

MASTER VIEW SLIDEAWAY™ KVM SWITCH



USER MANUAL

ACS-1208L

ACS-1216L

2002-01-15

Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

2002-01-15

PACKING LIST

The complete Master View ACS-1208L / ACS-1216L package consists of:

- 1 ACS-1208L or ACS-1216L KVM Switch
- 2 Custom KVM Cable Sets
- 1 Power Adapter with Power Cord
- 1 User Manual
- 1 Quick Start Guide
- 1 LCD OSD Quick Reference

Check to make sure that the unit was not 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 connected to it.

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OVERVIEW

The Master View ACS-1208L and ACS-1216L KVM Switches are control units that allow access to multiple computers from a single console (keyboard, mouse, and monitor). 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 ACS-1208L and ACS-1216L, you can easily access multiple computers in a cost effective manner.

A single Master View ACS-1208L or ACS-1216L can control up to 8 or 16 computers, respectively. As many as 31 additional Master View ACS-1216 units can be daisy chained to each other, so that up to 512 computers can all be controlled from a single keyboard-monitor-mouse console.

The Master View ACS-1208L / ACS-1216L offers a space-saving, streamlined approach to KVM switch technology by integrating a keyboard, LCD monitor, and trackball in a 1U high *Slideaway*[™] housing for convenient rack mounting. Slide the KVM module section out; flip the cover up; and you are ready to go to work. The LCD display is built into the cover; the keyboard and trackball are built into the base. When finished, simply flip the cover down and slide the KVM module away.

For further convenience, the ACS-1208L / ACS-1216L features high density 15 pin connectors instead of the usual 25 pin connectors. This space-saving innovation allows a full, 16 port switch to be installed in a 1U system rack. Because of its modular design, the KVM section can be detached from the switch section. If you ever need to expand your connections, you can remove the 8 port Switch module; and replace it with a 16 port Switch module.

Setup is fast and easy; plugging cables into their appropriate ports is all that is entailed. Because the ACS-1208L / ACS-1216L intercepts keyboard input directly, there is no software to configure, so there is no need to get involved in complex installation routines or be concerned with incompatibility problems. Access to any computer connected to the installation is easily accomplished either by entering *Hotkey* combinations from the keyboard, or by means of a powerful menu driven OSD (On Screen Display) system. A convenient *Auto Scan* feature also permits automatic scanning and monitoring of the activities of all computers running on the installation one by one.

There is no better way to save time and money than with a Master View ACS-1208L / ACS-1216L installation. By using the Master View ACS-1208L / ACS-1216L with its *Slideaway*[™] console, to manage your installation, you: (1) eliminate the expense of having to purchase a separate keyboard, monitor, and mouse for each computer; (2) save all the space those extra components would take up; (3) save the space that a keyboard, monitor, and mouse would take with a standard KVM switch; (4) save on energy costs; and (5) eliminate the inconvenience and wasted effort involved in constantly moving from one computer to another.

FEATURES

- ♦ Integrated KVM Console - Including a 15" LCD Monitor - In a 1U High *Slideaway*[™] Housing For Convenient Rack Mounting
- ♦ Space Saving Technology - A Single Console Controls Up To 8 (ACS-1208L) or 16 (ACS-1216L) Computers
- ♦ Daisy Chain Up To 31 Additional Units - Control Up to 512 Computers From the Unit's Integrated *Slideaway*[™] Console
- ♦ Console Detaches From the Switch Chassis for Easy Maintenance
- ♦ No Software Required - Convenient Computer Selection via *Hotkeys* and Intuitive On Screen Display (OSD) Menus
- ♦ Auto Scan Feature for Monitoring User-Selected Computers
- ♦ Hot Pluggable - Add or Remove Computers Without Having To Power Down the Switch
- ♦ Auto-Sensing of Station Position on Daisy Chained Installations - No Need For Manual DIP Switch Setting - Front Panel LED Indicates Station Position
- ♦ Port Names Automatically Reconfigured When Station Sequence Is Changed
- ♦ Two Level Password Security - Only Authorized Users View and Control the Computers - Up to Four Users Plus an Administrator - Separate Profiles For Each
- ♦ Two Level Logout - Manual and Timed
- ♦ PS/2 Keyboard and Mouse Emulation - Computers Boot Even When the Console Focus is Elsewhere
- ♦ Superior Video Quality - Supports Resolutions of Up To 1024 x 768
- ♦ Rack Mountable in 19" System Rack (1U)

HARDWARE REQUIREMENTS

COMPUTERS

The following equipment must be installed on each computer:

- A VGA, SVGA or Multisync card.

Note: Since the integrated LCD monitor's maximum resolution is 1024 x 768, make sure that the computer resolution settings do not exceed 1024 x 768.

- 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

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 the following high quality CS Custom Cable sets:

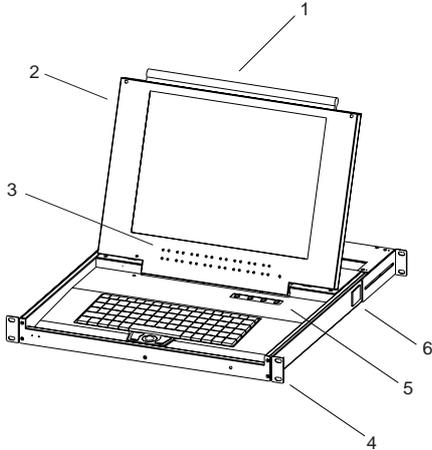
Function	CS Part Number
Master View to Computer	2L-5201P - 1.2 m
	2L-5202P - 1.8 m
	2L-5203P - 3.0 m
Master View to Master View (Daisy Chaining)	2L-1700 - 0.6 m
	2L-1701 - 1.8 m

Note: 1. The ACS-1208L/ACS1216L does not support serial mice. You cannot use Serial-to-PS/2 adapters with the extender cables. Attempts to do so will not work.

