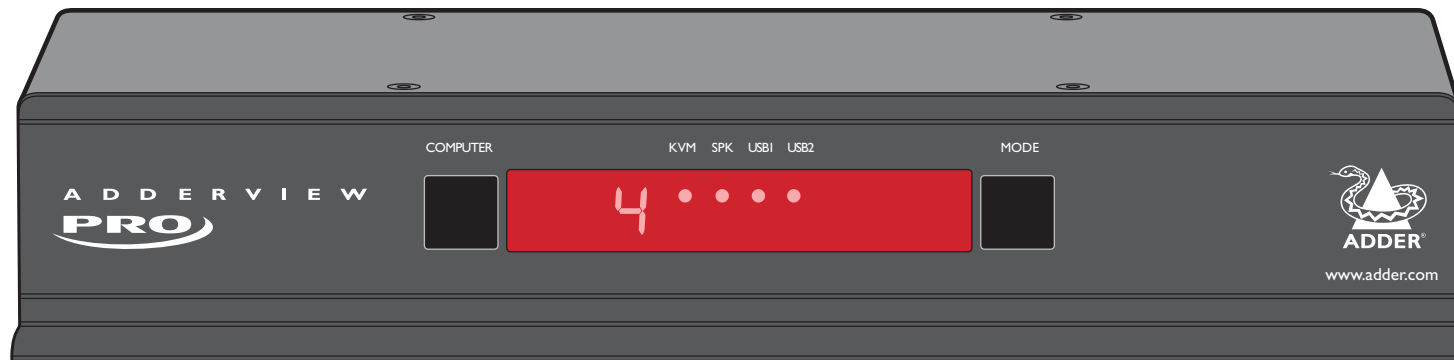




AV4PRO-VGA

User Guide

AV4PRO-VGA
AV4PRO-VGA-DUAL
AV4PRO-VGA-TRIPLE
AV4PRO-VGA-QUAD



CONTENTS



AV4PRO-VGA

用户指南

AV4PRO-VGA
AV4PRO-VGA-DUAL、
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Introduction



Thank you for choosing a member of the AdderView PRO (AV4PRO) family of professional switches from Adder Technology. There are four versions of the four-way AV4PRO-VGA, each of which allows a single operator to control up to four computer systems and share peripherals among them in a very flexible manner. The AV4PRO-VGA can support one video head per channel, whereas the slightly larger AV4PRO-VGA-DUAL, AV4PRO-VGA-TRIPLE and AV4PRO-VGA-QUAD units support two, three and four video heads per channel, respectively.

In addition to impressive VGA video performance, these units offer more than just straight switching between four systems. The KVM, speakers and two separate USB devices attached to the AV4PRO-VGA units can either be switched in unison, as normal, or you can mix your peripherals between any of the systems to suit your current tasks. For instance, you could be creating emails on one system, listening to a soundtrack from another while a third is sending documents to your printer and a fourth performing another task with a different

USB peripheral. The AV4PRO-VGA front panels make it straightforward to control which peripherals should connect to each system.

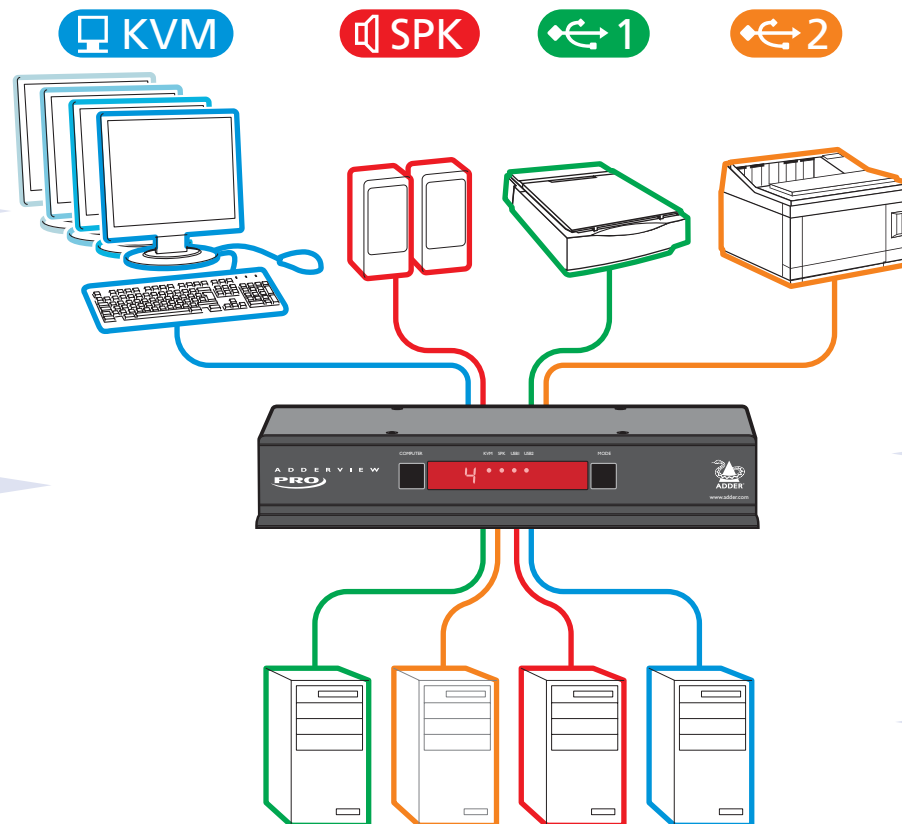
The AV4PRO-VGA units feature [True Emulation](#) which ensures that the full characteristics of the connected keyboard and mouse are passed to every system.

Multiscreen versions

The AV4PRO-VGA range includes separate models to support one, two, three or four video heads per channel.

Intelligent display information

The AV4PRO-VGA units use our [EDID Emulation](#) feature to ensure that all computers are supplied with the correct information about each connected video display.



Multiple switching

The attached peripheral devices can be switched collectively to any computer system, or can be linked to separate systems to achieve multiple tasks in parallel. Multiple switching can be controlled from the on-screen menu or using the front panel buttons.

True Emulation

Earlier USB KVM switches relied upon standard keyboard and mouse templates to inform each computer system how to deal with the connected peripherals. The AV4PRO-VGA range succeeds in harvesting the true identities of the connected keyboard and mouse and presents those 'real' profiles concurrently to every system. Thus, specialist keyboards and mice can be fully supported.

USB Remote wakeup

The USB Remote Wakeup feature is fully supported. Any connected computer can go into sleep mode and be awakened (when its channel is selected) as soon as you press a key or move the mouse. The computer and peripherals must support the USB Remote Wakeup feature.

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引言



感谢您选择 Adder Technology 公司推出的 AdderView PRO (AV4PRO) 系列专业交换机。该系列包含四款 AV4PRO-VGA 四路交换机，每款机型均支持单人操作人员控制最多四台计算机系统，并能灵活共享外围设备。AV4PRO-VGA 支持单通道单视频头，而稍大尺寸的 AV4PRO-VGA 双通道、三通道和四通道机型则分别支持单通道双、三、四视频头。

这些设备不仅具备出色的 VGA 视频性能，更提供超越四系统间简单切换的多功能性。AV4PRO-VGA 设备可连接 KVM、扬声器及两个独立 USB 设备，既可按常规顺序同步切换，也可根据当前任务自由调配外设。例如：当您在某台系统上撰写邮件时，可同时在另一台系统播放背景音乐，第三台系统处理文档打印，第四台则执行其他任务。

USB 外设。AV4PRO-VGA 前面板可轻松控制各系统应连接的外设。

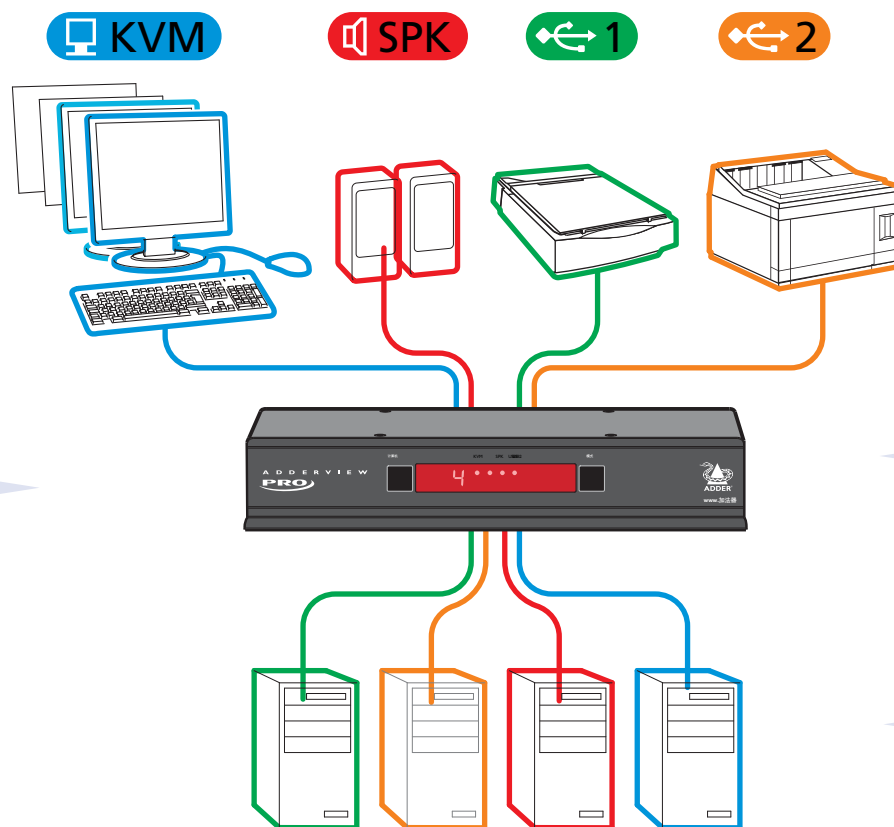
AV4PRO-VGA 设备具有 [真实模拟](#) 功能，可确保连接的键盘和鼠标的特性都能完整传递至每个系统。

多屏版本

AV4PRO-VGA 系列提供多款独立型号，可支持每个通道配置一个、两个、三个或四个视频头。

智能显示信息

AV4PRO-VGA 设备采用我们的 [EDID 仿真](#) 功能，确保所有计算机都能获取每个连接视频显示器的准确信息。



多路切换

所连接的外设可整体切换至任意计算机系统，亦可分别连接至独立系统以实现并行多任务处理。多重切换可通过屏幕菜单或前面板按钮进行控制。

真仿真

早期 USB KVM 开关依赖标准键盘和鼠标模板来指导每个计算机系统如何处理连接的外设。AV4PRO-VGA 系列成功识别连接的键盘和鼠标的真正身份，并将这些“真实”配置文件同步呈现给每个系统。因此，专业键盘和鼠标可获得全面支持。

USB 远程唤醒

USB 远程唤醒功能已全面支持。任何连接的计算机均可进入休眠状态，当您按下按钮或移动鼠标时，只要选中对应的通道，即可唤醒设备。该功能要求计算机及外设均需支持 USB 远程唤醒。唤醒功能。

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What is True Emulation?

True Emulation represents a significant breakthrough in sharing USB devices between two or more computer systems. Until this point, the problem has been how to create a USB switch that provides all of the following:

- Quick, transparent and reliable switching,
- Accurate representation of the connected USB keyboard and mouse,
- Switching control via the connected USB keyboard and/or mouse.

The difficulty in achieving all of the above requirements has been due to the complexity of the USB standard. This has led to various problems that have spawned a number of possible solutions.

Enumerated USB switching

The earliest attempts to switch USB devices applied a relatively 'hands off' approach. Enumerated USB switches are the electronic equivalent of those old mechanical KVM switches with a large knob on the front.

Enumerated switches are so called because a connected USB device will be required to perform a full initiation (a process called *Enumeration*) every time it is switched; just as if you had pulled out the plug and then reconnected it.

Enumerated switches simply pass all signals straight through between the USB device and the computer, they do not attempt to interpret any data. For most devices, this offers an advantage because the switch just leaves them to get on with their jobs without any interference or any hit on performance. However, it means that a USB keyboard or mouse cannot be used to control the switching process - a quick and simple control method expected by most users. Reliability of switching is also an issue that has plagued enumerated switches, especially when used with certain USB devices and particular operating systems.

Emulated USB switching

The issues with interpreting the complex USB data streams and recreating (or *Emulating*) the identity of attached USB devices were eventually solved, leading to the creation of the Emulated USB switch.

A neat side effect of the technique used is that each computer can be fooled into thinking that the USB device is permanently connected to it, even when the device is switched to another computer. This means that the enumeration process for the USB device takes place only once, during the first power on. After that, a computer merely sees a dormant version of the USB device whenever the device is actually connected to a different computer.

However, it remains a complex task to dynamically assume the identity of a USB device, distribute it among the connected computers and maintain all of the necessary signals, states and processes. Therefore, manufacturers have previously relied upon a fixed keyboard and mouse profile that is declared to each computer, regardless of the actual connected devices. This precluded the use of any special keyboard or mouse features over and above the standard layouts.

True Emulation

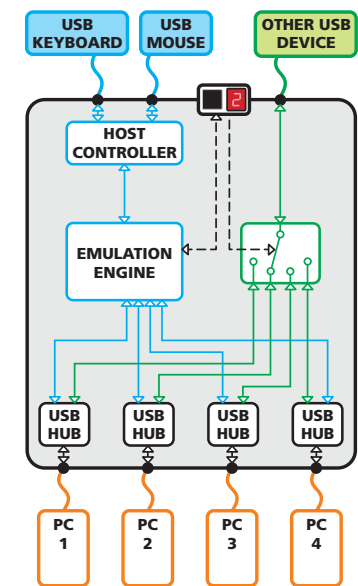
Mindful of the limitations associated with the previous USB switching techniques, we set about creating a more effective and elegant solution. After a great deal of research and development, *True Emulation* is the result.

True Emulation allows the complete identity of the keyboard and mouse to be copied and then presented to all of the connected computers. This means that any keyboard offering specialist function keys or any mouse with extra features will be fully supported at each computer. As with the previous emulation method, the unselected computers will continue to see the identities of the keyboard and mouse, which means that no enumeration is necessary when their link becomes active once again. This not only helps to speed up the rate of reconnection, but also raises the reliability of switching because USB links are at their most vulnerable during the enumeration process.

True Emulation relies upon a high speed circuit, called an Emulation Engine, to fully emulate the USB device identities and also interpret keyboard and mouse data streams. The result is full support for KVM switching control via hotkey presses or the third button/scroll wheel of a mouse.

True Emulation is not necessarily required by other USB devices, which is why you will also find two enumerated circuits included (shown in green within the block diagram) alongside the True Emulation feature (shown in blue). This allows those other USB devices to operate at their highest speeds, without any intervention. The enumerated circuits benefit greatly from the USB Hubs that are jointly used with the True Emulation system. Because they interface directly and permanently with each computer, they help to stabilise the dormant links, making errors during enumeration much less likely.

The dual switching arrangement provides further flexibility because the True Emulation and enumerated sections can be switched in unison or independently of each other, as required. Thus, your various peripherals can operate with different computers at the same time.



The emulated section of the switch is shown in blue and handles only the keyboard and mouse. The green enumerated section of the switch handles other USB devices and also uses the USB hubs to link with the computers.



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什么是真正的仿真？

True Emulation技术在实现多台计算机间共享USB设备方面取得重大突破。此前，如何设计一款能同时满足以下所有功能的USB切换器始终是技术难题：

- 快速、透明且可靠的切换功能，
- 精确呈现所连接的USB键盘和鼠标，
- 通过连接的USB键盘和/或鼠标进行切换控制。

由于USB标准的复杂性，难以满足上述所有要求，这导致了各种问题，并催生出多种可能的解决方案。

枚举式USB切换

早期尝试切换USB设备时采用了一种相对‘免手动操作’的方案。枚举式USB开关是电子版的机械 KVM 开关，其前端配有大旋钮。枚举开关之所以被称为枚举开关，是因为每次切换时都需要连接USB设备执行完整的初始化（一个称为枚举的过程），就像拔掉插头再重新连接一样。枚举式开关的工作原理是直接将所有信号从USB设备传输到计算机，不会对数据进行任何解析。这种设计对大多数设备来说优势明显——开关只需让设备正常运行，既不会产生干扰，也不会影响性能表现。但这也意味着用户无法通过USB键盘或鼠标来控制开关切换过程，这正是大多数用户期待的快速简便操作方式。此外，枚举式开关的可靠性问题也长期困扰着这类设备，特别是在与某些特定USB设备和操作系统配合使用时，其稳定性往往不尽如人意。

模拟USB交换机

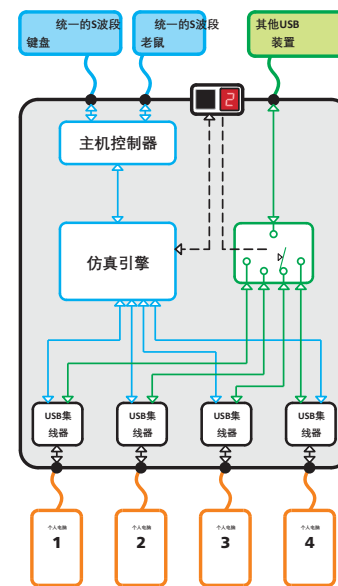
通过解决USB数据流的复杂性解析问题以及模拟（或仿真）连接USB设备身份的技术难题，最终成功研发出仿真USB交换机。该技术有个巧妙的副作用：即使USB设备被切换到其他电脑，每台计算机仍会误以为它始终连接在本机。这意味着USB设备的枚举过程仅需在首次开机时执行一次。此后每当设备实际连接到其他电脑时，计算机只会看到一个休眠状态的USB设备。然而，动态识别USB设备的身份、将其分配给连接的计算机，并维持所有必要信号、状态和进程，仍是一项复杂任务。因此，制造商过去依赖于为每台计算机预设的固定键盘和鼠标配置文件，而不管实际连接的设备是什么。这导致除了标准布局外，无法使用任何特殊键盘或鼠标功能。

真仿真

考虑到之前USB切换技术的局限性，我们着手开发一种更高效、更优雅的解决方案。经过大量研发，最终推出了真模拟技术。True Emulation技术可完整复制键盘和鼠标的配置，随后在所有联网计算机上呈现。这意味着所有配备专业功能键的键盘或具有额外功能的鼠标，在每台计算机上都将获得全面支持。与之前的模拟方法类似，未被选中的计算机仍会识别键盘和鼠标的标识信息，因此当这些设备重新建立连接时，无需进行枚举操作。这种设计不仅加快了重新连接的速度，还提升了切换过程的可靠性——因为USB连接在枚举阶段最容易出现故障。

TrueEmulation依赖于一个高速电路（称为仿真引擎），以完全模拟USB设备的身份，并解析键盘和鼠标的数据流。其结果是完全支持通过热键或鼠标第三个按钮/滚轮进行 KVM 切换控制。其他USB设备并不一定需要真仿真功能，因此系统还会提供两个枚举电路（如图所示）

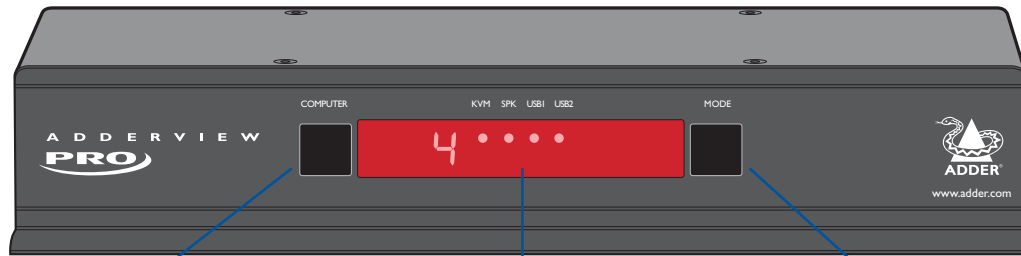
（方框图中的绿色区域）与真仿真功能（蓝色显示）并存。这使得其他USB设备无需任何干预即可以最高速度运行。枚举电路与真仿真系统协同使用的USB集线器效果显著。由于这些集线器与每台计算机直接且永久连接，有助于稳定休眠链路，从而大幅降低枚举过程中的错误发生概率。这种双切换机制提升了可读性，因为真仿真模式与枚举模式可按需同步或独立切换。这样一来，您的各类外设就能同时与不同计算机协同工作。



该开关的模拟部分以蓝色显示，仅支持键盘和鼠标操作。其绿色编号部分则可连接其他USB设备，并通过USB集线器与计算机建立连接。

AV4PRO-VGA features - front and rear

The AV4PRO-VGA single screen and multiscreen units are housed within durable, metallic enclosures with all connectors situated at the rear panel. The smart front face features the control buttons and the operation indicators.



