

## 4 Port High Resolution Dual Link DVI USB KVM Switch with Audio

SV431DVIUAHR



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## 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.

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# Introduction

Thank you for purchasing a StarTech.com 4 Port Dual Link DVI USB KVM Switch. Offering convenient sharing of up to four directly connected computers as well as USB peripheral switching between computers, SV431DVIUAHR connects to a DVI capable display to create the ideal switching solution for a broad range of multimedia environments, including SOHO (Small Office Home Office), HTPC applications etc.

## Features

- All metal chassis for long-term durability
- Compatible with all Operating Systems supporting USB
- Designed for high-resolution applications: supports up to a resolution of 2560x1600
- Front panel push button computer selection
- Integrated USB 2.0 hub allows you to share up to three high-speed USB devices between computers
- USB self-powered operation

## Package Contents

- 1 x SV431DVIUAHR
- 1 x User manual
- 1 x Rubber Foot Pad set
- 1 x Power Adapter

## System Requirements

### Console Side

- One DVI monitor
- One USB keyboard
- One USB mouse
- One 3.5mm microphone (optional)
- One 3.5mm audio output device (optional)

### Computer Side

- One DVI cable per computer



- One USB A-B cable with Type-A and Type-B plug for USB devices



**Please Note:** In place of using individual cables, StarTech.com offers a 6 ft. 4-in-1 USB, DVI, Audio, and Microphone KVM Switch Cable (USB-DVI4N1A6) that can fulfill the functions of both cables in one convenient unit.



# Installation

## PC BIOS Notice

The following BIOS setup changes may be necessary for PC users.

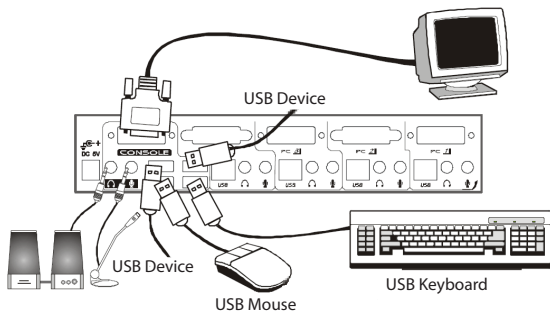
1. In STANDARD CMOS, set HALT ON ERROR to ALL BUT KEYBOARD
2. In PNP AND PCI SETUP, set PNP OS INSTALLED to YES and set USB IRQ to ENABLED.

**Please Note:** The SV431DVIUAHR provides USB keyboard and mouse switching from one computer to the other. If you plan to share other peripherals, such as a CCD camera, printer or scanner, it is required to shut down the computer driver before switching to another computer.

## Console Connection

Before installation, ensure that all devices and computers to be connected to the SV431DVIUAHR are powered off.

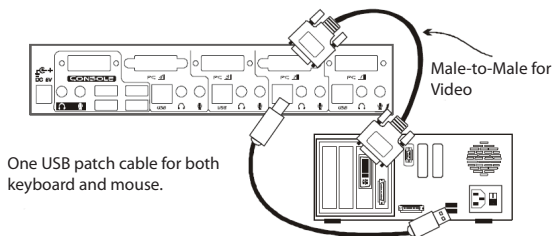
1. Connect a DVI-capable monitor to the Console's DVI port.
2. Plug a USB keyboard and a USB mouse to any two of the Console's USB ports as shown below.



## Computer Connection

Use a male-to-male cable to connect from a computer's DVI port to SV431DVIUAHR's DVI port of PC side, as shown below.

Use a USB A-B Cable to connect from the SV431DVIUAHR's USB port (B connector, square connector) to the USB port on the corresponding computer (A connector, flat connector), as shown below.



## Operation

### Front Panel

#### On-line 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.

### Auto Scan

Auto Scan automatically scans through the connected computers one by one in a fixed interval (see Scan Time below).

To activate Auto Scan, hold down front panel push buttons "3" and "4" simultaneously. The port LED flashes during Auto Scan. Auto Scan is effective for powered-on computers only. To exit Auto Scan mode, simply tap any one of the push buttons.

**Please Note:** The keyboard and mouse are inoperable during Auto Scan.

## Scan Time

Scan time sets the interval at which connected computers will be scanned. The Scan Time options are 3, 8, 15 and 30 seconds.

**Please Note:** Scan Time is automatically set to 3 seconds (default) when the KVM switch loses power.

To change the Scan Time interval, press hold front panel buttons "1" and "2" simultaneously. The KVM switch will beep 1, 2, 3 or 4 times for Scan Time of 3, 8, 15 or 30 seconds respectively.

## "FUNC" Button

To ensure optimal video signal strength corresponding to the length or quality of the DVI cable being used, the user can press the "FUNC" button in combination with the other push buttons.

1. Press the "FUNC" button three times. The "FUNC" LED will flash one time per second.
2. To adjust the **equalization** of the selected port:

Press push button "1" once to select normal operation, indicated by a single beep sounding; or twice to select enhanced mode, indicated by two beeps sounding.

or

To adjust the **output current** of the selected port:

Press push button "3" once to select normal operation, indicated by a single beep sounding; or twice to select enhanced mode, indicated by two beeps sounding.

or

To adjust the **output emphasis** of the selected port:

Press push button "4" once to select no pre-emphasis, indicated by a single beep sounding; or twice to select low pre-emphasis, indicated by two beeps sounding; or three times to select medium pre-emphasis, indicated by three beeps sounding; or four times to select high pre-emphasis, indicated by four beeps sounding.