2. If your computer uses an 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), in order to plug the cable into the computer's keyboard port.

INTRODUCTION

ACS-1208L / ACS1216L FRONT VIEW



1. Handle

Pull to slide the KVM module out; push to slide the module in.

2. Cover

After sliding the KVM module out, flip up the cover to access the LCD monitor, keyboard and trackball.

3. Port LEDs

Port LEDs provide status information about their corresponding CPU Ports. The top row of LEDs corresponds to Ports 1 - 8; the bottom row corresponds to Ports 9 - 16. There are two LEDs for each Port. The one on the left is the *On Line* LED; the one on the right is the *Selected Port* LED:

- An *On Line* LEDs light ORANGE to indicate that the computer attached to the corresponding port is up and running.
- A *Selected* LEDs light GREEN to indicate that the computer attached to the corresponding port is the one that has the KVM focus. The LED is steady under normal conditions, but flashes when its port is accessed under *Auto Scan Mode* (see *F7 SCAN*, p. 26).

- Note:**
1. Since the ACS-1208L only has eight ports, only the top row of LEDs (corresponding to Ports 1 - 8) are active on that unit. On the ACS-1216L, both rows are active.
 2. When the ACS-1208L / ACS-1216L is first powered on, the *On Line* and *Selected* LEDs blink one after the other as the Switch performs a self-test.



4. Rack Mounting Brackets

There are rack mounting brackets attached to each corner of the unit. They are used to secure the chassis to a system rack.

5. LCD Display Controls

The LCD On/Off Switch is located here, as well as buttons to control the position and picture settings of the LCD display. See the *LCD OSD Quick Reference* (provided with this package) for details.

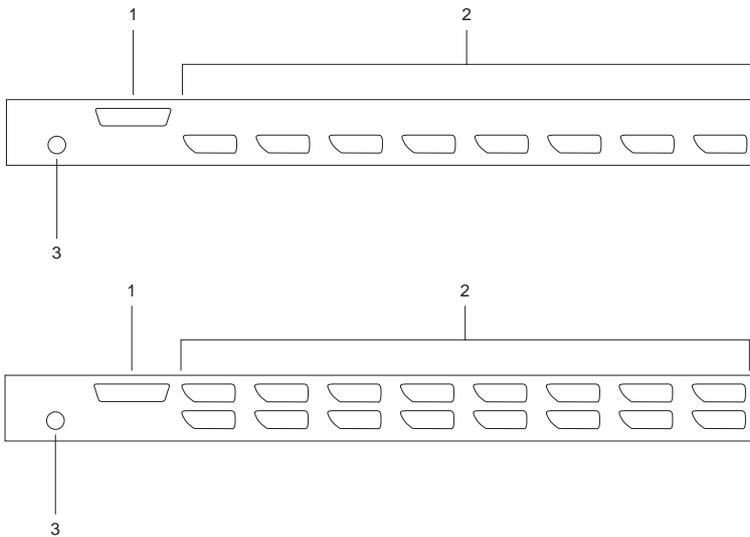
6. Locking Tabs

There is a locking tab on each side of the unit. When the KVM module is pulled all the way out, these tabs pop out to lock it in place. Before you can slide the KVM module back into the chassis, you must first push these tabs in.

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ACS-1208L / ACS1216L REAR VIEW



1. Daisy Chain Port

When Daisy Chaining Units, the cable plugs in here.

2. CPU Port Section

The cables that link to the computers plug in here.

Note: The shape of these 15-pin connectors has been specifically modified so that only extender 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.

3. Power Port

The power adapter cable plugs in here.

INSTALLATION

BEFORE YOU BEGIN



1. Make sure that power to all the devices you will be connecting up have been turned off.
2. To prevent damage to your equipment due to ground potential difference, make sure that all devices on the installation are properly grounded. Consult your dealer for technical details, if necessary.

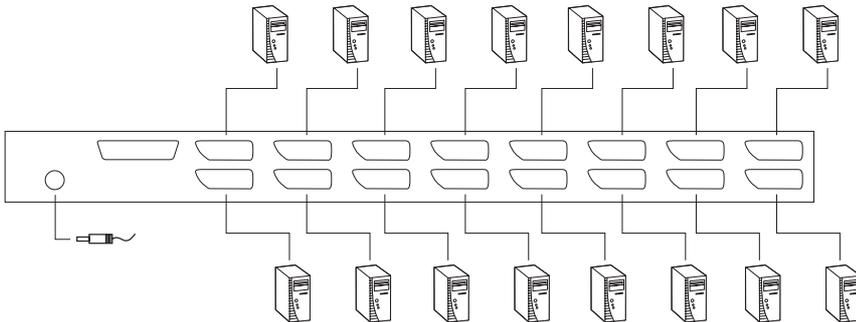
SINGLE STATION INSTALLATION

In a Single Stage installation, there are no additional Master View's daisy chained down from the first unit. To set up a single stage installation do the following:

1. Use connector cable sets (as described in the *Cables* section on p. 3), to connect any available CPU Port to the Keyboard, Video and Mouse ports of the computer you are installing.

Note: Ignore the Daisy Chain Port at this time. It is only used when daisy chaining additional Master View units. Daisy chaining is described in the next section.

2. Plug the power adapter cable into the Master View's Power Jack, then plug the power adapter into an AC power source.
3. Turn on the power to the computers.



DAISY CHAINING

To control even more computers, up to 31 additional Master View ACS-1208 / ACS-1216 units can be daisy chained down from the First Station.

Note: The ACS-1208 and ACS-1216 are similar in all respects to the ACS-1208L and ACS-1216L, except that they come in standard housings. They do not have the built in *Slideaway*[™] console.

