

# 4-Port Dual HDMI KVM Switch|4K 30Hz



Actual product may vary from photos

**User Manual** 

SKU#: SV431DHD4KU

For the latest information and specifications visit www.startech.com/SV431DHD4KU



# **Compliance Statements**

#### **FCC Compliance Statement**

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

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

#### **Industry Canada Statement**

This Class A digital apparatus complies with Canadian ICES-003.

CAN ICES-3 (A)/NMB-3(A)

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# **Safety Statements**

#### **Safety Measures**

- Wiring terminations should not be made with the product and/or electric lines under power.
- Product installation and/or mounting should be completed by a certified professional as per the local safety and building code guidelines.
- Cables (including power and charging cables) should be placed and routed to avoid creating electric, tripping or safety hazards.

#### Mesures de sécurité

- Les terminaisons de câblâge ne doivent pas être effectuées lorsque le produit et/ou les câbles électriques sont sous tension.
- L'installation et/ou le montage du produit doit être réalisé par un professionnel certifié et dans le respect des normes locales et du code de construction local.
- Les câbles (y compris les câbles d'alimentation et de chargement) doivent être placés et acheminés de façon à éviter tout risque électrique, de chute ou de sécurité

#### 安全対策

- 電源が入っている状態の製品または電線の終端処理を行わないでくださ
- 製品の設置やマウントは、使用地域の安全ガイドラインおよび建築基準に 従い、有資格の専門業者が行うようにしてください。
- ゲーブル(電源ゲーブルと充電ケーブルを含む)は、適切な配置と引き回しを行い、電気障害やつまづきの危険性など、安全上のリスクを回避するようにしてください。

#### Misure di sicurezza

- I terminiali dei fili elettrici non devono essere realizzate con il prodotto e/o le linee elettriche sotto tensione.
- L'installazione e/o il montaggio dei prodotti devono essere eseguiti da un tecnico professionale certificato che conosca le linee guida locali sulle norme edilizie e sulla sicurezza.
- I cavi (inclusi i cavi di alimentazione e di ricarica) devono essere posizionati e stesi in modo da evitare pericoli di inciampo, rischi di scosse elettriche o pericoli per la sicurezza.



#### Säkerhetsåtgärder

- Montering av kabelavslutningar får inte göras när produkten och/eller elledningarna är strömförda.
- Installation och/eller montering får endast göras av behöriga yrkespersoner och enligt gällande lokala förordningar för säkerhet och byggnormer.
- Kablar (inklusive elkablar och laddningskablar) ska dras och placeras på så sätt att risk för snubblingsolyckor och andra olyckor kan undvikas.

# Warning Statements

- Make sure to assemble this product according to the instructions. Failure to do so might result in personal injury or property damage.
- Never use this product if parts are missing or damaged.



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# **Product Diagram**

Actual product may vary from photos.

#### **Front View**



1	USB HID Port
2	Port LEDs
3	USB 3.0 Hub Port
4	Port Selection Buttons
5	Power LED

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#### **Rear View**



1	Power Adapter Port
2	Console HDMI Ports (2)
3	EDID Copy Buttons (2)
4	PC HDMI Ports (8)
5	USB HID Ports (3)
6	Console Audio Port
7	PC USB Ports (4)
8	PC Audio Port (4)
9	USB 3.0 Hub Port

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# **Product Information**

# **Package Contents**

- KVM Switch x 1
- Universal Power Adapter (NA/JP, EU, UK, ANZ) x 1
- Rubber Feet x 4
- Ouick-Start Guide x 1

### Requirements

Requirements are subject to change. For the latest requirements, please visit <a href="https://www.StarTech.com/SV431DHD4KU">www.StarTech.com/SV431DHD4KU</a>.

- HDMI cables
- USB-A to USB-B or USB-C to USB-B cables
- 3.5 mm audio cables
- Computer system or video card enabled with HDMI
- · Computer system enabled with USB
- Display device (e.g. monitor, projector, TV, and so on) enabled with HDMI
- Standard USB keyboard and mouse (wired or wireless)



### Installation

#### Connect the Console to the KVM Switch

- Turn off your Computer and any connected devices or peripherals (e.g. printers, external hard drives, etc.).
- Connect an HDMI Cable to the Console HDMI Port on the KVM Switch and to a Display Device.

Note: Repeat step 2 to connect additional Display Devices.

- Connect a Keyboard's USB Connector to a USB HID Port on the KVM Switch.
- Connect a Mouse's USB Connector to a USB HID Port on the KVM Switch.
- 5. The following are optional connections:
  - Connect a Speaker's 3.5 mm Connector to the Console Audio Port on the KVM Switch.
  - Connect a USB peripheral's Connector to the USB Hub Port on the KVM Switch.
  - Connect additional HID Devices (touch pads, touchscreens, number pads, etc.) to an available HID Port on the KVM Switch.



