Avocent™

RACKit®
Technology Corporation

Expert Solutions for the LAN Environment ™

SwitchView®

Installer/User Guide

Product Overview

Feature Overview

The SwitchView allows you to control multiple PCs, easily and affordably, with just one keyboard, monitor and mouse. There is no software to install or boards to configure, so installation is simple. SwitchView works with IBM PC/AT and PS/2 systems with support for VGA and SVGA video. PS/2 keyboard and PS/2 mouse peripherals are supported through the rear of the unit.

When you turn on your PCs, the SwitchView will boot up each one without interruption by sending out the proper signal to eliminate keyboard errors. PCs may be powered-up one-at-a-time or all at once. The first available channel is automatically selected upon power-up.

You can switch computer channels two ways: via the Select button on the SwitchView front panel, or through a short keyboard sequence if the SwitchView is out of reach.

The SwitchView supports the following additional features:

- **PS/2 mouse translation** - your PS/2 mouse will work with any attached PC, regardless of whether the computer is serial or PS/2 mouse compatible!

- **Extensive Mouse Support -** The SwitchView offers full support for the Logitech MouseMan Wheel, Logitech Trackman Marble Wheel, Logitech Trackman Marble FX, Microsoft Explorer mouse and the Microsoft IntelliMouse family.

- **Standard cables** - use either Avocent-supplied or standard straight-through cables to attach computers to the SwitchView unit.

- **Built-in scanning feature** - scan through all of your attached PCs automatically. Scan every PC for 2 to 60 seconds each.

- **Hot-pluggable** - new PCs can be added or removed without powering down the SwitchView unit or other attached PCs.

- **Status LEDs** - two LEDs per computer give you constant readings on the status of your Switch-View unit.

Specifications

Mechanical

2-Port	**4-Port**
Height:1.9″ (4.83 cm)	Height:1.9″ (4.83 cm)
Width: 8.1″ (20.57 cm)	Width: 8.1″ (20.57 cm)
Depth: 5.0″ (12.7 cm)	Depth: 5.0″ (12.7 cm)

Environmental/Power
Operating Temperature: 41° (5°C) to 104° (40°C)
Storage Temperature: -4° (-20°C) to 122° (50°C)
Optional Power Supply: 6VDC @ 700 mA

Supported Hardware
Computer: IBM PC/AT, PS/2 and 100% compatibles
Video Modes: VGA and SVGA
Maximum Resolution: 1600 x 1200 @ 75 Hz
Peripherals: PS/2 keyboard, PS/2 mouse

Regulatory Compliance Standards
UL 1950, CSA C22.2 No. 950, EN60950
FCC part 15B, EN55022, EN50082, CISPR22, ICES-003

Under certain circumstances it may be necessary to power the SwitchView with an external power supply. If this is necessary, the power supply should be a Listed Direct Plug-In Transformer unit marked "Class 2" or "L.P.S." and rated at 6 VDC, 700 mA.

Installation

## Basic Install

Before you install

In order to connect your PCs to the SwitchView, you will need the appropriate connecting cables. We recommend these Avocent cable kits:

For PS/2 PSs: **CPS2-6A**   For AT/serial PCs: **CSER-6A**

The SwitchView also accepts standard straight-through cables for these connections.

Connecting your peripherals

1. Your VGA monitor, keyboard and mouse connect to the SwitchView unit instead of your computer. Plug your PS/2 keyboard cable into the purple ▦ port on the back of your unit in the User Console section.

    Plug your PS/2 mouse cable into the green ⌷ port and your VGA video cable into the blue ▢ port.

