

iSwitch 201HKL

4K60 2x1 HDMI KVM Switcher Lite

User Manual V1.0



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1. DESCRIPTION

This 2x1 HDMI2.0 KVM Switch provides you with great flexibility in integrating cross-platform computer equipment easily. It makes you available to switch easily and reliably between any HDMI computers using one HDMI compliant display.

The 2x1 HDMI2.0 KVM Switcher not only have 2 USB 2.0 ports but also have keyboard and mouse ports. While using the mouse and keyboard control, USB2.0 can also be connected to USB drive and hub at the same time. By using USB 2.0 hub ports on the KVM, you even can attach USB drive, printer, barcode scanner, web cam, USB microphone/ speaker or other USB devices to the KVM. Switching can be controlled through variable methods, such as the front panel buttons, RS232 and hot keys on keyboard.

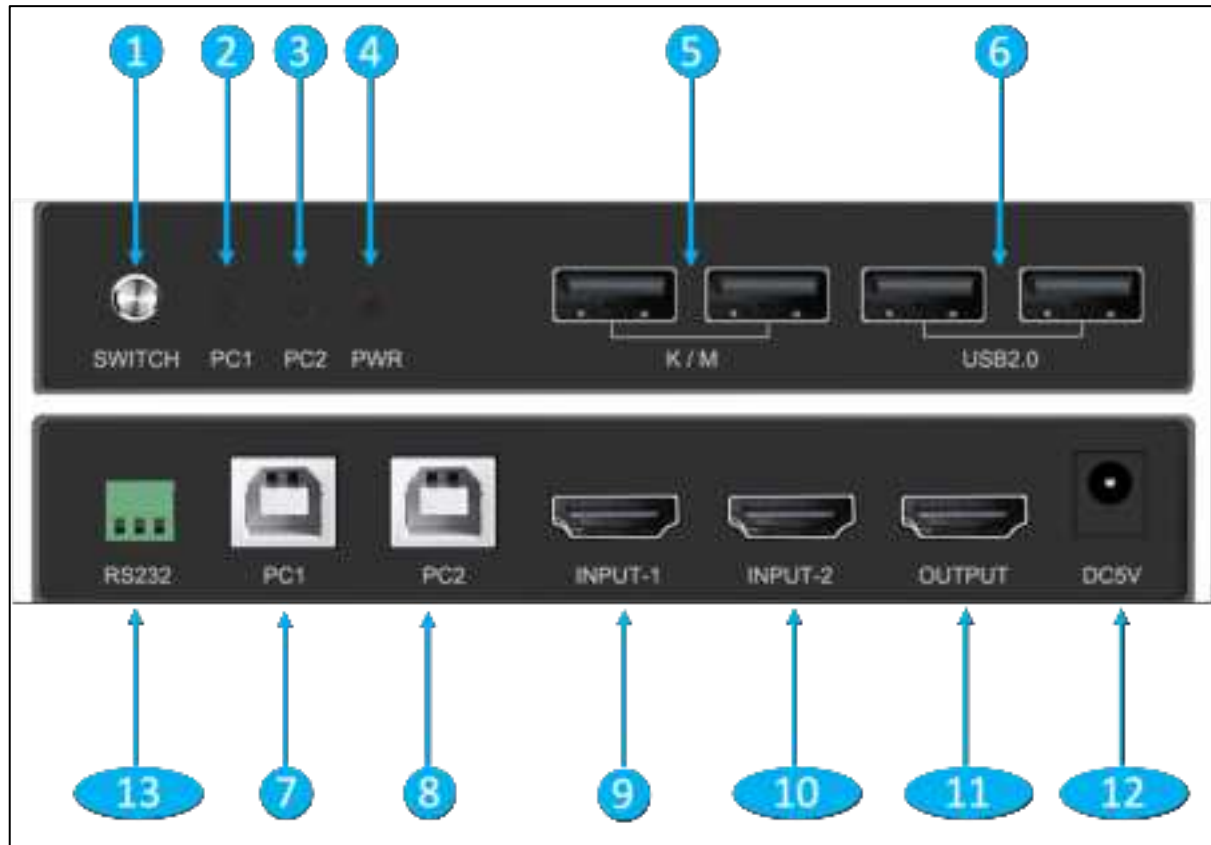
2. FEATURES

- Using only 1 set of keyboard, mouse and monitor to control 2 computer devices
- Support hot key commands and mouse gesture to switch inputs
- Support front panel buttons, RS232, keyboard hot keys to control KVM switch.
- Available to use keyboard without any delay after switch input sources
- Support resolution up to 3840*2160@60Hz 4:4:4
- Compliant with and HDCP 2.2, HDMI2.0
- Support USB 2.0 for printers, USB drive, web cam, USB microphone/ speaker etc
- Support Unix/Windows/Debian/Ubuntu/Fedora /Mac OS X/Raspbian/Ubuntu for Raspberry Pi and other Linux based system.