COMPUTER button

Press to change to the next computer channel.

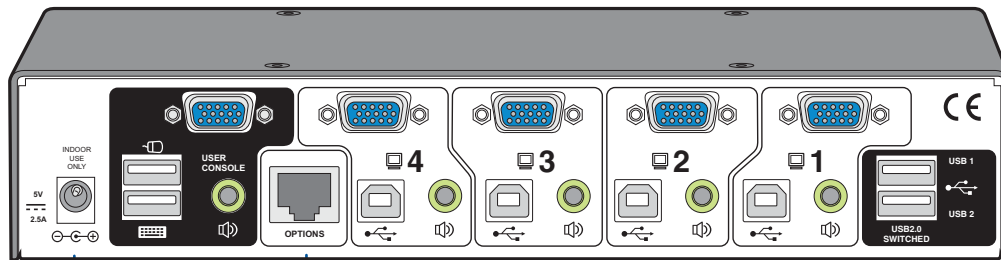
Indicators

The four indicators (**KVM**, **SPK**, **USB1**, **USB2**) show which peripherals are switched to the current computer channel OR (as you begin pressing the **MODE** button) the peripherals that will be switched during the next press(es) of the **COMPUTER** button.

The seven segment numeric display indicates the computer channel that is currently active.

MODE button

Press to determine which peripherals should be switched to another computer channel (will occur when the **COMPUTER** button is pressed).



Power input

The power supply connects here.

User console

Connect VGA video, USB keyboard and mouse plus optional speakers to these connectors.

Options port

This 10p10c port can separately support the following functions:

- Remote control - external switching control via Adder RC4 remote unit, RS-232 serial link or channel switching input lines (see [Optional RC4 remote control](#) or [Channel switching by external control](#) for details).
- Upgrades - used to update the internal firmware when necessary by connecting to a computer.

Computer channels

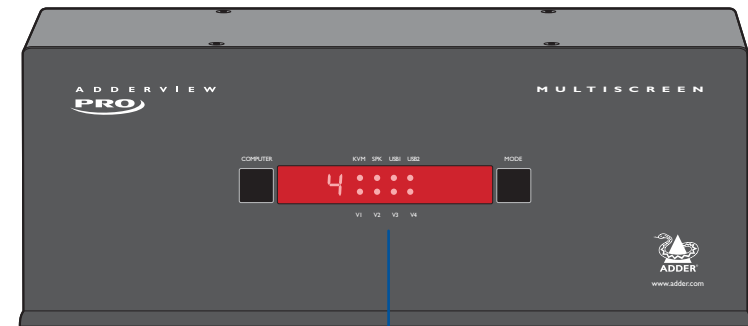
Each computer connects to one of these four channels via a VGA video connector, a USB B-type connector and an audio 3.5mm jack input.

User console

Connect up to two USB devices to these connectors. These ports are switched in an enumerated manner (see [What is True Emulation?](#))

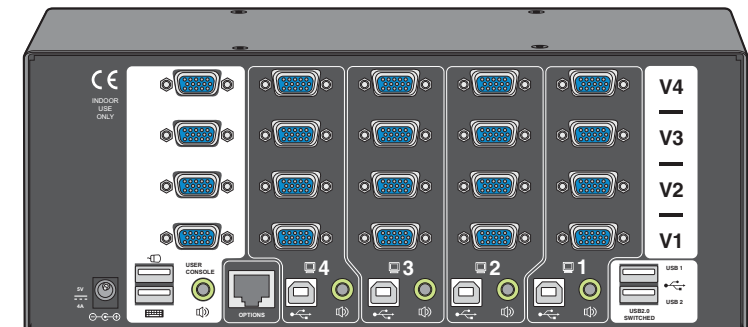
Multiscreen versions

The Dual, Triple and Quad video screen versions use a larger casing and provide more connectors on the rear panel.



Extra indicators

As well as the indicators shown on the single screen version, the multiscreen units also include four indicators, labelled V1 to V4, which show the video channels being switched.



Extra video channels

In addition to all of the ports described (left) for the single screen version, the multiscreen versions provide additional VGA connectors to allow multiple video streams from each computer to be switched to (up to) four video monitors.



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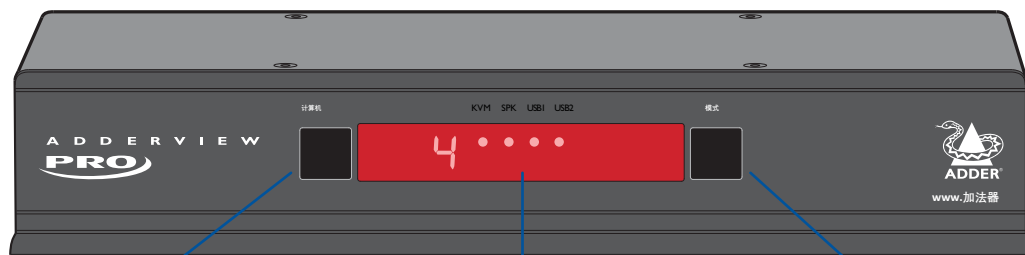
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AV4PRO-VGA功能特性 - 前后

AV4PRO-VGA单屏与多屏设备采用坚固的金属外壳封装，所有连接器均位于后盖板。智能前面板设有控制按钮及操作指示灯。



计算机按钮

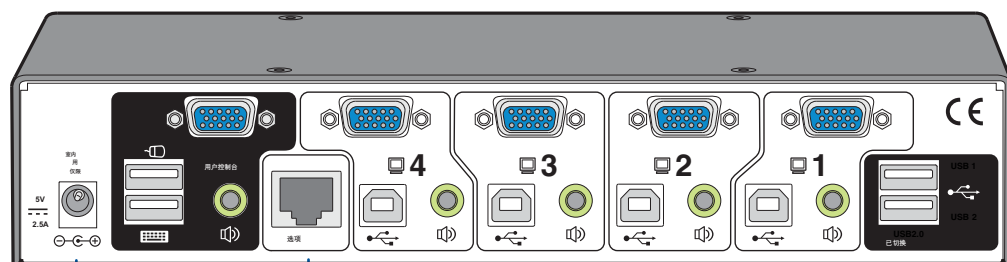
按此切换至下一计算机通道。

指标

这四个指示灯（KVM、SPK、USB1、USB2）会显示当前切换至计算机通道的外设，或（当您开始按MODE键时）下一次按计算机键时将切换的外设。七段数字显示屏显示当前激活的计算机通道。

模式按钮

按下按钮以确定应切换至另一计算机通道的外设（该操作将在按下计算机按钮时发生）。



功率输入
电源在此处连接。

用户控制台
将VGA视频接口、USB键盘鼠标及可选扬声器连接至这些设备连接器

计算机通道

每台计算机通过VGA视频接口、USB B型接口和3.5毫米音频接口，分别连接到这四个通道中的一个。

用户控制台

最多可将两个USB设备连接到这些接口。这些端口按枚举顺序进行切换（参见[什么是真值？](#)）

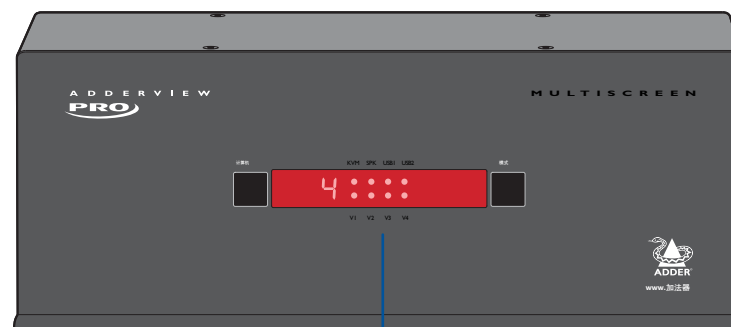
选项端口

该10p10c端口可独立支持以下功能：

- 远程控制 - 通过Adder RC4远程单元、RS-232串行链路或通道切换输入线进行外部切换控制（详见[可选RC4远程控制](#)或[通过外部控制进行通道切换](#)）。
- 升级功能——通过连接计算机在必要时更新内部固件。

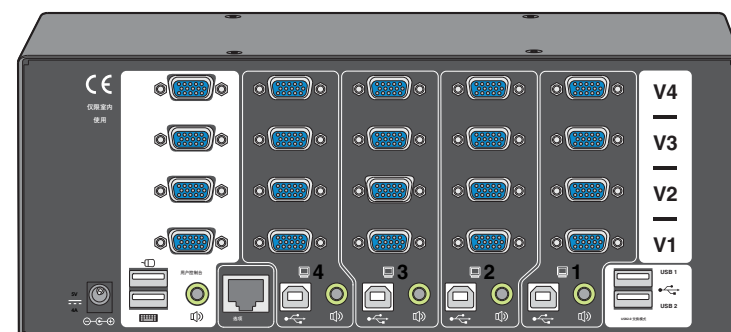
多屏幕版本

双屏、三屏和四屏视频版本采用更大尺寸的外壳设计，并在后盖上增加了更多接口。



附加指标

除单屏版本显示的指示灯外，多屏设备还包含四个标记为V1至V4的指示灯，用于显示正在切换的视频频道。



额外视频频道

除单屏版本中已描述的所有端口（左侧）外，多屏版本还提供额外的VGA连接器，可将每台计算机的多个视频流切换至（最多）四个视频显示器。



安装

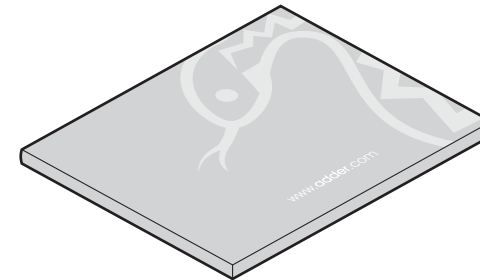
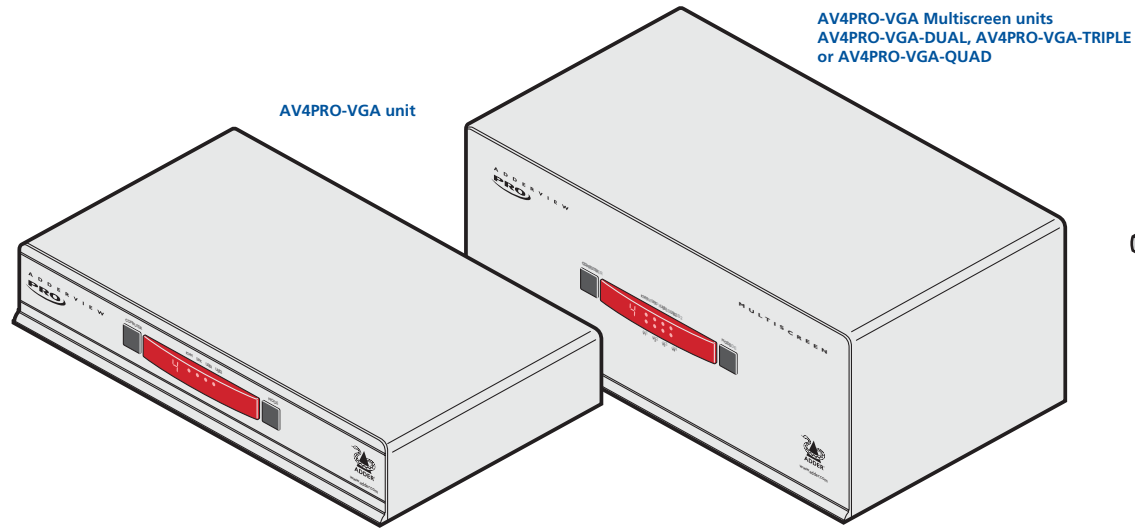
配置

手术

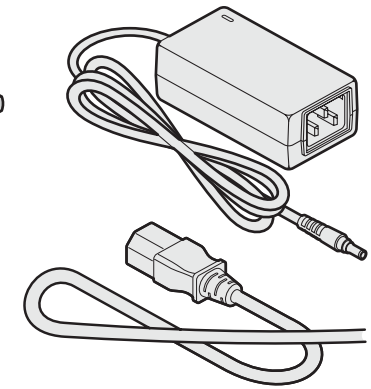
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What's in the box

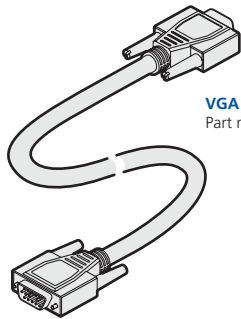


Information wallet
containing:
Four self-adhesive rubber feet
Safety document

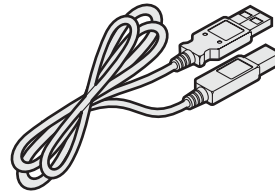


Power adapter (12.5W or 20W)
and country-specific power lead

What you may additionally need



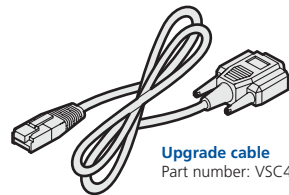
VGA analog video cable
Part number: VSC18 (2m length)



USB cable (type A to type B)
Part number: VSC24 (2m length)



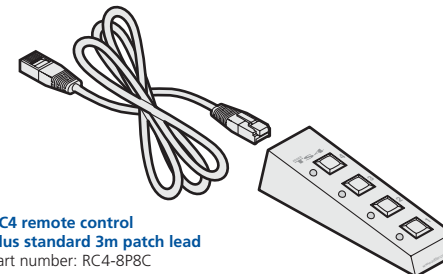
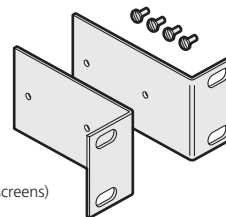
Audio cable 2m (3.5mm stereo jacks)
Part number: VSC22



Upgrade cable
Part number: VSC40

**Two 19" rack-mount brackets
and screws**

Part numbers:
RMK3 (single screen)
RMK5PRO-MS (dual, triple & quad screens)



**RC4 remote control
plus standard 3m patch lead**
Part number: RC4-8P8C

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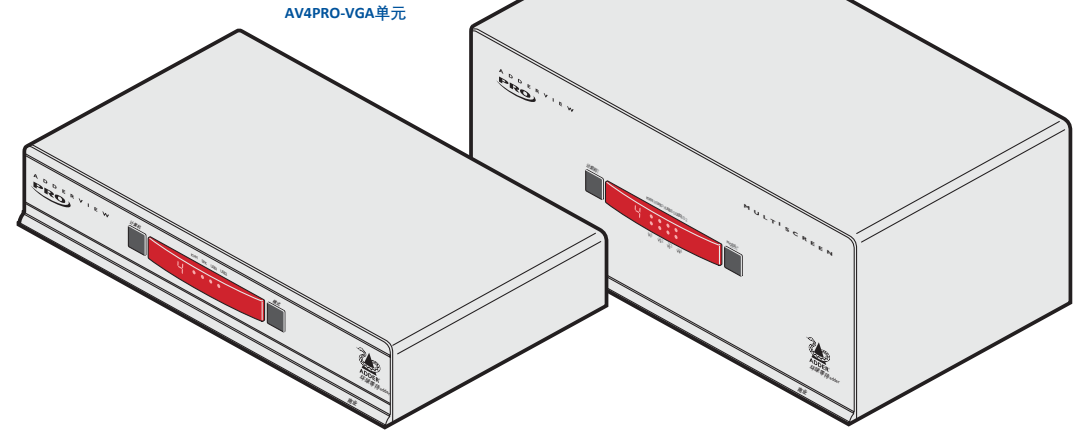
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盒内物品



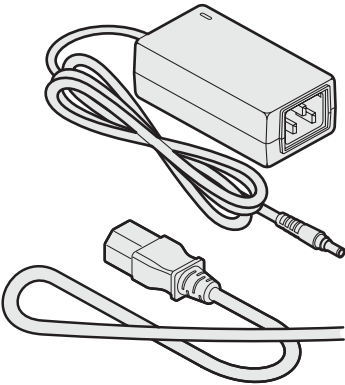
AV4PRO-VGA多屏设备
AV4PRO-VGA-DUAL、AV4PRO-VGA-TRIPLE
或 AV4PRO-VGA-QUAD

电源适配器（12.5W或20W）及国
家专用电源线

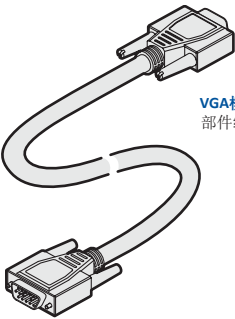


AV4PRO-VGA单元

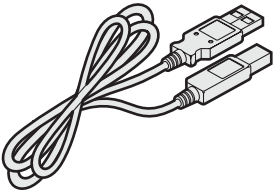
信息钱包
包含：四枚自粘式
橡胶足垫 安全文件



其他可能需要的物品



VGA模拟视频电缆
部件编号：VSC18（2米长度）



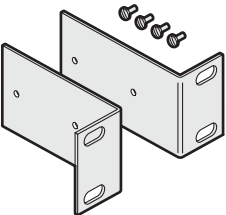
USB数据线（A型转B型）
部件编号：VSC24（2米长度）



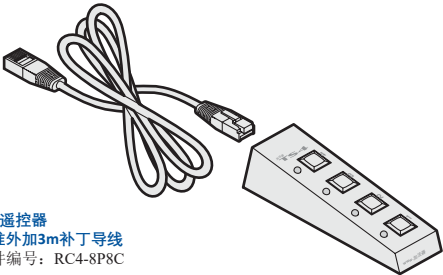
2米音频线（3.5毫米立体声插孔）
部件编号：VSC22



升级电缆
部件编号：VSC40



两个19英寸机架安装支架及螺
钉
部件编号：
RMK3 单层筛
RMK5PRO-MS（双屏、三屏及四屏）



RC4遥控器
标准外加3m补丁导线
部件编号：RC4-8P8C

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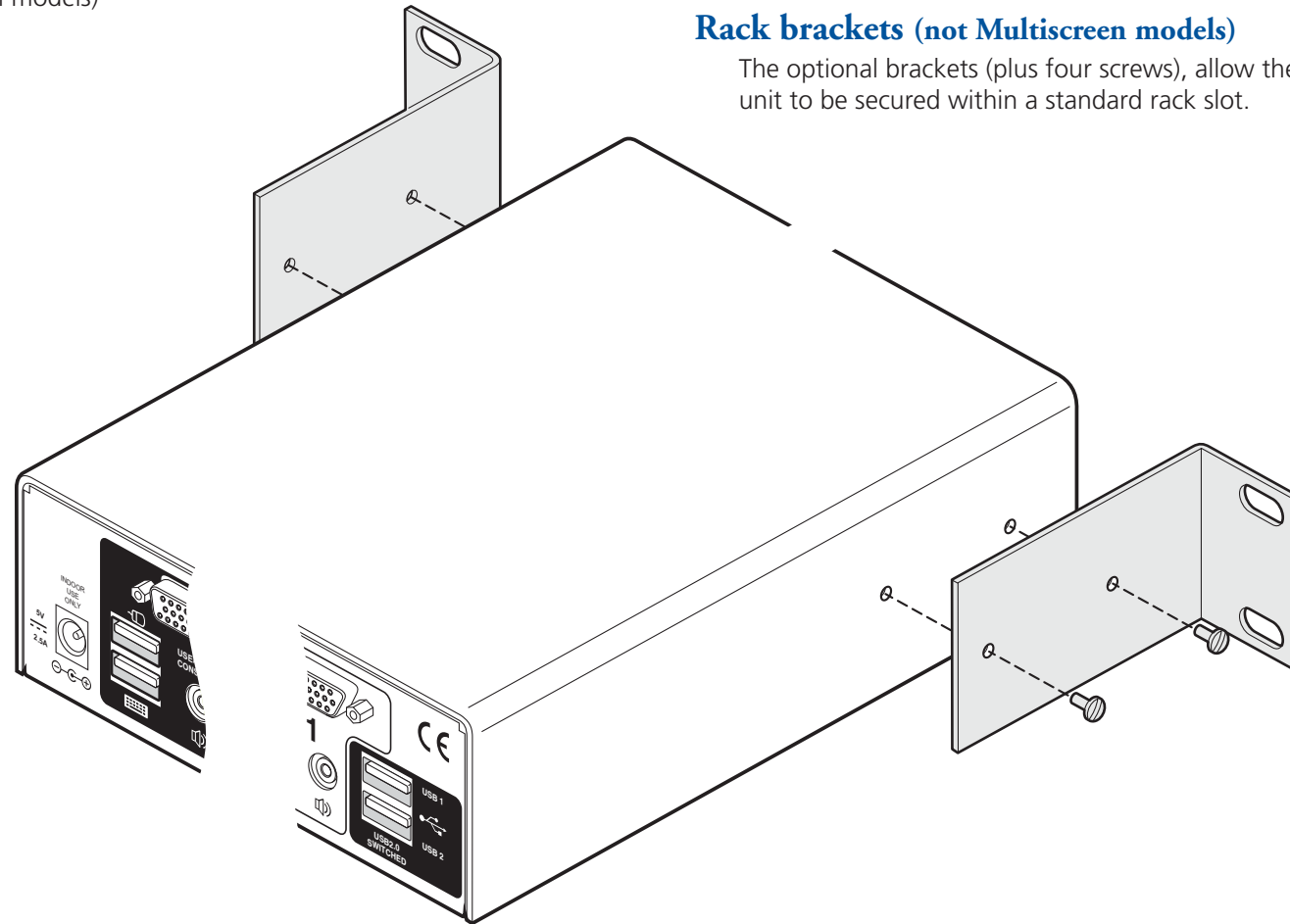
Mounting

There are two main mounting methods:

- The supplied four self-adhesive rubber feet
- Optional rack brackets (not Multiscreen models)

Connections

Note: Both the AV4PRO-VGA unit and its power supply generate heat when in operation and will become warm to the touch. Do not enclose them or place them in locations where air cannot circulate to cool the equipment. Do not operate the equipment in ambient temperatures exceeding 40 degrees Centigrade. Do not place the products in contact with equipment whose surface temperature exceeds 40 degrees Centigrade.



