AutoView®

Installer/User Guide

INSTRUCTIONS

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

DANGEROUS VOLTAGE

This symbol is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

POWER ON

This symbol indicates the principal on/off switch is in the on position.

POWER OFF

This symbol indicates the principal on/off switch is in the off position.

PROTECTIVE GROUNDING TERMINAL

This symbol indicates a terminal which must be connected to earth ground prior to making any other connections to the equipment.

AutoView®

Installer/User Guide

USA Notification

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 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.

Canadian Notification

This digital apparatus does not exceed the Class A 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 A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Japanese Notification

　　この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Agency Approvals

UL 1950, CSA C22. 2 No. 950, EN60950, IEC 60950
FCC part 15A, EN55022, EN55024

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Product Overview

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Chapter 1: Product Overview

Features and Benefits

The AutoView allows you to control up to 64 PCs with one keyboard, monitor and mouse. Each computer can be up to 30 feet away from the AutoView. The AutoView works with IBM PC/AT and PS/2 systems, and 100% compatible machines with support for VGA, SVGA, XGA and XGA-II video. PS/2 keyboard and mouse peripherals are supported through the rear of the unit.

Expansion for up to 64 computers

An AutoView unit will support from one to eight attached PCs, or channels. If more than eight channels are needed, multiple units can be cascaded together for expansion. Up to 2 tiers of units can be connected for a total of 64 attached computers in one system.

AutoBoot technology

The AutoBoot feature boots all attached servers during initial power up or after a power failure. PCs are booted transparently without operator intervention, and may be powered up one at a time or all at once. When the power stabilizes, a channel may be selected. The first available channel is automatically selected upon power up of the base AutoView.

On-Screen Display capability

Configure and control your AutoView with On-Screen Display (OSD). Name your computer channels anything you wish, then select the desired computer from an easy-to-use menu. Secondary menus let you configure and initiate channel scanning and other system features.

Advanced security for total control over system access

Use the advanced bi-level security feature to configure and control server access for every type of user in the system. The administrator has full access privileges; individual users can have viewing or viewing/editing capability for each attached server.

IntelliMouse support

The AutoView offers full support for the Microsoft IntelliMouse.

OSD Configuration Utility

The OSD Configuration Utility allows the administrator to easily configure and download a channel list with defined users and access privileges to the entire system. This utility will also read and save your current configuration for extra security.

Push-button and keyboard switching

In addition to using the on-screen menus, you can switch computer channels in one of three easy ways: via the AutoView channel push-buttons, with the Scan button or with a simple keyboard sequence.

Keep Alive feature

AutoView's Keep Alive feature allows attached servers to power the unit in the event of an AutoView power failure. This prevents attached PCs from locking up and keeps you from losing time and data.

PS/2 mouse translation

For added compatibility with your current equipment, AutoView features PS/2 mouse translation capability. Operated through the AutoView, your PS/2 mouse will work with any attached PC - regardless of whether the computer is serial or PS/2 mouse compatible.

Built-in scanning capabilities

A built-in scanning feature allows you to automatically monitor, or scan, your PCs without intervention. When keyboard activity is detected, scanning is suspended until all activity stops. Scanning then resumes with the next channel in sequence.

Status indicator LEDs

Indicator LEDs give you constant readings on the status of your AutoView unit. Status, scanning and channel LEDs take the guesswork out of system operation and diagnostics.
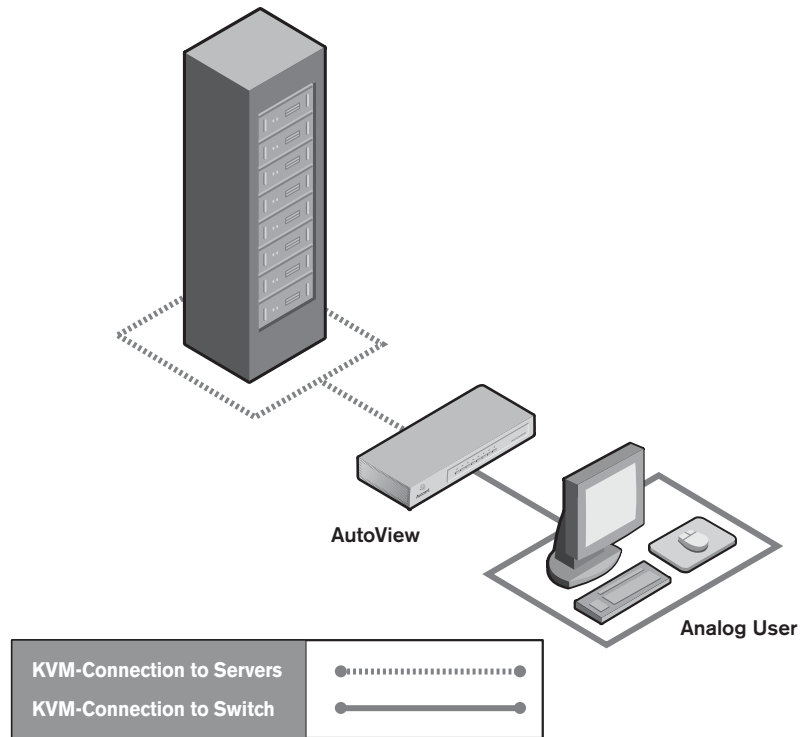
Figure 1.1: A Typical AutoView Configuration

Compatibility

PS/2 peripherals

The AutoView requires a PS/2 mouse and keyboard. The following mice are known to be compatible:

- IBM PS/2-style
- Logitech Trackman
- Kensington
- Microsoft Serial-PS/2 mouse
- Logitech Mouseman (PS/2)
- Microsoft IntelliMouse

Other manufacturers' mice may operate with the AutoView. If you experience problems using an untested mouse, contact Avocent Technical Support with the manufacturer and model number of the mouse.

XGA/XGA-II support

If you wish to use XGA or XGA-II video, you will need to purchase an adaptor available through Avocent.

Safety Precautions

To avoid potential video and/or keyboard problems when using Avocent products:

- If the building has 3-phase AC power, ensure that the computer and monitor are on the same phase. For best results, they should be on the same circuit.

- Use only Avocent-supplied cable to connect computers and KVM switches. Avocent warranties do not apply to damage resulting from user-supplied cable.

To avoid potentially fatal shock hazard and possible damage to equipment, please observe the following precautions:

- Do not use a 2-wire extension cord in any Avocent product configuration.

- Test AC outlets at the computer and monitor for proper polarity and grounding.

- Use only with grounded outlets at both the computer and monitor. When using a backup power supply (UPS), power the computer, the monitor and the AutoView unit off the supply.

NOTE: The AC inlet is the main disconnect.

Rack mount safety considerations

- Elevated Ambient Temperature: If installed in a closed rack assembly, the operation temperature of the rack environment may be greater than room ambient. Use care not to exceed the rated maximum ambient temperature of the unit.

- Reduced Air Flow: Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

- Mechanical Loading: Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

- Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of circuits might have on overcurrent protection and supply wiring. Consider equipment nameplate ratings for maximum current.

- Reliable Earthing: Reliable earthing of rack mounted equipment should be maintained. Pay particular attention to supply connections other than direct connections to the branch circuit (for example, use of power strips).

2 *Installation*

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Chapter 2: Installation

Getting Started

Before installing your AutoView system, refer to the lists below to ensure that you have all the items that shipped with the AutoView as well as all other items necessary for proper installation.

Supplied with the AutoView

Your AutoView switch package contains the following items:

- AutoView unit
- Local country power cord
- AutoView Installer/User Guide
- AutoView Quick Installation Guide
- Download Instructions

Optional items
- 19 inch Switch Mounting Bracket kit (available from Avocent)
- Serial cable, DB9 female
- Adaptors (available from Avocent)

Rack Mounting your AutoView Unit

You can either place your AutoView appliance on your desktop or rack mount your unit into an EIA standard rack.