As many as 504 (ACS-1208L) or 512 (ACS-1216L) computers can be controlled from from the unit's integrated *Slideaway*[™] console in a complete installation. Tables showing the relation between the number of computers and the number of Master Views needed to control them are provided on p. 27 in the Appendix.

To set up a daisy chained installation, do the following:

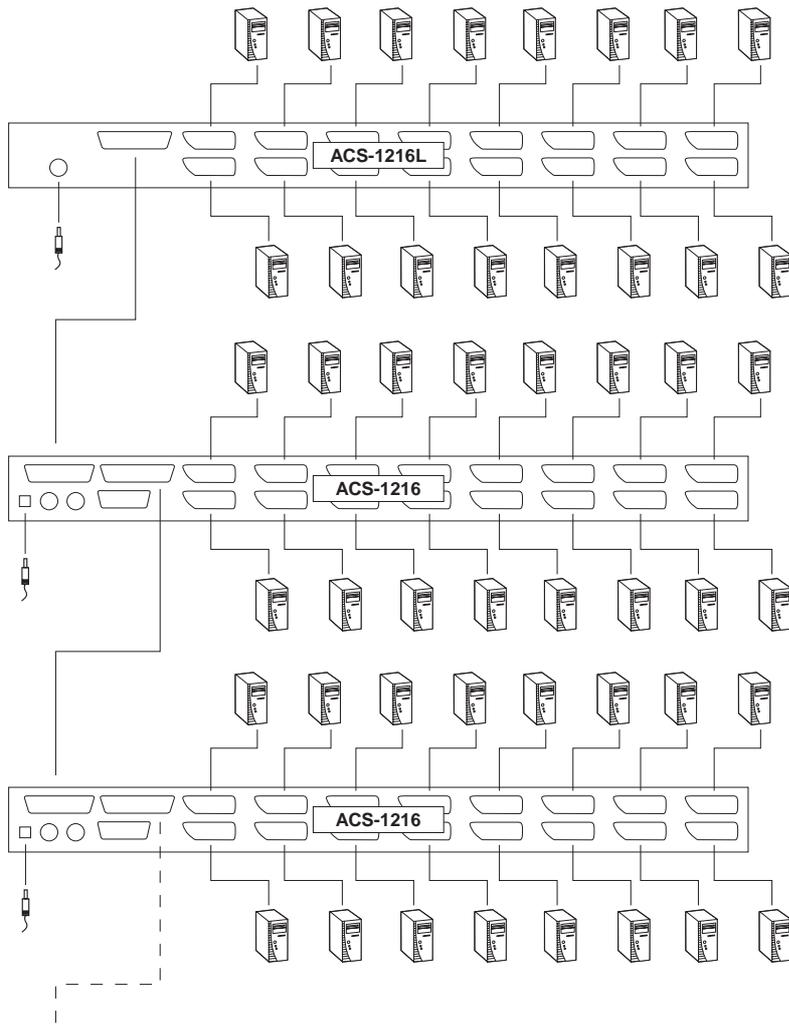
1. Make sure that power to all the devices you will be connecting up has been turned off.
2. Use a daisy chain cable set (described in the *Cables* section, p. 3), to connect the *Chain Out* port of the parent unit to the *Chain In* port of the child unit.
3. Use connector cable sets (described in the *Cables* section, p. 3), to connect any available Master View CPU Port to the Keyboard, Video and Mouse ports of the computers you are installing.
4. Repeat the above steps for any additional Master View units you wish to add to the chain.
5. Power up the installation according to the following procedure:

1. Plug in the power adapter for the First Station.
Wait a few seconds for the unit to ascertain its Station ID.
2. Plug in the power adapters for each Station on the installation in turn (Second Station, then Third Station, etc.).

Each ACS-1208 and ACS-1216 has a LED display on its front panel to indicate its Station ID (the Station ID for the First Stage unit is **01**, the ID for the Second Stage unit is **02**, the ID for the Third Stage unit is **03**, etc.).

In each case, wait for the Station ID to be ascertained and displayed on the Station ID LED before plugging in the next Station.

3. After all the Stations are up, power on the computers.



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HOT PLUGGING

The ACS-1216L supports hot plugging - components can be removed and added back into the installation by unplugging their cables from the ports without the need to shut the unit down. In order for Hot Plugging to work properly, however, these procedures that must be followed:

◆ Switching Station Positions:

You can switch station positions by simply unplugging from the old parent and plugging into a new one. After you do, in order for the OSD menus to correspond to the change, you must reset the OSD. See *RESET STATION IDS*, p. 24, for details.

Note: If the computer's Operating System does not support hot plugging, this function may not work properly.

◆ Hot Plugging CPU Ports:

In order for the OSD menus to correspond to the change, you must manually reconfigure the OSD information for the new Port information. See the *F3 SET* (p. 20) and *F4 ADM* (p. 22), functions for details.

POWERING OFF AND RESTARTING

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

1. Shut down all the computers that are attached to it.
2. Wait 10 seconds, then plug the Master View back in.
3. After the Master View is up, Power On the computers.

Note: If you have shut down more than one Station, power up the highest Station first and work your way down to the lowest one.



PORT ID NUMBERING

Each CPU port on a Master View installation is assigned a unique Port ID. The Port ID is made up of two parts: a *Station Number*, and a *Port Number*.

- The *Station Number* - a two digit number which reflects the ACS-1208L / ACS-1216L's position in the daisy chain sequence. This corresponds to the number displayed on the front panel Station ID LED.
- The *Port Number* - a two digit number which reflects the port on the ACS-1208L / ACS-1216L Station that the computer is connected to.
- The Station Number precedes the Port Number.
- Station and Port numbers from 1 - 9 are padded with a preceding zero, so they become 01 - 09.

For example, a computer attached to **Port 6** of **Station 12** would have a Port ID of: **12-06**.