Rack brackets (not Multiscreen models)

The optional brackets (plus four screws), allow the unit to be secured within a standard rack slot.

安装

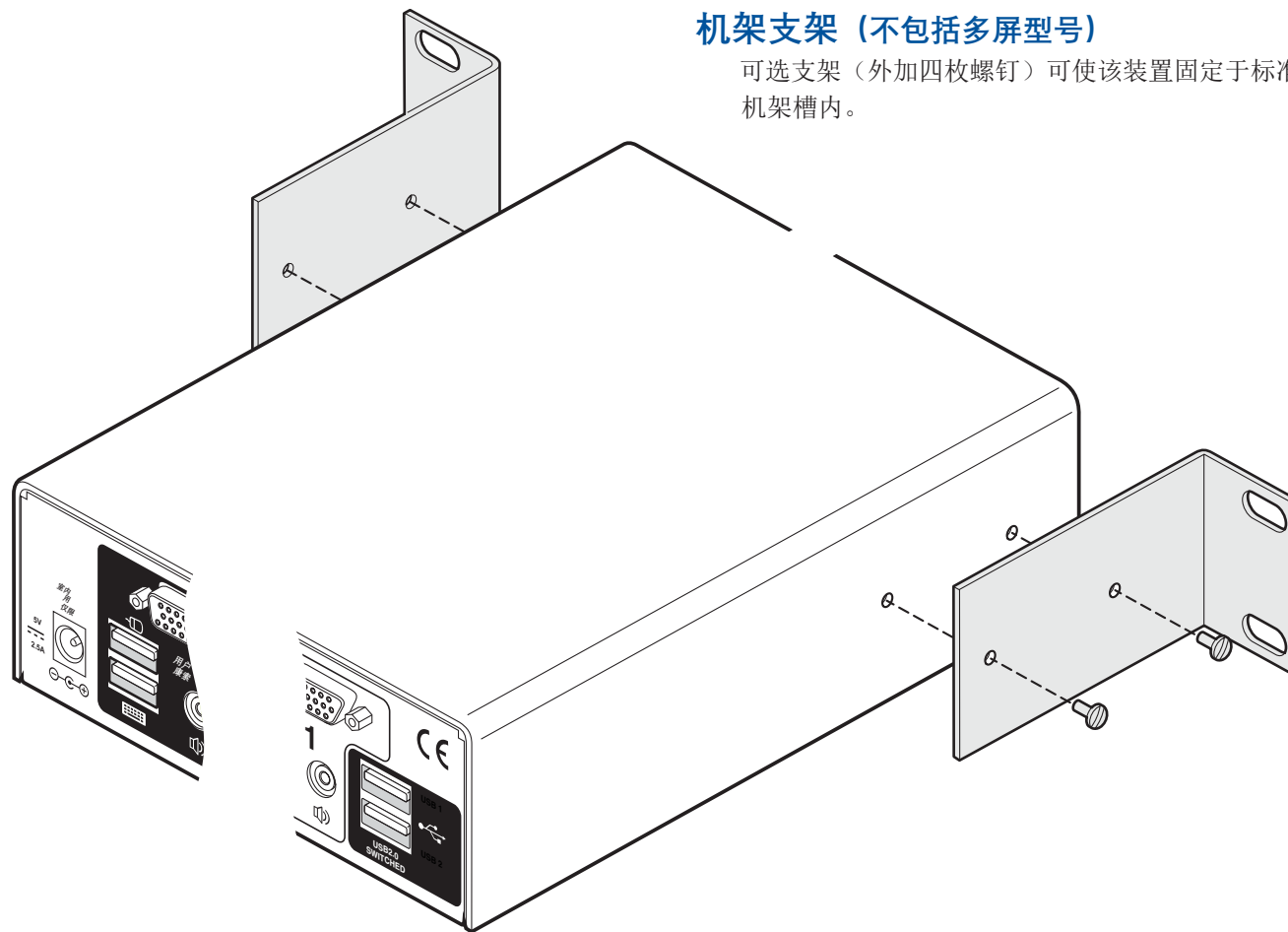
安装

主要有两种安装方法：

- 提供的四只自粘橡胶足
- 可选支架（非多屏型号）

连接

注：AV4PRO-VGA设备与
当处于工作状态时，其电源会产生热量
操作时应保持温暖，触摸时会变温。请勿
将其包裹或置于空气无法流通的场所。
用于冷却设备。请勿操作
环境温度下的设备
超过40摄氏度。
不得使产品接触
表面温度为
超过40摄氏度。



机架支架（不包括多屏型号）

可选支架（外加四枚螺钉）可使该装置固定于标准
机架槽内。

Connections

Connections do not need to be carried out in the order given within this guide, however, where possible connect the *power in* as a final step.

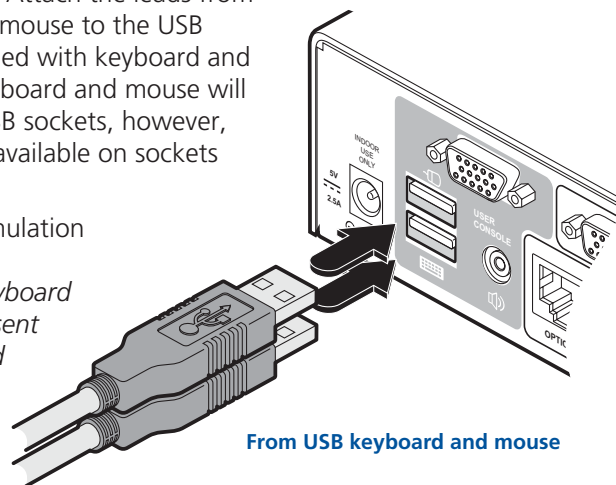
User console

The ports that make up the user console are where you attach the peripherals that will be shared between the computer systems. Ensure that power is disconnected from the unit.

To connect peripherals to the user console

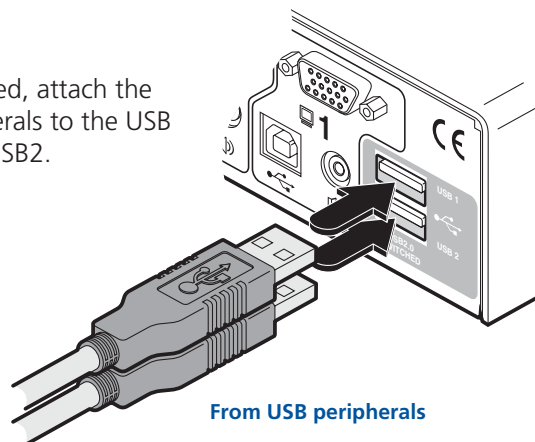
- 1 Position your peripheral devices in the vicinity of the unit such that their cables will easily reach.
- 2 **Keyboard and mouse:** Attach the leads from your USB keyboard and mouse to the USB sockets specifically labelled with keyboard and mouse symbols. The keyboard and mouse will operate in any of the USB sockets, however, [True Emulation](#) is not available on sockets labelled USB1 or USB2.

Note: The unit's True Emulation feature will read the full characteristics of the keyboard and mouse and will present those to each connected computer concurrently. This ensures that specialist keyboards and mice are fully supported.



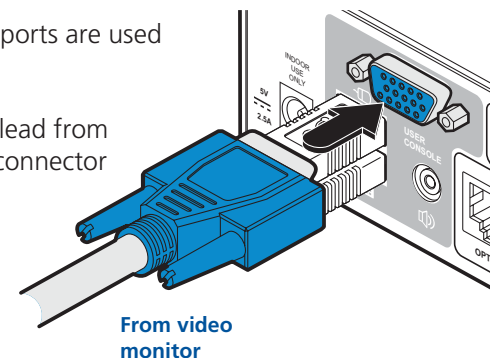
- 3 **USB devices:** Where required, attach the leads from your USB peripherals to the USB sockets labelled USB1 and USB2.

Note: These sockets provide [enumerated](#) (transparent) switching.



- 4 **Video monitor(s):** VGA video ports are used throughout.

Single screen units: Attach the lead from the video monitor to the VGA connector of the user console area.

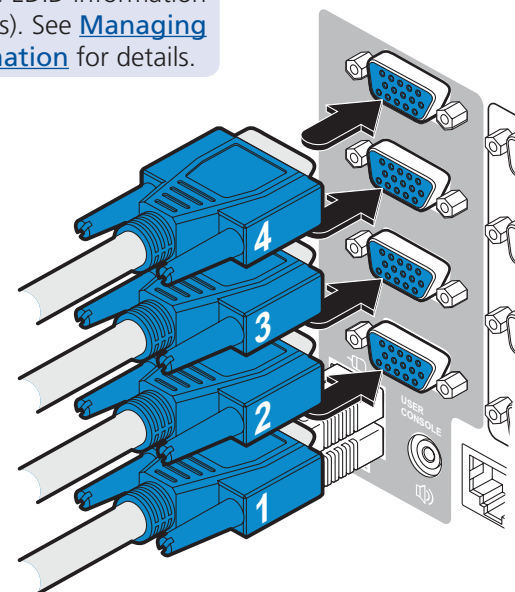


During initial power up, the AV4PRO-VGA unit will attempt to read the EDID information from the connected display(s). See [Managing EDID video display information](#) for details.

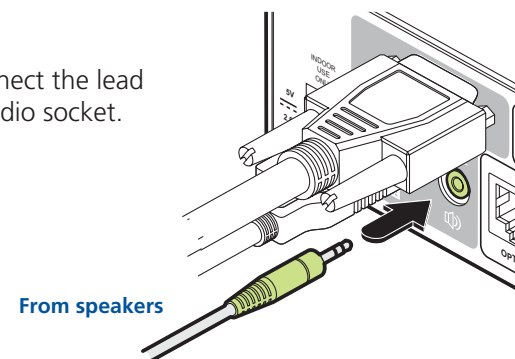
Multiscreen units: Attach the lead from each video monitor to a VGA connector of the user console area.

Note: On the rear panel of the unit, the connectors at each horizontal level (V1 to V4) will be switched through to the user console VGA connector which is at the same level.

From video monitors



- 5 **Audio:** Where required, connect the lead from your speakers to the audio socket.



连接

连接不必按照本指南中给出的顺序进行，但尽可能将电源连接作为最后一步。

用户控制台

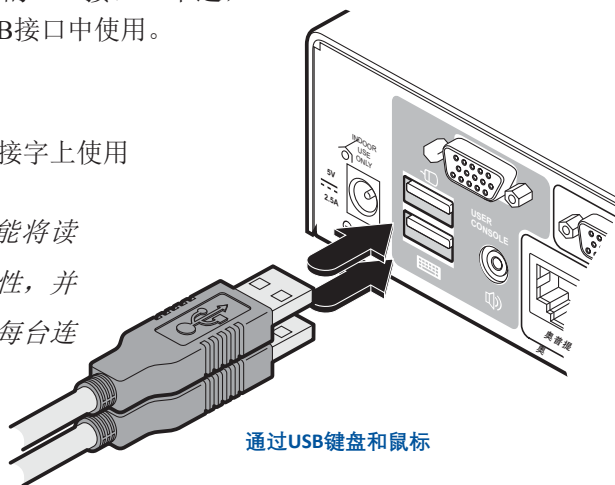
用户控制台的端口用于连接将在计算机系统间共享的外设。请确保已切断设备电源。

将外设连接至用户控制台

- 1 将外设置于设备附近，使其线缆易于触及。
- 2 **键盘和鼠标：**将USB键盘和鼠标的线缆连接到标有键盘和鼠标符号的USB接口。不过，键盘和鼠标可在任意USB接口中使用。

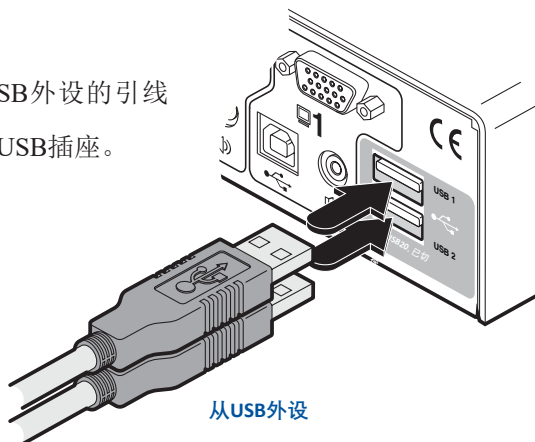
True Emulation无法在套接字上使用标有USB1或USB2的。

注：该设备的真模拟功能将读取键盘和鼠标的全部特性，并将这些特性同时呈现给每台连接的计算机。这确保了专业键盘和鼠标得到全面支持。



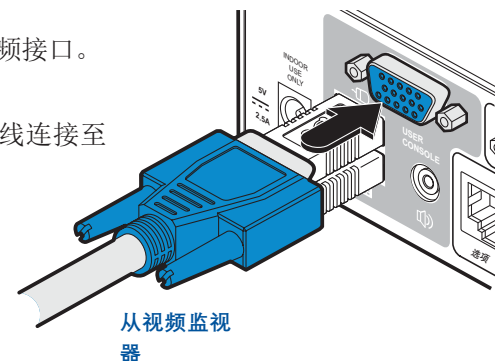
- 3 **USB设备：**在需要时，将USB外设的引线连接到标有USB1和USB2的USB插座。

注：这些插座提供 列举（透明）交换。



- 4 **视频监视器：**全程使用VGA视频接口。

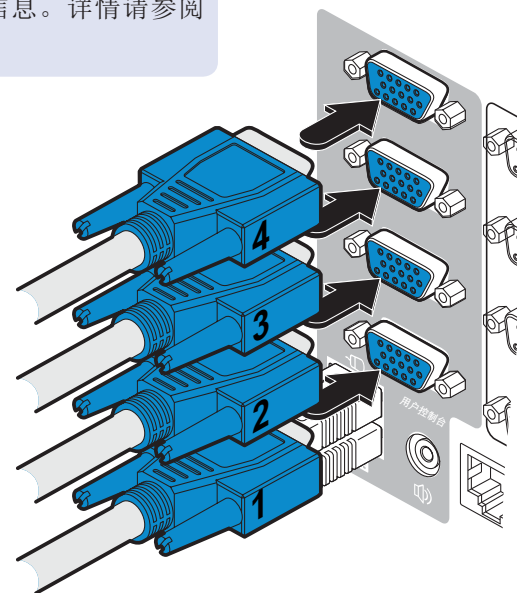
单屏设备：将视频监视器的导线连接至用户控制台区域的VGA接口。



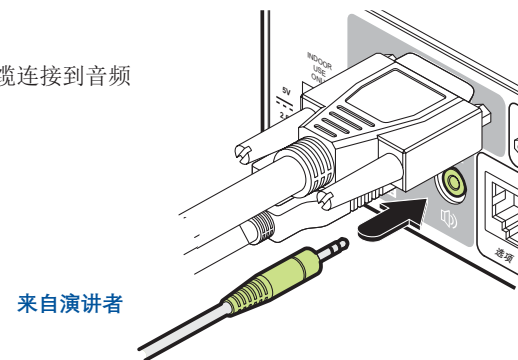
在初始上电时，AV4PRO-VGA单元将尝试从连接的显示器读取 EDID 信息。详情请参阅 [管理EDID 视频显示信息](#)。

多屏设备：将每个视频监视器的引线连接至用户控制台区域的VGA接口。

注：在设备后板上，各水平层（V1至V4）的连接器将切换至同一水平层的用户控制台VGA连接器。



- 5 **音频：**如有需要，将扬声器的线缆连接到音频插孔。



Computer systems

Each computer system is connected to the AV4PRO-VGA unit using up to three cables.

To connect a computer system

- 1 Ensure that power is disconnected from the AV4PRO-VGA unit and the system to be connected.
- 2 Use a USB cable (type-A to type-B) to link a USB port on the computer system to the USB port of the required channel on the rear of the unit.
- 3 If required, use a stereo audio link cable (3.5mm jacks at either end) to link the speaker port on the computer system to the audio port of the required channel on the rear of the unit.

From the USB port
on the computer

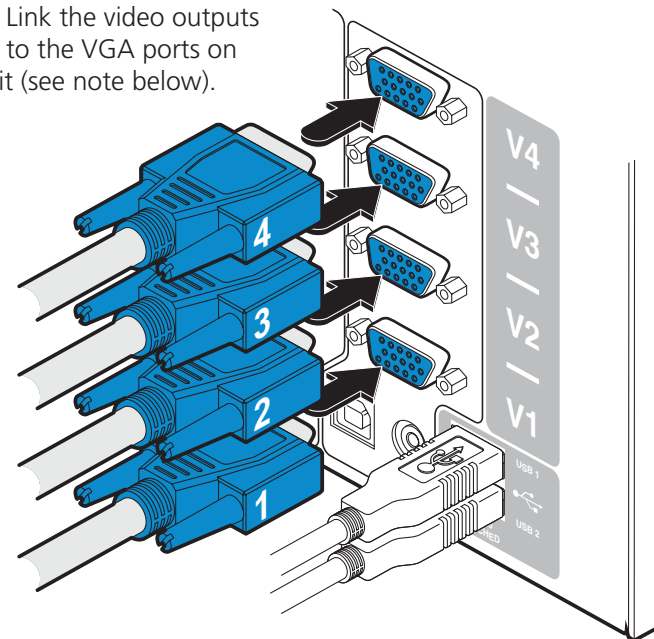
From the speaker port
on the computer

- 4 *Single screen units:* Link the video output of the computer's graphic port to the VGA port of the required channel on the rear of the unit.

