VERTIV

Vertiv™ Avocent® SV Switching System

Installer/User Guide

Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures. For additional assistance, visit https://www.VertivCo.com/en-us/support/.

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1 PRODUCT OVERVIEW

Vertiv™ Avocent® SV switches are field-proven KVM and KM switching solutions. This switching system enables you to use a single keyboard, monitor and mouse to seamlessly access multiple computers.

1.1 Features and Benefits

The SV switching system offers several options depending on the model:

- Support for HDMI, DVI-I and DisplayPort video
- Support for USB and PS/2 keyboard and mouse

NOTE: Supports most keyboards and mice. For more information, contact Technical Support.

- Managed copy and paste between computers
- Audio and USB freeze to lock ports for use between computers
- Front panel USB 3.0 ports with one high charging port

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2 BASIC OPERATION

Although installation of your SV switching system is complete, ensure you have one of the following compatible operating systems:

- Microsoft® Windows® 2000
- Red Hat® Linux®
- Mac OS® X v10.3 and higher

2.1 Switch Overview

The following figures show the connectors on the front and back of the switching system.

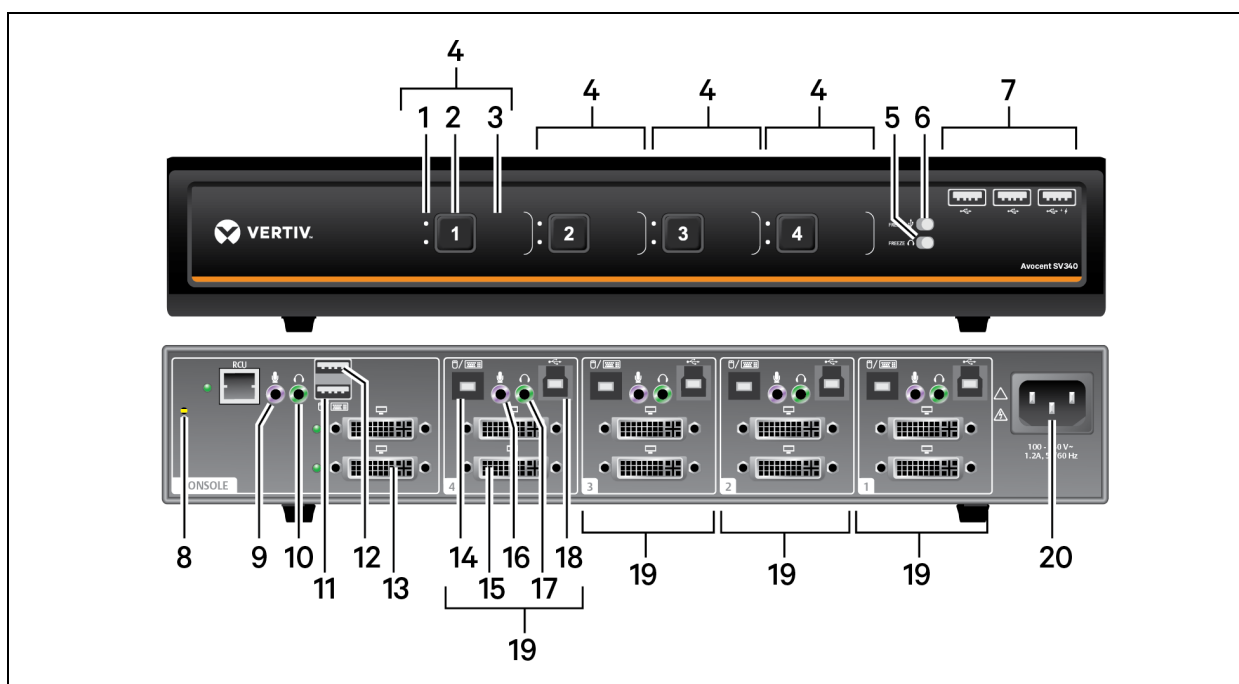**Figure 4.1 KVM Model (SV 340 Switch Shown)**

