MODEL:

VA-1VGAN
EDID Capture

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 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.

Connect the Computer Graphics Source to the EDID Capture port on the VA-1VGAN. Connect the Projector to the OUTPUT port. 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.
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
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/.
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.

![Diagram of VA-1VGAN with features labeled 1 to 5]

Figure 1: VA-1VGAN EDID Capture

<table>
<thead>
<tr>
<th>#</th>
<th>Feature</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5V DC</td>
<td>+5V DC connector for powering the unit</td>
</tr>
<tr>
<td>2</td>
<td>OUTPUT 15-pin HD connector</td>
<td>Connects to the VGA acceptor</td>
</tr>
<tr>
<td>3</td>
<td>CAPTURE Button</td>
<td>Press to acquire the EDID</td>
</tr>
<tr>
<td>4</td>
<td>INPUT 15-pin HD connector</td>
<td>Connects to the VGA source</td>
</tr>
<tr>
<td>5</td>
<td>ON LED</td>
<td>Illuminates when the power is connected</td>
</tr>
</tbody>
</table>
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.
4. Disconnect the projector’s VGA connector from the OUTPUT VGA on the VA-1VGAN.

5. Disconnect the power source.

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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.
3. 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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPUT:</strong></td>
<td>1 XGA on a 15-pin HD connector</td>
</tr>
<tr>
<td><strong>OUTPUT:</strong></td>
<td>1 XGA on a 15-pin HD connector</td>
</tr>
<tr>
<td><strong>MAX. OUTPUT LEVEL:</strong></td>
<td>&gt; 2Vpp</td>
</tr>
<tr>
<td><strong>BANDWIDTH (-3dB):</strong></td>
<td>1.8GHz</td>
</tr>
<tr>
<td><strong>DIFF. GAIN:</strong></td>
<td>0.02%</td>
</tr>
<tr>
<td><strong>DIFF. PHASE:</strong></td>
<td>0.02Deg</td>
</tr>
<tr>
<td><strong>K-FACTOR:</strong></td>
<td>&lt; 0.05%</td>
</tr>
<tr>
<td><strong>S/N RATIO:</strong></td>
<td>74dB @ 5MHz (unweighted: 66dB)</td>
</tr>
<tr>
<td><strong>CONTROLS:</strong></td>
<td>Pushbutton for EDID monitor information storage</td>
</tr>
<tr>
<td><strong>COUPLING:</strong></td>
<td>DC, direct wiring between input and output</td>
</tr>
<tr>
<td><strong>POWER SOURCE:</strong></td>
<td>5V DC, 20mA</td>
</tr>
<tr>
<td><strong>OPERATING TEMPERATURE:</strong></td>
<td>0° to +40°C (32° to 104°F)</td>
</tr>
<tr>
<td><strong>STORAGE TEMPERATURE:</strong></td>
<td>-40° to +70°C (-40° to 158°F)</td>
</tr>
<tr>
<td><strong>HUMIDITY:</strong></td>
<td>10% to 90%, RHL non-condensing</td>
</tr>
<tr>
<td><strong>DIMENSIONS:</strong></td>
<td>6.2cm x 6.2cm x 2.4cm (2.4” x 2.4” x 0.9”) W, D, H</td>
</tr>
<tr>
<td><strong>WEIGHT:</strong></td>
<td>0.15kg (0.33lbs) approx.</td>
</tr>
<tr>
<td><strong>ACCESSORIES:</strong></td>
<td>Power supply</td>
</tr>
<tr>
<td><strong>OPTIONS:</strong></td>
<td>RK-4PT 19” rack adapter</td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice at [http://www.kramerelectronics.com](http://www.kramerelectronics.com)
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SAFETY WARNING
Disconnect the unit from the power supply before opening and servicing