

# **User Manual**

## **USB3.0 Matrix KVM Switch**

Thanks for buying our USB3.0 Matrix KVM switch! This product supports 4Kx2K@ 60Hz ultra-high definition resolution, and the display has dual channel and matrix mode for your selection. It supports a set of USB keyboard, mouse and 2 monitors to operate computers with graphics cards that allows dual video outputs. The mouse, keyboard and screen display can be used alternately between the two monitors, and the two computers can be operated respectively. It is suitable for high-resolution games, multimedia design, multimedia post production and video editing, and provides great convenience for users.

## **I. Product Features:**

- Controls 4 computers or laptops using one set of keyboard, mouse and 2 monitors;
- Supports dual extended or mirrored monitor display for each selected computer **or Matrix display on 2 computers** (1 computer on 1 monitor);
- Supports HDMI2.0 or DP1.2 with auto EDID for resolution up to 4096x2160@ 60Hz 4:4:4, depending on graphic cards, signal conversion and monitors;
- With 2 extra USB3.0 HUB for data transferring rate up to 5Gbps/s (10 times faster than USB 2.0);
- Supports 6 Switch Modes:
  1. Push button;
  2. Keyboard hotkeys
  3. Mouse clicks
  4. Wired remote
  5. IR remote
  6. Auto scan (default as inactive)
- Cross supports major operation systems including Windows 10/7/2000/XP/Vista、Linux and Mac;
- Support Hot plug & play;
- Support auto detection, if one computer is powered off, the switch will automatically switch to the next powered-on computer (The default is in closed state, if you want to open it, please read the below setting operation instructions).
- With memory function in case of power-down
- Support stereo 3.5 audio through HDMI digital audio.

## II. Data sheet

MODEL		Dual HDMI KVM	Dual Displayport KVM	Dual HDMI+Displayport KVM
ITEM				
KVM output (Consel)	Keyboard	1XUSB Type A F		
	Monitor	2X HDMI2.0 F		
	Mouse	1XUSB Type A F		
	Stereo 3.5	1		
	USB 3.0 Type A F	2		
	IR	1		
	Mini USB	1X mini 10P		
Computer (Input)	HDMI 2.0 F	8	/	4
	Displayport F	/	8	4
	USB 3.0 Type B F	2		
DC Socket		DC5V2A	DC5V3A	DC5V3A
Push button		8		
LED light		9		
Resolution		4096×2160@60Hz		
Scan interval		8 ~ 999 Seconds		
Power Consumption		DC5V, 5W	DC5V, 10W	DC5V, 7.5W
Environment	Operating Temperature	0-50℃		
	Storage Temperature	-20-60℃		
	Humidity	0-80% RH, Non-condensing		
Physical Properties	Housing	Metal		
	Weight	0.65KG	0.65KG	0.65KG
	Dimensions(L×W×H)	145×75×63MM		

## III. Applicable Models



**Dual Monitor 4 Port HDMI Matrix KVM**



**Dual Monitor 4 Port HDMI+DP Matrix KVM**



**Dual Monitor 4 Port Displayport Matrix KVM**

#### IV. How to install

1. Power off all devices before installation;
2. Connect your computers to the Switch using USB 3.0 and HDMI or Display cables included (depending on different models).
3. Plug your mouse and keyboard to correspondent USB mouse and keyboard port on back panel,
4. Connect your Monitors to HDMI/Displayport Out A & Out B on the switch;
5. Plug in your speaker or USB device if needed;
6. Power on the KVM switch and then boot all devices;

#### ◆ Connection Diagram (e.g. 942HUA-M)



## V. Turn on/off mouse and keyboard hotkey switch

(Default is turn on, 'Hotkey on' lights in green)



1. When hotkey is on ('Hotkey on' lights in green), double click right **【Ctrl】→【M】→【Enter】**, after hearing 'beep' sound, mouse switch function was turned off, mouse port of KVM changed to USB 2.0 HUB function. The "Hotkey On" light stays green.
2. When hotkey is on, click right **【Ctrl】→【K】→【Enter】**, after hear 'beep' sound, the "Hotkey On" light will turn off, and the keyboard hotkey will turn off, keyboard port of KVM changed to USB 2.0 HUB function.
3. When mouse and keyboard hotkey are turned off, and you need use hotkey switch, you could press 'Hot key on/off' button, then hotkeys will be restored ('Hot key on' light is turn on).

