ATEN
Simply Better Connections

CL6700MW

DVI Full HD LCD Console
User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Warning

Operation of this equipment in a residential environment could cause radio interference.

Achtung

Der Gebrauch dieses Geräts in Wohnumgebung kann Funkstörungen verursachen.

KCC Statement

유선 제품용 / A 급 기기 (업무용 방송 통신 기기)
이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며 , 가정 외의 지역에서 사용하는 것을 목적으로 합니다 .

Industry Canada Statement
This Class A digital apparatus complies with Canadian ICES-003.

CAN ICES-003 (A) / NMB-003 (A)

HDMI Trademark Statement
The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

RoHS
This product is RoHS compliant.

警告使用者：此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

KVM+ 多電腦切換器類產品

設備名稱 Equipment Name	單滑軌 LCD 控制端		型號（型式） Type designa- tion (Type)	CL6700MW	
單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols				
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
電纜線 Cable	–	○	○	○	○	○
印刷電路部件 PCBA	–	○	○	○	○	○
塑膠 / 其他部件 Plastic / Other parts	○	○	○	○	○	○
螢幕 Panel	–	○	○	○	○	○
鍵盤 Keyboard	–	○	○	○	○	○
滑鼠 Mouse	–	○	○	○	○	○

備考 1. 〝超出 0.1 wt %〞及 〝超出 0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值。
Note 1："Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted
substance exceeds the reference percentage value of presence condition.
備考 2. 〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2：" ○ " indicates that the percentage content of the restricted substance does not exceed the percentage of
reference value of presence.
備考 3. 〝–〞係指該項限用物質為排除項目。
Note 3："–" indicates that the restricted substance corresponds to the exemption.

製造商：宏正自動科技股份有限公司
地址：新北市汐止區大同路二段 125 號三樓

最大操作環境溫度： 40℃

最大額定電壓： 100 - 240V AC

D33866
RoHS

About this Manual

This User Manual is provided to help you get the most from your CL6700MW system. It covers all aspects of installation, configuration and operation. An overview of the information found in the manual is provided below.

Overview

Chapter 1, Introduction, introduces you to the CL6700MW KVM Console. Its purpose, features and benefits are presented, and its components are described.

Chapter 2, Hardware Setup, provides step-by-step instructions for setting up your installation, and explains some basic operation procedures.

Chapter 3, Operation, describes the fundamental concepts involved in operating the CL6700MW.

Chapter 4, Firmware Upgrade, explains how to upgrade the CL6700MW's firmware with the latest available versions.

An Appendix, provides specifications and other technical information regarding the CL6700MW.

Conventions

This manual uses the following conventions:

Monospaced	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 selecting the option (on a menu or dialog box, for example), that comes next. For example, Start > Run means to open the *Start* menu, and then select *Run*.
⚠	Indicates critical information.

Package Contents

Basic Package

The basic CL6700MW package consists of:

1   CL6700MW DVI Full HD LCD Console with Standard Rack Mount Kit

1   custom USB DVI KVM cable set

1   power cord

1   firmware upgrade cable

1   user instructions*

Check to make sure that all of the components are present and in good order. If anything is missing, or was damaged in shipping, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the console or to any other devices on the CL6700MW installation.

* Changes may have been made to the manual since it was published. Please visit our web site to download the most up-to-date version of the manual

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

User Information

Online Registration

Be sure to register your product at our online support center:

International	http://eservice.aten.com

Telephone Support

For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988
	1-949-428-1111

User Notice

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

A typical LCD (Liquid Crystal Display) monitor has millions of pixels. A dead pixel refers to a pixel with a defect in its ability to display the correct color output. It most often looks like a tiny black or white spot on your screen, although it can be any other color. Since even a tiny dust particle on one of the pixels during the manufacturing process or a slight bump during shipping can create a dead pixel, the ISO 13406-2 norm defines 4 classes of acceptable screens with dead pixels--Class 1 is the best; Class 4 is the worst. Almost all manufacturers use Class 2 to establish their warranties, which allows a certain amount of dead pixels to exist before they will replace the screen. Since the manufacturers consider these screens to be acceptable under ISO specifications, we cannot be responsible for replacement or warranty of the TFT LCD panel.

Contents

Chapter 4.
Firmware Upgrade

Appendix

Chapter 1
Introduction

Overview

The CL6700MW DVI Full HD LCD Console is a single rail KVM console featuring a 17.3" HD widescreen with integrated keyboard and touchpad in a 1U rack-mountable sliding housing. The CL6700MW provides front end access to compatible KVM switches and utilizes space by closing flat and sliding into the rack. In addition, ports for an external USB keyboard and mouse as well as a monitor are provided on the rear panel.

The CL6700MW features DVI, HDMI, and VGA ports for the KVM switch and external console's video connection. This added convenience provides three video options for both the external console and KVM switch connection. The CL6700MW also includes two mini stereo ports for connecting audio speakers.

Server rooms already installed with compatible KVM switches will have the advantage of easy LCD access, an additional KVM console, and a built-in space saving sliding module, without having to purchase a new KVM switch.

The CL6700MW's firmware is upgradable, so you can stay current with the latest updates by downloading them from the ATEN website. Setup is fast and easy. Simply use the custom cables included with your device to connect the CL6700MW to the console ports of your KVM switch and you are ready to go!

Features

- Integrated KVM console with a 17.3" Widescreen DVI Full HD LCD monitor
- Single rail housing with top and bottom clearance for smooth operation in a 1U high system rack
- Supports an external console with DVI / VGA / HDMI video ports
- Superior video quality – up to 1920 x 1080 @60Hz; DDC, DDC2, DDC2B
- Optional rack mount kits available, including easy installation options
- Compatible with most ATEN DVI KVM Switches
- Adjustable depth to fit within the rack
- Audio support for connecting speakers
- Standard 105-key keyboard; Sun keyboard emulation
- Multiplatform support – Windows, Linux, Mac, and Sun
- Firmware upgradeable
- Console lock – enables the console drawer to remain securely locked away in position when not in use
- DDC emulation – video settings of attached computers are automatically adjusted for optimal output to the monitor

Requirements

LCD Console

- The LCD console supports most ATEN DVI KVM switches. If you are unsure whether your switch is supported or not, check with your dealer.