PORT SELECTION

Port Selection is accomplished either by entering Hotkey combinations from the keyboard, or by means of the ACS-1208L / ACS-1216L's OSD (On Screen Display). *Hotkey Port Selection* is discussed in the next section; *OSD Operation* is discussed in detail beginning on p. 16.

HOTKEY PORT CONTROL

Hotkey Port Control allows you to provide KVM focus to a particular computer directly from the keyboard. The Master View ACS-1208L / ACS-1216L provides the following Hotkey Port Control features:

- ♦ Selecting the Active Port
- ♦ Auto Scanning
- ♦ Previous/Next Switching

♦ Invoking Hotkey Mode

1. All Hotkey operations begin by invoking *Hotkey Mode*. Invoking Hotkey Mode takes three steps: 1) Press and hold down the **Num Lock** key; 2) Press and release the **minus** key; 3) Release the **Num Lock** key:

[Num Lock] + [-];

Note: The minus key must be released within one half second, otherwise Hotkey invocation is cancelled and it has no effect.

2. When Hotkey Mode is active:
 - ♦ A Command Line appears on the monitor screen. The command line prompt is the word *Hotkey:* in yellow text on a blue background, and displays the subsequent Hotkey information that you key in.
 - ♦ Ordinary keyboard and mouse functions are suspended - only Hotkey compliant keystrokes and mouse clicks (described in the sections that follow), can be input.
3. Pressing [Esc] exits Hotkey Mode.

◆ **Selecting the Active Port**

Each CPU port is assigned a Port ID (see *Port ID Numbering*, p. 11). You can directly access any computer on the installation with a Hotkey combination that specifies the Port ID of the CPU Port that the computer is connected to. The steps involved are:

1. Invoke Hotkey Mode with the [NumLock] + [-] combination
2. Key in the Port ID
The Port ID numbers display on the Command Line as you key them in. If you make a mistake, use [Backspace] to erase the wrong number.
3. Press [Enter]
After you press [Enter], the KVM focus switches to the designated computer and you automatically exit Hotkey Mode.

◆ **Auto Scanning**

Auto Scan automatically switches among all the active CPU Ports that are accessible to the currently logged on User (see *Scan/Skip Mode* of the OSD **F3 SET** function, p. 21), at regular intervals, so that he can monitor their activity automatically.

Setting the Scan Interval:

The amount of time Auto Scan dwells on each port is set with the *Scan Duration* setting of the OSD **F3 SET** function (see p. 21). You can change the scan interval before activating Hotkey Auto Scanning, if you wish, with the following Hotkey combination:

1. Invoke Hotkey Mode with the [NumLock] + [-] combination
2. Key in [T] [n]
Where [T] is the letter **T**, and [n] is a number from 1-255 that represents the number of seconds for the dwell time.
The letter **T**, and the numbers display on the Command Line as you key them in. If you make a mistake, use [Backspace] to erase the wrong number.
3. Press [Enter]
After you press [Enter], you automatically exit Hotkey Mode, and are ready to invoke Auto Scanning.

Starting Auto Scan:

To start Auto Scanning, key in the following Hotkey combination:

1. Invoke Hotkey Mode with the [NumLock] + [-] combination
2. Key in [A]
After you press **A**, you automatically exit Hotkey Mode, and enter Auto Scan Mode.
3. To exit Auto Scan Mode, press [Esc] or [Spacebar]

Note: While Auto Scan Mode is in effect, ordinary keyboard and mouse functions are suspended - only Auto Scan Mode compliant keystrokes and mouse clicks can be input. You must exit Auto Scan Mode in order to regain normal control of the console.

◆ Skip Mode

This feature allows you to switch between computers in order to monitor them manually. You can dwell on a particular port for as long or as little as you like - as opposed to Auto Scanning, which automatically switches after a fixed interval. To invoke Previous/Next Switching, key in the following Hotkey combination:

1. Invoke Hotkey Mode with the [NumLock] + [-] combination
2. Key in [Arrow]
Where [Arrow] refers to the left or right Arrow key. After you press [Arrow], you automatically exit Hotkey Mode, and enter Skip Mode where you can switch ports as follows:
 - ← Skips from the current port to the first accessible port previous to it. (See *Scan/Skip Mode*, p. 21, for information regarding accessible ports.)
 - Skips from the current port to the next accessible port.
 - ↑ Skips from the current port to the last accessible port of the previous Station.
 - ↓ Skips from the current port to the first accessible port of the next Station.
3. To exit Skip Mode, press [Esc]

Note: 1. Once Skip Mode has been invoked, until you exit, you can keep on skipping simply by pressing an Arrow key. You don't have to use the [NumLock] + [-] combination again.
2. While Skip Mode is in effect, ordinary keyboard and mouse functions are suspended - only Skip Mode compliant keystrokes can be input. You must exit Skip Mode in order to regain normal control of the console.

HOTKEY BEEPER CONTROL

The Beeper (see Activate Beeper, p. 23) can be Hotkey toggled On and Off. To toggle the Beeper, key in the following Hotkey combination:

1. Invoke Hotkey Mode with the [NumLock] + [-] combination
2. Key in [B]

After you press [B], 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.

HOTKEY SUMMARY TABLE

Combination		Action
[Num Lock] + [-]	[Port ID] [Enter]	Switches access to the computer that corresponds to that Port ID.
	[T] [n] [Enter]	Sets the Auto Scan interval to <i>n</i> seconds - where <i>n</i> is a number from 1 - 255.
	[A]	Invokes Auto Scan Mode.
	[←]	Invokes Skip Mode and skips from the current port to the first accessible port previous to it.*
	[→]	Invokes Skip Mode and skips from the current port to the next accessible port.*
	[↑]	Invokes Skip Mode and skips from the current port to the last accessible port of the previous Station.*
	[↓]	Invokes Skip Mode and skips from the current port to the first accessible port of the next Station.*
	[B]	Toggles the Beeper On or Off.