Notes:

1. customers can turn on/off this function according to needs;
2. If some Keyboards and mouse with special features don't work on the USB keyboard and mouse ports which are dedicated for hotkeys, Please turn off 'Hot key on/off' button, or use the USB 3.0 ports, then the issue should be solved.

## VI. Dual Display Operation Instructions

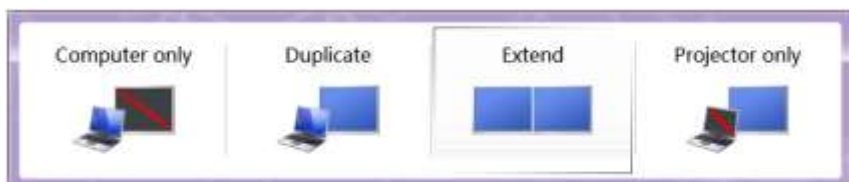
### ◆ Dual Display mode settings

Take Win7 as an example:

hold down the keyboard windows key→P, as shown in the figure:



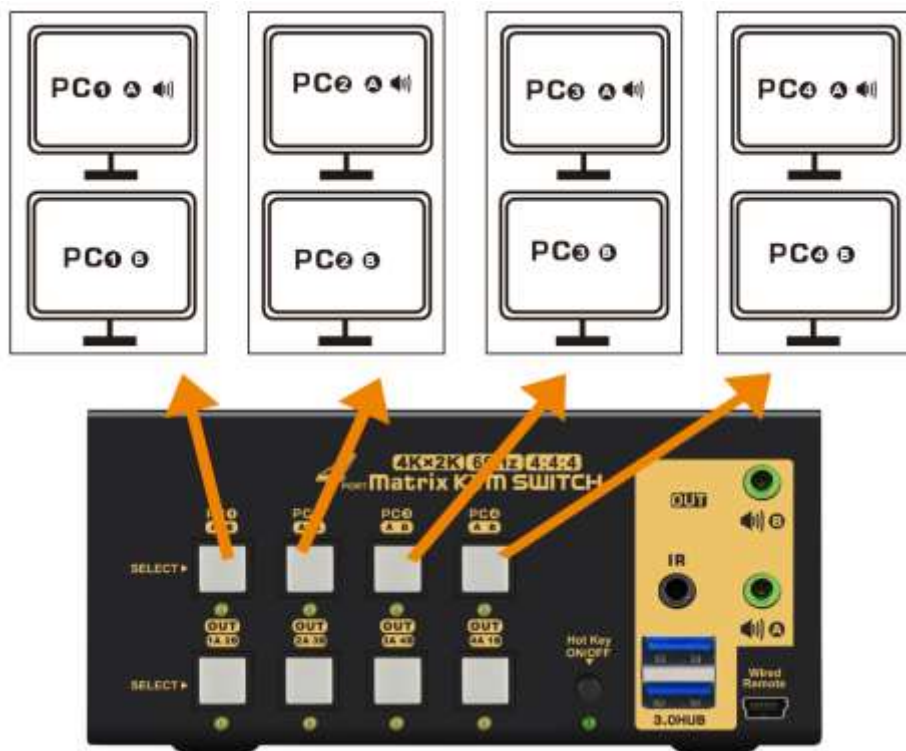
a dialog will pop up as below:



Select Duplicate or Extend, then the two monitors can be displayed at the same time per selected display mode.

