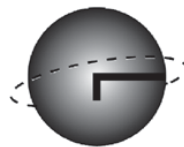


ex·tend·it
KVM Extender

Professional Series
CAT5-5000

USER MANUAL



GEFEN Inc.

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Notice

Gefen Inc. reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

CAT5•5000 is a trademark of Gefen Inc.
Macintosh is a trademark of Apple Computer Inc.

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INTRODUCTION

Thank you for purchasing the new ex•tend•it CAT5-5000 series by Gefen, Inc.

The ex•tend•it CAT5•5000 by Gefen allows users the benefits of extending USB, audio, and video signals beyond the desktop. In a growing number of applications, broadcast stations and production facilities need to locate a computer remotely from the keyboard, mouse, and video monitor. A CPU may need to be shared between several users, for example, or moved to another room because of annoying fan noise.

The CAT5•5000 series can be used to extend computers with noisy fans, printers, hard drives, scanners, cameras, keyboards, mouse, and any other USB-type device. With the potential to cover the distance of 330 feet, industry standard Category 5 (CAT-5) cables are used for the extension of all the devices. One can connect additional CAT5•5000 series to the same computer, allowing access to the same computer from other locations up to 330 feet apart.

HOW IT WORKS

CONTENTS

The CAT5•5000 system consists of:

- (1) CAT5•5000S sender unit
- (1) CAT5•5000R receiver unit
- (2) 12 VAC power supply
- (2) Video cable (6FT)
- (1) USB cable (06FT)
- (1) User Manual

HOW IT WORKS

In its most basic application, the CAT5•5000S sender unit resides next to the computer. Supplied with the system, straight VGA cable and USB cables connect the computer to the CAT5•5000S sender unit.

The CAT5•5000R receiver unit is placed next to the monitors and USB device, at the remote location. The monitors and USB device are connected to the CAT5•5000R 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•5000S sender and CAT5•5000R receiver units together. The first monitor, and USB signals are extended by one CAT-5 cable, while the second monitor is extended by the second CAT-5 cable. Audio is extended using a third CAT-5 cable.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE CAT5•5000 SYSTEM

* Industry standard Category-5 (CAT-5) cables are used to operate CAT5•5000 systems. Linking the sender and receiver boxes together, the CAT5•5000 model requires one CAT-5 cable to extend the first monitor, and single mode USB. A second CAT-5 cable is required to extend monitor 2, and third CAT-5 cable is used to extend audio.

* 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•5000 units are housed in a metal box for better RF shielding.

CAT5•5000S FRONT PANEL DESCRIPTIONS

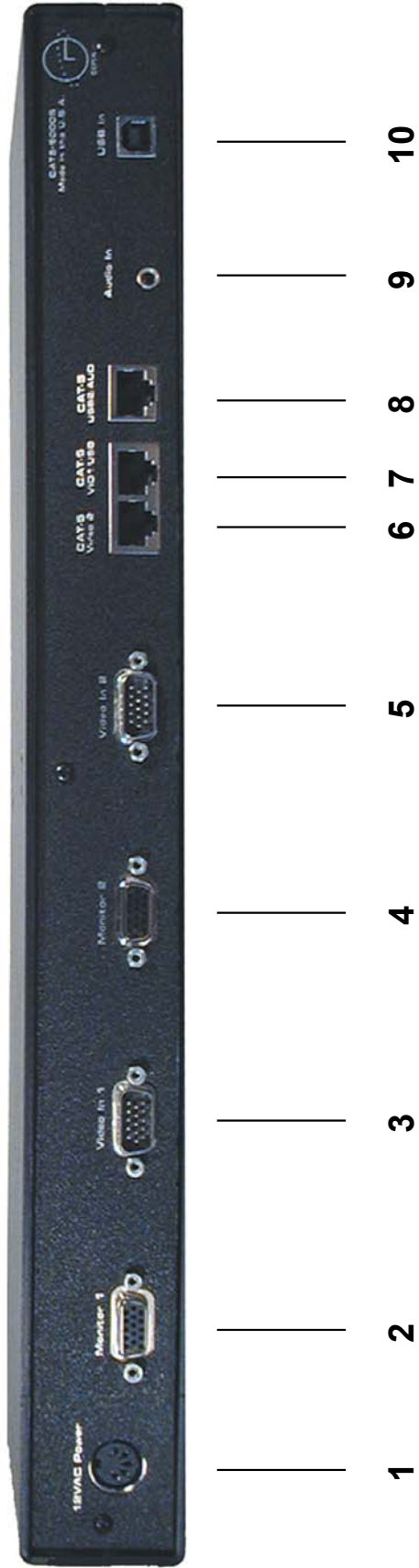


1

FRONT PANEL FUNCTION DESCRIPTIONS

- 1 Power On Indicator**
Indicates that the unit is on and plugged in.

