

STARVIEW

User's Manual

Model: SV821

StarTech.com



INTRODUCTION

The StarView KVM switch model SV821, which will be called simply the SV821, is a controller for one user to access more than one computer. The SV821 provides the easiest and most cost-effective way to access multiple computers.

With the powerful features of the SV821, anyone is capable of operating or testing many computers by using only one keyboard, one monitor and one mouse. Switching between controlled computers is quick and easy, by either using the buttons on the front of the unit or the simple "Hot Keys". It is simple to use as there is no software to install. No more frustrating incompatibility problems as the "Hot Keys" can be used with any operating system on hardware platform. This is possible because the SV821 intercepts the commands directly from the keyboard.

A single SV821 controls up to 8 computers. If you combine many SV821's you can control up to 302 computers. This combination is called cascading and involves connecting the console port of a lower level SV821 to a PC port of the next higher level SV821. This aspect of the SV821 will be described in detail later. The SV821 also offers a powerful Auto-Scan mode, which will allow you to scan all operational PC's one by one and will stop at the user's request.

There is no better way to save money because the use of the SV821 eliminates the need to purchase a monitor, keyboard and mouse for each computer attached to it. The SV821 also eliminates the user's wasted time and effort by allowing them to control all the connected PC's from one workstation.

FEATURES

- Supports PS/2 and AT style computers.
- Powerful keyboard and mouse translation allows one PS/2 style keyboard and mouse to control AT and PS/2 computers.
- Supports SVGA, VGA, and Multisync monitors.
- Switching confirmed by sounding buzzer.
- Easy PC selection via simple keystrokes or push buttons.
- Keyboard Caps Lock, Num Lock, Scroll lock states are automatically saved and restored when switching among computers.
- Auto-Scan mode automatically switches through powered computers. Auto-Scan rate is DIP switch settable (3, 10, 20, and 40 seconds).
- Quick Last/Next mode allows user to toggle through the ports without leaving the keyboard.
- LED's give current mode status.
- Computers connect to the SV821 using high definition extension cables, SVAT-10 for AT computer, SVPS2-10 for PS/2 computer.
- Saves space, power and equipment costs.
- No software required.
- Easy to install and use.

To reset the keyboards and mice simultaneously press select buttons 1 & 2, then hold them for three seconds. This can be done whenever necessary.

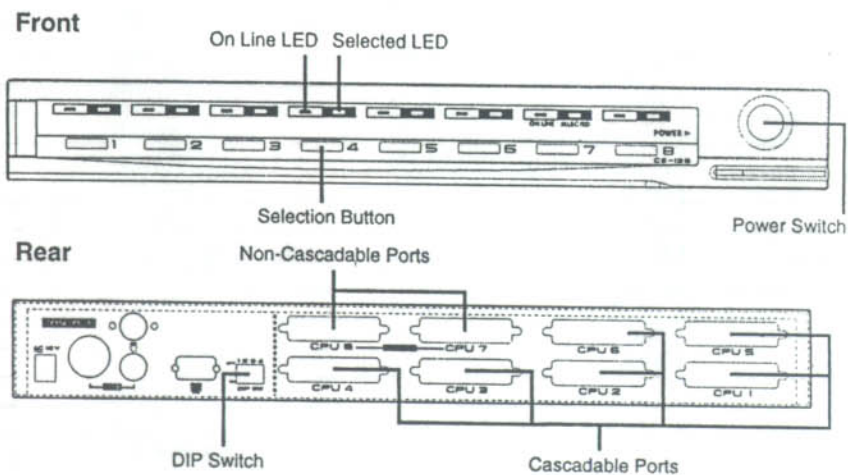
HARWARE REQUIREMENTS

Monitor: VGA, SVGA, or Multisync monitor card on each PC.

Mouse: DB-9 serial port or 6-pin DIN PS/2 mouse on each computer and one PS/2 mouse.