### ◆ Switching Modes Under Dual Display mode

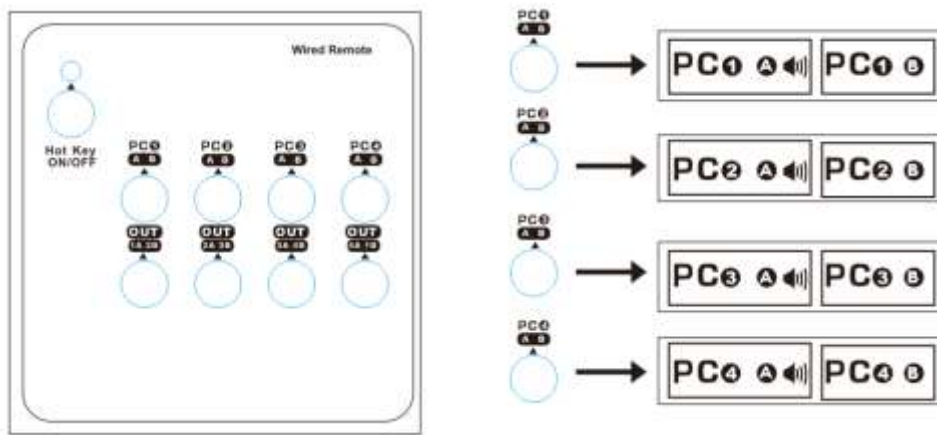
- **Button Switch:** Press the buttons on the front panel (marked with arrow as below) to switch between PC1, PC2, PC3 and PC4.



- **Wired Remote Switch:** Select PC1, PC2, PC3 or PC4 by remote button as follows after you plug it to the KVM.

