

**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 supports dual monitor mode and matrix monitor mode for your selection. With it, user can use a single set of USB keyboard, mouse and 2 monitors to control 2 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 2 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 5 Switch Modes:
  1. Push button;
  2. Keyboard hotkeys
  3. Mouse clicks
  4. Wired remote
  5. IR remote
- ✓ Supports auto scan switching with adjustable intervals between 8-999 seconds (default as inactive) for monitoring and testing purpose;
- ✓ 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

ITEM		MODEL	Dual HDMI KVM	Dual Displayport KVM	HDMI+Displayport KVM
KVM output (Consel)	Keyboard	1xUSB Type A F			
	Monitor	2x HDMI 2.0 F			
	Mouse	1xUSB Type A F			
	Stereo 3.5	1			
	USB 3.0 A F	2			
	IR	1			
	Mini USB(10pin)	1			
Computer (Input)	HDMI 2.0 F	4	/	2	
	DisplayPort F	/	4	2	
	USB 3.0 B F	2			
DC Socket		5.5x2.5mm			
Push button		2			
LED light		3			
Resolution		4096×2160@60Hz			
Scan interval		8 ~ 999 Seconds			
Power Consumption		DC5V, 2.5W	DC5V, 3.8W	DC5V, 3.2W	
Environment	Operating Temperature	0-50°C			
	Storage Temperature	-20-60°C			
	Humidity	0-80%RH, Non-condensing			
Physical Properties	Housing	metal			
	weight	0.5KG	0.5KG	0.5KG	
	Dimensions(L×W×H)	145×75×25mm			

## III. Applicable Models



Dual HDMI Matrix KVM



Dual Displayport Matrix KVM



HDMI+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) into correspondent PC1 and PC2 input ports.
3. Plug your mouse and keyboard to correspondent USB mouse and keyboard port on back panel,
4. Connect your Monitors to HDMI 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;

#### **Special Notes (Please Read):**

1. To get dual monitor displays, each computer / laptop needs to have dual HDMI outputs for dual HDMI model, or Dual DisplayPort outputs for dual DP model, or 1 HDMI+ 1 DisplayPort for dual HDMI+DP model. Otherwise, reliable adapters will be needed.
2. All models have 2 HDMI Output ports, so HDMI monitors are strongly recommended.

## Connection Diagram:



### V. Turn on/off Mouse and Keyboard Hotkey Switching

(Default is 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 User can turn on/off the hotkeys according to his/her 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.

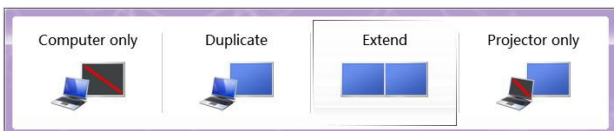


**VI. Display Mode Settings**

Take Win10 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.

## **VII. Monitor Display Mode**

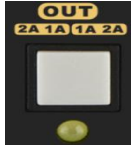
This KVM Switch Supports Dual Monitor Mode and Matrix Monitor Mode.

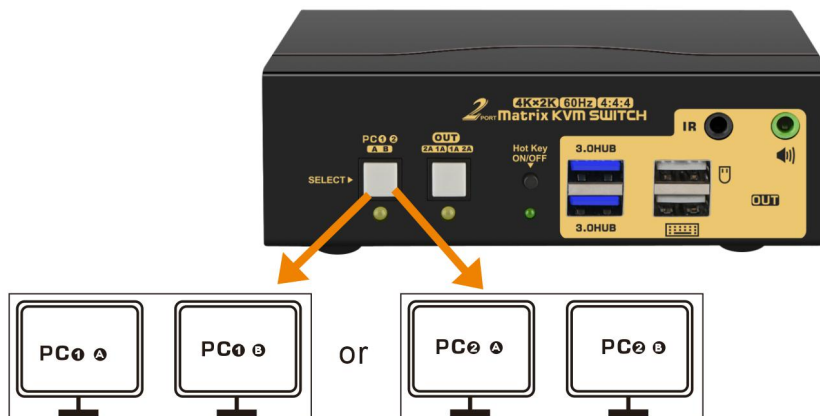
1. **Dual Monitor Mode** means the 2 monitors are extended or duplicated on one selected computer, and switch between 2 computers. Use the left white button on front of the switch. the LED under the right white button will be off.

