



# Extend VGA & RS-232 over a single CAT-5 cable

## Optional Accessories



CAT-5 Cables



VGA Cables

## VGA RS232 extender

Extends any VGA or Component HD display plus RS-232 using a Single CAT-5 cable up to 330 feet away.

### How It Works

The VGA RS232 Extender sender unit connects to your source using the supplied VGA and RS-232 cables. The receiver unit connects to your display and your Serial (RS-232) device - up to 330 feet away. Connect the sender and the receiver to each other using a single CAT-5 cable.

### Features:

- Extends any VGA or high definition component display and RS-232 device up to 330 feet (100 meters)
- Trim pot and dip switches for fine video equalization
- Perfect for digital signage applications
- One CAT-5 cable for extension
- Supports resolutions up to 1080p, 2K, and 1920 x 1200

### Specifications:

- Video Amplifier Bandwidth: 350 MHz
- Input Video Signal: 1.2 Volts p-p / Input
- Horizontal Frequency Range: 15-70 KHz
- Vertical Frequency Range: 30 - 170 Hz
- Video In: HD-15 male
- Video out: HD-15 female
- RS232 Input Connector: DB-9 female
- RS232 Output Connector: DB-9 male
- Link Connector: RJ-45 Shielded
- Conforms to RS-232C standards
- Power Supply: 5V DC
- Power Consumption: 5 watts (max.)
- Dimensions: 4" W x 1.125" H x 3" D
- Shipping Weight: 3 lbs.

### Package Includes:

- VGA RS232 Extender Sender
- VGA RS232 Extender Receiver
- 6 foot VGA cable (M-F)
- 6 foot Serial cable
- Two 5V external power supplies



EXT-VGARS232-141



**VGA RS-232**  
**Extender**  
USER MANUAL

## ASKING FOR ASSISTANCE

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### Technical Support:

Telephone (818) 772-9100  
(800) 545-6900

Fax (818) 772-9120

### Technical Support Hours:

8:00 AM to 5:00 PM Monday thru Friday.

### Write To:

Gefen Inc.  
c/o Customer Service  
20600 Nordhoff St  
Chatsworth, CA 91311

[www.gefen.com](http://www.gefen.com)  
[support@gefen.com](mailto:support@gefen.com)

### Notice

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

**VGA RS232 Extender** is a trademark of Gefen Inc.  
**Macintosh** is a trademark of Apple Computer Inc.

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# INTRODUCTION

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Thank you for purchasing the new ex•tend•it VGA RS232 Extender by Gefen, Inc.

The ex•tend•it VGA RS232 Extender by Gefen allows users the benefits of extending VGA and RS232 signals beyond the desktop. The VGA RS232 Extender series can be used to extend a VGA and RS232 signal to cover the distance of 330 feet. Industry standard Category 5 (CAT-5) cable is used for the extension.

## **CONTENTS**

The VGA RS232 Extender system consists of:

- (1) VGA RS232 Extender sender unit
- (1) VGA RS232 Extender receiver unit
- (2) 5 VDC power supply
- (1) VGA M-F cables (6FT)
- (1) Serial Cable
- (1) User Manual

## **HOW IT WORKS**

In its most basic application, the VGA RS232 Extender sender resides next to the computer. With the supplied VGA and Serial cable, the VGA RS232 Extender sender is connected to the computer. The VGA RS232 Extender receiver is then placed next to the monitor or projector and RS232 device. Industry standard Category 5 (CAT-5) cable is used to link the VGA RS232 Extender sender and VGA RS232 Extender receiver together.

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE VGA RS232 EXTENDER SYSTEM

- Use industry standard Category-5 (CAT-5) cable to operate the VGA RS232 Extender system. CAT-5 E cable is preferred.
- Please connect all the cables between the computer and the VGA RS232 Extender before powering up the VGA RS232 Extender unit.
- The VGA RS232 Extender units are housed in a metal box for better RF shielding.



# PANEL DESCRIPTIONS



## INSTALLATION INSTRUCTIONS

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1. Connect the VGA RS232 Extender sender unit to the VGA and RS232 output on the back of your computer. The six foot RS232 and M-F VGA cables connect the CPU and sender unit together.
2. Connect the VGA RS232 Extender receiver unit to your monitor with the VGA cable that is attached to your monitor.
3. Connect the VGA RS232 Extender receiver unit to your RS232 device.
4. Connect the CAT5 cable between the VGA RS232 Extender sender and receiver's CAT5 input.
5. Plug the 5 volt power supplies into both the sender and receiver unit.

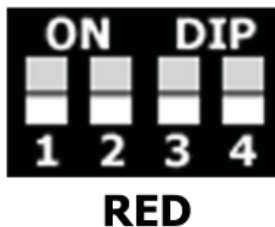
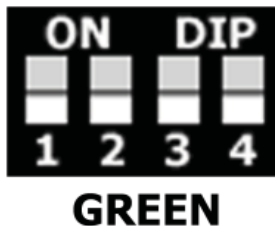
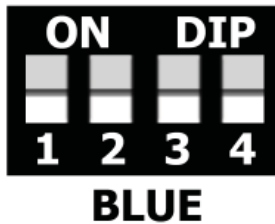
NOTE: The Brightness trim pod "B" can be adjusted to change the brightness of the picture.