- The integrated LCD monitor's maximum resolution is 1920 x 1080 @60Hz. Make sure that none of the resolution settings of the connected computers exceed the LCD monitor's maximum resolution.

External Console

- A VGA, SVGA, MultiSync, DVI, or HDMI monitor capable of displaying the highest resolution provided by any computer in the installation

- USB keyboard and mouse

Cables

For optimum signal integrity and to simplify the layout, we strongly recommend that you use high quality custom cable sets available in varying lengths, described in the table below, which can be purchased from your dealer.

Length (m)	Part Number
1.80	2L-7D02U
3.00	2L-7D03U
5.00	2L-7D05U
1.80	2L-7D02UH

Operating Systems

Supported operating systems are shown in the table below.

OS		Version
Windows		NT or later
Linux	RedHat	9.0 or later
	SuSE	10 or later
	Mandriva (Mandrake)	9.0 or later
UNIX	AIX	4.3 or later
	FreeBSD	5.5 or later
	Sun	Solaris 8 or later
Novell	Netware	5.0 or later
Mac		9.0 or later
DOS		6.2 or later

Components

Front View
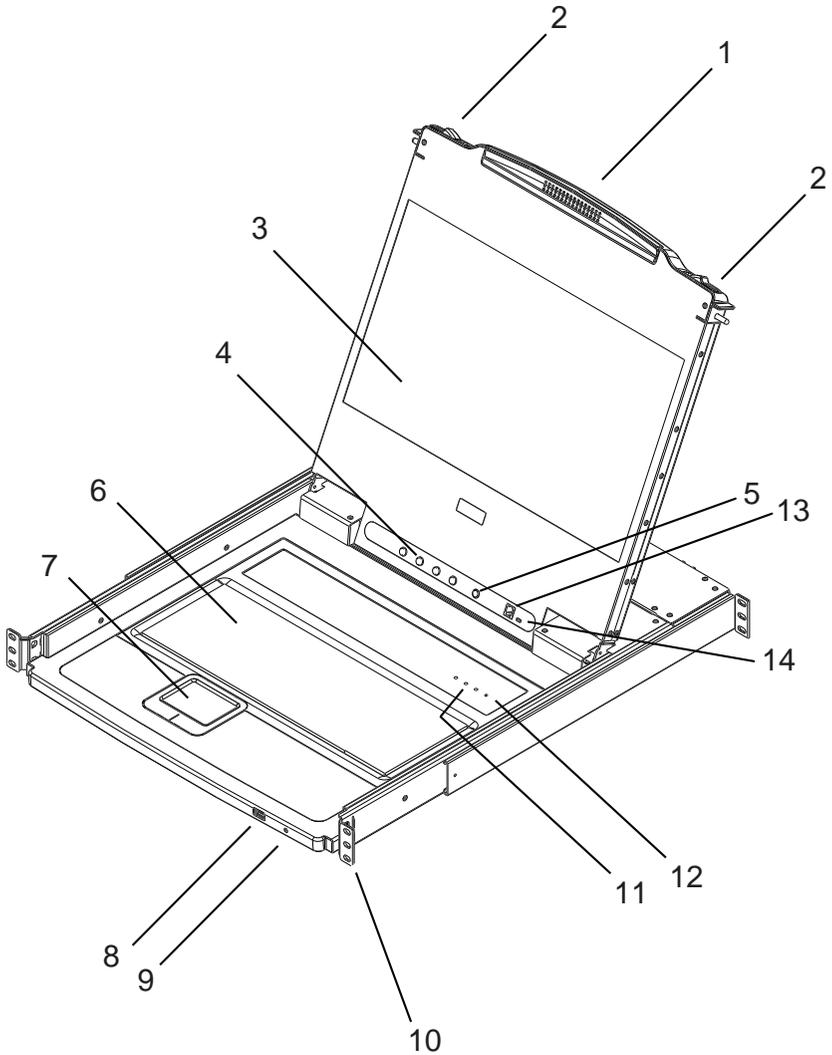
No.	Component	Description
1	upper handle	Pull to slide the LCD module out; push to slide it in. See *Opening the Console*, page 15, for details on sliding the console in and out
2	module release catches	In order to slide the console out, you must first release it by sliding these catches to the inside.
3	LCD module	After sliding the LCD module out, flip up the cover to access the LCD display.
4	LCD controls	The buttons to control the position and picture settings of the LCD display are located here. See page 18, for details.
5	LCD On / Off button	Push this button to turn the LCD monitor on and off. The button lights when the LCD monitor is off. **Note:** The light indicates that only the monitor is off, not the attached KVM switch.
6	keyboard module	Standard 105-key keyboard
7	touchpad	Standard mouse touchpad
8	USB port	The USB port is available to connect a USB peripheral device (flash drive, CD-ROM drive, etc.) to the console, or a USB mouse for users who prefer to use an external mouse.
9	power LED	Lights (green) to indicate that the unit is receiving power.
10	rack mount brackets	The rack mount brackets are located at each corner of the unit. See *Standard Rack Mounting*, page 9, for details.
11	lock LEDs	The Num Lock, Caps Lock, Scroll Lock LEDs are located here.
12	reset button	Located to the right of the Lock LEDs. Press this button in with a thin object to perform a system reset.
13	firmware upgrade port	The firmware upgrade cable that transfers the firmware upgrade data from the administrator's computer plugs into this RJ-11 connector.
14	firmware upgrade switch	During normal operation and while performing a firmware upgrade, this switch should be in the NORMAL position. If a firmware upgrade operation does not complete successfully, this switch is used to perform a firmware upgrade recovery. See *Upgrade Failed:*, page 28, for details.

