TESmart

User Manual

2x3 DisplayLink KVM Switch

HDC203 Prime Mac 24

To Enjoy Smart

HDC203 Prime Mac 24

English

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Preface

It's our great honor that you have chosen the Hybrid KVM Switch produced by our company, Tesla Elec Technology Co.,Ltd. In this user manual, you will learn how to operate and use this product. Please read this user manual comprehensively before use. If you have any questions, comments or suggestions, please contact us via the following email:
support@tesmart.com.

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Product Information

For more information about TESmart products and how they can help you to enjoy your job, please visit the following TESmart website or contact an TESmart Authorized Reseller.

www.tesmart.com

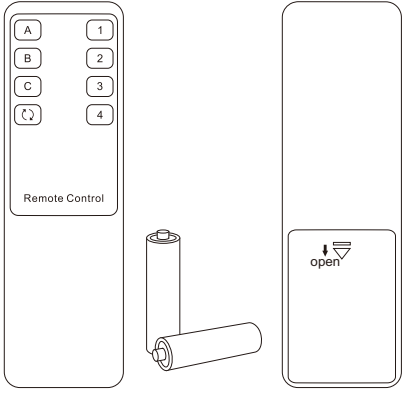
Contents

1. Safety Tips and Warnings

Tips: Please read the safety tips and warnings for Hybrid KVM Switch comprehensively before use. Use this produce in accordance with its instructions, safety tips and warnings to prevent unnecessary damage to the product and potential dangers to users.

- Keep the product away from water.
- Clean the product with dry cloth.
- Use the product in accordance with its instructions and do not block its vents.
- Keep the product away from ignition sources, such as heat sinks, heat accumulators, stovepipes and other heat production settings (including audio amplifiers).
- Do not touch the product and the power cord with wet hands so as to lower the risk of electric shock and damage to the product. Do not let the product get wet or become damp.
- Unplug the power supply of this product in thunderstorm days or when it has been not used for a long time.
- Do not expose this product and its battery to open fire or overheating environment. Dispose the waste battery in accordance with instructions.
- Users shall not remove and repair the product without authorization.

2. Battery Description



Tips: By default, the remote control is not equipped with batteries, due to the safety requirements of some express companies. Install AAA dry cells before use.

Caution: Improper disposal of the lithium battery may cause an explosion. Do not throw the battery into fire. Keep the battery away from children. Dispose the waste battery in accordance with local regulations.

3. Warranty Information

We warrant this product as free of defects in material and workmanship for a period of one (1) year from the date of shipment. If during the period of warranty this product proves defective under normal use, we will repair or replace this product, provided that this product has not been subjected to mechanical, electrical, or other abuse or modifications. If it fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for six (6) months from the day of reshipment to the buyer.

4. Preface

Dear Users,

2x3 Hybrid KVM Switch can easily integrate cross-platform computer devices and greatly simplify the devices management. Support managing a triple-display multimedia workstation. Using DisplayLink technology, allowing for a 3-screen extended display or mirrored display using a single USB-C source. The KVM also supports displaying different PCs on 3 monitors.

This KVM support USB 3.2 Gen 1 with superspeed data transfer rate. With 1 USB-C and 1 USB-A port on the front panel, which can be used as USB data transfer ports, and can also be used to charge your phone, tablet, etc. The USB-C port on the rear panel can provide power to the connected PC while displaying at the same time. With EDID emulators in each input port, it can keep PCs always having correct display information. The color LCD screen makes your operation clearer.

Tips: If you need to control more computers or conduct more complex and professional switching, you can also choose other products of our company. For more details, please visit our official website: www.tesmart.com.

