

Kramer Electronics, Ltd.



USER MANUAL

Model:

PT201VGA

2x1 VGA Switcher

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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 our high quality switchers and matrices, we also offer excellent distribution amplifiers, remote controllers, presentation processors, interfaces and computer-related products.

Congratulations on purchasing your Kramer **PT201VGA 2x1 VGA Switcher**, which is part of the new Pico TOOLS family of products for applications requiring uncompromising quality and compact size at an affordable price.

The **PT201VGA 2x1 VGA Switcher** is ideal for:

- Any system requiring automatic computer and presentation VGA routing
- Audio video duplication studios

The package includes the following items:

- **PT201VGA 2x1 VGA Switcher**
- Mounting bracket
- This user manual¹
- 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
- Use Kramer high performance high resolution cables²

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

² The complete list of Kramer cables is on our Web site at <http://www.kramerelectronics.com> (click "Cables and Connectors" in the Products section)

3 Overview

The high quality **PT201VGA 2x1 VGA Switcher** is a micro-sized mechanical switcher designed for VGA/XGA/UXGA signals using high-density 15 pin HD connectors. The **PT201VGA**:

- Accepts 2 inputs and lets you select either input using a switch located on the front panel
- With its passive design, eliminates the need for a power supply, and makes it possible to operate “backwards” (as a 1x2 switcher), by taking a single input and toggling between two displays
- Has high quality switching components and careful circuit design, ensuring very high bandwidth exceeding 1200 MHz (1.2GHz!) and minimal crosstalk

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 Kramer **PT201VGA** in a location free from moisture and away from excessive sunlight and dust

4 Your PT201VGA 2x1 VGA Switcher

Figure 1 and Table 1 define the **PT201VGA 2x1 VGA Switcher**:

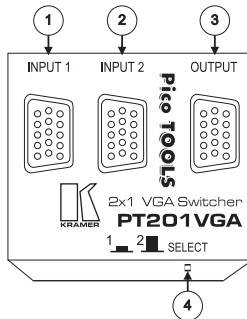


Figure 1: PT201VGA 2x1 VGA Switcher

Table 1: Features and Functions of the PT201VGA 2x1 VGA Switcher

#	Feature	Function
1	INPUT 1 HD15F Connector	Connects to the video source 1
2	INPUT 2 HD15F Connector	Connects to the video source 2
3	OUTPUT HD15F Connector	Connects to the video acceptor
4	SELECT Switch	Push in to select input 1; release to select input 2

5 Using the PT201VGA 2x1 VGA Switcher

Since the unit is passive, you can connect your **PT201VGA** as a 2x1 VGA switcher (see section 5.1) or as a 1x2 VGA switcher (see section 5.2).

5.1 Connecting the PT201VGA as a 2x1 VGA Switcher

To use your **PT201VGA** as a 2x1 VGA switcher, connect the 2 VGA INPUTS, as the example in Figure 2 illustrates:

1. Connect up to 2 VGA sources to the INPUT HD15F connectors, as follows:
 - A VGA source (for example, a PC “Source 1”) to INPUT 1
 - A VGA source (for example, a PC “Source 2”) to INPUT 2
2. Connect the HD15F OUTPUT connector to the VGA acceptor (for example, a monitor).
3. Push in the *SELECT* switch to route input 1, or release it to route input 2.

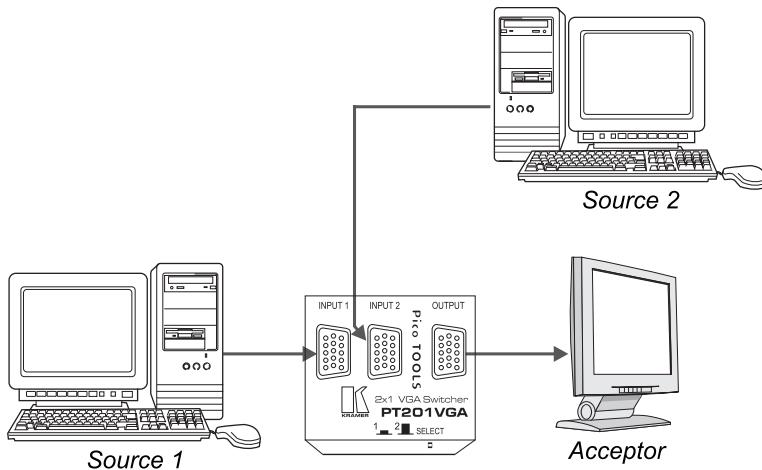


Figure 2: Connecting the PT201VGA 2x1 VGA Switcher

5.2 Connecting the PT201VGA as a 1x2 VGA Switcher

To use your **PT201VGA** as a 1x2 VGA switcher¹, as the example in Figure 3 illustrates, connect as follows:

¹ Due to its passive signal path, the PT201VGA can also operate in the opposite direction

1. Connect the VGA source (for example, a PC) to the HD15F OUTPUT¹ connector.
2. Connect the INPUT² HD15F connectors to up to 2 VGA acceptors, as follows:
 - INPUT 1 to a VGA acceptor (for example, a monitor “Acceptor 1”)
 - INPUT 2 to a VGA acceptor (for example, a monitor “Acceptor 2”)
3. Push in the *SELECT* switch to route the source signal to Acceptor 1 (at input 1), or release it to route the source signal to Acceptor 2 (at input 2).

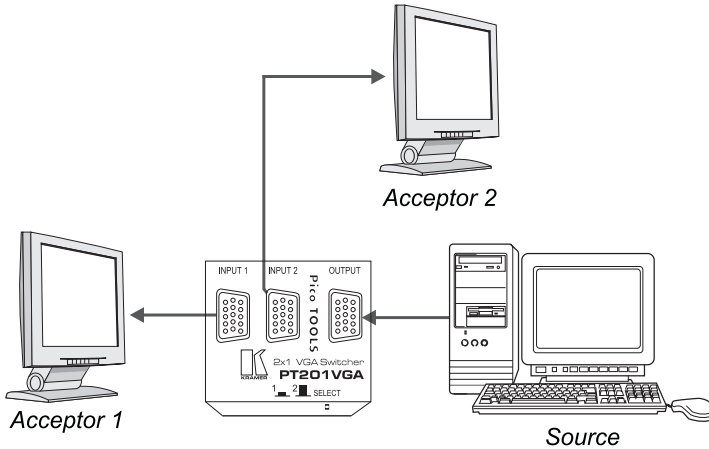


Figure 3: Connecting the PT201VGA 1x2 VGA Switcher

6 Technical Specifications

Table 2 includes the technical specifications:

Table 2: Technical Specifications³ of the PT201VGA 2x1 VGA Switcher

INPUTS:	2 analog red, green, blue signals - 0.7 Vpp / 75Ω, H & V sync, TTL level, on HD15F connectors
OUTPUT:	1 analog red, green, blue signals - 0.7 Vpp / 75Ω, H & V syncs, TTL level, on an HD15F connector
BANDWIDTH (-3dB):	>1200 MHz
DIMENSIONS:	6 cm x 6.5 cm x 2.5 cm (2.36" x 2.56" x 1") W, D, H
WEIGHT:	0.14 kg. (0.31 lbs.) approx.
ACCESSORIES:	Mounting bracket

1 Serves as the INPUT connector when operating in the opposite direction

2 Serve as the OUTPUT connectors when operating in the opposite direction

3 Specifications are subject to change without notice

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.
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.

**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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