

HDMI USB KVM 4*1 切换器

使用说明书

一、产品简介

HDMI 4 口 KVM 切换器能将两组高清视频源和 USB 接口实现四选一无由、同步切换,支持 EDID/HDCP 自适应功能,能够适应多种复杂的应用环境。该设备拥有卓越的图像处理 and 传输能力,使输出信号更加流畅和稳定,是一种可靠、高性能、高效的 HDMI USB 切换方式。

二、主要特性

- ✱ 把4路高清视频源 USB 接口实现四选一无由、同步切换;
- ✱ 高清视频信号分辨率最高可达到 3840*2160@60Hz;
- ✱ 兼容 HDMI 2.0/1.4 标准;
- ✱ 自动适配 EDID/HDCP 解密,能够适应多种复杂的应用环境;
- ✱ 可以连接的 USB 设备如: USB 鼠标、键盘、打印机、摄像头等;
- ✱ 可以通过按键延长模块和主机按键方式切换,方便快捷;
- ✱ 符合 HDCP 2.2 标准 - 高带宽数字内容保护技术;
- ✱ 能够自动识别和配置各种显示模式;
- ✱ 内置自动均衡系统,画面流畅,清晰,稳定;
- ✱ 内置 ESD 静电保护电路,全方位保护系统安全;
- ✱ 安装简单方便,即插即用,无需设置;

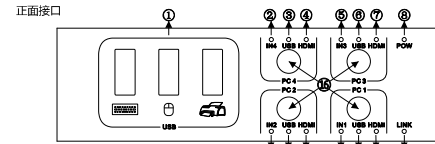
三、设备清单:

- ✱ HDMI KVM4*1 切换器主机 1 台
- ✱ 电源线 1 条
- ✱ 使用说明书 1 份
- ✱ USB线 4 条
- ✱ 按键延长线和按键模块 1 套

四、技术参数

参数名称	详细说明
支持协议	HDMI 2.0; HDCP 2.2
像素带宽	600MHz, 全数字
接口带宽	总带宽 18.0Gbps
最大支持分辨率	3840*2160@60Hz
接口类型	HDMI-A 接口
阻抗	100Ω
建议 HDMI 最大输入/输出距离	在 1920X1080@60Hz 时,小于5米, AWG26 在 3840X2160@60Hz 时,小于3米, AWG26
接口协议	USB2.0
PC 输入接口类型	USB-B
输出接口类型	USB-A
电源	电源适配器: DC 5V
最大功耗	MAX 2W
温度	工作温度: -5°C ~ +70°C
湿度	工作湿度: 5% ~ 90%
外形尺寸	110*60*33mm

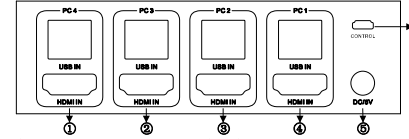
五、接口说明



端口	功能描述	端口	功能描述
1	USB键盘鼠标打印机接口	6	PC3组USB/信号输入指示灯
2	PC4组HDMI、USB通道选择指示灯	7	PC3组HDMI信号输入指示灯
3	PC4组USB信号输入指示灯	8	电源指示灯
4	PC4组HDMI信号输入指示灯	9	PC2组HDMI、USB通道选择指示灯
5	PC3组HDMI、USB通道选择指示灯	10	PC2组USB/信号输入指示灯

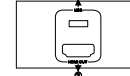
端口	功能描述	端口	功能描述
11	PC2组HDMI信号输入指示灯	14	PC1组HDMI信号输入指示灯
12	PC1组HDMI、USB通道选择指示灯	15	HDMI输出连接指示灯
13	PC1组USB信号输入指示灯	16	PC1, PC2, PC3, PC4切换按钮

背面接口



端口	功能描述	端口	功能描述
1	PC4组HDMI USB输入端口	4	PC1组HDMI USB输入端口
2	PC3组HDMI USB输入端口	5	DC/5V电源输入端口
3	PC2组HDMI USB输入端口	6	CONTROL外接延长控制模块端口

侧面接口



端口	功能描述
1	USB接口
2	HDMI视频信号输出端口

六、切换

切换方式有两种:

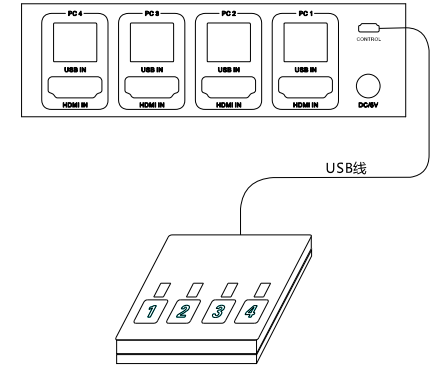
- ①通过前面板上的按键进行切换。
- ②使用按键延长线方式进行切换。

按键切换

使用面板按键或延长按键模块,按下数字键,即可切换到对应数字代号端口。

备注:为了兼容更多键盘、鼠标、打印机、U盘等,该设备不支持键盘热键切换。

外接延长控制模块连接图:



HDMI USB KVM 4*1 SWITCH

USER MANUAL

1. Description

HDMI 4 ports KVM switch four groups of high-definition video source and USB interface implementation free/Synchronize switch. Adaptive EDID/HDCP decryption, can adapt to a variety of complex application environments. The equipment has excellent image processing and transmission capacity, make the output signal is more smooth and steady, is a reliable, high performance and efficient way of HDMI USB switch.

2. Features

- ✱ The four lines of high-definition video source and USB interface implementation free/Synchronize switch;
- ✱ Support video resolution max up to 4Kx2K@60Hz;
- ✱ Compliance with HDMI 2.0 standard;
- ✱ Adaptive EDID/HDCP decryption, able to adapt to a variety of complex application environments;
- ✱ USB devices that can be connected such as: USB mouse, keyboard, printer, camera, etc;
- ✱ It can be switched by the button extension module and the host button, which is convenient and quick;
- ✱ HDCP 2.2 standard - high bandwidth digital content protection technology;
- ✱ High compatibility: can auto-match source and display device;
- ✱ Built-in automatic adjustment system, make the image smooth, clear and stable;
- ✱ Built-in ESD protection system;
- ✱ Simple to install, plug and play;

3. Package list

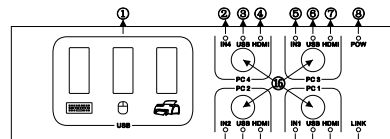
- ✱ HDMI KVM4*1 Switcher host 1 pcs
- ✱ Power wire 1 pcs
- ✱ User manual 1 pcs
- ✱ USB wire 4 pcs
- ✱ Key extension cable and key module 1 set

4. Specifications

Parameter	Description
Standards	HDMI 2.0; HDCP 2.2
Maximum pixel clock	600MHz
Maximum data rate	18Gbps
Resolution range	Up to 4Kx2K@60Hz 3D, 3840*2160@60Hz
Connector	HDMI-A Interface
Impedance	100Ω
HDMI Cable Range	<5M(Resolution: 1920*1080@60Hz) AWG26 <3M(Resolution: 3840*2160@60Hz) AWG26
Interface protocols	USB2.0
PC input interface type	USB-B
Output interface type	USB-A
Power supply	The power adapter: DC 5V
Power dissipation	MAX 2W
Temperature	Operating: -5°C ~ +70°C
Humidity	Operating: 5%~90%
Dimension	110*60*33mm

5. Panel

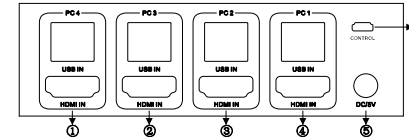
Front interface



Port	Description	Port	Description
1	USB keyboard mouse printer connectors	6	PC3 group USB input LED
2	PC4 group channel selection LED	7	PC3 group HDMI input LED
3	PC4 group USB input LED	8	Power LED
4	PC4 group HDMI input LED	9	PC2 group channel selection LED
5	PC3 group channel selection LED	10	PC2 group USB input LED

Port	Description	Port	Description
11	PC2 group HDMI input LED	14	PC1 group HDMI input LED
12	PC1 group channel selection LED	15	HDMI video output signal LED
13	PC1 group USB input LED	16	PC1,PC2,PC3,PC4 switch buttons

Rear interface



Port	Description	Port	Description
1	PC4 group HDMI USB input port	4	PC1 group HDMI USB input port
2	PC3 group HDMI USB input port	5	DC/5V power supply input port
3	PC2 group HDMI USB input port		

⑥ CONTROL : external extension control module port

Side interface



Port	Description
1	USB connectors
2	HDMI video output signal port

6. switch

There are two ways to switch:

- ① Use the keys on the front panel to switch.
- ② Use the button extension cable to switch.

Key switch

Use the panel button or extension button module and press the number keys to switch to the corresponding number code port.

Note: In order to be compatible with more keyboards, mice, printers, U disks, etc., this device does not support keyboard hotkey switching

External extension control module connection diagram:

