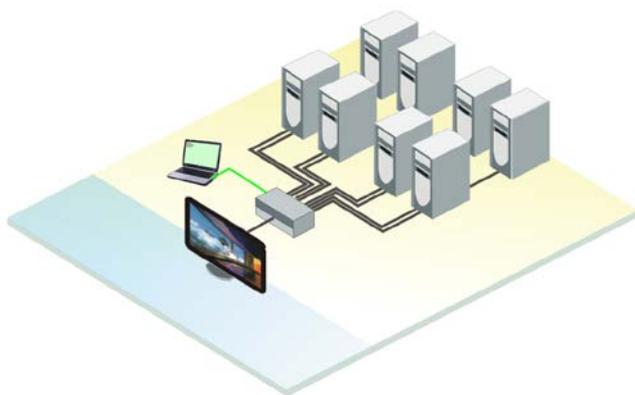


ROSE.COM

INSTALLATION AND OPERATIONS MANUAL



LIMITED WARRANTY

Rose Electronics® warrants the Vista AV DVI switch 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.

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NOTE: This equipment has been tested and found to comply with the limits for a Class A 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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INTRODUCTION

System Introduction

Thank you for choosing the Vista AV from Rose Electronics for your DVI video switching applications. The Vista AV is a very versatile product that can switch the DVI-D input signals from your PC or Mac computers to a common DVI monitor. Selection can be made using the front panel push buttons or by sending commands from a controlling computer to the RS232 port on the unit.

The Vista AV is available in four models, the 1x2, 1x4, 1x8, and 1x16. All models operate and function in the same manor. When the input DVI-D video source is selected, it is instantly displayed on the output DVI monitor at resolutions up to 1920 x 1200.

About this manual

This manual covers the installation, configuration, and the operation of the Vista DVI switching system. The system consists of the Vista DVI unit, the connected computers, the output DVI monitor, and a computer to send switching commands to the unit. The Installation section describes how all components are interconnected to form a seamless video switching system.

Product Registration

Register your product for future updates at: www.rose.com/htm/online-registrationform.htm.

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.

Features

- Models available with:
 - 1 DVI-D output / 2 DVI-D video input ports
 - 1 DVI-D output / 4 DVI-D video input ports
 - 1 DVI-D output / 8 DVI-D video input ports
 - 1 DVI-D output / 16 DVI-D video input ports
- Front panel push-buttons or remote serial port switching
- Multi-platform support for:
 - Windows® PC's
 - Mac
 - Linux
 - Sun
- DVI-D Single Link Resolution up to 1920 x 1200 @ 60Hz
- DVI input cable length – 20 feet*
- DVI output cable length – 20 feet*
- Front panel display indicates the active selection
- No configuration needed, connect the hardware and its ready to use
- Plug-and-play, no unit configuration needed

* If your system layout requires your monitors to be more than 15 feet from the Vista AV unit, use a high quality DVI cable. For distances greater than 20 feet, Rose Electronics DVI extender units can be interfaced to extend the distance up to 400 feet over CATx cable or up to 33,000 feet over singlemode fiber cable.

Package contents

- Vista AV model as ordered
- Power adapter for the model ordered
- Documentation CD

Cables are usually ordered separately. If the package contents are not correct, contact Rose Electronics or your reseller so the problem can be quickly resolved.

Rose Electronics web site

Visit our web site at www.rose.com for additional information on the Vista AV and other products offered by Rose Electronics that are designed for data center applications, classroom environments, and many other access and switching applications.

MODELS

Vista AV Models

The Vista AV is available in the following models:

Front View



Selection Indicator

Scroll up button
Scroll down button

Rear View 1x2 Model



Power adapter input
RS232 port
1-DVI-D output
2-DVI-D inputs

Rear View 1x4 Model



Power adapter input
RS232 port
1-DVI-D output
4-DVI-D inputs

Rear View 1x8 Model



Power adapter input
RS232 port
1-DVI-D output
8-DVI-D inputs

Rear View 1x16 Model



Power adapter input
RS232 port
1-DVI-D output
16-DVI-D inputs
Built-in Rack mount
bracket

Figure 1. Models

INSTALLATION

Vista AV Installation

Installation of the Vista AV Switch is a very easy and simple procedure. Figure 2 shows a typical installation. All models install in the same manor.

