



# CAT5•7500

EXT-CAT5-7500  
USER MANUAL



## ASKING FOR ASSISTANCE

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# INTRODUCTION

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Thank you for purchasing the new extend•it CAT5•7500 series by Gefen, Inc.

The extend•it CAT5•7500 by Gefen allows users the benefits of extending VGA, USB, PS/2, RS232, and audio signals beyond the desktop. In a growing number of applications, broadcast stations and production facilities there is a need to locate a computer remotely, from the keyboard, mouse, and video monitor. A CPU may need to be shared between several users or moved to another room because of annoying fan noise.

The CAT5•7500 series can be used to extend computers with noisy fans, printers, hard drives, scanners, cameras, keyboards, mouse, and any other USB-type devices. The CAT5•7500 has the potential to cover the distance of 330 feet over industry standard Category 5 (CAT-5) cables. One can connect additional CAT5•7500 series to the same computer, allowing access to the same computer from other locations up to 330 feet apart.

## CONTENTS

The CAT5•7500 system consists of:

- (1) CAT5•7500S sender unit
- (1) CAT5•7500R receiver unit
- (2) 5 VDC power supply
- (2) VGA M-F cables (6FT)
- (2) PS/2 M-M cables (6FT)
- (1) USB cable (6FT)
- (1) Audio cables (6FT)
- (1) Rack Ears
- (1) User Manual

## HOW IT WORKS

In its most basic application, the CAT5•7500S sender unit resides next to the computer. Supplied with the system, VGA cables, PS/2 keyboard, PS/2 mouse, audio, and USB cables, they connect the computer to the CAT5•7500S sender unit.

The CAT5•7500R receiver unit are placed next to the monitors, keyboard, mouse, and USB peripherals at the remote location. The monitor and keyboard are connected to the CAT5•7500R, similar to the 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•7500S sender and CAT5•7500R receiver units together. Monitor 1 is extended by one CAT-5 cable, monitor 2 is extended with a second CAT5 cable. USB and audio 1 are with a third CAT-5 cable. RS232 and PS/2 signals are extended with a fourth CAT5 cable. Audio is extended with a fifth CAT5 cable.

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE CAT5•7500 SYSTEM

- Use industry standard Category-5 (CAT-5) cable to operate the CAT5•7500 system. CAT-5 E cable is preferred.
- When monitors are used in the local and remote locations, the video monitors must be able to use the same resolution. 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 unable to sync the same resolution of the local monitors.
- Please connect all the cables between the computer and the CAT5•7500S before power up the CAT5•7500S unit.
- The CAT5•7500 units are housed in a metal box for better RF shielding.

## CAT5•7500S FRONT PANEL DESCRIPTION

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### Front Panel Function Description

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

### Receiver Front Panel Function Description

- 1 **F2** - Fine focus adjustment for monitor 2
- 2 **B2** - Adjusts the brightness for monitor 2
- 3 **F1** - Fine focus adjustment for monitor 1
- 4 **B1** - Adjusts the brightness for monitor 1
- 5 **POWER ON INDICATOR** - Indicates that the unit is plugged in and powered on

