

Hard-to-find made easy®

### 4 Port Professional USB or PS/2 VGA KVM Switch

SV431H



DE: Bedienungsanleitung - de.startech.com FR: Guide de l'utilisateur - fr.startech.com ES: Guía del usuario - es.startech.com IT: Guida per l'uso - it.startech.com NL: Gebruiksaanwijzing - nl.startech.com PT: Guia do usuário - pt.startech.com

For the most up-to-date information, please visit: www.startech.com

Manual Revision: 04/12/2012

#### FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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.

#### Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols

This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of third-party companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Regardless of any direct acknowledgement elsewhere in the body of this document, StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders.



# Table of Contents

Introduction	1
Installation	2 2 3 3 3
Operations	5 5 6 7
Cascade Configuration	7 7 7
Troubleshooting	8
Specifications	9
Technical Support	10
Warranty Information	10



### Introduction

The StarTech.com SV431H, fully compatible with USB specification, is a hybrid USB and PS/2 keyboard/mouse/monitor sharing switch. The SV431H USB switch lets a user manage four computers by USB or PS/2 interface or a combination of both, from 1 monitor, PS/2 keyboard and mouse saving you space, time, equipment and money.

Installation is as easy as connecting USB A-B cables or PS/2 cables in between computers and the SV431H switch. Selecting a computer is as easy as front panel push button pressing or by entering hotkey commands. The SV431H switch provides the easiest way to manage multiple USB or PS/2 computers with one PS/2 keyboard, mouse and monitor. No more tangled cables and messy working environments

#### Features

- Manage 4 PCs with USB or PS/2 interfaces from one PS/2 keyboard, mouse or monitor.
- · Front panel push buttons and hotkey commands for easy computer selection.
- · No drivers needed for keyboard and mouse operation.
- · Support keyboard and mouse operation.
- High VGA resolution: 1920 x 1440.
- Buzzer sound for computer switching confirmation.
- · Activate Auto Scan by front button pressing.
- · Selectable Scan Time interval.
- Support the latest DDC2B VGA monitor.
- · Saves time, space, equipment and power.
- No software required.





### Installation

### PC BIOS Notice

The following BIOS setup changes are necessary for PC users using USB and not necessary for Mac users:

- 1. In STANDARD CMOS, set HALT ON ERROR to ALL BUT KEYBOARD.
- 2. In PNP AN PCI SETUP, set PNP OS INSTALLED to YES and set USB IRQ to ENABLE.
- 3. For newer computers: in INTEGRATED PERIPHERALS, set USB CONTROLLER and KEYBOARD SUPPORT to ENABLE.

Also make sure that USB is properly selected in Device Manager under Control Panel, as shown below.

Note: The SV431H is applicable for USB keyboard and mouse. Switching from one computer to the next is equivalent to unplugging the USB device from one computer and plugging it to another. Some USB drivers check attached USB peripherals all the time and do not accept plugn-play function.



#### Adhesive Rubber Feet

For desktop operation, you may stick the four round rubber feet (supplied with the unit) to the bottom of the StarView. Do not use the rubber feet with the rack mount option.

### **Console Connection**

Before installation make sure all devices and computers to be connected to the SV431H have been turned off.

Plug you monitor to the consoles VGA port; connect the PS/2 mouse and keyboard to the console port marked with a mouse and a keyboard as shown in figure below.



#### **Computer Connection**

Use a HDB15 male-to-female cable to connect from your computers VGA port to the SV431H VGA port as shown on the following page.

For USB computers: Use a USB A-B cable to connect from one of the SV431H PC ports to the USB port on the corresponding computer (series A connector), as shown on the following page.





For PS/2 computers: Connect a PS/2 Y-adapter, which comes with the unit, to the SV431H PS/2, then use two mini-DIN6 male-to-male cables for keyboard and mouse, see figure below. There are two mini-DIN6 female connectors on the PS/2 Y-adapter marked as keyboard and mouse. Be sure not to swap the connections.





For notebook computers: In most cases, all you need is one PS/2 male-to-male cable connected between the SV431H and your Notebook; the Y-adapter is not necessary. However, some Notebook computers do not follow industry-standard, please check your Notebook users manual for details.

You can now turn on all devices and computers.

Note: Do use both PS/2 and USB of a PC port on the SV431H at the same time. Only the USB port will effective if this occurs.

## Operations

### Front Panel

Online LED & Selected LED

When the LED turns green, the connected computer is powered-on. When a computer is selected, its corresponding red LED illuminates.

Push buttons

Each computer has a button associated with it on the front panel for selection.

K/M Reset

K/M Reset solves most problems developed by keyboard, mouse, device replacement or change of configuration. Press both of the front-panel number 1 and 2 push buttons for 2 seconds to re-configure the whole system without turning either the SV431H or any computer off.

Auto Scan

Auto Scan automatically scans through computers one by one in a fixed intervals. The SV431H provides an easy to use feature to start Auto Scanning. You can press down both the front-panel number 3 and 4 buttons for 2 seconds to start Auto Scanning.

Note: Computers using a USB keyboard and mouse are not immediately operable when selected during Auto Scan. Wait for about three seconds after switching to a USB computer, then use the keyboard and mouse.



#### Hot Key Commands

Hot Key commands are short keyboard sequences used to select a computer, to activate computer scan, etc. The SV431H interprets keyboard strokes for Hot Keys all the time. A Hot Key sequence starts with 2 left Ctrl keystrokes followed by 1 or 2 more key strokes. A built-in buzzer generates a high-pitch beep for correct hot key commands; otherwise, one low-pitch beep for an error and the bad key sequence will not be forwarded to the selected computer.