* Once Skip Mode has been invoked, until you exit, you can keep on skipping simply by pressing an Arrow key. You don't have to use the [NumLock] + [-] combination again.

OSD OPERATION

OSD OVERVIEW

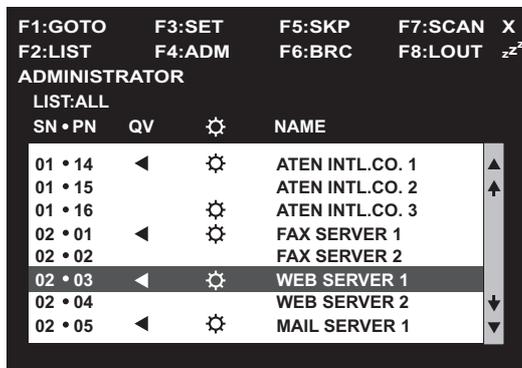
The On Screen Display (OSD) is used to handle all computer control and switching procedures. All procedures start from the OSD Main Menu. To pop up the Main Menu, tap the **[Scroll Lock]** key twice.

Note: You can optionally change the Hotkey to the Ctrl key (see *OSD Hotkey*, p. 20), in which case you would tap **[Ctrl]** twice. With this method, the [Ctrl] keys must be on the same side (both left, or both right).

The OSD incorporates a two level (Administrator / User) password system. Before the OSD Main Screen comes up, a dialog box appears that asks you to provide your password. If the password function has been set, you must provide the password in order to access the OSD Main Screen.

If this is the first time that the OSD is being run, or if the password function has not been set, simply press **[Enter]**. The OSD Main Screen comes up in Administrator Mode. In this mode, you have administrator privileges, with access to all Administrator and User functions, and can set up operations (including password authorization for the future), as you would like.

When you invoke the OSD, a screen similar to the one below appears:



- Note:**
1. The diagram depicts the Administrator's Main Screen. The User Main Screen does not show the **F4** and **F6** functions, since these are reserved for the Administrator and can't be accessed by ordinary Users.
 2. OSD always starts in List view, with the highlight bar at the same position it was in the last time it was closed.
 3. Only the ports that have been set accessible by the Administrator for the currently logged in User are visible (see *SET ACCESSIBLE PORTS*, p. 24, for details).

OSD NAVIGATION

- To dismiss the menu, and deactivate OSD, Click the **X** at the upper right corner of the OSD Window; or press **[Esc]**.
- To Logout, press **[F8]**, or Click **F8**, on the OSD Menu Bar.
- To move up or down through the list one line at a time, Click the Up and Down Triangle symbols (**▲▼**) or use the Up and Down Arrow Keys. If there are more entries than appear on the screen, the screen will scroll.
- To move up or down through the list one screen at a time, Click the Up and Down Arrow symbols (**⬆️⬇️**), or use the [Pg Up] and [Pg Dn] keys. If there are more entries than appear on the screen, the screen will scroll.
- To activate a port, Double Click it, or move the Highlight Bar to it then press [Enter].
- After executing any action, you automatically go back to the menu one level above.

OSD MAIN SCREEN HEADINGS

Heading	Explanation
SN-PN	This column lists the Port ID numbers (Station Number - Port Number) for all the CPU ports on the installation. The simplest method to access a particular computer is move the Highlight Bar to it, then press Enter .
QV	If a port has selected for Quick View scanning (see <i>Set Quick View Ports</i> , p. 24), an arrowhead displays in this column to indicate so.
	The computers that are powered on and are On Line have a Sun symbol in this column to indicate so.
NAME	If a port has been given a name (see <i>Edit Port Names</i> , p. 23), its name appears in this column.

OSD FUNCTIONS

OSD functions are used to configure and control the OSD. For example, you can: rapidly switch to any port; scan selected ports only; limit the list you wish to view; designate a port as a Quick View Port; create or edit a port name; or make OSD setting adjustments.

To access an OSD function:

1. Either Click a Function Key field on the screen, or press a Function Key on the keyboard.
2. In the Submenus that appear make your choice either by Double Clicking it, or moving the Highlight Bar to it, then pressing **[Enter]**.
3. Press **[Esc]** to return to the previous menu level.

◆ F1 GOTO:

Clicking the **F1** field or pressing **[F1]** activates the GOTO function. GOTO allows you to switch directly to a port either by keying in the port's *Name*, or its *Port ID*.

- ◆ To use the Name method, key in **1**; key in the port's Name; then press [Enter].
- ◆ To use the Port ID method, key in **2**; key in the *Port ID*; then press [Enter].

Note: You can key in a partial Name or Port ID. In that case, the screen will show all the computers that the User has *View* rights to (see *SET ACCESSIBLE PORTS*, p. 24), that match the Name or Port ID pattern, regardless of the current List settings (see *F2 LIST*, p. 19, for details).

To return to the OSD Main Menu without making a choice, press [Esc].

◆ **F2 LIST:**

This function lets you broaden or narrow the scope of which ports the OSD displays (lists) on the Main Screen. Many of the OSD functions only operate on the computers currently selected for Listing on the Main Screen with this function. The submenu choices and their meanings are given in the table below:

Choice	Meaning
ALL	Lists all of the ports on the installation.
POWERED ON	Lists only the ports that have their attached computers Powered On.
QVIEW*	Lists only the ports that have been selected as Quick View Ports (see <i>SET ACCESSIBLE PORTS</i> , p. 24).
QVIEW + POWERED ON*	Lists only the ports that have been selected as Quick View Ports (see <i>SET QUICK VIEW PORTS</i> , p. 24), and that have their attached computers Powered On.

* These items only show up on the Administrator's screen, since only he has *Quick View* setting rights (see *SET QUICK VIEW PORTS*, p. 24, for details).

Move the Highlight Bar to the choice you want, then press [Enter]. An icon appears before the choice to indicate that it is the currently selected one.

