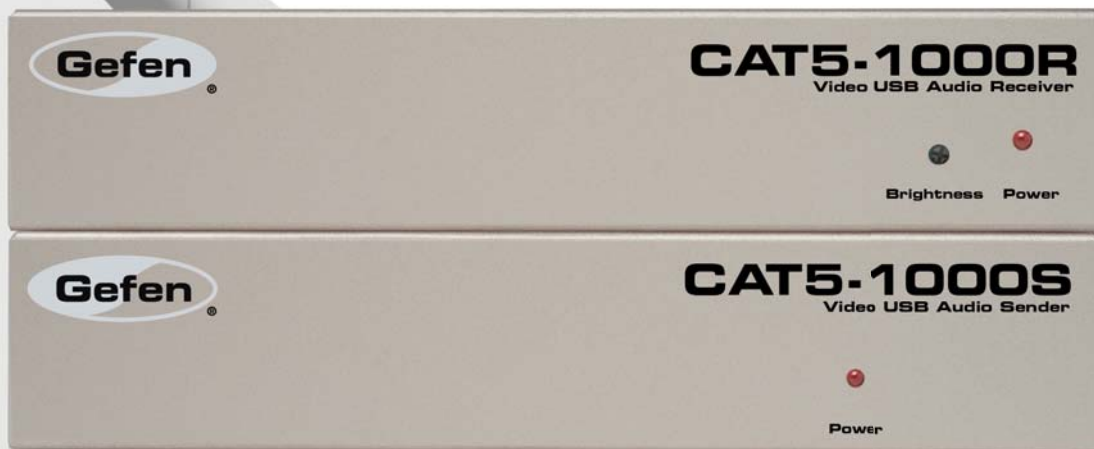




CAT5-1000

EXT-CAT5-1000
USER MANUAL



ASKING FOR ASSISTANCE

Technical Support:

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Notice

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Rev B2

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INTRODUCTION

Thank you for purchasing the new Gefen CAT5•1000 series.

The Gefen CAT5•1000 allows users the benefits of extending VGA, USB, and audio signals beyond the desktop. In a growing number of applications for broadcast stations and production facilities there is a need to control a computer remotely. The keyboard, mouse, and video monitor are relocated to the remote side. A CPU may need to be shared between several users or moved to another room because of annoying fan noise.

The CAT5•1000 can be used to extend computers with printers, hard drives, scanners, cameras, keyboards, mouse, and any other USB-type devices. The CAT5•1000 has the potential to extend the distance of 330 feet over industry standard Category 5 (CAT-5) cable. One can connect multiple CAT5•1000 units to the same computer, allowing access to the same computer from different locations up to 330 feet apart.

FEATURES

Features:

- Saves space—no need to make room for large or small CPUs at the workstation when the CAT5-1000 provides convenient and flexible ways to isolate the CPU at a distance and make room at the workstation area
- Increased productivity—a remote computer workstation allows computer data to be input and accessed on-site in real-time
- Improved aesthetics—the CAT5-1000 eliminates computer noise where you work
- Full functionality—the CAT5-1000 maintains 1920 x 1200 @ 75 Hz resolution video, support two types of analog monitors (CRT and LCD) and DDC control signals
- High Performance Technology—both models use Extreme USB technology for USB extension, ensuring control signals operate optimally
- Multimedia Enabled—audio is extended for multimedia applications
- Ease of use— the CAT5-1000 installs in seconds and the units are rack-mountable

The CAT5•1000 system consists of:

- (1) CAT5•1000S sender unit
- (1) CAT5•1000R receiver unit
- (2) 5V DC power supply
- (1) Video cable (6 FT)
- (1) USB cable (6 FT)
- (1) Audio cable (6 FT)
- (1) User Manual

HOW IT WORKS

In its most basic application, the CAT5•1000S sender unit resides next to the computer. With the supplied VGA, USB, and audio cables, they connect the computer to the CAT5•1000S sender unit.

