



KRAMER ELECTRONICS LTD.

USER MANUAL

MODEL:

VA-100P-5
Power Supply

P/N: 2900-000405 Rev 2

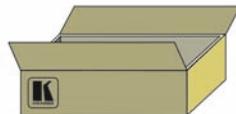
VA-100P-5 Quick Start Guide

This page guides you through a basic installation and first-time use of your **VA-100P-5**. For more detailed information, see the **VA-100P-5** User Manual. You can download the latest manual at <http://www.kramerelectronics.com>.

Step 1: Check what's in the box

- VA-100P-5** Power Supply
- 1 AC Power cord
- 10 DC Power cords

- 4 Rubber feet
- 1 Quick Start sheet
- 1 User Manual

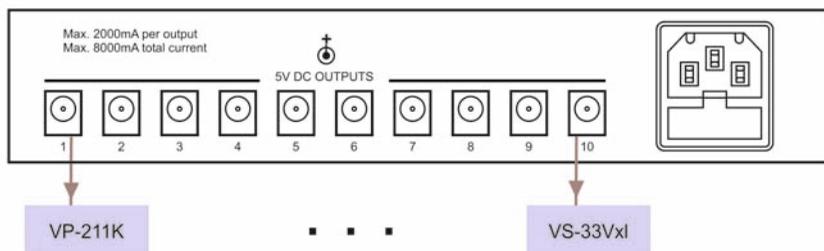


Save the original box and packaging in case your **VA-100P-5** needs to be returned to the factory for service.

Step 2: Install the VA-100P-5

Mount the machine in a rack (using the RK-1 rack adapter) or place on a table.

Step 3: Connect the outputs



Always use Kramer high-performance cables for connecting AV equipment to the **VA-100P-5**.

Step 4: Connect the power

Connect the power cord to the **VA-100P-5** and plug it into the mains electricity.



Contents

1	Introduction	1
2	Getting Started	2
2.1	Achieving the Best Performance	2
3	Overview	3
4	Your VA-100P-5 Power Supply	4
5	Using the Power Supply	5
6	Technical Specifications	6

Figures

Figure 1:	VA-100P-5 Power Supply	4
Figure 2:	Connecting the VA-100P-5 Power Supply	5

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 that are clearly defined by function: GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Matrix Switchers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Range Extenders and Repeaters; 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 and GROUP 11: Sierra Products.

Congratulations on purchasing your Kramer **VA-100P-5** *Power Supply*, which is ideal for the following typical applications:

- Any AV system using multiple 5V DC operated products
- As battery replacements for field/battery operated equipment

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
- Use only the power cord that is supplied with this machine



Go to <http://www.kramerelectronics.com> to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

2.1 Achieving the Best Performance

To achieve the best performance:

- Do not secure the cables in tight bundles or roll the slack into tight coils
- Position your Kramer **VA-100P-5** away from moisture, excessive sunlight and dust



Caution: No operator serviceable parts inside the unit

Warning: Disconnect the power and unplug the unit from the wall before installing

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 (RK-1) and then conveniently used to power up to ten 5V operated products mounted on the same rack
The complete list of Kramer rack mounts is on our Web site at <http://www.kramerelectronics.com>.
- Is fed from a 100-240V AC universal switching power supply and is housed in a half 19" enclosure

Ensure that the polarity of the unit to be connected matches that of the **VA-100P-5**: positive voltage in the center.



Make sure that the inrush current of the powered machines does not exceed the current capacity of the **VP-100P-5**. If the inrush current of the machines is not known, we recommend adding at least 25% overhead to the machines' specified current ratings.

4 Your VA-100P-5 Power Supply

Figure 1 defines the **VA-100P-5 Power Supply**.

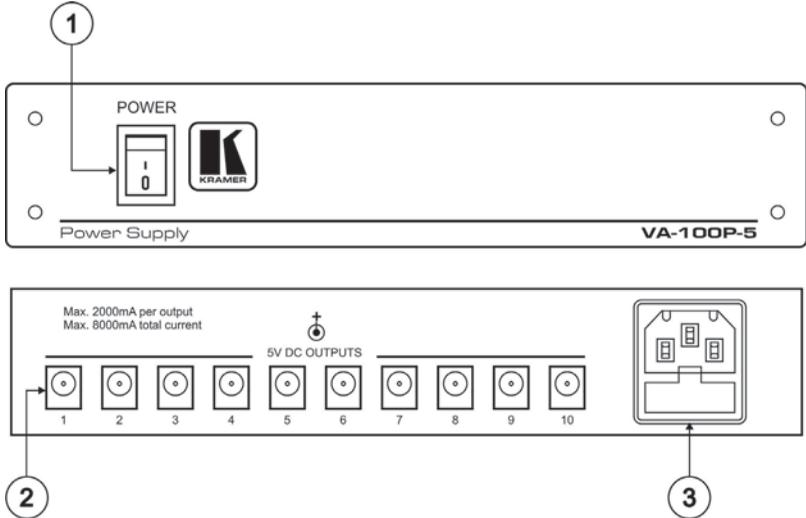


Figure 1: VA-100P-5 Power Supply

#	Feature	Function
1	<i>POWER</i> Switch	Illuminated switch for turning the unit ON or OFF
2	<i>5V DC Power OUTPUTS</i>	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	<i>Power Connector with FUSE</i>	AC connector enabling power supply to the unit

5 Using the Power Supply

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

1. Connect up to 10 power outlets, using DC-to-DC cables (supplied with the **VA-100P-5**). 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.