◆ **F3 SET:**

This function allows each User and the Administrator to set up their own working environment. A separate profile for each is stored by the OSD and is activated according to the Username that was provided during Login.

To change a setting:

1. Double Click it; or move the highlight bar to it, then press **[Enter]**
2. After you select an item, a submenu with further choices appears. To make a selection, either Double Click it; or move the Highlight Bar to it, then press **[Enter]**. An icon appears before the selected choice to indicate which one it is. The settings are explained in the following table:

Setting	Function
OSD HOTKEY	Selects which Hotkey activates the OSD function: [Scroll Lock] [Scroll Lock] or [Ctrl] [Ctrl] . Since the Ctrl key combination may conflict with programs running on the computers, the default is the Scroll Lock combination.
PORT ID DISPLAY POSITION	<p>Allows you to position where the Port ID appears on the screen. The default is the upper right corner, but you can choose to have it appear anywhere on the screen.</p> <p>Use the Mouse or the Arrow Keys plus Pg Up, Pg Dn, Home, End, and 5 (on the numeric keypad with Num Lock off), to position the Port ID display, then Double Click or press [Enter] to lock the position and return to the Set submenu.</p> <p>Note: The ID display position for each port on the installation is set independently; the choice specified here only applies to the currently active computer.</p>
PORT ID DISPLAY DURATION	Determines how long a Port ID displays on the monitor after a port change has taken place. The choices are: User Defined - which lets you select the amount of time (from 1 - 255 sec.); and Always On - which displays the Port ID at all times. If you select User Defined, key in the number of seconds, then press [Enter]. The default is 3 Seconds. A setting of 0 (zero) disables this function.

(Table continues on next page)

(F3 SET: continued)

Setting	Function
PORT ID DISPLAY MODE	Selects how the Port ID is displayed: the Port Number alone (PORT NUMBER); the Port Name alone (PORT NAME); or the Port Number plus the Port Name (PORT NUMBER + PORT NAME). The default is PORT NUMBER + PORT NAME).
SCAN DURATION	Determines how long the focus dwells on each port as it cycles through the selected ports in Auto Scan Mode (see <i>F7 SCAN</i> , p. 26). Key in a value from 1 - 255 seconds, then press [Enter]. Default is 5 seconds; a setting of 0 disables the Scan function.
SCAN/SKIP MODE	Selects which computers will be accessed under Skip Mode (see <i>F5 SKP</i> , p. 25), and Auto Scan Mode (see <i>F7 SCAN</i> , p. 26). Choices are: ALL - All the Ports which have been set Accessible (see <i>SET ACCESSIBLE PORTS</i> , p. 24); POWERED ON - Only those Ports which have been set Accessible and are Powered On; QUICK VIEW - Only those Ports which have been set Accessible and have been selected as Quick View Ports (see <i>SET QUICK VIEW PORTS</i> , p. 24); QUICK VIEW + POWERED ON - Only those Ports which have been set Accessible and have been selected as Quick View Ports and are Powered On. The default is ALL. Note: The Quick View choices only show up on the Administrator's screen, since only he has <i>Quick View</i> setting rights (see <i>SET QUICK VIEW PORTS</i> , p. 24, for details).
SCREEN BLANKER	If there is no input from the console for the amount of time set with this function, the screen is blanked. Key in a value from 1 - 30 minutes, then press [Enter]. A setting of 0 disables this function. The default is 0 (disabled).
HOTKEY COMMAND MODE	Enables / Disables the Hotkey Command function in case a conflict with programs running on the computers occurs.

◆ **F4 ADM:**

F4 is an Administrator only function. It allows the Administrator to configure and control the overall operation of the OSD. To change a setting Double Click it; or use the Up and Down Arrow Keys to move the highlight bar to it then press **[Enter]**.

After you select an item, a submenu with further choices for you to select from appears. Double Click the choice you want, or move the Highlight Bar to then press **[Enter]**. An icon appears before the selected choice so that you know which one it is. The settings are explained in the following table:

Setting	Function
SET USERNAME AND PASSWORD	<p>This function is used to set Usernames and Passwords for the Administrator and Users:</p> <ol style="list-style-type: none">1. One Administrator and four User passwords can be set.2. After you select one of the User fields or the Administrator field, a screen that allows you to key in your password appears. The password may be up to 12 characters long, and can consist of any combination of letters and numbers (A - Z, 0 - 9).3. For each individual, key in the Username and Password, then press [Enter].4. To modify or delete a previous Username and/or Password, use the backspace key to erase individual letters or numbers.
SET LOGOUT TIMEOUT	<p>If there is no input from the console for the amount of time set with this function, the Operator is automatically logged out. A login is necessary before the console can be used again. This enables other Operators to gain access to the computers when the original Operator is no longer accessing them, but has forgotten to log out. To set the timeout value, key in a number from 1 - 180 minutes, then press [Enter]. If the number is 0 [zero], this function is disabled. Default is 0 (disabled).</p>

(Table continues on next page)

(F4 ADM: continued)

Setting	Function
EDIT PORT NAMES	<p>To help remember which computer is attached to a particular port, every port can be given a name. This function allows the Administrator to create, modify, or delete port names. To Edit a port name:</p> <ol style="list-style-type: none">1. Click the port you want, or use the Navigation Keys to move the highlight bar to it, then press [Enter].2. Key in the new Port Name, or modify/delete the old one. The maximum number of characters allowed for the Port Name is 12. Legal characters include:<ul style="list-style-type: none">◆ All alpha characters: a - z; A - Z◆ All numeric characters: 0 - 9◆ + - / : . and SpaceCase does not matter; OSD displays the Port Name in all capitals no matter how they were keyed in.3. When you have finished editing, press [Enter] to have the change take effect. To abort the change, press [Esc].
RESTORE DEFAULT VALUES	<p>This function is used to undo all changes and return the setup to the original factory default settings (see <i>OSD FACTORY DEFAULT SETTINGS</i>, p. 29) - except for the <i>Names</i> settings that were assigned to the Ports, which are saved.</p>
CLEAR THE NAME LIST	<p>This function is similar to Restore Default Values. The difference is that it also clears the <i>Names</i> settings along with undoing all changes and returning the setup to the original factory default settings.</p>
ACTIVATE BEEPER	<p>Choices are Y (for Yes), or N (for No). When activated, the beeper sounds whenever a Port is changed; when activating the Auto Scan function (see <i>F7 SCAN</i>, p. 26); or an invalid entry is made on an OSD menu. The default is Y (activated).</p>

