MASTER VIEW KVM SWITCH

2 Port KVM Switch

User Manual

CS-82A

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

This package contains:

◆ 1 Master View CS-82A KVM Switch

◆ 1 User Manual

If anything is damaged or missing, contact your dealer.

2002-09-19

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 CS-82A 4 Port KVM (Keyboard, Video, Mouse), Switch is a control unit that allows access to two computers from a single console (keyboard, monitor and mouse). Before the development of the Master View, the only way to control multiple computer configurations from a single console was through a complex and costly network system. Now, with the Master View CS-82A, you can easily access two computers in a cost effective manner.

Setup is fast and easy; plugging cables into their appropriate ports is all that is entailed. There is no software to configure; there are no installation routines, and no incompatibility problems. Since the Master View CS-82A intercepts keyboard input directly, it works on any hardware platform and with all operating systems.

The Master View CS-82A provides two convenient methods to access the computers connected to the system: 1) push button Port Selection Switches located on the unit's front panel; and 2) Hotkey combinations entered from the keyboard.

There is no better way to save time and money than with a Master View CS-82A installation. Since a single console manages all of the computers, the CS-82A setup: 1) eliminates the expense of having to purchase a separate keyboard, monitor, and mouse for each computer; 2) saves all the space those extra components would take up; 3) saves on energy costs; and 4) eliminates the inconvenience and wasted effort involved in constantly moving around from one computer to another.

2002-09-19

FEATURES

- Supports Microsoft Intellimouse and the Scrolling Wheel on Most Mice
- Keyboard and Mouse Emulation For Error Free Booting
- Easy to Install - No Software Required - Standard Cables to Connect to the Computers Is All It Takes
- Easy to Operate - Computer Selection Via Push Button Switches or Hotkeys - Auto Scan Function to Monitor Computer Operation
- LED Display for Easy Status Monitoring
- Compatible With All Operating Platforms
- Caps Lock, Num Lock, and Scroll Lock, States are Saved and Restored When Switching
- Superior Video Quality - Up To 1920x1440; DDC; DDC2; DDC2B
- Compact, Sturdy, Durable Metal Housing
- Efficient, Ergonomic Design; Logical Connector Layout
- Follows PC 99 Color Specifications
- Standard Cables for Computer Connections
- Saves Time, Space, Power, and Equipment Costs
- Non-Powered Operation

2002-09-19

Hardware Requirements

Console

- A VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation
- A PS/2 Style Mouse
- A PS/2 Style Keyboard

Computers

The following equipment must be installed on each computer that is to be connected to the system:

- A VGA, SVGA or Multisync card.
- A 6-pin mini-DIN (PS/2 style) mouse port.
- Either a 6-pin mini-DIN (PS/2 Style) keyboard port with +5V DC on pin 4 and Ground on pin 3, or a 5-pin DIN (AT Style) keyboard port with +5V DC on pin 5 and ground on pin 4.*

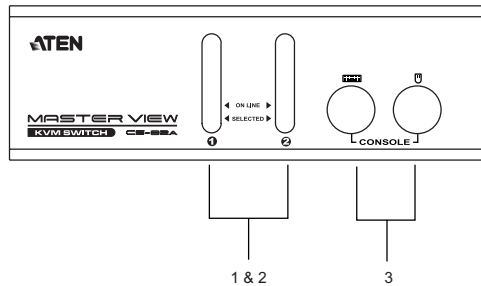* See the note under Cables in the next section.

Cables

Use of substandard cables may damage the connected devices or degrade overall performance. For optimum signal integrity and to simplify the layout, we strongly recommend that you use ATEN high quality CS Custom Cable sets: 2L-1001P/C (1.8 m) and 2L-1003P/C (3 m).

Note: 1. If your computer uses a standard AT style keyboard socket you will need to purchase a PS/2-to-AT keyboard adapter (Part No. 2A-106, or any standard keyboard adapter).

2. The CS-82A does not support serial mice.

2002-09-19

Introduction

Front View

1 & 2   3

1. **Port Selection Switches**

   Press a switch to access the computer attached to the corresponding port.
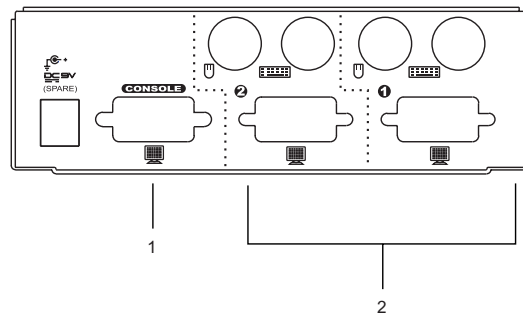
2. **Port LEDs:**

   The Port LEDs are built into the Port Selection Switches. The upper ones are the On Line LEDs; the lower ones are the Selected Port LEDs:

   - The *On Line* LEDs lights ORANGE to indicate that the computer attached to the corresponding port is up and running.

