

MASTER VIEW USB KVM SWITCH



USER MANUAL

CS-1732A

CS-1734A

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Subpart J of 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 instructions, may cause harmful 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.



Packing List

The complete Master View CS-1732A / CS-1734A package consists of:

- ◆ 1 CS-1732A or CS-1734A KVM Switch
- ◆ 2 CS Custom KVM Cables (CS-1732A)
- ◆ 4 CS Custom KVM Cables (CS-1734A)
- ◆ 1 Firmware Upgrade Cable
- ◆ 1 User Manual
- ◆ 1 Quick Start Guide

Check to make sure that all the components are present and that nothing was damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit, and/or any of the devices that connect to it.

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Conventions

This manual uses the following conventions:

- Courier** Indicates text that you should key in.
- [] Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be *chorded*, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
- 1. Numbered lists represent procedures with sequential steps.
- ◆ Bullet lists provide information, but do not involve sequential steps.
- ⊗ Indicates movement through a series. For example, Start ⊗ Run means to open the *Start* menu, and then select *Run*.
- ⚠ Indicates critical information.

Chapter 1. Introduction

Overview

The Master View CS-1732A and CS-1734A represent a revolutionary new direction in KVM (Keyboard, Video, Mouse) Switches. The CS-1732A and CS-1734A are dual function two and four Port KVM Switches combined with 2 Port USB Hubs. As KVM switches, they allow users to access two and four computers from a single USB keyboard, USB mouse, and monitor console. The CS-1732A / CS-1734A improves on previous designs by giving the user a choice of either transferring keyboard and mouse data to the computers via a USB connection, or with the traditional PS/2 connection.

If a USB connection is used, the CS-1732A / CS-1734A's integrated two-port USB hub is available to each of the computers. This permits each computer to access any peripherals connected to the hub on a 'one computer at a time' basis.

The CS-1732A / CS-1734A's asynchronous switching feature allows independent switching of the KVM, USB hub, and audio focus. If you wish, you can give one computer the KVM console focus, another the USB hub focus, while a third has the audio focus. You can work on a spreadsheet on one compute, for example, while you print from a second computer at the same time, thus eliminating the need to purchase separate USB hubs or peripheral sharers.

Recognizing the increased importance of sound, the CS-1732A / CS-1734A is audio enabled. A single microphone can provide audio input to each of the computers, and you can listen to the audio output of each computer on a single set of speakers (on a one-at-a-time basis).

Setup is fast and easy; simply plug cables into their appropriate ports. There is no software to configure, no installation routines, and no incompatibility problems. Since the CS-1732A / CS-1734A intercepts keyboard input directly, it works on multiple operating platforms (PC compatible, Mac*, Sun*, etc.). There are two convenient methods to access the computers: push button port selection switches located on the unit's front panel; and *Hotkey* combinations entered from the keyboard.

Since a single console manages all of the computers, the CS-1732A / CS-1734A installation: 1) eliminates the expense of having to purchase separate console components 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 from one computer to another.

* Mac and Sun computers must use the USB cable connection (see p. 3).

Features

- ◆ Dual function KVM-USB switch
- ◆ One console controls 2 (CS-1732A) or 4 (CS-1734A) computers and two additional USB devices
- ◆ Dual interface support - PS/2 or USB keyboard and mouse data transport*
- ◆ Independent (asynchronous) switching of KVM and peripheral USB ports
- ◆ Fully compliant with the USB 1.1 specification - supports transfer rates of 1.5/12 Mbps
- ◆ Computer selection via front panel switches and Hotkeys
- ◆ LED Display For Easy Status Monitoring
- ◆ Auto Scan Mode for monitoring all computers
- ◆ Complete keyboard emulation for error free booting
- ◆ Superior video quality - 2048x1536; DDC2B
- ◆ Easy installation - no software required
- ◆ Hot pluggable - add or remove computers for maintenance without powering down the switch
- ◆ Supports Windows, Mac, and Sun host systems
- ◆ Windows 98SE / ME / 2000 / XP; Mac OS8.6 or higher; Solaris; Linux

* For PC compatible computers. Mac and Sun computers must use the USB cable connection (see p. 3).

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 USB style mouse
- ◆ A USB style keyboard

Computer

The following equipment must be installed on each computer:

- ◆ A VGA, SVGA or Multisync card.
- ◆ Type A USB port, or PS/2 keyboard and mouse ports.

Cables

Only CS Custom cable sets specifically designed to work with this switch may be used to link to the computers. Two (CS-1732A) or four (CS-1734A) 1.2m 4-in-1 cable sets are provided with this package. They use the USB to transfer the keyboard and mouse input from your console to the computer.