2. **Matrix Monitor Mode** means the 2 Monitors are on 2 different computers, one for each computer, and switch between 2 monitors. Use the right white button on front of the switch, the LED under the right white button will be on.

## **VIII. Switch Modes under Different Display Mode:**

### **1. Dual Monitor Mode**

1) **Button Switch:** Press the left white button  on the front panel to switch between PC1 or PC2.



2) **Wired Remote Switch:** Select PC1 or PC2 by remote button after you plug it to the KVM as follows:



### 3) Click mouse Switch :

Double click the mouse middle roller for circular switching (within 1 second)




### 4) Keyboard Hot-key Switch :

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

Hot-key operation

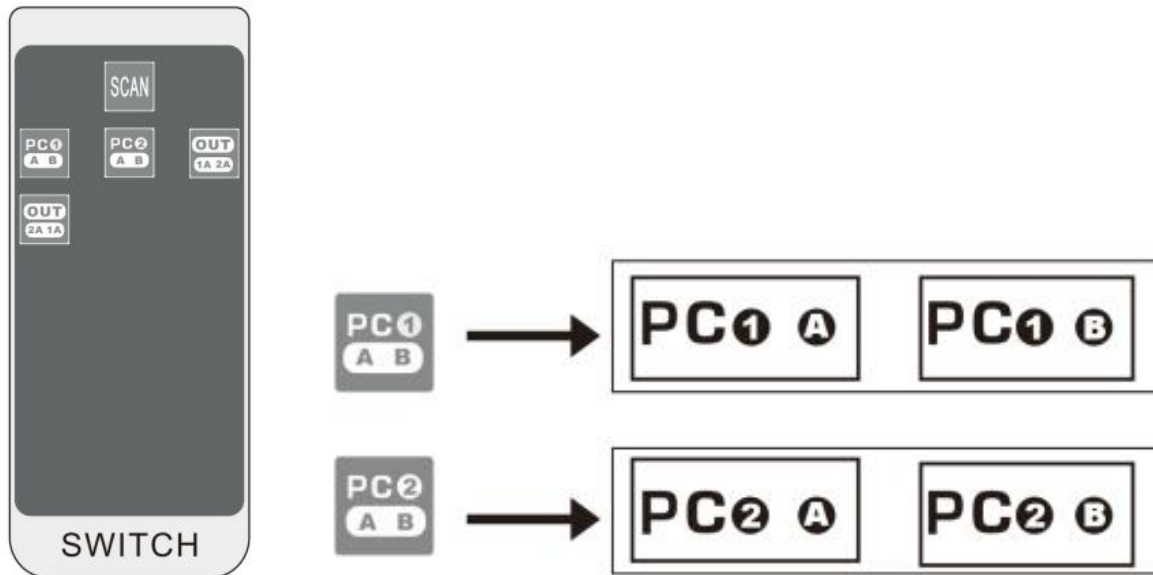
Display mode

Double click the right **【Ctrl】** → **1** → **【Enter】** ⇒ 

Double click the right **【Ctrl】** → **2** → **【Enter】** ⇒ 

### 5) IR Remote switch



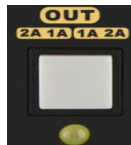


**Notes:**

- ① Please plug the IR receiver unit (included) into the IR port of the KVM.
- ② For shipment safety, there is no battery inside the remote. The battery specification is CR2025 3V.