Rear View
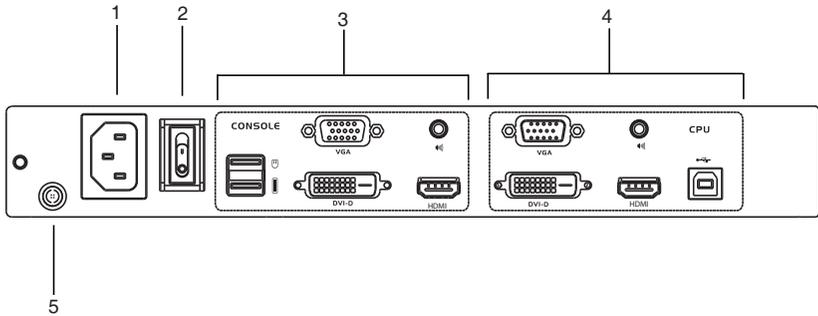
No.	Component	Description
1	power socket	This is a standard 3 prong AC power socket. The power cord from an AC source plugs in here.
2	power switch	This is a standard rocker switch that powers the CL6700MW on and off.
3	external console section	For flexibility and convenience, the CL6700MW supports an independent, external, KVM console. The external console's USB keyboard and mouse, DVI, VGA, or HDMI monitor, and audio cables plug in here.
4	KVM port section	The custom KVM cable supplied with the package for linking the CL6700MW to a computer or switch plugs in here. An additional HDMI and VGA port are provided.
5	grounding terminal	The grounding wire (used to ground the unit) attaches here.

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Chapter 2
Hardware Setup

Before you Begin

1. Important safety information regarding the placement of this device is provided on page 31. Please review it before proceeding.

2. Make sure that power to all the devices you will be connecting up has been turned off. You must unplug the power cords of any computers that have the Keyboard Power On function.

Standard Rack Mounting

A standard rack mount kit can be purchased separately for your CL6700MW. The kit enables the CL6700MW to be mounted in rack with a depth of 52–85 cm.
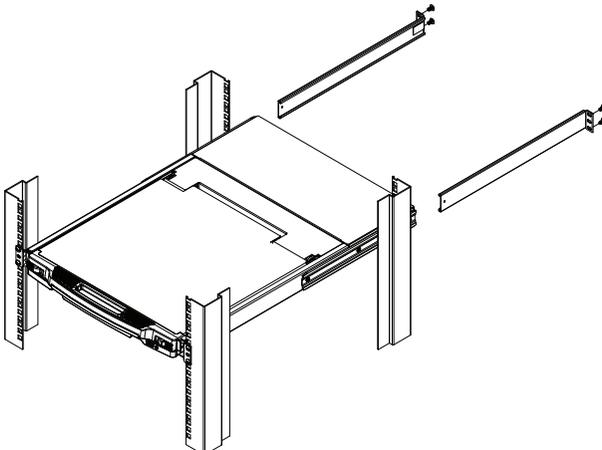

left & right L-shaped brackets

side mount brackets
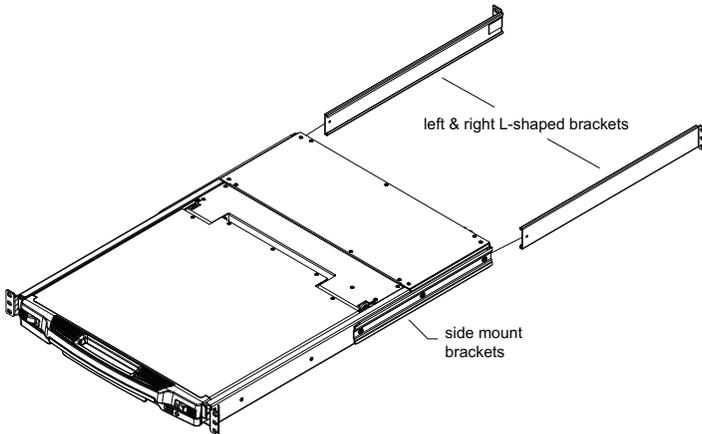
Note:
  ◆ It takes two people to mount the console.

  ◆ The standard rack mount kit does not include screws or cage nuts. If you need additional screws or cage nuts, contact your rack dealer.

To rack mount the CL6700MW, do the following:

1. Have one person position the unit in the rack and hold it steady. Have the second person screw the front brackets to the rack.
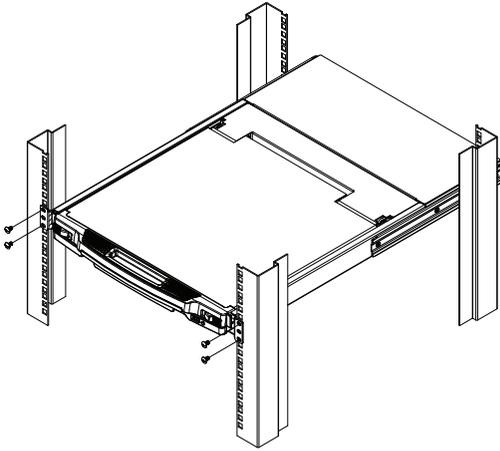
2. While the first person still holds the unit in place, the second person slides the left & right L-shaped brackets into the unit's side mounting brackets from the rear, installing four screws in the brackets to secure them in place.

3. After the L-shaped brackets are secured, tighten all the screws.

   Allow at least 5.1 cm on each side for proper ventilation, and at least 12.7 cm at the back for the power cord and cable clearance.

Optional Rack Mount Kits

For convenience and flexibility, optional rack mount kits are available and are listed in the table below:

Mounting Kit	Description
Standard Long Rack Mount Kit	This kit is the long-railed version of your standard rack mount kit that lets you fit your device to racks with greater depth.
Easy Installation Rack Mount Kit	This kit is designed to be easy to install and can be installed by one person

Note:
 ◆ For more information, visit the product webpage and refer to the Compatible Accessories.

 ◆ For detailed installation steps, visit the product webpage and refer to the *Optional Rack Mount Kits Installation Guide*.