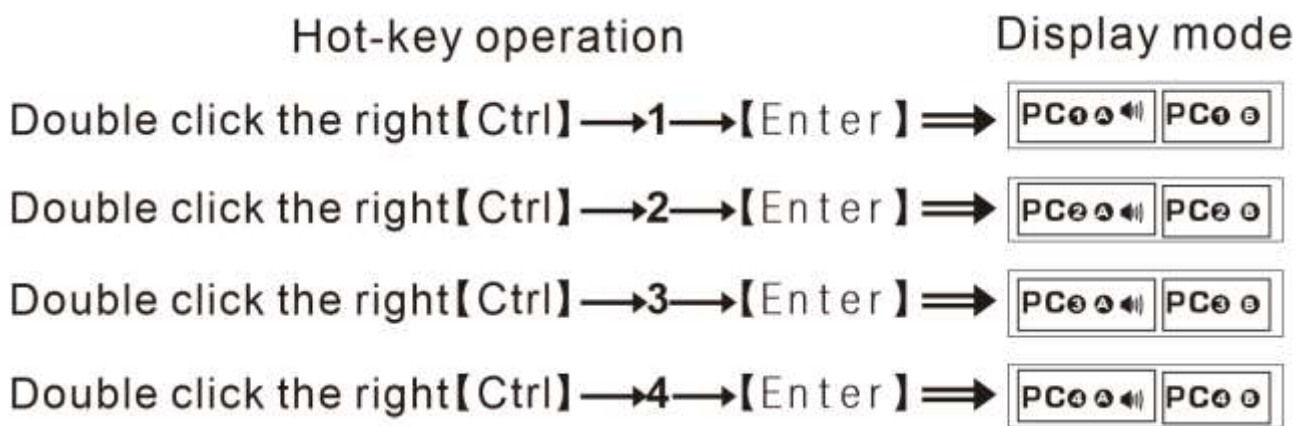




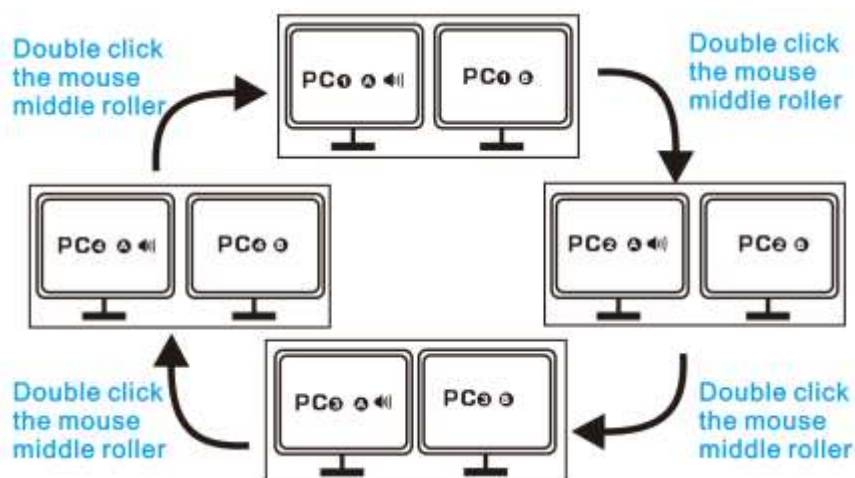


- **Keyboard Hot-key Switch :**

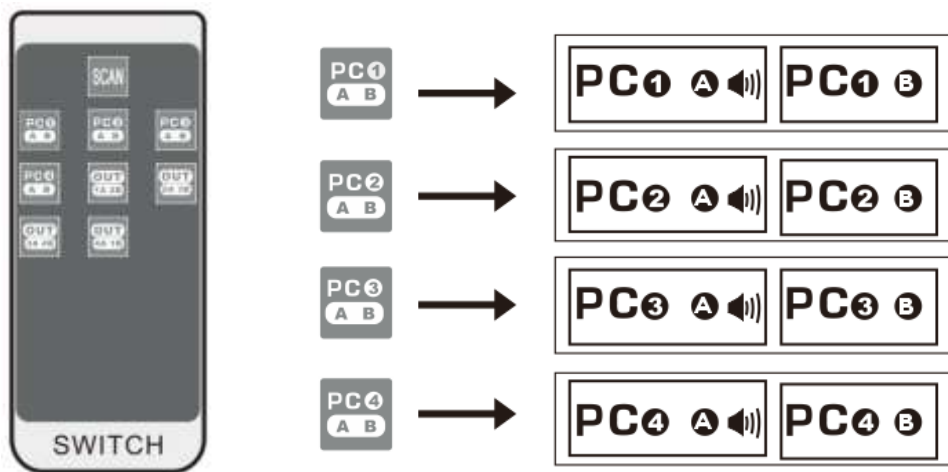
Double click the right **【Ctrl】** then 1 or 2 or 3 or 4 then **【Enter】** .



- **Click mouse Switch :** Double click middle roller+left and right keys of mouse to switch between PC1,PC2,PC3 and PC4. (within 2 second).



- **IR Remote switch:** Select PC1,PC2,PC3 or PC4 by IR button as follows, after you plug the IR receiver unit (included) into the IR port of the KVM.



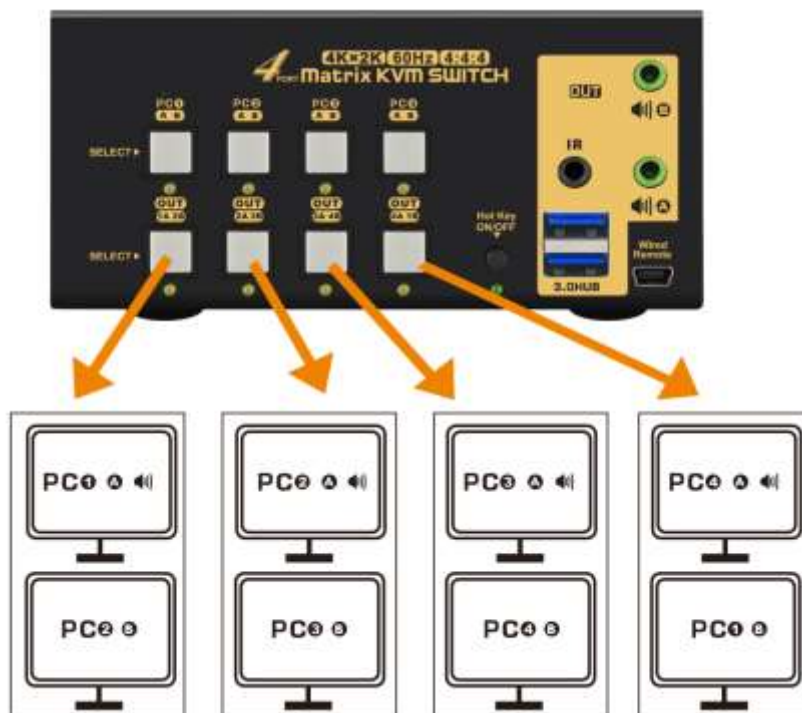
#### Note:

- Please plug the IR receiver unit (included) into the IR port of the KVM.
- For shipment safety, there is no battery inside the remote. The battery specification is CR2025 3V.