# CAT5•7500R FRONT PANEL DESCRIPTIONS

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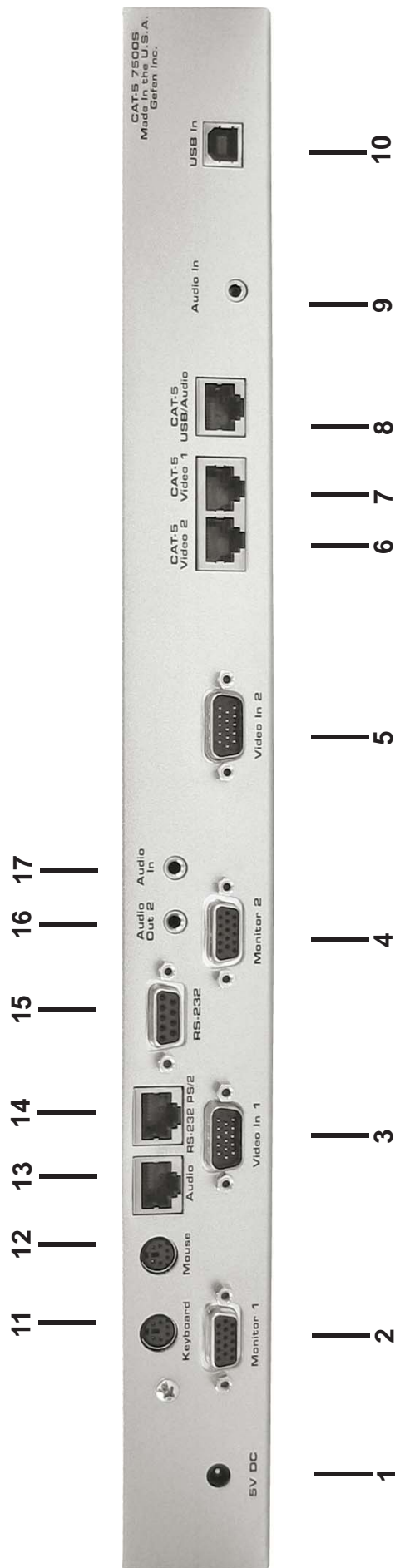


## CAT5•7500S BACK PANEL DESCRIPTIONS

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- 1 **POWER** - 5 VDC external power supply
- 2 **MONITOR 1** - HD15 output connects to local monitor 1
- 3 **VIDEO IN 1** - HD15 input from computer
- 4 **MONITOR 2** - HD15 output connects to local monitor 2
- 5 **VIDEO IN 2** - HD15 input from computer
- 6 **CAT-5 VIDEO 2** - RJ-45 input extends video input 2 with CAT-5 cable
- 7 **CAT-5 VIDEO 1** - RJ-45 input extends video 1 with CAT-5 cable
- 8 **CAT-5 USB/AUD** - RJ-45 input extends USB and audio 1 with CAT-5 cable
- 9 **AUDIO IN 1** - Audio Mini Jack input from computer
- 10 **USB IN** - USB input from computer
- 11 **KEYBOARD** - Mini din PS/2 connector connects to PC for keyboard controls
- 12 **MOUSE** - Mini din PS/2 connector connects to PC for mouse controls
- 13 **CAT-5 AUDIO** - RJ-45 input extends audio out and audio 2 with CAT-5 cable
- 14 **CAT-5 RS232/PS2**- RJ-45 input extends RS232, and PS/2 keyboard and mouse with CAT-5 cable
- 15 **RS232** - DB-9 input from computer
- 16 **AUDIO OUT 2**- Audio Mini Jack input from computer
- 17 **AUDIO IN 1** - Audio Mini Jack input from computer