Obtain a Rack Mounting Bracket Kit (1U) from Avocent to rack mount your AutoView. Before installing the switch and other components in the rack, stabilize the rack in a permanent location. Start rack mounting your equipment at the bottom of the rack, then work to the top.

CAUTION: Rack Loading - Overloading or uneven loading of racks may result in shelf or rack failure, causing damage to equipment and possible personal injury. Stabilize racks in a permanent location before loading begins. Mount components beginning at the bottom of the rack, then work to the top. Do not exceed your rack load rating.

CAUTION: Power Considerations - Connect only to the power source specified on the unit. When multiple electrical components are installed in a rack, assure the total component power ratings do not exceed circuit capabilities. Overloaded power sources and extension cords present fire and shock hazards.

To install the rack mounting bracket:

1. Remove the side screws that secure the cover on your AutoView unit.

2. Line up the holes in the side brackets with the screw holes in the sides of the AutoView unit.

3. Using the previously removed screws, thread one through each of the holes in the sides of the rack mount brackets and into the AutoView cover. Tighten them securely.

4. Install a snap on nut (provided) onto one end of the cable support rod. Insert the rod through both brackets as shown above. Install the remaining acorn nut on the other end of the support rod.

5. Tie wraps can be used to secure cables to the support rod.
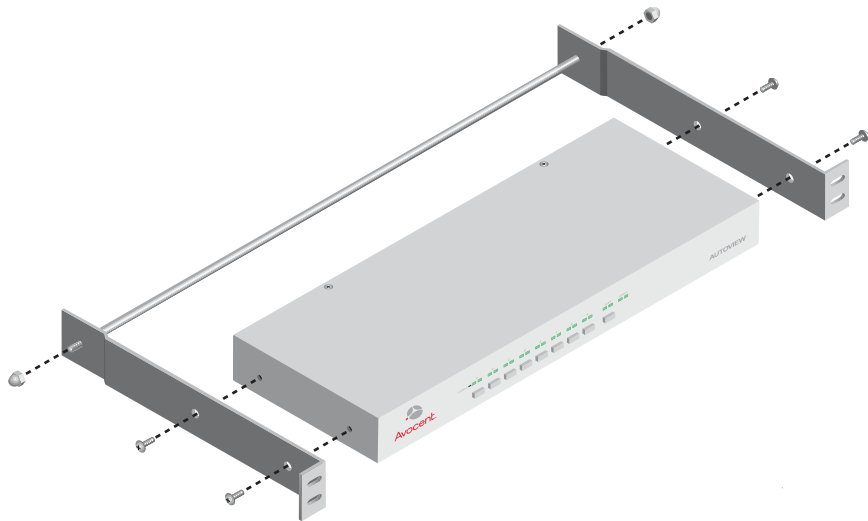
Figure 2.1: Rack Mounting Diagram

Installing the AutoView

The diagram below illustrates one possible configuration for your AutoView switch. Follow the step-by-step procedure *To install an AutoView switch* to properly install your new switch.

Local User

DB9 serial port for updating firmware

Servers B-H

Server A
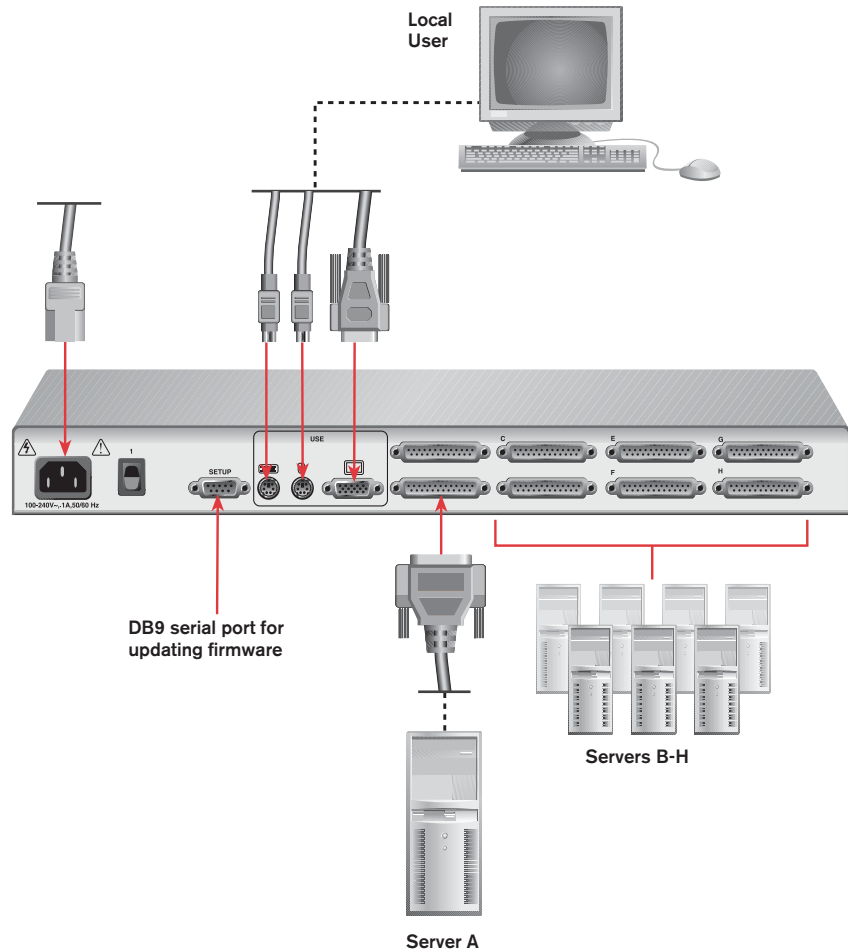
Figure 2.2: AutoView Installation Example

WARNING: To reduce the risk of electric shock or damage to your equipment -
- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the power cord into a grounded (earthed) outlet that is easily accessible at all times.
- Disconnect the power from the unit by unplugging the power cord from either the electrical outlet or the unit.

To install an AutoView switch:

1. Power down all computers that will be part of your AutoView system.

2. Prepare the location for the switch. See *Rack Mounting your AutoView Unit* in this chapter if you are rack mounting the unit.

3. Select cables with appropriate connectors and length.

4. Plug your VGA monitor cable into the port labeled ▢ on the back of your AutoView. Plug your PS/2 keyboard cable and your PS/2 mouse cable into the ports labeled ⌨ and 🖱 respectively.

5. Locate your first input cable. It will have a 25-pin "D" connector at one end. Plug this cable into any lettered channel port on the rear of the AutoView. The other end of the input cable will have five connectors: a 15-pin "HDD" connector for your video, a 5-pin DIN/6-pin miniDIN connector for an AT or PS/2 keyboard connection, and a 9-pin serial/6-pin miniDIN connector for a serial or PS/2 mouse connection. The PS/2 mouse connector is designated by a yellow band or mouse icon. Use only the keyboard and mouse connectors that are appropriate for your PC, and leave the others unconnected. Plug these connectors into the matching ports on your computer.

6. Locate your next input cable. Repeat step 5 until all computers are properly attached to the AutoView.

7. Locate the power cord that came with your AutoView unit. Plug it into the IEC power connector on the AutoView. Make sure that the power switch is off, then plug the other end of the power cord into an appropriate AC wall outlet. This outlet must be near the equipment and easily accessible to allow for unplugging prior to any servicing of the unit.

8. Power up your AutoView unit first, then all attached computers.

NOTE: The AutoView and all attached computers should be powered down before servicing the unit. Always disconnect the power cord from the wall outlet.