- Support hot plug, connect or disconnect devices to the KVM switch in any time and without turning off devices.
- Support HDR 10 and Dolby Vision
- Plug and play.

3. PACKAGE LIST

- 1x iSwitch 201HKL
- 1x DC to USB power cable
- 2x USB Cables
- 1x User manual

4. PANELS



No.	Ports	Descriptions
1	Switch	Switching PC1 or PC2
2	Indicator	PC1 Indicator
3	Indicator	PC2 Indicator
4	Indicator	Power Status Indicator
5	2x USB A 2.0	Keyboard and Mouse
6	2x USB A 2.0	USB devices
7	1x USB B 2.0	To PC1 host
8	1x USB B 2.0	To PC2 host
9	1x HDMI A Input	To PC1

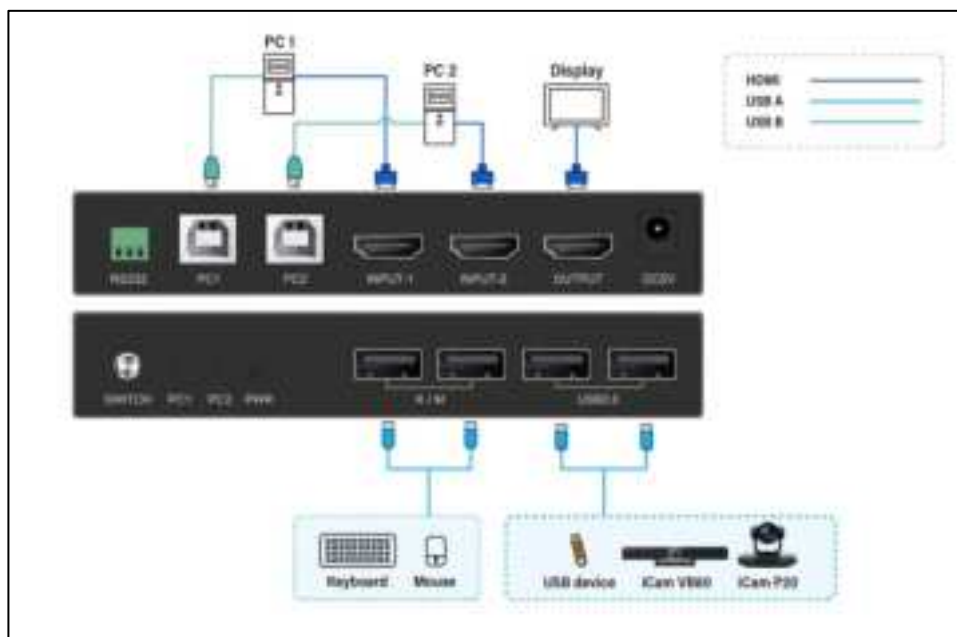
10	1x HDMI A Input	To PC1
11	1x HDMI A Output	To display
12	DC 5V	Power Supply IN
13	1x 3-pin block terminal	RS232 Control

5. SPECIFICATION

Model	iSwitch 201HKL
Name	4K60 2x1 HDMI KVM Switcher Lite
Protocol	HDMI 2.0; HDCP 2.2
HDMI Bandwidth	18Gbps
Resolution	Up to 3840x2160@60Hz 4:4:4
HDMI Port	2x HDMI Type A
HDMI Cable	Less than 5 meters at 1080p@60Hz
RS232	3-pin connector
Baud rate	1152000bps
Data bit	8bits
USB2.0	2x USB 2.0 type A devices ports
PC1/2	2x USB 2.0 B
K/M	USB-A, Keyboard and mouse
Supported OS	Unix/Windows/Debian /Ubuntu /Fedora /Mac OS X/ Raspbian /Ubuntu for Raspberry Pi and other Linux based system
Power adapter	DC 5V

ESD Protection	Human body model - $\pm 8\text{kV}$ (Air-gap discharge)
Temperature	$-5^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Humidity	5% ~ 90%
Product Dimension	145(L) x 67(W) x 22(H) mm
Warranty	3 years

6. DIAGRAM



7. CONTROL

7.1 BUTTON CONTROL



By toggle switching the front panel button, to switch PC1 and PC2.

