

UNIVERSAL KEYBOARD MONITOR MOUSE SWITCH

VISTA L-SERIES

INSTALLATION AND OPERATIONS MANUAL





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Rose Electronics Part # MAN-V8 ■ Revision 1.3 Printed In the United States of America

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This equipment complies with the requirements of the European EMC directive 89/336/EEC in respect of EN55022 (Class B), EN50082-1 and EN60555-2 standards and the Low Voltage Directive.



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INTRODUCTION

Introduction

Thank you for choosing the Rose Electronics[®] Vista[™] Universal KVM switch. The Vista switch is the result of Rose Electronics commitment to providing state-of-the-art switching solutions for today's demanding work place. The Vista switch has proven to be a valuable investment for users that have a need to access multiple CPUs from a single KVM station.

A Keyboard, Video monitor and Mouse are referred to throughout this manual as a KVM station.

Please refer to the safety section first before proceeding with any installation or configuration of the Vista switch.

The Vista L-series switch is available in eight models. The 4-port and 8port models are available with DB25 connectors or PC connectors. Each model can be ordered with optional on-screen display capabilities.

For the Vista models with DB25 connectors, it is recommended that Rose Electronics cable part number CAB-WX0606C*nnn* or CAB-CX0606C*nnn* (DB25 to HD15/PS2/PS2) CPU Cable be used.

For the models with PC connectors, it is recommended that Rose Electronics cable part number CAB-CXV66MM*nnn or* CAB-WX66MM*nnn* (VGA/PS/2 keyboard/PS/2 mouse cable) be used.

The Vista L-series switch can be ordered with an on-screen display option. This option allows you to configure the Vista switch from easy to use menus that display on your KVM stations' video monitor. You can assign unique names to each computer, change colors, fonts and assign a password for access to the configuration menus and a password for access to the attached computers.

The Vista switch can simplify your job by helping you organize your multiple computer applications. Because the Vista switch lets you use a single keyboard, video monitor, and mouse to access several computers, you can significantly reduce your equipment overhead and end keyboard and monitor clutter.

Features

- Available with DB25 or PC (keyboard, video monitor, mouse) CPU connectors.
- Access up to 4 or 8 computers from one KVM station.
- Select a computer from the front panel or simple keyboard commands.
- Models with the on-screen display (OSD) option can select computers from an on-screen menu.
- Power is obtained from the attached CPUs, eliminating the need for an external power source. An external power adapter is required for models with the OSD option.
- Front panel LEDs show computer, keyboard, and mouse status.
- Keyboard, video monitor, and mouse plug directly into the PC unit.
- Scan mode automatically sequences through CPUs at adjustable rate.
- Non-volatile memory stores configuration settings.
- Full emulation of keyboard and mouse, allowing computers to be booted at any time.
- Supports PS/2 mouse, wheel mouse, and serial mouse.
- Keyboard Num Lock, Caps Lock, and Scroll Lock states automatically saved and restored when switching among CPUs.
- Keyboard mode is automatically detected for simultaneous support of PCs, Unix computers, and IBM mode 1 computers.
- Reset button reinitializes all ports.
- Keyboard lockout function <Ctrl L>.
- Low cost and easy to use.
- Heavy-duty steel, fully shielded chassis.
- Rackmount option for 19", 23", or 24" racks. (1 rack unit high, 1.75")
- Saves space, reduces equipment and power costs, and eliminates clutter.
- One-year warranty and unlimited technical support.
- Made in USA.

Optional on-screen display (OSD) features

- On-screen display shows on top of existing video.
- Easy to use menus guide you through the configuration settings.
- Adjustable colors, fonts and text positions.
- Colors can be solid or transparent.
- Four selectable screen savers.
- Password protection for the Vista's configuration menus.
- Computer access password protection.

Compatibility

CPUs		
Computers	Industry standard PCs, Unix computers such as RS-6000, HP 9000, SGI, DEC Alpha, and others.	
Monitors	SVGA	
Keyboards	US, Korean, Japanese, keyboards with or without Windows keys (101, 102, 104, 105, 106, 109 keys) (Some older XT/AT auto-sensing keyboards may not be compatible).	
Mouse	Standard PS/2 Mouse (2 or 3 button) PS/2 Wheel Mouse (2 button + wheel) Serial Mouse (2 or 3 button)	
	KVM Station	
Monitors	SVGA	
Keyboards	US, Korean, Japanese, keyboards with or without Windows keys (101, 102, 104, 105, 106, 109 keys) (Some older XT/AT auto-sensing keyboards may not be compatible).	
Mouse	Standard PS/2 Mouse (2 or 3 button) PS/2 Wheel Mouse (2 button wheel)	

Table 1. Compatibility

Package contents

The package contents consists of the following:

- The Vista Unit.
- Power adapter (provided with OSD option).
- Installation and operations manual.

CPU 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.

OVERVIEW

System overview

The Vista L-series switch is designed to provide seamless, trouble-free switching from a single KVM station to any connected CPU. You can switch to the connected computers by simple keyboard commands or using the front panel buttons. Vistas' with the On-Screen Display option (OSD) can switch to the connected computers from an on-screen menu.