# Connect a Computer to the KVM Switch

**Notes:** No software or driver installation is required when connecting a **Computer** to the **KVM Switch**.

The cables for each individual **Computer** must be connected to the same port set on the **KVM Switch**.

- Turn off the Computers that you want to connect to the KVM Switch and any connected devices or peripherals (e.g. printers, external hard drives, etc.).
- Connect an HDMI Cable to the PC HDMI Port on the KVM Switch and to an HDMI port on a Computer.
- Connect a USB Cable to the PC USB Port on the KVM Switch and to a USB port on the Computer.
- (Optional): Connect an 3.5 mm Audio Cable to the PC Audio Port on the KVM Switch and to an Audio Output Port on the Computer.

*Note:* Repeat step 1 - 4, to connect additional **Computers**.

- Connect the Universal Power Adapter to the Power Adapter Port on the KVM Switch and to an AC Electrical Outlet. The Power LED will illuminate indicating that the KVM Switch is receiving power.
- Turn on any devices or peripherals that are connected to the KVM Switch.
- Turn on the connected Computer(s) and wait for the Computer(s) to finish loading. Test the functionality of the Keyboard and Mouse connected to the Computer.



 If additional Computers are connected to the KVM Switch, select a different port and repeat step 7 until you have tested the functionality of all of the connected Computers.

# Installing the Feet

- 1. Remove the Adhesive Backing from the Foot Pads.
- Align each of the Foot Pads with the four impressions on the bottom of the KVM Switch.
- While applying pressure, affix the Feet to the bottom of the KVM Switch.

# **Operation**

# **Hotkey Commands**

You can use keyboard key combinations, called hotkeys, to operate the **KVM Switch**.

**Notes:** Your **Keyboard** must be connected to one of the **HID Ports** on the **KVM Switch** to use hotkey commands.

The Scroll Lock key can be used as an alternative to the Left Ctrl key.



Basic Hotkey Commands		
Hotkeys	Function	
Left Ctrl, Left Ctrl, 1, 2, 3 or 4	Switch between the computers connected to ports 1 - 4.	
Left Ctrl, Left Ctrl, F1	Start auto scan.	
Left Ctrl, Left Ctrl, F2	Start manual scan.	
Left Ctrl, Left Ctrl, F3	Adjust scan rate (The KVM Switch will beep each time you enter the hotkey up to 4 beeps indicating the duration of the scan rate,	
	1 beep = 3 seconds, 2 beeps = 8 seconds, 3 beeps = 15 seconds, and 4 beeps = 30 seconds.	
Left Ctrl, Left Ctrl, F5	Turns the Audio Stick function On/Off. When Audio Stick is on, audio is synced to the computer connected to the current port selection.	
	Press Left Ctrl, Left Ctrl, A to move the audio function to the selected port. The audio will remain on the selected port until Audio Stick is disabled or the audio is moved to another port.	



#### **Push Button Control**

#### **Selecting a Connected Computer**

 Press the Port Select Button 1 - 4 to toggle between the ports.

#### **Activating Auto Scan**

The **Auto Scan** function allows you to scan through the computers connected to the **KVM Switch** in sequence.

Press and hold Port Selection Buttons 3 and 4 simultaneously.

**Note:** When a computer is being scan the corresponding **Port LED** will flash.

#### **Deactivating Auto Scan**

To deactivate **Auto Scan** in the middle of a scan:

 Press one of the Port Selection Buttons to stop the auto scan.

#### **Setting Scan Time**

You can set the scan time duration used within the **Auto Scan** function from 3 seconds to 30 seconds.

 Press and hold Port Selection Buttons 1 and 2 simultaneously.

**Note:** The **KVM Switch** will beep each time you enter the hotkey up to 4 beeps indicating the duration of the scan rate 1 beep = 3 seconds, 2 beeps = 8 seconds, 3 beeps = 15 seconds, and 4 beeps = 30 seconds.



# **EDID Copy**

# **Copying EDID Settings**

In some cases display problems may occur due to incorrect EDID communication between the display and the KVM switch. The **EDID Copy** function allows you to copy and store EDID details from an EDID compliant Display Device to reduces the risk of the display being incorrectly detected or using the wrong resolution or refresh rate.

- Press and hold the EDID Copy Button that is next to the Console HDMI Port the Display Device you want to copy EDID settings from, for 6 seconds.
- Release the EDID Copy Button once the HDMI LED starts to flash.

**Note:** The **HDMI LED** will flash twice indicating that it has successfully copied the EDID settings from the connected **Display Device**.

# **Auto Learning EDID Settings**

**Auto Learning** allows the **KVM** to copy EDID details without storing the EDID settings in non-volatile memory. Once **Auto Learning** is activated the **KVM Switch** will automatically copy and emulate the EDID details, until a new display is connected and/or the KVM switch is power cycled.

- Press and hold the EDID Copy Button that is next to the Console HDMI Port for the Display Device you want to use to copy EDID settings from, for 12 seconds.
- 2. Release the **EDID Copy Button** once the **HDMI LED** starts to

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slowly flash.