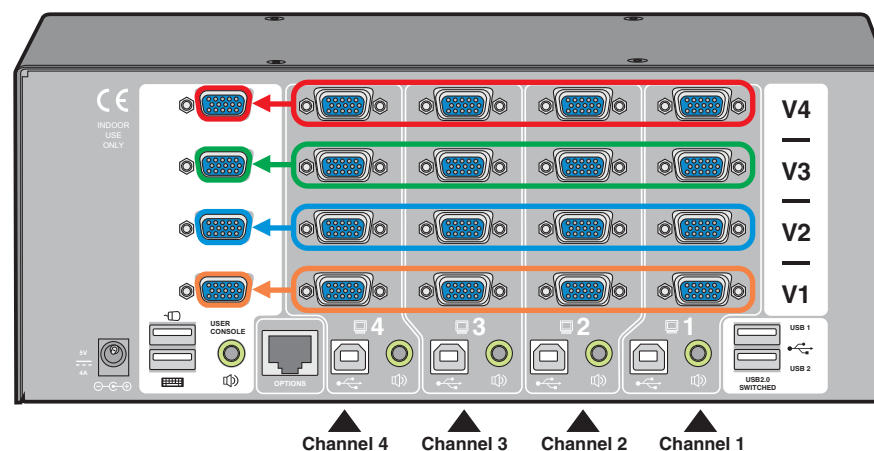
From the video port
on the computer

During initial power up, the AV4PRO-VGA unit will attempt to read the EDID information from the connected display(s). See [Managing EDID video display information](#) for details.

Multiscreen units: Link the video outputs of each computer to the VGA ports on the rear of the unit (see note below).



Note: On the rear panel of the unit, connectors belonging to the same channel are stacked vertically. The connectors at each horizontal level (V1 to V4) will be switched through to the user console VGA connector which is at the same level:



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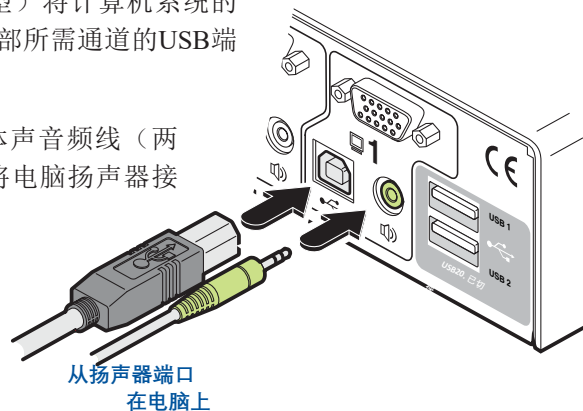
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计算机系统

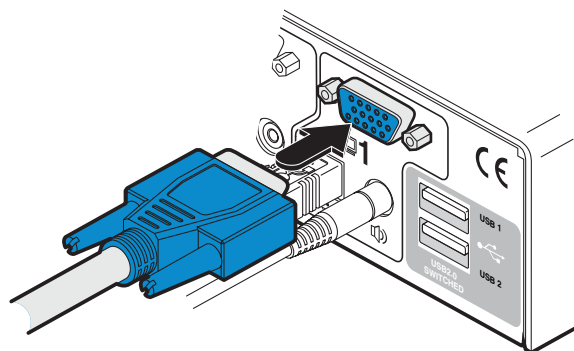
每套计算机系统最多通过三根电缆与AV4PRO-VGA单元相连。

连接计算机系统

- 1 确保AV4PRO-VGA设备与待连接系统断电。
- 2 使用USB线（A型转B型）将计算机系统的USB端口连接至设备后部所需通道的USB端口。
- 3 如需连接，可使用立体声音频线（两端均为3.5毫米插孔）将电脑扬声器接口接入。音频端口的系统所需信道装置后部

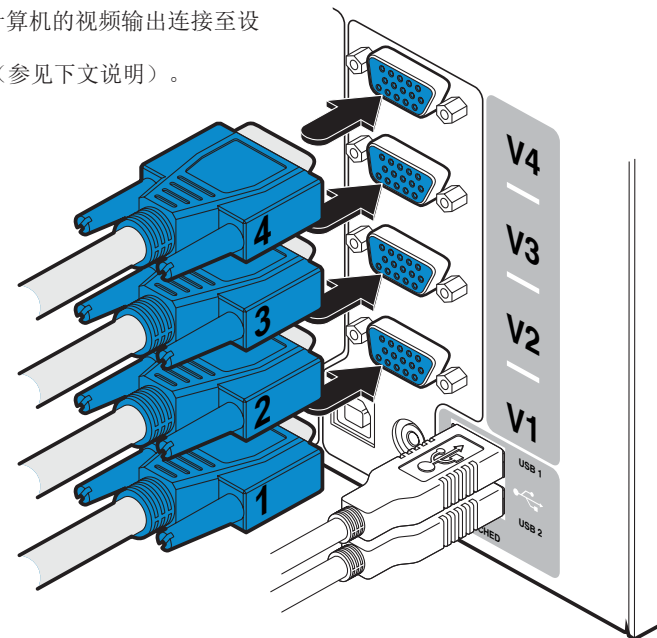


- 4 单屏设备：将计算机图形端口的视频输出连接至设备背面对应通道的VGA端口。

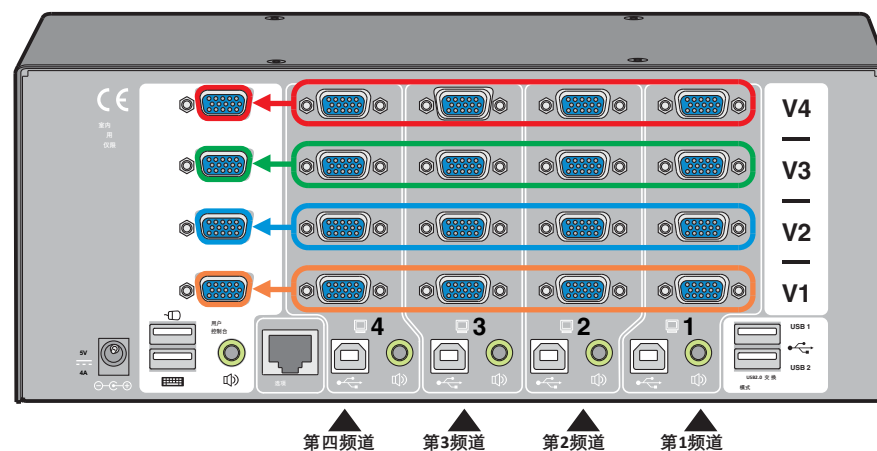


在初始上电时，AV4PRO-VGA单元将尝试从连接的显示器读取 EDID 信息。详情请参阅[管理EDID 视频显示信息](#)。

多屏设备：将每台计算机的视频输出连接至设备背面的VGA端口（参见下文说明）。



注：设备后板上，同通道的连接器呈垂直堆叠排列。各水平层（V1至V4）的连接器将切换至同层用户控制台的VGA连接器：

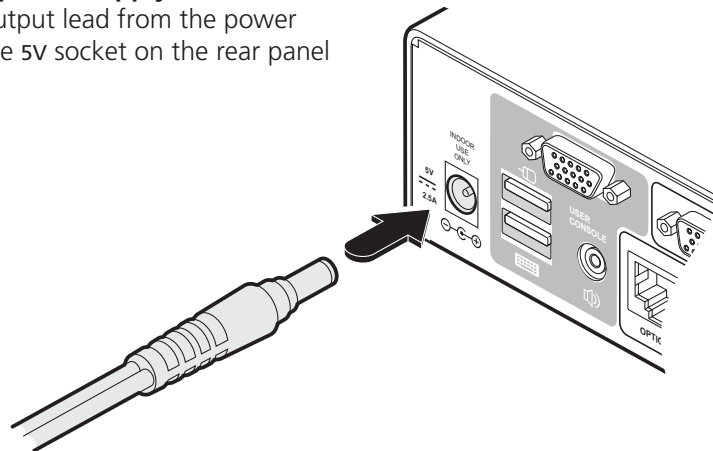


Power in connection

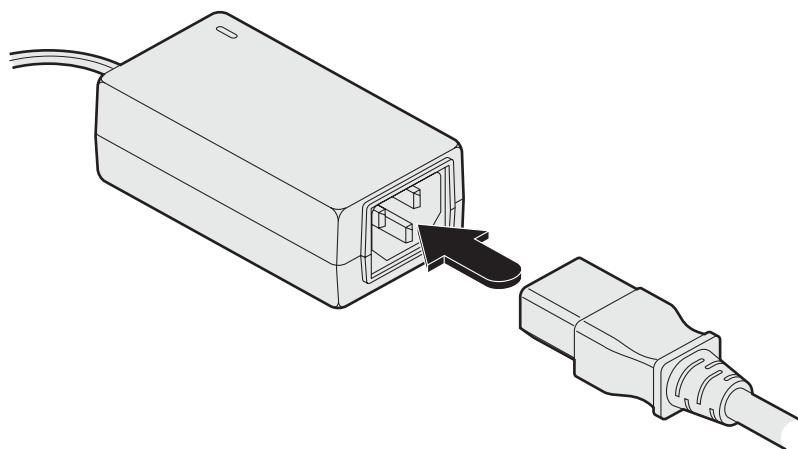
The AV4PRO-VGA unit is supplied with either a 12.5W (single screen version) or 20W (Multiscreen versions) power adapter. There is no on/off switch on the unit, so operation begins as soon as a power adapter is connected.

To connect the power supply

- 1 Attach the output lead from the power adapter to the 5V socket on the rear panel of the unit.



- 2 Connect the IEC connector of the supplied country-specific power lead to the socket of the power adapter.



- 3 Connect the power lead to a nearby main supply socket.

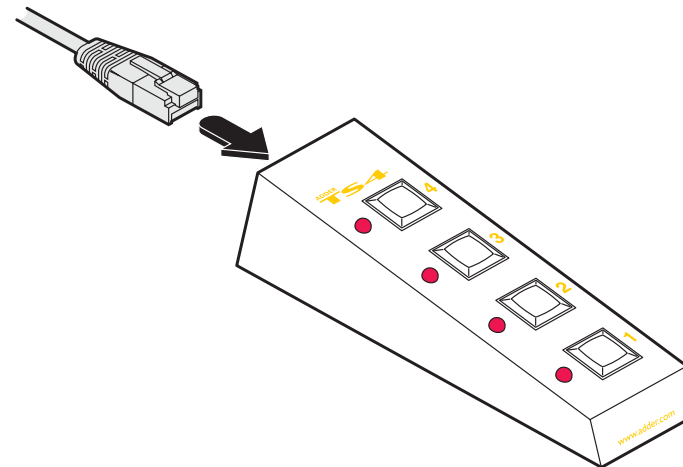
Note: Both the unit and its power supply generate heat when in operation and will become warm to the touch. Do not enclose them or place them in locations where air cannot circulate to cool the equipment. Do not operate the equipment in ambient temperatures exceeding 40 degrees Centigrade. Do not place the products in contact with equipment whose surface temperature exceeds 40 degrees Centigrade.

Optional RC4 remote control

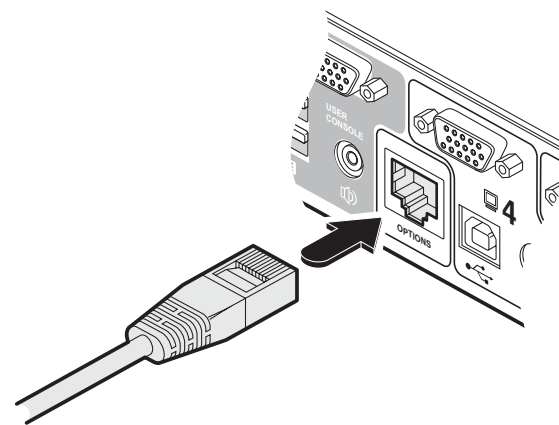
The optional RC4 remote control unit (full part number: RC4-8P8C) can be used to provide direct push button access to any channel from your desktop. The RC4 remote control is supplied with a 3 metre cable that is used to link with the OPTIONS port on the rear panel of the unit.

To connect the remote control

- 1 Connect either end of the supplied cable to the socket at the rear of the RC4 remote control.



- 2 Connect the other end of the cable to the OPTIONS port on the rear panel of the unit.



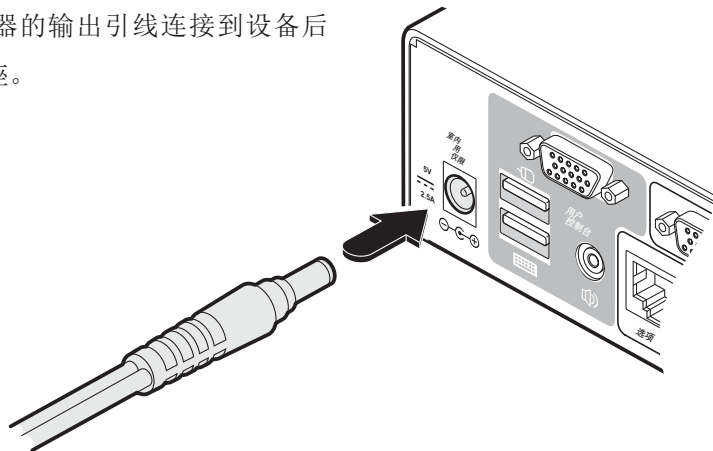
电源连接

AV4PRO-VGA设备配备12.5W（单屏版本）或20W（多屏版本）电源适配器。

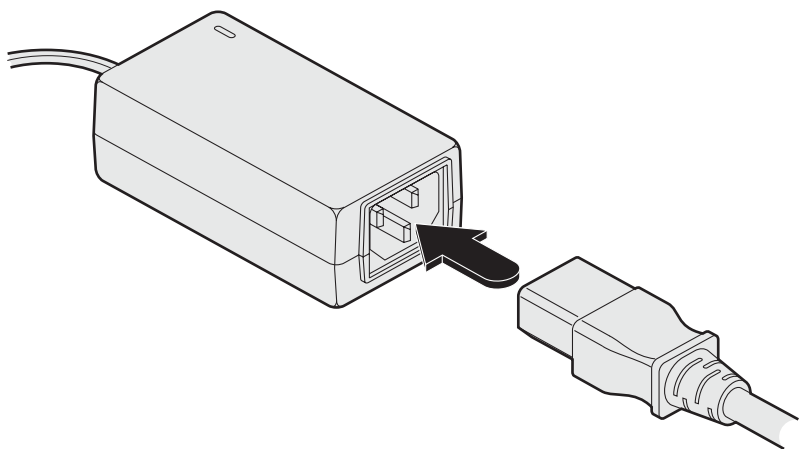
该设备无电源开关，连接电源适配器后即刻启动运行。

连接电源

- 1 将电源适配器的输出引线连接到设备后板上的5v插座。



- 2 将随附的国家专用电源线的IEC连接器接入电源适配器的插座。



- 3 将电源线连接至附近的主电源插座。

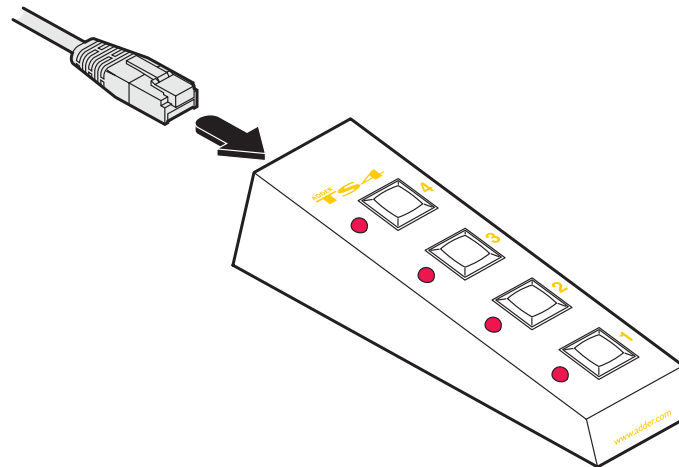
注意：设备及其电源在运行时均会产生热量，触摸时会感到温热。请勿将其封闭或置于空气无法流通以冷却设备的场所。环境温度超过40摄氏度时请勿操作设备。切勿将产品置于表面温度超过40摄氏度的设备接触处。

可选的 RC4 遥控器

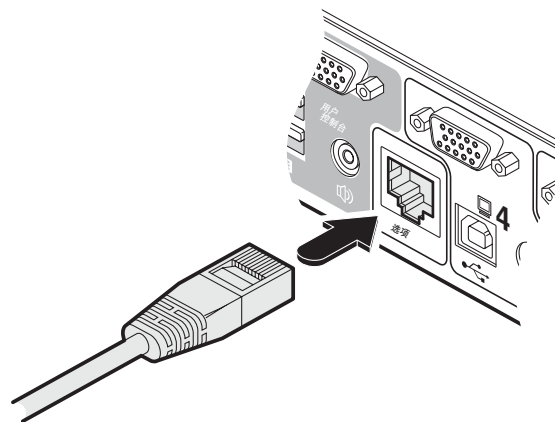
可选的 RC4 遥控单元（完整部件号：RC4-8P8C）可用于从您的桌面直接提供对任何通道的按钮访问。RC4 遥控器附带一根 3 米长的电缆，用于连接到该单元后面板上的选项端口。

连接遥控器

- 1 将提供的电缆两端分别连接至RC4遥控器后部的插座。



- 2 将电缆的另一端连接到设备后面板上的选项端口。



Channel switching by external control

The OPTIONS port featured on every AV4PRO-VGA allows external control of the current channel either by the optional RC4 controller, commands sent via RS-232 serial input or by switching one of the four channel select input lines. For more details about the necessary RS-232 serial cable, see [Appendix 2](#).

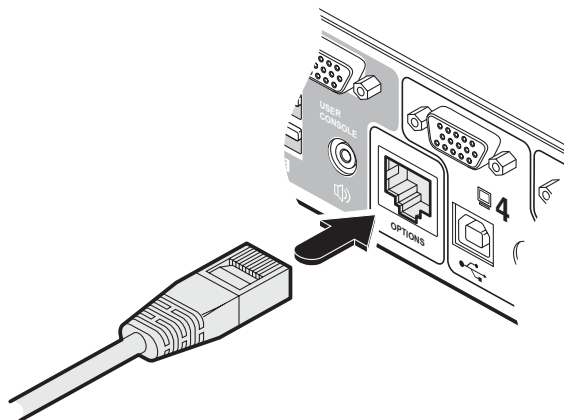
OPTIONS port pinout

The OPTIONS port can accept either 8p8c or 10p10c connectors, as required.

	8p8c	10p10c	Signal
1		1	Channel select input 1
2	1	2	5VDC power output (100mA max)
3	2	3	GND reference for all signals
4	3	4	RS232 (RXD) data receive
5	4	5	RS232 auxiliary data transmit (reserved)
6	5	6	RS232 auxiliary data receive (reserved)
7	6	7	RS232 (TXD) data transmit
8	7	8	Channel select input 2
9	8	9	Channel select input 3
10		10	Channel select input 4

To connect a computer or device for remote control

- 1 Insert the 8p8c or 10p10c connector of the cable to the OPTIONS port on the rear panel of the unit.



- 2 Connect the other end of the cable to a vacant serial port on the computer or to the output of the switching device.

Control by RS-232 serial

Where the external control is via RS-232 signal, ensure that the configuration menu option **[O]** is set to **[1]** or **[3]** to enable RS-232 control.

Serial port parameter settings

Ensure that the chosen serial port is configured to the following:

- Baud rate: To match setting of **[B]** option in the [Configuration menu](#)
- Data bits: 8
- Stop bit: 1
- Parity: None

Serial port channel selection codes

	ASCII Character	Hex	Decimal
• Channel 1:	'1'	0x31	49
• Channel 2:	'2'	0x32	50
• Channel 3:	'3'	0x33	51
• Channel 4:	'4'	0x34	52

Note: As each channel is chosen using the above RS-232 commands, the peripherals that will be transferred are determined by the current setting of the switching mode.

Control by channel select input lines

Where the external control is via the four channel select input lines of the OPTIONS port (see pin out opposite), ensure that the configuration menu option **[O]** is set to **[3]** to enable the input lines.

