

# VIDEO SPLITTER DVI

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## INSTALLATION AND OPERATIONS MANUAL



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## LIMITED WARRANTY

Rose Electronics® warrants the VideoSplitter DVI to be in good working order for one year from the date of purchase from Rose Electronics or an authorized dealer. Should this product fail to be in good working order at any time during this one-year warranty period, Rose Electronics will, at its option, repair or replace the Unit as set forth below. Repair parts and replacement units will be either reconditioned or new. All replaced parts become the property of Rose Electronics. This limited warranty does not include service to repair damage to the Unit resulting from accident, disaster, abuse, or unauthorized modification of the Unit, including static discharge and power surges.

Limited Warranty service may be obtained by delivering this unit during the one-year warranty period to Rose Electronics or an authorized repair center providing a proof of purchase date. If this Unit is delivered by mail, you agree to insure the Unit or assume the risk of loss or damage in transit, to prepay shipping charges to the warranty service location, and to use the original shipping container or its equivalent. You must call for a return authorization number first. Under no circumstances will a unit be accepted without a return authorization number. Contact an authorized repair center or Rose Electronics for further information.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THIS PRODUCT INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE, AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THIS PERIOD. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IF THIS PRODUCT IS NOT IN GOOD WORKING ORDER AS WARRANTED ABOVE, YOUR SOLE REMEDY SHALL BE REPLACEMENT OR REPAIR AS PROVIDED ABOVE. IN NO EVENT WILL ROSE ELECTRONICS BE LIABLE TO YOU FOR ANY DAMAGES INCLUDING ANY LOST PROFITS, LOST SAVINGS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF OR THE INABILITY TO USE SUCH PRODUCT, EVEN IF ROSE ELECTRONICS OR AN AUTHORIZED DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY.

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NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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## Disclaimer

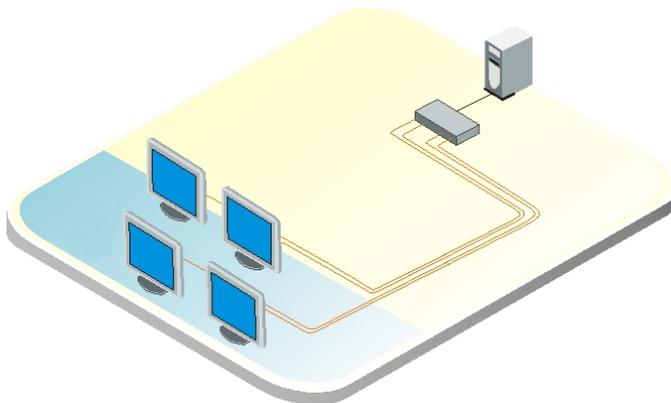
While every precaution has been taken in the preparation of this manual, the manufacturer assumes no responsibility for errors or omissions. Neither does the manufacturer assume any liability for damages resulting from the use of the information contained herein. The manufacturer reserves the right to change the specifications, functions, or circuitry of the product without notice.

The manufacturer cannot accept liability for damages due to misuse of the product or other circumstances outside the manufacturer's control. The manufacturer will not be responsible for any loss, damage, or injury arising directly or indirectly from the use of this product.

## System Introduction

Thank you for choosing Rose Electronics® Video Splitter DVI for your DVI video distribution applications. The Video Splitter DVI enables you to take your video source from a PC, DVD player, or Set-Top box and, depending on your model, display the video on 2, 4, or 8 remote monitors, HDTV's, or video projectors.

If your needs require additional displays, the Video Splitter DVI can be cascaded to additional units to increase the number of displays.



## Features

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- 1 x 2, 1 x 4, and 1 x 8 models available
- Single-link DVI video support
- Standard DVI-I connections
- Supports digital or analog video (adapter required for analog video)
- Video resolutions:
  - Up to 1920 x 1200 @ 60Hz
- Easy to install, no configuration needed
- Compatible with DVI standard by DDWG
- DVI video output #1 is used for the main display. The other outputs follow output #1.
- Units can be cascaded

## Compatibility

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- DVI standard by DDWG
- DVI-I connections

## Package contents

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The package contents consist of the following:

- The Video Splitter DVI Unit as ordered
- Power adapter. (Auto-switching transformer)
- Installation and operations manual.

Video cables are usually ordered separately.

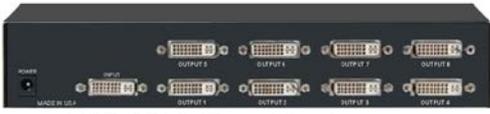
### **Rose Electronics web site**

Visit our web site at [www.rose.com](http://www.rose.com) for additional information on the Video Splitter DVI and other products that are designed for data center applications, classroom environments and other applications.

### **About this manual**

This manual covers the installation and operation of the Video Splitter DVI.