Connecting Up

Refer to the example installation diagram as you perform the following steps:

1. Plug the USB; then DVI, VGA, or HDMI, and audio connectors of a KVM cable (either supplied with the unit, or purchased separately, see *Cables*, page 3) into the KVM ports located in the CPU section on the rear of the CL6700MW.

   Note: The CL6700MW supports speakers only. It does not support a microphone. Connect the KVM cable's speaker jack (green) to the CL6700MW's audio port.

2. Plug the keyboard, monitor, mouse and audio connectors of the KVM cable into their respective ports in the console section of a KVM switch or computer.

3. If you are installing an external console, plug your keyboard, monitor, mouse and speakers into their respective ports in the console section of the CL6700MW.

   Note: The CL6700MW supports a DVI, VGA or HDMI external console monitor, but only one video signal (DVI-D, VGA, or HDMI) can be displayed at a time. The DVI monitor will display a DVI-D signal only.

4. Plug the CL6700MW's power cord into the CL6700MW's power socket and into a power source.

5. Power up your KVM installation.

6. Turn on the power to LCD console.

Installation Diagram

DVI-D, VGA, or HDMI

CL6700MW Rear View

DVI-D

CS1768 Rear View
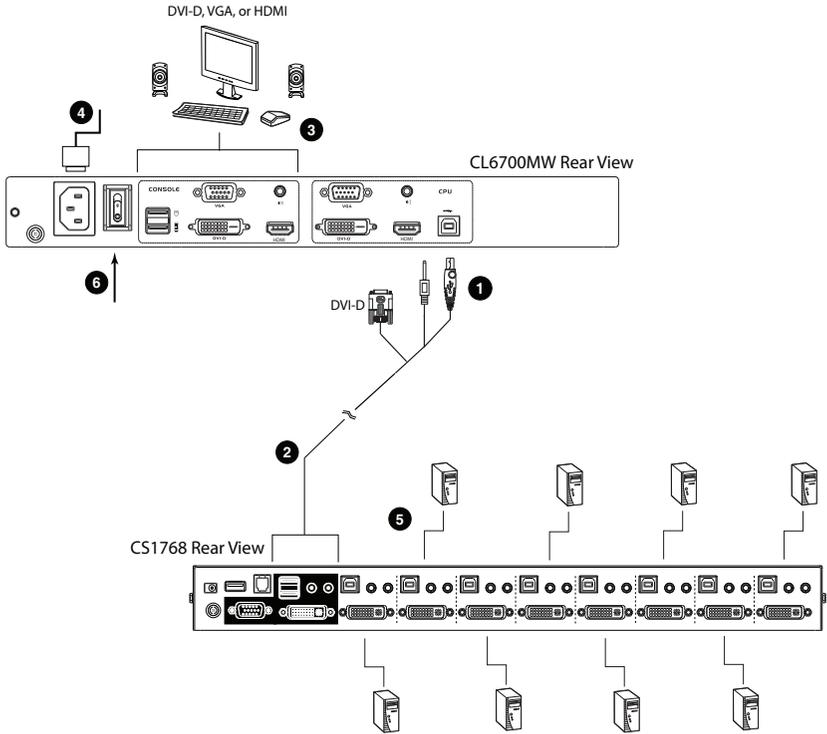
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Operation

Opening the Console

The CL6700MW's console is located under the top cover. To access the console, slide the console module out and raise the cover.

Note: As a safety precaution, to keep the console from accidentally sliding out, the console is locked into the *In* position. Before you can pull the console module out, you must release it by pushing the catches on the unit's front panel as indicated below.
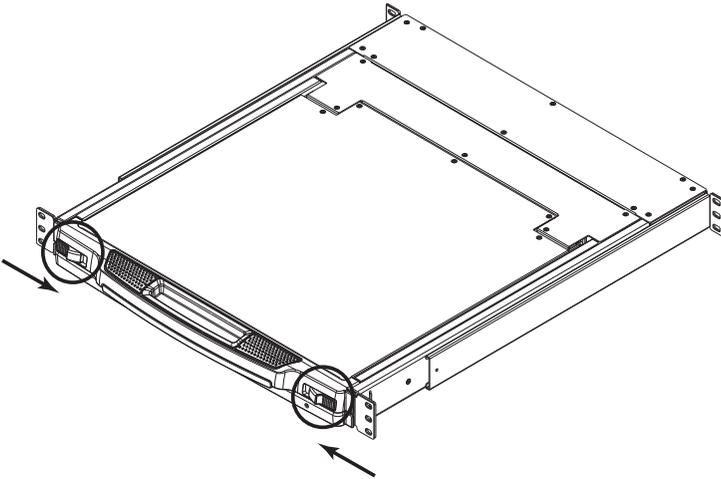
Closing the Console

To slide the console module back in, close the cover and do the following:

1. Pull the safety catches on the unit's side rails toward you and push the module in until it stops.

2. Release the catches. Pull the module slightly toward you, then push it all the way in.
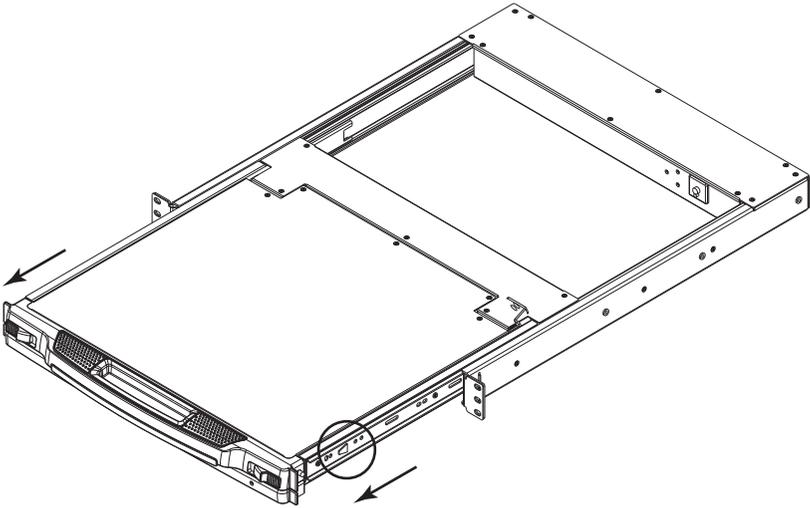
Note: The reason for the two step procedure is to minimize the chances of you pinching your fingers when sliding the module in.