## VII. Matrix Monitor Mode Operation Instructions

### ◆ Switching Modes Under Matrix Monitor Mode

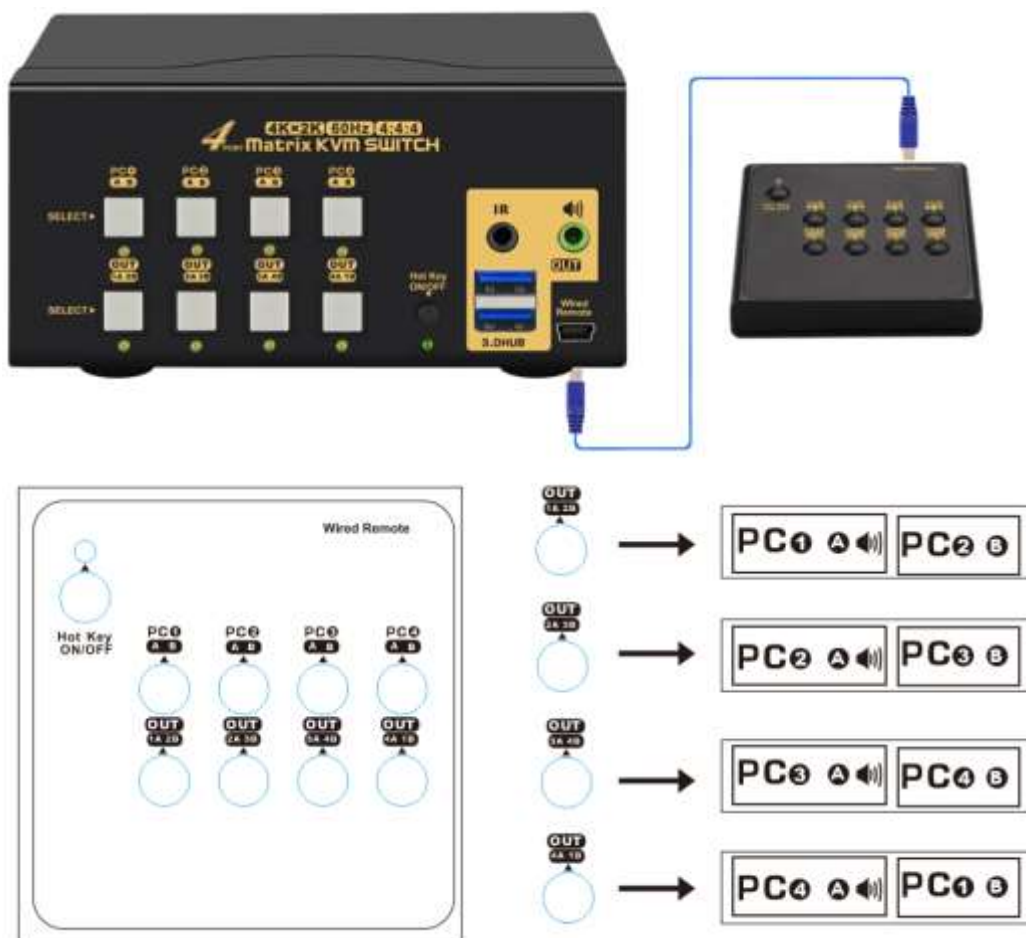
- **Button Switch:** Press the buttons on the front panel (marked with arrow as below) to switch between PC1A PC2B, PC2A PC3B, PC3A PC4B and PC4A PC1B modes.



**Note:** In the current state, press the corresponding button again to exit the matrix mode.



- **Wired Remote Switch:** Select PC1A PC2B, PC2A PC3B, PC3A PC4B and PC4A PC1B mode by remote button after you plug it to the KVM as follows:



**Note:** In the current state, press the corresponding key again to exit the matrix mode.

- **Keyboard Hot-key Switch:** Double click the right **【Ctrl】** then 5 or 6 or 7 or 8 then **【Enter】** .