The switches also support computers that use PS/2 connectors to transfer keyboard and mouse data. Cable sets with PS/2 connectors, as well as longer cable sets are also available:

Connector	Cable Length	Part Number
USB	1.2m	2L-5301U
USB	1.8m	2L-5302U
PS/2	1.2m	2L-5301P
PS/2	1.8m	2L-5302P

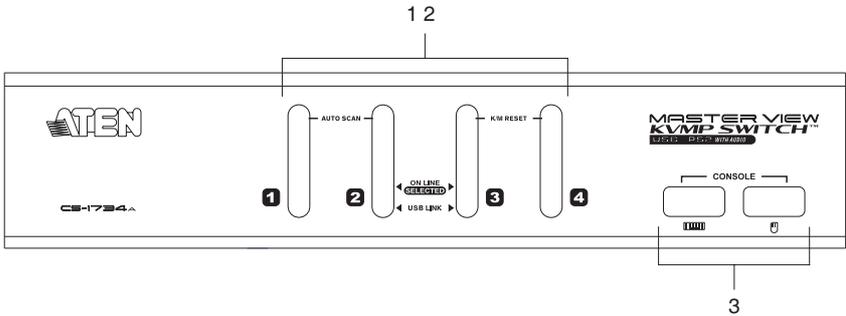
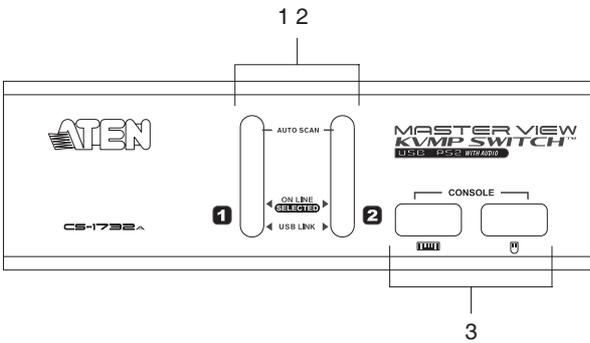
Note: The CS-1732A / CS-1734A's USB hub function only works with USB cable set connections. It will not work with PS/2 cable set connections.

For additional cables, contact your dealer.

Notes:

Chapter 2.
Hardware Setup

CS-1732A / CS-1734A Front View



1. Port Selection Switches

- ◆ Press a switch for longer than two seconds to bring the KVM, USB hub, and audio focus to the computer attached to its corresponding port.
- ◆ Press a switch for less than two seconds to bring only the KVM focus to the computer attached to its corresponding port.
- ◆ Press switches 1 and 2 simultaneously for 2 seconds to start *Auto Scan Mode*. See p. 15 for details.
- ◆ Press switches 3 and 4 simultaneously for 2 seconds to perform a keyboard and mouse reset. (CS-1734A)

2. Port LEDs

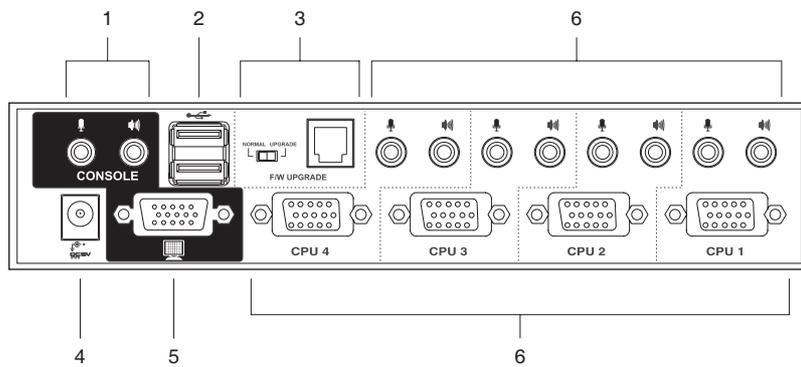
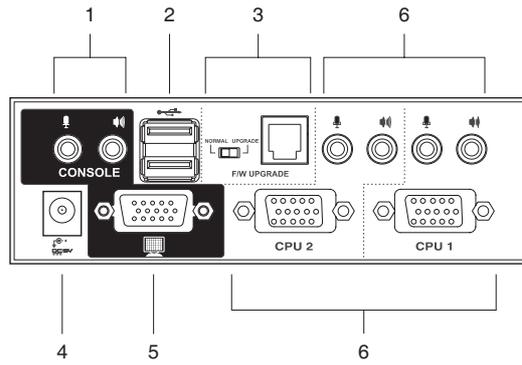
The Port LEDs are built into the Port Selection Switches. The upper ones are the KVM Port LEDs; the lower ones are the USB LEDs:

- KVM:**
- ◆ Lights DIM ORANGE to indicate that the computer attached to the corresponding port is up and running (On Line).
 - ◆ Changes to BRIGHT ORANGE to indicate that the computer attached to its corresponding port is the one that has the KVM focus (Selected).
 - ◆ Flashes to indicate that the computer attached to its corresponding port is being accessed under Auto Scan mode.
- USB:**
- ◆ Lights DIM GREEN when there is a USB cable connection to the computer. Does not light if there is no USB connection to the computer (there is a PS/2 cable connection rather than a USB cable connection - see the diagrams on p. 11).
 - ◆ Changes to BRIGHT GREEN to indicate that the computer attached to its corresponding port is the one that has access to the USB peripherals.

