



KRAMER ELECTRONICS LTD.

# USER MANUAL

MODEL:

**VA-1VGAN**  
EDID Capture

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P/N: 2900-000513 Rev 2



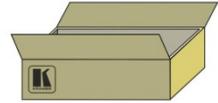
## VA-1VGAN Quick Start Guide

This guide helps you install and use your product for the first time. For more detailed information, go to [http://www.kramerelectronics.com/support/product\\_downloads.asp](http://www.kramerelectronics.com/support/product_downloads.asp) to download the latest manual or scan the QR code on the left.

### Step 1: Check what's in the box

- ✓ VA-1VGAN EDID Capture
- ✓ 1 Power supply (5V DC)

- ✓ 4 Rubber feet
- ✓ 1 Quick Start sheet



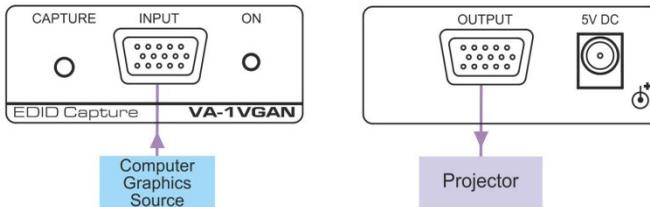
Save the original box and packaging materials in case you need to return your **VA-1VGAN** for service.

### Step 2: Install the VA-1VGAN

Attach the rubber feet and place on a table or mount the **VA-1VGAN** in a rack (using an optional RK-4PT rack mount).

### Step 3: Connect the inputs and outputs

Always switch off the power on each device before connecting it to your **VA-1VGAN**.



Always use Kramer high-performance cables for connecting AV equipment to the **VA-1VGAN**.

### Step 4: Connect the power

Connect the 5V DC power adapter to the **VA-1VGAN** and plug the adapter into the mains electricity.



### Step 5: Operate the VA-1VGAN

Power on the output device.  
Connect the VA-1VGAN and press the capture button.  
When the ON LED stops flashing, the EDID is stored.

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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 video, audio, presentation, and broadcasting professionals 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 Routers; 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-1VGAN EDID Capture**, which is ideal for the following typical applications:

- Distributing presentation graphics
- Using a display at a distance from the computer
- Using in graphics production studios

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## 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. Make sure that the VGA cable passes the signals on pins 12 and 15



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:

- Use only good quality connection cables to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Do not secure the cables in tight bundles or roll the slack into tight coils
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality
- Position your Kramer **VA-1VGAN** away from moisture, excessive sunlight and dust



**Caution:** No operator serviceable parts inside the unit

**Warning:** Use only the Kramer Electronics input power wall adapter that is provided with the unit

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

## 2.2 Recycling Kramer Products

The Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC aims to reduce the amount of WEEE sent for disposal to landfill or incineration by requiring it to be collected and recycled. To comply with the WEEE Directive, Kramer Electronics has made arrangements with the European Advanced Recycling Network (EARN) and will cover any costs of treatment, recycling and recovery of waste Kramer Electronics branded equipment on arrival at the EARN facility. For details of Kramer's recycling arrangements in your particular country go to our recycling pages at <http://www.kramerelectronics.com/support/recycling/>.

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## 3 Overview

The **VA-1VGAN** is a VGA EDID Capture, with VGA input and output on 15-pin HD computer graphics video connectors. When the **VA-1VGAN** is connected to a display device and the CAPTURE EDID button is pressed, the **VA-1VGAN** reads and stores the EDID (Extended Display Identification Data) from the display device. (Some computers need to have the EDID information available when they boot up, otherwise the VGA output may be disabled). The display can be disconnected and later reconnected without rebooting the operating system.

Specifically, the **VA-1VGAN** features:

- 15-pin HD connectors for input and output signals
- An EDID capture pushbutton
- An ON LED
- 5V DC power

## 4 Defining the VA-1VGAN EDID Capture

This section defines the **VA-1VGAN**.

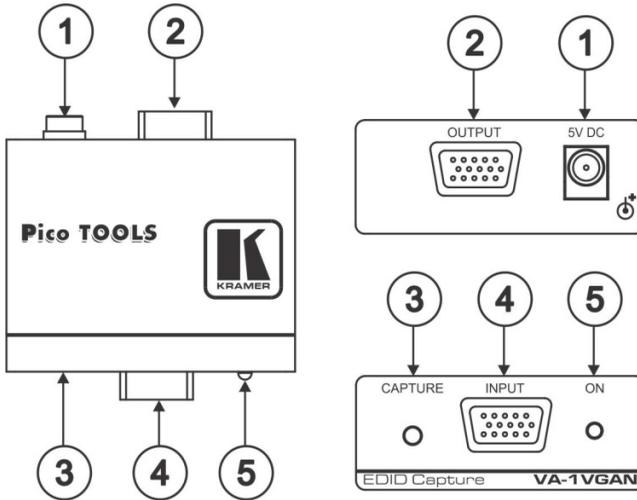


Figure 1: VA-1VGAN EDID Capture

#	Feature	Function
1	5V DC	+5V DC connector for powering the unit
2	OUTPUT 15-pin HD connector	Connects to the VGA acceptor
3	CAPTURE Button	Press to acquire the EDID
4	INPUT 15-pin HD connector	Connects to the VGA source
5	ON LED	Illuminates when the power is connected

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## 5 Connecting the VA-1VGAN



Always switch off the power to each device before connecting it to your **VA-1VGAN**. After connecting your **VA-1VGAN**, connect its power and then switch on the power to each device.

