



KRAMER ELECTRONICS LTD.

# USER MANUAL

MODEL:

**VA-1VGAxI**  
EDID Capture/Emulator

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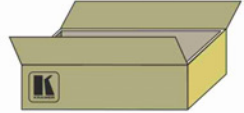
P/N: 2900-30001 1 Rev 2

# VA-1VGAxI Quick Start Guide

This page guides you through a basic installation and first-time use of your **VA-1VGAxI**. For more detailed information, see the **VA-1VGAxI** user manual. You can download the latest manual at <http://www.kramerelectronics.com>.

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

- VA-1VGAxI** EDID Capture/Emulator
- 1 Quick Start sheet
- 1 Power supply (5V DC)
- 1 4 Rubber feet



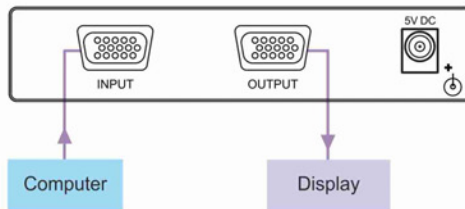
Save the original box and packaging materials in case you need to return your product for service.

## Step 2: Install the VA-1VGAxI

Attach the rubber feet and place on a table or mount the machine in a rack (using an optional **RK-3T** rack mount).

## Step 3: Connect the inputs and outputs

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



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

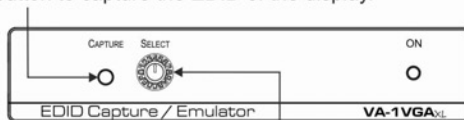
## Step 4: Connect the power

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



## Step 5: Operate the VA-1VGAxI

Press the **CAPTURE** button to capture the EDID of the display.



Or choose a preset EDID using the **SELECT** rotary switch.

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Getting Started</b>	<b>2</b>
2.1	Achieving the Best Performance	2
<b>3</b>	<b>Overview</b>	<b>3</b>
3.1	Defining the VA-1VGAXI EDID Capture/Emulator	3
<b>4</b>	<b>Connecting the VA-1VGAXI</b>	<b>5</b>
<b>5</b>	<b>Capturing the EDID from a Display</b>	<b>6</b>
5.1	Capturing the EDID from a Display Device	6
5.2	Setting a Built-in EDID	6
<b>6</b>	<b>Technical Specifications</b>	<b>8</b>
<b>7</b>	<b>Default EDID</b>	<b>9</b>

## Figures

Figure 1:	VA-1VGAXI EDID Capture/Emulator	4
Figure 2:	Connecting the VA-1VGAXI EDID Capture/Emulator	5

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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-1VGAxl** *EDID Capture*/Emulator, which is ideal for ensuring trouble-free VGA (up to WUXGA) transmission by capturing an EDID block from a display device or providing a built-in EDID to a video source.

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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



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-1VGAXI** 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

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## 3 Overview

The Kramer TOOLS **VA-1VGAxl** is a VGA EDID capture device and emulator used to read and write EDID to and from various devices.

The **VA-1VGAxl** is connected to a video source and a video acceptor. The device provides the source with either the EDID captured from the acceptor or from one of the built-in EDID data sets. This prevents problems where a source (for example, a PC) fails to output video because it was not connected to the video acceptor when attempting to read its EDID.

The **VA-1VGAxl** features:

- VGA input and output of up to WUXGA
- A bandwidth of 1.8GHz
- 13 preset resolutions: 800x600 @60Hz, 1024x768 @60Hz, 1152x864 @75Hz, 1280x720 @60Hz, 1280x800 @60Hz, 1024x1024 @60Hz, 1360x768 @60Hz, 1440x900 @60Hz, 1440x1050 @60Hz, 1600x1200 @60Hz, 1680x1050 @60Hz, 1920x1080 @60Hz, 1920x1200 @60Hz
- An EDID capture button, 16-position rotary switch
- A compact Kramer TOOLS™ enclosure