PS/2 MOUSE CABLE

PS/2 KEYBOARD CABLE

VGA VIDEO CABLE
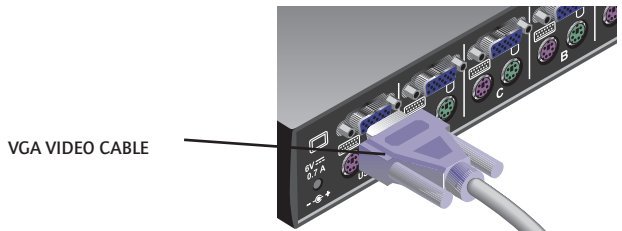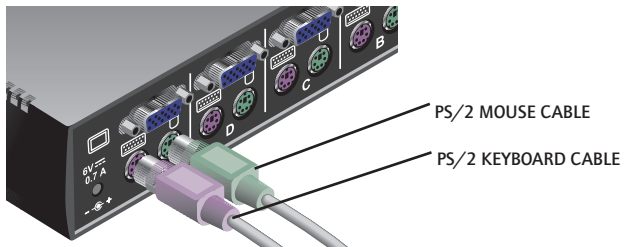
Connecting your Computers

2.   Power down all computers that will be part of your SwitchView system.

3.   Locate the appropriate cable kit to attach your first computer to the SwitchView. Now, plug the keyboard cable from the kit into the purple ⌨ connector of any available port on your SwitchView. Ports are labeled A-B on the 2-Port and A-D on the 4-Port.

    Next, plug your mouse cable into the green 🖱 connector of the same port.

    Plug the video cable into the blue monitor connector.

    Plug the remaining cable ends into the matching ports on your computer. For serial computers, use only Avocent provided adaptors. Tighten all thumbscrews.
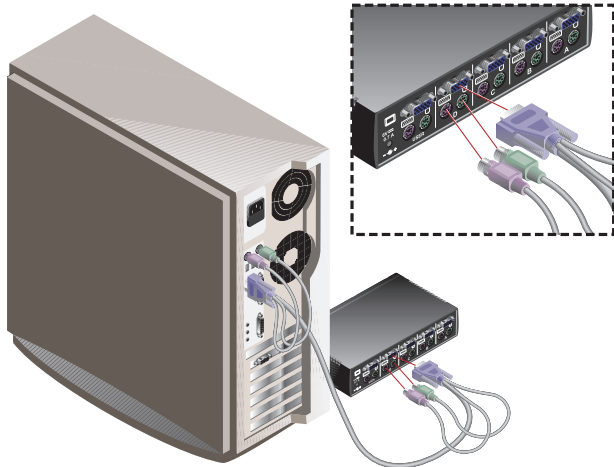
4.   Repeat step 3 for each additional computer to be attached and then power-up all attached computers.

Basic Operations

PCs may be powered-up one-at-a-time or all at once. The green LEDs over each channel will light, indicating that the attached computer is powered on. After power-up, a lit amber LED indicates the selected computer. Other PCs may now be selected for operation.

Selecting a PC

There are two ways to select a PC. One way is via the Select push-button. This selects the next computer in sequence. Holding the push-button down will enable scanning of all available channels until the button is released. The second way is by entering a short sequence of keystrokes on the keyboard. This is called keyboard, or hot-key, switching.

Press the **Control** key twice within one second to place your SwitchView in Command Mode. Your keyboard LEDs will flash to verify that you are operating in Command Mode. Now, whatever you type will be interpreted as SwitchView system commands until **Enter** is pressed to accept the command or **Escape** is pressed to cancel.

In Command Mode, type the letter for the PC you wish to select. Press **Enter** to accept the new address (Addr). See below.

Key Sequence	Action
<CTRL><CTRL>*Addr*<Enter>	Selects an active channel via keyboard.

EXAMPLE	
Key Sequence	**Action**
1. <CTRL><CTRL>B<Enter>	Selects Channel B.
2. <CTRL><CTRL>C<Enter>	Selects Channel C.

Scanning PCs

The scanning feature allows you to automatically monitor, or scan, each PC in your SwitchView system. If you use the keyboard during scanning, the scan will pause until you finish, then resume with the next PC. The length of time each PC's video remains on the screen, or dwell time, can be changed at any time. Scanning will be halted if the Halt command is entered or if another PC is selected.