Operating Precautions

The maximum load bearing capacity of the keyboard module is 30 kg. Failure to heed the information below can result in damage to the keyboard module.
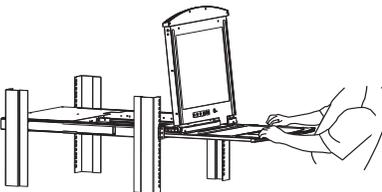
	Right! Rest your hands and arms lightly on the keyboard module as you work.
	Wrong! ◆ **DO NOT** lean your body weight on the keyboard module. ◆ **DO NOT** place heavy objects on the keyboard module.
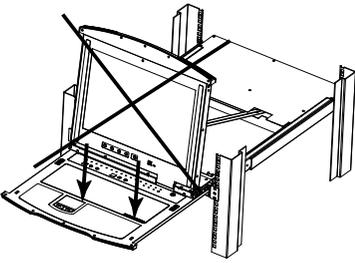
LCD OSD Configuration

LCD Buttons

The LCD OSD allows you to set up and configure the LCD display. Four buttons are used to perform the configuration, as described in the table, below:

Button	Function
MENU	◆ When you have not entered the LCD OSD Menu function, pressing this button invokes the Menu function, and brings up the Main Menu.
	◆ When you have entered the LCD OSD Menu function, and have reached a setting choice with the navigation buttons, pressing this button brings up its adjustment screen.
▶|▲	When navigating through the menus, this button moves you Right or Up. When making an adjustment, it increases the value.
◀|▼	When navigating through the menus, this button moves you Left or Down. When making an adjustment, it decreases the value.
EXIT	◆ When you have not entered the LCD OSD Menu function, pressing this button performs an auto adjustment. An auto adjustment automatically configures all the settings for the LCD panel to what the OSD considers their optimum values to be.
	◆ When you have entered the LCD OSD Menu function, pressing this button exits the current menu and returns you to the previous menu. Use it to leave an adjustment menu when you are satisfied with the adjustment you made.
	◆ When you are at the Main Menu, pressing this button exits the LCD OSD.

Manufacturing Number

The "MFG Number" (Manufacturing Number) is an internal serial number used by ATEN's factory and technical support staff to identify products. This number does not affect products' warranty. If your product requires after-sales services, you may provide the MFG Number to ATEN's sales or technical support staff to identify the product and model number.

Adjustment Settings

An explanation of the LED OSD adjustment settings is given in the table below:

Setting	Explanation
Brightness	Adjusts the background black level of the screen image.
Contrast	Adjusts the foreground white level of the screen image.
Phase	If pixel jitter or horizontal line noise is visible on the display, your LED may have the wrong phase setting. Adjust the phase setting to eliminate these problems.
Clock	If vertical banding is visible on the display, your LED may have the wrong clock setting. Adjust the clock setting to eliminate vertical banding.
H-Position	Positions the display area on the LED panel horizontally (moves the display area left or right).
V-Position	Positions the display area on the LED panel vertically (moves the display area up or down).
Color Temperature	Adjusts the color quality of the display. You can adjust the warmth value, color balance, etc. The *Adjust Color* selection has a further submenu that lets you fine tune the RGB values.
Language	Selects the language that the OSD displays its menus in.
OSD Duration	Lets you set the amount of time the OSD displays on the screen. If there is no input for the amount of time you choose, the OSD display turns off.
Reset	Resets the adjustments on all menus and submenus to their factory default settings. **Note:** The *Language* setting does not return to the factory default, but remains at the one that you have set it to.

Hot Plugging

The CL6700MW supports *hot plugging* – components can be removed and added to the console by unplugging their cables from the ports without the need to shut down the CL6700MW.

Powering Off and Restarting

If it becomes necessary to Power Off the CL6700MW (to upgrade the firmware, for example), simply turn off the power to the unit using the rear panel power switch. To restart the CL6700MW, turn the rear panel power switch back on.

Port ID Numbering & Port Selection

Port ID numbering and Port Selection follow the method used by the KVM switch connected to the CL6700MW. Consult your KVM switch's User Manual for details.

Hotkeys

Console selection is accomplished with the following hotkey combinations:

Combination	Action	Beeps	LEDs
[Ctrl] [Alt] [Shift] [P] [C] [Enter]	To select normal mode (pc, etc.).	2	None
[Ctrl] [Alt] [Shift] [M] [A] [C] [Enter]	To select Mac	2	None
[Ctrl] [Alt] [Shift] [S] [U] [N] [Enter]	To select SUN	2	None
[Ctrl] [Alt] [Shift] [u] [p] [g] [r] [a] [d] [e] [Enter]	Activates the Firmware Upgrade Mode. **Note:** this Hotkey sequence only works when the firmware upgrade switch (see page 24) is in the **Normal** position.	None	3 Flashing when upgrade is in process
[Ctrl] [Alt] [Shift] [L] [Enter]	Enable Local (LCD) console; Disable 2nd console or external console video.	2	None
[Ctrl] [Alt] [Shift] [R] [Enter]	Enable 2nd console, or external console video; Disable Local (LCD) console.	2	None
[Ctrl] [Alt] [Shift] [L] [R] [Enter] or [Ctrl] [Alt] [Shift] [R] [L] [Enter]	Enable both consoles (default).	2	None
[Ctrl] [Alt] [Shift] [F11] [F] [Enter]	Set the KVM port to be full speed USB.	2	None
[Ctrl] [Alt] [Shift] [F11] [L] [Enter]	Set the KVM port to be low speed USB.	2	None
[Ctrl] [Alt] [Shift] [U] [M] [Enter]	Configures the front USB Port to mouse mode (Mouse functionality is immediate upon switching to USB mouse mode). (USB mouse mode [U] [M] is the default)	2	None
[Ctrl] [Alt] [Shift] [U] [P] [Enter]	Configures the front USB Port to peripheral mode.	2	None

Note: 1. Press the keys in sequence – one key at a time. First **[Ctrl]**, then **[Alt]**, then **[Shift]**, etc.