(Table continues on next page)

(F4 ADM: continued)

Setting	Function
SET QUICK VIEW PORTS	<p>This function lets the Administrator select which Ports to include as Quick View ports.</p> <ul style="list-style-type: none">• To select/deselect a port as a Quick View Port, Double Click the port you want, or use the Navigation Keys to move the highlight bar to it, then Press [Enter].• When a port has been selected as a Quick View Port, an arrowhead displays in the QV column of the LIST on the Main Screen to indicate so. When a port is deselected, the arrowhead disappears.• If one of the Quick View options is chosen for the LIST view (see <i>F2 LIST</i>, p. 19), only a Port that has been selected here will display on the List.• If one of the Quick View options is chosen for Auto Scanning (see <i>SCAN/SKIP MODE</i>, p. 21), only a Port that has been selected here will be Auto Scanned. <p>The default is for no ports to be selected.</p>
SET ACCESSIBLE PORTS	<p>This function allows the Administrator to define User access to the computers on the installation on a Port-by-Port basis. For each User, select the target Port; then press the [Spacebar] to cycle through the choices: F (Full access), V (View Only), or blank. Repeat until all access rights have been set, then press [Enter]. The default is V for all users on all Ports.</p> <p>Note: A blank setting means that no access rights are granted. The Port will not show up on the User's LIST on the Main Screen.</p>
RESET STATION IDS	<p>If you change the position of one of the Stations in the daisy chain, the OSD settings will no longer correspond to the new situation. This function directs the OSD to rescan the Station positions of the entire installation and updates the OSD so that the OSD Station information corresponds to the new physical layout.</p> <p>Note: Only the Station Numbers get updated. Except for the Port Names, all Administrator settings (such as Set Accessible Ports, Set Quick View Ports, etc.), for all of the computers affected by the change, have to be manually redone.</p>

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◆ **F5 SKP:**

Clicking the **F5** field or pressing [**F5**] invokes Skip (SKP) Mode. This function enables you to easily skip backward or forward - switching the console focus from the currently active computer port to the previous or next available one.

- ◆ The selection of computers to be available for Skip Mode switching is made with the *Scan/Skip Mode* setting under the **F3 SET** function (see p. 21).
- ◆ When you are in Skip Mode, press [←] to switch to the previous computer in the List; press [→] to switch to the next computer in the List; press [↑] to switch to the last computer on the previous station in the List; press [↓] to switch to the first computer on the next station in the List.

Note: When you Skip, you only Skip to the the previous or next available computer that is in the *Scan/Skip Mode* selection (see p. 21).

- ◆ If a Port has been selected for *Scan/Skip Mode*, a Left/Right Triangle symbol appears before its Port ID Display (when the focus switches to that port), to indicate so.
- ◆ While Skip Mode is in effect, the console will not function. You must exit Skip Mode in order to regain control of the console.
- ◆ To exit Skip Mode, press [Esc].

◆ **F6 BRC:**

F6 is an Administrator only function. Clicking the **F6** field, or pressing [**F6**], invokes Broadcast (BRC) Mode. When this function is in effect, commands sent from the console are broadcast to to all available computers on the installation.

This function is particularly useful for operations that need to be performed on multiple computers, such as performing a system wide shutdown, installing or upgrading software, etc.

BRC works in conjunction with the **F2 LIST** function. The LIST function (see p. 19), is used to broaden or narrow the focus of which Ports appear on the OSD Main Screen. When you Broadcast a command, it is to the Ports currently displayed on the OSD Main Screen.

- ◆ While BRC Mode is in effect, a Speaker symbol appears before the Port ID Display of the port that currently has the console focus to indicate so.
- ◆ While BRC Mode is in effect, the mouse will not function. You must exit BRC Mode in order to regain control of the mouse.
- ◆ To exit BRC Mode, invoke the OSD (with the OSD Hotkey), then Click the **F6** field, or press [**F6**], to turn BRC Mode off.

◆ F7 SCAN:

Clicking the **F7** field or pressing **[F7]** invokes Auto Scan Mode. This function allows you to automatically switch among the available computers at regular intervals so that you can monitor their activity without having to take the trouble of switching yourself.

- ◆ The selection of computers to be included for Auto Scanning is made with the *Scan/Skip Mode* setting under the **F3 SET** function (see p. 21).
- ◆ The amount of time that each Port displays for is set with the *Scan Duration* setting under the **F3 SET** function (see p. 21). When you want to stop at a particular location, press the [Spacebar] to stop scanning.
- ◆ If the scanning stops on an empty port, or one where the computer is attached but is powered Off, the monitor screen will be blank, and the mouse and keyboard will have no effect. After the *Scan Duration* time is up, the Scan function will move on to the next port.
- ◆ As each computer is accessed, an **S** appears in front of the Port ID display to indicate that it is being accessed under *Auto Scan Mode*.
- ◆ While Auto Scan Mode is in effect, the console will not function. You must exit Auto Scan Mode in order to regain control of the console.
- ◆ To exit Auto Scan Mode, press the [Spacebar] or [Esc].

