



KRAMER ELECTRONICS LTD.

USER MANUAL

MODEL:

PT-201VGA
2x1 VGA Switcher

P/N: 2900-001038 Rev 3

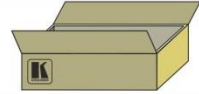


PT-201VGA Quick Start Guide

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

- PT-201VGA 2x1 VGA Switcher
- 4 Rubber feet
- 1 Quick Start sheet

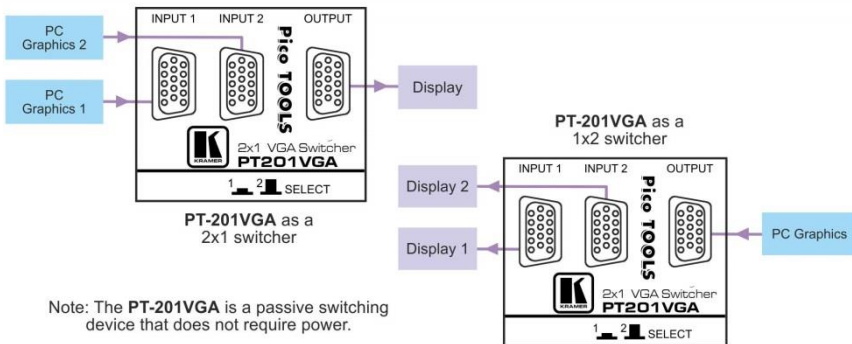


Save the original box and packaging materials in case you need to return your **PT-201VGA** for service.

Step 2: Install the PT-201VGA

Attach the rubber feet and place on a table or mount the **PT-201VGA** in a rack (using an optional **RK-4PT** rack adapter).

Step 3: Connect the inputs and outputs



Step 4: Operate the PT-201VGA

As a *2x1 switcher*:
For source 1, press the selector button.
For source 2, release the selector button.

As a *1x2 switcher*:
For acceptor 1, press the selector button.
For acceptor 2, release the selector button.

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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 14 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; GROUP 11: Sierra Video Products; GROUP 12: Digital Signage; GROUP 13: Audio; and GROUP 14: Collaboration.

Congratulations on purchasing your Kramer **PT-201VGA** 2x1 VGA Switcher, which is ideal for the following typical applications:

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

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/support/product_downloads.asp 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 **PT-201VGA** 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 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/>.

3 Overview

The high quality **PT-201VGA 2x1 VGA Switcher** is a micro-sized mechanical switcher designed for VGA/XGA/UXGA signals using high-density 15 pin HD connectors. The **PT-201VGA**:

- 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 high bandwidth exceeding 1200MHz and minimal crosstalk

3.1 Defining the PT-201VGA 2x1 VGA Switcher

This section defines the **PT-201VGA**.

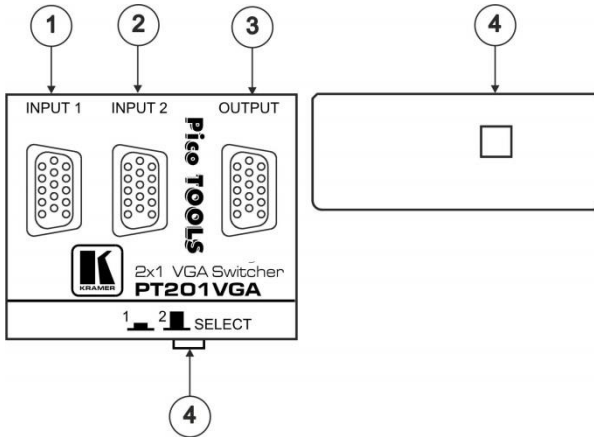


Figure 1: PT-201VGA 2x1 VGA Switcher

#	Feature	Function
1	INPUT 1 15-pin HD Connector	Connects to the video source 1
2	INPUT 2 15-pin HD Connector	Connects to the video source 2
3	OUTPUT 15-pin HD Connector	Connects to the video acceptor
4	SELECT Switch	Push in to select input 1; release to select input 2

4 Connecting the PT-201VGA

Since the unit is passive, you can connect your **PT-201VGA** as a 2x1 VGA switcher (see [Section 4.1](#)) or as a 1x2 VGA switcher (see [Section 4.2](#)).