SPECIFICATIONS

Function	Specification
Power consumption	AC 9V 600 mA
Accessing PC number	8
PC selected by	Keyboard, button
LED	8 on line, 8 selected, 1 power
Scan interval	3, 10, 20, and 40 seconds
Keyboard connector	5-pin DIN (AT style) / 6-pin mini-DIN (PS/2) female
Serial (AT) mouse connector	9-pin D-type male / female
PS/2 mouse connector	6-pin D-type female
Monitor connector	15-pin D-type male / female
PC connector	25-pin D-type female
Enclosure	Metal / Plastic
Humidity	0%~80% RH, non condensing
Operation Temperature	0~40 degrees C
Stock temperature	-20~40 degrees C
Weight	2650g
Dimension (LxWxH)	366 x 250 x 45 (mm)



Keyboard: 5-pin DIN AT keyboard port with +5V DC on pin 5 and ground on pin 4, or a 6-pin mini-DIN PS/2 keyboard port with +5V DC on pin 4 and ground on pin 3, and one AT or PS/2 keyboard.

INSTALLING THE HARDWARE

SETTING UP ONE SV821

Cable Part Number	Connector to SV821 Switch	Connector to Computer's Keyboard Port	Connector to Computer's Mouse Port	Connector to Computer's Monitor Port	Length
SVAT-10	25-pin D-type female	5-pin DIN male	9-pin D-type female	15-pin D-type male	10ft.
SVPS2-10	25-pin D-type female	6-pin mini-DIN male	6-pin mini-DIN male	15-pin D-type male	10 ft.

Connecting The Computers

Use SVAT-10 to connect your AT style computer to the SV821 CPU switch. Connect the 5-pin DIN connector to the keyboard port, 9-pin DIN D-type connector to the serial mouse port and the 15-pin D-type connector to the monitor port.

Use SVPS2-10 to connect your PS/2 style computer to the SV821 CPU switch. Connect the black 6-pin mini-DIN connector to the keyboard port, the grey 6-pin mini-DIN connector to the PS/2 mouse port and the 15-pin D-type connector to the monitor port.

CASCADING MULTIPLE SV821's

Number of SV821's	Number of Computers	Number of SV821's	Number of Computers
1	1-8	23	156-162
2	9-15	24	163-169
3	16-22	25	170-176
4	11-29	26	177-183
5	14-36	27	184-190
6	17-43	28	191-197
7	20-50	29	198-204
8	51-57	30	205-211
9	58-64	31	212-218
10	65-71	32	219-225
11	72-78	33	226-232
12	79-85	34	233-239
13	86-92	35	240-246
14	93-99	36	247-253
15	100-106	37	254-260
16	107-113	38	261-267
17	114-120	39	268-274
18	121-127	40	275-281
19	128-134	41	282-288
20	135-141	42	289-295
21	142-148	43	296-302
22	149-155		

Important:

To cascade to or more SV821's use only an SVCASCADE cable(s).

Port #7 and #8 are both reserved for computers only and cannot be used to connect to another SV821 switch.

The console ports (the ports connected to the monitor, keyboard and mouse) of one SV821 can be connected to the CPU section of another SV821 in order to access up to 302 computers from one keyboard, monitor and mouse. The following table shows the number of SV821s required to perform this function.

Cascading SV821s in Two Stages (to control up to 50 computers)

- Set DIP Switch #4 of the first stage SV821 to on and all others to off
- Computers may be connected to the first stage and second stage SV821's
- Using a SVCASCADE cable to connect two SV821s. Plug in the 5-pin DIN connector to the second stage SV821's keyboard port, the 6-pin mini-DIN connector to the PS/2 style mouse port and 15-pin D-type VGA connector to the monitor port. Plug in the 25-pin D-type male connector to one of the 25-pin female ports (Use Port#1~6 only. Port#7 and #8 cannot be used for cascading) of the first-stage SV821 CPU switch.

Cascading SV821s in Three Stages (to control up to 302 computers)

- Set DIP Switch #4 of the first stage SV821 to on and all others to off
- Computers may be connected to the first stage, second stage or the third stage SV821
- To connect two different stage SV821s, use a SVCASCADE cable only.

OPERATING THE SV821

You can access any computer attached to the SV821 by pressing one of the eight buttons on the front panel or by using the "Hot Keys". The SV821 will then direct the keyboard, video and mouse to and from the selected computer. It will seem as if the selected CPU is right in front of you.