   - The *Selected* LED lights GREEN to indicate that the computer attached to its corresponding port is the one that has the KVM focus. Depending on the port's status, the LED may flash according to a specific pattern (see the *LED Display* table in the Appendix for details).

3. **Console Keyboard and Mouse Ports**

   The cables from your keyboard and mouse plug in here. Each port is identified by an appropriate icon.

2002-09-19

Rear View

1. Console Video Connector

The cable from your monitor plugs in here.

2. CPU Port Connectors

The KVM cables that connect to the computer's monitor, keyboard and mouse ports plug in here. Each port is identified by an appropriate icon.

Note: 1. In order to have the console's keyboard and mouse control notebook computers that only have one PS/2 port, you can use a *two PS/2 port to USB adapter*, such as the ATEN UC-100KM. Simply plug the KVM cable's keyboard and mouse connectors into the adapter, then plug the adapter into the computer's USB port.

2. Ordinary PS/2 to USB changers commonly sold in computer shops will not work with the CS-82A.

2002-09-19

Installation

1. 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. Consult your dealer for technical details, if necessary.
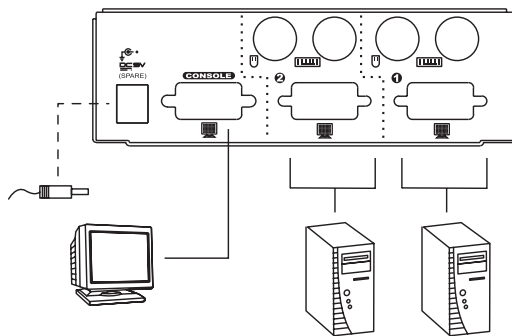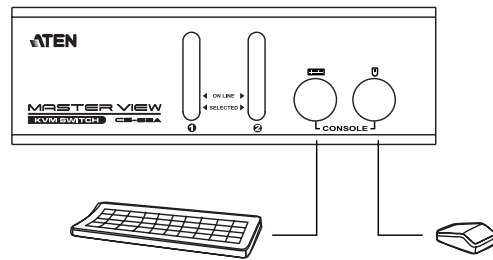
Refer to the diagram on the next page as you perform the following steps:

1. Plug the monitor, keyboard, and mouse into the Console port connectors of the Master View CS-82A unit. Each port is labeled with an appropriate icon to indicate itself.

2. Use KVM cables (see the *Hardware Requirements* section), to connect the keyboard, monitor, and mouse ports from any available CPU Port (1 - 2), to the keyboard, monitor, and mouse ports of the computers you are connecting up (see the diagram on p. 7).

   Note: If your computers use AT style connectors for the keyboard, and/or standard serial connectors for the mouse, refer back to the note in the *Cables* section on p. 3.

3. If you choose to use external power (optional) plug the power adapter into an external AC source; plug the power adapter cable into the unit s power jack as shown in the diagram on p. 7.

4. Turn on the power to the connected computers.

   Note: The CS-82A's Power On default is to link to the first computer you turn on.

2002-09-19

2002-09-19

Operation

Controlling all the computers in your CS-82A installation from a single console could not be easier. Two port selection methods that provide instant access to the computers are available:

 ◆ Manual Port Selection
 ◆ Hotkey Port Selection

Manual Port Selection

With Manual Port Selection you simply press the Port Selection switch that corresponds to the port that the computer you want to access is attached to. The *Selected LED* lights to indicate which port is active.

Hotkey Port Selection

Hotkey Port Selection allows you to select the active computer directly from the keyboard. The Master View CS-82A provides the following Hotkey Port Selection features:

 ◆ Selecting the Active Port
 ◆ Auto Scan Mode

2002-09-19

◆ **Selecting the Active Port:**

You can toggle between the two computers by pressing and releasing the left or right Ctrl key twice:

```
[Ctrl] [Ctrl]
```

Note: 1. Press and release the keys one at a time.

2. The combination must be on the same side:

```
[Left Ctrl] [Left Ctrl] or
[Right Ctrl] [Right Ctrl].
```

◆ **Auto Scan Mode:**

The CS-82A's Auto Scan feature automatically switches between the two computers at regular intervals so that you can monitor their activity without having to take the trouble of switching yourself.

Invoking Auto Scan

To invoke Auto Scan Mode, press and simultaneously release the left Shift key, then press and release the right Shift key:

```
[Left Shift] [Right Shift].
```

Setting the Scan Interval

The default amount of time that Auto Scan dwells on each port is five seconds. You can change the scan interval, if you wish, with the following Hotkey combination:

```
[Left Shift] [Right Shift] [S] [n]
```

Where n represents a number from 1 to 4 that sets the desired scan interval as shown in the table on p. 10.