The following key sequences control scanning:

Key Sequence	Action
<CTRL><CTRL>D*nn***<Enter>**	Configures the dwell time. Substitute nn with a value from 2 to 60 seconds. The default value is 5 seconds.
<CTRL><CTRL>SG**<Enter>**	Enables the scan Go command.
<CTRL><CTRL>SH**<Enter>**	Enables the scan Halt command.

If you would like mouse **and** keyboard activity to suspend scanning, see the commands below.

Key Sequence	Action
<CTRL><CTRL>M+**<Enter>**	Mouse will suspend scanning.
<CTRL><CTRL>M-**<Enter>**	Mouse will not suspend scanning. (default)

EXAMPLE	
Key Sequence	**Action**
1. **<CTRL><CTRL>**D10**<Enter>**	Each PC's video will remain on the screen for 10 seconds before the next channel is displayed.
2. **<CTRL><CTRL>**SG**<Enter>**	Scanning begins with the current computer, then continues to the next PC in sequence.
3. **<CTRL><CTRL>**SH**<Enter>**	Scanning is halted until the Go command is issued again.

Troubleshooting

Unit

Green channel LED not lit
Verify that the computer is powered on. Check the cabling between your computer and the SwitchView. Verify that a keyboard works when plugged directly into your PC. If the connection is to a laptop mouse, the green LED will not light but the port can still be selected.

Unable to switch channels
Verify that all attached PCs are powered and correctly connected to the unit.

Unable to hot-key
After a power loss, the unit will default to the <CTRL> <CTRL> key sequence. Try using <CTRL> <CTRL> to hot-key switch.

Video

No video
Verify that the video cable between the computer and the SwitchView is connected to the selected port. Verify that the monitor cable is correctly connected to the SwitchView.

Power down the computer. Connect the monitor directly to the computer and power up again. If the monitor does not operate correctly direct to the computer, try another monitor.

Verify that the cables from the computer to the Switch-View are connected properly.

Mouse

Mouse jumps or "hugs" screen
If the mouse has been hot-plugged while running in Windows, you may need to close and restart Windows.

If the mouse still does not function, try the mouse resynchronization command: **‹CTRL›‹CTRL›**ZM**‹Enter›**.

Mouse is inoperable on one or more channels
Try the mouse reset command: **‹CTRL›‹CTRL›**MR**‹Enter›** or **‹CTRL›‹CTRL›**MW**‹Enter›** depending on the type of mouse you have. Check the table below for the appropriate keyboard sequence. If your mouse type is not listed, use the MR keyboard sequence.

Verify that the mouse is plugged into the mouse port in the User Console area on the rear panel of the unit.

Verify that the computer works properly with a mouse connected directly to it. If not, try another mouse.

If you are using a serial mouse, verify that you are using an Avocent Serial Mouse adaptor.

Peripheral Mouse	Microsoft Intellipoint Driver	Logitech MouseWare Driver
Logitech MouseMan Wheel	MW	MR
Logitech Trackman Marble Wheel	MW	MR
Logitech Wheel Mouse	MW	MR
Logitech Trackman Marble FX	MR	MR
Logitech Marble Mouse	MR	MR
Three Button	MR	MR
Microsoft IntelliMouse	MW	MW
Microsoft Explorer	MW	MW

Keyboard

Keyboard is inoperable on one or more channels
Verify that the cables from the PC to the SwitchView are connected properly.

Verify that the keyboard is plugged into the keyboard port in the User Console area on the rear panel of the unit.

Verify that the keyboard works properly connected directly to the computer. If not, try a different keyboard.

If the keyboard still does not function, cycle power on all attached computers and try again.

Keyboard is inoperable after switching channels or characters on screen do not match keyboard input
Try changing the keyboard scan set by using the keyboard command sequence: <CTRL><CTRL>Kn<Enter>, where n is a scan set number 1-3.

If you require any further assistance, please contact Avocent Customer Support.