# CAT5•7500S BACK PANEL LAYOUT

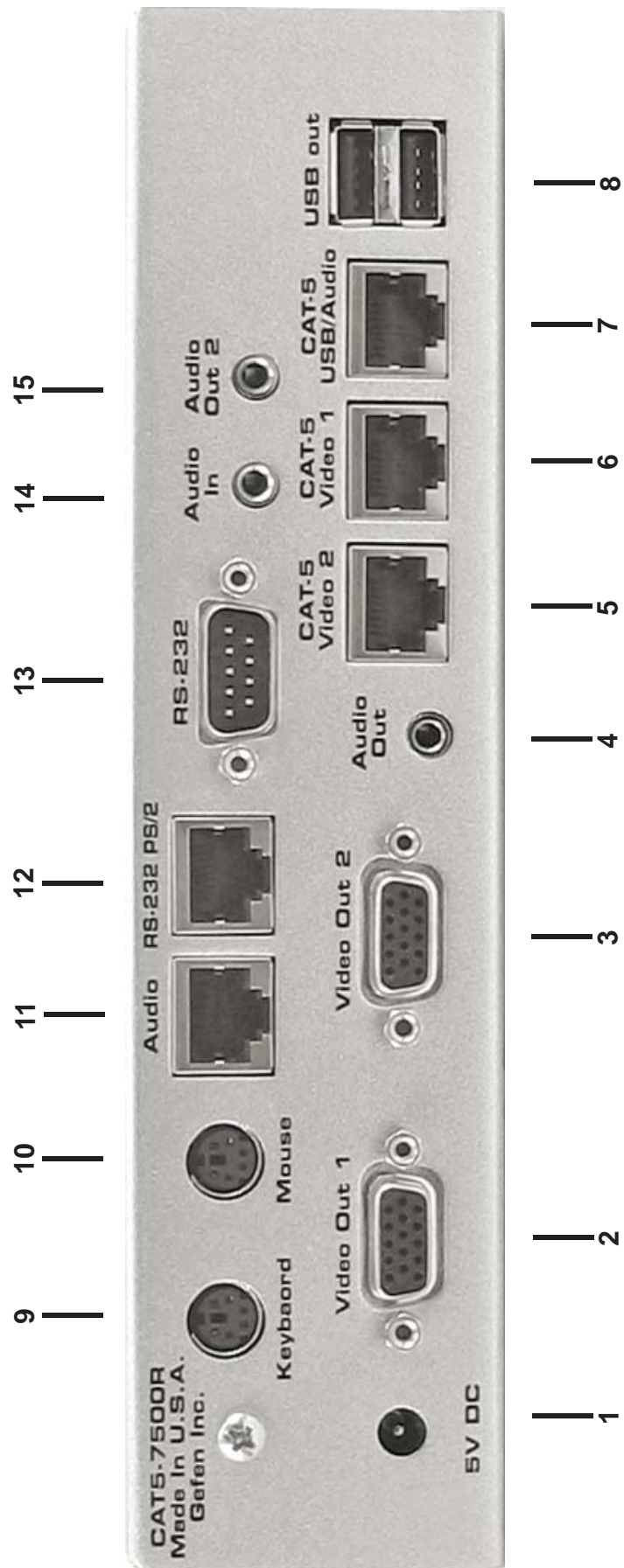


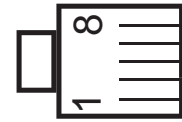