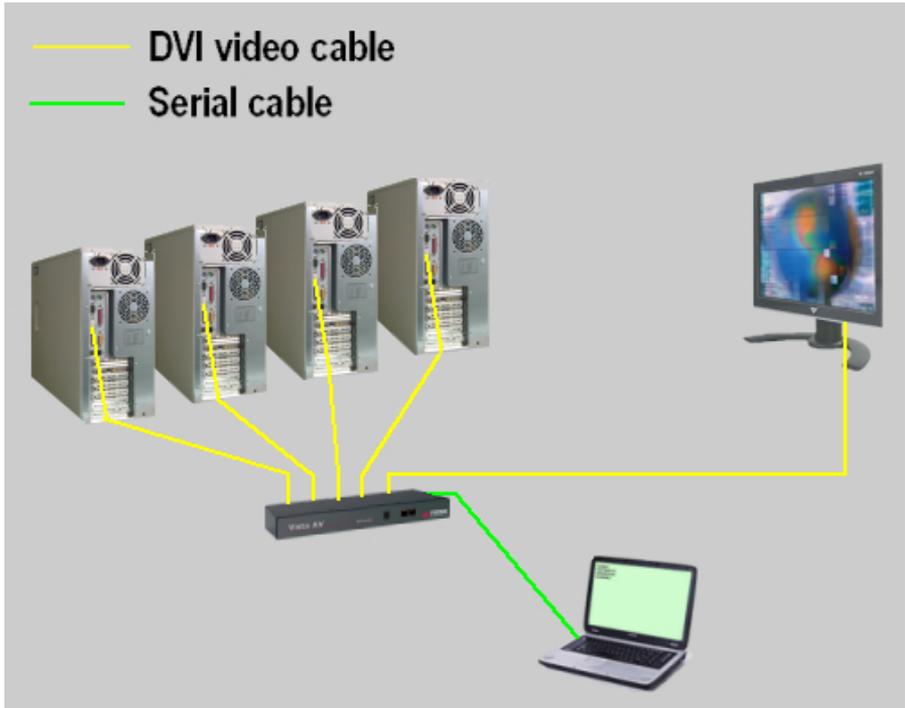


Figure 2. Typical Installation

1. Connect each computers DVI video port to the corresponding DVI Video input ports on the unit.
2. Connect a DVI monitor to the video out connector.
3. Connect a standalone or laptop computer or controller to the RS232 port.
4. Connect the provided power adapter to the Vista AV units power jack on the rear panel.

No configuration or set-up is needed.
Each model installs in the same manor.

System Operation

Front panel control

Figure 3 shows the front panel select buttons and the station indicator.

The select buttons sequentially select (scroll up or down) which DVI input signal to route to the DVI output. The station indicator shows which DVI input port is selected.



Figure 3. Front Panel

Remote Serial Switching

All Vista AV models can be remotely switched using the RS-232 connection. Install and connect the unit as shown in Figure 2. Use a DB9 male-to-female serial cable to connect a remote computer or laptop to the Vista AV's RS-232 port. Use a serial communication program like HyperTerminal to connect to the Vista AV. Set-up the communication mode to:

Baud rate : 9600bps
Data bits : 8
Parity : N
Stop bits : 1
Flow control : None

Issue the following command to switch ports:

//Mx [Enter] (x = port number to switch to)

To select port #1, send the serial command - //M1 [ENTER]

To select port #2, send the serial command - //M2 [ENTER]

When you send the serial command, the requested port is immediately switched to the Vista AV's output port

DDC Information / Learning

The Vista AV has the capability of learning and saving the DDC information from the display monitor connected to the unit. To capture the DDC information and save it, press and hold the front two push buttons until the displays reads "L". This indicates that the unit is in the learn mode. When in the learn mode, press the Down/Left button to cycle through the following DDC learning modes:

Mode Indicator	Description of mode
P	A "P" indicates Personal Computer Mode. This selection automatically selects the standard display characteristics for a PC display. This mode typically works for any PC / Display combination.
A	An "A" indicates Apple Mode. This selects the best display mode to accommodate a Mac computer
S	An "S" indicates Screen Mode. This mode replicates the type of device connected to input port #1.

The DDC information is obtained from the PC or MAC connected to port #1.

SERVICE and MAINTENANCE

Service

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

If you are experiencing problems, or need assistance in setting up, configuring, or operating your Vista AV, 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
Web: 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

The Vista AV has been tested for conformance to safety regulations and requirements, and has been certified for international use. Like all electronic equipment, the Vista AV 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 unit.
- 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.
- 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.

APPENDICES

Appendix A - Specifications

Dimensions

	Width (in / cm)	Depth (in / cm)	Height (in / cm)	Weight (lbs / kg)
AVS-1x02DVI	6.67	3.4	1.7	5 / 2.27
AVS-1x04DVI	10.5	6.0	1.7	6 / 2.72
AVS-1x08DVI	10.5	6.0	1.7	7 / 3.18
AVS-1x16DVI	17.0	6.75	1.7	10 / 4.53

Video:

Single link DVI-D
Resolution 1920 x 1200 @ 60Hz
Bandwidth 1.65G

Connectors:

DVI in / out DVI-I 29 pin female
Power Male barrel jack

Controls:

Front panel computer select buttons

Power:

Adapter +5 VDC / 3A

Appendix B – Part numbers

P/N	Description
AVS-1x02DVI	1x2 DVI Switch
AVS-1x04DVI	1x4 DVI Switch
AVS-1x08DVI	1x8 DVI Switch
AVS-1x16DVI	1x16 DVI Switch
CAB-DVIIMMxxx	DVI video cable



Server Management



Solutions

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