3. Console USB Ports

Your USB keyboard and USB mouse plug in here.

CS-1732A / CS-1734A Rear View



1. Console Audio Jacks

The cables from your microphone and speakers plug in here. Each jack is marked with an appropriate icon to indicate itself.

2. USB Hub Section

USB peripherals (printers, scanners, etc.) can plug into any available port.

3. Firmware Upgrade Section

- ◆ Firmware Upgrade Switch
During normal operation this switch should be in the NORMAL position.
- ◆ Firmware Upgrade Port
The Firmware Upgrade Cable that transfers the firmware upgrade data from the administrator's computer to the CS-1732A / CS-1734A plugs into this RJ-11 connector.
- ◆ See p. 23 for firmware upgrading details.

4. Power Jack

If you choose to use external power, the power adapter cable plugs into this jack.

Note: Use of a power adapter (DC 5V) is optional, and requires a separate purchase. See p. 10 for power adapter details.

5. Monitor Port

The video cable from your monitor plugs in here.

6. CPU Port Section

The cables that link the switch to your computers plug in here. Each CPU port is comprised of a microphone jack, speaker jack, and KVM data connector.

Note: The shape of these 15-pin connectors has been specifically modified so that only KVM cables designed to work with this switch can plug in (see the Cables section on p. 3, for details). Do **NOT** attempt to use ordinary 15 pin VGA connector cables to link these ports to the computers.

Before you Begin



1. 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 make sure that all devices on the installation are properly grounded.

Cable Connection

To set up your Master View CS-1732A / CS-1734A installation, refer to the installation diagrams on the following pages, and do the following:

1. Plug your USB keyboard and USB mouse into the USB Ports located on the unit's front panel.
2. Plug your monitor into the Console monitor port located on the unit's rear panel.
3. Plug your microphone and speakers into the Console microphone and speaker jacks located on the unit's rear panel.
4. Using a KVM cable set (provided with this package), plug the custom SPDB connector into any available CPU Port on the switch and plug the accompanying microphone and speaker cables into the CPU Port's microphone and speaker jacks.

Note: Be sure that all the plugs are in the same CPU Port sockets (all in Port 1, all in Port 2, etc.).

5. At the other end of the cable:
 - a) For a USB connection (see p. 11), plug the USB, video, microphone and speaker cables into their respective ports on the computer.
 - b) For a PS/2 connection (see p. 11), plug the keyboard, mouse, video, microphone and speaker cables into their respective ports on the computer.

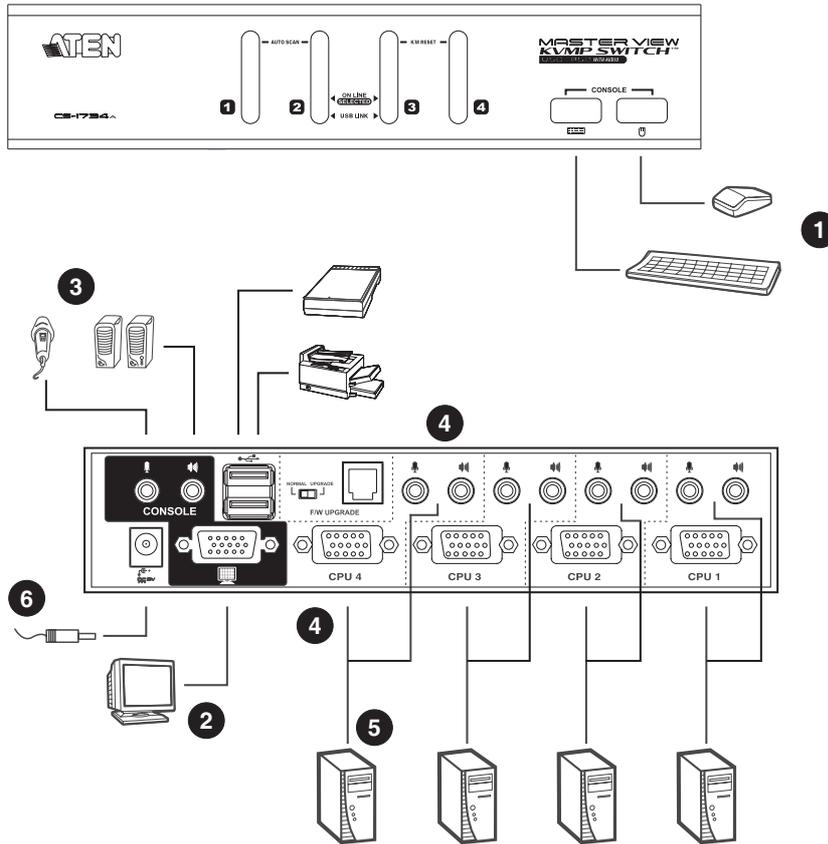
Repeat steps 4 and 5 for any other computers you are connecting up.