Figure 1 shows a typical configuration using the Vista 8 port switch with DB25 connectors. Up to 8 CPUs can be connected to the Vista 8 port switch and accessed from a single KVM station.

KVM station

A KVM station, consisting of a keyboard, video monitor and mouse, connects directly to the Vista switches' KVM connectors. The KVM station can switch its keyboard, video monitor and mouse to any of the connected CPUs and fully control that CPU if authorized. Files and folders can be managed, applications can be executed, upgrades can be performed, and general maintenance done from the KVM station.

The keyboard, video monitor and mouse used for the KVM station should be compatible with all of the CPU that will be connected. The KVM stations mouse must be a PS/2 mouse. It cannot be a serial mouse. The Vista switch will translate the KVMs PS/2 mouse movements and present it in serial form to CPUs with serial mouse connections. The KVM connectors on the Vista switch are HD-15F for the video monitor and MiniDin-6F for the keyboard and mouse.

CPU connections

The CPU connectors on the Vista switch depend on the model ordered. The "U" model connectors are DB25F for each CPU. The "PC" model connectors are HD15F (video) and MiniDin-6F (keyboard and mouse) for each CPU. Attached CPUs that use a serial mouse, use adapter ACC-KVM6F9F to connect to the CPUs serial port (do not substitute).



Figure 1. Typical installation

Power connectors

The power connector on the Vista switch is for a supplemental power adapter. Supplemental power may be needed if the cable length from the computers to the Vista switch is long or you are using a wireless keyboard. The power adapter is furnished for Vista models with the OSD option. (See Figure 2)



Supplemental power adapter is required for Units with the OSD option.

Figure 2. Optional power adapter

Rose Electronics web site

Visit our web site at <u>www.rose.com</u> for additional information on the Vista and other products offered by Rose Electronics that are designed for server room and data center applications, classroom environments and many other switching applications. MODELS

Vista L-Series models



Figure 3. Vista 4 port



Figure 4. Vista 8 port

Activity LED (ACT)	Lit when selected CPU has power. Flashes when Keyboard and mouse data is sent to the unit.
Power LEDs	Indicates which computers are powered on.
Select LEDs	Indicates which computer is selected.
Reset button	Resets the unit and initializes the keyboard and mouse.
CPU Select buttons $(1 - 4 \text{ or } 1 - 8)$	Selects the computer to be accessed.

Table 2. Front panel description



KVL-4UA rear connectors



KVL-8UA rear connectors

Label	Connector type	Description
(4U) 1,2,3,4	DB25	Computer connectors
(*U) 1,2,3,4,5,6,7,8	DB25	Computer connectors

	Monitor	HD15F	KVM monitor connector
€	Mouse	MiniDin-6F	KVM PS/2 mouse connector
ک	Keyboard	MiniDin-6F	KVM keyboard connector

Table 3. Vista 4UA/8UA description



KVL-4PCA rear connectors



KVL-8PCA rear connectors

Label		Connector Type	Description
I— <u>-</u>		Keyboard (MiniDin-6F) Mouse (MiniDin-6F) Video (HD15F)	CPU connectors 1-4 on 4PC model 1-8 on 8PC model
	Monitor	HD15F	KVM monitor connector
ð	Mouse	MiniDin-6F	KVM PS/2 mouse connector
200000	Keyboard	MiniDin-6F	KVM keyboard connector

Table 4. Vista 4PCA/8PCA description

CABLES

Vista cables

Vista to CPU cables

For the Vista models with DB25 CPU connectors, it is recommended that Rose Electronics cable part number CAB-WX0606C*nnn* or CAB-CX0606C*nnn* (DB25 to HD15/PS2/PS2) CPU cable be used.



For the Vista models with PC connectors, it is recommended that Rose Electronics cable part number CAB-CXV66MM*nnn* or CAB-WX66MM*nnn* (VGA & PS/2 Male to Male cable) be used.



For attached CPUs that use a serial mouse, use adapter ACC-KVM6F9F to connect to the CPUs serial port (do not substitute).

Vista to KVM station cable

The keyboard, video monitor, and mouse cables on a KVM station can connect directly to the Vista switches connectors provided they are a HD15 video and PS/2 (MiniDin-6) keyboard and mouse connectors.

INSTALLATION

Installation

Installation of the Vista switch consists of the following steps: It is recommended that the CPUs be powered off.

- 1. Connect the KVM station to the Vista switch.
- (Connect the optional power adapter if the unit has the OSD option.)
- 2. Connect the CPUs to the Vista switch.
- 3. Sequentially apply power, boot the CPUs.
- 4. Verify keyboard, mouse and CPU operation.

Step 1 - Connecting the KVM station

Connect your KVM station's keyboard, video monitor and mouse cables to the corresponding Vista switches' keyboard, video monitor and mouse connectors as shown in Figure 5.