Installing a Multiple Switch System

The following diagram illustrates one possible cascading configuration using your AutoView switch. Perform this installation if you want to add another switch to your existing system. Follow the step-by-step instructions to properly cascade your new AutoView switch.
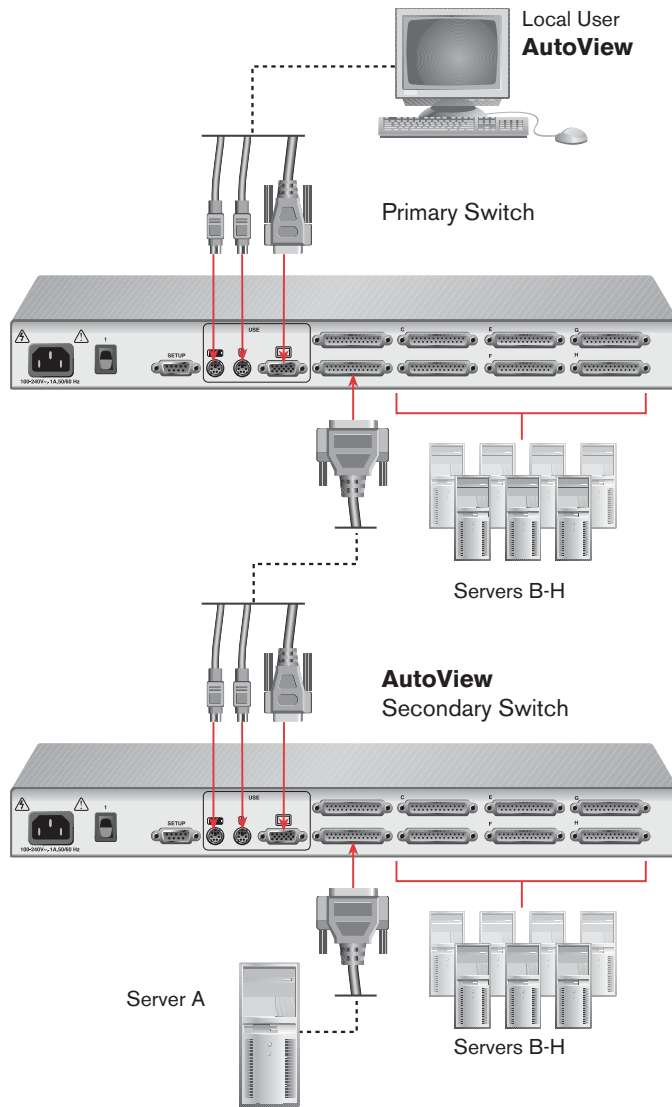
Figure 2.3: Multiple Switch Installation Example

To cascade multiple AutoView units:

1.   Follow steps 1-7 of the procedure *To install an AutoView switch.*

2.   Plug the 25-pin D connector of your input cable into one of the available channel ports on the rear of your primary AutoView unit.

3.   Plug the 15-pin video connector on the other end of the cable into the appropriately labeled port on your first cascading AutoView unit. Plug the PS/2 mouse and keyboard connectors into the appropriate ports.

4.   Repeat steps 2-3 for every cascaded AutoView unit in your system.

5.   Power up your AutoView unit(s) first, then all attached computers.

3 *Operations*

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Chapter 3: Operations

Overview

Your AutoView may be operated in a non-secure (no password required) or secure (password required) mode. All units ship defaulted to the non-secure mode. For information on implementing password security see *Setting User Station Security* later in this chapter.

Front Panel LEDs and push-buttons

PCs may be powered up one at a time or all at once. No operator intervention is required during booting. As the system stabilizes, the green LEDs over each channel will light, indicating that the attached computer is powered on. The amber LED will light at the active computer. A PC may now be selected via the On-Screen Display menu or, if you are in non-secure mode, channel push-buttons, the Scan button or keyboard hotkey sequence.

The Scan push-button has two LEDs over it. Press the button momentarily to switch to the next computer in sequence. The amber LED will light briefly during the channel switch. Press and hold the button for one second to initiate channel scanning. The green LED will light while you are in scan mode.

There are two status LEDs. The red LED lights if an internal failure occurs. The green LED will blink for several seconds during power up while the system performs a self-diagnostic. After initialization, the green LED remains lit during normal operation and blinks only when you are in Command Mode.

Figure 3.1: Avocent AutoView Front Panel LEDs and Push-buttons

On-Screen Display

When you launch the On-Screen Display, you will first see the OSD Administrator Channel List. This menu lists all the servers in the system, the associated addresses and the status of each port. From here, you can select servers and access OSD configuration options.

To access the OSD Administrator Channel List

1.   Press the keyboard **Control** key twice within one second.

2. In non-secure mode, the Administrator Channel List appears.
    -or-
    In secure mode, the User Login window appears. Type in your
    username and press **Enter**. The Administrator Channel List appears.
    -or-
    In secure mode, if you are the system administrator, log in as Admin, Root
    or Administrator. Type your password and press **Enter**. The Administrator
    Channel List appears.

Avocent Control Panel Administrator Channel List		
Name	**Address**	**Access**
Accounting	F	K
Engineering	E	K
John's PC	C	VK
Mail Server	A	VK
Pam's PC	B	VK
Shop Floor	D	K
		F10-Logout

Figure 3.2: The Administrator Channel List

3. If there is no keyboard activity, the login window will time-out after five
    minutes and go blank, enabling the monitor's energy saver. Press any key
    to restore the login prompt.

Understanding the Administrator Channel List

The Administrator Channel List displays all named channels in your
AutoView system. They will be listed alphabetically with their channel
addresses and access status beside them. When in secure mode, only the
channels that are accessible to the logged in user will be listed. For more
information on security, see *Setting User Station Security* in this chapter.

Selecting channels

A computer may be selected via the OSD or, if you are in non-secure mode,
via channel push-buttons, the Scan button or keyboard hotkey sequences. (See
Keyboard Switching later in this chapter.) The amber LED on the front panel of
the switch will light at the active computer.

To select a channel in the OSD:

1. Use your **Up** and **Down Arrow** keys, the **Page Up** and **Down** keys or
    the mouse to select a channel.
    -or-
    Press the **Home** or **End** key to move directly to the top or bottom of the list.
    -or-
    Type a letter to move the highlight bar to the first channel name beginning
    with that letter. Press the letter repeatedly to scroll through all channels
    that begin with that letter from top to bottom.

2. Press **Enter.**
    -or-
    Press **Escape** to exit the Administrator Channel List without changing
    channels.

To select servers without displaying the OSD:

1. Press and hold down the **Num Lock** key. Press and release the **Minus** (-)
    key on the numeric keypad. Now release the **Num Lock** key. The Command
    Line menu appears.

2. Type the channel address of the computer you wish to access.

3. Press **Enter**.

Setting up the On-Screen Display (OSD)

All commands other than selecting servers are performed from the
Administrator Commands menu. If you are operating in non-secure mode
or are the system administrator, you will have several options that do not
appear in the user level Command Menu. Add Channel, Edit Channel, Delete
Channel and Administrator Functions are all covered in separate sections in
this chapter.

```
╔═══════════════════════════════════════╗
║        Avocent Control Panel          ║
║     Administrator Command Menu        ║
╟───────────────────────────────────────╢
║  Channel Maintenance                  ║
║  Administrator Functions              ║
║  Turn Scanning ON                     ║
║  Scanning Order                       ║
║  Sequential Scan Dwell Time           ║
║  Reset Standard Mouse/Keyboard        ║
║  Reset Wheel Mouse/Keyboard           ║
║  Version Information                   ║
║                                       ║
║  ENTER-accept        ESC-previous     ║
╚═══════════════════════════════════════╝
```
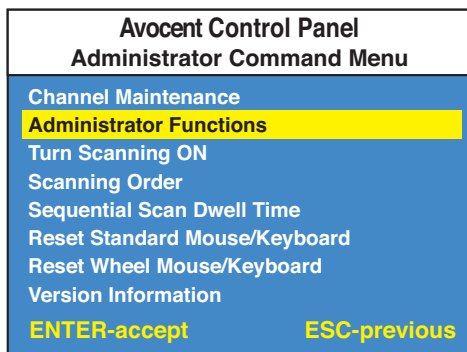
Figure 3.3: Administrator Command Menu

Administrator Commands Features List

Command	Description
Channel Maintenance	Add, delete and edit the channel name, address, dwell time and ID window
Administrator Functions	Set up administrator, users, channel switching, port setup and FLASH upgrade
Turn Scanning ON/OFF	Control the mode where the switch scans from port to port
Scanning Order	Set up a custom scan pattern
Sequential Scan Dwell Time	Control the dwell time for each active channel in the system
Reset Std Mouse/Keyboard	Reset the mouse and keyboard to restore correct settings
Reset Wheel Mouse/Keyboard	Reset the mouse and keyboard to restore correct settings
Version Information	Access the version information about your system

To access the Administrator Command Menu:

1. Press the keyboard **Control** key twice within one second.

2. In non-secure mode, the Administrator Channel List appears.
    -or-
    In secure mode, the User Login window appears. Type your username and press **Enter**. The Administrator Channel List appears.
    -or-
    In secure mode, if you are the system administrator, log in as Admin, Root or Administrator. Type your password and press **Enter**. The Administrator Channel List appears.

3. Press the keyboard **Control** key twice within one second again. The Administrator Command Menu appears.

4. Press the **Up** or **Down Arrow** key to select a specific menu or command.

5. Press **Enter** to access a menu or activate a command.
    -or-
    Press **Escape** to exit the window without saving changes.

Adding and Maintaining Channels

You may add, delete or edit a channel whenever you want to change your AutoView system. You will have the ability to name the channel, set the port address, set the time that the channel ID will flash on the screen and establish the scan dwell time, if appropriate.

To add a new channel to the base unit:

1. Press the keyboard **Control** key twice within one second. The Administrator Channel List appears.

2. Press the keyboard **Control** key twice within one second again. The Administrator Commands Menu appears.

3. Highlight *Channel Maintenance* and press **Enter**.

4. Highlight *Add Channel* and press **Enter**.

Avocent Control Panel
Configure Channel

Enter Channel Name

ENTER-accept   ESC-previous

Figure 3.4: Add Channel Menu

5. Type in a new channel name, up to 14 characters long, and press **Enter**.

6. Type a letter in the channel address for the PC you are naming and press **Enter**.

7. When prompted for another cascade level, type **N** and press **Enter**.
   -or-
   Press **Escape** to exit the window without saving changes.

To add new channels with a cascaded unit:

1. Press the keyboard **Control** key twice within one second. The Administrator Channel List appears.

2. Press the keyboard **Control** key twice within one second again. The Administrator Commands menu appears.

3. Highlight *Channel Maintenance* and press **Enter**.

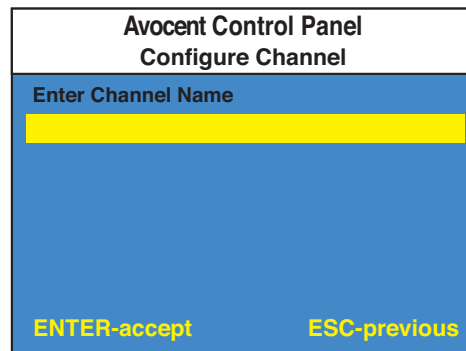4. Highlight *Add Channel* and press **Enter**.

5. Type in a new channel name, up to 14 characters long, and press **Enter**.

6. Type a letter in the channel address for the PC you are naming and press **Enter**.

7. When prompted for another cascade level, type **Y** and press **Enter**.

8. Enter the letter of the computer port on the cascaded AutoView you wish to add and press **Enter**.

9. You may add up to two levels of cascaded switches. When you have finished adding levels, type **N** when prompted for another cascade level and press **Enter**.

To delete an existing channel:

1. Press the keyboard **Control** key twice within one second. The Administrator Channel List appears.

2. Highlight the channel you wish to delete in the Administrator Channel List.

3. Press the **Control** key twice to access the Command Menu.
   -or-
   Type **Alt-M** to access the Command Menu.

4. Highlight *Channel Maintenance* and press **Enter**.

5. Highlight *Delete Channel* and press **Enter**.

6. Type **Y** or **N** at the prompt to confirm the deletion and press **Enter**.

To change a channel name:

1. Press the keyboard **Control** key twice within one second. The Administrator Channel List appears.

2. Highlight the channel you wish to change in the Administrator Channel List.

3. Press the **Control** key twice.
    -or-
    Type **Alt-M** to access the Command Menu.

4. Highlight *Channel Maintenance* and press **Enter**.

5. Highlight *Change Channel Name* and press **Enter**. The Configure Channel menu appears.

Avocent Control Panel
Configure Channel

Change Name
Accounting
to

ENTER-accept   **ESC-previous**
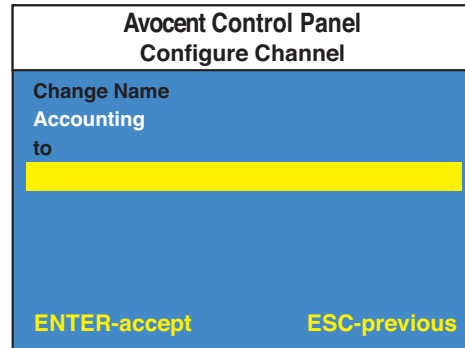
Figure 3.5: Change Channel Name Menu

6. Type the new channel name and press **Enter**.
    -or-
    Press **Escape** at any point to exit this operation without saving the changes.

To change a channel address:

1. Press the keyboard **Control** key twice within one second. The Administrator Channel List appears.

2. Highlight the channel you wish to change in the Administrator Channel List.

3. Press the **Control** key twice.
    -or-
    Type **Alt-M** to access the Command Menu.

4. Highlight *Channel Maintenance* and press **Enter**.

5. Highlight *Change Channel Address* and press **Enter**. The Configure Channel menu appears.

```
           Avocent Control Panel
             Configure Channel
  Enter Channel Letter for
  Accounting
  A...H are valid



  ENTER-accept          ESC-previous
```
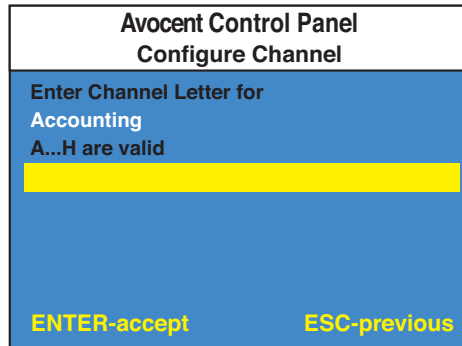
Figure 3.6: Change Channel Address Menu

6. Type the new channel address and press **Enter**.
    -or-
    Press **Escape** at any point to exit this operation without saving the changes.

Configuring the ID Window

The ID window appears when you change channels and displays the name of the selected channel. This window can be individually configured for each channel in your system. The characteristics of the ID window can be changed from the Channel Maintenance Menu. This option is only available if you are operating in non-secure mode or if you are the system administrator.

To change the size, color and position of the ID window:

1. Press the keyboard **Control** key twice within one second. The Administrator Channel List appears.

2. From the Administrator Channel List, press the **Control** key twice.
    -or-
    Type **Alt-M** to access the Command Menu.

3. Highlight *Channel Maintenance* and press **Enter**.

4. Highlight *Options for ID window* and press **Enter**. The ID window will appear. Follow the procedures outlined in the following table to configure your ID window.

ID Window Settings

Operation	Procedure
Move the ID window	Use the **Arrow** keys or mouse to move the ID window's position on the monitor. If the window flickers but does not move, continue tapping the **Arrow** keys until it moves back into range.
Change window background color	Press the **Page Up** key to cycle through the available window background colors.
Change text color	Press the **Page Down** key to cycle through the available text colors.
Change window size	Use the **Plus** (+) and **Minus** (-) keys to change the length of the ID window.

5.   Press **Enter** to accept the changes.
      -or-
      Press **Escape** to exit the menu without saving the changes.

Setting the ID window dwell time

This menu selection lets you set the time that the ID window remains on screen after a channel switch. Each channel can be configured independently. The default time is set for five seconds.