5. Features

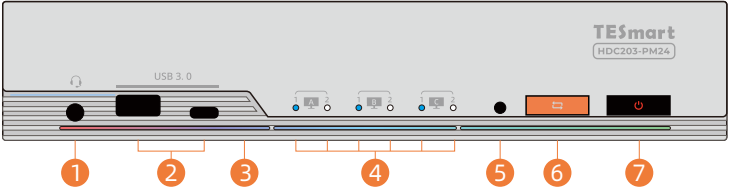
- Using 3 monitors, 1 set of keyboard and mouse to control 2 computers
- Support resolution up to 3840x2160@60Hz 4:4:4
- HDMI 2.0 and HDCP 2.2 compliant
- Support DisplayLink technology
- Support 2 display modes
- Support Unix/Windows/ Debian/ Ubuntu/Fedora/ MacOS X/ Raspbian/ Ubuntu for Raspberry Pi and other Linux based systems
- Support Gigabit wired network connection, 2 PCs connected to KVM can access to the network with only one network cable
- Support USB 3.2 Gen 1 with super-speed data transfer rate
- With EDID emulators in each input port, it can keep PCs always having correct display information
- Keyboard and mouse support passthrough mode and legacy emulation mode, significantly improving compatibility for keyboards and mice
- Support fast channel switching through panel keys, IR, mouse wheel and keyboard hotkeys
- Support connecting mobile devices to the front panel USB ports to charge

6. Packing List

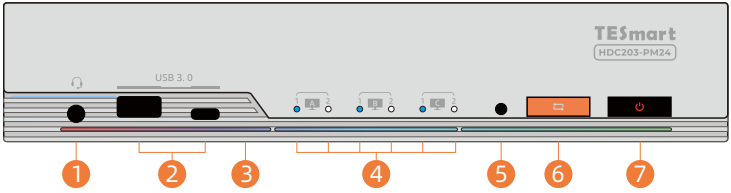
- 1 * 2x3 Hybrid KVM Switch
- 1 * USB-C Cable
- 1 * KVM Cable
- 2 * DP Cables
- 1 * IR Remote Control
- 1 * DC 20V Power Adapter
- 1 * User Manual

Tips: After receipt of the product, please check the packing list carefully to make sure that no components have been lost and no damage to the product has been caused during transportation. If you have any problem, please contact us at any time.

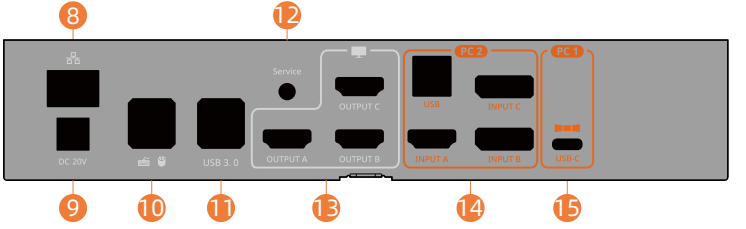
7. Panel Description



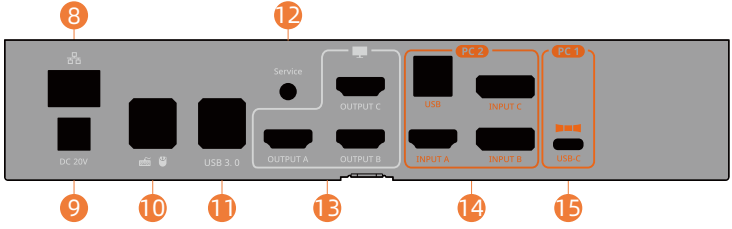
ID	Name	Function
1	3.5mm audio/mic	Integrated microphone and L/R audio output.
2	USB 3.2 Gen 2 ports	The maximum data transfer speed offered is 5 Gbps. Up to 7.5 W power output for faster charging.
3	RGB LED stirp	Features 4 lighting modes to match your atmosphere. Please refer to page 34 for how to switch different modes.