The CAT5•1000R receiver unit and USB peripherals are placed next to the monitor. The monitor and USB devices are connected to the CAT5•1000R in the same way they are connected to the back of the computer (PC or Macintosh).

Industry standard Category 5 (CAT-5) cables are used to link CAT5•1000S sender and CAT5•1000R receiver units together. The VGA, USB, and audio signals are extended by one CAT-5 cable.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE CAT5•1000 SYSTEM

- * Industry standard Category-5 (CAT-5) cables are used to link the CAT5•1000 sender and receiver boxes together.
- * When two monitors are used in the local and remote locations, the video monitors must be a multi-resolution type. This pertains to monitors placed remotely, and those divided between local and remote locations. The video monitors will not initialize correctly at start-up if they are different types.
- * The CAT5•1000 units are housed in a metal box for better RF shielding.

CAT5•1000S FRONT PANEL LAYOUT



Front Panel Function Descriptions

- 1 **POWER ON INDICATOR** - Indicates that the unit is plugged in and powered on

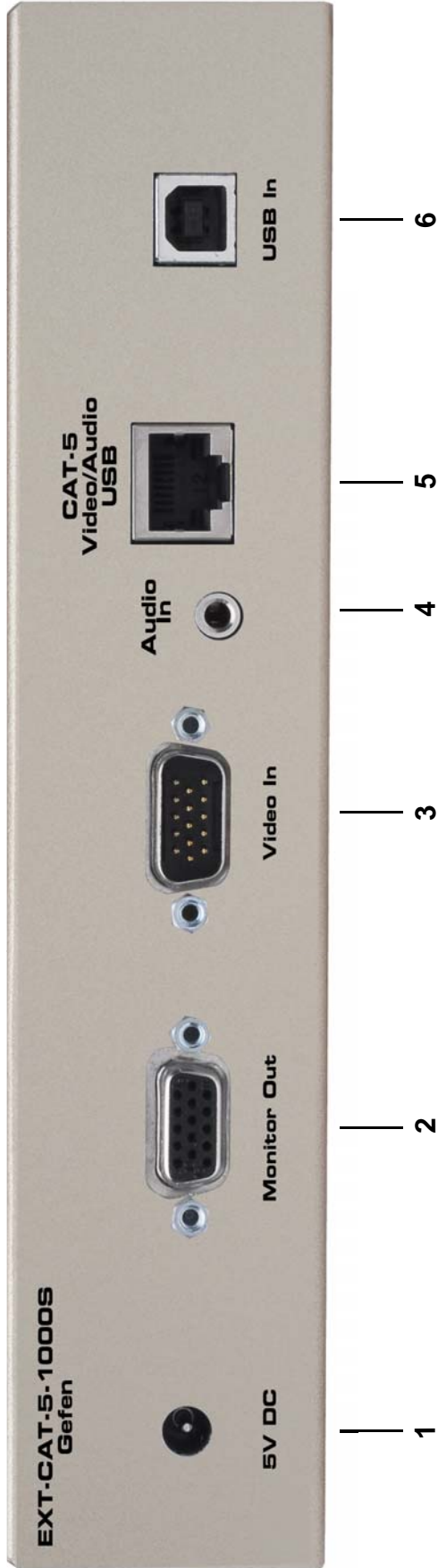
CAT5-1000R FRONT PANEL LAYOUT



Front Panel Function Descriptions

- 1 **BRIGHTNESS** - Adjusts the brightness for monitor 1
- 2 **POWER ON INDICATOR** - The red LED indicates that the unit is powered on

