

# HDMI KVM切换器使用说明书

## 特别提示

- ◆ 在使用本产品之前，请务必先仔细阅读本产品使用说明书。
- ◆ 请务必妥善保管好本书，以便日后能随时查阅。
- ◆ 请在充分理解内容的基础上，正确使用。
- ◆ 本公司保留对产品进行更改的权利，由于技术更新产品参数变化恕不另行通知。

## 产品介绍

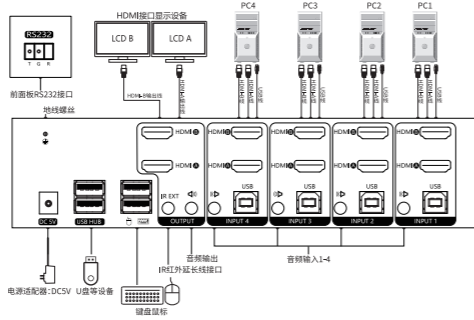
这款HDMI KVM四切二切换器可以实现四台电脑主机的的主屏与副屏两个屏幕同时显示，并支持共享键盘、鼠标、打印机、U盘等USB设备，可自动调整到屏幕分辨率，分辨率支持最高可达4K 60Hz YUV4:4:4显示，它具有优良的图像处理 and 传输能力、兼容能力，使信号输出更加稳定，可广泛应用于视频会议、多媒体教学、证券金融、办公空间等领域。

## 产品特点

- ◆ 支持USB1.1和2.0设备；
- ◆ 支持Windows、Mac、Linux、Android等多系统使用；
- ◆ 支持HDMI2.0、HDCP2.2；
- ◆ HDMI接口输入、输出分辨率支持3840x2160@60Hz/30Hz/2560x1440@144Hz/120Hz/60Hz/1920x1080P60Hz/30Hz/720P60Hz等；
- ◆ HDMI线缆使用HDMI2.0版本线材支持前后可延长距离高达20M；
- ◆ 支持USB端口插入自动识别侦测、自动扫描、电脑睡眠唤醒等功能；
- ◆ 无需安装驱动，即插即用，使用方便快捷，支持兼容大多数的无线键鼠、机械键盘、游戏鼠标使用；
- ◆ 支持可以通过键盘热键、鼠标、面板按键、红外遥控、串口切换等多种切换方式来选择所需操作的电脑主机的视频画面与音频功能；
- ◆ 支持热插拔，无需关闭设备电源可直接从端口插入和拔出线缆与设备部件；

## 连接示意图

(412HK)



- 注：1.USB ( ) 接口只可接鼠标键盘，  
2.USB HUB接口可接U盘、打印机等设备。  
3.双屏输出时需要输入电脑的2个输入接口为同一个显卡的输出端口。

## 安装方法以及使用说明：

- 1.用KVM线将电脑设备与KVM切换器连接起来（见接线图）。
- 2.将显示器和USB接口的键盘鼠标连接到KVM切换器上。

- ◆ 请在开机前确保所有电缆线连接正确。
- ◆ 清理或长时间不使用时，请拔掉电源插头。
- ◆ 请使用该产品的专用电源适配器，并在适配器标注的电源范围内使用。
- ◆ 工作温度：0~40℃，工作湿度：5~85%RH（无冷凝）。

## 操作方法

- 1、按连接示意图正确连接信号源和显示设备、操作键盘鼠标；
- 2、切换方式：面板按键切换、红外遥控切换、鼠标键盘切换、RS232代码切换。

## 切换方式

- ◆ 第一种切换方式：按键切换  
手动按KVM切换器面板上面的按钮可切换到对应的电脑主机。
- ◆ 第二种切换方式：遥控器切换  
直接用遥控器对准KVM切换器面板可切换到对应的电脑主机。
- ◆ 第三种切换方式：鼠标切换  
KVM鼠标切换方式：双击鼠标中间滚轮+右键往右进行循环切换，双击鼠标中间滚轮+左键 往左进行循环切换，操作时间2.5秒内切换完成，如下图：



