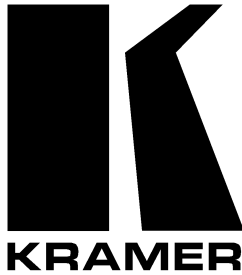


**Kramer Electronics, Ltd.**



# **USER MANUAL**

**Model:**

**VP-200Dxl**

*XGA Differential Amplifier / DA*

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## 1 Introduction

Dedication by Kramer Electronics since 1981, to the development and manufacture of high quality video/audio equipment, makes the Kramer line an integral part of the finest production and presentation facilities in the world. In recent years, Kramer has redesigned and upgraded most of the line, making the best even better! The Kramer line of professional video/audio electronics is one of the most versatile and complete available, and is a true leader in terms of quality, workmanship, price/performance ratio and innovation. In addition to the **VP-200Dxl XGA Differential Amplifier / DA** (Distribution Amplifier), we also offer excellent switchers and matrices, presentation processors, interfaces, remote controllers and computer-related products.

Congratulations on purchasing your Kramer Tools **VP-200Dxl XGA Differential Amplifier / DA**. This product is ideal for using with:

- Dual monitor remote applications (local or long range)
- Presentation systems (for long distance, interference-free distribution and cable equalization) requiring a local monitor and a large screen display such as a projector, at close or remote locations

The package includes the following items:

- **VP-200Dxl XGA Differential Amplifier / DA**
- Power adapter (12V DC Input)
- Mounting bracket
- This user manual<sup>1</sup>
- Kramer concise product catalog/CD

## 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

## 3 Overview

The high performance **VP-200Dxl XGA Differential Amplifier / DA** is a 1:2

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<sup>1</sup> Download up-to-date Kramer user manuals from the Internet at this URL: <http://www.kramerelectronics.com/manuals.html>

differential line amplifier / distributor for VGA/XGA signals that accepts one input, provides correct buffering and isolation, and then distributes the signal to 2 identical outputs.

In particular, the **VP-200Dxl XGA Differential Amplifier / DA** includes:

- High-density 15 pin D connectors
- Video bandwidth of 400 MHz, ensuring that it remains transparent even at highest resolution UXGA modes (1600x1200)
- An output level rotary control and a cable equalization rotary control
- Special differential amplifying circuitry, which eliminates noise and hum problems commonly found in long VGA/XGA lines
- ID Bit control

Achieving the best performance means:

- Connecting only good quality connection cables, thus avoiding interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Avoiding interference from neighboring electrical appliances that may adversely influence signal quality and positioning your **VP-200Dxl** unit in a location free from moisture and away from excessive sunlight and dust

## 4 Your XGA Differential Amplifier / DA

Figure 1 and Table 1 define the **VP-200Dxl XGA Differential Amplifier / DA**:

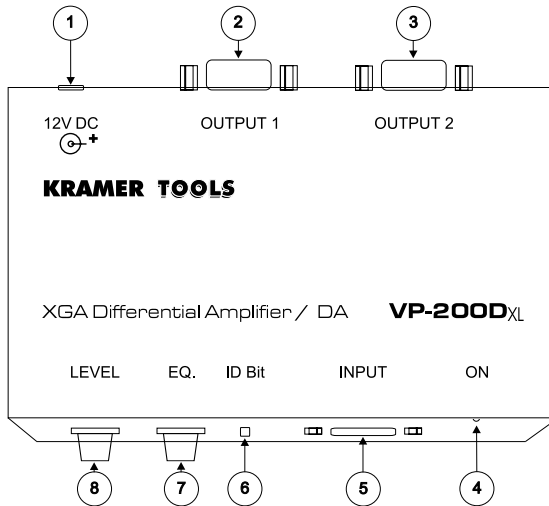


Figure 1: VP-200Dxl XGA Differential Amplifier / DA

Table 1: Features and Functions of the VP-200Dxl XGA Differential Amplifier / DA

#	Feature	Function
1	12V DC	+12V DC connector for powering the unit
2	OUTPUT 1 HD15F Connector	Connect to the VGA/XGA acceptor 1
3	OUTPUT 2 HD15F Connector	Connect to the VGA/XGA acceptor 2
4	ON LED	Illuminates when receiving power
5	INPUT HD15F Connector	Connect to the VGA/XGA source
6	ID Bit Button	Pushing in selects the ID BIT, releasing deactivates the ID BIT (when outputting the input signal from a notebook connected to an external VGA monitor <sup>1</sup> )
7	EQ. Control Knob	Adjusts the video EQ. (equalization) compensation potentiometer
8	LEVEL Control Knob	Adjusts the video signal level potentiometer

