



KRAMER ELECTRONICS LTD.

USER MANUAL

MODEL:

VP-2L
UXGA Line Amplifier

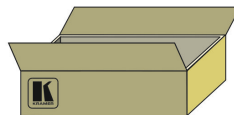
P/N: 2900-000239 Rev 3

VP-2L Quick Start Guide

This page guides you through a basic installation and first-time use of your **VP-2L**. For more detailed information, see the **VP-2L User Manual**. You can download the latest manual at <http://www.kramerelectronics.com>.

Step 1: Check what's in the box

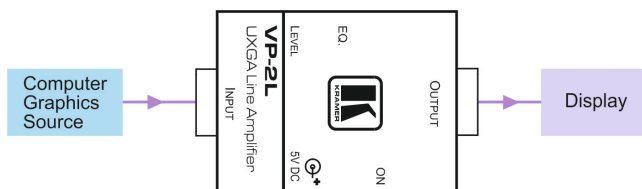
- | | |
|--|---|
| <input checked="" type="checkbox"/> VP-2L UXGA Line Amplifier | <input checked="" type="checkbox"/> 1 C-GM/GM-3 15-pin HD cable |
| <input checked="" type="checkbox"/> 1 Power supply (5V DC) | <input checked="" type="checkbox"/> 1 USB cable |
| <input checked="" type="checkbox"/> 4 Rubber feet | <input checked="" type="checkbox"/> 1 Quick Start sheet |
| | <input checked="" type="checkbox"/> 1 User Manual |



Save the original box and packaging in case your **VP-2L** needs to be returned to the factory for service.

Step 2: Connect the inputs and outputs

Always switch off the power on each device before connecting it to your **VP-2L**.



Always use Kramer high-performance cables for connecting AV equipment to the **VP-2L**.

Step 3: Connect the power

Connect the 5V DC power adapter to the **VP-2L** and plug the adapter into the mains electricity or connect the USB cable.



Step 4: Operate the VP-2L

Adjust the Level and/or Equalization and the ID bit setting if required.

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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 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 **VP-2L UXGA Line Amplifier**, which is ideal for the following typical applications:

- Conference room presentations and advertising 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
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).



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

2.1 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)
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality
- Position your Kramer **VP-2L** away from moisture, excessive sunlight and dust

3 Overview

The Kramer **VP-2L** is a high performance line amplifier for computer graphics video signals (up to UXGA) and HD signals. It accepts an input on a 15-pin HD connector and provides a buffered output, also on a 15-pin HD connector.

In particular, the **VP-2L UXGA Line Amplifier** features:

- Resolution of up to UXGA, ensuring that it remains transparent even in the most critical applications
- Trimmers for output level and cable equalization
- An ID Bit control switch
- A LED power indicator
- A small enclosure housing
- A 5V DC power supply

3.1 Defining the VP-2L UXGA Line Amplifier

This section defines the **VP-2L**.

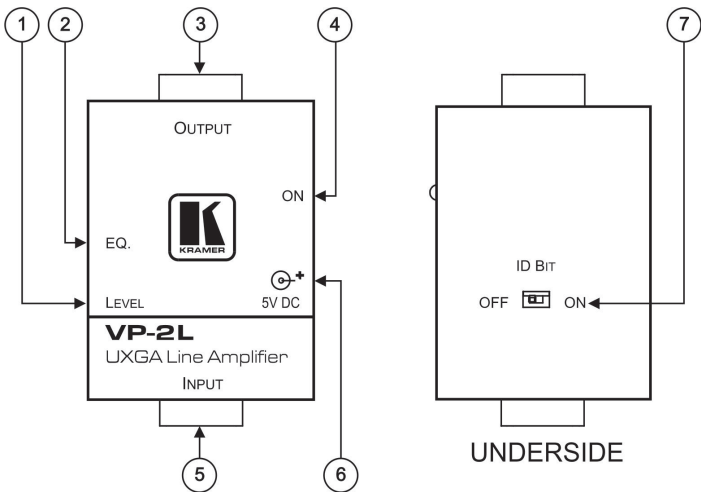


Figure 1: VP-2L UXGA Line Amplifier

#	Feature	Function
1	LEVEL Control Trimmer	Adjusts the video signal level Use a screwdriver to rotate the trimmer, adjusting the appropriate level
2	EQ. Control Trimmer	Adjusts the video EQ. (equalization) compensation
3	OUTPUT 15-pin HD Connector	Connect to the computer graphics acceptor
4	ON LED	Illuminates when receiving power
5	INPUT 15-pin HD Connector	Connect to the computer graphics source
6	5V DC	+5V DC connector for powering the unit
7	ID Bit Switch	Slide to the right to set to ON; to the left to set to OFF ON is the default that enables the notebook or laptop to output a VGA signal to an external VGA monitor

4 Connecting the VP-2L



Always switch off the power to each device before connecting it to your **VP-2L**. After connecting your **VP-2L**, connect its power and then switch on the power to each device.

To connect your **VP-2L UXGA Line Amplifier**, as the example in [Figure 2](#) illustrates, do the following:

1. Connect a computer graphics source to the INPUT 15-pin HD connector.
2. Connect the OUTPUT 15-pin HD connector to an acceptor (for example, a display).
3. Connect the 5V DC power adapter to the 5V DC socket and connect the transformer to the mains electricity or use the included USB cable to power the unit as described below.
4. If required, adjust the video output signal level and/or cable compensation equalization level.

Use a screwdriver to rotate the trimmers to adjust the appropriate level.