Hot-key operation

Display mode

Double click the right **【Ctrl】** → **5** → **【Enter】** ⇒

Double click the right **【Ctrl】** → **6** → **【Enter】** ⇒

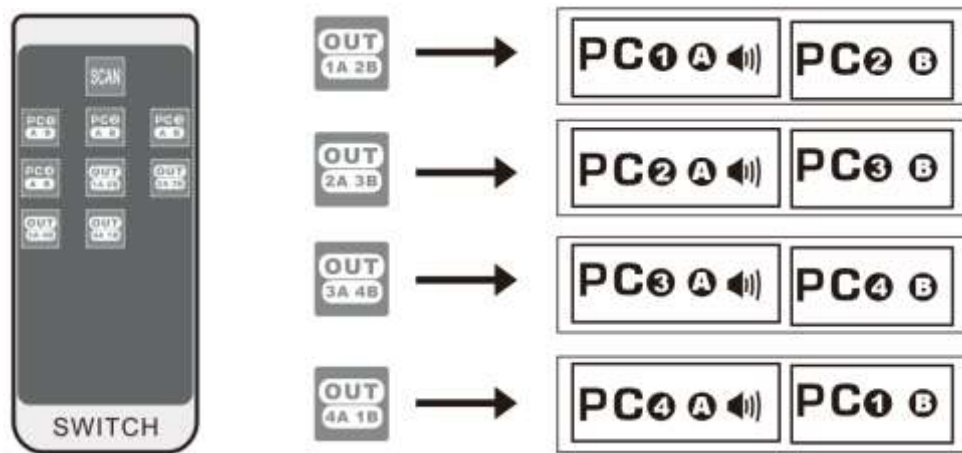
Double click the right **【Ctrl】** → **7** → **【Enter】** ⇒

Double click the right **【Ctrl】** → **8** → **【Enter】** ⇒

**Note:**

In the current state, double click the right **【Alt】** ,or double click the middle roller of the mouse,the mouse, keyboard, and USB are all cyclically switched between two adjacent hosts.

- **IR Remote switch:** IR Remote switch: Select PC1A PC1B, PC2A PC2B, PC3A PC3B or PC4A PC4B, by IR button as follows, after you plug the IR receiver unit (included) into the IR port of the KVM.



#### Note:

- In the current state, press the corresponding key again to exit the matrix mode.
- Please plug the IR receiver unit (included) into the IR port of the KVM.
- For shipment safety, there is no battery inside the remote. The battery specification is CR2025 3V.

## VIII: Hot key settings and hot-key Operations

### ◆ Hotkey Setting:

Default hot-key is the right **【Ctrl】** (the Ctrl key on right side of the shared keyboard. If using the right **【Ctrl】** conflicts with other hot-key, it can be set to **【Num lock】** key, or **【Scroll Lock】** or Left **【Ctrl】** .

For example: Double click the right **【Ctrl】** → **【Num lock】** → **【Enter】** , The hot-key changes to **【Num lock】** ; double click the right **【Ctrl】** → **【Scroll Lock】** → **【Enter】** , The hot-key changes to **【Scroll Lock】** key. If the hot-key set as **【Scroll Lock】** , If you want to set the hot-key to the left **【Ctrl】** key, then double click the **【Scroll Lock】** → the left **【Ctrl】** → **【Enter】** , then the hot-key changes to the left **【Ctrl】** .



Double click the right <b>【Ctrl】</b> → <b>【Num lock】</b> → <b>【Enter】</b>	Hotkey changes to <b>【Num lock】</b>
Double click the right <b>【Ctrl】</b> → left <b>【Ctrl】</b> → <b>【Enter】</b>	Hotkey changes to the left <b>【Ctrl】</b>
Double click the right <b>【Ctrl】</b> → <b>【Scroll Lock】</b> → <b>【Enter】</b>	Hotkey changes to <b>【Scroll Lock】</b>
If the hotkey is changed to <b>【Scroll Lock】</b> , You want to change it to the left <b>【Ctrl】</b> , Then double click <b>【Scroll Lock】</b> → the left <b>【Ctrl】</b> → <b>【Enter】</b>	