L-Ctrl: is the Ctrl key located at the left side of the keyboard. 1~4: are the numbers 1 ~ 4 at the upper row of the keyboard. Do not use the keypad at the right of the keyboard.

 To select a computer by hot key command, you must know its port address, which is determined by the SV431H connection at the back.

Left Ctrl + Left Ctrl + 4

Selects a computer connected to the PC port 4.

 To start Auto Scan, which will automatically scan power-on computers one by one at a fixed interval:

Left Ctrl + Left Ctrl + F1

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. The length of the Auto Scan interval (Scan Rate) is adjustable. To abort the Auto Scan mode, press the left Ctrl key twice.

Manual Scan enables you to manually switch back and forth between power-on computers.

Left Ctrl + Left Ctrl + F2

Press  $\Lambda$  or  $\psi$  to select the previous or the next computer in sequence. Press any other key to abort the Manual Scan.

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

Left Ctrl + Left Ctrl + F3

The SV431H sends one to four beeps indicating scan intervals of 3, 8, 15 and 30 seconds respectively.

 To adjust keyboard typematic rate (characters/sec), this setting over-rides that of the BIOS and any operating system:

Left Ctrl + Left Ctrl + F4

The Sv431H generates 1 to 4 beeps corresponding to 10, 15, 20 and 30 characters/sec respectively.



#### **Change Leading Hot Key**

The default leading hotkey sequence involves pressing the left Ctrl twice in succession (e.g. Left Ctrl>, Left Ctrl). This can be changed to the right Ctrl key instead, to avoid accidental activation due to using the left Ctrl key for functions such as Copy/Paste.

To change the leading hotkey sequence to Right Ctrl :

```
Left Ctrl + Left Ctrl + hold Alt + press Right Ctrl
```

All hotkey commands that previously required pressing the Left Ctrl will be switched to requiring the right Ctrl instead.

To change the leading hotkey sequence back to Left Ctrl:

```
Right Ctrl + Right Ctrl + hold Alt + press Left Ctrl
```

### Cascade Configuration

### Connection

Before connecting a device (a computer or any other SV431H) to the master under power, you must turn off the devices. Only the PS/2 ports are operable for cascade operation.



#### **Computer Selection by Hot Key Command**

The first digit is the port address of the Master unit (1~4) and the second digit is the port address of the Slave (1~4). Please note that only the Master's PS/2 ports can be connected to a Slaves Console port.

Left Ctrl + Left Ctrl + 1 + 3

Selects a computer connected to PS/2 port 3 of a Slave connected to PS/2 port 1 of the Master.



## Troubleshooting

Ensure that all cables are well seated. Label the cable for each computer to avoid confusion when connecting to the SV431H.

Кеу	Possible causes	Solutions
Keyboard or mouse does not work	<ul> <li>In Auto Scan, computers using USB keyboard and mouse are not operable.</li> <li>Too many keyboard or mouse drivers installed.</li> </ul>	<ul> <li>Press any front button to select a computer, then use the keyboard and mouse.</li> <li>Remove all unnecessary keyboard and mouse drivers.</li> </ul>
Keyboard or mouse does not work after switching to a different USB computer.	The USB computer does not support plug- and-play as specified by the USB standard.	Update that computer's USB driver. Device hot plug-and-play is one of the basic USB specifications
Computer hangs up while switching computers.	USB computer initialization takes too much time.	Wait at least 5 second before switching from one USB computer to another to ensure proper USB communication
Auto Scan does not switch PCs automatically and the SV431H beeps.	All PCs are off or only one PC is turned on. Scan mode works for power-on computers only.	Turn computers on.



## Specifications

No. of Computer Supported	4
Front Panel Push Button	4
Hot Plug-and-Play	Yes, PC USB Console only
Automatic Scan Interval	3, 8, 15, 30 seconds
Cable Longth (Mary)	30M (100ft) for VGA
Cable Length (Max)	30M (90ft) for PS/2
Computer Online LED	4
Computer Selected LED	4
VGA	1920 x 1440 DDC2B
Computer Peripheral Connector Monitor	USB Type B x 4, PS/2 x 3 HDB-15 male x 4
Console Peripheral Connector Monitor	PS/2 x 2 HDB-15 female x 1
Weight (g) (oz.)	90 31.74
H x W x D (mm) (in.) Size	44 x 220 x 130 1.7 x 8.7 x 5.1 Compact



# **Technical Support**

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/ support and access our comprehensive selection of online tools, documentation, and downloads.

### Warranty Information

This product is backed by a three year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

#### Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.



# StarTechcom

Hard-to-find made easy®

Hard-to-find made easy. At StarTech.com, that isn't a slogan. It's a promise.

StarTech.com is your one-stop source for every connectivity part you need. From the latest technology to legacy products — and all the parts that bridge the old and new — we can help you find the parts that connect your solutions.

We make it easy to locate the parts, and we quickly deliver them wherever they need to go. Just talk to one of our tech advisors or visit our website. You'll be connected to the products you need in no time.

Visit **www.startech.com** for complete information on all StarTech.com products and to access exclusive resources and time-saving tools.

StarTech.com is an ISO 9001 Registered manufacturer of connectivity and technology parts. StarTech.com was founded in 1985 and has operations in the United States, Canada, the United Kingdom and Taiwan servicing a worldwide market.