



# USER MANUAL

# ACS-1602

Read this guide thoroughly and follow the installation and operation procedures carefully in order to prevent any damage to the unit and/or any devices that connect to it.

This package contains:

- 1 ACS-1602 ADC KVM Switch
- 2 ADC Cables (1.8m)
- 1 User Manual
- 1 Quick Start Guide

If anything is damaged or missing, contact your dealer.

© Copyright 2003 ATEN® International Co., Ltd. Manual Part No. PAPE-1211-1AT Printed in Taiwan 04/2003

All brand names and trademarks are the registered property of their respective owners.

2003-04-22

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected;
- Consult the dealer or an experienced radio/television technician for help.



#### **OVERVIEW**

The Master View ACS-1602 ADC KVM Switch is a two port control unit that allows access to two ADC equipped Macintosh systems from a single ADC console (USB keyboard, USB mouse, and ADC display).

DVI equipped PCs can also be accessed from the ADC console with the use of an ADC to DVI adapter.

ADC (Apple Display Connector) is a digital interface implementation that is proprietary to Apple<sup>®</sup> Computer. Apple's *Cinema* and *Studio* flat panel displays utilize the ADC connector interface with the latest Mac systems. The ACS-1602 supports both of those displays. It also supports analog CRT ADC monitors.

Setup is fast and easy; plugging the ADC cables into their appropriate ports is all that is entailed. There is no software to configure, no installation routines, and no incompatibility problems.

The digital video, USB, and power signals are transported via the single ADC cable. This eliminates the desktop clutter associated with traditional cable hookups, and makes for a neat and tidy workspace.

Access to the two computers is quick and convenient. Pressing the push button *Port Selection Switch* located on the unit's top panel toggles the KVM focus between them.

There is no better way to save time and money than with a Master View ACS-1602 installation. By allowing a single console to manage both computers, the ACS-1602 eliminates the expense of purchasing a separate keyboard, video display, and mouse for each one. Additionally, it saves the extra space and energy costs that they would require, and eliminates the inconvenience and wasted effort involved in constantly having to move from one computer to the other.

### **FEATURES**

- Provides control of two ADC enabled computers from a single ADC console (ADC Display, USB keyboard, USB mouse).
- Supports all 15,17, 22, and 23 inch Apple<sup>®</sup> ADC Cinema & Studio Displays.
- Supports 19 inch analog CRT ADC monitors.
- Easy to install no software required simply connect the ADC cables.
- Easy to operate computer selection via push button switch.
- Supports Mac OS 9.2 and higher
- Supports Windows 98SE and higher.\*
- Up to 1920 x 1200 Resolution; DDC, DDC2, DDC2B
- · LED display for easy status monitoring.
- Saves time, space, power, and equipment costs.
- · Non-powered.
  - \* On DVI equipped PCs using an ADC to DVI adapter (requires separate purchase).



### **WARNING!**

Components on an ADC connection are **NOT** hot pluggable. To add or remove components the Installation and Powering Off sequences described in this manual (pages 6 and 10) must be followed. Failure to do so will result in damage to the components.

### HARDWARE REQUIREMENTS

#### CONSOLE

- An ADC Cinema or Studio Display; or an analog ADC CRT monitor
- · A USB Keyboard
- A USB Mouse

#### COMPUTER

Either an ADC equipped Mac, or DVI equipped PC with an ADC to DVI adapter (see the *Cables* section, below).

#### CABLES

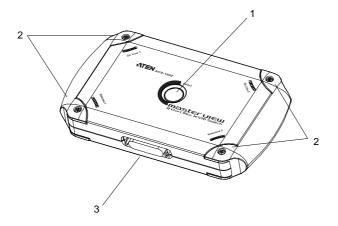
Because the ACS-1602 supports both digital and analog signals, the integrated (digital and analog) Custom Cable sets provided with this package must be used to connect the Master View ACS-1602 to the computers. Standard ADC cables cannot be used.

The ADC cable carries video signals, USB signals, and power. It is compatible with DVI graphics cards, but requires the installation of an ADC to DVI adapter that separates out the USB and power signals (see the diagram on p. 8).

- **Note:** 1. An ADC to DVI adapter is not part of the ACS-1602 package. It must be purchased separately.
  - 2. If you use an ADC to DVI adapter make sure that the adapter and the PC's DVI VGA card are *both* digital or *both* analog devices.
  - Mac Cube, G3 and G4 systems support both analog and digital signals.

# COMPONENTS

# FRONT VIEW:



# 1. Port Selection Switch

Press this switch to toggle the KVM focus between the two ports.

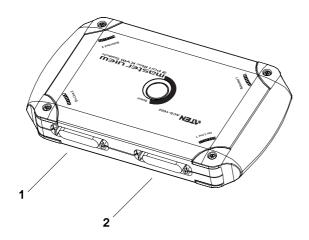
### 2. Port LEDs

- The On Line LED lights ORANGE to indicate that the computer connected to its corresponding port is up and running.
- The Selected LED lights GREEN to indicate that the computer connected to its corresponding port is the one that has the KVM focus.

# 3. ADC Console Port

The cable from your ADC display plugs in here.

# REAR VIEW:



### 1. ADC Port 2

The cable that connects to the ADC port on the computer you are designating as Computer 2 plugs in here.

# 2. ADC Port 1

The cable that connects to the ADC port on the computer you are designating as Computer 1 plugs in here.