The **VP-2L** is supplied with the USB cable that:

- Has a USB-A connector at one end and a 5V DC jack at the other
- Connects to any USB port to power the unit

The internal Kramer P/N for this USB cable is 2518-0214003 C-UAM/DC35(THREAD)-3

To connect the **VP-2L UXGA Line Amplifier** using this cable:

1. Connect the 5V DC jack of the cable to the 5V DC socket of the **VP-2L** (instead of using the 5V DC power adapter) and connect the USB-A connector of the cable to the USB port of the display or computer.
The **VP-2L** receives power from the display or computer without needing a power supply.

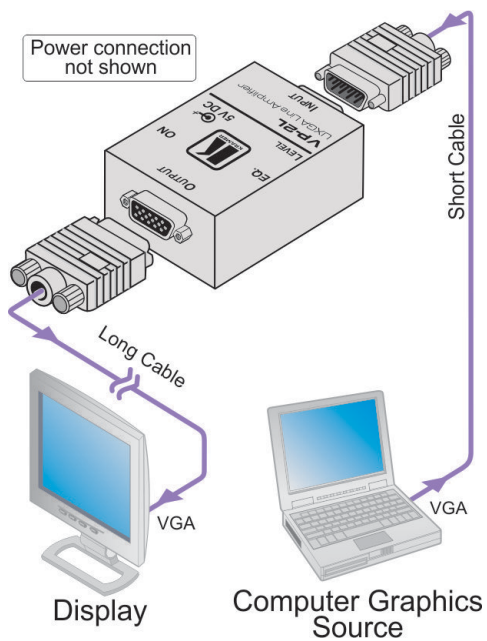


Figure 2: Connecting the VP-2L

5 Technical Specifications

INPUT:	1 UXGA on a 15-pin HD connector
OUTPUT:	1 UXGA on a 15-pin HD connector
MAX. OUTPUT LEVEL:	1.5Vpp
RESOLUTION:	Up to UXGA
DIFF. GAIN:	2.7%
DIFF. PHASE:	0.09°
K-FACTOR:	0.1%
S/N RATIO:	73dB
CONTROLS:	Level: -7.4dB to +4dB; EQ.: 0 to +26.4dB
COUPLING:	DC
POWER SOURCE:	5V DC, 307mA
DIMENSIONS:	4.27cm x 5.64cm x 2.2cm (1.68" x 2.22" x 0.87") W, D, H.
WEIGHT:	0.14kg (0.31lbs) approx.
ACCESSORIES:	Power supply, C-GM/GM-3 molded 15-pin HD to 15-pin HD cable, USB cable (internal Kramer P/N: 2518-0214003 C-UAM/DC35(THREAD)-3)
Specifications are subject to change without notice at http://www.kramerelectronics.com	

LIMITED WARRANTY

We warrant this product free from defects in material and workmanship under the following terms.

HOW LONG IS THE WARRANTY

Labor and parts are warranted for seven years from the date of the first customer purchase.

WHO IS PROTECTED?

Only the first purchase customer may enforce this warranty.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

1. Any product which is not distributed by us or which is not purchased from an authorized Kramer dealer. If you are uncertain as to whether a dealer is authorized, please contact Kramer at one of the agents listed in the Web site www.kramerelectronics.com.
2. Any product, on which the serial number has been defaced, modified or removed, or on which the WARRANTY VOID IF TAMPERED sticker has been torn, reattached, removed or otherwise interfered with.
3. Damage, deterioration or malfunction resulting from:
 - i) Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
 - ii) Product modification, or failure to follow instructions supplied with the product
 - iii) Repair or attempted repair by anyone not authorized by Kramer
 - iv) Any shipment of the product (claims must be presented to the carrier)
 - v) Removal or installation of the product
 - vi) Any other cause, which does not relate to a product defect
 - vii) Cartons, equipment enclosures, cables or accessories used in conjunction with the product

WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR

We will pay labor and material expenses for covered items. We will not pay for the following:

1. Removal or installations charges.
2. Costs of initial technical adjustments (set-up), including adjustment of user controls or programming. These costs are the responsibility of the Kramer dealer from whom the product was purchased.
3. Shipping charges.

HOW YOU CAN GET WARRANTY SERVICE

1. To obtain service on you product, you must take or ship it prepaid to any authorized Kramer service center.
2. Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage, and should be included in any shipment of the product. Please also include in any mailing a contact name, company, address, and a description of the problem(s).
3. For the name of the nearest Kramer authorized service center, consult your authorized dealer.

LIMITATION OF IMPLIED WARRANTIES

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

EXCLUSION OF DAMAGES

The liability of Kramer for any effective products is limited to the repair or replacement of the product at our option. Kramer shall not be liable for:

1. Damage to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or:
2. Any other damages, whether incidental, consequential or otherwise. Some countries may not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from place to place.

NOTE: All products returned to Kramer for service must have prior approval. This may be obtained from your dealer.

This equipment has been tested to determine compliance with the requirements of:

- EN-50081: "Electromagnetic compatibility (EMC);
generic emission standard.
Part 1: Residential, commercial and light industry"
- EN-50082: "Electromagnetic compatibility (EMC) generic immunity standard.
Part 1: Residential, commercial and light industry environment".
- CFR-47: FCC* Rules and Regulations:
Part 15: "Radio frequency devices
Subpart B Unintentional radiators"

CAUTION!

➤ Servicing the machines can only be done by an authorized Kramer technician. Any user who makes changes or modifications to the unit without the expressed approval of the manufacturer will void user authority to operate the equipment.

➤ Use the supplied DC power supply to feed power to the machine.

➤ Please use recommended interconnection cables to connect the machine to other components.

* FCC and CE approved using STP cable (for twisted pair products)



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