## 4.1 Connecting the XGA Differential Amplifier / DA

To connect the **VP-200Dxl**, as the example in Figure 2 illustrates, do the following:

1. Connect a XGA source (for example, a PC graphics card) to the INPUT HD15F connector.
2. Release the ID Bit button<sup>2</sup>.
3. Connect the OUTPUT (HD15F connectors) to up to 2 acceptors, as follows:
  - Connect the OUTPUT 1 (HD15F connector) to the acceptor 1 (for example, a PC monitor)
  - Connect the OUTPUT 2 (HD15F connector) to the acceptor 2 (for example, a projector)
4. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.
5. Adjust the video EQ. (equalization) compensation and/or the video signal level, if required.

<sup>1</sup> Sometimes notebook computers refuse to output a VGA signal to an external VGA monitor if they do not detect the ID Bit as ON (pin # 4 on the VGA connector). Set the ID Bit to ON using this button so that the notebook will output to an external VGA monitor

<sup>2</sup> However, if the source is a notebook (instead of a PC graphics card), push in the ID Bit button

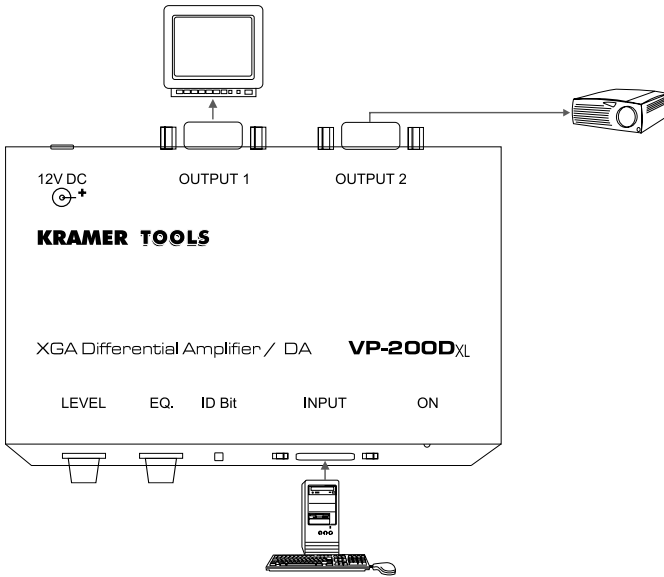


Figure 2: Connecting the VP-200Dxl XGA Differential Amplifier / DA

## 5 Technical Specifications

Table 2 includes the technical specifications:

Table 2: Technical Specifications of the VP-200Dxl XGA Differential Amplifier / DA

Input:	Analog red, green, blue signals - 0.7 Vpp / 75Ω, H & V sync, TTL level, on HD15F connector
Outputs:	2 analog red, green, blue signals - 0.7 Vpp / 75Ω, H & V syncs, TTL level, on HD15F connectors
Video Bandwidth:	400 MHz -3dB
Diff. Gain:	0.17%
Diff. Phase:	0.1 Deg.
Coupling:	DC
K-Factor:	<0.05%
S/N Ratio:	71.5 dB
Controls:	Level: -1.1 to +6dB, EQ.: 0 to +14.5dB
Power Source:	12 VDC, 150 mA
Dimensions:	12cm x 7.5cm x 2.5cm (4.7" x 2.95" x 0.98"), W, D, H
Weight:	0.3 kg. (0.66 lbs.) approx.
Accessories:	Power supply, mounting bracket

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## LIMITED WARRANTY

Kramer Electronics (hereafter *Kramer*) warrants this product free from defects in material and workmanship under the following terms.

### HOW LONG IS THE WARRANTY

Labor and parts are warranted for three 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 Kramer, 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](http://www.kramerelectronics.com).
2. Any product, on which the serial number has been defaced, modified or removed.
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.



**For the latest information on our products and a list of Kramer distributors, visit our Web site: [www.kramerelectronics.com](http://www.kramerelectronics.com).**

**Updates to this user manual may be found at  
<http://www.kramerelectronics.com/manuals.html>.**

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

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