## SwitchView ${ }^{\text {® }} 1000$ Switch

Installer/User Guide


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## 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.

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## CHAPTER

## 1

## Installation

## Introduction

The SwitchView ${ }^{\circledR} 1000$ switch is a 4,8 or 16 -port keyboard, video and mouse (KVM) appliance that supports both USB and PS/ 2 interfaces. With the capacity to daisy-chain up to 16 levels, the SwitchView 1000 switch also allows direct channel selection via three different methods: on-screen display (OSD), front-panel push-buttons or keyboard hotkeys.

Time-out and password protection offer secure access to the SwitchView 1000 switch, while the hot-plug feature allows for uninterrupted switching and usage.


Figure 1.1: SwitchView 1000 Switch

## Getting Started

Before installing your SwitchView 1000 switch, refer to the following list to ensure you have all items that shipped with the appliance, as well as other items necessary for proper installation.

## Supplied with the SwitchView 1000 switch

- SwitchView 1000 switch
- Rack mount kit
- Power supply
- Daisy-chain cable
- Upgrade cable
- Ground terminator


## Installation

If you are installing your SwitchView 1000 switch to a PS/2 interface, you must power down all servers before connecting your switch to a server to ensure proper installation. USB interfaces do not need to be powered down before installation.

> NOTE: Linux users may experience mouse failure if hot-plugging directly to the SwitchView 1000 switch. If your mouse becomes locked, use the mouse reset hotkeys (see Appendix A) to reset your mouse, or turn the Linux server off before connecting it to the SwitchView 1000 switch.

Plug one end of the supplied power cord into the back of the switch and the other end into an appropriate power source. Connect the local keyboard, monitor and mouse cables to the appropriate ports on the rear of your SwitchView 1000 switch.

Connect your servers to an available port on the rear of your SwitchView 1000 switch using the cable appropriate for your interface. Power up all connected servers. Keyboard and mouse recognition is now activated and your SwitchView 1000 switch is ready for operation. Figure 1.2 on page 3 shows a basic configuration for the SwitchView 1000 switch.


Figure 1.2: Basic SwitchView 1000 Switch Configuration


CAUTION: To reduce the risk of electric shock or damage to your equipment:

- 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.


## Rack Mounting Your SwitchView 1000 Switch

Your SwitchView 1000 switch may be rack mounted using brackets.
Before installing the appliance, stabilize the rack in a permanent location. Install your equipment starting 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.

## Accessing and using the OSD menus

The OSD menus allow you to easily access and edit such features as server name, setup functions, time-outs, autoscan capabilities and firmware upgrades. The following table lists basic OSD functions.

Table 1.1: Navigating the OSD menu

| To do this: | Use this hotkey sequence: |
| :--- | :--- |
| Activate OSD | ScrLk + ScrLk + Spacebar |
| Deactivate OSD | ESC (Escape key) |
| Change Value | Left/right arrow keys |
| Select Item | Up/down arrow keys |

NOTE: The two consecutive ScrLk keystrokes should be pressed within two seconds and the following command key(s) should also be pressed within two seconds. Otherwise, the hotkey sequence will not be validated.


Figure 1.3: Main OSD Window (8-port SwitchView 1000 Switch)
The following options will be selectable via the Main OSD window.
Table 1.2: Main OSD Menu Functions

| Function | Description |
| :--- | :--- |
| Select server | Use up/down arrow key to navigate and <br> press PgUp/PgDn to scroll page. Press <br> Enter to select. |
| Edit server name | Pressing Insert allows you to change a <br> server name. Enter confirms the change. |

Table 1.2: Main OSD Menu Functions (Continued)

| Function | Description |
| :--- | :--- |
| Setup | A submenu for various configurations. |
| Logout | Logs out keyboard and mouse for security. |



Figure 1.4: Setup Options Window
The following options will be selectable via the Setup OSD window.
Table 1.3: Setup menu functions

| Function | Description |
| :--- | :--- |
| Auto logout | Specifies time for auto logout (0 to 99 min). Your <br> password must be configured and enabled for auto <br> logout to function. |
| OSD timeout | Specifies duration for OSD menu to remain on screen. |
| Autoscan period | Specifies time for the autoscan period. |
| Title bar | Specifies the position of the OSD title bar. |
| Hotkey | Specifies the hotkey initiation sequence: <br> ScrLk (default), Caps Lock, ESC, F12 or <br> Num Lock. |
| Setup Password | Enter user-selectable password. |
| Load Default | Loads the default settings. |
| Upgrade Firmware | Upgrades the firmware of the switch. |

## Upgrading firmware

The SwitchView 1000 switch firmware is upgradable via the firmware upgrade cable (included). Maintaining current firmware enhances the SwitchView 1000 switch's compatibility with other devices and can enhance the switch's performance. Go to www.avocent.com/support for more information on upgrading your firmware.

## To upgrade your SwitchView 1000 switch:

Prior to beginning the firmware upgrade process, ensure that you have an RS-232 port (COM port), and a mouse and a keyboard directly connected to it. You will also need the upgrade cable, upgrade utility and upgrade file.