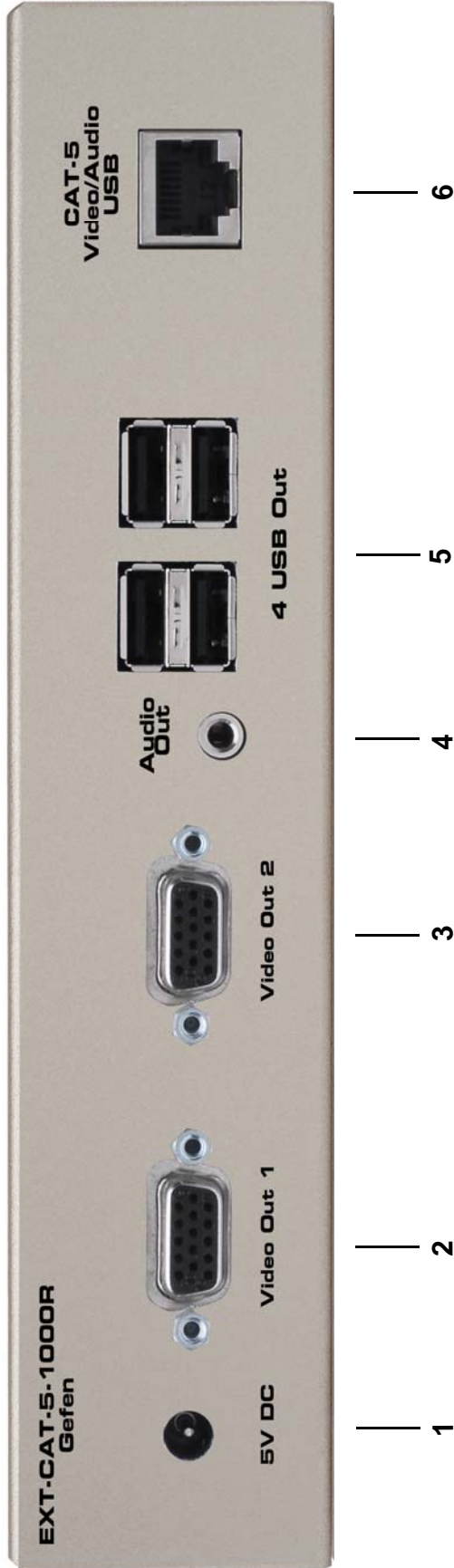
CAT5•1000S SEND UNIT BACK PANEL



CAT5•1000S BACK PANEL FUNCTIONS

- 1 **POWER** - 5 VDC external power supply
- 2 **MONITOR OUT** - HD15 output connects to the monitor for local video
- 3 **VIDEO IN** - HD15 input from computer
- 4 **AUDIO** - Analog audio mini-stereo 3.5mm jack input from computer
- 5 **RJ-45 VID/AUD/USB** - RJ-45 input extends VGA, USB, and audio signals with CAT5 extension cable
- 6 **USB IN** - USB Input from computer

CAT5•1000R BACK PANEL LAYOUT



CAT5•1000R BACK PANEL FUNCTIONS

- 1 **POWER** - 5 VDC external power supply
- 2 **VIDEO OUT 1** - HD15 output connecting to the video monitor
- 3 **VIDEO OUT 2** - HD15 output connecting to the video monitor (mirrored video)
- 4 **AUDIO** - Analog Audio 3.5mm stereo mini-phono jack
- 5 **(4) USB OUT** - USB Outputs (Type A) - Connects to USB devices
- 6 **CAT-5 VID/AUD/USB** - RJ-45 input connects CAT-5 cable to receive extended VGA, USB, and audio signals

CAT5 CABLE LENGTH SETUP

Jumper settings are used to set the focus of the picture and characters to the best possible sharpness. The jumpers in the CAT5•1000R are set at the factory as shown in the diagram below. The first step to adjusting the video is to have the CAT5•1000S and CAT5•1000R connected together with the CAT-5 cable that is going to be used in the installation. Then set your computer to the resolution and refresh rate that you will be using most frequently be using. Then open up the CAT5•1000R by unscrewing the bottom three screws on back end of the box. Then two screws on each side of the box and the top. That is 9 screws in total that need to be removed. Lastly the 4 hex bolts around the Monitor Out port and the Video In port need to also be removed. After that look at some text on the monitor and set the jumpers to the recommend jumper setting based on the length of your CAT-5 cable. If you still see some smearing try moving all the jumpers up or down one from the recommended setting. If you see smearing of just one color adjust an individual jumper for the color that is smearing (it can be two colors). Repeat the same steps for monitor 2