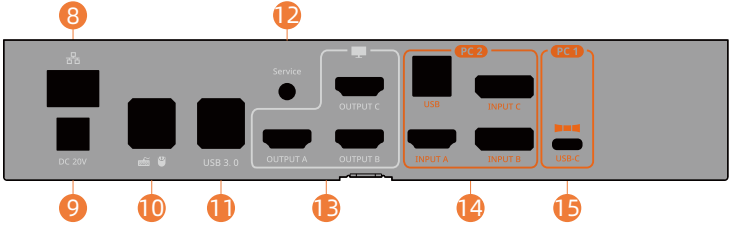
ID	Name	Function
4	Display status indicators	Display the current output status of each monitor.
5	IR receiver	Receive IR remote signal.
6	Input selection button	Press to switch input sources.
7	Power switch	Turn on or turn off power supply.



ID	Name	Function
8	LAN port	Insert the network cable into this port to let the 2 input PCs to connect to the local network area.
9	DC 20V	20V DC power supply.
10	Keyboard and mouse input	For USB keyboard and mouse input.
11	USB 3.2 Gen 1 port	The maximum data transfer speed offered is 5 Gbps.



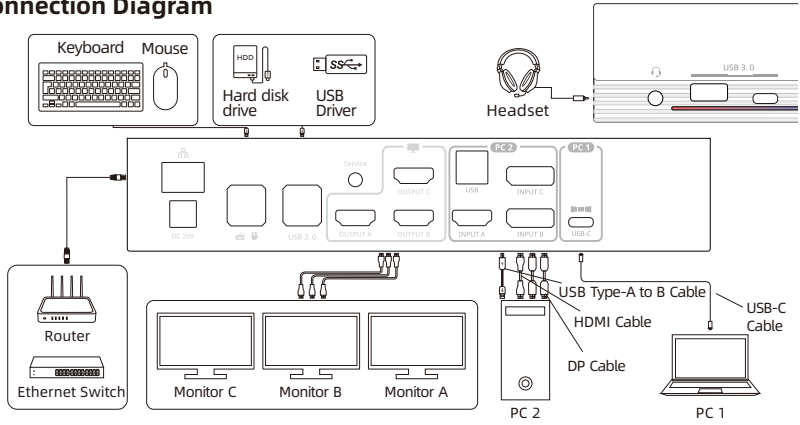
ID	Name	Function
12	Control interface	Supports infrared remote extension and external control panel via UART commands.
13	HDMI outputs	Connect to 3 HDMI displays for video output.



ID	Name	Function
14	PC2 connection ports (For general devices)	Contains 1 HDMI port and 2 DP ports(marked as Input A,B&C) and a USB-B port. Connect the ports to corresponding input devices for signal input. Devices connected to these ports **CANNOT** be charged.
15	PC1 connection ports (For USB-C devices)	Includes a USB-C port that supports DisplayLink. The PC connected to PC connection port can be charged.

8. Connection Description

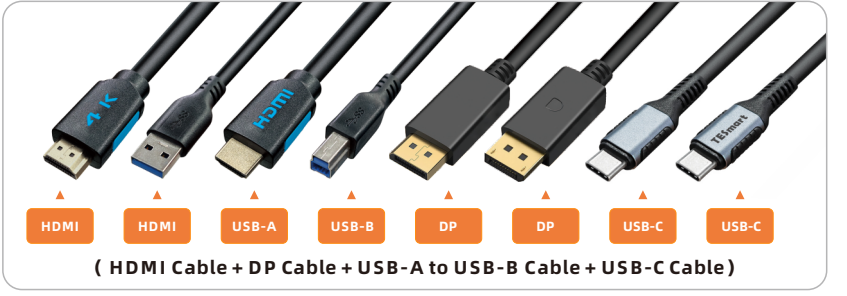
8.1 Connection Diagram



Tips: For your better use of this product, We recommend that you connect all 3 input ports on the KVM, which are circled and marked as 'PC 2', to the same PC.

8.2 Connection Preparation

- Take into consideration all devices required to be connected and prepare a workbench large enough before the connection.
- Lay out the cables properly to facilitate the layout of power supply as a lot of power sockets and plug boards will be adopted in connection.
- Prepare different sticker labels to mark cables as a lot of cables will be adopted in connection.