## Video Splitter DVI Models

Model	Connectors
 <p>VSP-2DVI ( Rear View)</p>	DVI-IN (1) - DVI-I DVI-OUT (2) - DVI-I
 <p>VSP-4DVI (Rear View)</p>	DVI-IN (1) - DVI-I DVI-OUT (4) - DVI-I
 <p>VSP-8DVI (Rear View)</p>	DVI-IN (1) - DVI-I DVI-OUT (8) - DVI-I

**Figure 1. Models**

## Cables

The only cable needed is a DVI-I MM cable to connect the unit with a PC or Set-Top Box. DVI monitors connect directly to the DVI-I F connectors on the rear panel.

For DVI video - use a DVI to DVI cable

For VGA video - use a DVI to VGA cable or a DVI to VGA adapter

NOTE: The input video signal (DVI or VGA) is split and routed to each output.  
The output monitors must match the input signal (DVI or VGA)

		
DVI to DVI cable	DVI to VGA cable	DVI to VGA adapter

## Installation

Installing the Video Splitter DVI is a very simple and straight forward process. It is recommended that all equipment be powered off to start.

Connect your DVI or VGA video source (PC, Set-Top Box, DVD Player, etc) to the DVI-IN connector (DVI-I Female) on the rear panel. If you are using a VGA video source, a VGA to DVI adapter must be used.

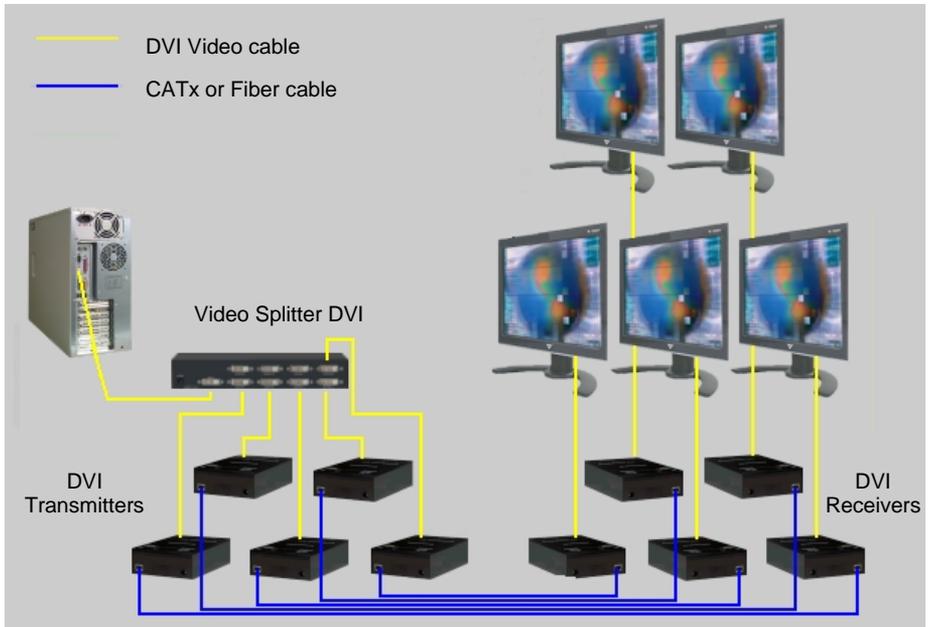
Next connect your DVI video monitor cables to the DVI-I connectors on the rear panel labeled Output x.

Finally, connect the power adapter to the VideoSplitter DVI unit, turn on all the monitors and boot the computer last. You should see the boot-up sequence on all monitors.



**Figure 2. Basic Installation**

If your application requires that the DVI monitors be extended further than the standard 15 to 32 feet that a DVI cable allows, Rose Electronics offers a CATx and a Fiber DVI extender unit that can extend the distance up to 450 feet using CATx cable or up to 6 miles using singlemode fiber cable.



**Figure 3. Extended Distance Installation**

## System Operation

The operation of Video Splitter DVI is very easy and simple. There are no adjustments of configurations to make. Whatever video source connected to the DVI input connector (DVI or VGA) is split and distributed to all DVI video output connectors.

The versatility of the Video Splitter DVI allows you to present still pictures to all monitors, rolling text, display airline schedules, video credits and other presentations.

## Troubleshooting

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The troubleshooting section is used as a guide to understanding the capabilities of the Video Splitter DVI and for general troubleshooting. If you have any problems or questions concerning the installation, operation or usage of the Video Splitter DVI that is not covered in this manual, please contact Rose Electronics for technical support.

### **No Image on any monitor**

- Check the DVI cable connection between the Video Splitter DVI unit and the computer's video card for proper connections.
- Verify that the DVI cable is in good condition, try another cable
- Verify that power is applied to all equipment

### **Image is not sharp on all monitors**

- Verify that the output video resolution from the video card is the same as the resolution of the monitor with the lowest resolution.
- Check the DVI cable connection between the Video Splitter DVI unit and the computer's video card for proper connections.
- Check the DVI cable routing from the PC to the Video Splitter DVI to assure the cable is not routed next to heavy equipment or devices that can cause any interference.

### **Image is not sharp on some monitors**

- Verify that the output video resolution from the video card is the same as the resolution of the monitor with the lowest resolution.
- Check the DVI cable connection between the Video Splitter DVI unit and the DVI monitor for proper connections.
- Check the DVI cable routing from the Video Splitter DVI to the DVI monitor to assure the cable is not routed next to heavy equipment or devices that can cause any interference.