Figure 5. Vista to KVM station

Step 2 - Connect the CPUs

Connect the CPU keyboard, video monitor and mouse ports to the corresponding Vista switches keyboard, video monitor and mouse ports using the appropriate CPU cables as shown in Figure 6. For attached CPUs that use a serial mouse, use adapter ACC-KVM6F9F to connect to the CPUs serial port (do not substitute).



Figure 6. Vista to CPU

Step 3 - Applying power

It is recommended that each connected CPU be booted up starting with the CPU connected to Port #1. Switch the Vista to the CPU port by pressing the appropriate numbered button on the front panel (1-4 or 1-8). Boot that CPU. Verify that the mouse and keyboard function properly. If the keyboard or mouse does not respond, see the troubleshooting section. Verify that the CPU functions and applications perform properly before booting up the next CPU. Perform this procedure for all connected CPU. Figure 8 shows a typical installation.

Step 4 – Verify keyboard, mouse and CPU operation

Verify the keyboard and mouse function properly for each CPU that is connected to the Vista switch. Refer to the troubleshooting section if needed.

Rack mounting

The Vista switch is designed to mount in a CPU rack. Rackmount kits are available in three different sizes, 19", 23", and 24". Each is 1 rack unit high (1.75"). (See Appendix D and Appendix E for rack mounting instructions.)

Your Vista switch is now ready for operation using the initial factory settings. Pressing the numbered buttons (1-4 or 1-8) on the front panel will switch to that port. To take full advantage of the Vista features, refer to the operating instructions for detailed information about each of the Vista commands. The keyboard commands are summarized in Table 5.

To begin switching immediately from the keyboard, press and release the left control <Ctrl> key, then type in the computer number (1-4 or 1-8). The video from the connected computer will display on the KVMs video monitor.

The keyboard, video monitor, and mouse signals can be driven up to 1,000 feet using our CrystalView[™] KVM extenders.







Figure 8. Vista Installation

OPERATING INSTRUCTIONS

Operating instructions

The Vista switch is very easy to operate. Computer selection and set-up functions are entered from the keyboard. You can also select computers manually from the Vista's front panel by using buttons 1-4 or buttons 1-8 depending on your model. The Vista models with the on-screen display (OSD) option can select computers by choosing from an on-screen list of the computers.

Keyboard command

Following is a description of the Vista keyboard command functions.

The <Ctrl> input is a press and release of the left control key. Within 2 seconds of pressing and releasing the left <Ctrl> key, enter the next command.

Command	Key Sequence	Description
Reset command	<ctrl> R</ctrl>	Resets and enables mouse and keyboard, enables PS/2 mouse on currently selected port.
Reset mouse command	<ctrl> O</ctrl>	Sends reset mouse command to currently selected CPU. Will recover stuck NT mouse.
Send null byte	<ctrl> N</ctrl>	Used to re-synchronize PS/2 mouse.
Identify ROM version	<ctrl> I</ctrl>	Identifies ROM version, CPU must be at a command prompt, word processor, or text editor to receive value.
Keep	<ctrl> K</ctrl>	Saves current scan state and custom settings.
Scan time interval	<ctrl> Txx <enter> (xx = 1 - 16 sec.)</enter></ctrl>	Sets the pause time for each port when scanning.

Keyboard commands (continued)

Command	Key Sequence	Description
Mode command	<ctrl> M x <enter> Where: x = 1 for mode 1 x = 2 for mode 2 x = 3 for mode 3 x = 7 for mode 7 x = 8 for mode 8 x = 9 for mode 9</enter></ctrl>	First select the CPU port to configure, and then enter the mode command. Mode 1, 2, 3 for keyboard: Mode 7, 8, 9 for mouse
Maximum computers	<ctrl> P x <enter> (x = 1 - 4 or 1 - 8)</enter></ctrl>	Limits scanning to maximum port number
Typematic value	Factory setting = 43 Rate = 10.9 chars/sec Delay = 500 millisec.	See Attachment F.
Mouse type	<ctrl> Q x <enter> Where: x = 0 for PS/2 mouse x = 1 for Serial mouse x = 2 for Wheel mouse</enter></ctrl>	First select the CPU port, and then enter the type command
Computer Select	<ctrl> x (x = 1, 2, 3, 4, 5, 6, 7, 8)</ctrl>	Connects your keyboard, video monitor, and mouse to the selected computer.
Connect to next computer	<ctrl> + (Plus)</ctrl>	Selects the next sequential computer.
Connect to previous computer	<ctrl> - (Minus)</ctrl>	Selects the previous sequential computer.

OPERATING INSTRUCTIONS

Command	Key Sequence	Description
Computer disconnect.	<ctrl> L</ctrl>	Disconnects from computer.
Scan (On)	<ctrl> S</ctrl>	Turns scan mode on, causing the Vista to start scanning sequentially from the current port through the remaining ports and start again at Port 1.
Scan (Off)	<ctrl> X</ctrl>	Turns scan mode off.
Reset mouse command	<ctrl> O</ctrl>	Sends reset mouse command to the currently selected computer. Will recover stuck NT mouse

Keyboard commands (continued)

Table 5. Keyboard commands

Follow each set-up command with the "Keep" command to save the changes. "Keep" command = press and release the left <Ctrl> key, then the "K" key.