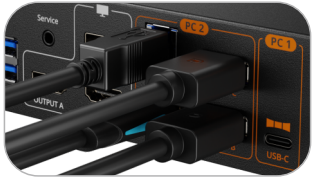


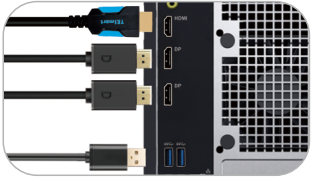
(HDMI Cable + DP Cable + USB-A to USB-B Cable + USB-C Cable)

8.3 Connection Steps

1. Connect PC 1 with 1 USB-C cable.

2. Connect PC 2 with 1 KVM cable and 2 DP cables. Connect PC to the corresponding DP ports in the PC 2 port group on the KVM using 2 DP cables, and similarly for the HDMI port. Use USB Type-A end to connect PC and Type-B end to connect the KVM.





3. Connect external mouse and keyboard to KVM's keyboard and mouse input port.

4. Connect KVM's HDMI output ports to 3 HDMI displays with 3 HDMI cables.

5. Connect USB 3.0 devices to KVM's standard USB 3.0 ports.

6. Use 1 network cable, one end is connected to the RJ45 port, the other end is connected to a switch or a router.

Tips: By default, the network cable is not included in the package.

7. Connect external audio device to KVM's audio port.

8. Connect the power cable to KVM's DC 20V port and plug it to a power socket.

9. By now, the connection has been completed. Turn on the power supply and the KVM Switch will begin to work.

8.4 KVM Workbench

A workbench with 2x3 Hybrid KVM Switch successfully connected is shown as below:

9. Function Description

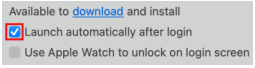
9.1 DisplayLink Technology Description

DisplayLink is a proprietary technology that enables video and audio signals to be transmitted over USB connections. It allows you to connect multiple displays to a single computer or device without the need for a dedicated graphics card for each display. This is achieved by using USB data channels to carry compressed video signals, which are then decompressed by our DisplayLink-enabled KVM to drive external monitors.

If your PC, tablet, Mac or phone has a USB C port, this can still be used to connect to the KVM. It is recommended to connect to a USB-C interface that complies with the USB 3.2 specification or a higher one.

- **How to Use DisplayLink with the KVM Switch**
  - Install the DisplayLink drivers on each connected computer. Please download the appropriate version of the driver based on your system.
    Path: https://www.synaptics.com/products/displaylink-graphics/downloads

  - Mac users, please check the "Launch automatically after login" option in the app window for the software to start automatically every time you log-in.
    Note: this is not compulsory but recommended.



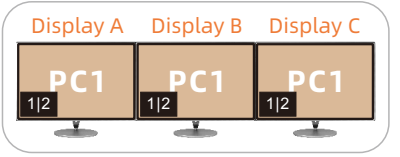
Tips: 1. PC connected to the port labeled 'PC2' on the KVM does not require the installation of the driver.
2. After install the driver, starting macOS Catalina 10.15 or later, the OS requires the user to permit "Screen Recording" in order for DisplayLink devices to work properly. But the screen is not actually being recorded by DisplayLink. For more details, please refer to the official DisplayLink website.

9.2 Display Mode Description

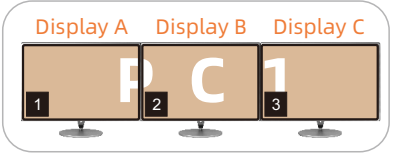
The 2x3 DisplayLink KVM Switch support 2 display mode. You can choose to implement 3-screen extended display or duplicate display or display different PCs on 3 monitors.