**2. Matrix Monitor Mode**

**1) Button Switch:**





Use the right white button

- **First push:** switch to Matrix Monitor Mode (PC1A and PC2A), the LED under the right white button will be on;
- **Second push:** to swap monitors and USB between 2 computers (PC2A and PC1A);
- **Third push:** to exit the Matrix Monitor Mode (back to Dual Monitor Mode), the LED under the right white button will be off.

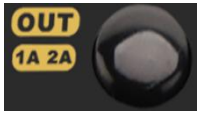

**2) Wired Remote Push Button Switch:**

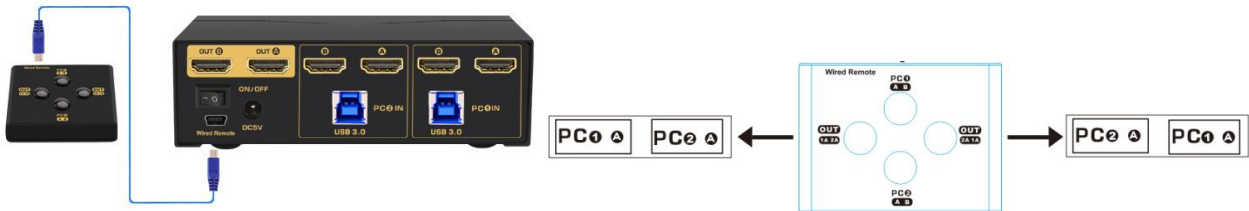


Press the button  or  on the box to switch to the corresponding port screen or exit the matrix monitor mode.

**Notes:**

- ① 1A means Display A (input A) of PC 1, 2A means display A (Input B) of PC 2.

② To exit the matrix monitor mode, press the key  or  repeatedly in the current state then return to dual monitor mode.



**3) Click mouse Switch :**

Double click the mouse middle roller to switch the USB between 2 computers (within 1 second) ,



**4) Keyboard Hot-key Switch :**

- Double click the right **【Ctrl】** +3 or 4+ **【Enter】** to switch between monitors (from PC 1A 2A to PC 2A to 1A)

## Hot-key operation

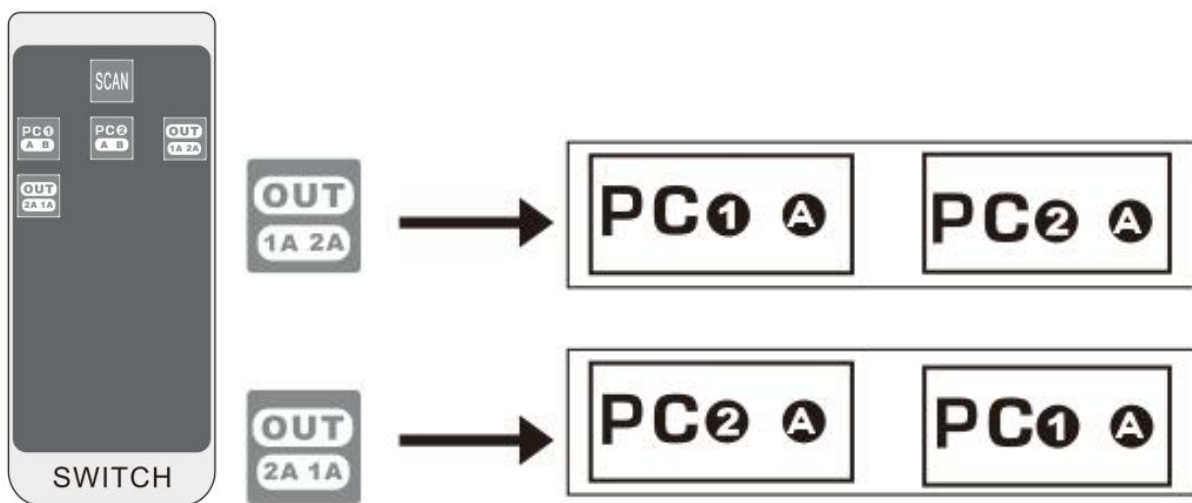
## Display mode

Double click the right【Ctrl】→3→【Enter】⇒ 



Double click the right【Ctrl】→4→【Enter】⇒ 

- Twice click the “Alt” to switch the USB between 2 computers.