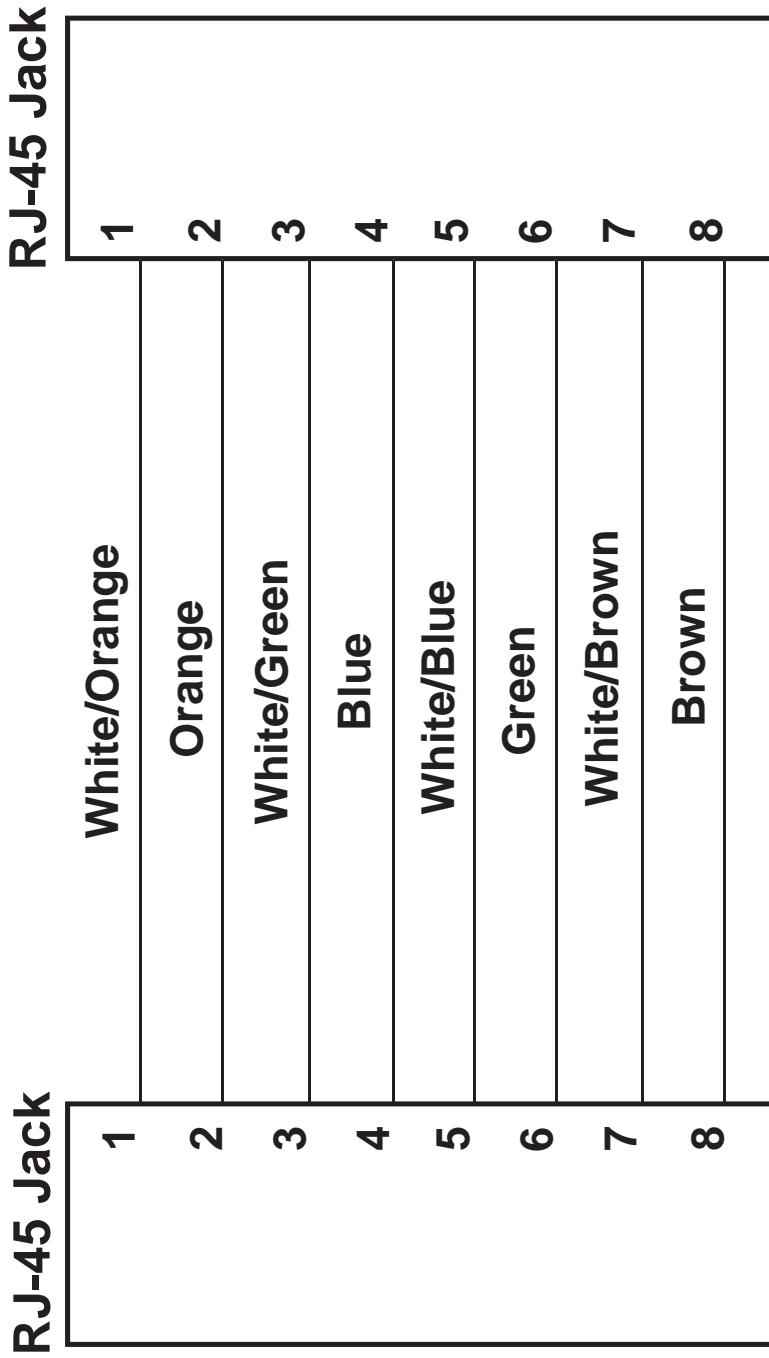
## CAT5•7500R BACK PANEL DESCRIPTIONS