The four input lines are suitable for connection to dry contacts or open collector style outputs. Connecting an input line to GND will cause the AV4PRO-VGA to switch all of its functions to the selected channel:

- Channel 1: Channel select input **1** low
- Channel 2: Channel select input **2** low
- Channel 3: Channel select input **3** low
- Channel 4: Channel select input **4** low

If the input line is held low then all other switching requests by other means will be ignored until the line returns to a high (open) state.

If more than one logic input is low (closed) then the lower channel number takes priority.

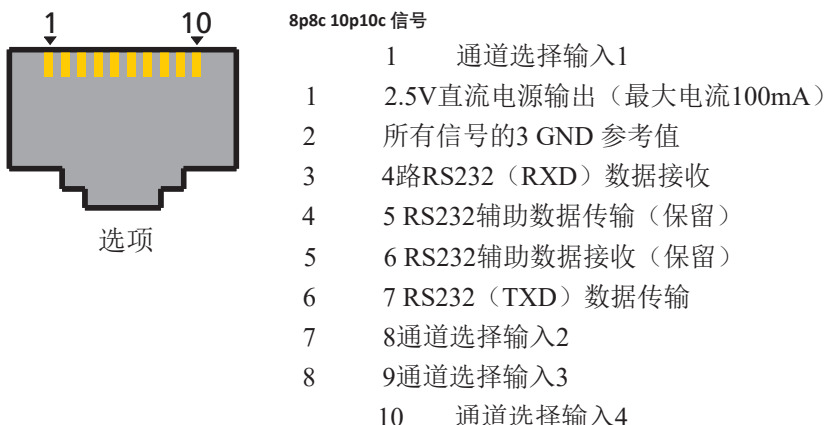
Note: The input lines have only limited protection against over voltage.

外部控制的信道切换

AV4PRO-VGA上的选项端口允许通过可选的RC4控制器、通过RS-232串行输入发送命令或通过切换四个通道选择输入线之一来对当前通道进行外部控制。有关必要的RS-232串行电缆的更多详细信息，请参阅[附录2](#)。

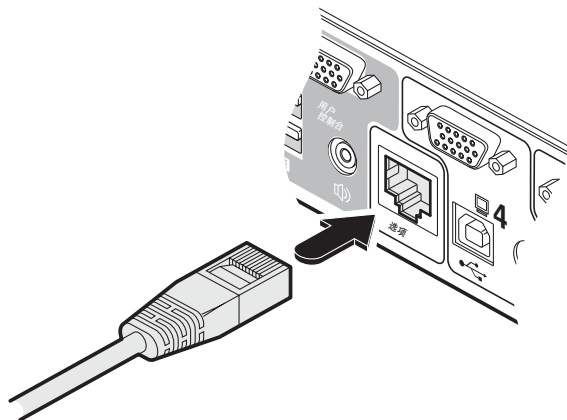
选项端口引脚

该选项端口可根据需求支持8针8引脚或10针10引脚连接器。



连接计算机或设备以进行远程控制

- 1 将电缆的8p8c或10p10c连接器插入设备后板上的选项端口。



- 2 将电缆另一端连接至计算机的空闲串行端口或交换设备的输出端。

RS-232串行控制

当外部控制通过RS-232信号实现时，需确保配置菜单选项[Q] 定于[1] 或[3] 以实现RS-232控制。

串行端口参数设置

确保所选串行端口配置如下：

- 波特率：需与设置值匹配[B] [配置菜单](#)中的选项
- 数据位：8
- 停止位：1
- 对称性：无

串行端口选择码

	美国信息交换标准代码		
	字符	施魔法于	十进位的
• 第1频道：	'1'	0x31	49
• 第2频道：	'2'	0x32	50
• 第3频道：	'3'	0x33	51
• 第4频道：	'4'	0x34	52

注：由于每个通道均通过上述RS-232命令进行选择，因此待传输的外设由当前切换模式的设置所决定。

通过通道选择输入线控制

当外部控制通过选项端口的四通道选择输入线实现时（参见对面引脚布局），请确保配置菜单选项[Q] 定于[3] 使输入线路启用。

这四条输入线可连接干触点或开集电极式输出。若将输入线连接至 GND，

AV4PRO-VGA将切换所有功能至所选通道：

- 通道1：通道选择输入1低
- 通道2：通道选择输入2低
- 通道3：通道选择输入3低
- 通道4：通道选择输入4低

若输入线路保持低电平，则所有其他方式的切换请求将被忽略，直至线路恢复至高电平（开路）状态。

若多个逻辑输入端处于低电平（闭合状态），则优先采用较低通道编号。

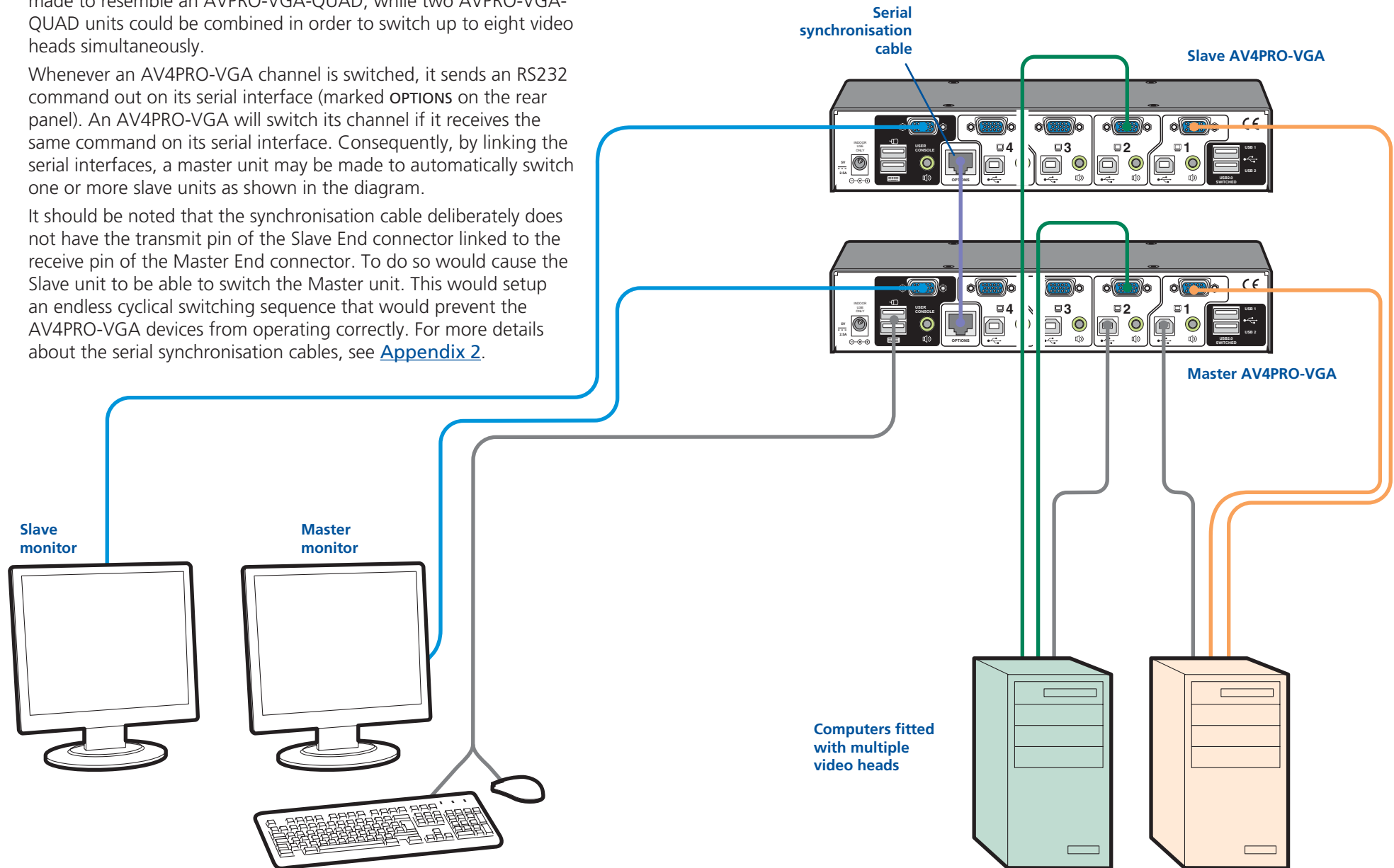
注：输入线路仅具有有限的过电压保护功能。

Synchronising multiple units

AV4PRO-VGA units can be connected together so that they operate in a synchronised manner. Thus, two AV4PRO-VGA units can be made to switch two video heads in a similar manner to an AVPRO-VGA-DUAL. Additionally, two AVPRO-VGA-DUAL units could be made to resemble an AVPRO-VGA-QUAD, while two AVPRO-VGA-QUAD units could be combined in order to switch up to eight video heads simultaneously.

Whenever an AV4PRO-VGA channel is switched, it sends an RS232 command out on its serial interface (marked **OPTIONS** on the rear panel). An AV4PRO-VGA will switch its channel if it receives the same command on its serial interface. Consequently, by linking the serial interfaces, a master unit may be made to automatically switch one or more slave units as shown in the diagram.

It should be noted that the synchronisation cable deliberately does not have the transmit pin of the Slave End connector linked to the receive pin of the Master End connector. To do so would cause the Slave unit to be able to switch the Master unit. This would setup an endless cyclical switching sequence that would prevent the AV4PRO-VGA devices from operating correctly. For more details about the serial synchronisation cables, see [Appendix 2](#).

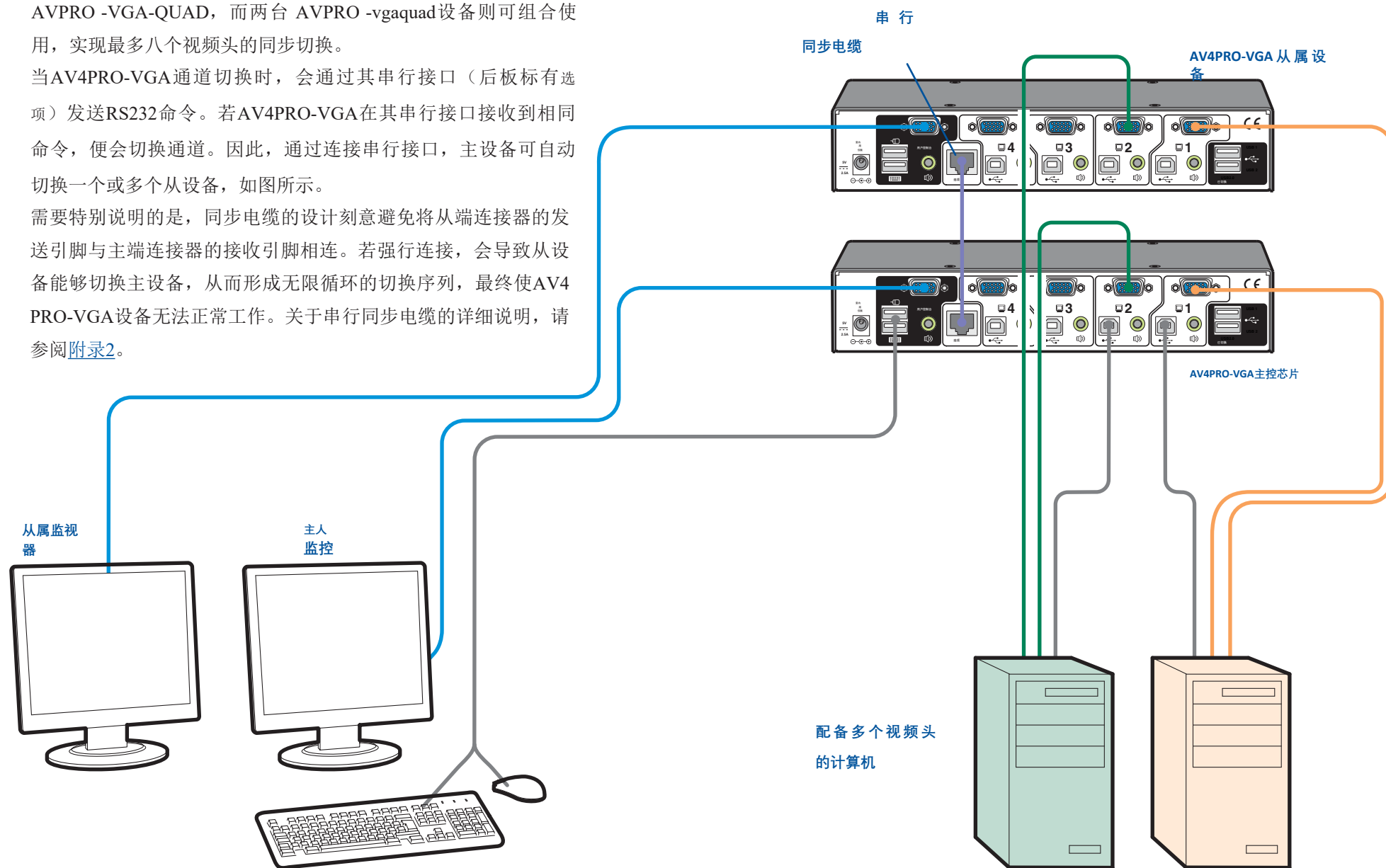


多单元同步

AV4PRO-VGA设备可相互连接实现同步操作。因此，两台AV4PRO-VGA设备可协同切换两个视频头，其工作方式与avprovga-DUAL类似。此外，两台AVPRO-VGA-DUAL设备可组合成AVPRO-VGA-QUAD，而两台AVPRO-vgaquad设备则可组合使用，实现最多八个视频头的同步切换。

当AV4PRO-VGA通道切换时，会通过其串行接口（后板标有选项）发送RS232命令。若AV4PRO-VGA在其串行接口接收到相同命令，便会切换通道。因此，通过连接串行接口，主设备可自动切换一个或多个从设备，如图所示。

需要特别说明的是，同步电缆的设计刻意避免将从端连接器的发送引脚与主端连接器的接收引脚相连。若强行连接，会导致从设备能够切换主设备，从而形成无限循环的切换序列，最终使AV4PRO-VGA设备无法正常工作。关于串行同步电缆的详细说明，请参阅[附录2](#)。

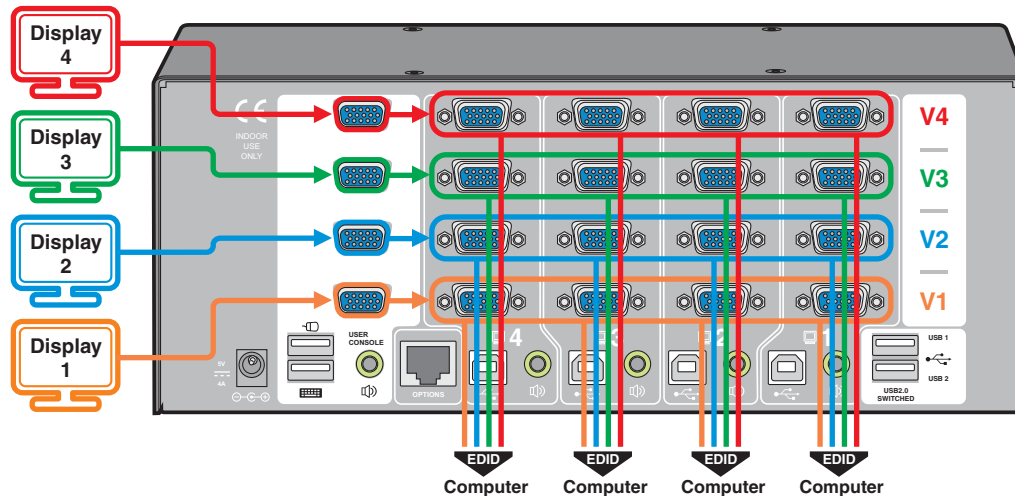


Managing EDID video display information

Whenever a AV4PRO-VGA unit is powered on (or when the option **F2** is selected from the [configuration](#) menu), it will interrogate the connected monitor(s) to determine whether EDID (Extended Display Identification Data) information is available. If EDID information is available, it will be copied and used; otherwise a default set of data, stored within the AV4PRO-VGA, will be substituted. You can also optionally choose to prevent the unit from seeking new EDID information and instead rely only on stored data.

EDID Emulation

The AV4PRO-VGA units use our *EDID Emulation* feature to ensure that the collected EDID information (up to two pages) is correctly supplied to every connected computer, whether it is currently selected or not:



Refreshing EDID information during use

You can refresh the EDID information from the connected monitor(s) without the need to power cycle the AV4PRO-VGA.

To refresh EDID information during use

- 1 Enter the [Configuration](#) menu.
- 2 Press **F** to enter the **Functions** menu
- 3 Press **2** and then **Enter**.
- 4 Press **E** and then **Enter** to exit the menu.

Using stored EDID information only

You can choose to prevent the unit from interrogating the video display(s) during startup. When you invoke this option, the unit will only use the EDID information that it has already stored and pass this on to the connected computers. To revert to interrogating the video display, use the F 2 function discussed above.

To use the stored EDID information at the power up

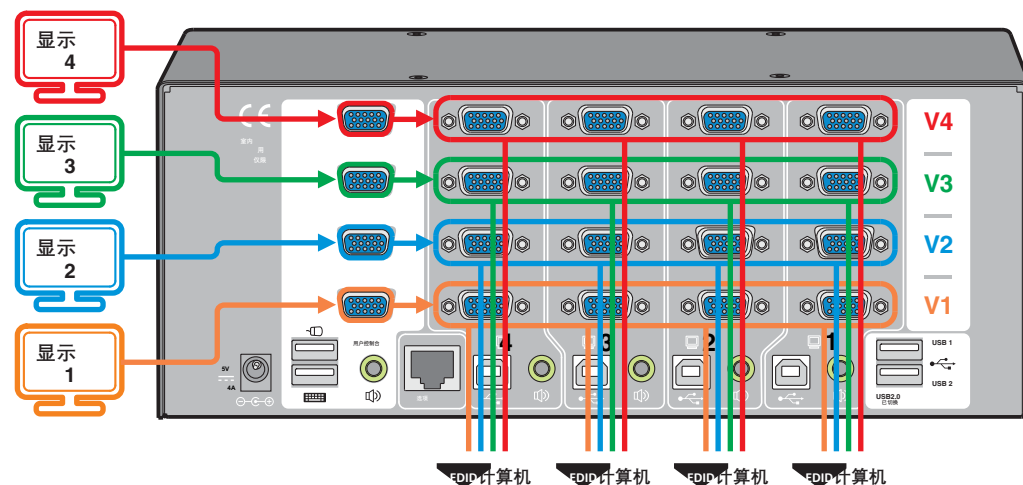
- 1 Enter the [Configuration](#) menu.
- 2 Press **F** to enter the **Functions** menu
- 3 Press **3** and then **Enter**.
- 4 Press **E** and then **Enter** to exit the menu.

管理 EDID 视频显示信息

每当AV4PRO-VGA设备通电时（或当该选项**F**回从**配置**菜单中选择后，将查询连接的显示器以确定是否可用 EDID（扩展显示识别数据）信息。如果可用，将复制并使用该信息；否则，将用AV4PRO-VGA中存储的默认数据集替代。您还可以选择阻止设备搜索新的 EDID 信息，而仅依赖存储的数据。

EDID 模拟

AV4PRO-VGA设备采用我们的EDID 模拟功能，确保收集的 EDID 信息（最多两页）能准确传输至所有连接的计算机，无论这些计算机当前是否处于选中状态。



使用期间刷新 EDID 信息

无需重启AV4PRO-VGA，即可从已连接的显示器刷新 EDID 信息。

在使用过程中刷新 EDID 信息

- 1 进入**配置**菜单。
- 2 按压**F** 进入**功能**菜单
- 3 按压**2** 于是**Enter**。
- 4 按压**E** 于是**Enter** 退出菜单。

仅使用存储的 EDID 信息

可选择在启动时禁止设备查询视频显示。启用此选项后，设备仅使用已存储的 EDID 信息，并将这些信息传递给连接的计算机。如需恢复查询视频显示功能，请使用前文所述的F2功能。

上电时使用存储的 EDID 信息

- 1 进入**配置**菜单。
- 2 按压**F** 进入**功能**菜单
- 3 按压**3** 于是**Enter**。
- 4 按压**E** 于是**Enter** 退出菜单。

Configuration

Using the configuration menu

The configuration mode allows you to determine numerous aspects of the AV4PRO-VGA unit capabilities.