- ◆ 第四种切换方式：键盘快捷键切换，  
附表：键盘快捷键功能表

切换热键:R' Ctrl/L' Ctrl/Scroll lock/Num lock /Caps lock五种切换热键模式	
以R' Ctrl热键为例:(默认为R' Ctrl热键)	
热键组合	功能说明
快速双击[R' Ctrl]+1(或2)+Enter	切换到PC1或PC2
快速双击[R' Ctrl]+B+Enter	蜂鸣器开启、关闭
快速双击[R' Ctrl]+T+Enter	跟踪功能开启、关闭
快速双击[R' Ctrl]+M+Enter	鼠标切换功能开启、关闭
快速双击[R' Ctrl]+S+Enter	自动扫描功能开启、关闭
快速双击[R' Ctrl]+S+数字键+Enter	设定自动扫描时间
快速双击[R' Ctrl]+R+Enter	开启一次复位功能
快速双击[R' Ctrl]+L' Ctrl+Enter	切换至 L' Ctrl模式
快速双击[R' Ctrl]+Scroll lock+Enter	切换至 Scroll lock模式
快速双击[R' Ctrl]+Num lock+Enter	切换至 Num lock模式
快速双击[R' Ctrl]+Caps lock+Enter	切换至 Caps lock模式
快速双击[R' Ctrl]+R' Ctrl+Enter	切换至 R' Ctrl模式

注:如CTRL键更改为:ScollLock、NumLock等模式功能切换按键就变成相对应的快捷键

- ◆ 第五种切换方式：RS232通讯切换，  
附表：RS232切换代码表

串口设定	波特率115200bps,8位数,1位停止,校验位None 十六进制	备注
输入1	3030 3030 3030 0a0a 0d0d	
输入2	3030 3030 3131 0a0a 0d0d	
输入3	3030 3030 3232 0a0a 0d0d	
输入4	3030 3030 3333 0a0a 0d0d	
输入5	3030 3030 3434 0a0a 0d0d	
输入6	3030 3030 3535 0a0a 0d0d	
输入7	3030 3030 3636 0a0a 0d0d	
输入8	3030 3030 3737 0a0a 0d0d	

## 性能参数

PC端连接接口	HDMI A型母座+USB2.0 A型端口+3.5mm 3节音频接口
控制端连接接口	HDMI A型母座+USB2.0 B型端口+3.5mm 3节音频接口
PC端选择方式	面板按键+遥控器+鼠标+键盘热键+RS232通讯
HDMI版本	HDMI2.0 HDCP2.2/自适应EDID
HDMI解晰度/分辨率	3840x2160P@60Hz/30Hz/2560x1440P@144Hz/120Hz/60Hz/1920x1080P60Hz/30Hz/720P60Hz等
HDMI视频带宽/速率	带宽：600MHz 速率：18Gbps
HDMI视频颜色深度	4K60P:(420/422) 8, 10 or 12 Bit 4K60P:(444/RGB) 8 Bit
最大工作电流	450mA
电源适配器	交流输入:(50-60Hz) 100V-240V/直流输出: 5V/1A
外壳材质	铁壳
尺寸与重量	219*58*57mm/0.52kg

## 安全使用须知：

为确保设备可靠使用及人员的安全，请在安装、使用和维护时，请遵守以下事项：

- 请勿在下列场所使用本产品：有灰尘、油烟、导电性尘埃、腐蚀性气体、可燃性气体的场所；暴露于高温、结露、风雨的场合；有振动、冲击的场合。电击、火灾、误操作也会导致产品损坏和恶化；

- 避免带电状态进行接线。插拔电缆插头，否则容易导致电击，或导致电路损坏；

- 安装和接线必须牢固可靠，接触不良可能导致误操作；

- 本产品通过电源线的接地导线接地，为避免电击， 必须将接地导线与大地相连， 在对本产品的输入端或输出端进行连接之前，请务必将本产品正确接地；

- 必须将外部电源全部切断后，才能进行安装、接线等操作， 否则可能引起触电或设备损坏；

- 在下列情况下，请立即断开电源，并与公司联系：

1. 设备进水；
2. 设备摔坏或机壳破裂；
3. 设备工作异常或展示的性能已完全改变；
4. 设备产生气味、烟雾或噪音。

- 请不要自己修理设备，除手册中有明确指示外。

## 包装清单

序号	部件	数量
1	KVM切换器	1
2	遥控器	1
3	DC5V/1A电源	1
4	使用说明书	1
5	保修卡	1
6	KVM线(HDMI+USB)1.5M	4
7	红外接收延长线	1