To set the ID window dwell time:

1.   Press the **Control** key twice to access the Administrator Channel List.

2.   Highlight the channel you wish to change.

3.   Press the **Control** key twice to access the Command Menu.

4.   Highlight *Channel Maintenance* and press **Enter**.

5.   Highlight *Dwell Time for ID window.* Enter a number between ø-255 seconds. Entering **ø** disables the ID window. Entering **255** allows the ID window to stay on screen the entire time the channel is active. Press **Enter**.

6.   Highlight *Save Changes* and press **Enter**.

Setting User Station Security

The Administrator Functions Menu allows you to create an administrator password, set a system logout time and create individual user logins with specific access and privileges. This menu is only used if you are running your system in secure mode. The table below discusses the security features.

Security Operating Modes

Feature	Description
Administrator password	Entering an administrator password places your system in secure mode. A lock symbol will appear to the right of the menu headings to indicate secure operation. Non-secure systems do not use passwords. To return your system to the default of non-secure mode, simply delete the administrator password. When the administrator password is enabled, user passwords must also be entered or the switch will not be completely secure. The default for users is no password. Simply hit the **Enter** key at the prompt.
Logout capability	You have the option of automatically logging out of the system after an administrator defined period of inactivity. Time-out values can be set from ø to 60 minutes. A value of ø keeps the user logged in continuously. When the time-out is reached, the current channel is deselected and the display goes to screen saver mode. Users must login again to access system computers. This option is only available in secure mode. To manually logout when in secure mode, press **F10**.
Multiple user logins	You can create up to four user login accounts in addition to the system administrator. Use these logins to configure and control server access for every type of system user. The administrator has full access privileges. Additional users can have viewing or viewing with keyboard and mouse control capability for each attached server. This option is only available in secure mode.
Push-button and Hotkey	While in secure mode, all front panel push-buttons and hotkey channel selection methods are disabled. This also includes use of the Cybex Remote Switch Panel (RSP). All other hotkey commands remain operational to the administrator only. In non-secure mode, all push-buttons and hotkey commands function normally.

To access the Administrator Functions menu:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Press the **Control** key twice more to access the Command Menu.

3. Highlight *Administrator Functions* from the Command Menu and press **Enter**.

```
┌─────────────────────────────────────────┐
│          Avocent Control Panel          │
│            Administrator Menu           │
├─────────────────────────────────────────┤
│  Administrator Password                 │
│  Administrator Logout Time              │
│  Setup USER 1                           │
│  Setup USER 2                           │
│  Setup USER 3                           │
│  Setup USER 4                           │
│  Unit Configuration                     │
│                                         │
│  ENTER-accept          ESC-previous     │
└─────────────────────────────────────────┘
```

Figure 3.7: Administrator Functions Menu

To create the administrator account:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Press the **Control** key twice more to access the Command Menu.

3. Highlight *Administrator Functions* from the Command Menu and press **Enter**.

4. Highlight *Administrator Password* from the Administrator Menu and press **Enter**.

5. Type your password and press **Enter**. (The password is not case sensitive.)

6. Re-enter the password for confirmation and press **Enter**.

CAUTION: Security is enabled once the password has been created. Store a copy of your password in a safe place.

You should now see the option F10 - Logout at the bottom of the Administrator Channel List and a lock symbol to the right of the menu headings.

To set the administrator logout time:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Press the **Control** key twice more to access the Command Menu.

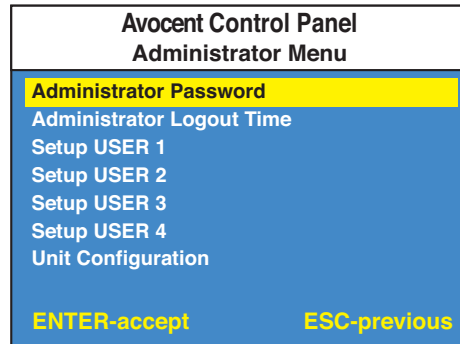3. Highlight *Administrator Functions* from the Command Menu and press **Enter**.

4. Highlight *Administrator Logout Time* from the Administrator Menu and press **Enter**.

5. Enter the number of minutes you wish to pass without keyboard/mouse activity before the administrator is automatically logged out of the system. The default of **ø** keeps the administrator logged on continuously; **60** is the maximum setting. Press **Enter** when you have completed your configuration.

To set up additional users:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Press the **Control** key twice more to access the Command Menu.

3. Highlight *Administrator Functions* from the Command Menu and press **Enter**.

4. Highlight *Setup User 1* from the Administrator Menu and press **Enter**.

5. Highlight *Name* and type the name for this user.

6. Highlight *Password* and type the password, then confirm it for this user. (Passwords are not case sensitive.)

7. Highlight *Access* . You will see a listing of all attached servers in the channel list. For each server, choose a level of access for this user by selecting one of the function keys listed on the menu: **F5** for no access, **F6** for video only or **F7** for video and keyboard/mouse capability. The default is set for full access. All changes are immediately effective. Press **Enter** when you have finished.

8. Highlight *Logout Time*. Type a value in minutes for this user's logout time. A value of **ø** keeps the user logged on continuously; **60** is the maximum setting. The default is set for five minutes.

9. Press **Enter** to accept your selections.

10. Repeat steps 4-9 for each remaining user.

Scanning your AutoView System

The AutoView scanning feature allows you to automatically monitor, or scan, your computer channels without intervention. When keyboard activity is detected, scanning is suspended until all keyboard activity stops. Scanning then resumes with the next channel in sequence. Mouse activity will not affect scanning in any way. The length of time each channel remains on the screen, or dwell time, is configurable and can be changed at any time.

Scanning Options

There are two ways to scan through the channels in your AutoView system, either sequentially or alphanumerically.

Scanning sequentially allows you to view each of your active channels in the order that they are attached to the AutoView. The amount of time each channel remains on the screen, or dwell time, is configurable and is the same for all channels.

Scanning alphanumerically allows you to scan all your channels in alphanumeric order according to the Administrator Channel List. With this scan method, you can adjust the dwell time for each channel or omit a channel from the scan sequence completely.

Choose whichever method is most appropriate for your configuration.

Scanning and Security

In non-secure mode, you may scan your channels either alphanumerically according to your channel list or sequentially through all attached servers. Sequential scanning will allow you to pause at every active channel, regardless of whether that channel has been added to the channel list or not.

In secure mode, you will only scan through channels that appear on the channel list, regardless of the scanning method chosen.

To set the scanning method:

1.   Press the **Control** key twice to access the Administrator Channel List.

2.   Press the **Control** key twice more to access the Command Menu.

Avocent Control Panel
Administrator Command Menu

Channel Maintenance
Administrator Functions
Turn Scanning ON
Scanning Order
Sequential Scan Dwell Time
Reset Standard Mouse/Keyboard
Reset Wheel Mouse/Keyboard
Version Information

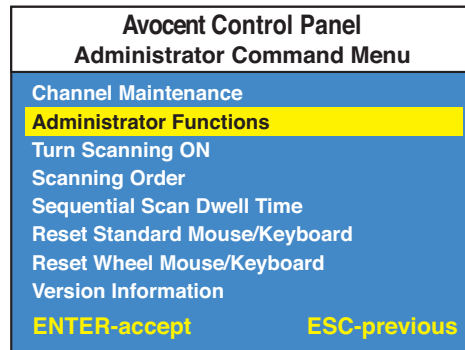ENTER-accept   ESC-previous

Figure 3.8: Administrator Commands Menu

3.   Highlight *Scanning Order* and press **Enter**.

4.   Select either *Sequential Order* or *Alphanumeric Order*.

5.   Press **Enter**.

To scan from the OSD menu:

1.   Press the **Control** key twice to access the Administrator Channel List.

2.   Press the **Control** key twice more to access the Command Menu.

3. Highlight *Turn Scanning On* or *Turn Scanning Off* from the menu. This is a toggle option - only one scanning option will show on the menu.