### 5) IR Remote switch



#### Notes:

- ① To exit the matrix monitor mode, press the key  or  repeatedly in the current state then return to dual monitor mode.
- ② Please plug the IR receiver unit into the IR port of the KVM.
- ③ No battery inside the remote. The battery specification is **CR2025 3V**.

### IX. 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-keys, it can be set to 【Num lock】 key or 【Scroll Lock】 or 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 th 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>	



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】**.

## **X. Keyboard Hot-key Operation:**


Double click the right <b>【Ctrl】</b> → 1 or 2 → <b>【Enter】</b>	Dual monitor mode. Select PC1 or PC2
Double click the right <b>【Ctrl】</b> → 3 or 4 → <b>【Enter】</b>	Matrix monitor mode. Cross switch the video and audio output from PC1 or PC2
Double click the right <b>【Alt】</b>	Keyboard, mouse and USB Hub circular switching.
Double click the right <b>【Ctrl】</b> → <b>【S】</b> → <b>【Enter】</b>	Turn on/off the Auto-scan function, You can also press the scan on front panel
Double click the right <b>【Ctrl】</b> → <b>【S】</b> → n → <b>【Enter】</b>	Set the scan interval, Can set to 8-999 seconds (The system defaults to 8 seconds, n stands for interval time between 8-999)
Double click the right <b>【Ctrl】</b> → <b>【B】</b> → <b>【Enter】</b>	Turn on/off the beeping sound, If your keyboard hotkey does not work well, please use a generic keyboard to do so.
Double click the right <b>【Ctrl】</b> → <b>【T】</b> → <b>【Enter】</b>	Turn on/off the detecting function (default is off)
Double click the right <b>【Ctrl】</b> → <b>【R】</b> → <b>【Enter】</b>	Reset the KVM switch to solve the keyboard and mouse freeze
Double click the right <b>【Ctrl】</b> → <b>【H】</b> → <b>【Enter】</b>	Turn on HDCP (default is off)
Double click the right <b>【Ctrl】</b> → <b>【P】</b> → <b>【Enter】</b>	Turn off HDCP
Double click the right <b>【Ctrl】</b> → <b>【TAB】</b> → <b>【Enter】</b>	Restore the hotkey to the default --- right <b>【Ctrl】</b>
Double click the right <b>【Ctrl】</b> → <b>【ESC】</b> → <b>【ESC】</b> → <b>【Enter】</b>	Reset factory setting for KVM switch to solve the problem of keyboard and mouse

## **XI. Sound Card Settings :**

This KVM Switch only support HDMI digital audio output, please follow below to set the sound correctly:

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.

