

8 Port Rack Mount VGA USB KVM Switch with Audio

SV831DUSBAU



*actual product may vary from photos

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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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.

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Introduction

The SV831DUSBAU 8 Port Rack Mount USB VGA KVM Switch (with Audio Cables Included) allows you to control up to 8 USB computers using a single keyboard, mouse and monitor, and features Audio and Microphone ports to switch between audio signals as well as PC ports.

Based on a 1U rack mountable slim form factor design, this 8 Port USB KVM uses rear cable connections to maximize space efficiency. Multiple KVM units can also be connected (cascaded) together for control of up to 64 computers, ensuring a scalable KVM solution that can be expanded as necessary.

To ensure seamless operation, the switch features automatic and manual scan modes, supports both hot-key and front panel push-button switching, and features a convenient OSD (on-screen display) for added configuration options.

Backed by a StarTech.com 3-year warranty and free lifetime technical support

Features

- Auto-scan function automatically selects computers sequentially
- Cascade configuration expands system capability
- Hotkey functions allow easy computer access/switching
- Identifies and selects computers by name assignment
- OSD security option protected against unauthorized computer use
- Unique cables offer convenient, space-saving connections

Package Contents

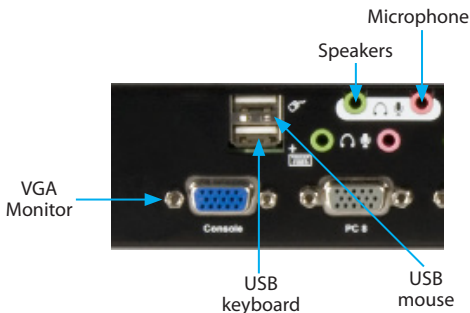
- 1 x 8 Port KVM Switch
- 8 x 6ft. green (speaker) 3.5mm mini-jack audio cable
- 8 x 6ft. red/pink (microphone) 3.5mm mini-jack audio cable
- 2 x Mounting Bracket
- 3 x Power Cord (NA/UK/EU)
- 1 x User Manual
- 1 x Foot pad (set)

Installation

WARNING: Prior to installation, please ensure that all computers and KVM switch(es) are powered down.

Console Connection

The SV831DUSBAU is designed for use with USB console connections only. A USB compatible keyboard and mouse and VGA monitor must be used for the local console. A USB keyboard/mouse combo device that uses a single USB connector may also be used, but must be connected to the USB Keyboard port only. If using audio, separately connect the 3.5mm mini-jack cables for the speaker and microphone to the corresponding Console connectors indicated.

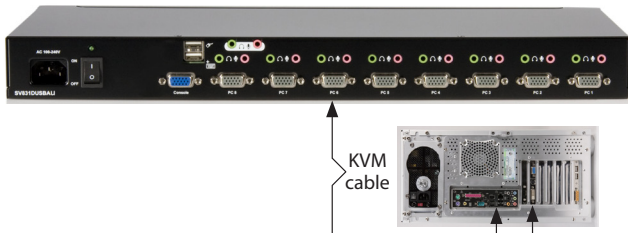


Connecting Computers to the KVM Switch

To connect a computer to the KVM switch, use the appropriate StarTech.com KVM cable to connect from one of the PC ports located on the rear panel of the KVM switch to the keyboard/mouse and VGA video ports on the computer.

If using audio, separately connect 3.5mm mini-jack cables for the speaker and microphone connections from the same PC port to the sound card on the computer.

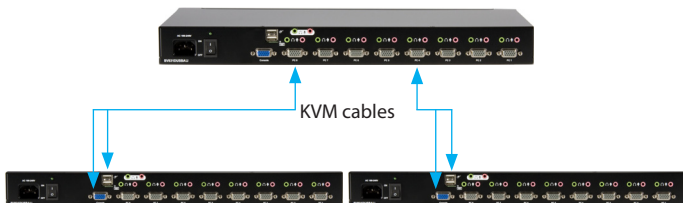
Repeat these steps for each computer you wish to connect to the KVM switch.