Display Mode 1: Display the same PC

Duplicate displays



Extend 3 displays



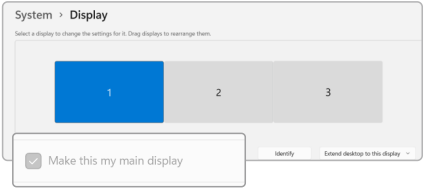
Tips: 1. You can set the duplicate mode or extend mode in the Display Settings of the current selected PC.
2. Please connect the USB-C cable to the USB-C port on the PC that supports video output; otherwise, you will only be able to get two display outputs.

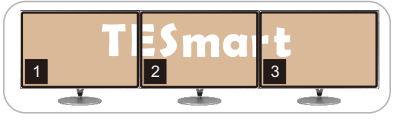
Display Mode 2:

Display different PCs on 3 monitors

In this mode, you can show one PC on any two monitors connected to the KVM and the other PC on the remaining monitor. Use the front panel, hotkeys, or IR control to switch between PCs and monitors.

Tips: When any PC is expanded screens, there is only one main display, and it is fixed to the display connected to a certain output port when switching (which display is determined by the operating system). If you need to switch the main screen to display on other output displays and their display order, you need to set manually in the Display Settings on the current selected PC.





9.3 Keyboard and Mouse Emulation Mode

We provide two keyboard and mouse modes: Pass Through Mode and Legacy Emulation Mode. Pass Through mode supports most keyboard and mouse drivers and multifunction keyboards and mice. Legacy Emulation Mode ensures the normal functioning of the keyboard, mouse, and hotkey features.

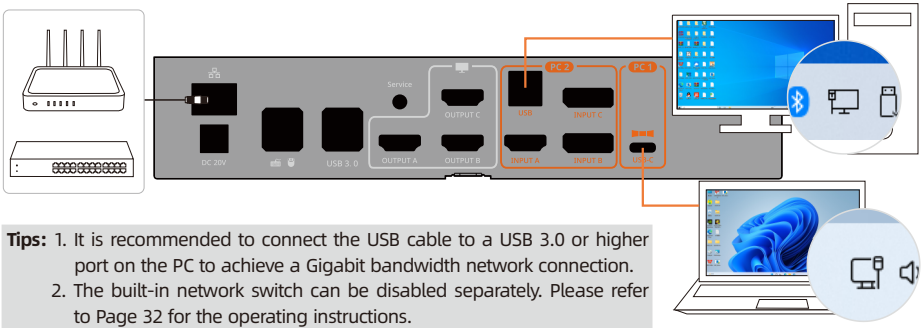
- Typically, we recommend using Passthrough Mode for an optimal user experience, allowing you to:

If you encounter issues with the keyboard and mouse in Passthrough Mode, we recommend switching to Legacy Emulation Mode.

Tips: 1. To toggle between two modes, please refer to Page 32. After toggled, please restart the KVM.
2. In Legacy Emulation Mode, the keyboard and mouse control software will no longer be available.

9.4 Built-in Network Switch

The 2x3 KVM Switch have a built-in USB Ethernet Adapter, which adds a standard RJ45 port to all the PC that is connected to the KVM and allows you to connect your computers to a router or network switch for gigabit wired network connection. Full 1000Mbps Ethernet for fast, stable data transfer, more reliable than most wireless connections. This feature has been added with a switch, allowing you to freely choose to enable or disable it.



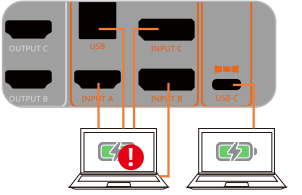
Tips: 1. It is recommended to connect the USB cable to a USB 3.0 or higher port on the PC to achieve a Gigabit bandwidth network connection.
2. The built-in network switch can be disabled separately. Please refer to Page 32 for the operating instructions.

9.5 Built-in Charging Module

The 2x3 DisplayLink KVM Switch comes with a powerful built-in charging module that allows you to charge your laptops, phone, tablet and other devices while you use it.

- Connect the laptops to the rear Type-C video port of the KVM and they will be charged via the PD protocol.