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- 1 **POWER** - 5 VDC external power supply
- 2 **VIDEO OUT 1** - HD15 output connecting to the video monitor 1
- 3 **VIDEO OUT 2** - HD15 output connecting to the video monitor 2
- 4 **AUDIO OUT 1** - Audio mini jack connects to speakers
- 5 **CAT-5 VIDEO 2** - RJ-45 input connects CAT-5 cable to receive extended video signals
- 6 **CAT-5 VIDEO 1** - RJ-45 input connects CAT-5 cable to receive extended video signals
- 7 **CAT-5 USB/AUDIO** - RJ-45 input connects CAT-5 cable to receive extended USB and audio 1 signals
- 8 **USB OUT** - 2 port power USB hub, connects to USB devices
- 9 **KEYBOARD** - PS/2 output connects to the keyboard
- 10 **MOUSE** - PS/2 output connects to the mouse
- 11 **CAT-5 AUDIO** - RJ-45 input connects CAT-5 cable to receive extended audio in and audio 2 signals
- 12 **CAT-5 RS232/PS2** - RJ-45 input connects CAT-5 cable to receive extended RS-232 and PS/2 signals
- 13 **RS232** - DB-9 connector connects to RS-232 devices
- 14 **AUDIO IN** - Audio mini jack connects to microphone
- 15 **AUDIO OUT 2** - Audio mini jack connects to speakers

# CAT5-7500R BACK PANEL LAYOUT





# 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•7500R are set at the factory as shown in the diagram below. The first step to adjusting the video is to have the CAT5•7500S and CAT5•7500R 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•7500R 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 recommended 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 on 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

**\*As shown in picture**

133-198 feet

199-264 feet

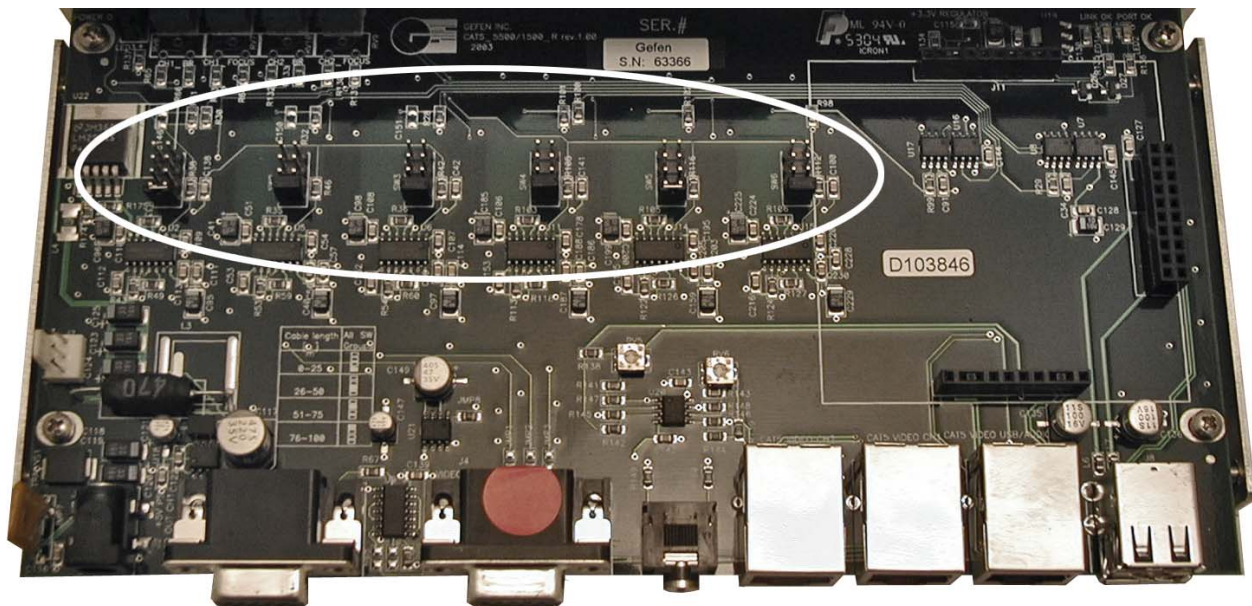
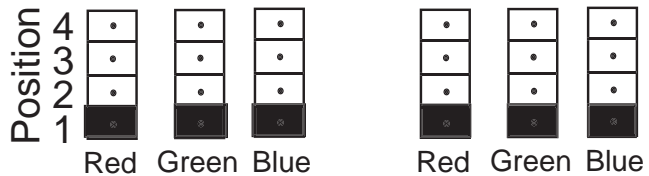
265-330 feet