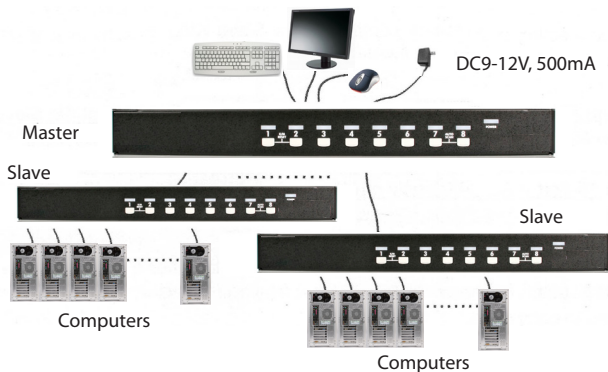
Cascaded Configurations

NOTE: The Master KVM switch must have equal or more PC ports than that of the Slave KVM switch. For example, if an 8-port switch is the Master KVM switch, an 8-port or 4-port switch can be used as a Slave KVM switch, but a 16-port switch cannot be used.

The ports labelled PC 1 - PC 8 can be connected to either a computer or a Slave KVM switch's **CONSOLE** port, as shown below. Use only StarTech.com KVM cables to connect the Master KVM switch's PC ports and Slave KVM switch's **CONSOLE** port, as shown below:



The maximum number of computers controlled by a master/slave configuration with all 8-port units is 64, including 8 Slave KVM switches and each slave unit connecting to 8 computers as depicted below:



NOTE: A device (computer or KVM switch) on any PC port can be changed at any time after initial power up. If you change any one of the PC1 thru PC8 connections from a computer system to a Slave KVM switch or vice-versa, or simply change/replace the device, the On-Screen Display (OSD) will update the next time the OSD menu is activated.

After the connection has been completed, please reactivate the OSD menu to verify that the Master KVM switch has recognized the Slave KVM switches. A triangle mark is placed to the right of the Channel Name to indicate that the port connected is a KVM switch and not a computer. A number to the left of the triangle mark indicates the number of ports on the Slave KVM switch.

Operation

You may select a computer by pressing the front panel push button directly, by issuing hot-key commands or by activating the OSD window. The front panel indicator changes to reflect the computer port selected (red) and whether the port is connected to a powered computer (green). The indicator flashes red when it is in either Auto Scan or Manual Scan mode.

Push Button controls

To select control of an attached computer, press the front panel button that corresponds with the assigned computer number.

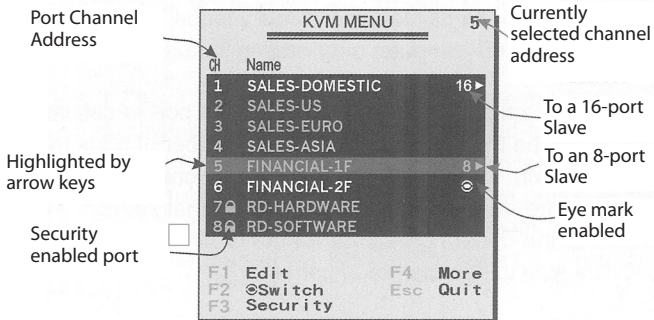
K/M Reset

K/M Reset resolves the majority of problems developed by keyboard and/or mouse device replacement or configuration changes. Press down buttons 1 and 2 simultaneously for 2 seconds to reconfigure the whole system without having to turn off the KVM switch or any attached computers.

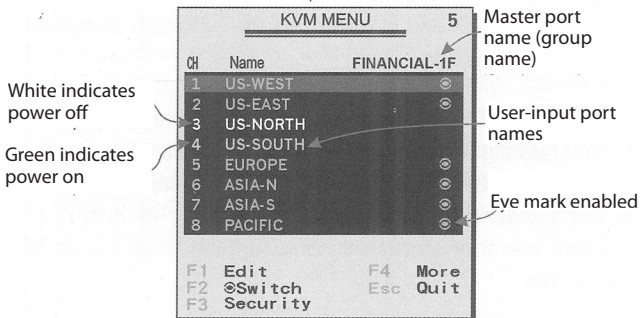
Auto Scan

This KVM switch provides an easy to use feature to start Auto Scanning. To use this function, simultaneously press buttons 7 and 8 and hold for two seconds.

OSD (On Screen Display) Operation



Press "Enter" to the slave
FINANCIAL-1F



By hitting the left <CTRL> key twice within two seconds, you may see the 'Hotkey Menu' if it is enabled (an OSD option). Or, by hitting the left <CTRL> key three times within two seconds, you will see a 'KVM MENU' screen displaying a list of the computers with corresponding channel addresses, names and status.

The channel address (port number) of the currently selected computer is displayed in red, same as the front indicator, to the right of the OSD title 'KVM MENU'.