2. Console selections are not saved. If the CL6700MW is powered off, it reverts to the default setting of both consoles enabled when it is powered on again.

3. Either side of the keyboard can be used to invoke **[Shift] [Ctrl] [Alt]** hotkeys.

4. If the KVM switch connected to the CL6700MW uses the **[Ctrl] [Alt] [Shift]** combination to invoke its hotkey mode, you won't be able to access any of its hotkey operations because the CL6700MW will capture the combination for console selection first.
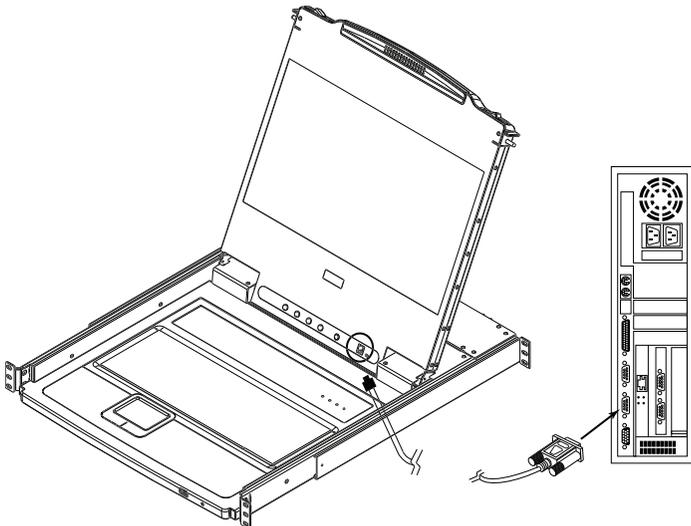
Firmware Upgrade

The Firmware Upgrade Utility

As new firmware revisions become available for the CL6700MW, firmware upgrade packages are posted on the ATEN web site. The Windows-based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth, automated process for upgrading the CL6700MW's firmware. Check the web site regularly to find the latest firmware packages and information relating to them.

Before You Begin

To prepare for the firmware upgrade, do the following:

1. From a computer that is not part of your CL6700MW installation go to ATEN's Internet support site and choose the model name that relates to your device 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. Use the *firmware upgrade cable* (provided with this unit), to connect a COM port on your computer to the *firmware upgrade port* of the CL6700MW.

Firmware Upgrade Mode

The CL6700MW's firmware upgrade mode can be accessed one of two ways: by entering a hotkey sequence (see *Hotkeys*, page 21), or by placing the CL6700MW in firmware upgrade recovery mode (see *Exiting Firmware Upgrade Mode*, page 29).

Note: In order to activate the Firmware Upgrade Mode using a hotkey sequence, the firmware upgrade switch (see page 6) must be set to the **Normal** position.

1. Turn off the power to the CL6700MW using the power switch located on the back side of the console.

2. Slide the firmware switch to RECOVER (see page 6).

3. Turn on the power to the CL6700MW using the power switch located on the back side of the console.

When the CL6700MW is in Firmware Upgrade Mode, the Num Lock, Caps Lock and Scroll Lock LEDs will continually flash on and off.

To exit the Firmware Upgrade Mode, see *Exiting Firmware Upgrade Mode*, page 29.

Performing the Upgrade

Starting the Upgrade:

1. With the CL6700MW in Firmware Upgrade Mode, run the downloaded Firmware Upgrade Package file from your computer - either by double clicking the file icon, or by opening a command line and keying in the full path and filename.

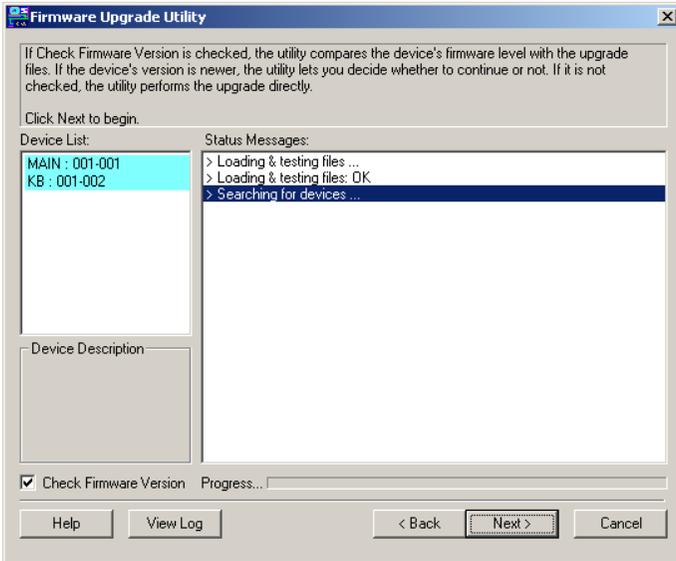   The Firmware Upgrade Utility *Welcome* screen appears:
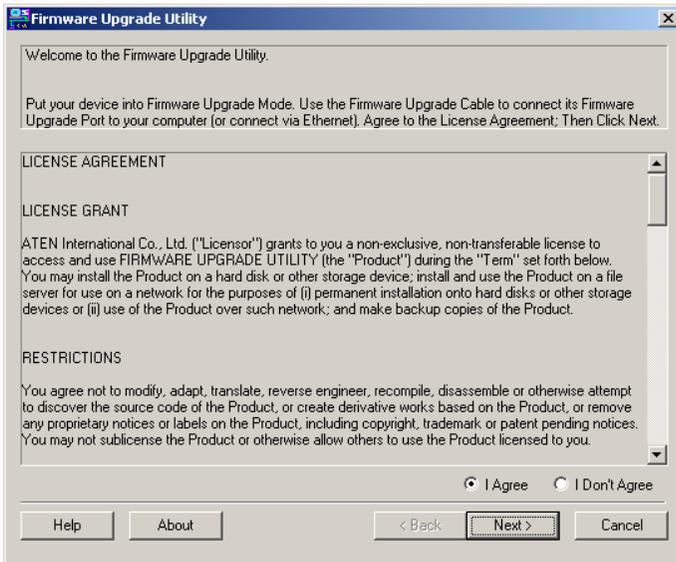
2. Read and *Agree* to the License Agreement (enable the I Agree radio button).