**Note:** The **HDMI LED** will flash 3 times indicating that it has successfully copied the EDID settings from the connected **Display Device**.

# Resetting EDID Settings

In order to reset the **KVM Switch's** EDID setting back to factory settings:

- Press and hold the EDID Copy Button that is next to the Console HDMI Port for the Display Device you want to use to copy EDID settings from, for 18 seconds.
- Release the EDID Copy Button once the HDMI LED starts to flash quickly.

**Note:** The **HDMI LED** will flash 3 times indicating that it has successfully reset the EDID settings.



### About the LED indicators

The **KVM Switch** features a Port selection/link LED for each port, as well as a power LED. For more information about the LEDs, consult the table below:

LED	Behavior	Scenario
Power LED	Illuminated	KVM Switch is receiving power
Port LEDs	Illuminated green	Connected Computer is turned on
	Illuminated red	Connected Computer is currently selected
	Blinking	<b>Auto Scan</b> process is in progress



# **Troubleshooting**

# **PC BIOS Change**

The following changes may be required for a PC.

- From on the Standard CMOS Features screen, change the Halt On/Halt on Error field to All But Keyboard. The Halt On/Halt on Error field, prompts the user when errors occur during the boot process. Switching this field to All But Keyboard, ignores all keyboard errors during the boot process (e.g. no keyboard detected).
- From on the *PNP and PCI Setup* screen, change the *PNP OS* Installed field to Yes. By setting the *PNP OS Installed* field to Yes, only critical devices required for the system boot process are configured during boot up.
- 3. Change the **USB IRQ** field to **Enabled**.



#### **FDID**

If you are unable to achieve maximum resolution on your connected **Display Devices** or a connected **Display Device** is not detected.

- Press and hold the EDID Copy Button next to the Console HDMI Port for the Display Device you want to use to copy EDID settings from, for 18 seconds.
- Release the EDID Copy Button once the Power LED starts to flash quickly. The Power LED will flash 3 times indicating that it has successfully reset the EDID settings.
- Power cycle the KMV Switch. Disconnect all USB cables from the KVM Switch. Disconnect the Universal Power Adapter from the KVM Switch, wait 60 seconds and Reconnect the Universal Power Adapter to the KVM Switch.

If the **KVM Switch** looses EDID settings when switching ports and cannot detect the **Display Device**.

- Press and hold the EDID Copy Button next to the Console HDMI Port for the Display Device you want to use to copy EDID settings from, for 6 seconds.
- Release the EDID Copy Button once the Power LED starts to flash. The Power LED will flash twice indicating that it has successfully copied the EDID settings from the connected Display Device.



# **Keyboard and Mouse**

If the **Keyboard** and **Mouse** does not work once connected to the **KVM Switch**.

- Press the corresponding Port Selection Button for the computer that is having the Keyboard and Mouse issue.
- With the **Keyboard** and **Mouse** connect directly to the **Host** Computer, remove all unnecessary keyboard and mouse drivers.
- 3. Power off the Computer.
- 4. Connect the **Keyboard** and **Mouse** back to the **KVM Switch**.
- With the same Computer selected on the KVM Switch power on the Computer.

#### **Connected USB Device**

If you have recently connected a USB device that is not responding, try one of the following solutions:

- 1. Re-install the USB device driver.
- Add a power adapter to the USB device if the device can be self powered.
- Double check USB cable connecting the device to the KVM Switch.
- Disconnect the USB device and move it to an available USB port.
- Disconnect all USB devices and cables and power cycle the KVM Switch.

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6. Restart the Computer.

**Note:** Some HID devices may perform better connected to a USB HUB port.

# **Functionality**

#### **Port Switching**

**Note:** Some systems may take longer to detect the connected hardware when switching from one port to another.

If the connected computer hangs up while switching to another connect computer.

 Wait a minimum of 5 seconds before switching Computers to ensure proper USB connection.

**Note:** You may need to unmount or power off connected USB devices before switching **Computers**.

#### **Auto Scan**

When preforming an **Auto Scan** the **KVM Switch** does not automatically switch to the next computer and beeps.

- 1. Disable Auto Scan.
- Ensure that all connected systems are powered up and accessible.

**Note:** There must be at least two connected and powered systems for the **Auto Scan** feature to work.

- Power up or reboot any systems which are currently powered off or not detected correctly.
- 4. Re-enable Auto Scan.



# **Display Device**

If there is no video signal when connecting a **Display Device** to the **Console HDMI Port** or when switching ports.

 Make sure that you have plugged a Display Device to the Console HDMI Port and reboot the Computer while the KVM Switch is on.



# **Warranty Information**

This product is backed by a two-year warranty.

For further information on product warranty terms and conditions, please refer to <a href="https://www.startech.com/warranty">www.startech.com/warranty</a>.

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