Selecting PC's Using the Front Panel Select Buttons

To access a computer, press the SELECT button for that specific port and the "Selected LED" of the unit you have chosen will turn on.

To access a computer on a second level SV821, just select the port on level one and the corresponding computer on the second level.

To access a computer on a third level SV821, just select the corresponding computer on the third level.

Selecting PC's Using the Keyboard "Hot Keys"

If you know the number of the CPU you wish to access, you can use the "Hot Keys" to directly select that PC. Each PC that is connected to the SV821 has a unique keyboard combination to use so that it can be selected using the "Hot Keys". Each combination will begin with the three keys, (pressed all at once or one at a time (in any order)) <alt> + <ctrl> + <shift>, then you will press the port number of the CPU you want to access, and finally the <enter> key.

Below you will find an example of "Hot Key" usage.

Keyboard Problems

Press These Keys	To Select This Computer
<alt> + <ctrl> + <shift> 1 <enter>	CPU 1 on the first level SV821
<alt> + <ctrl> + <shift> 2 <enter>	CPU 2 on the first level SV821
<alt> + <ctrl> + <shift> 12 <enter>	CPU 2 on the second level SV821 connected to CPU 1 on the first level
<alt> + <ctrl> + <shift> 221 <enter>	CPU 1 on the third level SV821 connected to CPU 2 on the second level SV821 connected to CPU 2 on the first level SV821

The SV821 works with both AT and PS/2 style keyboards. Old XT keyboards (84 key models) and some AT models (those with the function keys on the side instead of across the top) do not work with the SV821. Keyboard problems are rarely reported and in most cases, they can be solved by replacing the keyboard.

Video Problems

The SV821 supports VGA, SVGA, MultiSync, and XGA (interlaced) with resolutions up to 1600 x 1024. The maximum bandwidth is 180 MHz.

You may use monitors or video cards with a higher resolution, but video decay may occur. When you encounter signal decay, the image will lack in sharpness and overall quality.

Mouse Problems

Assuming that all the cables are the correct ones, and they are properly installed, perform the following procedure:

Push buttons one and two on the SV821 simultaneously and hold them for 3 seconds. (This is the keyboard and mouse reset)

If the problem still persists:

- a. Turn off the Switch Box and all PCs attached to it in order to reset the system.
- b. Turn the Switch Box back on.
- c. Turn the attached PCs back on. (NOTE: The Switch Box must be turned on before you turn on your computers) The SV821 supports mouse emulation and must be powered on to provide the needed translation. All PCs may be turned on at the same time.
- d. If problems persist, change the mouse and or the mouse driver. Try a generic mouse driver (one should be included with a copy of your Windows 3.x, Win95/98 or NT). Use a regular mouse, some combination mice (mice that can be either PS/2 or serial) have special function buttons. (Kensington manufactures a mouse that has 2 extra buttons.) The SV821 may not support

the extra buttons and wheel when using a "net mouse" in serial mode. However, the two basic buttons should work fine. Switch the mouse to PS/2 mode if you need the functions of the extra buttons and/or wheel.

e. When using AT machines with a serial mouse, please note that the SV821 mouse conversion does not support the Mouse System mouse driver. You must use the MS mouse driver instead of the Mouse Systems driver.

Some Notebook computers have difficulties working with the SV821 when both mouse and keyboard ports are used simultaneously. The Laptops known to exhibit this behavior are the IBM Thinkpad and the Toshiba Tecra. Sometimes this can be alleviated by disabling the stick mouse in the BIOS of the Notebook in question. To avoid this problem you should connect either the mouse or the keyboard to the SV821. If you connect the mouse only you will have to use the Laptop keyboard when you switch to that port.

Preventing Radio and TV Interference

WARNING!! This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of part 15 of FCC Rules which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own risk and expense will be required to correct the interference.

Limited Warranty

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK OR ITS DOCUMENTATION.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and specially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update device documentation without obligation to notify any individual or entity of such revisions, or update. For further inquiries please contact your direct vendor.

Part Number	Specifications
SV120	External SUN to PS/2 Converter
SV110	External MAC to PS/2 Converter
SV560UTP	Category 5 UTP Console Extender / Sharer