6. If you choose to use external power, plug the power adapter cable into the switch's Power Jack, then plug the power adapter into an AC power source.

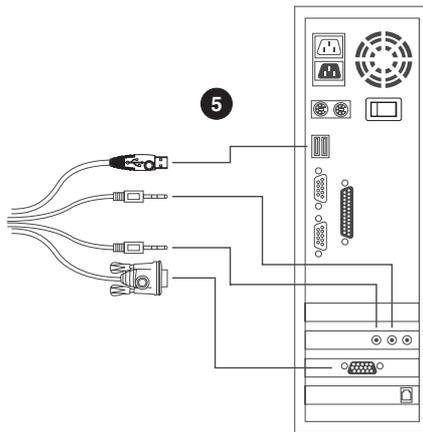
Note: The power adapter should be DC5V 2.6A with the inside positive and the outside negative:



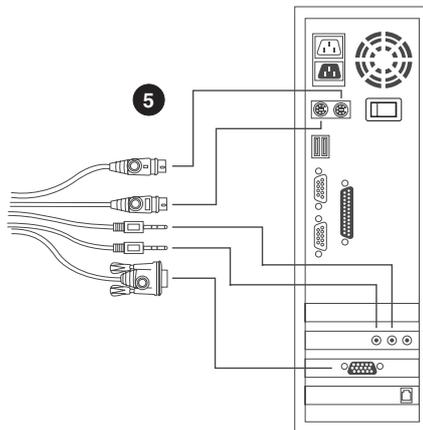
7. Turn on the power to the computers.



USB Cable Connection:



PS/2 Cable Connection:



Hot Plugging

The Master View CS-1732A / CS-1734A supports USB hot plugging - components can be removed and added back into the installation by unplugging their cables from the CPU ports without the need to shut the unit down.

Powering Off and Restarting

If it becomes necessary to Power Off the Master View unit, before starting it back up you must do the following:

1. Shut down all the computers that are attached to the switch.
Note: You must unplug the power cords of any computers that have the *Keyboard Power On* function that are connected to the shut down switches. Otherwise, the switches will still receive power from the computers.
2. Unplug the switch's power adapter cable.
3. Wait 10 seconds, then plug the switch's power adapter cable back in.
4. After the switch is up, Power On the computers.

Port Numbering

Each CPU port on the CS-1732A / CS-1734A switch is assigned a port number (1 or 2 for the CS-1732A; 1 to 4 for the CS-1734A). The port numbers are marked on the rear panel of the switch (see p. 7).

The Port ID of a computer is derived from the CPU port number it is connected to. For example, a computer connected to CPU port 3 has a Port ID of 3.

The Port ID is used to specify which computer gets the KVM, USB hub, and audio focus with the Hotkey port selection method (see p. 13, for details).

Chapter 3. Hotkey Operation

The CS-1732A / CS-1734A provides an extensive, easy-to-use, hotkey function that makes it convenient to control and configure your KVM installation from the keyboard. Hotkeys provide asynchronous (independent) switching of the KVM, USB hub and audio focus. If you wish, you can give one computer the KVM console focus, another the USB hub focus, while a third has the audio focus.

Port Switching

All port switches begin with tapping the **Scroll Lock** key twice. The tables below describe the actions that each combination performs.

Note: If using the Scroll Lock key conflicts with other programs running on the computer, the **Ctrl** key can be used, instead. See p. 16 for details.

Cycling Through the Ports

Hotkey	Action
[Scroll Lock] [Scroll Lock] [Enter]	Brings the KVM, USB hub, and audio focus from the port that currently has the KVM focus to the next port on the installation (1 to 2; 2 to 1 for the CS-1732A; 1 to 2; 2 to 3; 3 to 4; 4 to 1 for the CS-1734A). Note that the KVM, USB hub, and audio focus all go to this port even if they were on different ports to begin with.
[Scroll Lock] [Scroll Lock] [K] [Enter]	Brings only the KVM focus from the port that currently has it to the next port on the installation. The USB hub and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [U] [Enter]	Brings only the USB hub focus from the port that currently has it to the next port on the installation. The KVM and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [S] [Enter]	Brings only the audio focus from the port that currently has it to the next port on the installation. The KVM and USB hub focus remain where they are.

Going Directly to a Port

Hotkey	Action
[Scroll Lock] [Scroll Lock] [n] [Enter]	Brings the KVM, USB hub, and audio focus to the computer attached to the port corresponding to the specified Port ID. Note that the KVM, USB hub, and audio focus all go to this port even if they were on different ports to begin with.
[Scroll Lock] [Scroll Lock] [n] [K] [Enter]	Brings only the KVM focus to the computer attached to the specified port. The USB hub and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [n] [U] [Enter]	Brings only the USB hub focus to the computer attached to the specified port. The KVM and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [n] [S] [Enter]	Brings only the audio focus to the computer attached to the specified port. The KVM and USB hub focus remain where they are.
[Scroll Lock] [Scroll Lock] [n] [K] [U] [Enter]	Brings the KVM and USB hub focus to the computer attached to the specified port. The audio focus remains where it is.
[Scroll Lock] [Scroll Lock] [n] [K] [S] [Enter]	Brings the KVM and audio focus to the computer attached to the specified port. The USB hub focus remains where it is.
[Scroll Lock] [Scroll Lock] [n] [U] [S] [Enter]	Brings the USB hub and audio focus to the computer attached to the specified port. The KVM focus remains where it is.

Note: The **n** stands for the computer's Port ID number (1, 2, 3, or 4 - see *Port Numbering*, p. 12). Replace the **n** with the appropriate Port ID when entering hotkey combinations.

Auto Scanning

The CS-1732A / CS-1734A's Auto Scan feature automatically cycles the KVM focus through the computer ports at regular intervals. This allows you to monitor the computer activity without having to take the trouble of switching from port to port manually. See the table below for details.

Hotkey	Action
[Scroll Lock] [Scroll Lock] [A] [Enter]	Starts Auto Scan. The KVM focus cycles from port to port at 5 second intervals.
[Scroll Lock] [Scroll Lock] [A] [n] [Enter]	Starts Auto Scan. The KVM focus cycles from port to port at n second intervals.

Note: The **n** stands for the number of seconds that the CS-1732A / CS-1734A should dwell on a port before moving on to the next. Replace the **n** with a number between 1 and 99 when entering this hotkey combination.

Hotkey Setting Mode

Hotkey Setting Mode is used to set up your CS-1732A / CS-1734A switch configuration. All operations begin with invoking Hotkey Setting Mode (HSM).

Invoking HSM

To invoke HSM do the following:

1. Press and hold down the **Num Lock** key
2. Press and release the **minus** key
3. Release the **Num Lock** key

Note: 1. There is an alternate key combination to invoke HSM. See below for details.
2. The minus key must be released within one half second, otherwise Hotkey invocation is canceled.

When HSM is active, the Caps Lock, and Scroll Lock LEDs flash in succession to indicate that HSM is in effect. They stop flashing and revert to normal status when you exit HSM.

Ordinary keyboard and mouse functions are suspended - only Hotkey compliant keystrokes and mouse clicks (described in the sections that follow), can be input.

At the conclusion of some hotkey operations, you automatically exit hotkey mode. With some operations, you must exit manually. To exit HSM manually, press the **Esc** key, or the **Spacebar**.

Alternate HSM Invocation Keys

An alternate set of HSM invocation keys is provided in case the default set conflicts with programs running on the computers.

To switch to the alternate HSM invocation set, do the following:

1. Invoke HSM (see above)
 2. Press and release the **H** key
- The HSM invocation keys become the Ctrl key (instead of Num Lock) and the F12 key (instead of minus).

Note: This procedure is a toggle between the two methods. To revert back to the original HSM invocation keys, invoke HSM, then press and release the **H** key again.

Alternate Port Switching Keys

The port switching activation keys can be changed from tapping the Scroll Lock key twice ([Scroll Lock] [Scroll Lock]) to tapping the Ctrl key twice. To change the port switching activation keys, do the following:

1. Invoke HSM (see p. 16)
2. Press and release the **T** key

Note: This procedure is a toggle between the two methods. To revert back to the original [Scroll Lock] [Scroll Lock] method, invoke HSM, then press and release the **T** key again.

Keyboard Operating Platform

The CS-1732A / CS-1734A's default port configuration is for a PC Compatible keyboard operating platform. If your requirements call for different port settings (you have a Mac or Sun attached to a port, e.g.), you can change a port's keyboard operating platform configuration as follows:

1. Bring the KVM focus to the port you want to set.
2. Invoke HSM (see p. 16)
3. Press and release the appropriate Function key (see table). After completing a setting, you automatically exit HSM.

Function Key	Operation
[F1]	Sets the PC Compatible keyboard operating platform.
[F2]	Sets the Mac keyboard operating platform.
[F3]	Sets the Sun keyboard operating platform.*

* The first time that the Sun system runs from a port, you must configure its port for the Sun keyboard operating platform before you turn the system on, or else the Sun system will not start.

List Hotkey Settings

To see a listing of the current hotkey settings, do the following:

1. Invoke HSM (see p. 16).
2. Press and release the **F4** function key.
3. Open a text editor or word processor and use its *Paste* function to display the settings.

USB Reset

If the USB loses focus and needs to be reset, do the following:

1. Invoke HSM (see p. 16).
2. Press and release the **F5** function key.

Hotkey Beeper Control

The Beeper can be hotkey toggled On and Off. To toggle the Beeper, do the following:

1. Invoke HSM (see p. 16).
2. Press and release the **B** key.

The Beeper toggles On or Off. The Command Line displays *Beeper On* or *Beeper Off* for one second; then the message disappears and you automatically exit Hotkey Mode.

Disable Port Switching Keys

To disable the Port Switching Keys ([Scroll Lock] [Scroll Lock] / [Ctrl] [Ctrl]), do the following:

1. Invoke HSM (see p. 16).
2. Press [**X**] [**Enter**].

Note: This procedure is a toggle. To enable the Port Switching keys repeat steps 1 and 2.

Restore Default Settings

To reset the CS-1732A / CS-1734A to its default hotkey settings, do the following:

1. Invoke HSM (see p. 16).
2. Press **[R] [Enter]**.

All hotkey settings return to the factory default settings.

HSM Summary Table

After invoking HSM (see p. 16), key in one of the following keys to perform the corresponding function:

Key	Function
H	Toggles between the default and alternate HSM invocation keys.
T	Toggles between the default and alternate Port Switching keys.
F1	Sets the PC Compatible keyboard operating platform.
F2	Sets the Mac keyboard operating platform.
F3	Sets the Sun keyboard operating platform.
F4	Lists the current hotkey settings via the <i>Paste</i> function of a text editor or WP.
F5	Performs a USB reset.
B	Toggles the beeper On and Off.
X [Enter]	Enables/Disables the Port Switching keys.
R [Enter]	Resets the hotkey settings to their default status.

Keyboard Emulation

Sun Keyboard

The PC compatible (101/104 key) keyboard can emulate the functions of the Sun keyboard when the Control key [Ctrl] is used in conjunction with other keys. The corresponding functions are shown in the table below.

Note: When using [Ctrl] combinations, press and release the **Ctrl** key, then press and release the activation key.

PC Keyboard	Sun Keyboard
[Ctrl] [T]	Stop
[Ctrl] [F2]	Again
[Ctrl] [F3]	Props
[Ctrl] [F4]	Undo
[Ctrl] [F5]	Front
[Ctrl] [F6]	Copy
[Ctrl] [F7]	Open
[Ctrl] [F8]	Paste
[Ctrl] [F9]	Find
[Ctrl] [F10]	Cut
[Ctrl] [1]	
[Ctrl] [2]	
[Ctrl] [3]	
[Ctrl] [4]	
[Ctrl] [H]	Help
	Compose
	Meta

Mac Keyboard

The PC compatible (101/104 key) keyboard can emulate the functions of the Mac keyboard. The emulation mappings are listed in the table below.

Note: When using key combinations, press and release the first key, then press and release the second one.

PS/2 Keyboard	Mac Keyboard
[Shift]	Shift
[Ctrl]	Ctrl
[Win]	⌘
[Ctrl] [4]	⏮
[Alt]	L Alt/Option
[Prt_Sc]	F13
[Scroll Lock]	F14
[Desktop Menu]	=
[Enter]	Return
[Back Space]	Delete
[Ins]	Help
[Ctrl] [Win]	F15
[Ctrl] [1]	Mult
[Ctrl] [2]	V_DN
[Ctrl] [3]	V_UP

Notes:

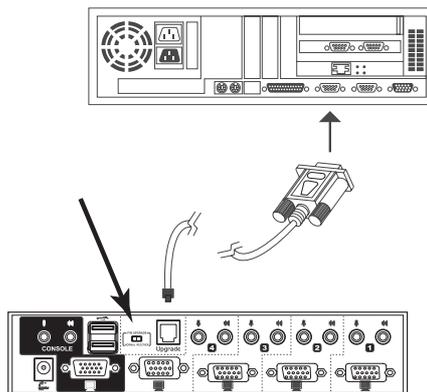
Chapter 4. The Firmware Upgrade Utility

The Windows-based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth, automated process for upgrading the KVM switch's firmware. The Utility comes as part of a Firmware Upgrade Package that is specific for each device. New firmware upgrade packages are posted on our web site as new firmware revisions become available. Check the web site regularly to find the latest packages and information relating to them:

<http://www.aten.com.tw>

Before You Begin

1. From a computer that is not part of your KVM installation go to our Internet support site and choose the model name that relates to your device (CS-1732A / CS-1734A) to get a list of available Firmware Upgrade Packages.
2. Choose the Firmware Upgrade Package you want to install (usually the most recent), and download it to your computer.
3. Power off the switch.
 - ◆ Unplug the KVM cables from the back of the switch.
 - ◆ If you are using a power adapter with your switch, unplug its power adapter cable from the power jack.
4. Use the *Firmware Upgrade Cable* provided with this unit, to connect a COM port on your computer to the *Firmware Upgrade Port* of your switch
5. Slide the Firmware Upgrade Switch to the *Upgrade* position.



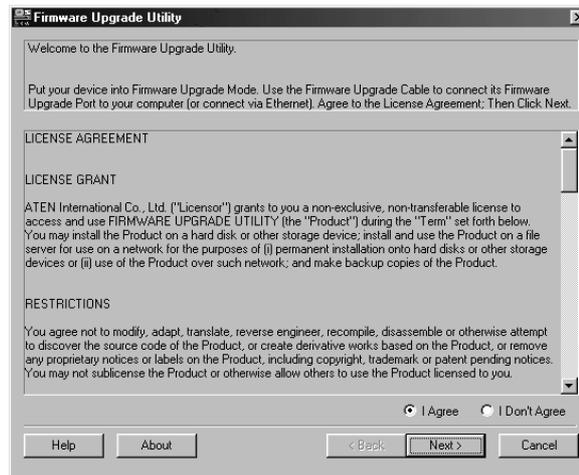
6. Power the switch back on by plugging in one of the KVM cables. The switch's front panel LEDs flash to indicate that it is in Firmware Upgrade Mode.

Starting the Upgrade

To upgrade your firmware:

1. Run the downloaded Firmware Upgrade Package file - either by double clicking the file icon, or by opening a command line and entering the full path to it.

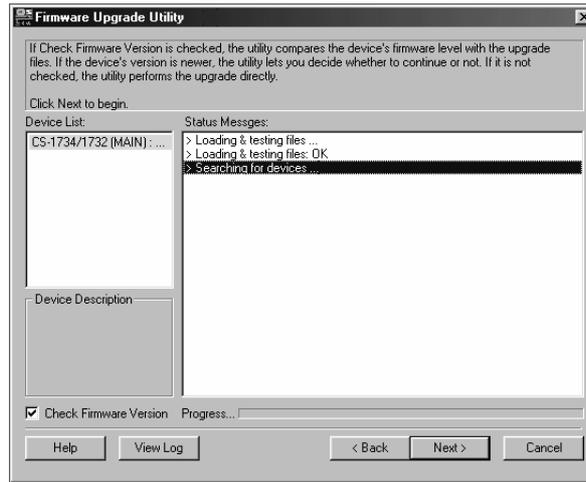
The Firmware Upgrade Utility *Welcome* screen appears:



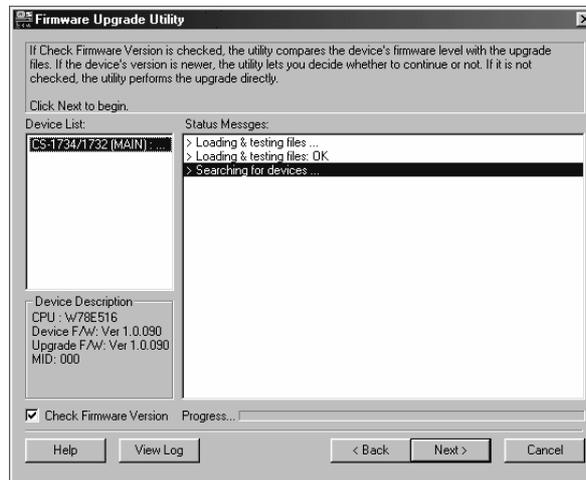
Note: The screenshots in this section are for example purposes. The screens that appear during your firmware upgrade may vary slightly as to their wording and descriptions.

2. Read and *Agree* to the License Agreement (enable the I Agree radio button).

1. Click Next to continue. The Firmware Upgrade Utility main screen appears:
The Utility inspects your installation. All the devices capable of being upgraded by the package are listed in the *Device List* panel.

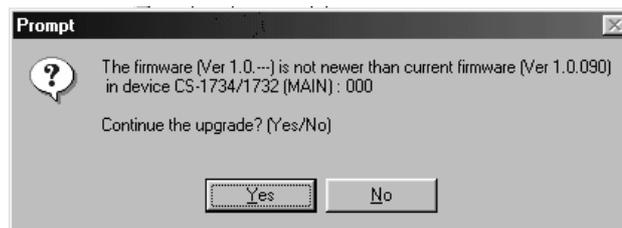


2. As you select a device in the list, its description appears in the *Device Description* panel.



3. After you have made your device selection(s), Click **Next** to perform the upgrade.

If you enabled *Check Firmware Version*, the Utility compares the device's firmware level with that of the upgrade files. If it finds that the device's version is higher than the upgrade version, it brings up a dialog box informing you of the situation and gives you the option to Continue or Cancel.