Use only the numeric keys above the keyboard. The keypad will not work. All keyboard commands must be entered within 2 seconds of pressing and releasing the left <Ctrl> key.

Keyboard command description

Computer select

To select a computer from your keyboard, press and release the left <Ctrl> key and then type in the computer number (1-4 or 1-8).

Next computer

To switch to the "Next computer", press and release the left <Ctrl> key, then press the plus/equal key.

Previous computer

To switch to the "Previous computer", press and release the left <Ctrl> key then press the minus/underscore key.

Scan mode (On)

To enable the "Scan mode", press and release the left <Ctrl> key, then type S. The Vista switch will begin scanning sequentially from its current computer through the remaining computers (as set by the maximum computers command), and then begin again at computer 1.

Scan mode (Off)

To stop the "Scan mode", press and release the left <Ctrl> key and then type "X". Issuing a computer select command also turns off scanning.

Scan time interval

The "Scan Time interval" command sets the time, in seconds that the Vista switch will pause at each of the computers when scanning. The default setting is 5 seconds. To change the Scan Time to another interval press and release the left <Ctrl> key, type "T" then enter the new scan time interval (1-16 seconds), and press <Enter>.

Reset

To "Reset" the mouse and keyboard, press and release the left <Ctrl> key, then type "R". This command is used to reset the mouse and keyboard on the currently selected Vista port without removing power from the Vista switch. This is most useful to reset a PS/2 mouse that has been unplugged and plugged back in. Upon issuing this command, all keyboard LEDs will go on and then return to their previous state.

Reset computer mouse type (NT and WIN 2K systems only)

DO NOT issue this command on non-NT or Win 2K based computers. Press and release the left <Ctrl> key, then type "O". This command sends a reset mouse command to the currently selected NT or Win 2K computer. The command is used to recover a stuck mouse on an NT or Win 2K system.

Send null byte

Press and release the left <Ctrl> key, then type "N". This command is used to re-synchronize an out-of-sync PS/2 mouse. The command may need to be entered once or twice, depending if the mouse is out-of-sync by one or two bytes.

Identify ROM version

Press and release the left <Ctrl> key, then type "I". This command is used to identify the revision level of the Vista firmware currently installed. Before entering this command, the selected CPU must be at a command prompt, word processor, or text editor, so when the Vista switch sends the ROM revision level the result can be displayed.

Keep command

Press and release the left <Ctrl> key, then type "K". The Keep command saves all settings.

Mode command

The Vista switch supports keyboard modes 1, 2 and 3 and mouse modes 7,8, and 9. To issue the "Mode" command, press and release the left <Ctrl> key, type "M", then enter the mode number (1,2,3,7,8,9) followed by <Enter>.

Mode 1 - CPU Keyboard = PC Mode 1 (Some IBM's & PS/1's) Mode 2 - CPU Keyboard = PC Mode 2 (Most PCs) Mode 3 - CPU Keyboard = Most (RISC) Unix Workstations & Rose Translator Mode 7 - CPU Mouse = 2 Button Serial (Microsoft) (7 Bt) Mode 8 - CPU Mouse = 2 Button Serial (Not Used) (8 Bt) Mode 9 - CPU Mouse = 3 Button Serial (Mouse Systems)

Maximum computers

Press and release the left <Ctrl> key, type "P", enter the total number of computers, and press <Enter>. This command limits the number of computers to scan. For example on an eight-port unit, if no computers were connected to ports 7 and 8, setting maximum computers to 6 would bypass scanning computers 7 and 8.

Typematic command

Initial factory setting = 43. Rate = 10.9 chars/sec, Delay = 500 millisec. See Attachment F for typematic value calculations.

Mouse type

To issue the "Mouse type" command press and release the left <Ctrl> key, type "Q", enter mouse type (0,1,2), and press <Enter>. Mouse type 0 = PS/2 mouse Mouse type 1 = Serial mouse Mouse type 2 = Wheel mouse

Reset to initial factory settings

The settings that have been previously set and saved in non-volatile memory can be returned to their initial factory settings by holding in buttons "1" and "2" on the front panel and press and release the "Reset" button. At least one CPU must be connected to the unit, so that the unit can be powered. The activity LED will flash three times to signify that the non-volatile memory has been returned to the original factory settings. Only those settings listed in Appendix A are reset, all other settings remain unchanged from their set values.

MENUS

On-screen display option

The on-screen display (OSD) option is available for the Vista L-series models. You can use the OSD to configure the Vista switch, select a computer from a list, display what computer you are switched to and set up security options for the switches' configuration and for computer access.

Vista L-series menu structure



Figure 9. Vista L-series menu structure

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Main menu

To access the main configuration menu, press and release the left <Ctrl> key, then the F12 key. The main menu will display on the KVM stations video monitor. (See Figure 10)

To use the main menu, press the up/down arrow keys to select (highlight) the option needed. Once selected, press enter and that options menu will display.