# HDMI KVM Switch Manual

## Special Notification

- ◆ Before using this product, please read this manual carefully.
- ◆ Please keep this manual for future reference.
- ◆ The company may change the fuction of product without notice.

## Appearance

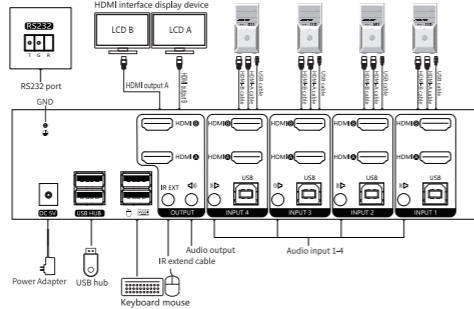
This HDMI KVM four-cut two switch can realize the simultaneous display of the main screen and the secondary screen of four computer hosts, and supports the sharing of USB devices such as keyboard, mouse, printer, U disk, and can automatically adjust to the screen resolution. The resolution supports up to 4K 60Hz YUV4:4:4 display. It has excellent image processing and transmission capabilities and compatibility, which makes the signal output more stable. It can be widely used in video conferencing, multimedia teaching, securities finance, office space, etc. field.

## Features

- ◆ Support USB1.1 and 2.0 devices;
- ◆ Support Windows, Mac, Linux, Android and other systems;
- ◆ Support HDMI2.0, HDCP2.2;
- ◆ Support HDMI INPUT Resolution: 3840x2160@60Hz/30Hz/2560x1440@144Hz/120Hz/60Hz/1920x1080P60Hz/30Hz/720P60Hz;
- ◆ Support HDMI2.0 Cable extended up to 20M;
- ◆ Support USB port insert automatic identification detection, automatic scanning, computer sleep wake and other functions;
- ◆ No need to install the driver, plug and play, easy to use, support compatible with most wireless keyboard and mouse, mechanical keyboard, game mouse use;
- ◆ Supports the video screen and audio functions of the computer host to be operated by various switching modes, such as keyboard hotkeys, mouse, panel keys, infrared remote control, serial port switching, etc;
- ◆ Support hot plug, plug and unplug cables and equipment parts directly from the port without turning off the power supply;

## Connection Diagram

(412HK)



Note:

- 1.USB ( ) port can only connect mouse and keyboard.
- 2.USB HUB interface can connect U disk, printer and other devices.
- 3.Double-screen output needs to input the computer's two input interfaces Is the output port of the same video card.

## Use Manual

- ◆ Make sure all cables are properly connected before turning.
- ◆ Please unplug when clean-up or long time no use.
- ◆ Please use the product-specific power adapter and use in the range of the adapter marked.
- ◆ Working Temperature: 0~40°C, Humidity: 5~85%RH(No condensation).

## Operation

1. Connect signal source, display device, keyboard and mouse correctly.
2. Switch mode: panel button switch, keyboard mouse switch, infrared remote control switching, RS232 code switching.

## Switching mode

- ◆ One way to switch: Key Switch  
manually press the button above the KVM switcher panel to switch to the corresponding computer host.
- ◆ Two way to switch: Remote control Switch  
direct the remote control to the KVM switcher panel to switch to the corresponding computer host.
- ◆ Three way to switch: Mouse Switch  
double click the middle mouse wheel + right mouse wheel to the right for the loop switch, double click the middle mouse wheel + left mouse button to the left for the loop switch, the operation time is 2.5 seconds



- ◆ Four way to switch: Keyboard hot keys Switch  
schedule: keyboard shortcut key function list