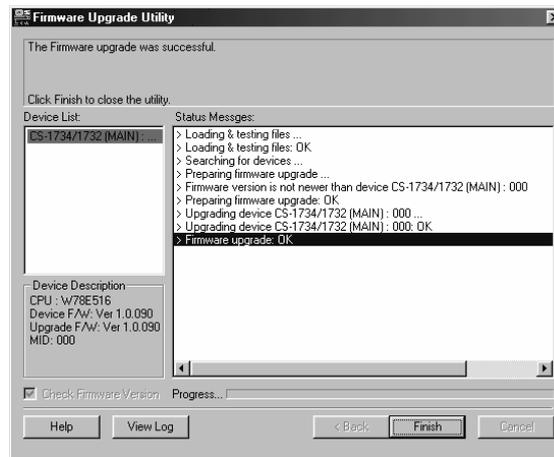


If you didn't enable *Check Firmware Version*, the Utility installs the upgrade files without checking whether they are a higher level, or not.

As the Upgrade proceeds status messages appear in the Status Messages panel, and the progress toward completion is shown on the *Progress* bar.

Upgrade Succeeded

After the upgrade has completed, a screen appears to inform you that the procedure was successful.



To complete the upgrade:

1. Click **Finish** to close the Firmware Upgrade Utility.
2. Power off the switch by unplugging the KVM cable that you connected in step 6 of *Before You Begin* (see p. 23), from the back of the switch.
3. Remove the Firmware Upgrade Cable.
4. Slide the Firmware Upgrade Switch to the *Normal* position.
5. Connect all the KVM cables.
6. If you are using a power adapter, plug its cable back in.

Upgrade Failed

If the *Upgrade Succeeded* screen doesn't appear, it means that the upgrade failed to complete successfully, in which case you should repeat the upgrade procedure from the beginning.

Notes:

Appendix

Specifications

Function		CS-1732A	CS-1734A
Computer Connections		2	4
CPU Port Selection		Front Panel Switches; Hotkey	
USB Port Selection		Hotkey	
LEDs	On Line	2 (Orange)	4 (Orange)
	USB Link	2 (Green)	4 (Green)
Console Connectors	Keyboard	1 x USB Type A	
	Mouse	1 x USB Type A	
	Video	1 x HDB -15 female	
	Audio	1 x Stereo port 1 x Microphone port	
CPU Connectors	KVM data	2 x SPDB - 15 female	4 x SPDB - 15 female
	Audio	2 x Stereo ports 2 x Microphone ports	4 x Stereo ports 4 x Microphone ports
USB Peripherals		2 x USB Type A	
Firmware Upgrade		1 x RJ- 11socket	
Power Adapter		1 x DC 5V jack	
Scan Interval		1 - 99 secs. (5 secs. default)	
Resolution		Up to 2048 x 1536	
Power Consumption		240mA	1280mA
Operating Temperature		0 - 50° C	
Storage Temperature		-20 - 60° C	
Humidity		0 - 80% RH	
Housing		Metal	
Weight		.49 kg	.70 kg
Dimensions (L x W x H)		13.0 x 7.45 x 4.2cm	20 x 7.45 x 4.2cm

Troubleshooting

Symptom	Possible Cause	Action
Erratic behavior.	Unit not receiving enough power.	Use a DC 5V power adapter if you are not already using one. If you are already using a power adapter, check that it matches the system specifications (DC 5V), and that it is plugged in and functioning properly.
Keyboard and/or Mouse not responding.	Keyboard and/or mouse need to be reset.	Press and hold port selection switches 1 and 2 for two seconds. (CS-1734A only.) Unplug the cable(s) from the console port(s), then plug it/them back in.
	No connection to the computer.	Check the cable from the switch to the computer to make sure it is properly connected.
	KVM switch needs to be reset.	Power off all devices on the installation (see the note at the top of p. 9); power off the KVM switch; wait five seconds; then power up.
USB devices not responding.	USB ports need to be reset.	Unplug the device's USB cable from the USB port on the switch's rear panel, then plug it back in.
		Use the USB Reset hotkey combination (see p. 18), to reset the USB ports.
Device not recognized message (Windows)	Windows timing problem.	<ol style="list-style-type: none"> 1. Unplug the KVM cable from the computer's USB port. 2. Go into Windows' <i>System Settings</i> and remove the <i>Unknown Device</i> entry. 3. Plug the KVM cable back in. Windows will now recognize the device.
Sun system does not start.	CPU port not configured correctly.	The first time that a Sun system runs from a port, you must configure its port for the Sun keyboard operating platform before you turn the system on, or else the Sun system will not start. See p. 17 for details.

Limited Warranty

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