Table 4.1 KVM SV 340 Switch Description

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
1	LED channel indicator	11	CONSOLE keyboard and mouse full-speed USB type A port
2	Channel selector	12	CONSOLE keyboard and mouse high-speed USB type A port
3	Channel label	13	CONSOLE female video port (varies with model: DVI-I, HDMI or DisplayPort)
4	Channel configuration	14	Keyboard and mouse USB type B port
5	USB freeze toggle	15	Varies with model (DVI-I, HDMI or DisplayPort)
6	Audio freeze toggle	16	Microphone jack
7	USB 3.0 ports	17	Audio jack (3.5 mm stereo)
8	CONSOLE system reset	18	USB type B port
9	CONSOLE microphone jack	19	Channel configuration

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
10	CONSOLE Audio jack (3.5 mm stereo)	20	AC input (100-200 VAC)

Figure 4.2   KM Model (SV KM140 Switch Shown)
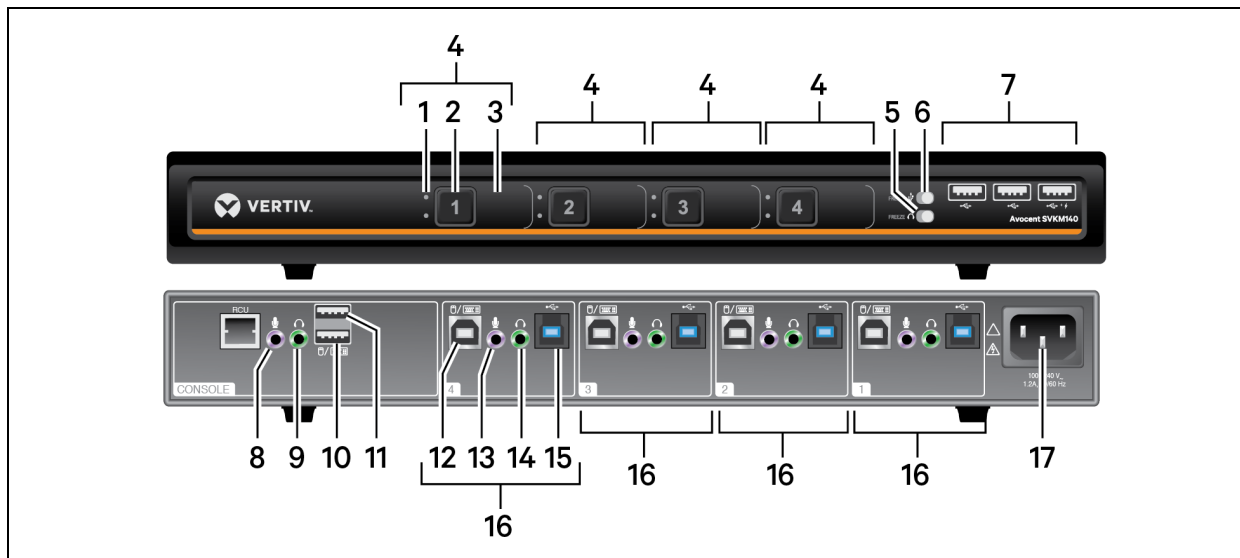
Table 4.2

SV KM140 Switch Description

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
1	LED channel indicator	10	CONSOLE keyboard and mouse full-speed USB type A port
2	Channel selector	11	CONSOLE keyboard and mouse high-speed USB type A port
3	Channel label	12	Keyboard and mouse USB type B port
4	Channel configuration	13	Microphone jack
5	Audio freeze toggle	14	Audio jack (3.5 mm stereo)
6	USB freeze toggle	15	USB type B port
7	USB 3.0 ports	16	Channel configuration
8	CONSOLE microphone jack	17	AC input (100-200 VAC)
9	CONSOLE Audio jack (3.5 mm stereo)		

2.1.1 Switching between computers

After turning on the switch, the default channel is channel one. You can select which computer to operate using front panel push-buttons.

To switch between computers:

Select the computer by pressing the corresponding front panel push-button on the front of the switch. The LED number will illuminate to indicate which computer is currently selected. It will take approximately one second for the video signal to sync after switching computers.

To switch between computers using keyboard shortcuts:

Select the computer by typing key combinations on the keyboard. To switch to another channel, press left CTRL+ left CTRL+ <the channel number>.

NOTE: Use left control key only.

The following table details keyboard shortcut options for KM models.