CAT5•5000S BACK PANEL LAYOUT



CAT5•5000S BACK PANEL LAYOUT

- 1 POWER** - 12 VAC external power supply
- 2 MONITOR 1** - HD15 output connects to the monitor 1 for local video
- 3 VIDEO IN 1** - HD15 input from computer
- 4 MONITOR 2** - HD15 output connects to the monitor 2 for local video
- 5 VIDEO IN 2** - HD15 input from computer
- 6 CAT5 2 Video 2** - RJ-45 input extends video input 2 with CAT-5 cable
- 7 CAT5 1 VID1/USB** - RJ-45 input extends video, and USB signals with CAT-5 cable
- 8 CAT5 USB2/AUD** - RJ-45 input extends audio signals with CAT-5 cable
- 9 AUDIO IN** - Audio Mini Jack input from computer
- 10 USB IN** - USB Input from computer

CAT5•5000R FRONT PANEL LAYOUT



Front Panel Function Descriptions

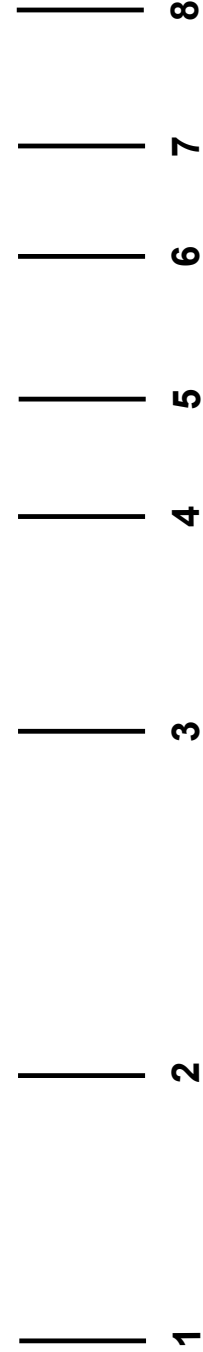
1 **Brightness**

Trim pot settings adjust brightness settings based on cable length

2 **Power On Indicator**

Indicates that the unit is on and plugged in.

CAT5•5000R BACK PANEL LAYOUT



CAT5•5000R BACK PANEL FUNCTIONS

- 1 POWER** - 12 VAC 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** - Audio Mini Jack
- 5 USB OUT** - USB Outputs - Connects to USB devices
- 6 CAT-5 Video 2** - RJ-45 input connects CAT-5 cable to receive extended video signals
- 7 CAT-5 Video/USB 1** - RJ-45 input connects CAT-5 cable to receive extended video signals and extended USB signals
- 8 CAT5 Audio/USB** - RJ-45 input connects CAT-5 cable to receive extended audio signals

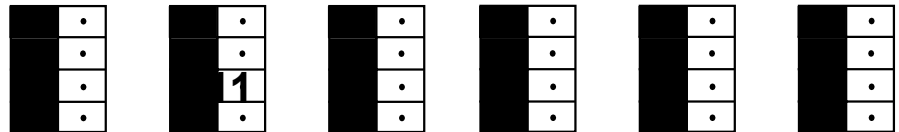
CAT5 CABLE LENGTH SETUP

In order to get the best video quality out of the CAT5•5000, you need to set the jumpers inside the receiver box according to the length of the CAT5 cable being used. The factory default setting is for 81-165 feet range. If the CAT5 cable length is longer than a 165 feet or shorter than 80 feet, then you will need to open the CAT5•5000R receiver unit by unscrewing the the top two side screws on each side of the unit. Please note you will only need to change the jumper settings if the video does not look perfect.