Recommended Jumper Settings

Cable length

0-132 feet



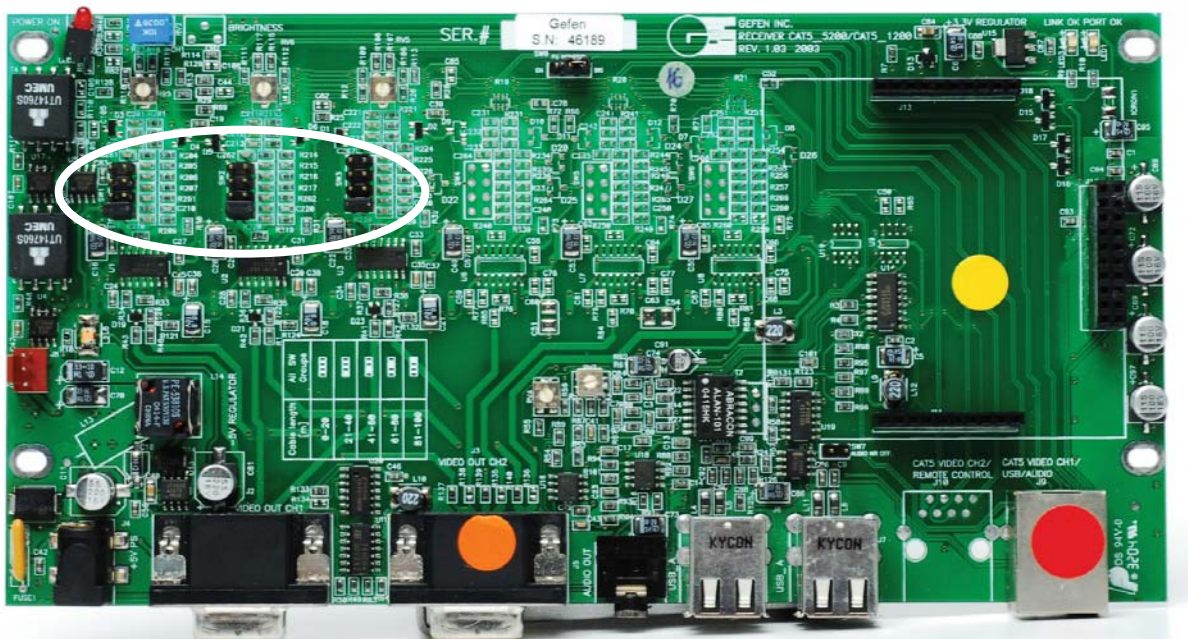
133-198 feet