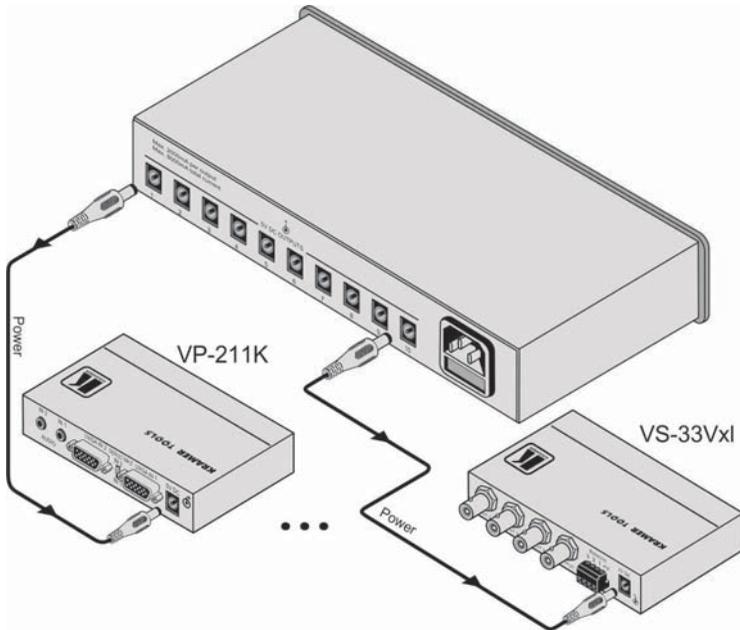


Figure 2: Connecting the VA-100P-5 Power Supply

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)
OPERATING TEMPERATURE:	0° to +55°C (32° to 131°F)
STORAGE TEMPERATURE:	-45° to +72°C (-49° to 162°F)
HUMIDITY:	10% to 90%, RHL non-condensing
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
Specifications are subject to change without notice at http://www.kramerelectronics.com	

LIMITED WARRANTY

The warranty obligations of Kramer Electronics for this product are limited to the terms set forth below:

What is Covered

This limited warranty covers defects in materials and workmanship in this product.

What is Not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Kramer Electronics to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover cartons, equipment enclosures, cables or accessories used in conjunction with this product.

Without limiting any other exclusion herein, Kramer Electronics does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

How Long Does this Coverage Last

Seven years as of this printing; please check our Web site for the most current and accurate warranty information.

Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

What Kramer Electronics will do

Kramer Electronics will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1. Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition. Kramer Electronics will also pay the shipping costs necessary to return this product once the repair is complete.
2. Replace this product with a direct replacement or with a similar product deemed by Kramer Electronics to perform substantially the same function as the original product.
3. Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

What Kramer Electronics will not do Under This Limited Warranty

If this product is returned to Kramer Electronics or the authorized dealer from which it was purchased or any other party authorized to repair Kramer Electronics products, this product must be insured during shipment, with the insurance and shipping charges prepaid by you. If this product is returned uninsured, you assume all risks of loss or damage during shipment. Kramer Electronics will not be responsible for any costs related to the removal or re-installation of this product from or into any installation. Kramer Electronics will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

How to Obtain a Remedy under this Limited Warranty

To obtain a remedy under this limited warranty, you must contact either the authorized Kramer Electronics reseller from whom you purchased this product or the Kramer Electronics office nearest you. For a list of authorized Kramer Electronics resellers and/or Kramer Electronics authorized service providers, please visit our web site at www.kramerelectronics.com or contact the Kramer Electronics office nearest you.

In order to pursue any remedy under this limited warranty, you must possess an original, dated receipt as proof of purchase from an authorized Kramer Electronics reseller. If this product is returned under this limited warranty, a return authorization number, obtained from Kramer Electronics, will be required. You may also be directed to an authorized reseller or a person authorized by Kramer Electronics to repair the product.

If it is decided that this product should be returned directly to Kramer Electronics, this product should be properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization number will be refused.

Limitation on Liability

THE MAXIMUM LIABILITY OF KRAMER ELECTRONICS UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

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Other Conditions

This limited warranty gives you specific legal rights, and you may have other rights which vary from country to country or state to state.

This limited warranty is void if (i) the label bearing the serial number of this product has been removed or defaced, (ii) the product is not distributed by Kramer Electronics or (iii) this product is not purchased from an authorized Kramer Electronics reseller. If you are unsure whether a reseller is an authorized Kramer Electronics reseller, please visit our Web site at www.kramerelectronics.com or contact a Kramer Electronics office from the list at the end of this document.

Your rights under this limited warranty are not diminished if you do not complete and return the product registration form or complete and submit the online product registration form. Kramer Electronics thanks you for purchasing a Kramer Electronics product. We hope it will give you years of satisfaction.



For the latest information on our products and a list of Kramer distributors, visit our Web site where updates to this user manual may be found.

We welcome your questions, comments, and feedback.

Web site: www.kramerelectronics.com

E-mail: info@kramerel.com



SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing



P/N: 2900-000405



Rev: 2