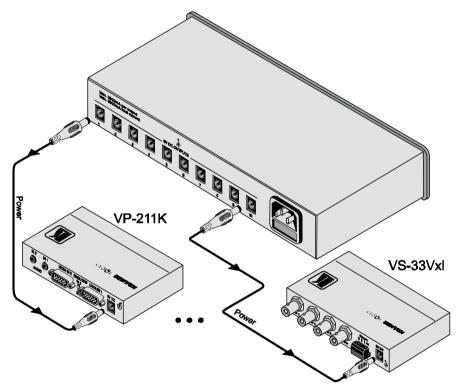


Figure 2: Connecting the VA-100P-5 Power Supply

<sup>1</sup> Supplied with the VA-100P-5

### 6 Technical Specifications

INPUT POWER SOURCE:	230V AC, 50/60Hz, (115V AC, U.S.A.) 60VA
OUTPUTS:	10 x 5V DC outputs, to up to 8A (up to 800mA to each of the 10 outputs simultaneously) or a maximum of 2A per output (up to 4 outputs at the same time)
DIMENSIONS:	21.46cm x 16.25cm x 4 36cm (8.44" x 6.4" x 1.7") W, D, H (half 19", 1U)
WEIGHT:	1.2kg (2.6lbs) approx.
ACCESSORIES:	Power cord, 10 DC-to-DC cables, 95cm (37.4") per cable
OPTIONS:	RK-1 19" rack kit

Table 2: Technical Specifications<sup>1</sup> of the VA-100P-5 Power Supply

<sup>1</sup> Specifications are subject to change without notice



#### 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, or on which the WARRANTY VOID IF TAMPERED sticker has been torn, reattached, removed or otherwise interfered with.
- 3. Damage, deterioration or malfunction resulting from:
  - Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
    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. \* FCC and CE approved using STP cable (for twisted pair products)



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.



**Safety Warning**: Disconnect the unit from the power supply before opening/servicing.



CE

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