Figure 10. OSD Main menu

When entering information into the menu system, use only the numeric keys above the keyboard, the numeric keys and <Enter> key on the keypad will not work. Commands are entered into the menu system by first pressing and releasing the left control <Ctrl> key. Within 2 seconds issue the needed command.

Configure computer name

Each computer is initially assigned a computer name, "computer x", where "x" = 1-8. To change the computer name to one of your choosing, use the up/down arrow keys to select (highlight) the computers name to change. Once selected (highlighted), press enter to clear the present name. Enter the new computer name (up to 16 valid ASCII characters) and press <Enter>. The new name will be changed and saved immediately in non-volatile memory.



Figure 11. OSD Computer name

The computer name is case sensitive. Use upper/lower case letters as needed. (16 ASCII characters Maximum). The "Reset to Initial Factory Settings" function will not change the assigned computer names from their present values.

Configure appearance

The "Configure appearance" menu allows you to change the foreground and background colors, position the computer name on the screen, change the name fadeout time, font, and set up a screen saver type. Figure 12 shows the "Configure appearance" menu. Use the up/down arrow keys to select (highlight) the selection to change. Once selected, press the space bar to cycle through the list of available options or press enter for that selection.

Change the name color/posi Foreground color Background color Name x position (0 – 64) Name y position (0 – 99) Name fadeout time (seconds) Name font Screen saver type Screen saver time (minutes)	tion and screen saver White Blue 25 90 20 (255 = always on) 8 x 16 modern Fireflies 10	
Name font Screen saver type Screen saver time (minutes)	8 x 16 modern Fireflies 10	
		F1 for help

Figure 12. OSD Configure appearance

Appearance options:

Foreground/Background color:

Change the foreground and background colors of the computer label showing the selected computer. Solid colors are black, red, green, yellow, blue, magenta, cyan, and white. The transparent colors are: clear, red, green, yellow, blue, magenta, cyan, and white.

To change the foreground or background color, first select (highlight) the option and press the space bar to cycle through the list of all the available colors. Stop when the desired color displays and hit <Enter>.

Name x or y position:

This option allows you to position the computer name that is displayed on the KVM monitor when you switch to that computer. The label can be positioned anywhere on the screen and that position will be maintained even with different screen resolutions. To change the position, highlight the x or y position and press enter to clear the field. Enter the new x or y position and press <Enter>. Valid x position values are 0 - 64, valid y position values are 0 - 99.

Name fadeout time:

This option sets the time when the computer label disappears after switching to a computer. To change this value, highlight Name fadeout time and press <Enter> to clear the present value. Enter the new value (0-255) and press <Enter>.

A value of 0 (zero) inhibits the label from displaying.

A value of 255 keeps the label displayed at all times.

Name font:

To change the name font, first select (highlight) the option and press the space bar to cycle through the list of available fonts. Stop when the desired font displays.

The choices are:

- 8X16 modern
- 8X16 classic
- 16X24 modern
- 16X24 classic
- 16X32 modern
- 16X32 classic

Screen saver type:

To change the "Screen saver type", first select (highlight) the option and press the space bar to cycle through the list of all the available screen savers. Stop when the desired screen saver displays.

The choices are:

- Blank screen
- Fireflies
- Weaving
- Bounce

Screen saver time:

This sets the time in seconds when the screen saver activates when no keyboard or mouse activity has occurred.

To change the "Screen saver time", highlight screen saver time and press <Enter> to clear the present value. Input the new value (0 – 999 minutes) and press <Enter>.

A value of 0 (zero) disables the screen saver function.

Configure security

Figure 13 shows the change passwords and access time screen.



Figure 13. OSD Configure passwords

Configuration password:

Assigning a "Configuration password" prevents unauthorized changes to the Vista switches' configuration. To change the password, highlight the configuration password field and press <Enter> to clear the existing password. Type in a new password (8 characters max / case sensitive) and press <Enter>. An input box will then appear requesting confirmation of the password. Re-type the password and press <Enter>. You will be prompted for a password whenever you access the configuration menu (<Ctrl> F12).

DO NOT forget your configuration or access passwords.

Access password:

Assigning an "Access password" prevents unauthorized access to the connected computers. To change the password, highlight the access password field and press <Enter> to clear the existing password. Type in a new password (8 characters maximum / case sensitive) and press <Enter>. An input box will appear for you to confirm the access password. Re-type the same password and press <Enter>. You will be prompted for an access password whenever the Vista switch is powered on or you have disconnected from a computer.

To remove a password, highlight configure password or access password and press enter to clear the password field. Press enter again with no password input and the password will be removed. The configuration password must be entered before passwords can be changed or removed.

If you forget your "Access password", the person who knows the configure password can enter a new "Access password" for you. If you forget your "Configure password", contact Rose Electronics Technical Support for instructions.