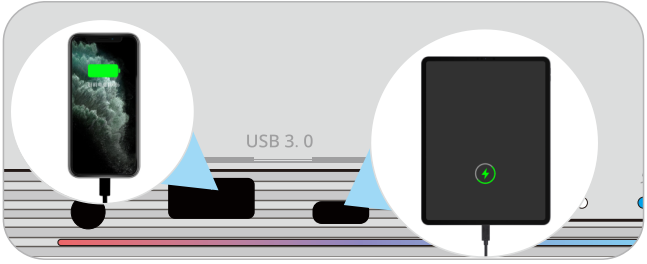
Tips: Laptops connected only to PC 1 can be charged.



Tips: 1. The USB-C port on the laptop needs to support the charging protocol to be able to charge.
2. When the laptop is connected to both the KVM and the original charger, the charger will give priority to charge it.

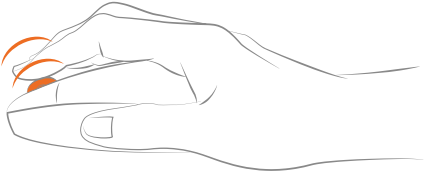
- Connect the tablet, phone, ect to the front USB-A or USB-C port and they will be charged.

Use the USB ports on the front panel of the 2x3 KVM Switch (including an USB-A and an USB-C ports) can support data transmission while charging. The USB port support BC 1.2 protocol, and are able to match voltage and current automatically based on the specifications of charging devices. It makes your charging safe and avoid damage.



9.6 Mouse Wheel Switching

Mouse wheel switching method can quickly switch input sources by mouse operation, double-click the mouse wheel to switch to the next input port. Mouse wheel switching mode is off by default. You can use keyboard hotkey command to turn on mouse wheel switching mode. Please refer to Page 32.



10. Operation Method

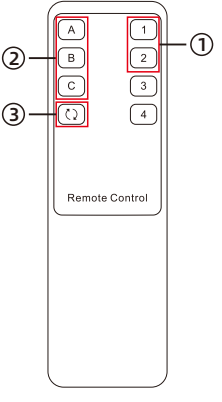
10.1 Front Panel Button Switching Method

The 2x3 DisplayLink KVM Switch can switch to any input devices at any time with front panel keypad, IR remote control and keyboard hot keys. You can choose your favorite switching method according to your personal needs and habits.

→ The blue light indicates which PC is currently being displayed on monitors A and B.

→ Press [ ] button to switch between PCs on display mode 1.

10.2 IR Remote Control



① —— Press directly to select among 2 PCs, and 3 displays will display the selected PC at the same time. (i.e. display mode 1)

② —— Press the key, and then press the **[1~2]** key to make the selected monitor display the selected PC. (i.e. display mode 2)

③ —— Turn on/off the buzzer.
One beep indicates that the buzzer is turned off, while two beeps indicate that the buzzer is turned on.

Tips: Unspecified buttons at above are non-functional.

10.3 Keyboard Hot Keys

→ Use external keyboard hot keys to switch the input source or set up some other functions..

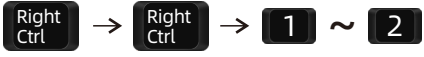
Tips: The keyboard hot keys can only work with external keyboard correctly connected to the keyboard and mouse input port of the KVM. The default hot key trigger key is **[Right-Ctrl]**.

After press **[Right-Ctrl]** key twice within 2 seconds and you will hear the buzzer beep once, please enter the commands within 3 seconds and the KVM will execute the corresponding commands.