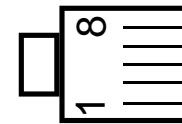
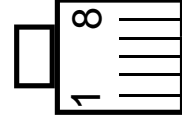
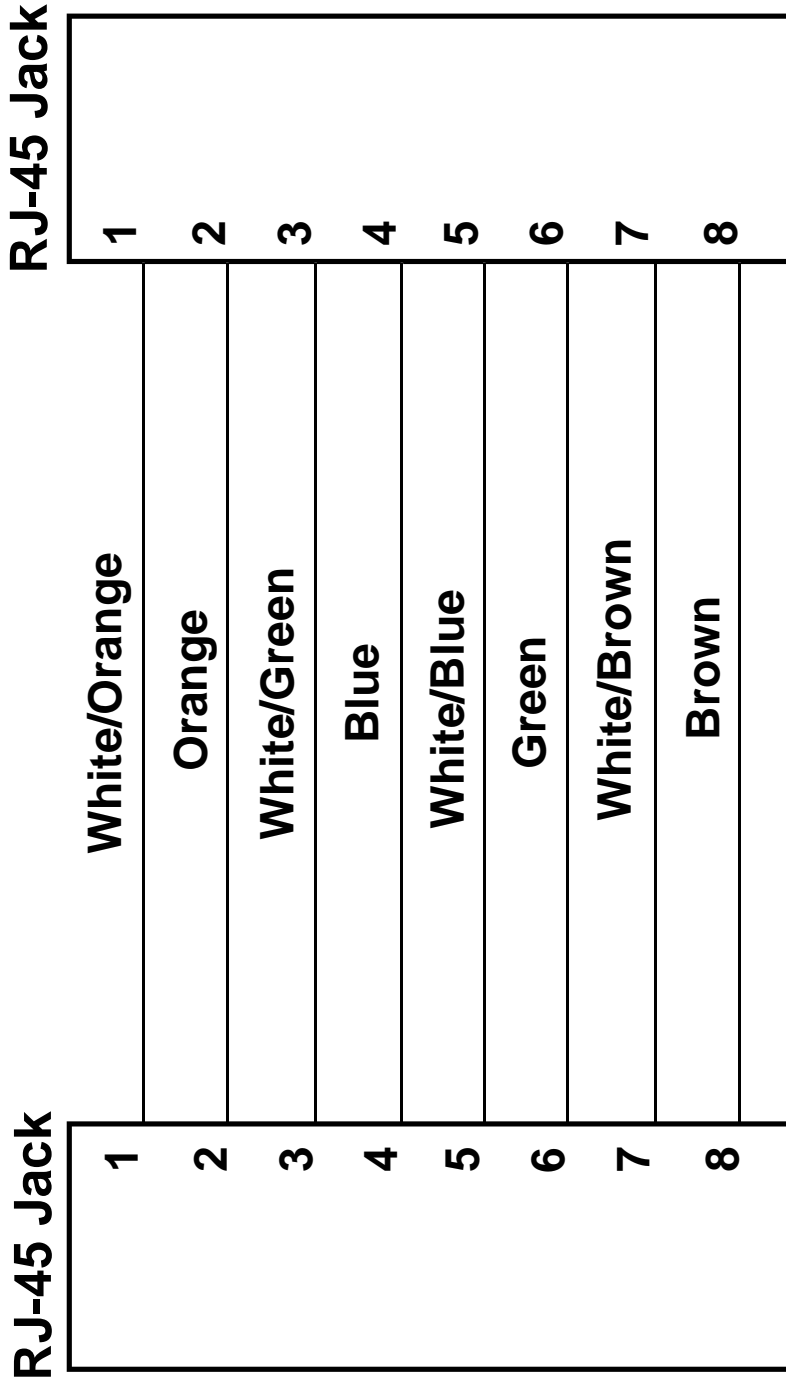
199-264 feet