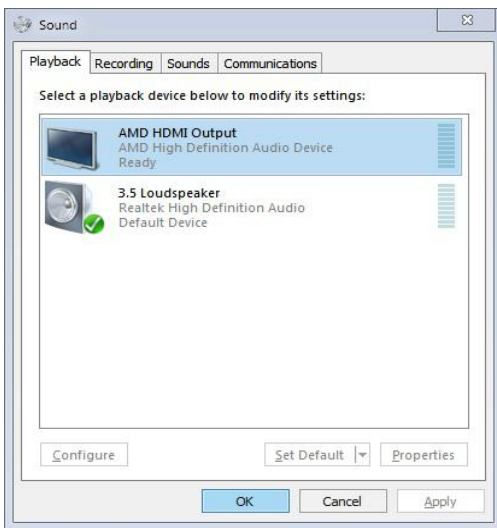


Figure A

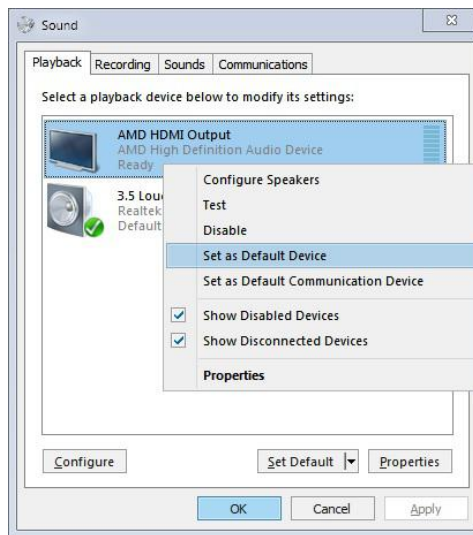


Figure B

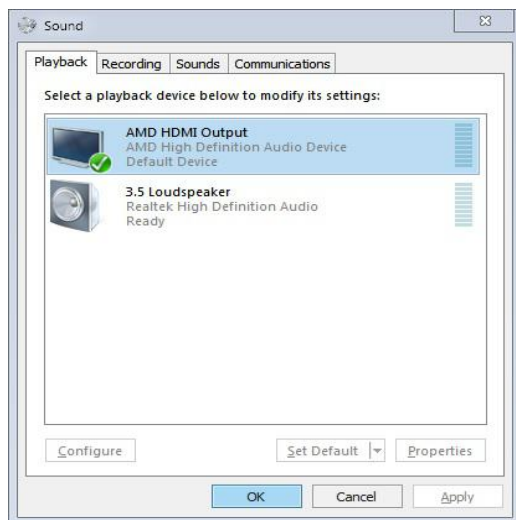


Figure C

Note: If HDMI or monitor audio option is not available, the sound would not work.

## **XII. What's Included:**

1x KVM switch

2x USB 3.0 cables

4x HDMI 2.0 cables and/or DP1.2 cables (depending on different modes)

1x wired remote with mini USB cable

1x IR remote with IR receiver (battery not included)

1x Power adapter (DC 5V 2A 5.5mmx2.5mm)

1. User manual in English

## **XIII. FAQ & Trouble Shooting**

### **Q1: Keyboard or mouse does not work:**

- 1) Make sure the USB 3.0 cable is already connected from each computer to correspondent USB B port on the switch.
- 2) 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.
- 3) 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).
- 4) Power cycle the KVM switch and reboot computers to re-identify the USB devices, if the keyboard and mouse stop working after a certain time of use.
- 5) If keyboard and mouse stops working on one computers, press the right Ctrl twice, then Esc 3 times, then Enter to restore the KVM switch to factory settings, make sure hotkey is on and the keyboard is plugged in the USB keyboard port when doing so, or swap the USB cable to see if the cable issue.

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

- 1) Make sure to power off everything before installation.
- 2) Check if the cables and power adapters are well connected ; or swap the cables to see if it is cable or adapter problem.
- 3) To get dual monitor display, make sure each computer has 2 video connections to

correspondent IN A and IN B ports.

- 4) Power cycle the KVM switch and reboot computers to recognize monitors.
- 5) 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.
- 6) Pay attention to signal converting direction, eg. If you want to convert USB C on computer to HDMI input on the KVM switch, correct direction should be USB C to HDMI, If you are converting HDMI Out put on the kvm switch to a VGA on monitor, correct direction should be HDMI to VGA.
- 7) VGA to HDMI, HDMI to VGA or HDMI to DP needs to be at least USB powered. DP adapters need to be active type.
- 8) We prefer to use adapter with chips instead of simple conversion cable without chips. Some adapters/conversion cables/docking stations may work directly with computers but may not work through the KVM switch. Please reach out to seller for recommendation.
- 9) Try to power cycle the KVM switch, or unplug and replug cables, or reboot computers when there is display issue.

### **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.