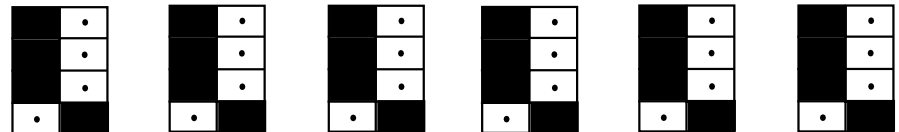
Jumper Settings

Cable length

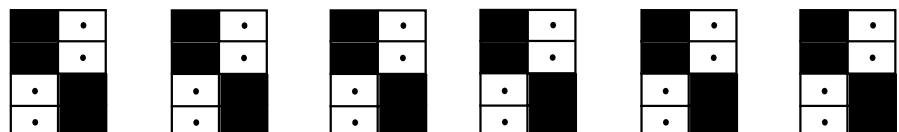
0-80 feet



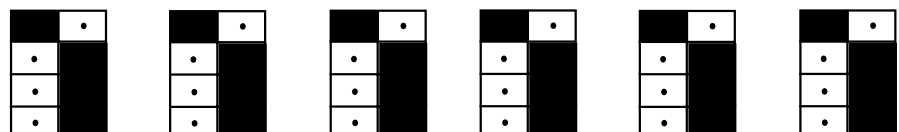
81-165 feet



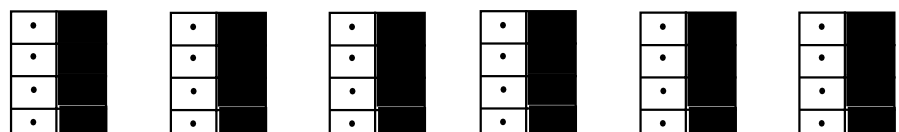
166-265 feet



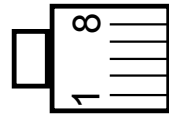
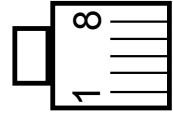
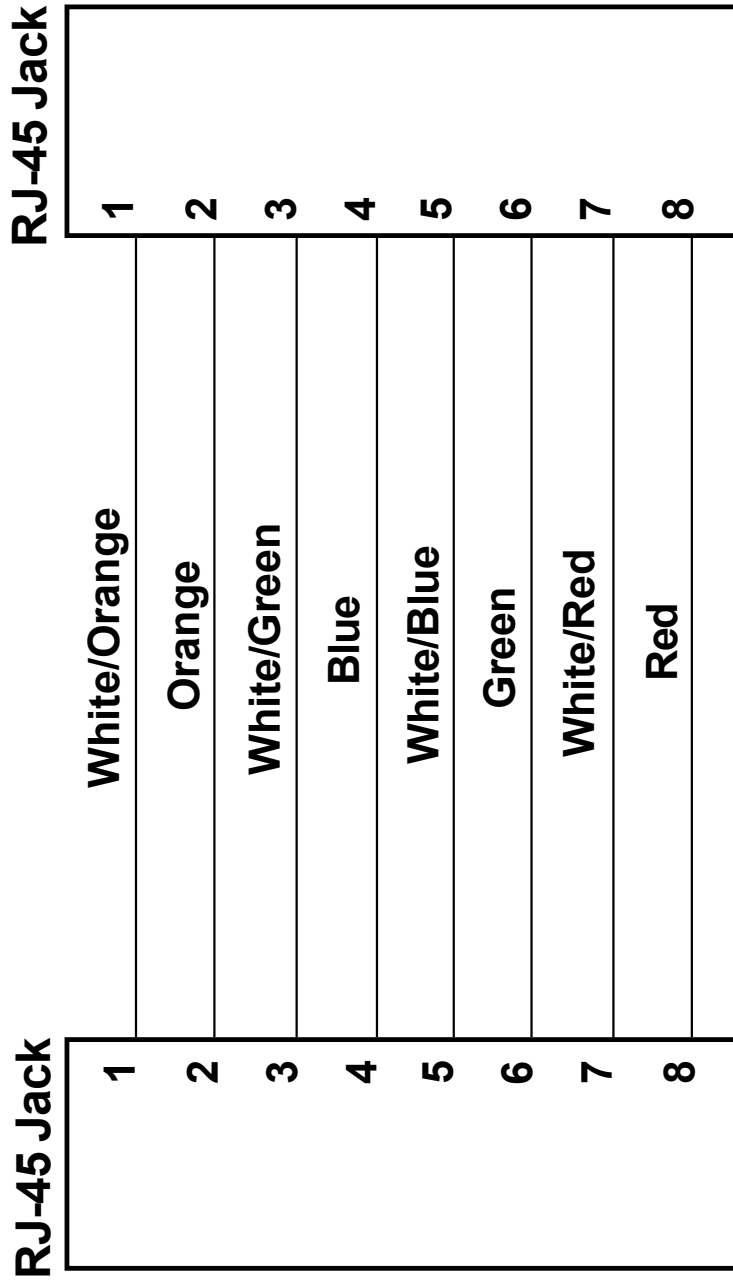
266-363 feet