4. Press **Enter** to select the new scanning setting.

To scan using the scan button:

1. Press and hold the Step/Scan push-button until the Scan LED is lit.

2. Scanning may be halted if a channel is selected or if the Step/Scan push-button is pressed again.

To scan using a keyboard hotkey sequence:

1. Press the **Num Lock** and **Minus** (-) keys on the numeric keypad then release to display the command line. For more information, see *Using the Command Mode* later in this chapter.

2. Type **SG** in the command line to enable scanning.

3. Type **SH** in the command line to halt scanning.

Setting the Scanning Dwell Time

To set the dwell time for sequential scanning:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Press the **Control** key twice more to access the Command Menu.

3. Select *Sequential Scan Dwell Time* and press **Enter**.

4. Type a number between 2-60 seconds and press **Enter**. The value you enter will be the dwell time for each active channel in the system.

To set the dwell time for alphanumeric scanning:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Highlight the channel in the Administrator Channel List that you wish to configure.

3. Press the **Control** key twice more to access the Command Menu.

4. Highlight *Channel Maintenance* and press **Enter**.

5. Highlight *Alpha Scan Dwell Time* and press **Enter**.

6. Type a number between ø-255 seconds and press **Enter**. Type ø to skip a channel during scanning.

Resetting your Mouse

If your mouse locks up during normal use with the AutoView, you may be able to re-establish operation by issuing a reset command. The reset command sends a hot-plug sequence to the server. The hot-plug sequence to a Plug and Play server causes the mouse settings to be sent to the AutoView. With communication re-established, functionality is restored to you.

To reset the mouse values:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Press the **Control** key twice more to access the Command Menu.

3. Highlight either *Reset Standard Mouse/Keyboard* or *Reset Wheel Mouse/Keyboard*, depending on the type of mouse you are using.

4. Press **Enter** to activate the reset.

Displaying Version Information

Use the Version screen to display the system firmware. This information facilitates system troubleshooting and support. For optimum performance, keep your firmware current.

To display version information:

1. Press the **Control** key twice to access the Administrator Channel List.

2. Press the **Control** key twice more to access the Command Menu.

3. Highlight *Version Information* and press **Enter**. The Version Screen appears.

Keyboard Switching

One of the ways to change the active channel in a non-secured AutoView system is by entering a short sequence of keystrokes on the keyboard. This is called keyboard, hotkey or soft switching. In addition, there are a variety of commands that can be activated via the keyboard without having to access the OSD. The following procedures and tables describe your many options.

NOTE: Hotkey switching is only available in the default non-secure state. For more information on security, see *Setting User Station Security* in this chapter.

Using the Command Mode

The first set of keystrokes places your system in Command Mode. A blue window with a line for commands will appear. As long as you are operating in Command Mode, whatever you type will be interpreted as channel switch

commands until the **Enter** or the **Escape** key is pressed to terminate Command Mode. None of the keystrokes entered will be forwarded to the attached computer until you exit Command Mode.

To activate the Command Line:

1.   Press and hold down the **Num Lock** key.

2.   Press and release the **Minus (-)** key on the numeric keypad.

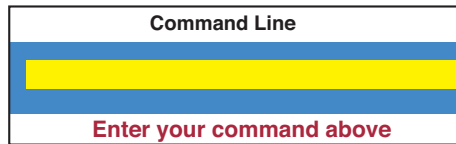3.   Release the **Num Lock** key. The Command Line menu appears.

Command Line
Enter your command above

Figure 3.9: Command Line menu

NOTE: In the following tables, the Command Mode procedure is referred to by the **<CM>** symbol. When you see this symbol, perform the above key sequence.

To select servers without displaying the OSD:

1.   Press the **<CM>** sequence to access the Command Line.

2.   Type the channel address of the computer you wish to access. For cascaded systems, enter the address of the base unit, then the address of the cascaded unit. Example: You have an AutoView unit cascaded from channel B of your base unit. To access the computer at channel C of this second (cascaded) unit, type **BC**.

3.   Press **Enter** to accept the new channel.

The table below shows an example of a hotkey switching session to demonstrate how you might switch to various channels in a system.

Example Keyboard Switching Sequence

Key Sequence	Action
1. **<CM>E<Enter>**	Selects channel E on the base unit as the active channel.
2. **<CM>CF<Enter>**	Selects the AutoView attached to channel C on the base unit, then selects channel F on the cascaded unit.
3. **<CM>G<Enter>**	Selects channel G on the base unit as the active channel.
4. **<CM>BA<Escape>**	Exit Command Mode. The instruction is not executed. Channel G is still the active channel.

Additional Command Mode hotkey sequences

In addition to switching channels, you can also use the Command Mode to control a variety of other features on your AutoView system. The following table describes these hotkey sequences.

Keyboard Hotkey Sequences

This Key Sequence	Does This
<CM>Kn<Enter>	Sets the keyboard scan set where *n* is a scan set number 1-3.
<CM>MR<Enter>	If you hot-plug your mouse cable, you may experience a loss of mouse signal. Use this command to restore the signal if you are using a PC with a standard PS/2 mouse driver.
<CM>MW<Enter>	If you hot-plug your mouse cable, you may experience a loss of mouse signal. Use this command to restore the signal if you are using a PC with a Microsoft IntelliMouse or other wheel mouse driver.
<CM>AV<Enter>	Displays the current firmware version of your AutoView.
<CM>H1<Enter>	Changes the hotkey sequence to the default: (**NumLock**, **-**).
<CM>H2<Enter>	Changes the hotkey sequence to the 1st alternate: (**NumLock**, *****).
<CM>H3<Enter>	Changes the hotkey sequence to the 2nd alternate: (**Ctrl**, **~**).
<CM>ZM<Enter>	Use this command to resynchronize the mouse after a device or computer 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.

Appendices

Contents

Appendices

Appendix A: Technical Specifications

AutoView Specifications

Mechanical

Height: 1.7"	(4.5 cm)
Width: 17.2"	(43.7 cm)
Depth: 6.5"	(16.51 cm)
Weight: 4.2 lbs	(1.91 kg)

Environmental/Power

Operating Temperature:	41° (5°C) to 104° (40°C)
Storage Temperature:	-4° (-20°C) to 122° (50°C)
Input Power:	8.0 W
Operating Voltage:	100 - 240 VAC
Power Frequency:	50 - 60 Hz

Supported Hardware

Computer: IBM PC/AT, PS/2 and 100% compatibles

Video Modes: VGA, SVGA, (XGA, XGA-II with adaptor)

Maximum Resolution: 1280 x 1024 @ 60 Hz

Peripherals: PS/2 keyboard, PS/2 mouse, IntelliMouse (PS/2 only)