1. Power up the SwitchView 1000 switch.

NOTE: The firmware upgrade process automatically upgrades all SwitchView 1000 switches daisy-chained to your primary switch.
2. Invoke the OSD menu and press F1 to enter the Setup Page.

Navigate to Upgrade Firmware and press Enter.
3. Select Yes and press Enter to enable upgrade mode.
4. Use the firmware upgrade cable to connect the RS-232 port (COM port) of the host server to the Daisy Chain In port of the (primary) SwitchView 1000 switch.
5. Double-click on the SV1000 upgrade utility icon to bring up the following window.


Figure 1.5: Main Upgrade Utility Window
6. Click Select File to locate the firmware upgrade file.
7. Click Check Version to see the current firmware version of your SwitchView 1000 switch. If the selected firmware file is a newer version, click Upgrade to start the upgrade process.


Figure 1.6: Starting Upgrade Process Window
NOTE: During the upgrade process, do not remove the upgrade cable or SwitchView 1000 switch power adaptor.
8. An Upgrade complete! message appears above the progress bar after a successful firmware upgrade. You may now exit the utility.

## Daisy-chaining your SwitchView 1000 switch

The SwitchView 1000 switch features up to 16 levels of attached switches via the daisy-chain cable. The 16-port switch is daisychainable up to 256 servers, while the 8 -port switch has a 128 server limit. The 4-port switch can be daisy-chained with up to 64 servers. Contact Avocent to purchase additional cables.

[^0]
## To cascade multiple switches:

1. Plug one end of the daisy-chain cable into the Daisy Chain Out port on the rear of your primary SwitchView 1000 switch.
2. Connect the other end of the daisy-chain cable to the Daisy Chain In port on the secondary SwitchView 1000 switch.
3. Repeat steps 1 and 2 for all subsequent SwitchView 1000 switches.
4. Plug the ground terminator into the Daisy Chain Out port on the rear of the last daisy-chained SwitchView 1000 switch.


Figure 1.7: Basic Daisy-Chain Example

## APPENDICES

## Appendix A: Quick Reference Guide

Table A.1: SwitchView1000 Quick Reference Guide

| Command | Hotkeys | OSD Control | Front-panel | Description |
| :---: | :---: | :---: | :---: | :---: |
| Select Server | ScrLk + ScrLk + (a) $+(\mathrm{b})+(\mathrm{y})+(\mathrm{z}) \mathrm{ab}=$ bank no. $x y=$ channel no.) | Cursor keys to navigate Enter to select | Press corresponding button yz on Switch ab for channel yz on bank ab | Select the active bank (switch) and channel |
| Next Lower Channel | ScrLk + ScrLk + (arrow up) | Cursor keys to navigate Enter to select | Press corresponding button | Select the next lower connected channel |
| Next Higher Channel | ScrLk + ScrLk + (arrow down) | Enter to select | Press corresponding button | Select the next higher connected channel |
| Next Lower Bank | ```ScrLk + ScrLk + PgUp``` | PgUp (w/ OSD Menu) | Press corresponding button | Select the next lower bank (switch) with multiple daisychained units |
| Next Higher Bank | $\begin{aligned} & \text { ScrLk + ScrLk + } \\ & \text { PgDn } \end{aligned}$ | $\begin{aligned} & \text { PgDn (w/ OSD } \\ & \text { Menu) } \end{aligned}$ | Press corresponding button | Select the next higher bank (switch) with multiple daisychained units |
| Autoscan <br> Beep Sound On/Off | ScrLk+ScrLk + B | N/A | N/A | Toggle on/off the beep sound for switching confirmation while autoscanning. The beep sound can be turned off during normal switching |
| Load Factory Default | N/A | Main Menu / Setup / Load Default | N/A | Restore the EEPROM settings to the factory default |
| Change Server Name | N/A | Enter (Ins) to select/edit | N/A | Change the server name [max. length $=8$ <br> alphanumeric characters] |
| Reset/ Initialize | $\begin{aligned} & \text { ScrLk + ScrLk + } \\ & \text { End } \end{aligned}$ | N/A | N/A | Reset the switch/initialize the daisy-chain setup |

Table A.1: SwitchView1000 Quick Reference Guide (Continued)

| Command | Hotkeys | OSD Control | Front-panel | Description |
| :--- | :--- | :--- | :--- | :--- |
| Show OSD <br> Menu | ScrLk + ScrLk + <br> (Space Bar) | N/A | N/A | Activate the OSD Menu on <br> the console screen |
| Autoscan | ScrLk + ScrLk + S | N/A | N/A | Autoscan through every <br> connected channel for quick <br> screen browsing of each <br> channel |
|  |  |  |  | N/A |

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[^0]:    NOTE: All SwitchView 1000 switch models (4-port, 8-port and 16-port) can be daisy-chained up to 16 levels. For example, a 16-port and 8-port SwitchView 1000 switch can be daisy-chained to connect a maximum of 24 servers.