### 3.1 Defining the VA-1VGAxl EDID Capture/Emulator

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

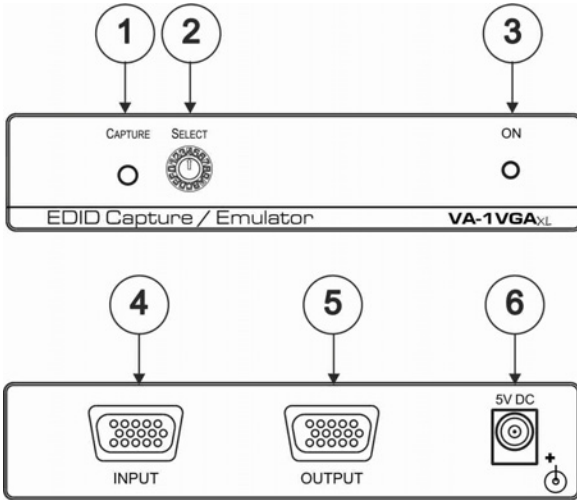


Figure 1: VA-1VGAxl EDID Capture/Emulator

#	Feature	Function
1	<i>CAPTURE</i> Button	Press to capture the EDID (either from an attached display or from one of the built-in emulations)
2	<i>SELECT</i> Switch	Turn to select one of the built-in EDID emulations
3	<i>ON</i> LED	Lights green when the unit receives power
4	<i>INPUT</i> 15-pin HD (F) Connector	Connect to the video source
5	<i>OUTPUT</i> 15-pin HD (F) Connector	Connect to the video acceptor
6	<i>5V DC</i> Connector	Connect to the +5V DC power adapter, center pin positive

## 4 Connecting the VA-1VGAxI



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

To connect the **VA-1VGAxI** as illustrated in the example in [Figure 2](#):

1. Connect the video source (for example, a laptop) to the 15-pin HD INPUT connector on the **VA-1VGAxI** using a VGA cable.  
The EDID is carried over pins 12 and 15 of the VGA connector so the cable used must have pins 12 and 15 connected.
2. Connect the 15-pin HD OUTPUT connector on the **VA-1VGAxI** to the video acceptor (for example, a display).

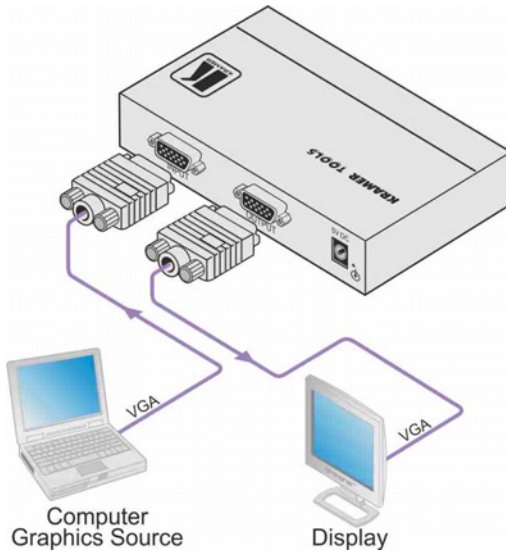


Figure 2: Connecting the VA-1VGAxI EDID Capture/Emulator



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## 5 Capturing the EDID from a Display

The **VA-1VGAxI** can present on its input an EDID from either a display connected to the output or one of the built-in EDID values.

### 5.1 Capturing the EDID from a Display Device

To capture the EDID from a display device:

1. Ensure that the rotary switch is in position 0. If it is not, use a small screwdriver to turn it to 0.
2. Press the EDID capture button.  
The ON LED flashes slowly several times.  
The new EDID is captured when the LED stops flashing and lights continuously. If the LED flashes quickly a few times and then lights continuously, the EDID was not captured and the default EDID is captured.

### 5.2 Setting a Built-in EDID

To set a built-in EDID:

1. Using a small screwdriver, turn the rotary switch to the required position (see the table below).
2. Press the EDID CAPTURE button.  
The ON LED flashes quickly several times.  
The new EDID is captured when the LED stops flashing and lights solid. If the LED flashes quickly a few times and then goes out, the EDID was not captured.