Note: 1. Press and release the keys one at a time.

2. You must press [S] and [n] within one second, otherwise, they will be ignored and the CS-82A will go into Auto Scan Mode.

2002-09-19

n	Scan Interval
1	3 secs
2	5 secs
3	10 secs
4	20 secs

Once scanning begins, it continues until you press the **[Spacebar]** to exit Auto Scan Mode. The port that has the KVM focus at the time scanning stopped remains active.

Note: While Auto Scan Mode is in effect, the console will not function normally. You must exit Auto Scan Mode (by pressing the **[Spacebar]**) in order to regain normal control of the console.

◆ **Hotkey Summary Table**

Combination	Action
[LCtrl] [LCtrl] or [RCtrl] [RCtrl]	Toggles access between the computers.
[LShift] [RShift]	Starts Auto Scan Mode.
[LShift] [RShift] [S] [*n*]	Changes the scan interval.
[Spacebar]	Exits Auto Scan Mode.

2002-09-19

Appendix

Selected LED Display

Activity	Meaning
Off	Port is not selected.
On (Steady)	Port is connected to an active computer.
Flashing (On and Off equal)	Port is connected to an active computer and is being accessed in Auto Scan mode.

Specifications

Function		Specification
Power Consumption		180 mW
Computer Connections		2
Port Selection		Push Button Switches; Hotkeys
LEDs	On Line	2 (Orange)
	Selected	2 (Green)
Connectors	Keyboard	1 x 6 pin mini-DIN female (PS/2 style) - Console 2 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Mouse	1 x 6 pin mini-DIN female (PS/2 style) - Console 2 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Video	1 x HDB-15 female (std. VGA/SVGA) - Console 2 x HDB-15 male (std. VGA/SVGA) - CPU Ports
Resolution		Up to 1920 x 1440; DDC, DDC2, DDC2B
Scan Interval		5 Seconds
Conversion	Keyboard	PC/AT & PS/2
	Mouse	PS/2
Operating Temperature		5 - 40° C
Storage Temperature		-20 - 60° C
Humidity		0 - 80% RH Non condensing
Housing		Metal
Weight		420 g
Dimensions (L x W x H)		128 x 75 x 45 mm

2002-09-19

Troubleshooting

Note: If you are experiencing problems, first make sure that there are no problems with the cables, and that they are all properly connected.

Symptom	Possible Cause	Action
Keyboard Not Responding[1]	Loose cables.	Check all keyboard cable connections to make sure they are completely seated in their sockets.
	Keyboard needs to be reset.	Unplug the keyboard from the Console Keyboard Port, then plug it back in.
	Switch needs to be reset	Turn off the computers. Unplug the KVM cables from the unit. Wait five seconds; then plug the cables back in and turn the computers on.
	Switch is in Auto Scan Mode.	Press the [Spacebar] to exit Auto Scan or Last/Next Mode.
Mouse Not Detected, or Does Not Respond Correctly[2]	Loose cables.	Check all mouse cable connections to make sure they are completely seated in their sockets.
	Use of Mouse Port Adapters	This unit is designed to only work with PS/2 mice and computers with PS/2 type mouse ports. PS/2 mouse signals and serial mouse signals are different - adapters will not convert the signals - therefore, the computer must be equipped with a PS/2 type mouse port. Serial mouse ports with adapters cannot be used.
	Mouse needs to be reset.	Unplug the mouse from the Console Keyboard Port, then plug it back in.

2002-09-19

Symptom	Possible Cause	Action
Mouse Not Detected, or Does Not Respond Correctly[2]	Master View needs to be reset.	Turn off the computers. Unplug the KVM cables from the . Wait five seconds; then plug the cables back in and turn the computers on
	Mouse set to Serial Mode.	Some mice can be set to act as either a PS/2 or serial mouse. Make sure the mouse is set to PS/2 mode.
	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 CS-82A only supports all the extra features of the Microsoft Intellimouse. It supports the scrollwheel function of most other mice, however.
Video Problems	Resolution and/or Bandwidth set too high.	This unit supports VGA, SVGA, Multisync, and XGA (interlaced), with resolutions of up to 1920x1440. The maximum bandwidth is 180 MHz.
	Cable quality not good enough.	We strongly recommend that you use the high quality cables provided with this package. Using high quality cables should eliminate possible video problems.

[1] The unit is designed to work with AT and PS/2 keyboards. Older XT (84 key) and some older AT keyboards (those with the function keys on the side), will not work.

[2] Some Notebooks, notably the IBM Thinkpad and Toshiba Tecra, have trouble when their mouse and keyboard ports are used simultaneously. To avoid this, only connect the mouse port or the keyboard port. If you connect the mouse port, you will need to use the notebook's keyboard when the notebook becomes the active computer.

2002-09-19

Limited Warranty

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2002-09-19