   (Continues on next page.)

(Continued from previous page.)

3. Click **Next**. 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.

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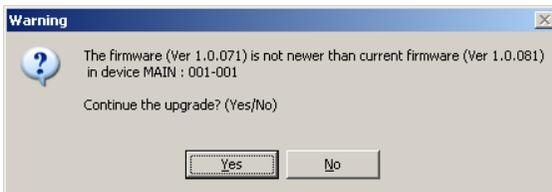
   If you didn't enable *Check Firmware Version*, the Utility installs the upgrade files without checking whether they are a higher level, or not.

   ◆ 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:
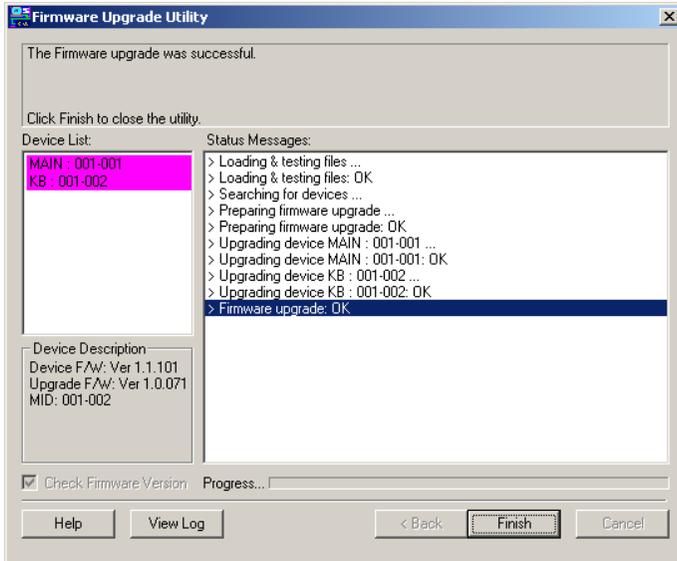
Click **Finish** to close the Firmware Upgrade Utility.

Upgrade Failed:

If the firmware upgrade fails (*Upgrade Succeeded* screen does not appear), you can recover the situation. An upgrade failed message appears, an example is shown:

Possible reasons for firmware upgrade failure are:

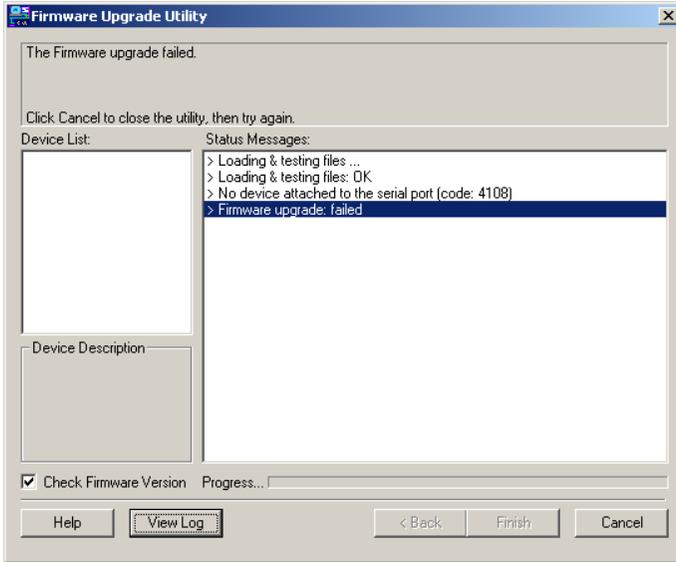- When a firmware upgrade was manually aborted.

- When the unit's firmware becomes corrupted for some reason and you are unable to operate it.

- When a firmware upgrade procedure is interrupted.

- When a firmware upgrade procedure fails.

To recover a failed firmware upgrade, do the following:

1. Click **Cancel** to close the Firmware Upgrade Utility.

2. Power off the unit.

3. Connect the *firmware upgrade cable* to its *firmware upgrade port*.

4. Slide the *firmware upgrade switch* to the **Recover** position.

5. Power the unit back on and repeat the upgrade procedure (see *Starting the Upgrade:* on page 25).

6. After the unit has been successfully upgraded, power it off, and slide the *firmware upgrade switch* back to the **Normal** position.

7. Power the unit back on again.

Exiting Firmware Upgrade Mode

To exit the Firmware Upgrade Mode, do the following:

1. Slide the *firmware upgrade switch* (see page 6) to the **Normal** position.

2. Power off and restart the CL6700MW according to the instructions given in the *Powering Off and Restarting* section (see page 18).

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Appendix

Safety Instructions

General

◆ This product is for indoor use only.

◆ Read all of these instructions. Save them for future reference.

◆ Follow all warnings and instructions marked on the device.

◆ Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.

◆ Do not use the device near water.

◆ Do not place the device near, or over, radiators or heat registers.

◆ The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.

◆ The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.

◆ Never spill liquid of any kind on the device.

◆ Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

◆ The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.

◆ The device is designed for IT power distribution systems with 230V phase-to-phase voltage.

◆ To prevent damage to your installation it is important that all devices are properly grounded.

◆ The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.

◆ Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.

- If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.

- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).

- Position system cables and power cables carefully; Be sure that nothing rests on any cables.

- Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.

- Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.

- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
  - The power cord or plug has become damaged or frayed.
  - Liquid has been spilled into the device.
  - The device has been exposed to rain or water.
  - The device has been dropped, or the cabinet has been damaged.
  - The device exhibits a distinct change in performance, indicating a need for service.
  - The device does not operate normally when the operating instructions are followed.

- Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.

- Do not connect the RJ-11 connector marked "UPGRADE" to a public telecommunication network.

Rack Mounting

- ◆ Before working on the rack, make sure that the stabilizers are secured to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.

- ◆ Always load the rack from the bottom up, and load the heaviest item in the rack first.

- ◆ Make sure that the rack is level and stable before extending a device from the rack.

- ◆ Use caution when pressing the device rail release latches and sliding a device into or out of a rack; the slide rails can pinch your fingers.

- ◆ After a device is inserted into the rack, carefully extend the rail into a locking position, and then slide the device into the rack.

- ◆ Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.

- ◆ Make sure that all equipment used on the rack – including power strips and other electrical connectors – is properly grounded.

- ◆ Ensure that proper airflow is provided to devices in the rack.

- ◆ Ensure that the operating ambient temperature of the rack environment does not exceed the maximum ambient temperature specified for the equipment by the manufacturer.

- ◆ Do not step on or stand on any device when servicing other devices in a rack.

- ◆ **Caution:** Slide/rail (LCD KVM) mounted equipment is not to be used as a shelf or a work space.

Technical Support

International

◆ For online technical support – including troubleshooting, documentation, and software updates: **http://support.aten.com**

◆ For telephone support, see *Telephone Support*, page vii.

North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://www.aten-usa.com/support
Telephone Support		1-888-999-ATEN ext 4988
		1-949-428-1111

When you contact us, please have the following information ready beforehand:

◆ Product model number, serial number, and date of purchase.

◆ Your computer configuration, including operating system, revision level, expansion cards, and software.

◆ Any error messages displayed at the time the error occurred.

◆ The sequence of operations that led up to the error.

◆ Any other information you feel may be of help.

Specifications

Function			CL6700MW
Computer Connections			1
Console Selection			Hotkey
Connectors	External Console Ports	Keyboard	1 x USB Type A Female
		Mouse	1 x USB Type A Female
		Monitor	1 x DVI-D Female (White) 1 x HDB-15 (VGA) Female (Blue) 1 x HDMI Female (Black)
		Speaker	1 x Mini Stereo Jack Female (Green)
	KVM Ports	KB / Mouse	1 x USB Type B Female (White)
		Monitor	1 x DVI-D Female (White) 1 x HDB-15 (VGA) Male (Blue) 1 x HDMI Female (Black)
		Speaker	1 x Mini Stereo Jack Female (Green)
	External Mouse / Peripheral		1 x USB Type A Female (Black)
	Firmware Upgrade		1 x RJ-11 Female (Black)
	Power		1 x 3-prong AC Socket
Switches	Reset		1 x Semi-recessed Pushbutton
	Power		1 x Rocker
	F/W Upgrade		1 x Slide
	LCD Power		1 x Pushbutton
	LCD Adjustment		4 x Pushbutton
LEDs	Power		1 (Green)
	Lock	Num	1 (Green)
		Caps	1 (Green)
		Scroll	1 (Green)
Emulation	Keyboard / Mouse		USB
Video			1920 x 1080 @60Hz, DDC2B
I/P Rating			100–240VAC; 50–60Hz; 1A
Power Consumption			120V, 19.4W / 230V, 19.4W
Environment	Operating Temp.		0–40º C
	Storage Temp.		-20–60º C
	Humidity		0–80% RH Non-condensing

Function		CL6700MW
Physical Properties	Housing	Metal
	Weight	11.38 kg
	Dimensions (L x W x H)	48.00 x 58.92 x 4.40 cm

Sun Keyboard Emulation

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.

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
⊞	◆

Note: When using key combinations, press and release the first key (Ctrl), then press and release the activation key.

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.

PC Keyboard	Mac Keyboard
[Shift]	Shift
[Ctrl]	Ctrl
⊞	⌘
[Ctrl] [1]	🔇
[Ctrl] [2]	🔉
[Ctrl] [3]	🔊
[Ctrl] [4]	⏏
[Alt]	Alt
[Print Screen]	F13
[Scroll Lock]	F14
📝	=
[Enter]	Return
[Backspace]	Delete
[Insert]	Help
[Ctrl] ⊞	F15

Note: When using key combinations, press and release the first key (Ctrl), then press and release the activation key.

Troubleshooting

Symptom	Action
There are ghost images on the external monitor.	The distance between the external console and the CL6700MW is too great. The maximum DVI cable distance should not exceed 20m and, in some cases, may need to be shorter. Replace the DVI cable with one of an appropriately short length.
Some characters I enter from the keyboard do not display correctly.	The keyboard layout setting for the port does not match the keyboard you are using. On your switch, change the keyboard layout setting for the port to match the layout of the keyboard you are using.
I can't use the special keys on the Sun external keyboard to control Sun computers.	Use Sun keyboard emulation keystrokes (page 37) to achieve all Sun keyboard functions.

Limited Warranty

ATEN warrants its hardware in the country of purchase against flaws in materials and workmanship for a Warranty Period of two [2] years (warranty period may vary in certain regions/countries) commencing on the date of original purchase. This warranty period includes the LCD panel of ATEN LCD KVM switches. Select products are warranted for an additional year (see *A+ Warranty* for further details). Cables and accessories are not covered by the Standard Warranty.

What is covered by the Limited Hardware Warranty
ATEN will provide a repair service, without charge, during the Warranty Period. If a product is detective, ATEN will, at its discretion, have the option to (1) repair said product with new or repaired components, or (2) replace the entire product with an identical product or with a similar product which fulfills the same function as the defective product. Replaced products assume the warranty of the original product for the remaining period or a period of 90 days, whichever is longer. When the products or components are replaced, the replacing articles shall become customer property and the replaced articles shall become the property of ATEN.

To learn more about our warranty policies, please visit our website:
http://www.aten.com/global/en/legal/policies/warranty-policy/