3. Once the desired settings are complete, press the "FUNC" button once to exit the settings mode.

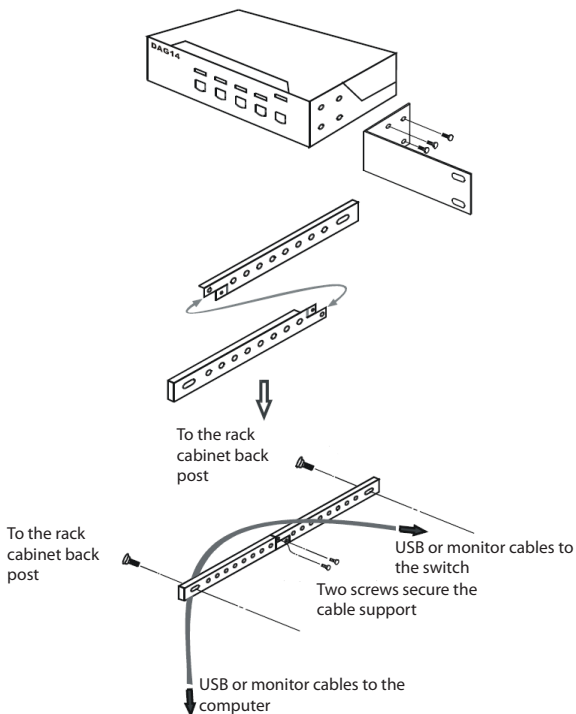


To select the audio signal from any port of 4 connected computers, the user can press "FUNC" button in combination with the other push buttons.

1. Press and hold the "FUNC" button. Either all 4 green LEDs will illuminate or just one green LED. If all four LEDs illuminate, the audio port is operating on the same channel as the selected computer. This is known as "tracking mode." If just one green LED (the selected audio port) is illuminated, the audio port is not on the same channel as the selected computer (referred to as "non-tracking mode").
2. While the "FUNC" button is being held down, press the push button that corresponds with the audio port you wish to select.  
or  
While the "FUNC" button is being held down, press and hold "1" AND "2" to enter tracking mode.
3. Once the desired setting changes have been made, release "FUNC" button to exit the settings mode.

# Rack Mount Kit (Optional)

The figure below shows how to attach optional mounting brackets and cable support (SV431RACK) to the SV431DVIUAHR for installation in a standard 19-inch rack cabinet.



# Specifications

<b>Number of Ports</b>	4
<b>Computer Connectors</b>	1 x USB type B female 1 x 29-pin DVI female 2 x 3.5mm Audio female
<b>Console Connectors</b>	4 x USB type A female 1 x 29-pin DVI female 2 x 3.5mm Audio female
<b>LEDs</b>	4 x Port Selection/Link 1 x Power
<b>Maximum Video Resolution</b>	2560x1600*
<b>Port Selection Modes</b>	Push button
<b>Rack Mountable</b>	Yes (optional kit available)
<b>Audio Support</b>	Yes
<b>Cascadable</b>	No
<b>Maximum Cable Length</b>	4.6 m (15 ft) for USB
<b>Power Adapter</b>	5VDC, 2000mA, center positive
<b>Operating Temperature</b>	0°C ~ 40°C (32°F ~ 104°F)
<b>Storage Temperature</b>	-20°C ~ 60°C (-4°F ~ 140°F)
<b>Humidity</b>	0% ~ 80% RH
<b>Dimensions</b>	220.0mm x 130.0mm x 44.0mm
<b>Weight</b>	1750 g

\* Resolutions exceeding 2560x1600 can be obtained by using a lower refresh rate.  
Example: 3840x2400 @30Hz

# Troubleshooting

Ensure that all cables are properly connected. Label the cable for each computer to avoid confusion when connected to the SV431DVIUAHR.

Symptom	Causes	Solution
The keyboard or mouse does not work	<p>In Auto Scan, keyboard and mouse are inoperable.</p> <p>Too many keyboard or mouse drivers installed.</p>	<p>Press any front button to select a computer, then use the keyboard and mouse.</p> <p>Remove ALL unnecessary keyboard and mouse drivers.</p>
A newly installed USB device does not work.	<p>Improper device driver.</p> <p>Device consumes too much power.</p> <p>Device consumes too much power instantaneously.</p> <p>The device was not initialized properly.</p> <p>When SV431DVIUAHR works under self-power, (no added power supply) it supports max of 100mA as per USB spec.</p>	<p>Re-install device driver.</p> <p>The device should be powered. Add a power adapter to the device.</p> <p>If the device does not provide a power jack, add a power adapter with DC5V of less than 1A to the SV431DVIUAHR.</p> <p>Ensure that the USB cable is well connected.</p> <p>Remove all power sources from the SV431DVIUAHR by unplugging all USB A-B cables and the power adapter, then restart.</p> <p>Select the computer by push button, restart the computer then try again.</p>

Symptom	Causes	Solution
Computer hangs up while switching computers.	Device initialization takes too much time.	Wait at least 5 seconds before computer switching to ensure proper USB communication.  Turn off the device driver (not keyboard or mouse) before computer switching.
Auto Scan does not switch PCs automatically and the SV431DVIUAHR beeps.	All PCs are off or only one PC is turned on. Scan mode works for computers only if they are powered on.	Turn computers on.
DVI Dual Link doesn't work.	Either the computer or monitor does not support the DVI Dual Link mode.	Ensure that the computer or the monitor being used support the DVI Dual Link mode.
The resolution is poor.	Improper SV431DVIUAHR video settings.	To adjust the optimal video signal strength corresponding to the length or quality of the DVI cable, the user can press "FUNC" button combing with the other push buttons. Please see more details on pages 6 and 7.

# Technical Support

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## 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.

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