Select previous input port:
[Right-Ctrl]→[Right-Ctrl]→[PgUp]

Select next input port:
[Right-Ctrl]→[Right-Ctrl]→[PgDn]

Select port by port number(i.e. display mode 1):
[Right-Ctrl]→[Right-Ctrl]→[1]~[2]



Switch PCs on different monitors separately(i.e. display mode 2):

Monitor 1: **[Right-Ctrl] → [Right-Ctrl] → [←]**

Monitor 2: **[Right-Ctrl] → [Right-Ctrl] → [↓]**

Monitor 3: **[Right-Ctrl] → [Right-Ctrl] → [→]**

Switch keyboard and mouse focus in display mode 2:

[Right-Alt] → [Right-Alt]

Toggle between keyboard and mouse modes:
[Right-Ctrl] →[Right-Ctrl] →[F2]

Tips: The default keyboard and mouse mode is Pass Through mode. When switching to Legacy Emulation Mode, the buzzer will emit 2 short beeps; when switching to Pass Through Mode, the buzzer will emit only 1 short beep. It is recommended to restart the KVM after switching modes.

Disable/enable built-in network card:
[Right-Ctrl] →[Right-Ctrl] →[F4]

Tips: The built-in network card is enabled by default. This operation only applies to the current PC. Enable it will trigger the buzzer to beep twice and disable it will trigger the buzzer to beep once.

Turn on/off mouse wheel switching mode:
[Right-Ctrl] →[Right-Ctrl] →[F6]

Tips: Turning on the mouse wheel switching mode will trigger the buzzer to beep twice and turning it off will trigger the buzzer to beep once.

Disable or enable buzzer sound:
[Right-Ctrl] →[Right-Ctrl] →[F11]

Tips: The default setting of buzzer sound is enabled. Repeat this step to disable or enable buzzer sound.

Disable/enable follow mode:

Tips: "Follow Mode" refers to whether the audio devices and USB 3.0 devices connected to the front panel will switch synchronously with the keyboard and mouse focus when switching.

[Right-Ctrl] →[Right-Ctrl] →[~]

Tips: The default setting of follow mode is enabled. When you disable it, the buzzer will emit only 1 short beep; when enable it, the buzzer will emit 2 short beeps.

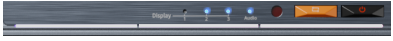
When Follow Mode is disabled, you can use the following hotkeys to switch audio and USB 3.0 channels between PCs:
[Right-Ctrl] →[Right-Ctrl] →[0]

Switch lighting modes:

Turn off lighting:

[Right-Ctrl] → [Right-Ctrl] → [L] → [0]

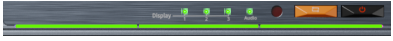
Right Ctrl → Right Ctrl → L → 0



Light effects vary with KVM indicators:

[Right-Ctrl] → [Right-Ctrl] → [L] → [1]

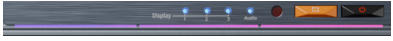
Right Ctrl → Right Ctrl → L → 1



Marquee lighting effect:

[Right-Ctrl] → [Right-Ctrl] → [L] → [2]

Right Ctrl → Right Ctrl → L → 2



Orange breathing light:

[Right-Ctrl] → [Right-Ctrl] → [L] → [3]

Right Ctrl → Right Ctrl → L → 3

11. Change Hot Key Combinations

For your convenience, we have built-in a custom hotkey function. By setting, you can use any key on the keyboard connected to the KVM as the trigger key for the hot key command. The default hotkey trigger key is the **[Right-CTRL]**. The custom hotkey function can be set in the following ways:

Method 1:

→ After powering on the KVM, press and keep holding the [ ] button on the front panel for 10 seconds until you hear the buzzer is long beeping. When starting to set the trigger key, the buzzer will have a 5 seconds tone. Please press the key you want to use as the hot key trigger key on the keyboard within 5 seconds. After pressing the button, the prompt tone ends and the setting is complete.

Method 2:

→ Press [Right-Ctrl]→[Right-Ctrl]→[F1], then the buzzer will have a 5 seconds tone. Please press the key you want to use as the hot key trigger key on the keyboard within 5 seconds. After pressing the button, the prompt tone ends and the setting is complete.

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To Enjoy Smart

HDC203 Prime Mac 24

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