The color of a device name is green if it has power and is ready for selection (its corresponding front panel indicator is green), or the color is white as it has no power.

OSD menu updates the color when it is activated.

Use the **<UP>** and **<DOWN>** arrow keys to highlight a computer and the **<ENTER>** key to select it. Or, you may press **<ESCAPE>** to exit the OSD and remove the OSD menu from the display; the status window returns to the display and indicates the currently selected computer or operating status.

A triangle mark (▶) to the right of a name indicates the port is cascaded to a slave switch; the number at the left of the triangle mark indicates the number of ports the slave has, (i.e. 8 for SV831DUSBAU). The **<ENTER>** key brings you one level down and another screen pops up listing the names of the computers on that slave. The name of the slave will be shown at the upper right corner of the OSD menu. It is useful to group computers and still be able to see the group name.

An eye mark (👁) to the right of a name indicates the computer is selected to be monitored in *Scan mode*. In the OSD, this mark can be switched on or off by function key **<F2>**.

Press the **<ESCAPE>** key to exit the OSD and to return to the selected computer, the computer name is also shown on the screen.

Function key **<F1>**: To edit the name entry of a computer or a slave, use the **<UP>** and **<DOWN>** arrow keys to highlight a channel, then press **<F1>** followed by name entry. Valid characters are 'A'~'Z', '0'~'9' and the dash character. Lowercase letters are converted to uppercase ones.

Press the **<BACKSPACE>** key to delete a letter one at a time. Non-volatile memory stores all name entries until you change them, even if the unit is powered down.

Function key **<F2>**: To switch the eye mark (👁) of a computer on or off. First, use the **<UP>** and **<DOWN>** arrow keys to highlight it, then press **<F2>** to switch it's eye mark on or off. If *Scan Type* is 'Ready PC + 👁', only the power-on and eye mark selected computers will be displayed sequentially in *Scan mode*.

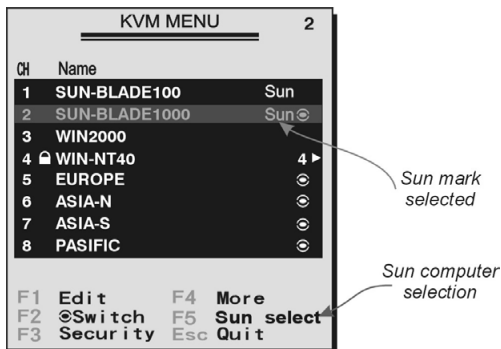
Function key <F3>: To lock a device (a computer or a slave) from unauthorized access, use Security. Security is effective for only one device (a computer or a slave). To lock a device Use the <UP> and <DOWN> arrow keys to highlight it, then press <F3>. Now, enter up to 4 characters ('A'~'Z', '0'~'9', '-') followed by <ENTER> as new password. A Security enabled device is marked with a lock (🔒) following its channel number. To permanently disable the security function from a locked device, highlight it, press <F3> then enter the password.

If you want to access the locked device temporarily, simply highlight it and press <ENTER>, the OSD will ask you for the password. After entering the correct password, you are allowed to use the device. This device is automatically re-locked once you switch to another port. During *Scan mode*, OSD skips the security-enabled device.

NOTE: If you forget the password, the only way to permanently erase all of the passwords is to press and hold the 1 and 2 front panel buttons, then hold 7 and 8. Release 7 and 8, then release 1 and 2.

Function key <F4>: More functions are available by hitting <F4>. A new screen pops up displaying more functions as described below. Most of them are marked with a triangle (▶) indicating there are options to choose from. Using the <UP> and <DOWN> arrow keys, select the functions and press <ENTER>. Available options will be shown in the middle of the screen. Again, use the <UP> and <DOWN> arrow keys to view options then press <ENTER> to make your selection. You can press <ESCAPE> to exit.

Function Key <F5>: To switch the Sun mark of a port on or off indicating the computer is a Sun server as shown below. Sun servers have more keys on the keyboard than a PC. When a Sun-marked port is selected, the KVM Switch starts to translate the keys from a PC keyboard to a Sun keyboard. See the section entitled Sun Keyboard Mapping for further detail.



NOTE: It is unnecessary to switch the Sun mark ON or OFF if an authentic Sun keyboard is being used on the console. In other words, you must ensure that the Sun-marked port has not been selected if you are already using a Sun keyboard.