Access time:

Automatically log out (disconnects) of the Vista switch after a period of non-activity time. The access time is changeable from 1 to 999 minutes. Time starts when there is no keyboard or mouse activity. To change the access time value, highlight the access time field and press <Enter> to clear the field. Input a new value and press <Enter>. Entering an access time of 0 (zero) disables the logout function.

Configure mouse type

The "Configure mouse type" menu allows you to change the mouse type for each connected CPU.

Port		
1	PS/2	
2	PS/2	
3	PS/2	
4	PS/2	
5	PS/2	
6	PS/2	
7	PS/2	
8	PS/2	
		F1 for help

Figure 14. OSD Configure mouse

You should only have to change the mouse type if you un-plug the mouse or change the mouse from the auto-detected type.

To change the mouse type, first select (highlight) the port (Computer #) to change the mouse type and press the space bar to cycle through the list of all the available mouse types. Stop when the desired mouse type is displayed.

The choices are:

- PS/2 (2 or 3 button mouse)
- Serial 2 button
- PS/2 Wheel mouse (2 button + wheel)

Configure keyboard type

The "Configure keyboard type" menu allows you to change the keyboard type.

Port Keyboard Type		
1 PC2		
2 PC2		
3 PC2		
4 PC2		
5 PC2		
6 PC2		
7 PC2		
8 PC2		

Figure 15. OSD Configure keyboard

You should only have to change the keyboard type if you un-plug the keyboard or change the keyboard from the auto-detected type. To change the keyboard type, select (highlight) the port (Computer #) to change the keyboard type and press the space bar to cycle through the list of all the available keyboard types. Stop when the desired keyboard type is displayed.

The choices are:

- PC1
- PC2
- PC3

Configure miscellaneous

This menu allows you to change the maximum computer ports and scan time.



Figure 16. OSD Configure miscellaneous

Maximum ports:

The "Maximum ports" configuration allows you to change the total number of computer ports that are in use. If your using an 8-port switch and only connecting 6 CPUs, changing the maximum ports from 8 to 6 will skip computer ports 7 and 8 during the scan function. To change the "Maximum Ports", highlight the maximum ports and press <Enter> to clear the field. Type in the new value (1-8) and press <Enter>.

Scan time:

This item sets the pause time during the scan function. To change the "Scan time", highlight the scan time and press <Enter> to clear the field. Type in the new value (1-16 seconds) and press <Enter>.

Save

The "Save" function, saves all configuration changes that have been made to flash memory.

Names Appearance Security Muse ResolutionChange the computer names Change the name color/position and screen saver Change the mouse type on your computers Change the keyboard type on your computers Change the maximum ports and scan settings Save all changes to non-volatile memory Exit from this menuPRESS ENTER TO SAVE CONFIGURATION CHANGES PRESS ESCAPE TO RETURN TO THE MAIN MENUFor pressConstant of the transmissionConstant of trans	Vista m	main menu version 2.2 Copyright 199		
PRESS ENTER TO SAVE CONFIGURATION CHANGES PRESS ESCAPE TO RETURN TO THE MAIN MENU	Names Appearance Security Mouse Keyboard Miscellaneous Save Exit		Change the comput Change the name c Change the passwo Change the mouse Change the keyboa Change the maximu Save all changes to Exit from this menu	ter names olor/position and screen saver ords and access time type on your computers rd type on your computers um ports and scan settings non-volatile memory
ELECTRONICS F1 for help	ĺ	PRESS I PRESS I	ENTER TO SAVE CO ESCAPE TO RETURN	NFIGURATION CHANGES
	٢			F1 for help

Figure 17. OSD Save menu

To save the configuration changes that have been made, select (highlight) save from the main menu and press <Enter>. When you press <Enter>, a message box will display as shown in Figure 17. Press <Enter> again to save your changes or press the escape key to return to the main menu.

Computer select window

The OSD option allows you to switch to the connected computers from a list of computer names.



Figure 18. OSD Computer select window

To access the computer select window, press and release the left <Ctrl> key, then press the escape key. The computer select window shown in Figure 18 will display.

Use the up/down arrow keys to select (highlight) the computer to switch to and press <Enter>. The computer names as defined on the computer name menu are displayed under the computer column. The asterisks between the port and computer column indicates the currently selected computer.

TROUBLESHOOTING

TroubleShooting

CPU does not boot, keyboard or mouse error received

- Cable is loose, reseat cable and hit F1 to continue or reboot computer.
- Wrong cable plugged in, keyboard and mouse cables reversed.
- Cable is defective; try using a cable from another CPU. If the problem goes away cable is defective.
- Port on the Vista switch is defective; try using another port. If the problem goes away port is defective.
- Port on CPU is defective, try plugging in keyboard or mouse directly. If the problem remains, the CPU port is defective. If the activity LED is not lit when switched to computer, which is powered on, the fuse on the computer's motherboard may be blown.

