



Ultimate Security - Hardwired Black and Red isolated KVM

## ADDERView AVS Range

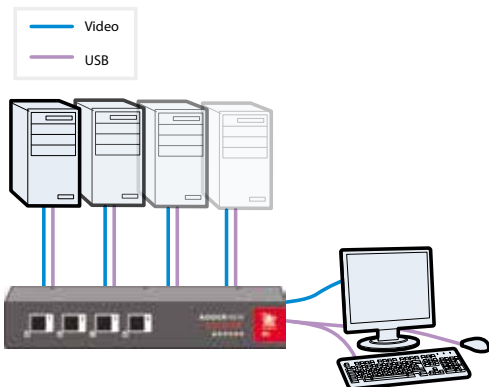
Ultimate Security - Hardwired Black and Red isolated secure KVM



### PRODUCT IN BRIEF

The AdderView Secure range of products are highly robust KVM switches for critical applications. When information absolutely must not be leaked between systems or networks, the AdderView Secure units combine the necessary isolation with a desirable ease of use.

AdderView Secure units combine a number of overlapping strategies that are designed to defeat potential points of infiltration or protect against user error.



The switching section is hardwired to allow only one channel to be selected at any time.

Common keyboard, mouse and video monitor are able to access multiple high security computers/networks, safe in the knowledge that data will not be transferred from one to another, either by user error or subversive attack.

### FEATURES

**TEMPEST qualified and EAL4+ certified**  
Tempest certified design (USA NSTISSAM Level I and NATO SDIP-27 Level A), EAL4+ Common Criteria Evaluation Assurance Level 4 (augmented by ALC\_FLR.2 and ATE\_DPT.2).

#### Physical port identification

Channel switching is controlled only from the front panel buttons. No keyboard or mouse switching commands are permitted.

#### Hardwired port isolation

Data Diodes, implemented within hard-wired electronic circuitry, rather than software, are liberally employed to ensure that critical data paths can flow only in one direction. These data diodes ensure that a compromised peripheral, a keyboard for instance, cannot read information back from a connected system in order to transfer such details to another system. Whenever a channel is changed, the connected keyboard and mouse are always powered down and re-initialized to provide yet another level of protection against hidden peripheral malware.

#### No critical software reliance

In general, the role of software within the unit has been reduced to an absolute minimum to avoid the possibility of subversive reprogramming. Additionally, all flash memory has been banished from all security critical areas of the design, to be replaced by one-time programmable storage which cannot be altered.

#### Minimal emission design

The outer casing contains extensive shielding to considerably reduce electromagnetic emissions. Additionally, the casing has been designed with as few apertures as possible to reduce the possibility of external probing and several primary chassis screws are concealed by tamper-evident seals to indicate any unauthorized internal access. Shielding extends also to the internal circuitry with strong levels of electrical crosstalk isolation between ports to protect against signals from one computer becoming detectable on another.

#### Physical port identification

AdderView Secure units are available in two port and four port sizes. Each size can be ordered in standard and enhanced versions. The enhanced versions allow you to attach a smart card reader that can be securely shared between the connected systems. The enhanced versions also contain anti-subversion and authentication features that guard against intrusion and allow you to prove that the unit is genuine, respectively.

These are just a few of the many strategies and innovations that have been combined to reinforce the separation between differing systems. Numerous other defences lie in wait to defeat potential threats.

# ADDERView AVS Range

Ultimate Security - Hardwired Black and Red isolated secure KVM

## Feature Matrix

	Standard 2-port AVSV1002	Standard 4-port AVSV1004	Enhanced 2-port AVSC1002	Enhanced 4-port AVSC1004
Uni-directional keyboard / mouse data paths	YES	YES	YES	YES
High port-to-port cross-talk isolation	YES	YES	YES	YES
Heavy shielding for low emissions	YES	YES	YES	YES
Single key per port for selection	YES	YES	YES	YES
USB or PS/2 computer connections	YES	YES	YES	YES
Tamper protection	YES	YES	YES	YES
Secure DDC EDID strategy	YES	YES	YES	YES
Smartcard reader support			YES	YES
Combined keyboard/smartcard reader support			YES	YES
Advanced tamper protection / reporting			YES	YES
Authentication function			YES	YES

## TECHNICAL SPECIFICATIONS

### Hardware compatibility

Compatible with all known platforms featuring VGA video and USB HID or PS/2 connectivity

### OS compatibility

All known software and operating systems including Windows (all), DOS, Linux, Unix, BSD, Sun OS, Solaris, Mac OS, NetWare etc.

### Computer connections at switch

2 x USB HID (Keyboard/Mouse), HD-15 VGA, 2 or 4 x system link connection, smart card USB

### Physical design

Compact case, robust metal construction, extensive shielding

### Power connection

100-240 VAC 47/63Hz

### Operating temperature

0°C to 40°C / 32°F to 104°F

## ORDERING INFORMATION

4 Port Enhanced: AVSC1104-XX  
 4 Port Standard: AVSV1004-XX  
 2 Port Enhanced: AVSC1102-XX  
 2 Port Standard: AVSV1002-XX

XX = Mains Lead Country Code:  
 UK = United Kingdom  
 EURO = Europe  
 AUS = Australia

Export restrictions apply to specific countries. Please enquire with Adder if you are considering exporting these products.

## CABLES

The special cables available for connections to each system are carefully constructed with braid and foil to provide excellent screening against signal emissions that could otherwise be eavesdropped. A similarly constructed cable is also available for the monitor connection (VSCD9).

The special cables already have ferrite cores fitted to assist with signal suppression. For USB peripheral connections, we strongly recommend that (if not already fitted) you attach ferrite cores to those cables to further assist with emission suppression.

Shielded link cable (VGA, PS/2 keyboard, PS/2 mouse)  
**Part code: VSCD5** (length 1.8m/6ft)

Shielded link cable (VGA, USB keyboard/mouse, USB card reader)  
**Part code: VSCD6** (length 1.8m/6ft)

Shielded link cable (VGA, USB keyboard/mouse)  
**Part code: VSCD7** (length 1.8m/6ft)

Shielded link cable (VGA only)  
**Part code: VSCD9** (length 1.8m/6ft)

## RELATED PRODUCTS

Adder offer a vast range of products to suit your needs. Other products you may be interested in include:

ADDERView PRO  
AV4PRO-DVI



ADDERView PRO  
AV8PRO-DVI



ADDER CCS4USB  
CCS4USB



ADDERView Secure  
AVSD1004:AVSD1002



## Approvals

EAL4+, CE, FCC  
 Tempest qualified design



© Copyright 2010 Adder Technology Ltd. All brand names and trademarks are the property of their respective owners. AVSC1104v2.indd