Appendix

The following is a summary of all operational commands.

Key Sequence	Action
<CTRL><CTRL>*Addr***<Enter>**	Selects an active channel via keyboard.
<CTRL><CTRL>D*nn***<Enter>**	Configures the dwell time. Substitute *nn* with a value from 2 to 60 seconds.
<CTRL><CTRL>SG**<Enter>**	Enables the scan Go command.
<CTRL><CTRL>SH**<Enter>**	Enables the scan Halt command.
<CTRL><CTRL>M+**<Enter>**	Mouse will suspend scanning.
<CTRL><CTRL>M-**<Enter>**	Mouse will not suspend scanning. (default)
<CTRL><CTRL>MR**<Enter>**	If you hot-plug the SwitchView to a PC connection you may experience a loss of mouse signal. Use this command to restore the signal if you're using a PC with a standard PS/2 mouse driver. (See page 8)
<CTRL><CTRL>MW**<Enter>**	Use this command to restore the mouse signal if you're using a PC with a Microsoft IntelliMouse driver. (See page 8)
<CTRL><CTRL>K*n***<Enter>**	Sets keyboard scan set; *n* is a number 1 - 3.
<CTRL><CTRL>AV**<Enter>**	Displays the current firmware version of the SwitchView processors. You must be at a DOS prompt or in a text editor/word processor to view this information.
<CTRL><CTRL>H1**<Enter>**	Default Command Mode Activation
<CTRL><CTRL>H2**<Enter>**	Changes the Command mode activation sequence to <ALT> <ALT>
<CTRL><CTRL>H3**<Enter>**	Changes the Command mode activation sequence to <Shift> <Shift>
<CTRL><CTRL>H4**<Enter>**	Changes the Command mode activation sequence to <NUMLOCK> <->
<CTRL><CTRL>ZM**<Enter>**	Used to resynchronize the mouse after a hot-plug. Repeat, if necessary, until synchronization is re-established. **NOTE: Using this command while the mouse is operating correctly will cause the mouse to lose sync.**

U.S.A.
Federal Communications Commission (FCC)

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canada
Industry Canada (IC)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Japan
Voluntary Control Council for Interference (VCCI) Standards

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Warranty

Avocent Corporation warrants to the original retail purchaser that this product is and will be free from defects in materials and workmanship for a period of 12 months from the date of purchase.

Additionally, all Avocent products carry an unconditional thirty-day satisfaction guarantee. If, for any reason, you are dissatisfied with the performance of this product, you may return it to the point of purchase for a refund of the purchase price (excluding shipping charges). This guarantee does not apply to special order products, and may not be available through all resellers. During the warranty period, purchaser must promptly call Avocent for a RETURN MATERIALS AUTHORIZATION (RMA) number. Make sure that the RMA number appears on the packing slip, proof of purchase, AND ON THE OUTSIDE OF EACH SHIPPING CARTON. Unauthorized returns or collect shipments will be refused.

Ship prepaid to: Avocent Corporation
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        Huntsville, AL 35805 U.S.A.
        Telephone: (256) 430-4000

The above limited warranty is voided by occurrence of any of the following events, upon which the product is provided as is, with all faults, and with all disclaimers of warranty identified below:

1. If non-Avocent approved cabling is attached to the SwitchView. Poorly constructed and miswired cabling can diminish video quality and damage equipment. Avocent manufactured cabling is built to high quality standards utilizing overall braided shield to comply with FCC emission standards, and each cable is individually tested under load.
2. If defect or malfunction was caused by abuse, mishandling, unauthorized repair, or use other than intended.
3. If unauthorized modifications were made to product.
4. If unreported damages occurred in any shipment of the product.
5. If damages were due to or caused by equipment or software not provided by Avocent.
6. If the SwitchView is used with non-grounded or incorrectly polarized AC power.
7. If the product is used in contradiction to any instruction provided by any User Guide or Instruction Sheet provided to you or with the product.

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