Mouse driver does not load

- If using a PS/2 type mouse, the CPU must be connected to the Vista or mouse at boot-up time in order for mouse to be recognized by CPU.
 Reboot the computer with the Vista powered on and cable attached.
- If using a serial type mouse make sure the right COM port is being used and the syntax of mouse driver is correct.
- Incompatible or old mouse driver being used, update the driver.
- Mouse translation is set incorrectly.

Can't switch ports from keyboard.

 You must press and release the left control key before you press the key that specifies the port number. You must also use the numeric keys above the alphabetic keys, not those on the numeric keypad.

Wrong or missing characters from those typed

The mode of the keyboard does not match that of the CPU. Issue the mode command, usually 1 for IBM PS/1, 2 for most other PS/2 PCs, and 3 for Unix computers. The default setting of the Vista is mode 2. An incorrect mode can confuse the CPU or keyboard and require rebooting the CPU or resetting the keyboard by unplugging and plugging it back in.

PS/2 mouse gets out of sync

 Cabling was disturbed during mouse movement. Issue the null command once or twice to re-sync the mouse. Update to the latest mouse driver.

Video fuzzy

Cable too long or wrong type. Use coax cable for high resolution.

Mouse does not move

- The Vista is turned off after or not connected when CPU was booted or the application using the mouse was run. Exit and re-enter application or operating system using mouse or issue reset command.
- PS/2 mouse was not connected when the Vista was powered up or the mouse was disconnected and reconnected. Issue the reset command.
- Mouse translation set incorrectly.

Video not synchronized or wrong color

- The cable may be loose, reseat cable.
- Wrong CPU cable used. If you have a 9515, 9517, 9518, XGA mono or similar monitor you must use special cables or adapters.
- Cable is defective; try using cable from another CPU if problem goes away cable is defective.
- Port on the Vista is defective; try using another port on the Vista. If problem goes away port is defective.

Cannot remember the configuration or access password.

Call Rose Electronics Technical Support for instructions.

SERVICE

Maintenance and repair

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 switch, 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: <u>TechSupport@rose.com</u> 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

Safety

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

- Follow all instructions and warnings marked on this Unit.
- 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 the power cord and the connection cables clear of obstructions that might cause damage to them.
- Use only the power cords, power transformer and connection cables designed for this Unit.
- Use only a grounded (three-wire) electrical outlet.
- Use only the power adapter designed for the Vista Switch.
- 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 is 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 and EMC regulatory statements

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

These are Safety Class I products and have protective earthing terminals. 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 servicetrained personnel may perform any servicing, maintenance, or repair. The user may adjust only items mentioned in this manual.

Safety and EMC regulatory statements

Informations concernant la sécurité



Symbole de référence à la documentation. Si le produit est marqué de ce symbole, reportez-vous à la documentation du produit afin d'obtenir des informations plus détaillées.

WARNING

Dans la documentation, un WARNING indique un danger susceptible d'entraîner des dommages corporels ou la mort.

CAUTION

Un texte de mise en garde intitulé indique un danger suscep-tible de causer des dommages à 'équipement.

Ne continuez pas au-delàd'une rubrique WARNING ou CAUTION avant d'avoir bien compris les conditions présentant un danger et pris les mesures appropriées.

Cet appareil est un produit de classe I et possède une borne de mise à la terre. La source d'alimentation principale doit être munie d'une prise de terre de sécurité installée aux bornes du câblage d'entrée, sur le cordon d'alimentation ou le cordon de raccordementfourni avec le produit. Lorsque cette protection semble avoir été endommagée, débrancher le cordon d'alimentation jusqu'à ce que la mise à la terre ait été réparée. Aucune pièce contenue à l'intérieur de ce produit ne peut être réparée par l'utilisateur.

Tout dépannage, réglage, entretien ou réparation devra être confié exclusivement à unpersonnel qualifié.

APPENDICES

Appendix A. Initial factory settings

Setting	Default Value
Foreground Color	White
Background Color	Blue
X-position	45
Y-position	90
Fadeout Time	20 seconds
Font	8 x 16 modern
Screen Saver	Fireflies
Screen Saver Time	10 minutes
Maximum Ports	8
Scan enable	Off
Scan Time Interval	5 seconds
Caps/Num lock/Scroll lock	On
PC keyboard Mode	2
Typematic Value	43 Rate=10.9 chars/sec Delay = 500 millisec.)
Mouse translation	0 (PS/2 mouse output)

Press and hold computer select buttons 1 and 2 and press the reset button to reset the Vista switch to the factory settings listed. All other settings remain unchanged.