To use the configuration menu

During normal use, the seven segment display on the front panel shows the number of the currently selected computer channel. From this condition, enter configuration mode as follows:

- 1 Press and hold the front panel **COMPUTER** button for roughly five seconds.

The display will show: **[**

- 2 On the keyboard, press the letter key for the required menu section, e.g. **[S]**

The display will show the pressed letter, e.g. **5**

- 3 Press the number of the required setting, e.g. **[4]**

The display will show the pressed number, e.g. **4**

- 4 Press **[Enter]** to accept the setting and return to the main menu section.

The display will show: **[**

- 5 You can now continue with your next configuration change (go to step 2), or exit from the configuration menu (see below).

To exit the configuration menu and save changes

- Press **[E]** and then press **[Enter]** to exit and save changes.

To exit the configuration menu without saving

- Press either of the front panel buttons.

- [B]** Enter the **OPTIONS** port **Baud rate** menu

- | | |
|---------------------------|-------------------|
| [1] 1200 (default) | [5] 38400 |
| [2] 2400 | [6] 57600 |
| [3] 9600 | [7] 115200 |
| [4] 19200 | |

You can press **[Esc]** at any point to exit from an option and return to the main menu (**[**) section.

- [F]** Enter the **Functions** menu

- | |
|---|
| [1] Show current firmware version |
| [2] Refresh EDID information from the connected video display (default) |
| [3] Use the stored EDID at startup, do not interrogate the video display |
| [8] Reset configuration to factory defaults ([r] is displayed momentarily) |

- [H]** Enter the **Hotkey** menu

- | | |
|---------------------------------|-----------------------------|
| [1] Ctrl + Alt (default) | [5] Alt |
| [2] Ctrl + Shift | [6] Left Ctrl + Alt |
| [3] Alt + Shift | [7] Right Ctrl + Alt |
| [4] Right Alt | [8] Hotkeys disabled |

- [O]** Enter the **Options port** behaviour menu

- | |
|--|
| [1] Channel switching via RS-232 serial control (using the baud rate set by the 'B' option). Contact switching via the Options port disabled. (d) |
| [2] Channel switching via RC4 remote. Contact switching disabled. |
| [3] As per [1] but with contact switching enabled. |

- [P]** Set a new password for use with the lock mode

- [S]** Enter the **Switch Mode** menu

- | |
|--------------------------|
| [1] All (default) |
| [2] KVM + Speaker |
| [3] KVM only |
| [4] Speaker only |
| [5] USB1 only |
| [6] USB2 only |

(default) or (d) denote the default settings for each group of options.

- [T]** Enter the **Autoscan Time Delay** menu

- | | |
|--------------------------------|-----------------------|
| [1] Autoscan disabled | [5] 15 seconds |
| [2] 2 seconds | [6] 30 seconds |
| [3] 5 seconds (default) | [7] 1 minute |
| [4] 7 seconds | [8] 5 minutes |

- [U]** Enter the **User Preferences** menu

- | |
|--|
| [1] Enable mouse switching (default) |
| [2] Disable mouse switching |
| [7] Cycle all ports (when using 'Hotkey + Tab' or 'Autoscan') (default) |
| [8] Cycle only active ports (when using 'Hotkey + Tab' or 'Autoscan') |



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使用配置菜单

该配置模式可帮助您全面评估AV4PRO-VGA设备的各项功能特性。

使用配置菜单

正常使用时，前面板的七段显示屏会显示当前选定计算机通道的编号。根据该状态，按以下步骤进入配置模式：

- 1 按住前面板计算机按钮约 5 秒钟。显示屏将显示：**[5]**
- 2 在键盘上，按下对应菜单部分的字母键，例如。**[S]** 显示屏将显示所按的字母，例如。**[4]**
- 3 按下所需设置的编号，例如。**[4]** 显示屏将显示所按数字，例如。**[4]**
- 4 按压**[Enter]** 接受设置并返回主菜单界面。显示屏将显示：**[]**
- 5 您现在可继续进行下一项配置更改（转至步骤2），或退出配置菜单（详见下文）。

退出配置菜单并保存更改

- 按压**[E]** 然后按**[Enter]** 退出并保存更改。

退出配置菜单而不保存

- 按下前面板上的任一按钮。

[B] 输入选项端口**波特率**菜单1200 (默认) 38400
[1] 2400 **[5]** 57600
[2] 9600 **[6]** 115200
[3] 19200 **[7]**
[4]

您可随时点击**[Esc]** 位置退出选项，返回主菜单 () 部分。 **[]**

[F] 进入**功能**菜单显示当前固件版本
[1] 从连接的视频显示器刷新 EDID 信息 (默认) 在启动时使用存储的 EDID，不要询问视频显示器重置配置为出厂默认值 (会短暂显示)
[2]
[3]
[8]

[H] 进入**快捷键**菜单
[1] Ctrl + Alt (默认) **[5]** 音
[2] Ctrl + Shift 左 Ctrl **[6]** Alt
[3] Alt + Shift **[7]** Ctrl + Alt
[4] 右 Alt **[8]** 热键已禁用

[O] 进入**选项端口**行为菜单
[1] 通过RS-232串行控制进行通道切换 (使用 'B' 选项设置的波特率)。通过选项端口进行的触点切换已禁用。^(d)通过RC4远程进行的通道切换。触点切换已禁用。
[2] 换已禁用。
[3] 根据但**[T]**启用接触切换。

[P] 为锁定模式设置新密码

[S] 进入**切换模式**菜单 "全部"
[1] (默认)
[2] KVM + 演讲者
[3] 仅限 KVM
[4] 仅限发言人
[5] 仅支持USB1
[6] 仅支持USB2

[T] 进入**自动扫描时间延迟**菜单，自动扫描已禁用
[1] 15秒 **[5]**
[2] 2秒 30秒 **[6]**
[3] 5秒 (默认) 1分钟 **[7]**
[4] 7秒 5分钟 **[8]**

[U] 进入**用户首选项**菜单 启用鼠标切换
[1] 换 (默认) 禁用鼠标切换
[2] 循环所有端口 (使用 "热键+Tab" 或 "自动扫描" 时) (默认) 仅循环活动端口 (使用 "热键+Tab" 或 "自动扫描" 时)
[3]
[4]
[5]
[6]
[7]
[8]

(默认) 或 (d) 表示各选项组的默认设置。



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General configuration

Changing hotkeys

AV4PRO-VGA units use **Ctrl** and **Alt** as their standard hotkeys. These can be changed if they clash with other software or hardware within the installation.

To change the hotkeys

- 1 Enter the [Configuration](#) menu.
- 2 Press **H** to enter the **Hotkey** menu and then press either:
 - 1** to choose **Ctrl + Alt**
 - 2** to choose **Ctrl + Shift**
 - 3** to choose **Alt + Shift**
 - 4** to choose **Right Alt**
 - 5** to choose **Alt**
 - 6** to choose **Left Ctrl + Alt**
 - 7** to choose **Right Ctrl + Alt**
 - 8** to disable the Hotkeys
- 3 Press **Enter** to accept the setting and return to the main menu section.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

Mouse switching

You can enable or disable mouse switching to suit your installation requirements.

To enable/disable mouse switching

- 1 Enter the [Configuration](#) menu.
- 2 Press **U** to enter the **User Preferences** menu and then press either:
 - 1** to **Enable mouse switching**
 - 2** to **Disable mouse switching**
- 3 Press **Enter** to accept the setting and return to the main menu section.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

OPTIONS port speed

You can change the speed of the OPTIONS serial port.

To change the OPTIONS port speed

- 1 Enter the [Configuration](#) menu.
- 2 Press **B** to enter the **Baud rate** menu and then press either:
 - 1** to choose **1200**
 - 2** to choose **2400**
 - 3** to choose **9600**
 - 4** to choose **19200**
 - 5** to choose **38400**
 - 6** to choose **57600**
 - 7** to choose **115200**
- 3 Press **Enter** to accept the setting and return to the main menu section.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

OPTIONS port channel control behaviour

You can determine how the OPTIONS port responds to channel control inputs.

To define the OPTIONS port behaviour

- 1 Enter the [Configuration](#) menu.
- 2 Press **O** to enter the **Options port** menu and then press either:
 - 1** to allow channel switching commands to be received via RS-232 serial signal through the OPTIONS port (see [Appendix 2](#) for cable pin-out details and [Channel switching by external control](#) for command details). The baud rate currently set by the **B** option will be used for the port. Switching commands via the four channel select inputs within the OPTIONS port connector are disabled in this mode. Use option **3** if you wish to enable the channel select inputs in addition to RS-232 control.
 - 2** to allow channel switching commands to be received from the optional RC4 remote control (see [Optional RC4 control](#) for connection details). The baud rate set by the **B** option is ignored and the rate used by the RC4 is automatically imposed. Switching commands via the four channel select inputs within the OPTIONS port connector are disabled in this mode.
 - 3** enables channel switching via RS-232 as per option **1**. However, in this mode the four channel select inputs are also enabled.
- 3 Press **Enter** to accept the setting and return to the main menu section.
- 4 Press **E** and then **Enter** to exit the menu and save changes.



continued

一般配置

更改快捷键

AV4PRO-VGA设备使用说明 $\boxed{\text{Ctrl}}$ 和 $\boxed{\text{Alt}}$ 作为它们的标准热键。若与安装中的其他软件或硬件冲突，可进行更改。

更改热键

- 1 进入配置菜单。
- 2 按压 $\boxed{\text{H}}$ 进入快捷键菜单，然后按以下任一键： $\boxed{1}$ 选择 $\boxed{\text{Ctrl}} + \boxed{\text{Alt}} \boxed{5}$ 选择 $\boxed{\text{Alt}}$
 $\boxed{2}$ 选择 $\boxed{\text{Ctrl}} + \boxed{\text{Shift}} \boxed{6}$ 选择左 $\boxed{\text{Ctrl}} + \boxed{\text{Alt}}$
 $\boxed{3}$ 选择 $\boxed{\text{Alt}} + \boxed{\text{Shift}} \boxed{7}$ 选择右键 $\boxed{\text{Ctrl}} + \boxed{\text{Alt}}$
 $\boxed{4}$ 选择右 $\boxed{\text{Alt}}$ 回 禁用热键
- 3 按压 $\boxed{\text{Enter}}$ 接受设置并返回主菜单界面。
- 4 按压 $\boxed{\text{E}}$ 于是 $\boxed{\text{Enter}}$ 退出菜单并保存修改内容。

鼠标切换

根据安装需求，可自由启用或禁用鼠标切换功能。

启用/禁用鼠标切换

- 1 进入配置菜单。
- 2 按压 $\boxed{\text{U}}$ 进入用户偏好设置菜单，然后按以下任一键： $\boxed{1}$ 启用鼠标切换
 $\boxed{2}$ 到禁用鼠标切换
- 3 按压 $\boxed{\text{Enter}}$ 接受设置并返回主菜单界面。
- 4 按压 $\boxed{\text{E}}$ 于是 $\boxed{\text{Enter}}$ 退出菜单并保存修改内容。

选项端口速度

可调节选项串行端口的传输速率。

更改选项端口速度

- 1 进入配置菜单。
- 2 按回键进入波特率菜单，然后按以下任一键： $\boxed{1}$ 选择1200
回 选择38400
 $\boxed{2}$ 选择2400 $\boxed{6}$ 选择57600
回 选择9600 $\boxed{7}$ 选择115200
回 选择19200
- 3 按压 $\boxed{\text{Enter}}$ 接受设置并返回主菜单界面。
- 4 按压 $\boxed{\text{E}}$ 于是 $\boxed{\text{Enter}}$ 退出菜单并保存修改内容。

选项端口通道控制行为

可检测选项端口对通道控制输入的响应特性。

定义选项端口行为

- 1 进入配置菜单。
- 2 按压 $\boxed{\text{O}}$ 进入选项端口菜单，然后按以下任一键：
 $\boxed{1}$ 允许通过选项端口的RS-232串行信号接收通道切换命令（电缆引脚配置详见附录2，命令说明参见外部控制通道切换）。该端口将采用回选项当前设定的波特率。此模式下，选项端口连接器内的四个通道选择输入端的切换命令功能将被禁用。若需在RS-232控制外启用通道选择输入端，请启用选项回。
 $\boxed{2}$ 允许接收来自可选RC4遥控器的频道切换指令（连接详情参见可选RC4控制）。回选项设置的波特率将被忽略，RC4自动采用其设定速率。在此模式下，选项端口连接器的四个频道选择输入端的切换指令将被禁用。
 $\boxed{3}$ 支持通过RS-232接口实现通道切换功能（按选项配置） $\boxed{1}$ 然而，在此模式下，四个通道选择输入端口亦被启用。
- 3 按压 $\boxed{\text{Enter}}$ 接受设置并返回主菜单界面。
- 4 按压 $\boxed{\text{E}}$ 于是 $\boxed{\text{Enter}}$ 退出菜单并保存修改内容。

继续的

Switching mode

Using the configuration menu, you can define a default switching mode. The switching mode determines which peripherals (KVM, USB1, USB2 and/or speakers) should be moved to the next computer when it is selected using any of the standard methods. Regardless of the default switching mode set here, during use you can always change the mode using either the MODE button (on the front panel) or using the additional hotkey press combinations.

Note: Of the external switching methods, the RC4 remote and the RS-232 serial signal inputs will switch the peripherals as defined by the currently selected switching mode. However, switching control initiated by the channel select input lines will always switch all of the peripherals to the chosen channel regardless of the switching mode.

To set the default switching mode

- 1 Enter the [Configuration](#) menu.
- 2 Press **[S]** to enter the **Switch Mode** menu and then press either:
 - [1]** to select **All** (default)
 - [2]** to select **KVM and speaker**
 - [3]** to select **KVM only**
 - [4]** to select **Speaker only**
 - [5]** to select **USB1 only**
 - [6]** to select **USB2 only**
- 3 Press **[Enter]** to accept the setting and return to the main menu section.
- 4 Press **[E]** and then **[Enter]** to exit the menu and save changes.

Miscellaneous functions

To refresh EDID information from the monitor

- 1 Enter the [Configuration](#) menu.
- 2 Press **[F]** to enter the **Functions** menu
- 3 Press **[2]** and then **[Enter]**.
- 4 Press **[E]** and then **[Enter]** to exit the menu and save changes.

To use the stored EDID information at the power up

When you engage this mode, the unit will not interrogate the video display during startup and will instead use the data that are stored. To revert to interrogating the video display, use the F 2 function discussed above.

- 1 Enter the [Configuration](#) menu.
- 2 Press **[F]** to enter the **Functions** menu
- 3 Press **[3]** and then **[Enter]**.
- 4 Press **[E]** and then **[Enter]** to exit the menu and save changes.

To reset configuration to factory defaults

- 1 Enter the [Configuration](#) menu.
- 2 Press **[F]** to enter the **Functions** menu
- 3 Press **[8]** and then **[Enter]**. The display will show **r** momentarily.
- 4 Press **[E]** and then **[Enter]** to exit the menu and save changes.

To show the current firmware version

- 1 Enter the [Configuration](#) menu.
- 2 Press **[F]** to enter the **Functions** menu
- 3 Press **[1]** and then **[Enter]**.

The display will blank for a short while and then the major number of the firmware revision will be shown. The display will blank again and then show the first digit of the minor number. Following another blank, the second digit of the minor number will be displayed. e.g. <blank> 1 <blank> 0 <blank> 2 <blank> equals v1.02
- 4 Press **[E]** and then **[Enter]** to exit the menu and save changes.

To set a new password

- 1 Enter the [Configuration](#) menu.
- 2 Press **[P]** and then **[Enter]**. The display will show **:**
- 3 Enter a new password and then **[Enter]**. See [To lock access to the computers](#).
- 4 Press **[E]** and then **[Enter]** to exit the menu and save changes.



切换模式

通过配置菜单，可设置默认切换模式。

切换模式决定当通过任一标准方法选择下一台计算机时，哪些外设（KVM、USB1、USB2和/或扬声器）应被移至该计算机。无论此处设置的默认切换模式如何，在使用过程中，您始终可通过前面板上的MODE按钮或附加热键组合来切换模式。

注：在外部切换方式中，RC4遥控器和RS-232串行信号输入将根据当前选定的切换模式切换外设。但由通道选择输入线触发的切换控制，无论切换模式如何，都会将所有外设切换至所选通道。

设置默认切换模式

- 1 进入配置菜单。
- 2 按压[S] 进入切换模式菜单，然后按以下任一键：**1** 选择全部

（默认）

2 选择KVM 和说话人

3 选择仅 KVM

4 仅选择说话人

回 选择USB1

6 选择USB2 仅

- 3 按压[Enter] 接受设置并返回主菜单界面。
- 4 按压[E] 于是[Enter] 退出菜单并保存修改内容。

杂项功能

刷新显示器上的 EDID 信息

- 1 进入配置菜单。
- 2 按压[F] 进入功能菜单
- 3 按压**2** 于是[Enter].
- 4 按压[E] 于是[Enter] 退出菜单并保存修改内容。

上电时使用存储的 EDID 信息

启用该模式时，设备在启动过程中将不再询问视频显示内容，而是使用已存储的数据。如需恢复询问视频显示功能，请使用上述讨论的F2功能。

- 1 进入配置菜单。
- 2 按压[F] 进入功能菜单
- 3 按回 键，然后[Enter].
- 4 按压[E] 于是[Enter] 退出菜单并保存修改内容。

将配置重置为出厂默认值

- 1 进入配置菜单。
- 2 按压[F] 进入功能菜单
- 3 按回 键，然后[Enter] 显示屏将显示 **r** 顷刻之间
- 4 按压[E] 于是[Enter] 退出菜单并保存修改内容。

显示当前固件版本

- 1 进入配置菜单。
- 2 按压[F] 进入功能菜单
- 3 按压**1** 于是[Enter].
显示屏将短暂空白，然后显示固件版本号的主数字。显示屏将再次空白，然后显示小数的第一位数字。再次空白后，将显示小数的第二位数字。例如，<空白> 1 <blank> 0 <blank> 2 <blank> 等于v1.02
- 4 按压[E] 于是[Enter] 退出菜单并保存修改内容。

设置新密码

- 1 进入配置菜单。
- 2 按回 键，然后[Enter] 显示屏将显示 **2**
- 3 输入新密码，然后[Enter]. 请参阅[锁定对计算机的访问](#)。
- 4 按压[E] 于是[Enter] 退出菜单并保存修改内容。



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Performing upgrades

The AV4PRO-VGA unit is fully upgradeable via flash upgrade. Such upgrades require a Windows-based computer system to be linked via the **OPTIONS** port.

Items required to perform an upgrade

- Optional upgrade cable (see [Appendix 2](#) for pin-out specifications).
- A Windows-based upgrade computer with an RS232 serial port.
- The latest version of the KVM Firmware Uploader and firmware files for the AV4PRO-VGA unit - available from the *Technical Support > Updates* section of the Adder Technology website (www.adder.com).

To use the KVM Firmware Uploader utility

1 - Obtain and run the KVM Firmware Uploader.

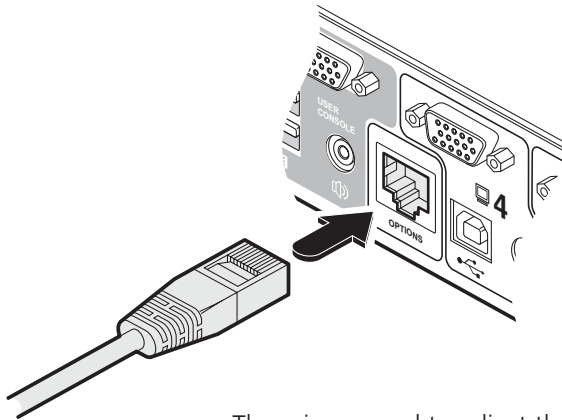
Download the latest AV4PRO-VGA unit KVM Firmware Uploader from the Adder Technology website and install it on a Windows-based upgrade computer that will be connected to the AV4PRO-VGA unit. The files are supplied as a compressed ZIP file. Decompress the ZIP file with an appropriate tool such as WinZip (www.winzip.com) and copy all contained files to the same folder on the upgrade computer.