7.2 HOT KEY CONTROL

There are 4x Hot Key control modes, the Scroll mode is by default. User can switch to other mode by press [Scroll] + [Scroll] + [Caps]/ [Num] to enable Caps mode or Num mode. Every time to switch other mode, user must follow existing switching method, for example if the existing mode is Caps mode, user must press [Caps] + [Scroll]/ [Num] to change.

Hotkey Mode	
1. Scroll Mode (Factory default)	
2. Caps Mode	
3. Num Mode	
4. Ctrl+Shift Mode (Left button)	
1. Scroll Mode	
Hotkey combination	Hotkey description
[Scroll] ++ [Scroll] + [1/2][*1]	Switch to PC1/PC2
[Scroll] ++ [Scroll] + [→or↓]	Switch to next PC
[Scroll] ++ [Scroll] + [←or↑]	Switch to Previous PC
[Scroll] ++ [Scroll] + [S]	Turn on/off the polling switching function, the default switching interval is 5 seconds, (press "ESC" to exit)
[Scroll] ++ [Scroll] + [S] + [n][*2]	Set the polling switching time interval, valid range: 5-999S

[Scroll] ++ [Scroll] + [ESC]	Restore factory default settings
[Scroll] ++ [Scroll] + [T][*3]	Turn on/off the automatic detection function
[Scroll] ++ [Scroll] + [F12]	Turn on/off the mouse through screen function
[Scroll] ++ [Scroll] + [Caps]	Switch to Caps hotkey mode
[Scroll] ++ [Scroll] + [Num]	Switch to Num hotkey mode
[Scroll] ++ [Scroll] + [left/right Ctrl][*4]	Switch to Ctrl+Shift hotkey mode
2. Caps Mode	
Hotkey combination	Hotkey description
[Caps] ++ [Caps] + [1/2]	Switch to PC1/PC2
[Caps] ++ [Caps] + [→or↓]	Switch to next PC
[Caps] ++ [Caps] + [←or↑]	Switch to Previous PC
[Caps] ++ [Caps] + [S]	Turn on/off the polling switching function, the default switching interval is 5 seconds, (press "ESC" to exit)
[Caps] ++ [Caps] + [S] + [n]	Set the polling switching time interval, valid range: 5-999S
[Caps] ++ [Caps] + [ESC]	Restore factory default settings
[Caps] ++ [Caps] + [T]	Turn on/off the automatic detection function
[Caps] ++ [Caps] + [F12]	Turn on/off the mouse through screen function
[Caps] ++ [Caps] + [Scroll]	Switch to [Scroll]++[Scroll] hotkey mode
[Caps] ++ [Caps] + [Num]	Switch to [Num]++[Num] hotkey mode
[Caps] ++ [Caps] + [Ctrl]	Switch to [Ctrl]+[Shift] hotkey mode
3. Num Mode	
Hotkey combination	Hotkey description
[Num] ++ [Num] + [1/2]	Switch to PC1/PC2
[Num] ++ [Num] + [→or↓]	Switch to next PC