In the example illustrated in [Figure 2](#), a projector is disconnected from a PC in order to reinstall it at a distance, after the PC has read the projector's acquired EDID from the **VA-1VGAN**. The projector is then reconnected as illustrated in [Figure 3](#), without the need for rebooting the system.

The configuration illustrated in [Figure 2](#) requires two separate stages:

- The **VA-1VGAN** acquires the projector's EDID information (see [Section 5.1](#))
- The PC is connected to the **VA-1VGAN**, letting it read the projector's EDID information even if it is not connected to the PC (see [Section 5.2](#)).  
The projector can now be reconnected at a distance to the PC via the **VA-1VGAN**.

### 5.1 Acquiring the EDID

To use the **VA-1VGAN** to acquire the EDID information, as illustrated in the example in [Figure 2](#), do the following:

1. Connect the OUTPUT VGA connector to the input VGA connector of the display (for example, a projector), using a short cable.  
The EDID is carried over pins 12 and 15 of the VGA connector. It is essential that the cable used for capturing the EDID passes all 15 pins.
2. Connect the 5V DC power adapter to the power socket and connect the adapter to the mains electricity (not shown in this illustration).  
The ON LED lights.  
Also make sure that the projector is connected to the power supply.
3. Briefly press the CAPTURE button.
  - The ON LED flashes slowly while the EDID information is read from the connected projector and stored in the **VA-1VGAN** non-volatile memory.
  - If nothing is connected to the VGA Output of the **VA-1VGAN** the ON LED flashes quickly and the device restores the default EDID.

- When the ON LED stops flashing and lights again, the EDID is stored.
4. Disconnect the projector's VGA connector from the OUTPUT VGA on the **VA-1VGAN**.
  5. Disconnect the power source.

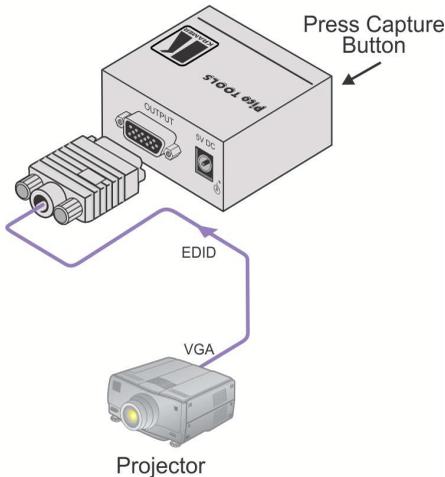


Figure 2: Acquiring the EDID from the Display Device

## 5.2 Reconnecting the Projector

To reconnect the projector at a distance from the PC as shown in [Figure 3](#), do the following:

Switch OFF the power on each device before connecting it to your VA-1VGAN.

1. Connect a VGA source (for example, the graphics card of the PC) to the INPUT VGA connector on the **VA-1VGAN**.



Turn on the VGA source only after connecting the **VA-1VGAN**, so it can acquire the EDID properly.

2. Connect the 5V DC power adapter to the power socket and connect the adapter to the mains electricity.  
If the PC can supply power to the unit via its VGA connector, the power supply is not needed.

- When installation is complete, connect the OUTPUT VGA connector of the **VA-1VGAN** to the projector, using the required cable length.

The EDID is transmitted to the PC via the VA-1VGAN, so the PC gets the EDID information even if the projector is temporarily disconnected. When installing the display again at a distance, there is no need to reboot the PC.

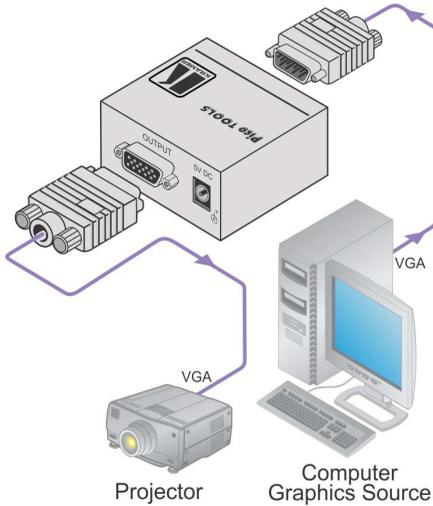


Figure 3: Reconnecting the Display Device

## 6 Technical Specifications

INPUT:	1 XGA on a 15-pin HD connector
OUTPUT:	1 XGA on a 15-pin HD connector
MAX. OUTPUT LEVEL:	> 2Vpp
BANDWIDTH (-3dB):	1.8GHz
DIFF. GAIN:	0.02%
DIFF. PHASE:	0.02Deg
K-FACTOR:	< 0.05%
S/N RATIO:	74dB @ 5MHz (unweighted: 66dB)
CONTROLS:	Pushbutton for EDID monitor information storage
COUPLING:	DC, direct wiring between input and output
POWER SOURCE:	5V DC, 20mA
OPERATING TEMPERATURE:	0° to +40°C (32° to 104°F)
STORAGE TEMPERATURE:	-40° to +70°C (-40° to 158°F)
HUMIDITY:	10% to 90%, RHL non-condensing
DIMENSIONS:	6.2cm x 6.2cm x 2.4cm (2.4" x 2.4" x 0.9") W, D, H
WEIGHT:	0.15kg (0.33lbs) approx.
ACCESSORIES:	Power supply
OPTIONS:	RK-4PT 19" rack adapter
Specifications are subject to change without notice at <a href="http://www.kramerelectronics.com">http://www.kramerelectronics.com</a>	

## 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](http://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](http://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.



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

Web site: [www.kramerelectronics.com](http://www.kramerelectronics.com)

E-mail: [info@kramerel.com](mailto:info@kramerel.com)



**SAFETY WARNING**

Disconnect the unit from the power supply before opening and servicing

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