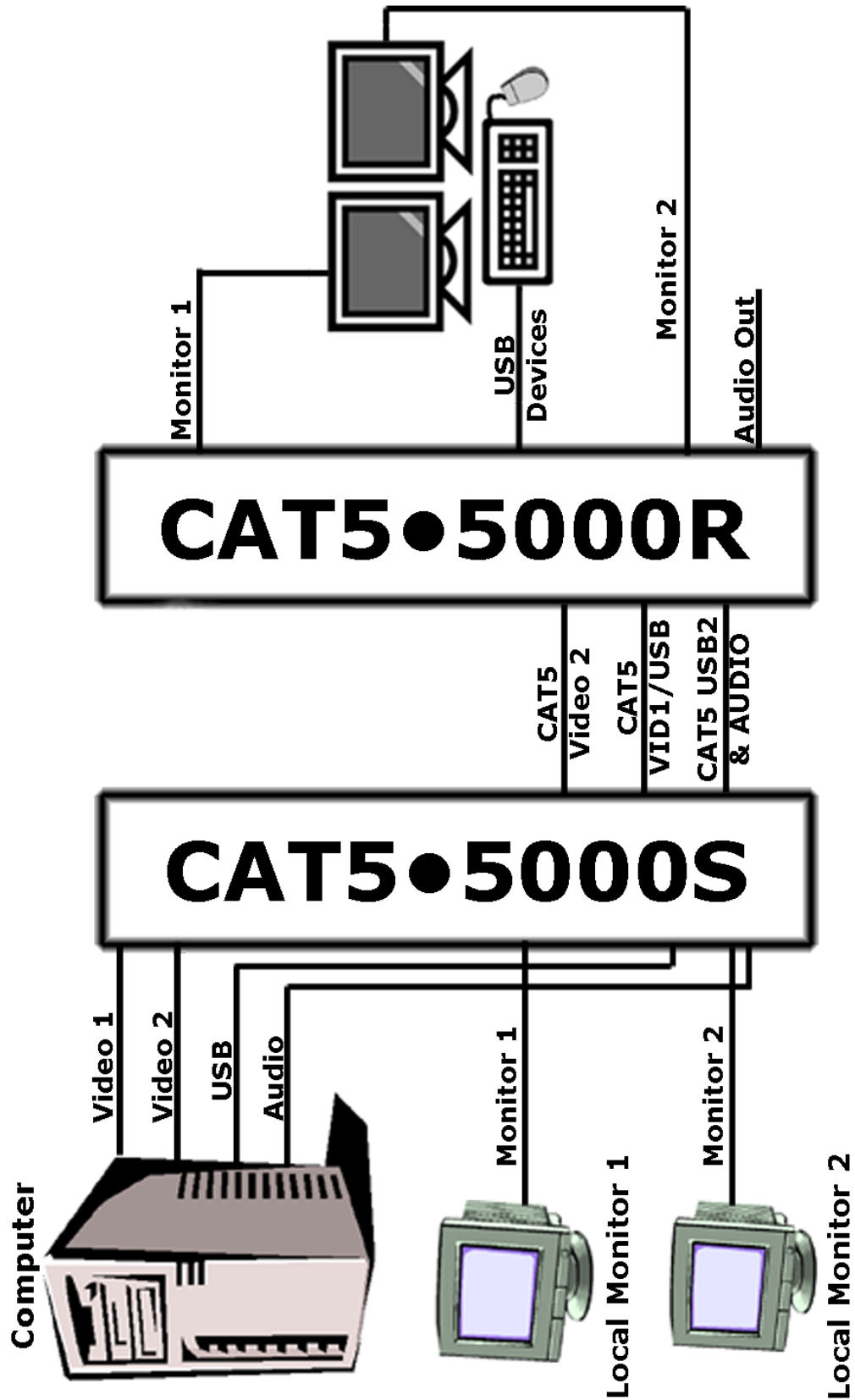
364-495 feet



CAT5 LINK CABLE - WIRING DIAGRAM



CAT5•5000 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 450 FT
Video out	HD-15
Link Connector	RJ-45
USB - "A" Connector	USB Out
USB - "B" Connector	USB Device Input
Power Consumption	15 Watts (max.)
Power Supply	12 VAC (External)
Dimensions Send Unit	16"W x 1 3/4"H x 4"D
Dimensions Receive Unit ..	8"W x 1 3/4"H x 4"D
Rack Mountable	2 Rack Spaces
Shipping Weight	13 Lbs

WARRANTY

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

If equipment fails because of such defects and Gefen Inc. is notified within one (1) year from the date of shipment, Gefen System 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 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.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen Inc. assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen Inc., 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 CAT5•5000 features and specifications is subject to change without notice.