Agency Approvals

UL 1950, CSA C22.2 No. 950, EN60950

FCC part 15A, EN55022, EN50082

Appendix B: Pairing

Pairing connects two AutoView units serially, allowing access to 16 computers with one keyboard, monitor and mouse without using a computer port. It is used in place of cascading two units. To pair your AutoView units, use the following instructions instead of those given in the *Installation* chapter.
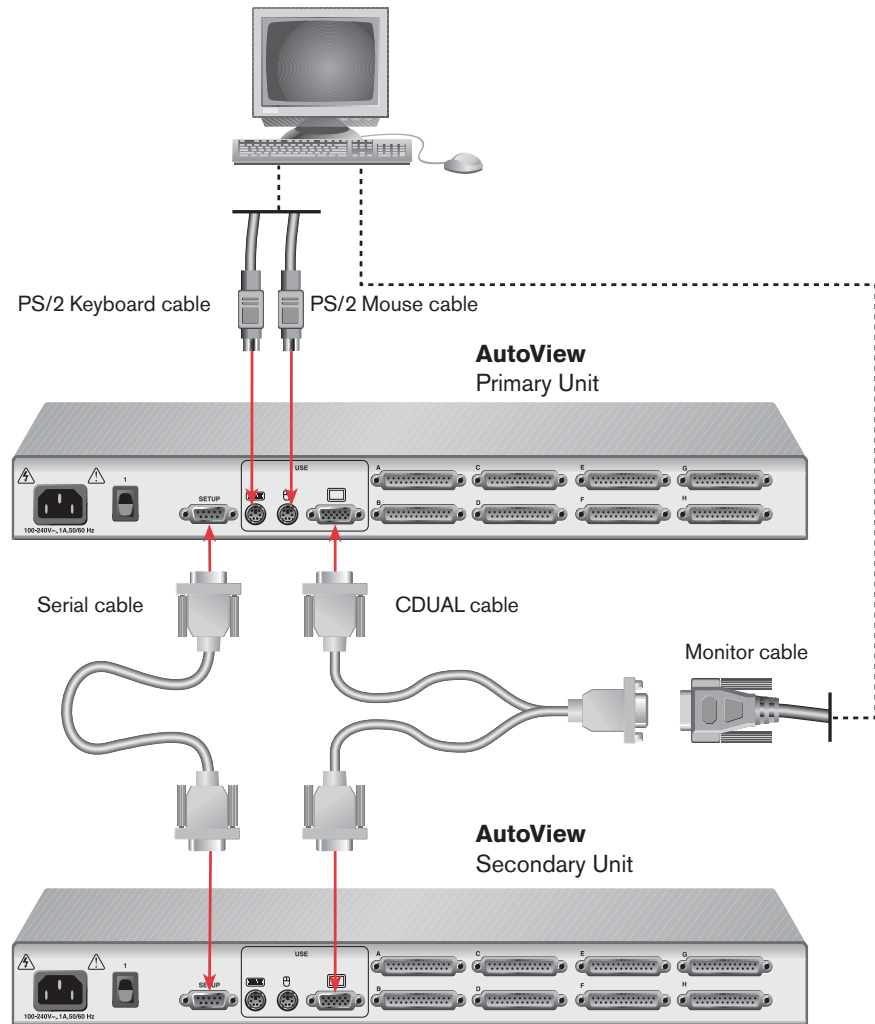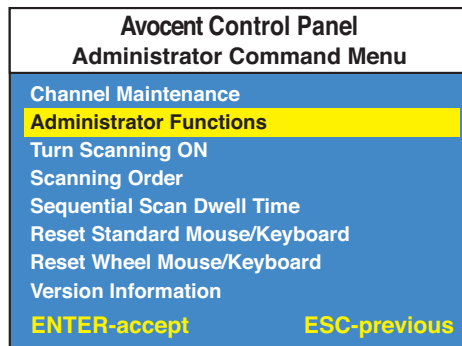

Figure B.1: Example of Paired AutoViews

To configure your secondary unit:

1. Power down all computers that will be part of your AutoView system.

2. Prepare the location for the switch. See *Rack Mounting your AutoView Unit* if you are rack mounting the units.

3. Select one of your two AutoView units to be used as the secondary unit.

4. Select cables with appropriate connectors and length.

5. Connect your VGA monitor cable and keyboard to the appropriate ports on the rear of the secondary switch.

6. Locate the power cord that came with your secondary AutoView unit. Plug it into the IEC power connector on the secondary unit. Make sure that the power switch is off, then connect the other end of the power cord into an appropriate AC wall outlet. This outlet must be near the equipment and easily accessible to allow for unplugging prior to any servicing of the unit.

7. Power up the secondary unit and press the **Control** key twice to activate the Administrator Channel list.

8. Press the **Control** key twice more to activate the Administrator Command Menu.

9. Using the **Arrow** keys, highlight and select *Administrator Functions* to display the Administrator Menu.

> **Avocent Control Panel**
> **Administrator Command Menu**
>
> Channel Maintenance
> **Administrator Functions**
> Turn Scanning ON
> Scanning Order
> Sequential Scan Dwell Time
> Reset Standard Mouse/Keyboard
> Reset Wheel Mouse/Keyboard
> Version Information
>
> ENTER-accept   ESC-previous

Figure B.2: Administrator Command Menu

10. Highlight *Unit Configuration* and press **Enter**.

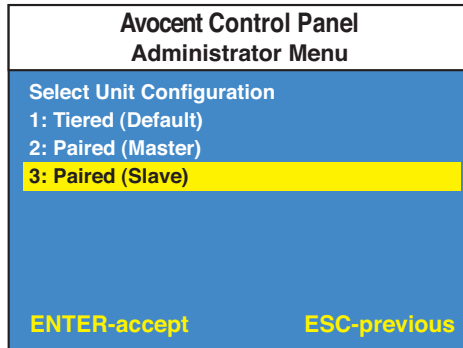11. Highlight option 3, *Paired (Slave)* and press **Enter**.

```
         Avocent Control Panel
           Administrator Menu

  Select Unit Configuration
  1: Tiered (Default)
  2: Paired (Master)
  3: Paired (Slave)




  ENTER-accept          ESC-previous
```

Figure B.3: Administrator Functions Menu

12. Press the **Escape** key repeatedly to exit from the OSD menu.

13. Power down the secondary unit and disconnect the keyboard and monitor.

To configure your primary unit:

1. Select cables with appropriate connectors and length.

2. Connect your VGA monitor cable and keyboard to the appropriate ports on the rear of the primary switch.

3. Locate the power cord that came with your primary AutoView unit. Plug it into the IEC power connector on the rear of the unit. Make sure that the power switch is off, then connect the other end of the power cord into an appropriate AC wall outlet. This outlet must be near the equipment and easily accessible to allow for unplugging prior to any servicing of the unit.

4. Power up the primary unit and press the **Control** key twice to activate the Administrator Channel list.

5. Press the **Control** key twice more to activate the Administrator Command Menu.

6. Using the **Arrow** keys, highlight and select *Administrator Functions* to display the Administrator Menu.

7. Highlight *Unit Configuration* and press **Enter**.

8. Highlight option 2, *Paired (Master)* and press **Enter**.

9. Press **Escape** repeatedly to exit the OSD menu.

10. Power down the primary unit and disconnect the monitor.

To connect your paired AutoView units:

1. Locate the pairing cable kit (CDUAL), containing two cables. The first cable is a Y-video cable with two 15-pin male VGA connectors and one 15-pin female VGA connector. The second is a 9-pin male serial cable.

2. Plug the male VGA connectors into the ports labeled Video on each of the AutoView units.

3. Connect the female VGA connector to the end of your monitor cable.

4. Connect the serial cable to the ports labeled Setup on the AutoView units.

5. Connect a PS/2 mouse to the primary AutoView unit.

To connect computers to the AutoView system:

1. Power down the computers that will be part of your AutoView system. Make sure that both of your AutoView units are turned off.

2. Locate your first input cable. Plug the 25-pin D connector of your input cable into one of the available ports on the rear of your primary AutoView unit.

3. The other end of the first input cable has connectors for video, keyboard and mouse: a 15-pin HDD connector for video, a 5-pin DIN/6-pin miniDIN connector for an AT or PS/2 keyboard connection and a 9-pin serial/6-pin miniDIN connector for a serial or PS/2 mouse connection. The PS/2 mouse connector is designated by a yellow band or mouse icon. Plug the appropriate connectors into the appropriate ports on your computer and leave the remainder unconnected.

4. Locate your next input cable. Repeat steps 2 and 3 with all the computers that will be attached to your primary AutoView.

5. Repeat steps 2 and 3 to attach the remaining computers to the secondary AutoView.

6. Locate the power cords that came with your AutoView units. Plug each one into the IEC power connectors on the AutoView units. Make sure that the power switches are off, then plug the other end of the power cords into appropriate AC wall outlets. This outlet must be near the equipment and easily accessible to allow for unplugging prior to any servicing of the unit.

7. Power up your secondary AutoView first followed by your primary AutoView, then all attached computers.

NOTE: The AutoView and all attached computers should be powered down before servicing the unit. Always disconnect the power cord from the wall outlet.