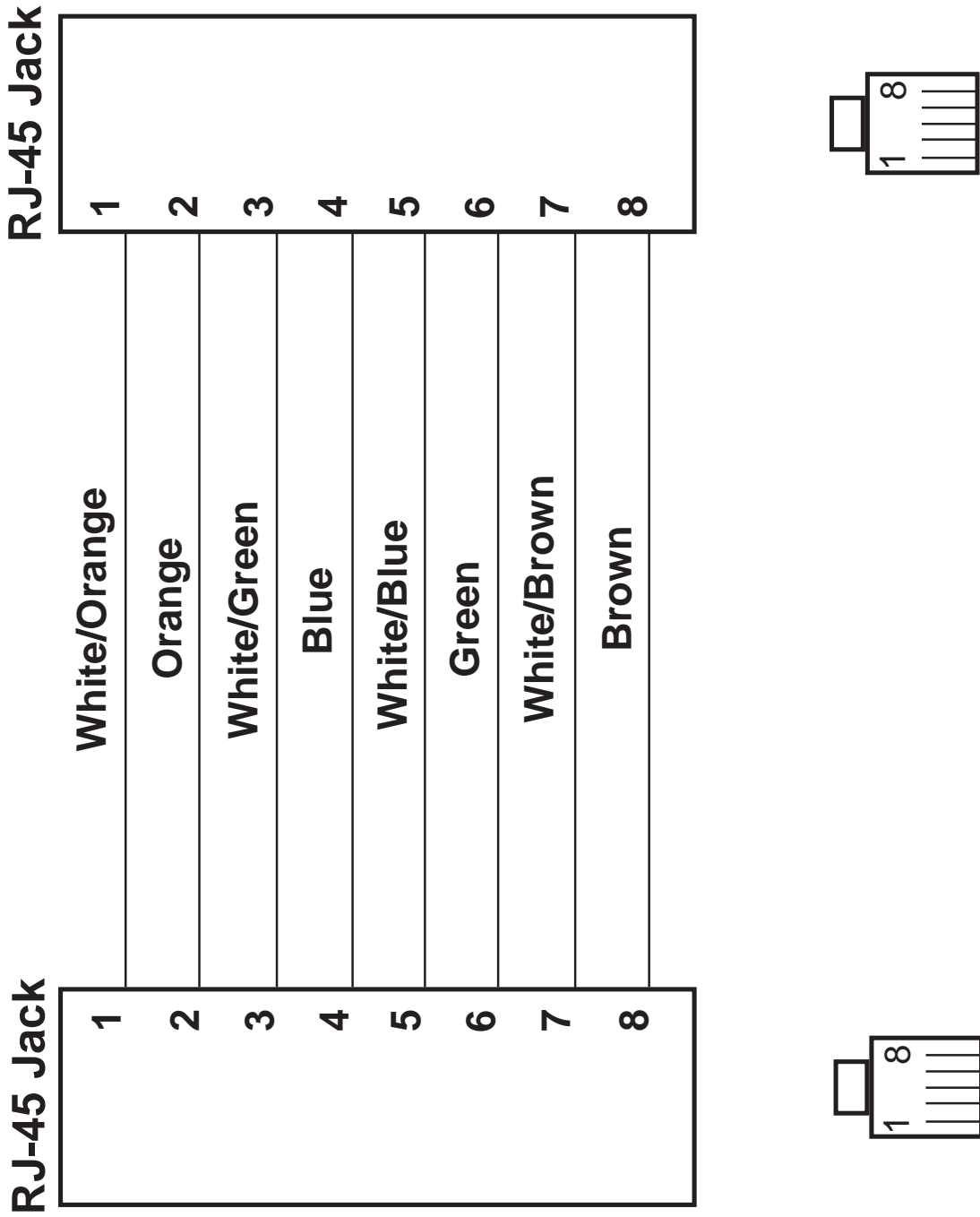
## HOW TO ADJUST THE PICTURE

The first step in adjusting the video quality is to display text and a graphic on your monitor (i.e. desktop icons). Then set your computer to the resolution that you will be using most frequently. The dip switches are used to set the focus and sharpness of the picture to the best possible setting. Set the dip switches to the settings that are recommended for the different lengths of CAT5 cable (see chart below). Verify that the picture quality is to your satisfaction. If the recommended setting does not produce a great quality picture, try using a different dip switch setting. The trim pod next to the VGA connector on the VGA RS232 Extender-R allows brightness adjustments for video.

0-25 Feet	All dip switches OFF for all colors.
26-100 Feet	Set dip switch #1 ON all colors. 1,2,3 remain OFF.
101-200 Feet	Set dip switch #2 ON all colors. 1,2,4 remain OFF.
201-300 Feet	Set dip switch #3 ON all colors. 1,3,4 remain OFF.
301 Feet and Up	Set dip switch #4 ON all colors. 2,3,4 remain OFF.

NOTE: The dip switches are set to the OFF position when the switch is closest to the number or in the down position.





## SPECIFICATIONS

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Video Amplifier Bandwidth .....	350 MHz
Actual Bandwidth .....	120 MHz
Input Video Signal .....	1.2 Volts p-p
Horizontal Frequency Range .....	15-70 KHz
Vertical Frequency Range .....	30-170 Hz
Video In .....	HD-15 Male
Video Out .....	HD-15 Female
Serial In .....	9-Pin Female
Serial Out .....	9-Pin Male
Link Connector .....	RJ-45
Power Consumption .....	5 Watts (max)
Power Supply .....	5VDC (External)
Dimensions .....	1.25"H x 4"W x 3"D
Shipping Weight .....	3 Lbs

## WARRANTY

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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 two (2) year from the date of shipment, Gefen Inc. 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 cable must be free from any scratches, markings, and neatly coiled.

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 the VGA RS232 Extender features and specifications is subject to change without notice.