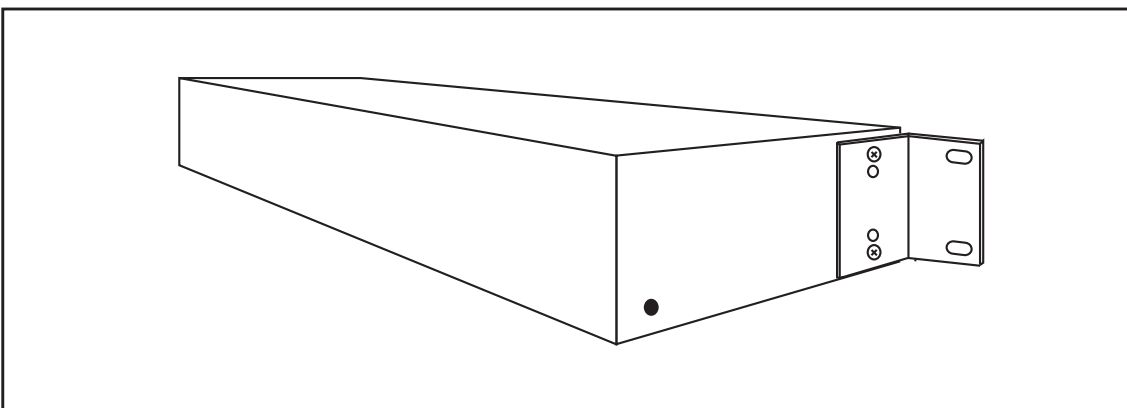
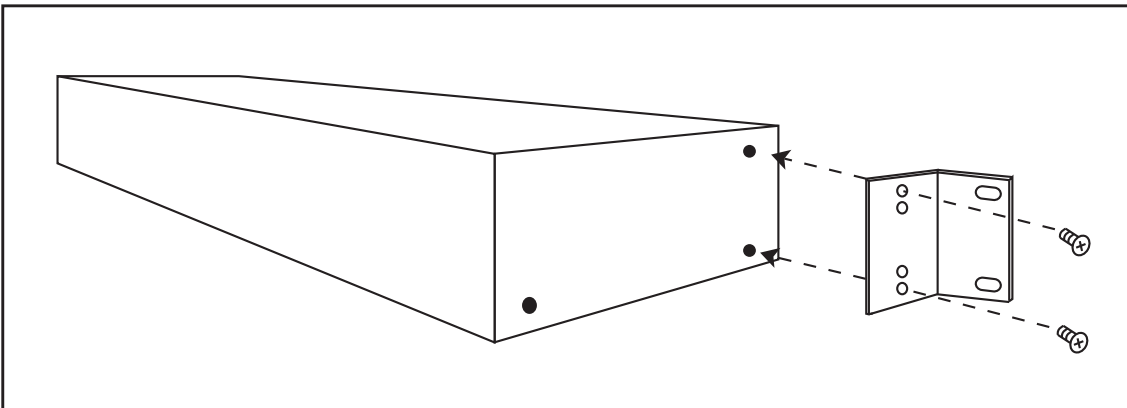
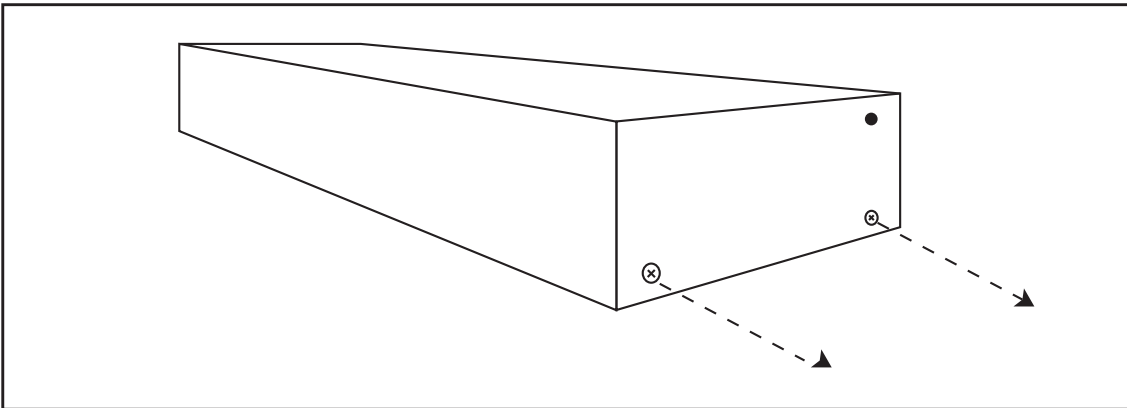
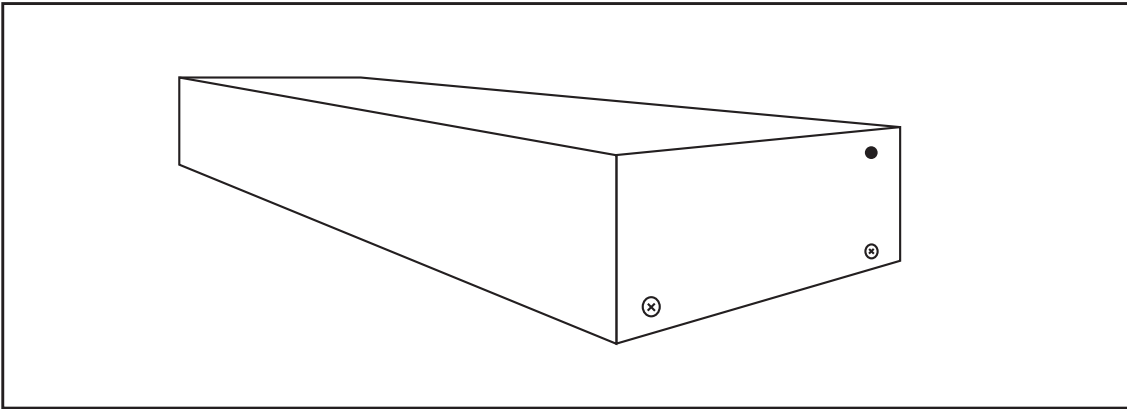
## Jumper Settings