Table 4.3   KM Keyboard Shortcuts

KEY COMBINATION	DESCRIPTION
CTRL|CTRL|F11|r	Device resets to factory defaults and all settings and configurations are deleted.
CTRL|CTRL|F11|f	Disable cursor navigation. Switching between systems will not be possible with mouse movement.
CTRL|CTRL|F11|u	Enable cursor navigation. Switching between systems is possible with mouse movement.
CTRL|CTRL|F11|+	Mouse speed is increased.
CTRL|CTRL|F11|-	Mouse speed is decreased.

2.1.2 USB 3.0 port

Three front panel USB 3.0 ports, enabled by default, provide easy access and connectivity to any external USB device to ensure quick data transfer. One port is a high charged port allowing charging of other devices, such as tablets. The host detection USB freeze function enables the user to switch between channels without affecting the processes performed by devices connected to the USB port, such as file transfers. When only one computer is using the USB port function, ensure that it is connected to channel one.

Using USB freeze

If you need to retain authentication information on one channel after switching to another, you can freeze the USB port of the first channel.

To freeze the USB channel:

1. Select the channel you want to freeze.
2. On the front panel, switch the USB port Freeze toggle to FREEZE mode. The channel indicator will illuminate on the selected channel and on the Freeze toggle.

NOTE: If you are on a channel that has a USB port enabled and you switch to a channel that is not using the USB port, then you will lose the connection and the ability to freeze the information. You must switch back to a USB-enabled channel to reactivate the feature.

2.1.3 Managed copy and paste

The managed copy and paste feature enables copying of files and text from one source computer to the other for seamless integration of sources. Once the driver is installed, performing a copy from one source stores the files or text in temporary memory. Performing the paste function on a different source retrieves the files or text in a way that is transparent to the user.

NOTE: Two-port and four-port models support managed copy and paste of text. Four-port models also support managed copy and paste of files.

The managed copy and paste feature requires a driver and software agent download. To download the files, visit the product page at www.VertivCo.com.

2.1.4 KM multi-monitor support

The SV KM140 switch is preconfigured to support one monitor per channel. The user can use the preset keys to configure the KM to support more than one monitor per channel. To leverage the multiple monitor feature, the user must install the multiple monitor driver on each of the desired systems. When using the multiple monitor configuration, the user can experience seamless switching by moving the mouse cursor to the desired display. To download the multi-monitor display driver, visit www.VertivCo.com.

The following images detail the different preset monitor configurations.

NOTE: In the configurations, gray indicates a single display computer and black indicates a multi-monitor display. P indicates the primary display and S indicates a secondary display in a multi-monitor display configuration.

Figure 4.3   Two-Port KM Presets

Figure 4.4   Four-Port KM Presets

Preset	Layout		Preset	Layout		Preset	Layout
F11｜F1	1 2 / 3 4		F11｜1｜2	1 / 2 3		F11｜2｜3	2 3 4 / 1P 1S
F11｜F2	1 2 3 4		F11｜1｜3	1 / 2 3		F11｜2｜4	1 2P 2S 3
F11｜F3	1P 1S / 3P 3S		F11｜1｜4	1 2 / 3		F11｜2｜5	1 / 2
F11｜F4	1P 3P / 1S 3S		F11｜1｜5	1 2 / 3		F11｜2｜6	1 2
F11｜F5	1 2 3P 3S		F11｜1｜6	1 / 2 3 4		F11｜2｜7	1 2 / 3
F11｜F6	1 2P 2S 4		F11｜1｜7	1 / 2 3 4		F11｜2｜8	3 / 1 2
F11｜F7	1P 1S 3 4		F11｜1｜8	2 3 4 / 1		F11｜2｜9	2 / 1 3
F11｜F8	1P 1S 3P 3S		F11｜1｜9	1 2 / 3P 3S		F11｜2｜0	2 / 3 1
F11｜F9	1 2 3		F11｜1｜0	3P 3S / 1 2		F11｜3｜1	1P / 1S 2P 2S 3
F11｜F10	1 / 2 3 4		F11｜2｜1	1 3P / 2 3S			
F11｜1｜1	1 / 2 / 3		F11｜2｜2	3P 1 / 3S 2			

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