## ◆Keyboard hot-key Operation:



Double click the right <b>【Ctrl】→ 1,2,3 or 4 → 【Enter】</b>	Dual monitor mode. Select PC1,PC2, PC2 or PC4
Double click the right <b>【Ctrl】→ 5,6,7 or 8 → 【Enter】</b> A: Double click the right <b>【Alt】</b> b: Double click the middle roller of the mouse.	Matrix monitor mode. Cross switch the video and audio output between two adjacent hosts. The mouse, keyboard, and USB are all cyclically switched between two adjacent hosts.
Double click the right <b>【Ctrl】→ 【M】→ 【Enter】</b>	Turn off the mouse hot-key function, at this time, the USB becomes the HUB2.0 signal.
Double click the right <b>【Ctrl】→ 【K】→ 【Enter】</b>	Turn off the keyboard hotkey-function, at this time, the USB becomes a HUB2.0 signal.
Double click the right <b>【Ctrl】→ 【H】→ 【Enter】</b>	Turn ON HDCP function.
Double click the right <b>【Ctrl】→ 【P】→ 【Enter】</b>	Turn Off HDCP function.
Double click the right <b>【Ctrl】→ 【S】→ 【Enter】</b>	Turn on/off the automatic scan function.
Double click the right <b>【Ctrl】→ 【S】+Number(8-999)→ 【Enter】</b>	Set the automatic scan interval time, which can be set from 8-999 seconds (the system defaults to 8 seconds)
Double click the right <b>【Ctrl】→ 【B】→ 【Enter】</b>	Turn on/off the beep sound. The default setting is "ON". When the beep is "ON", each time the hot-key is successfully operated, will beep once.
Double click the right <b>【Ctrl】→ 【T】→ 【Enter】</b>	Turn ON/Off the detection function (default is Off). The automatic detection function refers to: 1. The switch will automatically detect whether each port of the computer is turned on or off, and when a port is turned off or the device connection line is pulled out, it will automatically jump to the next port in the power-on state. 2 When a power-off port is restarted or an idle port is newly connected to a device and turned on, it will automatically jump to the port that was just turned on. 3. When the detection function is turned on and automatically scans, the port computer scans online, and does not scan if it is offline.
Double click the right <b>【Ctrl】→ 【R】→ 【Enter】</b>	Restart KVM to solve the problem of keyboard and mouse malfunction.
Double click the right <b>【Ctrl】→ 【TAB】→ 【Enter】</b>	to restore the hot-key to "Right [Ctrl]"
Double click the right <b>【Ctrl】→ 【ESC】→ 【ESC】→ 【ESC】→ 【Enter】</b>	Reset the KVM system and restore all settings to factory settings.

- Note: 1.** The keyboard and mouse must be plugged in the port that marked with the corresponding characters of the keyboard and mouse. If use wireless mouse and keyboard kit, the Bluetooth receiver must be plugged into the port marked with keyboard character.
- 2.** This KVM does not support some DVR hard disk video recorders or other devices that composite signal USB.

## IX:Sound Card Settings

Right click  on the desktop taskbar, popup task box , Click 'Playback devices', then jump out of the interface shown in Figure A.

Then select the 'AMD HDMI Output', right click and show as Figure B. And then select the 'Set as Default Device'.

It displayed tick status  , which indicates successful setup. As the Figure C.