Hot Key: R' Ctrl/L' Ctrl/Scroll lock/Num lock /Caps lock Five Hotkey modes	
Take R' Ctrl Hot key example:(The default R' Ctrl hot key)	
Hot key Combination	Function Declaration
Double-click[R' Ctrl]+1 or 2+Enter	Switch to PC1 or PC2
Double-click[R' Ctrl]+B+Enter	Buzzer On/Off
Double-click[R' Ctrl]+T+Enter	Trace facility On/Off
Double-click[R' Ctrl]+M+Enter	Mouse Switch On/Off
Double-click[R' Ctrl]+S+Enter	Automatic scanning On/Off
Double-click[R' Ctrl]+S+8-999+Enter	Set automatic scanning time
Double-click[R' Ctrl]+R+Enter	Reset Once
Double-click[R' Ctrl]+L' Ctrl+Enter	Switch to L' Ctrl modes
Double-click[R' Ctrl]+Scroll lock+Enter	Switch to Scroll lock modes
Double-click[R' Ctrl]+Num lock+Enter	Switch to Num lock modes
Double-click[R' Ctrl]+Caps lock+Enter	Switch to Caps lock modes
Double-click[R' Ctrl]+R' Ctrl+Enter	Switch to R' Ctrl modes

- ◆ Five way to switch: Rs232 switch  
Schedule: RS232 switched code table

Serial port	Baud rate:115200bps,Data bits:8, Stop bit:1 Hexadecimal	Remark
Port 1	3030 3030 3030 0a0a 0d0d	
Port 2	3030 3030 3131 0a0a 0d0d	
Port 3	3030 3030 3232 0a0a 0d0d	
Port 4	3030 3030 3333 0a0a 0d0d	
Port 5	3030 3030 3434 0a0a 0d0d	
Port 6	3030 3030 3535 0a0a 0d0d	
Port 7	3030 3030 3636 0a0a 0d0d	
Port 8	3030 3030 3737 0a0a 0d0d	

## Technical parameters

PC-Port	HDMI A type+USB2.0 A type+3.5mm audio port
KVM-Port	HDMI A type+USB2.0 B type+3.5mm audio port
PC-Switch	Key+Remote control+Mouse+Keyboard hot keys+RS232
HDMI Standard	HDMI2.0 HDCP2.2
HDMI Resolution	3840x2160P@60Hz/30Hz/2560x1440P@144Hz/120Hz/60Hz/1920x1080P60Hz/30Hz/720P60Hz
HDMI Data Rate	Bandwidth: 600MHz Data Rate: 18Gbps
Color Bit Depth	4K60P:(420/422) 8, 10 or 12 Bit 4K60P:(444/RGB) 8 Bit
Max working current	450mA
Power Adapter	AC INPUT: (50-60Hz) 100V-240V/DC OUTPUT: 5V/1A
Shell Material	Metal
Size/Weight	219*58*57mm/0.52kg

## The matters needong attention of installation

In order to ensure the reliable performance of the equipment and the safety of the user, please observe the following matters during the process of installation, use and maintenance.

- Please do not use this product in the following places: the place of dust, soot and electric conductivity dust, corrosive gas, combustible gas; the place exposed to high temperature, condensation,wind and rain; the occasion of vibration and impact. Electric shock, fire, wrong operation can lead to damage and deterioration to the product, either;

- Should avoid wiring and inserting cable plug in charged state, otherwise it is easy to cause the shock, or electrical damage;

- The installation and wiring should be strong andreliable, contact undesirable may lead to false action;

- This product grounds by the grounding wires. To avoid electric shocks, grounding wires and the earth must be linked together. Before the connection of input or output terminal, please make sure this product is correctly grounded;

- Only after cutting down all external power source, can install, wiring operation begin, or it may cause electric shock or equipment damage;

- Please do not dismantle the equipment, avoid damaging the internal electrical component.

## Packing list

NO.	Parts	Qty
1	KVM Switch	1
2	Remote control	1
3	Power Adapter:DC5V/1A	1
4	User manual	1
5	Warranty Card	1
6	KVM Cable:(HDMI+USB)1.5M	4
7	Infrared receiver extension cable	1