Rotary Switch Position	Resolution	Refresh Rate
<b>0 (Default)</b>	1024x768	60Hz
<b>1</b>	800x600	60Hz
<b>2</b>	1024x768	60Hz
<b>3</b>	1152x864	75Hz
<b>4</b>	1280x720	60Hz
<b>5</b>	1280x800	60Hz
<b>6</b>	1024x1024	60Hz
<b>7</b>	1360x768	60Hz
<b>8</b>	1440x900	60Hz
<b>9</b>	1440x1050	60Hz
<b>A</b>	1600x1200	60Hz
<b>B</b>	1680x1050	60Hz
<b>C</b>	1920x1080	60Hz
<b>D</b>	1920x1200	60Hz
<b>E</b>	For future use	
<b>F</b>	For future use	

## 6 Technical Specifications

INPUT:	1 VGA on a 15-pin HD connector (up to WUXGA)
OUTPUT:	1 VGA on a 15-pin HD connector (up to WUXGA)
CONTROLS:	Button for EDID capture, Rotary switch for EDID resolution selection
POWER CONSUMPTION:	5V DC, 20mA
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:	12.1cm x 7.7cm x 2.5cm (4.8" x 3.03" x 1") W, D, H.
WEIGHT:	0.18kg (0.4lbs) approx.
ACCESSORIES:	Power supply, mounting bracket
OPTIONS:	RK-3T 19" rack adapter
Specifications are subject to change without notice at <a href="http://www.kramerelectronics.com">http://www.kramerelectronics.com</a>	

# 7 Default EDID

Monitor  
Manufacturer KRM  
Plug and Play ID KRM0000  
Serial number 2  
Manufacture date 2009, ISO week 10  
-----  
EDID revision 1.3  
Input signal type Analog 0.700,0.300 (1.0V p-p)  
Sync input support Separate  
Display type RGB color  
Screen size 360 x 290 mm (18.2 in)  
Power management Standby, Suspend, Active off/sleep  
Extension blocs None  
-----  
DDC/CI n/a

Color characteristics  
Default color space Non-sRGB  
Display gamma 2.40  
Red chromaticity Rx 0.611 - Ry 0.329  
Green chromaticity Gx 0.312 - Gy 0.559  
Blue chromaticity Bx 0.148 - By 0.131  
White point (default) Wx 0.320 - Wy 0.336  
Additional descriptors None

Timing characteristics  
Range limits Not available  
GTF standard Not supported  
Additional descriptors None  
Preferred timing Yes  
Native/preferred timing 1024x768p at 60Hz (4:3)  
Modeline "1024x768" 65.000 1024 1048 1184 1344 768 771 777 806 -hsync -vsync  
Detailed timing #1 1280x800p at 60Hz (1:1)  
Modeline "1280x800" 71.000 1280 1328 1360 1440 800 803 809 823 +hsync -vsync  
Detailed timing #2 1680x1050p at 60Hz (1:1)  
Modeline "1680x1050" 119.000 1680 1728 1760 1840 1050 1053 1059 1080 +hsync -vsync  
Detailed timing #3 1920x1200p at 60Hz (1:1)  
Modeline "1920x1200" 154.000 1920 1968 2000 2080 1200 1203 1209 1235 +hsync -vsync

Standard timings supported  
640 x 480p at 60Hz IBM VGA  
640 x 480p at 67Hz Apple Mac II  
640 x 480p at 72Hz VESA  
640 x 480p at 75Hz VESA  
800 x 600p at 56Hz VESA  
800 x 600p at 60Hz VESA  
800 x 600p at 72Hz VESA  
800 x 600p at 75Hz VESA  
1024 x 768p at 60Hz VESA  
1024 x 768p at 70Hz VESA  
1024 x 768p at 75Hz VESA  
1280 x 1024p at 75Hz VESA  
1280 x 1024p at 60Hz VESA STD  
1280 x 960p at 60Hz VESA STD  
1400 x 1050p at 60Hz VESA STD  
1440 x 900p at 60Hz VESA STD  
1600 x 1200p at 60Hz VESA STD

Raw data  
00,FF,FF,FF,FF,FF,FF,00,2E,4D,00,00,02,00,00,00,0A,13,01,03,08,24,1D,8C,EA,9C,20,9C,54,4F,8F,26,  
21,52,56,3F,CF,00,81,80,81,40,90,40,95,00,A9,40,01,01,01,01,01,01,64,19,00,40,41,00,26,30,18,88,  
36,00,30,E4,10,00,00,18,BC,1B,00,A0,50,20,17,30,30,20,36,00,20,20,00,00,00,1A,7C,2E,90,A0,60,1A,  
1E,40,30,20,36,00,20,20,00,00,00,1A,28,3C,80,A0,70,B0,23,40,30,20,36,00,20,20,00,00,00,1A,00,1F

## 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

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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.



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](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

P/N: 2900-300011



Rev: 2