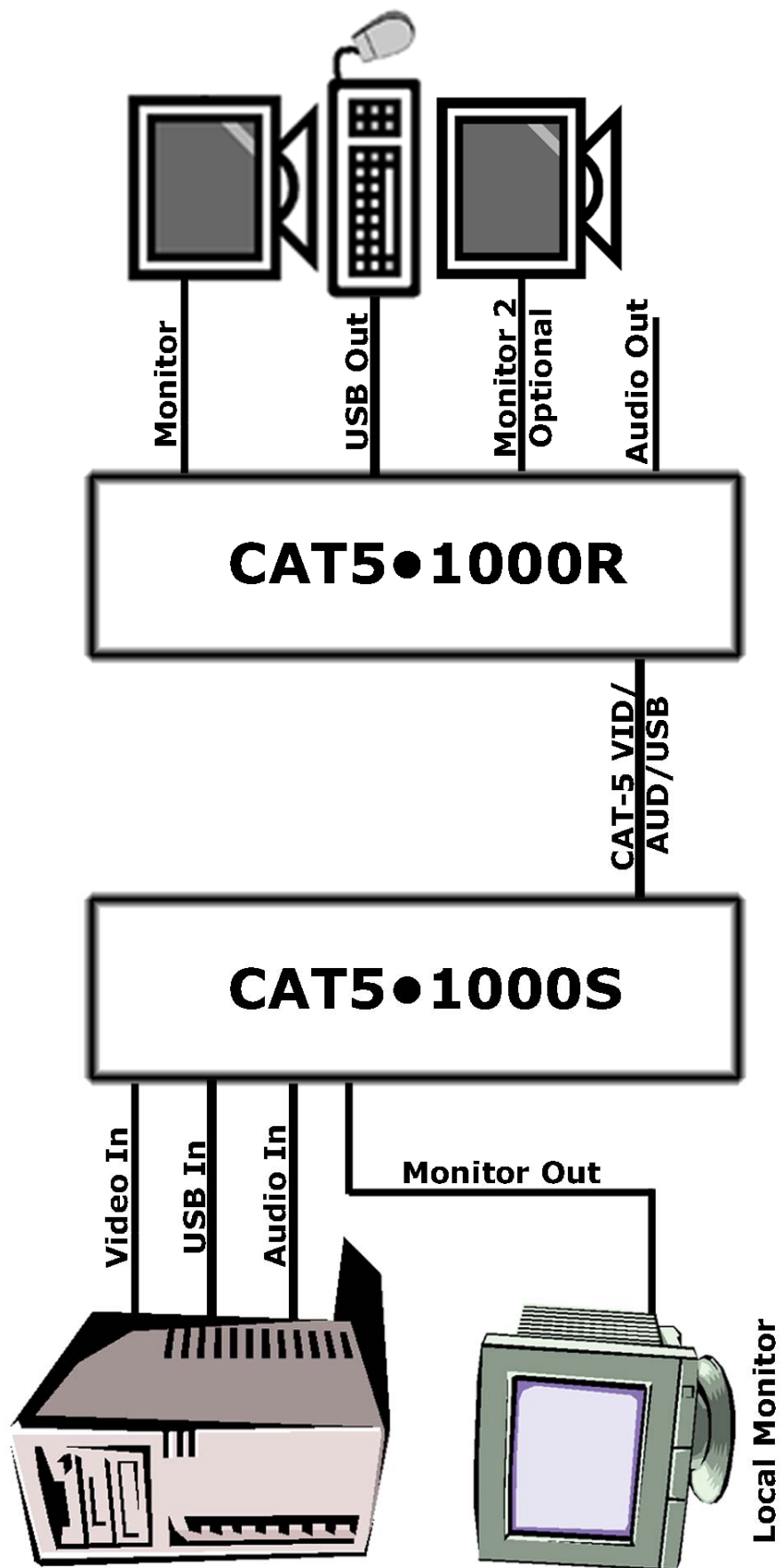
265-330 feet



LINK CABLE - WIRING DIAGRAM



CAT5•1000 WIRING DIAGRAM



SPECIFICATIONS

Video Amplifier Bandwidth	350 MHz
Actual Bandwidth	120 MHz
Input Video Signal	1.2 Volts p-p
Input Sync Signal	5 Volts p-p (TTL)
Horizontal Frequency Range	15-70 KHz
Vertical Frequency Range	30 - 170 Hz
Video In.....	HD-15
Focus/Brightness Control	25 to 330 FT
Video out	HD-15
Link Connector	RJ-45
USB - "A" Connector	USB Input
USB - "B" Connector	USB Device Input
Power Consumption	20 Watts per unit (max.)
Power Supply	5 VDC (External)
Dimensions	8.5" W x 1.75" H x 4.6" D
Rack Mountable	1 Rack Space
Shipping Weight	8 Lbs

WARRANTY

Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

For the latest warranty coverage information, please visit Gefen's Warranty web page at <http://www.gefen.com/kvm/aboutus/warranty.jsp>

PRODUCT REGISTRATION

Please register your product online by visiting Gefen's web site at <http://www.gefen.com/kvm/Registry/Registration.jsp>



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This product uses UL listed power supplies.