MODEL:

**VM-2Hxl**
1:2 HDMI Distributor

P/N: 2900-000672 Rev 3
VM-2HxI 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

- ✔ VM-2HxI 1:2 HDMI Distributor
- ✔ 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 VM-2HxI for service.

Step 2: Install the VM-2HxI

Attach the rubber feet and place on a table or mount the VM-2HxI 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 VM-2HxI.

Always use Kramer high-performance cables for connecting AV equipment to the VM-2HxI.

Step 4: Connect the power

Connect the 5V DC power adapter to the VM-2HxI and plug the adapter into the mains electricity.

Step 5: Operate the VM-2HxI

Acquire the EDID from a connected output:

1. Press and hold the EDID SETUP button to select the desired EDID.
2. The OUT LEDs illuminate in the following cycle: OUT 1, OUT 2, both illuminate (auto-mix) and both flash (default).
3. Release the button when reaching the desired set up. (If you set the machine to acquire the EDID from an output that is not connected, the default EDID is acquired)
4. The EDID is now acquired.
Contents

1 Introduction 1
2 Getting Started 2
  2.1 Achieving the Best Performance 2
  2.2 Safety Instructions 3
  2.3 Recycling Kramer Products 3
3 Overview 4
  3.1 Defining the VM-2Hxl 1:2 HDMI Distributor 4
4 Connecting the VM-2Hxl 6
  4.1 Acquiring the EDID 7
5 Technical Specifications 9

Figures

Figure 1: VM-2Hxl 1:2 HDMI Distributor 5
Figure 2: Connecting the VM-2Hxl 1:2 HDMI Distributor 6
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 VM-2Hxl 1:2 HDMI Distributor, which is ideal for the following typical applications:

- Home theater, presentation and multimedia applications
- Rental and staging
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

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 (we recommend Kramer high-performance, high-resolution 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 VM-2Hxl away from moisture, excessive sunlight and dust

This equipment is to be used only inside a building. It may only be connected to other equipment that is installed inside a building.
2.2 Safety Instructions

**Caution:** There are 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

2.3 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/](http://www.kramerelectronics.com/support/recycling/).
3 Overview

The high-quality VM-2Hxl accepts an HDMI input and distributes the signal to two outputs. In particular, the VM-2Hxl features:

- A maximum data rate of 6.75Gbps (2.25Gbps per graphic channel)
- HDMI support for Deep Color, x.v.Color™, Lip Sync, CEC
- HDTV compatibility
- HDCP compliance
- 3D pass-through
- I-EDIDPro™ Kramer Intelligent EDID Processing™, an intelligent EDID handling and processing algorithm that ensures Plug and Play operation for HDMI systems
- Kramer Equalization & re-Klocking™ Technology that rebuilds the digital signal integrity to travel longer distances
- Active Output LED
- A default EDID for fast and efficient connection of the unit
- 5V DC power

3.1 Defining the VM-2Hxl 1:2 HDMI Distributor

This section defines the VM-2Hxl.
Figure 1: VM-2Hxl 1:2 HDMI Distributor

<table>
<thead>
<tr>
<th>#</th>
<th>Feature</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HDMI IN</td>
<td>Connects to the HDMI source</td>
</tr>
<tr>
<td>2</td>
<td>HDMI OUT 1</td>
<td>Connects to the HDMI acceptor 1</td>
</tr>
<tr>
<td>3</td>
<td>HDMI OUT 2</td>
<td>Connects to the HDMI acceptor 2</td>
</tr>
<tr>
<td>4</td>
<td>5V DC</td>
<td>+5V DC connector for powering the unit</td>
</tr>
<tr>
<td>5</td>
<td>EDID SETUP Button</td>
<td>Press for more than 3 seconds to acquire the EDID information from the display</td>
</tr>
<tr>
<td>6</td>
<td>INPUT LED</td>
<td>Flashes when the stored EDID does not match the display device EDID; illuminates when the EDID corresponds to the display device and that HDMI source is active</td>
</tr>
<tr>
<td>7</td>
<td>OUT 1 LED</td>
<td>Flashes during the EDID setup; illuminates when output 1 is connected</td>
</tr>
<tr>
<td>8</td>
<td>OUT 2 LED</td>
<td>Flashes during the EDID setup; illuminates when output 2 is connected</td>
</tr>
<tr>
<td>9</td>
<td>ON LED</td>
<td>Illuminates when receiving power</td>
</tr>
</tbody>
</table>
Always switch off the power to each device before connecting it to your **VM-2Hxl**. After connecting your **VM-2Hxl**, connect its power and then switch on the power to each device.