## Service Information

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### Maintenance and Repair

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This Unit does not contain any internal user-serviceable parts. In the event a Unit needs repair or maintenance, you must first obtain a Return Authorization (RA) number from Rose Electronics or an authorized repair center. This Return Authorization number must appear on the outside of the shipping container.

See Limited Warranty for more information.

When returning a Unit, it should be double-packed in the original container or equivalent, insured and shipped to:

Rose Electronics  
Attn: RA \_\_\_\_\_  
10707 Stancliff Road  
Houston, Texas 77099 USA

### Technical Support

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If you are experiencing problems, or need assistance in setting up, configuring or operating you're Video Splitter DVI, consult the appropriate sections of this manual. If, however, you require additional information or assistance, please contact the Rose Electronics Technical Support Department at:

Phone: (281) 933-7673  
E-Mail: [TechSupport@rose.com](mailto:TechSupport@rose.com)  
Web: [www.rose.com](http://www.rose.com)

Technical Support hours are from: 8:00 am to 6:00 pm CST (USA), Monday through Friday.

Please report any malfunctions in the operation of this Unit or any discrepancies in this manual to the Rose Electronics Technical Support Department.

## Safety

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The Video Splitter DVI has been tested for conformance to safety regulations and requirements, and has been certified for international use. Like all electronic equipment, the Video Splitter DVI should be used with care. To protect yourself from possible injury and to minimize the risk of damage to the Unit, read and follow these safety instructions.

- Follow all instructions and warnings marked on this Unit.
- Except where explained in this manual, do not attempt to service this Unit yourself.
- Do not use this Unit near water.
- Assure that the placement of this Unit is on a stable surface or rack mounted.
- Provide proper ventilation and air circulation.
- Keep power cord and connection cables clear of obstructions that might cause damage to them.
- Use only power cords, power adapter and connection cables designed for this Unit.
- Use only a grounded (three-wire) electrical outlet.
- Use only the power adapter provided with the Video Splitter DVI.
- Keep objects that might damage this Unit and liquids that may spill, clear from this Unit. Liquids and foreign objects might come in contact with voltage points that could create a risk of fire or electrical shock.
- Operate this Unit only when the cover is in place.
- Do not use liquid or aerosol cleaners to clean this Unit. Always unplug this Unit from its electrical outlet before cleaning.
- Unplug this Unit from the electrical outlet and refer servicing to a qualified service center if any of the following conditions occur:
  - The power cord or connection cables are damaged or frayed.
  - The Unit has been exposed to any liquids.
  - The Unit does not operate normally when all operating instructions have been followed.
  - The Unit has been dropped or the case has been damaged.
  - The Unit exhibits a distinct change in performance, indicating a need for service.

## Safety

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### Safety information



Documentation reference symbol. If the product is marked with this symbol, refer to the product documentation to get more information about the product.

**WARNING** A WARNING in the manual denotes a hazard that can cause injury or death.

**CAUTION** A CAUTION in the manual denotes a hazard that can damage equipment.

Do not proceed beyond a WARNING or CAUTION notice until you have understood the hazardous conditions and have taken appropriate steps.

### Grounding

There must be an un-interruptible safety earth ground from the main power source to the product's input wiring terminals, power cord, or supplied power cord set. Whenever it is likely that the protection has been impaired, disconnect the power cord until the ground has been restored.

### Servicing

There are no user-serviceable parts inside these products. Only service-trained personnel must perform any servicing, maintenance, or repair.

The user may adjust only items mentioned in this manual.

## Appendix A – General Specifications

Resolution	1920 x 1200 (PC)
Video Bandwidth	165 MHz (VGA – UXGA), Single Link
Connectors	DVI-I
Input / Output DVI Channels	1 input / 2, 4, or 8 Output channels
Max cable length	32.8 feet (10M)
Power	110-220V 60Hz to 5VDC
Operating Temperature	32°F - 122°F ( 0°C - 50°C)
Storage Temperature	14°F - 150°F (-10°C - 70°)
Humidity	30% to 80% non condensing
Dimensions (2 port model)	7.93"W x 3.75"D x 1.75"H (201 x 95 x 45 mm)
Dimensions (4 port model)	7.93"W x 3.75"D x 1.75"H (201 x 95 x 45 mm)
Dimensions (8 port model)	9.87"W x 5.0"D x 1.75"H (251 x 127 x 45 mm)
Weight (2 port model)	0.6 lb (272 g)
Weight (4 port model)	0.7 lbs (320 g)
Weight (8 port model)	2.4 lbs (1.09kg)

## Appendix B – Part Numbers

Part Number	Description
VSP-2DVI	1 DVI Video In – 2 DVI Video Out
VSP-4DVI	1 DVI Video In – 4 DVI Video Out
VSP-8DVI	1 DVI Video In – 8 DVI Video Out
CAB-DVIIMMxxx	DVI-I male to male cable
CAB-DVIDMMxxx	DVI-D male to male cable
CAB-DVIIMVMxxx	DVI to VGA cable

xxx= length in feet





## Server Management



## Solutions

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