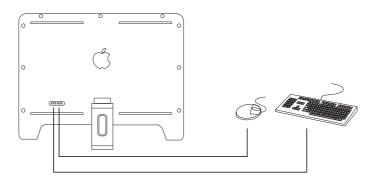
### INSTALLATION



- Before you begin, make sure that power to all the devices you will be connecting up have been turned off. You must unplug the power cords of any computers that have the *Keyboard Power On* function. Otherwise, the switch will receive power from the computer.
- 2. To prevent damage to your installation due to ground potential difference, make sure that all devices on the installation are properly grounded.
- 3. When starting up your installation, you must follow the connecting up and powering On sequence described in these installation instructions. Failure to do so will result in damage to the equipment.

To set up your ACS-1602 installation, refer to the diagram below and the one on p. 8 as you do the following:

 Plug your USB keyboard and USB mouse into the USB ports on the back of the ADC display.



- 2. Plug the cable from the ADC display into the Console port connector of the Master View ACS-1602.
- Use the ADC cables provided with this package to connect the ACS-1602's ADC ports to the ADC ports of the computers you are installing.

Note: If your computer uses a DVI type connector, you will have to use an ADC to DVI adapter (requires separate purchase). Refer back to the Note in the Cables Section on p. 3, for details.

- 4. Turn On the power to the computers.
- 5. Turn On the ADC Display.

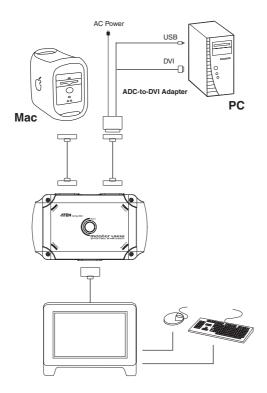
### POWERING ON CONSIDERATIONS:

1. When you Power On, the Display and the computers take a few moments to establish their communication parameters.

You must wait until the procedure completes (i.e., the desktop finishes coming up and is ready to accept computer input) before changing ports. Otherwise, when you switch back to the original port, the display will either be blank or distorted.

If this occurs, you must Power Off the system (see p. 10), and Power it back On (see steps 4 and 5, above).

2. The Power On default is to link to ADC Port 1. If the computer attached to port 1 is inactive, the display will be blank so it may appear as if the unit is not functioning. This is not the case. Simply press the Port Selection switch to toggle the KVM focus to the active computer on port 2.



- 8 -

### PORT SELECTION

Simply press the Port Selection switch on the ACS-1602's top panel to toggle the KVM focus between the computers (ADC1, ADC2). The Selected LED on the top panel lights to indicate which port is active.

**Note:** For the Mac, if any USB storage devices are attached to the ADC's USB ports, the following warning message appears when you switch ports:

The device you removed was not properly put away. Data might have been lost or damaged. Before disconnecting a device, you should select its icon in the finder and choose eject from the file menu.

You can ignore this message as it does not effect the ACS-1602's operation.

### POWERING OFF

To power off your ACS-1602 installation, do the following:

- 1. Turn Off the ADC display
- 2. Turn Off the power to the computers.

### MODIFYING THE INSTALLATION

If you should ever need to take down, or change components on your ACS-1602 installation, do the following:

- Power Off the installation as described in steps 1 and 2, above.
- 2. Unplug the power cords of both computers from their power source (wall socket, power adapter, etc.).
- 3. Unplug the cables that connect the computers to the ACS-1602's ADC ports.
- 4. Unplug the cable that connects the ADC display to the ACS-1602's Console ports.



Components on an ADC connection are NOT hot pluggable. When shutting down or adding/removing components on your installation, you must follow the sequences described above. Failure to do so will result in damage to the equipment.

# TROUBLESHOOTING

Symptom	Possible Cause	Action	
Keyboard and/or Mouse Not Repsonding	Loose Cables	Check all cable connections to make sure they are completely seated in their sockets.	
	Keyboard and/or Mouse needs to be reset	Unplug the keyboard or mouse from the USB port on the ADC display's rear panel, then plug it back in.	
	Master View needs to be reset	Turn off both computers (see <i>Powering Off</i> p. 10); wait five seconds; then turn the computers back on.	
	Selected port connects to a powered Off computer.	Change the port by pressing the Port Selection switch.	
	Incorrect Mouse Driver	Check your Device Manager to be sure that the correct driver for your mouse (obtained from the manufacturer, or supplied by the operating system), has been installed.  Because of the wide variety of mouse driver standards for the modern series of mice (the ones with the extra buttons and wheels), the ACS-1602 only supports all the extra features of the Microsoft Intellimouse. It supports the scrollwheel function of most other mice.	
Video Problems	Resolution and/or Bandwidth set too high.	The Master View ACS-1602 supports Apple Studio and Cinema Displays (interlaced), with resolutions of up to 1920x1200.	
	Improper Startup	A blank, or distorted display may be due to not starting up properly. See <i>Powering On Considerations</i> , p. 7, for details.	
	Improper Cables	The cables supplied with this package must be used. See the <i>Cables</i> section, p. 3, for details.	

### SPECIFICATIONS

Function		Specification
Computer Connections		2
Port Selection		Push Button Switch
LEDs	Selected	2 Green
	Online	2 Orange
Connectors	Console	1 x ADC-35 female
	Computers	2 x ADC-35 female
Resolution		1920 x 1200; DDC,DDC2,DDC2B
Environment		Operating Temperature: 0 ~ 50°C
		Storage Temperature: -20 ~ 60°C
		Humidity: 0 ~ 80% RH Noncondensing
Housing		Plastic
Weight		220 g
Dimensions (L x W x H)		14.6 x 10.4 x 2.6 cm

### LIMITED WARRANTY

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM THE DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK OR ITS DOCUMENTATION.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and specially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update the device or documentation without obligation to notify any individual or entity of such revisions, or update. For further inquires please contact your direct vendor.

Notes

- 14 -

2003-04-22