Video 1 on the left

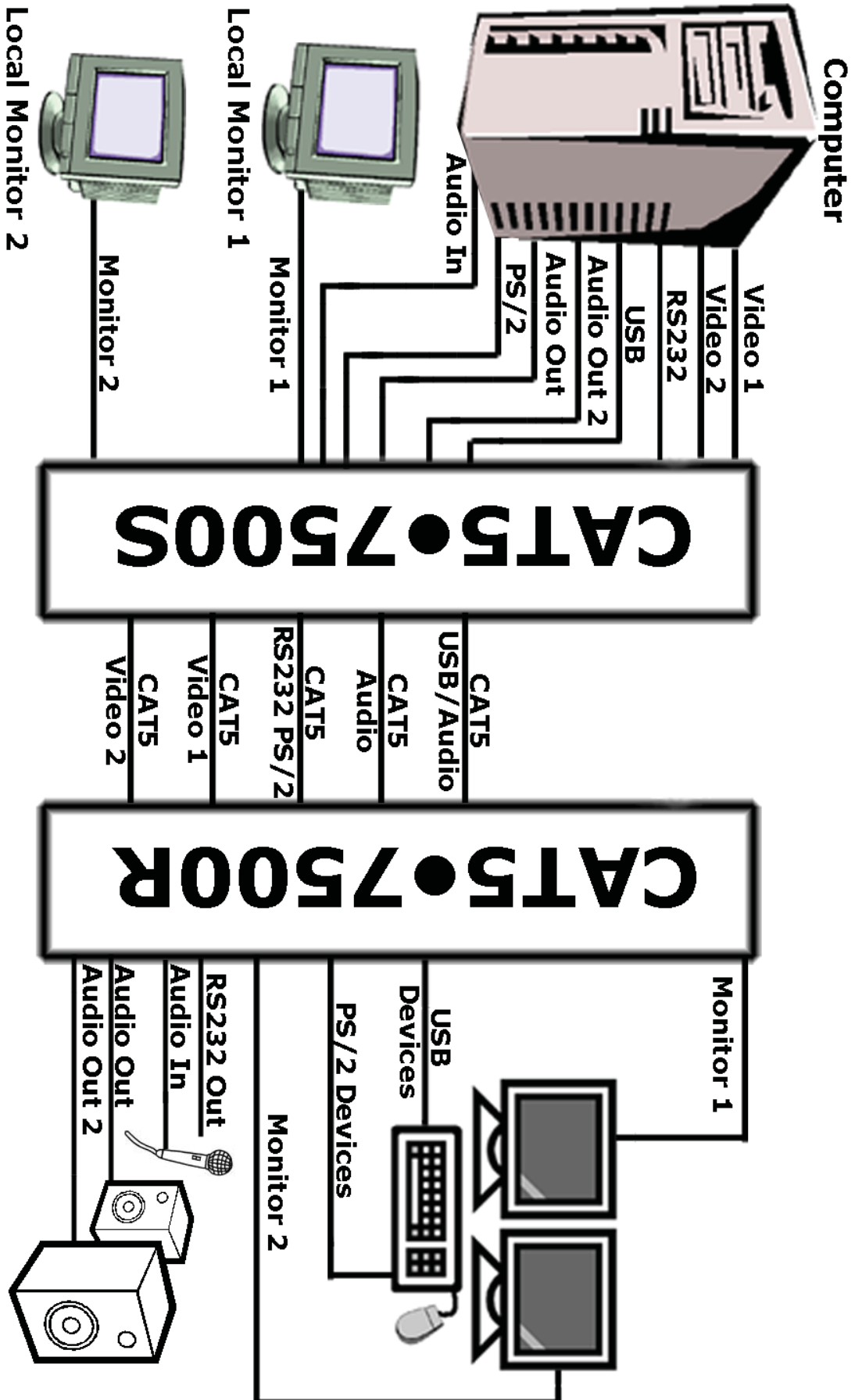
Video 2 on the right



# CAT5•7500S RACK MOUNT DIAGRAM



# WIRING DIAGRAM





## SPECIFICATIONS

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Video Amplifier Bandwidth .....	350 MHz
Input Video Signal .....	1.2 Volts p-p
Video In .....	HD-15
Focus/Brightness Control .....	25 to 330 FT
Video out .....	HD-15
Link Connector .....	RJ-45
Audio Connector .....	mini-stereo 3.5mm phono jack
PS/2 Keyboard Connectors .....	6 Pin MiniDin
PS/2 Mouse Connectors .....	6 Pin MiniDin
USB - "A" Connector .....	USB Input
USB - "B" Connector .....	USB Device Input
Power Consumption .....	20 Watts (max) per unit
Power Supply .....	5V DC (External)
Dimensions .....	(CAT5•7500S) 17.1"W x 1.4"H x 4.2"D
Dimensions .....	(CAT5•7500R) 8.4"W x 2"H x 4.2"D
Rack Mountable .....	1 Rack Space
Shipping Weight .....	9 Lbs