[Num] ++ [Num] + [←or↑]	Switch to Previous PC
[Num] ++ [Num] + [S]	Turn on/off the polling switching function, the default switching interval is 5 seconds, (press "ESC" to exit)
[Num] ++ [Num] + [S] + [n]	Set the polling switching time interval, valid range: 5-999S
[Num] ++ [Num] + [ESC]	Restore factory default settings
[Num] ++ [Num] + [T]	Turn on/off the automatic detection function
[Num] ++ [Num] + [F12]	Turn on/off the mouse through screen function
[Num] ++ [Num] + [Scroll]	Switch to [Scroll]++[Scroll] hotkey mode
[Num] ++ [Num] + [Caps]	Switch to [Caps] ++[Caps] hotkey mode
[Num] ++ [Num] + [Ctrl]	Switch to [Ctrl]+[Shift] hotkey mode
4. Ctrl+Shift Mode	
Hotkey combination	Hotkey description
[Ctrl] ++ [Ctrl]	Switch to next PC
[Ctrl + Shift + 1/2][*5]	Switch to PC1/PC2
[Ctrl + Shift + →or↓]	Switch to next PC
[Ctrl + Shift + ←or↑]	Switch to Previous PC
[Ctrl + Shift + S]	Turn on/off the polling switching function, the default switching interval is 5 seconds, (press "ESC" to exit)
[Ctrl + Shift + S + n]	Set the polling switching time interval, valid range: 5-999S
[Ctrl + Shift + ESC]	Restore factory default settings
[Ctrl + Shift + T]	Turn on/off the automatic detection function
[Ctrl + Shift + F12]	Turn on/off the mouse through screen function
[Ctrl + Shift + Scroll]	Switch to [Scroll]++[Scroll] hotkey mode
[Ctrl + Shift + Caps]	Switch to [Caps] ++[Caps] hotkey mode

[Ctrl + Shift + Num]	Switch to [Num] +[Num] hotkey mode
5. Other Hotkey Mode	
Hotkey combination	Hotkey description
[* + 1/2]	Switch to PC1/PC2
[Middle mouse button + right mouse button]	Switch to next PC
[Middle mouse button + left mouse button]	Switch to Previous PC

Note:

1: "++" means to press the Scroll key twice in rapid succession, [Scroll] ++ [Scroll] + [1] means to press the Scroll key twice in rapid succession, then press the number "1" key again, the detection timeout between each hot key code is 2 seconds, if you press the Scroll key for the first time, press it again after more than 2 seconds, then this hotkey combination is invalid.

2: "n" can be 1/2/3 numbers, "Scroll ++ Scroll + S + 1 + 2 + 0" means to press the Scroll key twice in rapid succession, and then press the number "S" Press the key and release it, press the number "1" key and release it, press the number "2" key and release it, press the number "0" key and release it, and set the polling time interval to 120 seconds.

3: After turning on the automatic detection function, the switch will automatically detect the connection of the computer's USB interface and perform smart switching. If it detects a new computer's USB interface connection, it will automatically switch to the newly connected computer, if it detects the USB interface is disconnected, it will automatically switch to the next connected computer. If it is detected that the USB interface of a non-enabled computer is disconnected, the connection does not switch. If the automatic detection function is turned on, and then the automatic polling scan function is turned on, it will automatically skip the unconnected USB Computer.

4: "CTRL" and "SHIFT" can be used regardless of left or right.

5: The hot key [Ctrl + Shift + 1] means that it will not be released after pressing the "CTRL" key and will not release after pressing the "SHIFT" key, and then press the number "1" key, then release all keys.

6: By default, the switch of the pass-through USB port is synchronized with the switch of the USB keyboard and mouse, that is, the keyboard and mouse switch to PC1, the pass-through port. The USB devices on the switch to PC1 at the same time. If you turn off the direct USB port to follow the keyboard and mouse synchronization switching function, then when switching the keyboard and mouse,

the device with the pass-through USB port still stays on the original PC, unless the hot key to switch the device with the pass-through USB port alone is used to switch.

7.3 AUTO CYCLING MODE

[Scroll] + [Scroll] + [S]

[Num] + [Num] + [S]

[Caps] + [Caps] + [S]

Double click “Scroll” or “Num” or “Caps” + “S” to turn ON or OFF the auto cycling mode. The default switching intervals are 5 seconds. Press “ESC” to exit. User must select to use “Scroll”, “Num” or “Caps” by the existing mode.

7.4 RS232 CONTROL



The serial communication data format is:

Baud rate	115200
Start bits	1
Data bits	8
Stop bit	1
Parity bit	No parity bit

Hexadecimal Command Packet	Function Description
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57 AB 32 01 59 8E 57 AB 32 01 5A 8F	Switch to the specified PC 1 to 2
57 AB 33 00 35	Switch to the next PC
57 AB 34 00 36	Switch to the previous PC
57 AB 03 00 05	Reset
57 AB 04 00 06	Factory Reset