◆ F8 LOUT:

Clicking the **F8** field, or pressing **[F8]** logs you out of OSD control of the computers, and blanks the Console screen. This is different from simply pressing **[Esc]** to deactivate the OSD. With this function you must log in all over again to regain access to the OSD, whereas with **[Esc]**, all you have to do to reenter the OSD is tap the OSD Hotkey.

- Note:**
1. When you reenter the OSD after logging out, the screen stays blank except for the OSD Main Menu. You must input your password before you can continue.
 2. If you reenter the OSD after logging out, and immediately use [Esc] to deactivate the OSD without having selected a port from the OSD menu, a Null Port message displays on the screen. The OSD Hotkey will bring up the Main OSD Screen.

APPENDIX

ACS-1208L - COMPUTER CONNECTION TABLE

The following tables indicate the relationship between the number of Master View Units and the number of computers that they control:

MVs	Computers	MVs	Computers	MVs	Computers	MVs	Computers
1	1 - 8	9	121 - 136	17	249 - 264	25	377 - 392
2	9 - 24	10	137 - 152	18	265 - 280	26	393 - 408
3	25 - 40	11	155 - 168	19	281 - 296	27	409 - 424
4	41 - 56	12	169 - 184	20	297 - 312	28	425 - 440
5	57 - 72	13	187 - 200	21	313 - 328	29	441 - 456
6	73 - 88	14	201 - 216	22	329 - 344	30	457 - 472
7	89 - 104	15	217 - 232	23	345 - 360	31	473 - 488
8	105 - 120	16	233 - 248	24	361 - 376	32	489 - 504

ACS-1216L - COMPUTER CONNECTION TABLE

The following tables indicate the relationship between the number of Master View Units and the number of computers that they control:

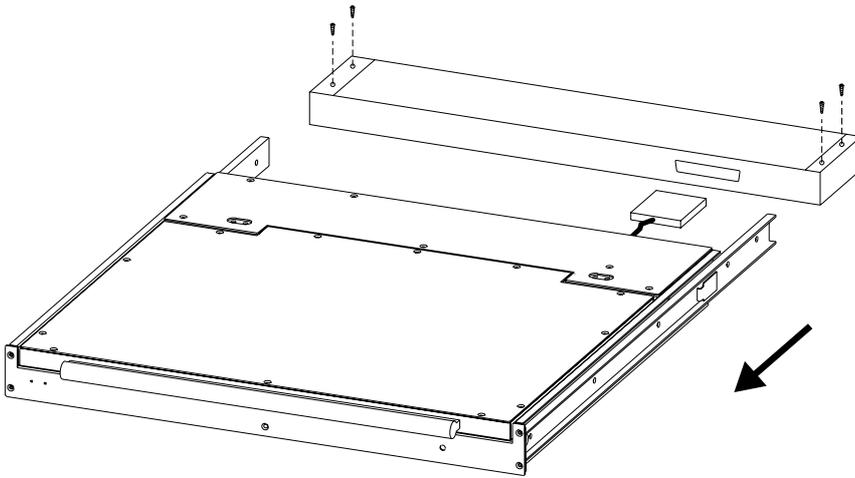
MVs	Computers	MVs	Computers	MVs	Computers	MVs	Computers
1	1 - 16	9	129 - 144	17	257 - 272	25	385 - 400
2	17 - 32	10	145 - 160	18	273 - 288	26	401 - 416
3	33 - 48	11	161 - 176	19	289 - 304	27	417 - 432
4	49 - 64	12	177 - 192	20	305 - 320	28	433 - 448
5	65 - 80	13	193 - 208	21	321 - 336	29	449 - 464
6	81 - 96	14	209 - 224	22	337 - 352	30	465 - 480
7	97 - 112	15	225 - 240	23	353 - 368	31	481 - 496
8	113 - 128	16	241 - 256	24	369 - 384	32	497 - 512

REMOVING THE KVM MODULE

For maintenance convenience, the KVM module can be removed from the unit chassis. To do so:

1. Remove the four module attachment screws
2. Unplug the data cable
3. Pull the KVM module away.

Note: The slider brackets and extender arm go with the KVM module.



OSD FACTORY DEFAULT SETTINGS

The factory default settings are as follows:

Setting	Default
OSD Hotkey	[Scroll Lock] [Scroll Lock]
Port ID Display Position	Upper Right Corner
Port ID Display Duration	3 Seconds
Port ID Display Mode	The Port Number plus the Port Name
Scan Duration	5 Seconds
Scan/Skip Mode	All
Screen Blanker	0 (Disabled)
Logout Timeout	0 (Disabled)
Beeper	Y (Activated)
Accessible Ports	F (Full) For all Users on all Ports

TROUBLESHOOTING

Symptom	Possible Cause	Action
Erratic behavior.	Unit not receiving enough power.	Check that the Power Adapter that was supplied with the unit is plugged in and functioning properly.

SPECIFICATIONS

Function		ACS-1208L	ACS-1216L
Computer Connections	Direct	8	16
	Max	504 (via Daisy Chain)	512 (via Daisy Chain)
Port Selection		OSD (On Screen Display); Hotkeys	
LEDs	On Line Port	8 (Orange)	16 (Orange)
	Selected Port	8 (Green)	16 (Green)
	Power	1 (Blue)	
Computer Port Connectors		8 x SPDB-15 F	16 x SPDB-15 F
Daisy Chain Ports		1 x DB-25 M	
Scan Interval (OSD Select)		User Specified: 1 - 255 secs.	
Emulation	Keyboard	PS/2	
	Mouse	PS/2	
Video		1024 x 768	
Power Consumption		120V 60Hz 24W; 230V 50Hz 24W	
Operating Temperature		0 - 50° C	
Storage Temperature		-20 - 60° C	
Humidity		0 - 80% RH	
Housing		Metal	
Weight		11.5 Kg	12.0 Kg
Dimensions (L x W x H)		483 x 517 x 45 mm (19" 1U)	



LIMITED WARRANTY

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