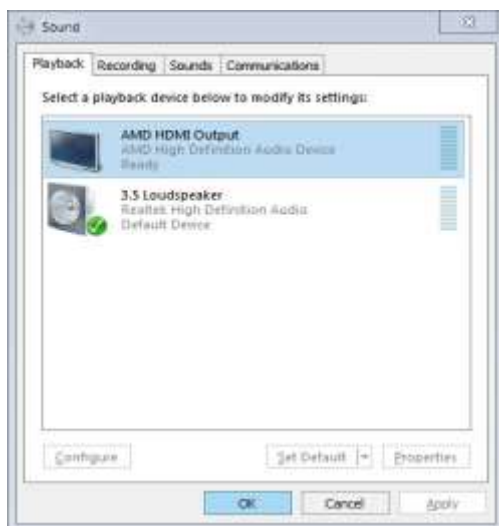


Figure A

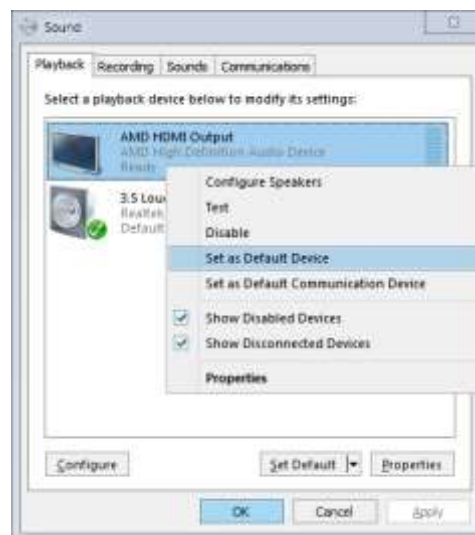


Figure B

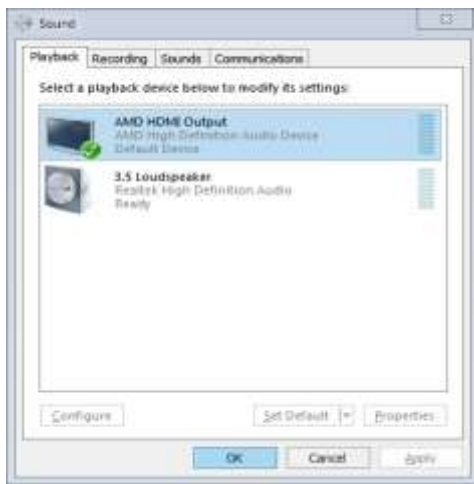


Figure C

## X : Whats included

ITEM \ PCS	MODEL	CKL-942HUA-M	CKL-642D-M	CKL-642DH-M
KVM Switch		1	1	1
USB3.0 Cable		4	4	4
HDMI 2.0 Cable		8		4
DP 1.2 Cable		/	8	4
5V 2A Power Adaptor		1	/	/
5V 3A Power Adaptor		/	1	1
USB Mini 5P Cable		1	1	1
User Manual		1	1	1
Wired-Remote		1	1	1
IR remote with IR receiver		1	1	1

## XI:FAQ & Trouble Shooting

**Q1: Keyboard or mouse does not work:**Make sure the USB 3.0 cable is already connected from each computer to correspondent USB B port on the switch;

- 1) Some keyboard and mouse with special features may not work well with the hotkeys on USB keyboard and mouse port, if so, please use the USB 3.0 HUB port(s), or turn off the hotkeys, without hotkeys, user can use the the wired remote or IR remote or front button to switch between computers and display modes;
- 2) For wireless keyboard and mouse which share a unified dongle , the dongle must be plugged into the port marked with keyboard (with hotkeys), or USB3.0 HUB (no Hotkey);
- 3) Power cycle the KVM switch to re-identify the USB devices, if the keyboard and mouse stop working after a certain time of use.

**Q2: Monitor(s) does not display or images display improperly:**

- 1) Check if the cables are connected well or swap the cables, see if it is cable or adapter problem;
- 2) To get dual monitor display, make sure each computer has 2 video connections to correspondent IN A and IN B ports;
- 3) Power cycle the KVM switch and reboot computers to recognize monitors.
- 4) Avoid using adapters on both computer and monitors for a same video flow. For example, if an adapter is used for connecting IN A port, then do not use another adapter for connecting monitor A.

**Q3. Does it work with USB-C (Type C) Laptops?**

Yes, but depends on the USB-C dock/adaptor quality which is beyond what we can control.

**Q4. How can I turn off the beep sound?**

You can double click the right Ctrl → B → Enter to turn the beep on/off.

If your keyboard hotkey does not work well, use a generic for turning off the beep.

**Q5: Why it takes longer time when switching between dual monitor mode and matrix monitor mode?**

When switching between dual monitor mode and matrix monitor mode, the systems need to re-recognize the all the connected devices, it normally takes around 7 seconds.

**Q6: Does the USB 3.0 cable draws power from computer to the KVM switch?**

Yes it does, If in case the power supply is not enough to drive power hunger device, the package also includes a power adapter (AC to DC 5V 2A 5.5mmx2.5mm).

**Q7: My question / issue is not listed above?**

Please reach out seller for support needed.