With different types of keyboard and computer, the Sun Mark must be set up in compliance with the following instruction:

Keyboard Type	Computer Type	Sun Mark
USB (non-Sun)	PC/Mac	No
USB (non-Sun)	Sun	Yes
USB (Sun keyboard)	PC/Mac	No
USB (Sun keyboard)	Sun	Yes

ESC: To exit the OSD, press the <ESCAPE> key.

Auto Scan

In this mode, the KVM Switch automatically switches from one power-on computer to the next, sequentially, in a fixed interval. During AutoScan mode, the OSD displays the name of the selected computer.

When Auto Scan detects any keyboard or mouse activity, it suspends the scanning until activity stops; it then resumes with the next computer in sequence.

To abort Auto Scan mode, press the left <CTRL> twice, or, press any front button.


Scan Type and Scan Rate set the scan pattern. Scan Type (<F4>: More\Scan Type) determines if scanned computers must also be eye mark selected. Scan Rate(<F4>: More\Scan Rate) sets the display interval when a computer is selected before selecting the next one.

Manual Scan


Scan through power-on computers one by one by keyboard control. You can type (<F4>: **More\Scan Type**) to determine if scanned computers must also be eye mark selected.

Press the up arrow key (↑) to select the previous computer and the down arrow key (↓) to select the subsequent computer. Press any other key to abort Manual Scan mode.

Scan Type:

Ready PC + : In Scan mode, scan through power-on and eye mark selected computers. The non-volatile memory stores the Scan Type setting.

Ready PC: In Scan mode, scan through power-on computers.

 only: In Scan mode, scan through any eye-marked computer regardless of computer power status. The non-volatile memory stores the Scan Type setting.

Scan Rate: Sets the duration of a computer displayed in Auto Scan mode.

The options are 3 seconds, 8 seconds, 15 seconds and 30 seconds. The non-volatile memory stores the Scan Rate setting.

Hotkey Menu: When you hit the left <CTRL> key twice within two seconds, the Hotkey Menu appears displaying a list of hotkey commands if the option is On. The hotkey Menu can be turned Off if you prefer not to see it when the left <CTRL> key is hit twice. The non-volatile memory stores the Hotkey Menu setting.

CH Display:

Auto Off: After you select a computer, the channel address and name of the computer will appear on the screen for 3 seconds then disappear automatically.

Always On: The channel address and name of a selected computer and/or OSD status displayed on the screen all the time. The non-volatile memory stores the CH Display setting.

Position: The position of the selected computer name and/or OSD status displayed on-screen during operation. The actual display position shifts due to different VGA resolution, the higher the resolution the higher the display position. The non-volatile memory stores the Position setting.

Upper Left, Upper Right, Middle, Lower Left, Lower Right.

Country Code for Sun: Sun keyboards of different languages have different layouts. The KVM switch is able to emulate a Sun keyboard for a specific language type or country such as Arabic, Belgian, US, Yugoslavia, etc. Select the proper country code that matches all of your Sun computers.

Please Note: The country code must be set prior to powering up the Sun computer. Not performing this step prior to power-up could cause the system to malfunction.

You can adjust the monitor resolution under this sub-menu. The following selections are available: 1024x768, 1280x1024, 1600x1200, 1920x1440, widescreen: 1680x1050, 1280x720, 1366x768, 1920x1080 and "DDC2B Disable".

Hot-key commands

Hot-key commands are short keyboard sequences used to select a computer, to activate computer scan, etc. SV831DUSBAU interprets keystrokes followed by one or two more keystrokes; a built-in buzzer generates a high-pitch beep for a correct hotkey command, otherwise, one low-pitch beep for an error and the bad key sequence will not be forwarded to the selected computer.

The short form hotkey menu can be turned on as an OSD function (<F4>:More) Hotkey Menu) every time the left <CTRL> key is pressed twice.

NOTE: Left<CTRL>: denotes the Ctrl key on the left side of the keyboard

1~8: designate the number keys '1'~'8' in the upper row of the keyboard
Do not use the keypad at the right of the keyboard.

To select a computer by hotkey command, you must know its port number, which is determined by the KVM Switch connection. For a computer connected to a slave, two characters represent its port - the first character is the port number of the master unit (1~8) and the second one is the port number of the slave (1~8).

Left <CTRL> , Left <CTRL>, **7** : Selects a computer connected to **port 7** of the master.