4.1 Connecting the PT-201VGA as a 2x1 VGA Switcher

To use your **PT-201VGA** 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 15-pin HD connectors, as follows:
 - A VGA source (for example, PC graphics 1) to INPUT 1
 - A VGA source (for example, PC graphics 2) to INPUT 2
2. Connect the 15-pin HD OUTPUT connector to the VGA acceptor (for example, a display).
3. Push in the *SELECT* switch to route input 1, or release it to route input 2.

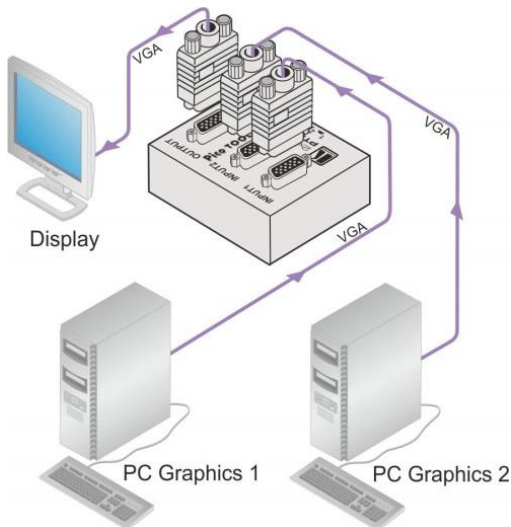


Figure 2: Connecting the PT-201VGA 2x1 VGA Switcher

4.2 Connecting the PT-201VGA as a 1x2 VGA Switcher

To use your **PT-201VGA** as a 1x2 VGA switcher, as the example in [Figure 3](#) illustrates, connect as follows:

1. Connect the VGA source (for example, PC graphics) to the 15-pin HD OUTPUT connector.
2. Connect the INPUT 15-pin HD connectors to up to 2 VGA acceptors, as follows:
 - INPUT 1 to a VGA acceptor (for example, display 1)
 - INPUT 2 to a VGA acceptor (for example, display 2)
3. Push in the *SELECT* switch to route the source signal to display 1 (at input 1), or release it to route the source signal to display 2 (at input 2).

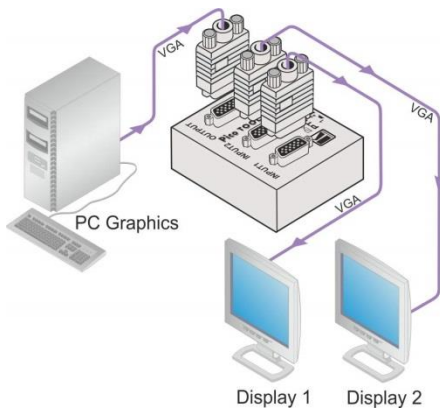


Figure 3: Connecting the PT-201VGA 1x2 VGA Switcher

5 Technical Specifications

INPUTS:	2 analog red, green, blue signals, 0.7Vpp/75Ω, H & V sync, TTL level, on 15-pin HD connectors
OUTPUTS:	1 analog red, green, blue signals, 0.7Vpp/75Ω, H & V syncs, TTL level, on an 15-pin HD connector
BANDWIDTH (-3dB):	1200MHz
OPERATING TEMPERATURE:	0° to +40°C (32° to 104°F)
STORAGE TEMPERATURE:	-40° to +70°C (-40° to 158°F)
HUMIDITY:	10% to 90%, RHL non-condensing
DIMENSIONS:	6cm x 6.5cm x 2.5cm (2.36" x 2.56" x 1") W, D, H
WEIGHT:	0.14kg (0.31lbs) approx.
INCLUDED ACCESSORIES:	Mounting bracket
OPTIONS:	RK-4PT 19" rack adapter
Specifications are subject to change without notice at http://www.kramerelectronics.com	

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 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.

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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 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

E-mail: info@kramerel.com

CE



SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing



P/N: 2900-001038



Rev: 3