To connect the **VM-2Hxl** as illustrated in the example in **Figure 2**:

1. Connect the HDMI source (for example, a DVD player) to the HDMI IN connector.

2. Connect the HDMI OUT connectors to up to two HDMI acceptors, as follows:
   - HDMI OUT 1 connector to an LCD TV
   - HDMI OUT 2 connector to a plasma display

3. Connect the 5V DC power adapter to the power socket and connect the adapter to the mains electricity.

4. Press the EDID SETUP button to acquire or change the EDID information (see **Section 4.1**).
4.1 Acquiring the EDID

Initially, the VM-2Hxl operates with the factory default EDID. This lets you connect the power before connecting one of the acceptors or sources.

You can acquire the EDID from:

This is usually done only once, when the machine is being set up in an installation. Once acquired, the EDID is saved in non-volatile memory and further acquisition is not necessary.

- One output (the relevant output illuminates)
- The default EDID (both output LEDs flash)
- Two connected outputs, the auto-mix mode (both output LEDs illuminate)

The EDID acquired is a weighted average of all the connected outputs. For example, if several displays with different resolutions are connected to the outputs, the acquired EDID supports all the resolutions, as well as other parameters included in the EDID.

When pressing the EDID SETUP button briefly, the OUT LEDs indicate which type of EDID was last acquired. If the:

- OUT 1 LED illuminates, the OUT 1 EDID is stored in the non-volatile memory
- OUT 2 LED illuminates, the OUT 2 EDID is stored in the non-volatile memory
- OUT 1 and OUT 2 LEDs illuminate, the Auto-Mix EDID is stored in the non-volatile memory
- OUT 1 and OUT 2 LEDs flash, the Default EDID is stored in the non-volatile memory

To acquire the EDID, do the following:

1. Connect the power.
2. Connect the output or outputs from which you want to acquire the EDID.
3. Press and hold the EDID SETUP button to select the desired EDID.

The OUT LEDs illuminate in the following cycle: OUT 1, OUT 2, both illuminate (auto-mix) and both flash (default).
4. Release the button when reaching the desired set up. (If you set the machine to acquire the EDID from an output that is not connected, the default EDID is acquired)

The EDID is now acquired.
## Technical Specifications

<table>
<thead>
<tr>
<th>INPUT:</th>
<th>1 HDMI connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTPUTS:</td>
<td>2 HDMI connectors</td>
</tr>
<tr>
<td>BANDWIDTH:</td>
<td>6.75Gbps (2.25Gbps per graphic channel)</td>
</tr>
<tr>
<td>COMPLIANCE WITH HDMI STANDARD:</td>
<td>Supports HDMI and HDCP</td>
</tr>
<tr>
<td>CONTROLS:</td>
<td>EDID SETUP button, input select button</td>
</tr>
<tr>
<td>INDICATOR LEDS:</td>
<td>IN 1, IN 2, OUT 1, OUT 2, and ON LEDs</td>
</tr>
<tr>
<td>POWER CONSUMPTION:</td>
<td>5V DC, 910mA</td>
</tr>
<tr>
<td>OPERATING TEMPERATURE:</td>
<td>0° to +40°C (32° to 104°F)</td>
</tr>
<tr>
<td>STORAGE TEMPERATURE:</td>
<td>-40° to +70°C (-40° to 158°F)</td>
</tr>
<tr>
<td>HUMIDITY:</td>
<td>10% to 90%, RHL non-condensing</td>
</tr>
<tr>
<td>DIMENSIONS:</td>
<td>12cm x 7.2cm x 2.4cm (4.7” x 2.8” 1.0”) W, D, H</td>
</tr>
<tr>
<td>WEIGHT:</td>
<td>0.3kg (0.67lbs) approx.</td>
</tr>
<tr>
<td>ACCESSORIES:</td>
<td>Power supply, bracket installation kit</td>
</tr>
<tr>
<td>OPTIONS:</td>
<td>RK−3T 19&quot; 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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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.