2 - Power off the AV4PRO-VGA unit

Remove the power supply plug from the rear panel of the unit.

3 - Connect the upgrade computer to the AV4PRO-VGA unit

Connect the serial port of the upgrade computer to the **OPTIONS** port on the rear panel of the unit using the optional upgrade cable.



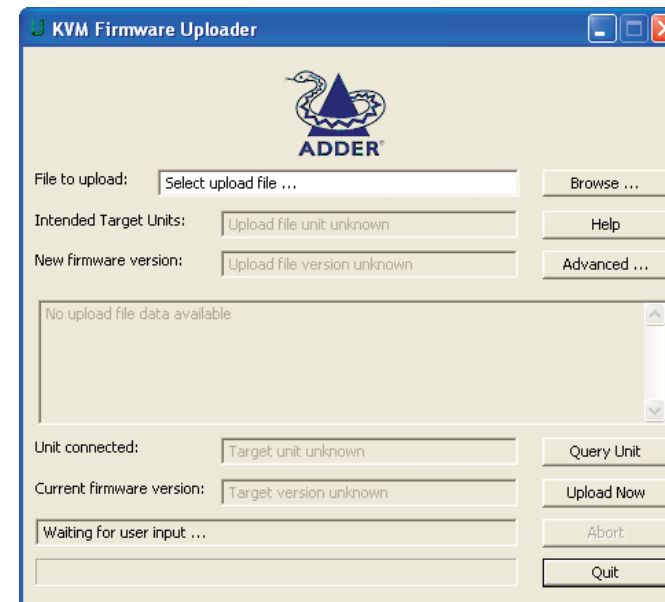
There is no need to adjust the computer's serial port settings as the application will do this automatically.

4 - Invoke upgrade mode

While powering on or when already powered: Press and hold the **COMPUTER** and **MODE** buttons (for up to ten seconds) until the numeric indicator shows '**U**'.

5 - Run the KVM Firmware Uploader utility

From that folder, select the KVMUploader icon to run the upgrade utility. The KVM Firmware Uploader dialog will be displayed:



6 - Query the AV4PRO-VGA unit

Click the *Query Unit* button to confirm that communication is possible with the AV4PRO-VGA unit and to establish its firmware details. If successful, the 'Unit connected' field should show the name of the AV4PRO-VGA unit and the current firmware will also be listed.

If the application cannot contact the AV4PRO-VGA unit, re-check the connection cable and click the *Advanced...* button to check that the correct serial port is being used. Change the serial port within the *Advanced...* section, if necessary.

continued

执行升级

AV4PRO-VGA设备可通过线缆升级实现全面升级。此类升级需要将基于Windows的计算机系统通过选项端口连接。

升级所需项目

- 可选升级电缆（引脚规格参见附录2）。
- 一台基于Windows系统的升级计算机，配备RS232串行端口。
- KVM固件上传器的最新版本和AV4PRO-VGA单元的固件文件-可从Adder Technology网站(www.adder.com)的[技术支持](#)>更新部分获得。

使用 KVM 固件上传工具

1 获取并运行 KVM 固件上传程序。

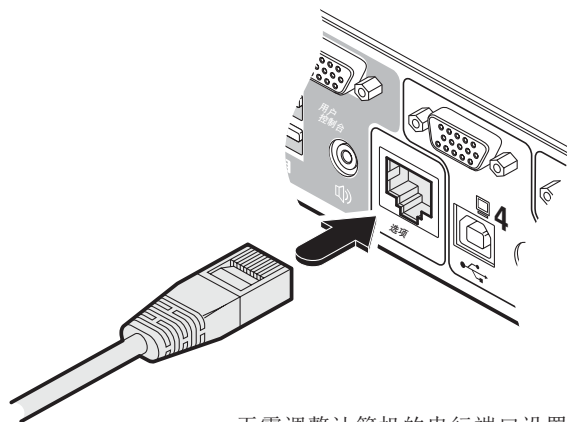
从Adder Technology网站下载最新的AV4PRO-VGA单元 KVM 固件上传程序，并将其安装在将连接到AV4PRO-VGA单元的基于Windows的升级计算机上。文件以压缩ZIP文件的形式提供。使用适当的工具（如WinZip（www.winzip.com））解压缩ZIP文件，并将所有包含的文件复制到升级计算机上的同一文件夹中。

2 - 关闭AV4PRO-VGA设备

从设备后盖板上拔下电源插头。

3 将升级后的计算机连接至AV4PRO-VGA设备

使用可选升级电缆将升级计算机的串行端口连接到设备后面板上的选项端口。



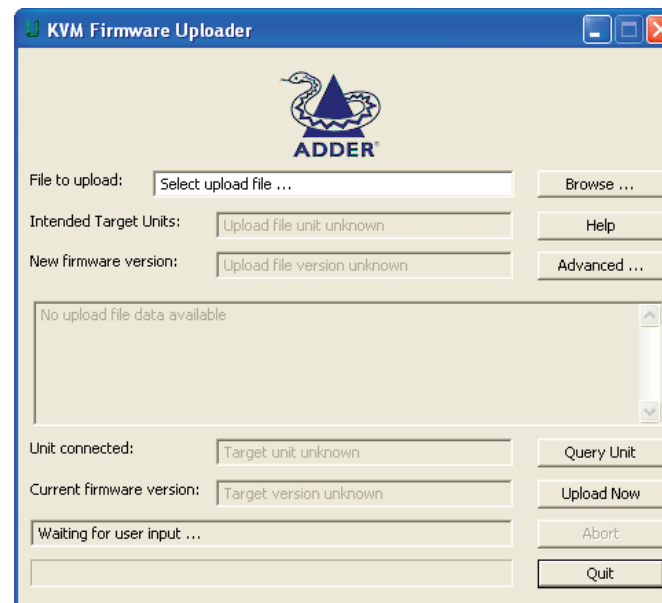
无需调整计算机的串行端口设置，因为应用程序将自动完成此操作。

4 - 调用升级模式

在开机或已通电状态下：长按计算机和MODE按钮（最长十秒），直至数字指示器显示 'U'。

5 - 运行 KVM 固件上传工具

从该文件夹中选择KVMUploader图标以运行升级工具。此时将显示KVM固件上传器对话框：



6 - 查询AV4PRO-VGA设备

点击[查询设备](#)按钮，确认与AV4PRO-VGA设备的通信连接成功，并获取其固件信息。若操作成功，‘设备已连接’栏将显示AV4PRO-VGA设备名称及当前固件版本。

如果应用程序无法连接AV4PRO-VGA设备，请重新检查连接电缆，然后单击[高级...](#)按钮，以检查是否使用了正确的串行端口。在[高级...](#)中更改串行端口。

必要时，可进行切开。

继续的

7 - Select the upgrade file to be used

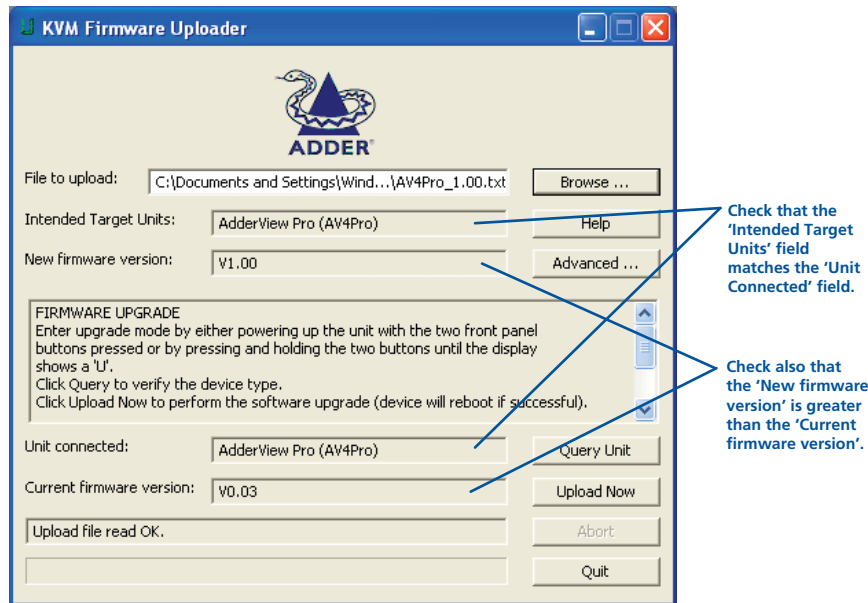
From the main KVM Firmware Uploader dialog, click the *Browse...* button and select the upgrade file:

AV4Pro_xxx.txt

where xxx is the firmware version.

The upgrade file details will be displayed within the dialog.

IMPORTANT: Check that the 'Intended Target Units' field matches the 'Unit Connected' field. If these fields do not match then you may have an incorrect upgrade file, check with Adder Technology Ltd before proceeding. Check also that the 'New firmware version' is greater than the 'Current firmware version'.



8 - Commence the upgrade

To begin the upgrade process, click the *Upload Now* button. The progress will be shown within the dialog. Should you decide not to continue with the upload at any stage, click the *Abort* button; response to this is usually immediate, however, during an erase command, the upload will not be aborted until the erase is complete (this may take a few seconds).

9 - Cycle the power

Disconnect the power. When the power is re-applied the AV4PRO-VGA unit will operate using the new firmware.

Issues to consider when performing flash upgrades

The upgrade program rewrites the internal firmware code. If the upgrade process is interrupted then the unit will have invalid code and will not be able to operate. It is therefore good practice to ensure that the upgrade process is always fully completed. A partial or failed upgrade may be rectified by performing another upgrade.

WARNING: Running faulty or partially upgraded code may have unpredictable results and may damage your AV4PRO-VGA unit or computing equipment.

7 - 选择要使用的升级文件

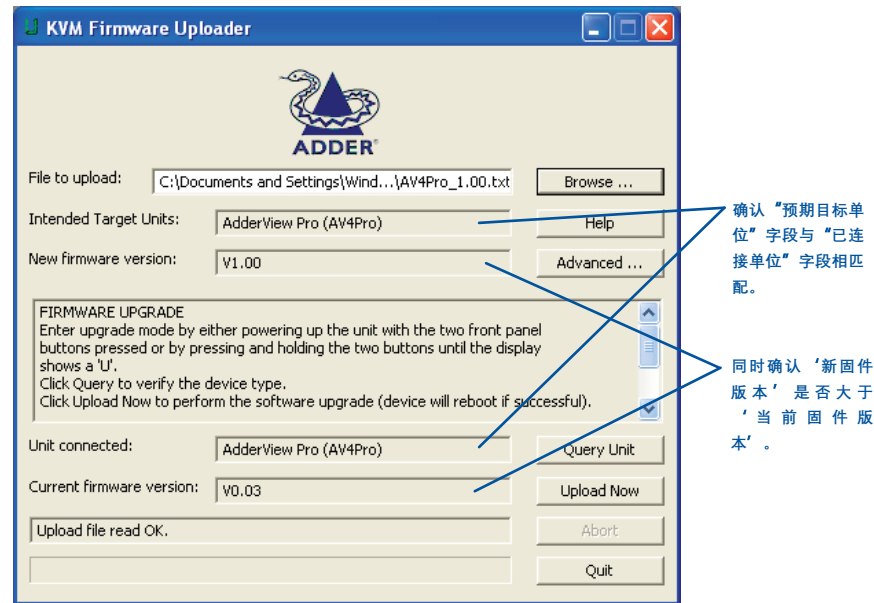
在主 KVM 固件上传器对话框中，点击浏览...按钮并选择升级文件：

AV4Pro_xxx .文本

其中xxx为固件版本号。

升级文件的详细信息将在对话框中显示。

重要提示：请核对‘目标目标单元’字段与‘已连接单元’字段是否一致。若二者不匹配，可能是升级文件有误，请在继续操作前联系Adder Technology有限公司确认。同时需确保‘新固件版本’高于‘当前固件版本’。



进行睫毛升级时需考虑的问题

升级程序会重写内部固件代码。若升级过程中断，设备将出现无效代码而无法运行。因此，确保升级过程始终完全完成是最佳实践。若升级不完整或失败，可通过重新执行升级来修正。

警告：运行故障代码或部分升级的代码可能导致不可预测的结果，并可能损坏您的AV4PRO-VGA设备或计算机设备。

8 - 开始升级

要开始升级流程，请点击立即上传按钮。进度条会显示在对话框中。若中途决定停止上传，请点击中止按钮；通常操作会立即生效，但在执行擦除命令时，上传操作不会中止，直到擦除完成（可能需要几秒钟）。

9 - 电源循环

断开电源。重新通电后，AV4PRO-VGA设备将采用新固件运行。

Operation



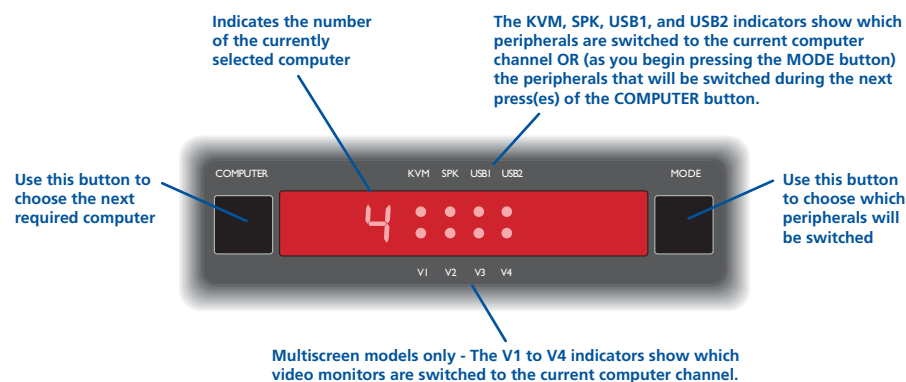
Selecting a computer

There are four main ways to switch the common peripherals to specific computer channels:

- Using the front panel controls ➡
- [Using hotkeys](#)
- [Using mouse button presses](#)
- Using external switching control ([RC4 remote](#), [RS-232](#) or [input lines](#))

To select a computer using the front panel

The front panel allows you to determine how the various peripherals are switched to one or more computer channels.



- 1 Optional: If you need to selectively switch some of your peripherals, press the MODE button repeatedly to change the switching mode:

	KVM	SPK	USB1	USB2	
MODE	●	●	●	●	Will switch all peripherals together
MODE	●	●	●	●	Will switch keyboard, video, mouse and speakers
MODE	●	●	●	●	Will switch only the keyboard, video and mouse
MODE	●	●	●	●	Will switch only the speakers
MODE	●	●	●	●	Will switch only USB peripheral 1
MODE	●	●	●	●	Will switch only USB peripheral 2

Note: If an indicator flashes, it signifies that the respective peripheral is currently switched to another computer channel.

- 2 Press the COMPUTER button repeatedly to select the required computer channel.

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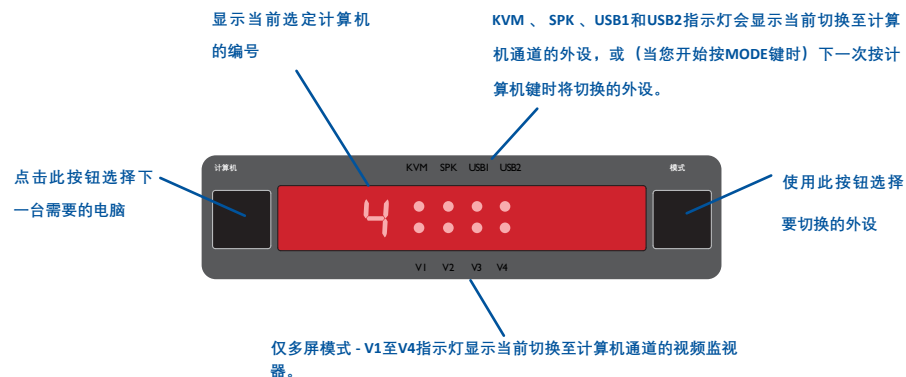
选择计算机

将通用外设切换至特定计算机通道主要有四种方式：

- 使用前面板控件
- [使用热键](#)
- [使用鼠标按键操作](#)
- 使用外部开关控制（[RC4远程](#)、[RS-232](#)或[输入线路](#)）

使用前面板选择计算机

通过前面板可设置各类外设与一个或多个计算机通道的连接方式。



1 可选操作：如需选择性切换部分外设，请反复按压MODE键以切换模式：



注：若指示灯闪烁，表明相应外周设备当前已切换至另一计算机通道。

2 反复按压计算机按钮以选择所需计算机通道。

To select a computer using hotkeys

Using hotkey combinations, you can quickly switch the keyboard, video monitor(s), mouse and speakers and USB peripherals to any computer channel.

There are two main ways to use hotkeys: *Standard* and *Additional*.

Standard hotkey press combinations

The standard hotkey press combinations allow you to change channels with the minimum of keypresses:

- 1 Simultaneously press and hold **Ctrl** and **Alt** (or other hotkeys, if altered).
- 2 While still holding **Ctrl** and **Alt**, press the number key of the required channel address (or the TAB key), then release all of the keys.

Note: The numbers on your keyboard's numeric keypad are not valid, use only the numeral keys above the QWERTY section.

The ports (KVM, audio and/or USB) that are switched using this method depend upon the switching mode that is currently set using the [front panel buttons](#).

The range of standard hotkey combinations are as follows:

*Note: If your hotkeys have been changed, substitute them for **Ctrl** and **Alt** in the examples given here.*

Ctrl Alt 1	Selects channel 1
Ctrl Alt 2	Selects channel 2
Ctrl Alt 3	Selects channel 3
Ctrl Alt 4	Selects channel 4
Ctrl Alt 0	Isolates the user console from all channels
Ctrl Alt Tab	Selects the next channel (see note ⇌)

What are hotkeys?

The **Ctrl** and **Alt** keys when pressed in combination are called 'hotkeys' and they signal to the AV4PRO-VGA unit that you wish to control it, rather than the computer. However, if these particular hotkeys clash with another device or program, you can change them to a different combination within the [Configuration](#) menu.

Additional hotkey press combinations

In addition to the standard hotkey press combinations (shown left), you can also add additional keypresses in order to determine which peripherals are switched:

- 1 Simultaneously press and hold **Ctrl** and **Alt**.

- 2 Press and release a command key:

A to switch all peripherals

K to switch only the keyboard, video and mouse

S to switch only the speakers

U to switch only USB1 and USB2

- 3 Press and release the required channel number (**1** to **4** using only the keys above the QWERTY section).

- 4 Release **Ctrl** and **Alt**.

The appropriate peripherals will change to the chosen channel.

Note: Regardless of which peripherals were switched, the front panel indicators will continue to show the switching mode that was last determined using the front panel controls.