To add new channels with paired units:

1. Press the **Control** key twice to bring up the Administrator Channel List menu.

2. Press **Control** twice more to bring up the Command Menu.

3. Select *Add Channel* from the Channel Maintenance Menu and press **Enter**.

4. Type in a new channel name, up to 14 characters long, and press **Enter**.

5. At the next prompt, type in the letter **A** if the PC is attached to the primary unit or **B** if it is attached to the secondary unit. Press **Enter**.

6. When prompted for another cascade level type **Y** and press **Enter**.

7. Type the letter of the computer port that the computer is attached to on the secondary AutoView and press **Enter**.

8. To exit type **N** when prompted for another cascade level and press **Enter**.
    -or-
    Press **Escape** at any point to exit this operation without adding a channel.

NOTE: Keyboard switching is not available on paired units. All other keyboard controls function as described earlier in the manual.

To uninstall pairing:

1. Press the **Control** key twice to bring up the Administrator Channel List menu.

2. Press **Control** twice more to bring up the Command Menu.

3. Highlight *Administrator Functions* and press **Enter**.

4. Highlight *Unit Configuration* and press **Enter**.

5. Highlight *Option 1 (Tiered)* and press **Enter.**

6. Press **Escape** to exit OSD.

7. Disconnect the serial and video cables from both AutoView units.

8. Attach a keyboard and monitor directly to the secondary unit.

9. Repeat steps 1-6 on the secondary unit.

10. The units may now be cascaded together or used separately.

NOTE: The channel list will need to be modified according to the Basic Channel Maintenance instructions in the manual after uninstalling pairing.

Appendix C: Technical Support

Our Technical Support staff is ready to assist you with any installation or operating issues you encounter with your Avocent product. If an issue should develop, follow the steps below for the fastest possible service:

1. Check the Troubleshooting section of this manual to see if the issue can be resolved by following the procedures outlined (see Appendix D).

2. Check our web site at www.avocent.com/support to search the knowledge base or use the on-line service request.

3. Call Avocent Technical Support for assistance at (888) 793-8763. Visit the Avocent web site at http://www.avocent.com/support and click on *Getting Support* for current phone support hours.

Appendix D: Troubleshooting

No status light

Verify that the unit is turned on.

Check the power cable. Turn off the unit and check the fuse located under the power cord connector.

Contact Technical Support.

Red status LED lit

Internal unit failure. Contact Avocent Technical Support.

Both amber and green LEDs lit

If the Scan button is depressed for longer than 3 seconds, both LEDs will light momentarily and a reset is sent to the unit. To initiate scanning, depress the **Scan** button for 1-2 seconds only. If both LEDs remain lit, call Avocent Technical Support.

Green channel LED not lit

Verify that the computer is powered on. Check the cabling between your computer and the AutoView. Verify that a keyboard works when plugged directly into your PC. If the problem persists, contact Avocent Technical Support.

Unable to hotkey switch to a channel

Verify that no OSD menuing windows are up on your monitor. You must escape from all OSD menus to enable hotkey switching.

Verify that you are not in secure mode. (No lock symbol on OSD menu.)

Verify that you are in hotkey mode by checking to see if the green status LED is blinking. If it is not, press **Escape** and try going into Command Mode again. If the problem persists, contact Avocent Technical Support.

Unable to push-button switch

Verify that the channel being selected is not serving as a channel to an expansion unit.

Verify that you are not in secure mode. (No lock symbol on OSD menu.)

Verify that a computer is attached to that channel. If the problem persists, contact Avocent Technical Support.

No video

Verify that the video cable between the PC and the AutoView is correctly connected. Verify that the monitor cable is correctly connected to the AutoView.

Power down the computer. Connect the monitor directly to the computer and power up again. If the monitor operates correctly direct to the computer, contact Avocent Technical Support. If it does not, try another monitor.

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 <**ZM**>. For instructions on Command Mode, see *Operations*. If the problem persists, contact Avocent Technical Support.

Mouse is inoperable on one computer channel

If the mouse is inoperable on a channel, reset command <**MR**> or <**MW**> with that PC selected. For instructions on Command Mode, see *Operations*.

Verify that the cables from the computer to the AutoView are connected properly.

Make sure that you have keyboard/mouse privileges for that channel.

Verify that the mouse driver is configured properly for mouse support.

Verify that the computer works properly with a mouse connected directly to it. If the problem persists, contact Avocent Technical Support.

Mouse is inoperable on all channels

Verify that the mouse is plugged into the correct PS/2 port on the back of the AutoView.

Verify that the mouse is PS/2 style and a supported brand. See *Product Overview* for more information.

Try the mouse reset command <**MR**> or try the *Reset Standard Mouse/Keyboard* command from the OSD Command Menu for computers using PS/2 mice. Use <**MW**> or *Reset Wheel Mouse* for computers using the Microsoft IntelliMouse. For instructions on command mode, see *Operations*.

Verify that the mouse works when connected directly to a computer.

Cycle power to the AutoView unit. You do not have to power down your computers for this. If the mouse remains inoperable, power down all attached computers, cycle power on the AutoView, then repower the computers. If the problem persists, contact Avocent Technical Support.

Keyboard is inoperable on one channel

If the keyboard does not function on one channel, verify that the cables from the computer to the AutoView are connected properly.

If you are operating in secure mode, verify your keyboard and mouse privileges.

Verify that the keyboard works properly connected directly to the computer. If the problem persists, contact Avocent Technical Support.

Keyboard is inoperable on all channels

If the keyboard does not work on any channel, try the all channels *Reset Mouse/Keyboard* command from the OSD Command Menu.

Try a different keyboard. If the keyboard still does not function, cycle the power on the AutoView unit.

Cycle power on all attached computers and the AutoView unit and try again. If the problem persists, contact Avocent Technical Support.

Keyboard is inoperable after switching channels

> Try changing the keyboard scan set for that channel by using the keyboard command sequence <**Kn**>. For more information, see *Operations*.

> If you are operating in secure mode, verify your keyboard and mouse privileges. If the problem persists, call Avocent Technical Support.

Characters on screen do not match keyboard input

> Try changing the keyboard scan set for that channel by using the keyboard command sequence <**Kn**>. For more information, see *Operations*. If the problem persists, call Avocent Technical Support.

No keyboard, video or mouse

> Verify that the cable connecting the two units together on the expansion unit is functioning properly; verify that the base unit is correctly connected on both ends. For additional is information, see *Installation*. If the problem persists, contact Avocent Technical Support.

OSD menu does not "pop-up"

> Verify that you are pressing the **Control** key twice within one second. If the problem persists, contact Avocent Technical Support.

Unable to change channels using OSD

> Verify that the channel is powered. Check the address configured in OSD. If the computer is powered and the address is correct, call Avocent Technical Support.

Administrator password is forgotten

> Call Technical Support.

User password is forgotten

> Contact your system administrator.

General Keyboard/Video Problems

> If the building has 3-phase AC power, ensure that the computer, the AutoView and the monitor are on the same phase. Best results are obtained when they are on the same circuit.

> Use only Avocent-supplied cable. Avocent warranties do not apply to damage resulting from user-supplied cable. Do not use a 2-wire extension cord in any Avocent product configuration.

> Test AC outlets at computer, AutoView and monitor for proper polarity and grounding. Use only with grounded outlets at the computer, AutoView and monitor. When using a backup power supply (UPS), power the computer, AutoView and the monitor off the supply.

System lockup during paired operation

> If there is no keyboard, mouse or push-button channel selection function, try to bring up the OSD menu. If it activates, reselect your channel and verify that the channel functions normally. If the problem persists, contact Technical Support.

> If the OSD menu does not activate, verify that the serial cable and video cables are securely attached to both boxes. If not, reattach and try the OSD menu again. If the problem persists, contact Technical Support.

LIMITED 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 24 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
                         4991 Corporate Drive
                         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 unit. 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 unit 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.
8. If the product is damaged due to power surges, water exposure or act of God including lightning.

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The Power of Being There™

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