Left <CTRL> , Left <CTRL> **6, 3** : Selects a computer connected to **port 3 of a slave** that is connected to port 6 of the master.

To start *Auto Scan*, automatically scan power-on computers individually at a fixed interval:

Left <CTRL>, Left <CTRL>, **F1**

When Auto Scan detects any keyboard or mouse activity, it suspends the scanning until the activity stops. It then resumes with the next computer in sequence. The length of the Auto Scan interval (Scan Rate) is adjustable.

To abort Auto Scan mode, press the left <CTRL> key twice.

NOTE: Scan Type determines whether an eye-marked computer is to be displayed during Auto Scan.

Manual Scan enables you to manually switch back and forth between the powered computers:

Left <CTRL>, Left <CTRL>, **F2**

Press "↑", "↓" to select the previous or the next computer in sequence. Press any other key to abort the Manual Scan.

NOTE: Scan Type determines whether an eye-marked computer is to be displayed during Auto Scan.

To adjust *Scan Rate*, which sets the duration before switching to the next computer in Auto Scan:

Left <CTRL>, Left <CTRL>, **F3**

The switch will beep one to four times indicating the scan interval of 3, 8, 15 and 30 seconds respectively.

To set Audio Stick, which controls which computer's microphone and speaker signal is active:

Left <CTRL>, Left <CTRL>, **F5**

The KVM switch will beep once or twice for ON and OFF respectively. When ON, audio selection follows computer selection. When OFF, audio selection stops following computer selection. Audio Stick is also accessible via the OSD menu (<F4>:More\ **Audio Stick**).

Sun/Mac Keyboard Mapping












The KVM Switch emulates a Sun Keyboard when a computer is marked with a Sun, in the OSD menu by Function Key <F5>. A Sun keyboard has more keys than a standard PC keyboard. These extra keys are simulated by tapping the right <CTRL> button (normally located on the right lower part of the keyboard) followed by one of the function keys on the general keyboard (i.e. combo key). For example, tap the right <CTRL> key, and then tap the function key <F7> to activate **Open** for a Sun computer.

NOTE: For older Sun Operating Systems, the switch does not support the *LowPower* option under *Power Off Select*.

For keystroke emulation of Sun/Mac computers, please refer to the chart on the following page and conduct the following two examples:

Stop A function in Sun: Press right <CTRL> and release, then within two seconds press **F1** and **A** in sequence.

The Help function in Sun: Press right <CTRL> and release, then within 2 seconds, press the **H** key.

From Standard Keyboard	Map to SUN Keyboard	Map to MAC Keyboard
Press Right CTRL and release; 1		
Press Right CTRL and release; 2	 -	
Press Right CTRL and release; 3	 +	
Press Right CTRL and release; 4	 	 Power
Press Right CTRL and release; F1	Stop	
Press Right CTRL and release; F2	Again	
Press Right CTRL and release; F3	Props	
Press Right CTRL and release; F4	Undo	
Press Right CTRL and release; F5	Front	
Press Right CTRL and release; F6	Copy	
Press Right CTRL and release; F7	Open	
Press Right CTRL and release; F8	Paste	
Press Right CTRL and release; F9	Find	
Press Right CTRL and release; F10	Cut	
Print Screen		F13
Scroll Lock		F14
Pause Break		F15
Press Right CTRL and release; H	Help	
Right 	Right +	Right 
Left 	Left +	Left 
	Compose	
Right ALT key	ALT graph	Right - <i>Option</i>
Left ALT key	ALT	Left - <i>Option</i>

Specifications

Maximum # of connected computers (Cascaded)	64
Maximum Video Resolution	1920 x 1440
Storage Temperature	-20° ~ 60° C
Storage Humidity	0-80% RH
Operating Temperature	5° ~ 40° C
Operating System Support	OS Independent (transparent)
Number of Computer Ports	8
KVM Console Interface	USB
Console Connectors	1 x DE-15 VGA female 2 x USB type A female 2 x 3.5mm Audio Mini-Jack female
Computer (PC) Connectors - Per Port	1 x DE-15 VGA female 2 x 3.5 mm Audio Mini-Jack female
Power Consumption (Max.)	9-12VDC, 500mA
Dimensions - H x W x L	45 mm (1.77") x 180 mm (7.09") x 548mm (21.3")
Weight	2.6 kg (91.78 oz)

Technical Support

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Warranty Information

This product is backed by a three year warranty.

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