Appendix B. Parts and cables

CPU Adapter Cables for Models with DB25 Connectors				
Part Number	Description			
CAB-WX0606Cnnn*	VGA–PS/2 keyboard/mouse to DB25M			
CAB-WX0606C/ATnnn*	VGA–AT keyboard–Serial (9) mouse to DB25M			
CAB-CX0606Cnnn**	Coax VGA-PS/2 keyboard/mouse to DB25M			
CAB-CX0606C/ATnnn**	Coax VGA-AT keyboard–Serial (9) mouse to DB25M			
CPU Adapter Cables for	Models with PC Connectors			
CAB-WX66MMnnn**	VGA-PS/2 keyboard/mouse male to male			
CAB-WX66MMnnn/AT**	VGA-AT keyboard/Serial mouse			
CAB-WX66MFnnn**	VGA-PS/2 keyboard/mouse male to female			
CAB-WX66MF <i>nnn</i> /AT**	VGA-AT keyboard/Serial mouse			
CAB-CXV66MMnnn**	VGA-PS/2 keyboard/mouse male to male			
CAB-CXV66MFnnn**	VGA-PS/2 keyboard/mouse male to female			
ACC-6F5M	MiniDin-6 female to din-5 male adapter			
ACC-KVM6F9F	MiniDin-6 female to DB9 female adapter			
TFR-05D200FSUP-3.5	Supplemental 5 Volt DC power adapter			
ACC-KBPWR	Adapter for keyboard port			
	Rackmount Kits			
RM-UL19	Black anodized, for installation in 19" racks.			
RM-UL23	Black anodized, for installation in 23" racks.			
RM-UL24	Black anodized, for installation in 24" racks.			

*Available in standard lengths of 5, 10, and 20 feet Replace *nnn* with desired length.

**Available in lengths of 5, 10, 20, 35, 50, 75, and 100 feet. Replace *nnn* with desired length.

Appendix C. General specifications

Size	13.2" W x 1.75" H x 4.5" D
Weight	3 lb.
Environment	0 to 55°C., 0% to 80% non-condensing relative humidity
Input Power	Supplied by computers
CPU Connectors	KVL-4UADB25 FemaleKVL-8UADB25 FemaleKVL-4PCAHD15F/MD6F/MD6FKVL-8PCAHD15F/MD6F/MD6F
Video Connector	HD15F VGA video
Keyboard Connector	MD6F
PS/2 Mouse Connector	MD6F
Chassis	Fully shielded, black painted steel with polyester graphic overlay panel
Controls	Reset button Computer select buttons: 4 port models - buttons 1-4 8 port models - buttons 1-8
Indicators	Activity LED Power LEDs: 4 port models LEDs 1-4 8 port models LEDs 1-8 Computer select LEDs: 4 port models LEDs 1-4 8 port models LEDs 1-8

Appendix D. Rack mount instructions

The optional rack mount kit includes the following items:

- Two black anodized mounting brackets.
- Four 6 32 x 3/8" flat head mounting screws.

To rack mount your Vista switch, attach the two rack mounting brackets to your unit with the short flange against the unit using the four screws provided. Using hardware other than that provided could cause damage to the electronics and/or result in loss of mounting integrity. Do not over tighten the screws used to mount the unit to the mounting brackets. Secure the mounting brackets to the rack using the appropriate size bolts, nuts and lock washers.

The following general guidelines should be observed when installing your unit into a rack.

- 1. The Vista switch is designed to work in an ambient temperature of 0° C to 55° C (32° F 131° F).
- 2. Do not block power supply vents or otherwise restrict airflow when rack-mounting this unit.
- 3. Mechanical loading of the rack should be considered to prevent instability.
- 4. Tighten all connectors securely and provide adequate strain relief for all cables.
- Provide a grounded power source to all units. Pay special attention to overall branch circuit load ratings before connecting equipment to this source. Overloaded circuits are potential fire hazards and can cause equipment failures or poor performance.

Appendix E. Rack mount illustration



Rack mount kits come with two (2) mounting brackets and four (4) screws to attach the Vista KVL chassis to the mounting brackets.

Appendix F. Typematic rate

Typematic Command

Press the left <Ctrl> key, type "A", enter the typematic value (1-3 digit) followed by <Enter>.

The typematic value is determined from the following tables using the equation: Typematic Value = Rate value + Delay Value. Pick the desired rate in keys/sec. and the delay in milliseconds from tables below. Add the Rate Value and the Delay Value. The sum of these values is the typematic value to enter.

For example to use a Rate of 16.0 keys/sec. and a 500 millisecond delay, the Rate value = 7 and the Delay value = 32. Add 7 + 32 = 39. To set a typematic value of 16, press the left <Ctrl> key, type "A", enter 39, and then press Enter.

Typematic Rate							
Rate Keys/sec	Rate Value	Rate keys/sec	Rate Value	Rate Keys/sec	Rate Value	Rate Keys/sec	Rate Value
30.0	0	15.0	8	7.5	16	3.7	24
26.7	1	13.3	9	6.7	17	3.3	25
24.0	2	12.0	10	6.0	18	3.0	26
21.8	3	10.9	11	5.5	19	2.7	27
20.0	4	10.0	12	5.0	20	2.5	29
18.5	5	9.2	13	4.6	21	2.3	28
17.1	6	8.6	14	4.3	22	2.1	30
16.0	7	8.0	15	4.0	23	2.0	31
Typematic Delay							
Delay*	Delay Value	Delay*	Delay Value	Delay*	Delay Value	Delay*	Delay Value
250	0	500	32	750	64	1000	96

* Delay in milliseconds

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