Choosing which computers are accessed when using hot keys + tab

The computer channels that are visited when you use the hot keys + tab (or mouse buttons/autoscan) are determined by a setting within the Configuration menu:

- 1 Enter the [Configuration](#) menu.
- 2 Press **U** and then press either:
 - 7** to choose **Cycle all ports**, or
 - 8** to choose **Cycle only active ports**
- 3 Press **Enter** to accept the setting and return to the main menu section.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

使用热键选择计算机

使用热键组合，您可以快速切换键盘、视频监视器、鼠标、扬声器和USB外
设到任何计算机通道。热键有两种主要使用方式：*标准*和*附加*。

标准热键组合

标准热键组合可让您以最少按键次数切换频道：

- 1 同时按住 **Ctrl** 和 **Alt**（或其它热键，如已更改）。
- 2 仍持 **Ctrl** 和 **Alt** 按下所需频道地址的数字键（或TAB键），随后松开所有按键。

注：键盘数字小键盘上的数字无效，仅使用QWERTY区域上方的数字键。

使用此方法切换的端口（KVM、音频和/或USB）取决于当前使用 [前面板按钮](#) 设置的切换模式。

标准热键组合的范围如下：

*注意：若热键已更改，请用新设置替换原有设置 **Ctrl** 和 **Alt** 在本文给出的示例中。*

Ctrl Alt 1	选择通道1
Ctrl Alt 2	选择通道2
Ctrl Alt 3	选择第3频道
Ctrl Alt 4	选择第4频道
Ctrl Alt 0	将用户控制台与所有通道隔离
Ctrl Alt Tab	选择下一通道（参见注释⇨）

什么是热键？

这个 **Ctrl** 和 **Alt** 按组合键时，按键称为“热键”，它们向AV4PRO-VGA单元发出信号，表示你希望控制它，而不是计算机。但是，如果这些特定的热键与另一个设备或程序冲突，你可以在 [配置](#) 菜单中将它们更改为不同的组合键。

其他热键组合

除标准热键组合（如左图所示）外，您还可添加额外按键组合以确定切换的外设：

- 1 同时按住 **Ctrl** 和 **Alt**。
- 2 按住并释放命令键：

A 切换所有外设

K 仅切换键盘、视频和鼠标

S 只切换扬声器

回 仅切换 USB1 和 USB2

- 3 按住并释放所需通道编号（**1** 向 **4**）仅使用QWERTY键盘上方的按键。
- 4 发行 **Ctrl** 和 **Alt**。

相应的外设将切换至所选通道。

注：无论切换何种外设，前面板指示灯将持续显示上次通过前面板控制确定的切换模式。

使用热键+Tab键时选择访问哪些计算机

当您使用热键+Tab（或鼠标按钮/自动扫描）时所访问的计算机通道，由配置菜单中的设置决定：

- 1 进入 [配置](#) 菜单。
- 2 按 回 键，然后按以下任一键：
 - 7** 选择循环所有端口，或
 - 回 选择Cycle仅激活端口
- 3 按压 **Enter** 接受设置并返回主菜单界面。
- 4 按压 **E** 于是 **Enter** 退出菜单并保存修改内容。

To select a computer using the mouse buttons

Using the mouse buttons, you can quickly switch the keyboard, mouse, video monitor(s), speakers and/or USB peripherals to any computer channel.

Note: These procedures work only with three-button or IntelliMouse devices and only if the 'Mouse Switching' option has been enabled.

To select a computer using the mouse buttons

- 1 Hold down the middle button (or scroll wheel) of the mouse.
- 2 Click the left mouse button to increment the channel number or click the right mouse button to decrement the channel. When the correct channel is reached, release the middle button.

When using this method of switching:

- The computer channels that are visited depend upon the configuration menu setting (see note ⇔).
- The ports (KVM, audio and/or USB) that are switched using this method depend upon the switching mode that is currently set using the [front panel buttons](#).

Choosing which computers are accessed when using mouse buttons

The computer channels that are visited when you use the mouse buttons (or hotkeys + tab/autoscan) are determined by a setting within the Configuration menu:

- 1 Enter the [Configuration](#) menu.
- 2 Press **[U]** and then press either:
[7] to choose **Cycle all ports**, or
[8] to choose **Cycle only active ports**
- 3 Press **[Enter]** to accept the setting and return to the main menu section.
- 4 Press **[E]** and then **[Enter]** to exit the menu and save changes.

使用鼠标按钮选择计算机

通过鼠标按键，可快速切换键盘、鼠标、视频显示器、扬声器及USB外设至任意计算机通道。

注：本操作流程仅适用于三键式或IntelliMouse设备，且需启用“鼠标切换”选项。

使用鼠标按钮选择计算机

- 1 按住鼠标中间按钮（或滚轮）。
- 2 单击鼠标左键可递增通道编号，单击鼠标右键可递减通道编号。当到达正确通道时，松开中间按钮。

采用此切换方法时：

- 访问的计算机通道取决于配置菜单设置（参见注释）⇔).
- 使用此方法切换的端口（KVM、音频和/或USB）取决于当前使用[前面板按钮](#)设置的切换模式。

使用鼠标按钮时选择访问哪些计算机

当您使用鼠标按钮（或热键+Tab/自动扫描）访问计算机通道时，这些通道的访问路径由配置菜单中的设置决定：

- 1 进入[配置](#)菜单。
- 2 按压`U` 然后按以下任一键：`7`
选择**循环所有端口**，或
`8` 选择**Cycle 活动端口**
- 3 按压`Enter` 接受设置并返回主菜单界面。
- 4 按压`E` 于是`Enter` 退出菜单并保存修改内容。



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To lock access to the computers

When privacy is required, you can lock access to the connected computers via the unit.

To lock the unit

- 1 Simultaneously press and hold **Ctrl** and **Alt** (or other hotkeys, if altered).
- 2 While still holding **Ctrl** and **Alt**, press **L**.
The display will show **P** (providing a valid password has been previously set).
You will not be able to access any computers until the password is correctly entered.

To unlock the unit

- When prompted, enter the correct password and press **Enter**.

To set a new password

- 1 Enter the [Configuration](#) menu.
- 2 Press **P** and then **Enter**. The display will show **:-**
- 3 Enter a new password and then **Enter**.
The password is not case sensitive and can be any combination of key strokes, including the function keys, but excluding the Num Lock, Caps Lock, Scroll Lock and **Enter** keys. If your keyboard has special media keys, these also cannot be used as part of the password.
When you have typed in your password, press **Enter** to store it. Don't worry if you type the password incorrectly, you can always re-enter configure mode and set the password again.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

To cancel the password

- 1 Enter the [Configuration](#) menu.
- 2 Press **P** and then **Enter**. The display will show **:-**
- 3 Press **Enter** to remove the existing password.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

If you forget the password

To clear an existing password: Connect the OPTIONS port of the unit to the serial port of a computer and transmit the text **clrpwd** to the unit.

锁定对计算机的访问权限

当需要保护隐私时，您可通过设备锁定对连接计算机的访问权限。

锁定装置

1 同时按住 **Ctrl** 和 **Alt**（或其它热键，如已更改）。

2 仍持 **Ctrl** 和 **Alt** 压 **L**。

显示屏将显示 **P**（前提是已设置有效密码）。若未正确输入密码，您将无法访问任何计算机。

解锁装置

- 提示时，输入正确密码并按下 **Enter**。

设置新密码

1 进入 **配置** 菜单。

2 按 **Return** 键，然后 **Enter** 显示屏将显示 **2**。

3 输入新密码，然后 **Enter**。

密码不区分大小写，可由任意组合的按键输入（含功能键），但不包括数字锁定键、大写锁定键、滚动锁定键及 **Fn**。若键盘设有特殊媒体键，这些键同样不可作为密码的一部分使用。

输入密码后，请按 **Enter** 用于存储。若输入密码错误，无需担心，您可随时重新进入配置模式并再次设置密码。

4 按压 **E** 于是 **Enter** 退出菜单并保存修改内容。

取消密码

1 进入 **配置** 菜单。

2 按压 **P** 于是 **Enter** 显示屏将显示 **2**。

3 按压 **Enter** 删除现有密码

4 按压 **E** 于是 **Enter** 退出菜单并保存修改内容。

如果你忘记了密码

如需清除现有密码：将设备的选项端口连接至计算机的串行端口，并向设备发送文本 **clrpwd**。



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Autoscanning

When enabled, the autoscan mode switches between the connected computers in sequence. This is useful to allow you to sample activity among the connected computers.

Two scanning modes are available:

- **Cycle all ports** – This mode visits, in turn, to each connected computer. This mode should be used with care due to the reasons given in the warning below. To prepare for this autoscan mode, choose **U 7** within the configuration menu (see right).
- **Cycle only active ports** – Only computer ports where an active computer is detected will be viewed. This mode avoids blank screens from being displayed and helps to prevent the viewing monitor from entering a power-down state on every scan cycle.

Additionally, when this mode is selected, whenever you use either the mouse buttons or hot keys + tab to change channels, only computers that are active will be visited. To prepare for this autoscan mode, choose **U 8** within the configuration menu (see right).

WARNING: Many monitors are fitted with automatic power saving relays that switch off after a few seconds when connected to an inactive computer. If you are using such a monitor, do not use the 'Cycle all ports' mode. Continual switching on and off of the monitor's relay will eventually damage the monitor.

Seven autoscan periods are available (the time spent viewing each computer) ranging from 2 seconds to 5 minutes. To prepare the autoscan period, choose **T** and then **2** to **8** within the configuration menu (see right).

To start autoscanning mode, press **Ctrl Alt X** on the keyboard.

To select an autoscan mode

- 1 Enter the **Configuration** menu.
- 2 Press **U** and then press either:
 - **7** to choose **Cycle all ports**, or
 - **8** to choose **Cycle only active ports**
- 3 Press **Enter** to accept the setting and return to the main menu section.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

Note: The setting of this option also affects which computers are visited when the channel is changed using the mouse buttons or hot key + tab.

To select an autoscan period

- 1 Enter the **Configuration** menu.
- 2 Press **T** and then press either:
 - 1** to choose **Autoscan disabled**,
 - 2** to choose **2 seconds**,
 - 3** to choose **5 seconds**,
 - 4** to choose **7 seconds**,
 - 5** to choose **15 seconds**,
 - 6** to choose **30 seconds**,
 - 7** to choose **1 minute**, or
 - 8** to choose **5 minutes**.
- 3 Press **Enter** to accept the setting and return to the main menu section.
- 4 Press **E** and then **Enter** to exit the menu and save changes.

To start autoscanning

- On the keyboard, press **Ctrl Alt X**.

Notes:

During autoscanning, mouse switching, hot key + tab and interactivity with the computers are all disabled.

During autoscanning, only the KVM and speaker ports are switched to each visited computer channel, the two USB device ports remain connected to their currently selected channels.

To stop autoscanning

You can stop the autoscanning process in either of the following ways:

- Press the **COMPUTER** button on the front panel, or
- Select a specific channel using the hot keys + channel number.



自动扫描

启用自动扫描模式后，系统会按顺序在连接的计算机之间切换。该功能可帮助您采集各连接计算机的运行状态。

提供两种扫描模式：

- **循环扫描所有端口**——该模式会依次访问所有已连接的计算机。由于下文警告中提到的原因，使用此模式需谨慎。若要启用此自动扫描模式，请选择 **[U] [7]** 在配置菜单中（见右图）。
- **仅循环活动端口**- 仅循环活动计算机的端口

检测到的信号将被显示。该模式可避免屏幕显示空白，并有助于防止监视器在每个扫描周期进入断电状态。

此外，当选择此模式时，无论您使用鼠标按钮还是热键+Tab键切换频道，系统仅会访问当前处于活动状态的计算机。如需启用此自动扫描模式，请选择 **[U]** 配置菜单中的 回（见右图）。

警告：多数显示器配备自动省电继电器，当连接闲置电脑时几秒后便会自动断电。若使用此类显示器，请勿启用‘全端口循环’模式。频繁开关显示器的继电器最终会导致显示器损坏。

共有七个自动扫描时段可供选择（每次查看计算机的时间），时长范围从2秒到5分钟。要设置自动扫描时段，请选择 **[T]** 然后在配置菜单中 回 回（见右图）。如需启动自动扫描模式，请按 **[Ctrl] [Alt] [X]** 在键盘上。

选择自动扫描模式

- 1 进入 **配置** 菜单。
- 2 按压 **[U]** 然后按以下任一键：
 - **7** 选择 **循环所有端口**，或
 - **8** 选择 **Cycle 活动端口**
- 3 按压 **[Enter]** 接受设置并返回主菜单界面。
- 4 按压 **[E]** 于是 **[Enter]** 退出菜单并保存修改内容。
注：此选项的设置还会影响通过鼠标按钮或热键+tab键切换通道时访问的计算机。

选择自动扫描周期

- 1 进入 **配置** 菜单。
- 2 按压 **[T]** 然后按以下任一键： **[1]** 选

择 **禁用自动扫描**， **[2]** 选择 **2秒**

[3] 选择 **5秒**

[4] 选择 **7秒**
回 选择 **15秒**，

[6] 选择 **30秒**

[7] 选择 **1分钟**，或
回 选择 **5分钟**。

- 3 按压 **[Enter]** 接受设置并返回主菜单界面。
- 4 按压 **[E]** 于是 **[Enter]** 退出菜单并保存修改内容。

开始自动扫描

- 在键盘上，按 **[Ctrl] [Alt] [X]**。

记下

在自动扫描过程中，鼠标切换、热键+Tab键操作以及与计算机的交互功能均被禁用。

在自动扫描过程中，仅 KVM 和扬声器端口会切换至每个访问的计算机通道，而两个USB设备端口则保持连接当前选定的通道。

停止自动扫描

您可通过以下任一方式停止自动扫描流程：

- 按下前面板上的计算机按钮，或
- 使用热键+频道编号选择特定频道。

Further information

This chapter contains a variety of information, including the following:

- Getting assistance - see right
- [Appendix 1 – Supported video modes](#)
- [Appendix 2 – Cable pin-outs](#)

Getting assistance

If you are still experiencing problems after checking the information contained within this guide, then please refer to the Support section of our website:
www.adder.com



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更多信息

本章包含多种信息，包括以下内容：

- 获取援助——见右
- [附录1 – 支持的视频模式](#)
- [附录2 – 电缆引脚排布](#)

获取帮助

若您在查阅本指南所含信息后仍存在问题，请参阅我们网站的支持部分：

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Appendix 1 – Default EDID video modes

The following digital video modes are defined within the default EDID information held by the AV4PRO-VGA units. This information is used only if no new EDID information is made available by the attached video monitor(s). The AV4PRO-VGA units support video resolutions and refresh rates in excess of those listed here.

1024 x 768p at 60Hz	Native/preferred timing
720 x 400p at 70Hz	IBM VGA
720 x 400p at 88Hz	IBM XGA2
640 x 480p at 60Hz	IBM VGA
640 x 480p at 67Hz	Apple Mac II
640 x 480p at 72Hz	VESA
640 x 480p at 75Hz	VESA
800 x 600p at 56Hz	VESA
800 x 600p at 60Hz	VESA
800 x 600p at 72Hz	VESA
800 x 600p at 75Hz	VESA
832 x 624p at 75Hz	Apple Mac II
1024 x 768i at 87Hz	IBM
1024 x 768p at 60Hz	VESA
1024 x 768p at 70Hz	VESA
1024 x 768p at 75Hz	VESA
1280 x 1024p at 75Hz	VESA
1152 x 870p at 75Hz	Apple Mac II
1600 x 1200p at 60Hz	VESA STD
1680 x 1050p at 60Hz	VESA STD
1360 x 765p at 60Hz	VESA STD
1360 x 768p at 60Hz	
1440 x 900p at 60Hz	VESA STD
1280 x 720p at 60Hz	VESA STD
1920 x 1080p at 60Hz	VESA STD



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附录1 - 默认 EDID 视频模式

AV4PRO-VGA设备默认 EDID 信息中定义了以下数字视频模式。当连接的视频监视器未提供新的 EDID 信息时，该信息才会被使用。AV4PRO-VGA设备支持的视频分辨率和刷新率可超过此处列出的规格。

1024 x 768p 60Hz	自然/首选时间
720 x 400p, 70Hz	IBM VGA
720 x 400p, 88Hz	IBM XGA2
640 x 480p, 60Hz	IBM VGA
640 x 480p, 67Hz	苹果Mac II
640 x 480p, 72Hz	视频电子标准协会
640 x 480p, 75Hz	视频电子标准协会
800 x 600p, 56Hz	视频电子标准协会
800 x 600p 60Hz	视频电子标准协会
800 x 600p 72Hz	视频电子标准协会
800 x 600p, 75Hz	视频电子标准协会
832 x 624p, 75Hz	苹果Mac II 1024 x
768i 87Hz	美国国际商用机器公司
1024 x 768p 60Hz VESA	
1024 x 768p 70Hz VESA	
1024 x 768p 75Hz VESA	
1280 x 1024p 75Hz VESA	
1152 x 870p, 75Hz, 苹果Mac II	
1600 x 1200p 60Hz VESA 标准	
1680 x 1050p, 60Hz, VESA标准	
1360 x 765p分辨率, 60Hz刷新率, 符合VESA标准	
1360 x 768p, 60Hz	
1440 x 900p, 60Hz, VESA标准	
1280 x 720p, 60Hz, VESA标准	
1920 x 1080p 60Hz VESA STD	

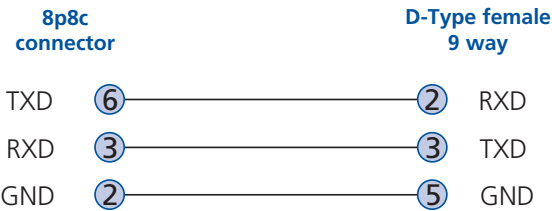


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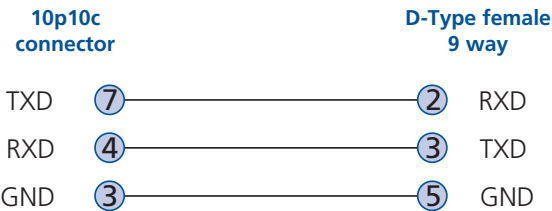
Appendix 2 – Cable pin-outs

The OPTIONS port uses a 10p10c socket which can accommodate both 10p10c connectors as well as the much more common 8p8c connectors, which are used on Ethernet leads and patch cables. The pin-outs are listed in this section for both types of connector.

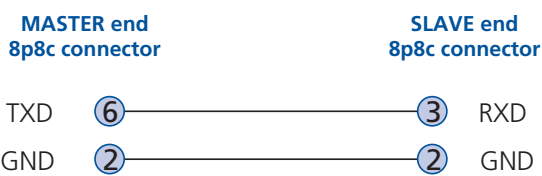
Serial remote control and flash upgrade cable (8p8c)



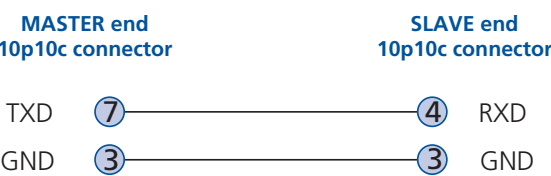
Serial remote control and flash upgrade cable (10p10c)



Multi-head synchronisation cable (8p8c)



Multi-head synchronisation cable (10p10c)

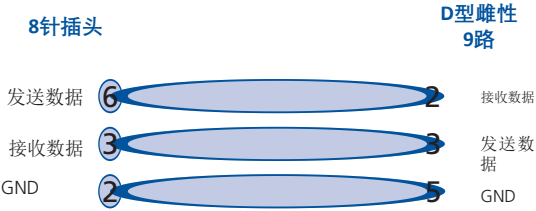


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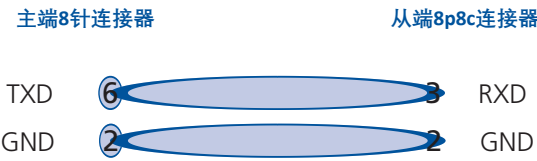
附录2 – 电缆引脚排布

该选项端口采用10p10c插槽，可同时兼容10p10c连接器和更常见的8p8c连接器（后者广泛应用于以太网线和跳线电缆）。本节将分别列出两种连接器的引脚配置。

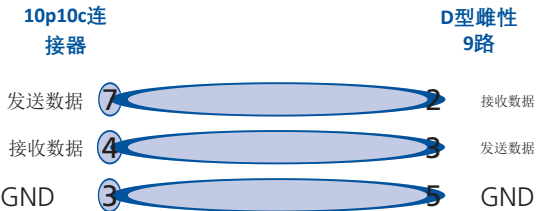
串行遥控和闪存升级电缆 (8p8c)



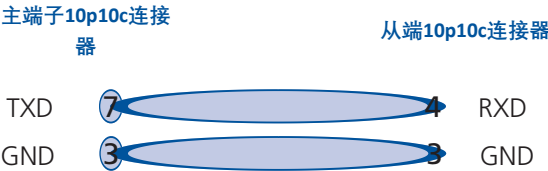
多头同步电缆 (8p8c)



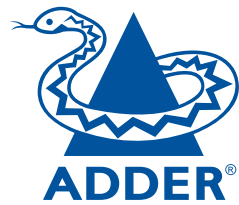
串行遥控与闪存升级电缆 (10p10c)



多头同步电缆 (10p10c)



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