ATEN
Simply Better Connections

CL3800 / CL3700 / CL3100

Short Depth WideScreen 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.

VCCI Statement

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。　　　　　VCCI－A

Note: The VCCI Statement only applies to CL3100.

RoHS

This product is RoHS compliant.

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 (ATEN allows up to 5 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.

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

Package Contents

Make sure that all components are in working order. If you encounter any problem, please contact your dealer.

CL3800

1   CL3800 USB HDMI DVI VGA Dual Rail LCD Console with Standard Rack Mount Kit

1   USB HDMI KVM cable set

1   firmware upgrade cable

1   power cord

2   Front-L brackets

1   user instructions

CL3700

1   CL3700 USB HDMI Single Rail LCD Console with Standard Rack Mount Kit

1   USB HDMI KVM cable set

1   firmware upgrade cable

1   power cord

1   user instructions

CL3100

1   CL3100 USB VGA Single Rail LCD Console with Standard Rack Mount Kit

1   USB VGA KVM cable set

1   firmware upgrade cable

1   power cord

1   user instructions

Contents

4. Firmware Upgrade

Appendix

About this Manual

This manual is provided to help you get the most out of your CL3800 / CL3700 / CL3100. It covers all aspects of the device, including installation, configuration, and operation.

Models covered in this manual include:

Model	Product Name
CL3100	Ultra Short Depth Single Rail WideScreen LCD Console (USB,VGA)
CL3700	Ultra Short Depth Single Rail WideScreen LCD Console (USB, HDMI)
CL3800	Ultra Short Depth Dual Rail WideScreen LCD Console (USB, HDMI / DVI / VGA)

An overview of the information found in the manual is provided below.

Chapter 1, Introduction, introduces you to the CL3800 / CL3700 / CL3100, its purpose, features, and benefits, with its components are described.

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

Chapter 3, Operation, describes the fundamental concepts involved in operating the CL3800 / CL3700 / CL3100.

Chapter 4, Firmware Upgrade, explains how to upgrade the CL3800 / CL3700 / CL3100's firmware with the latest version of firmware available .

Appendix, provides specifications and other technical information regarding the CL3800 / CL3700 / CL3100.

Note:

◆ Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or connected devices.

◆ The product may be updated with features and functions added, improved or removed since the release of this manual. For an up-to-date CL3800 / CL3700 / CL3100 documentation, visit http://www.aten.com/global/en/

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 consecutive options (such as on a menu or dialog box). For example, Start > Run means to open the *Start* menu, and then select *Run*.
⚠	Indicates critical information.

This Page Intentionally Left Blank

Introduction

Overview

CL3800 / CL3700 / CL3100 is ATEN's Short Depth WideScreen LCD Console Series designed to offer convenient on-site operation for KVM devices or servers in limited space. The short-depth design fits all 19" equipment cabinets, and is especially suitable for shallow racks. Aside from saving valuable space on the rack, the CL3800 / CL3700 / CL3100 is also an ideal, space-saving solution for various special-environment applications, such as outside broadcast vans (OB vans) and compact control rooms.

The CL3800 USB HDMI DVI VGA LCD Console is a dual rail LCD KVM console featuring an 18.5" LED-backlit widescreen LCD monitor with an integrated keyboard and touchpad. It supports three types of video input — HDMI, DVI, and VGA — for providing the ultimate installation flexibility by allowing users to connect the console and the computer via any of the three types of video source.

To maximize space utilization, the dual rail design enables CL3800's LCD monitor, keyboard, and touchpad to operate independently of each other. The LCD console's keyboard and touchpad modules can slide back to be hid away when not in use, while the thin-profile LCD monitor rotates back, flush against the rack, to allow convenient monitoring of the computer / server connected.

While the CL3800 supports multiple video interfaces, the CL3700 and CL3100 are dedicated front-end sliding consoles respectively for HDMI and VGA KVM switches. Both of the CL3700 and CL3100 are of single rail design with an 18.5" LED-backlit widescreen LCD monitor and an integrated keyboard and touchpad.

For added convenience, users can also choose to manage the connected computer /server from an external console. Ports for a second external KVM console (USB keyboard/mouse) with either an HDMI (CL3800 and CL3700), DVI (CL3800 only), or VGA (CL3800 and CL3100) monitor, are provided on the rear panel. The CL3800 and CL3100 include two mini stereo ports for connecting audio speakers, one in the CPU section, and the other in the external Console section on the rear panel. The CL3800 / CL3700 / CL3100 also features a port for an external USB mouse on the unit's front panel for use with the built-in keyboard. See *Rear Panel External Console Ports*, page 2 to view a table of available ports for each model.

The LCD monitors of CL3800NW and CL3700NW support resolutions up to 1920 x 1080, while the LCD monitors of CL3800NX, CL3700NX, and CL3100NX support resolutions up to 1366 x 768. See *Specifications*, page 57, for details.

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.

With an upgradable firmware, you can keep your CL3800 / CL3700 / CL3100 up-to-date with the latest updates by downloading them from the ATEN website. Setup is fast and easy. Simply use the custom cable included with your device to connect the CL3800 / CL3700 / CL3100 to the console ports of your KVM switch and you are ready to go!

With CL3700NW, testing is performed using the MIL-STD-810G* procedure to verify High/Low Temperature, Vibration, and Shock Resistance. MIL-STD-810G testing ensures the CL3700NW operates reliably in harsh environments by subjecting the equipment to rigorous testing. This process emphasizes the equipment's environmental design and limits under real-world conditions it will encounter throughout its lifespan, such as operating in extreme temperature ranges or on vessels experiencing frequent high vibrations and shocks on the ocean. To achieve this, the CL3700NW need to collocate with 2K-0003/ 2K-0004, and 2X-EA12 (LockPro HDMI cable lock), 2X-EA07 (Lok-U-Plug cable holder) to install.

Rear Panel External Console Ports

Model	Keyboard/ Mouse	Audio (Speakers)	HDMI	VGA	DVI
CL3800	Yes	Yes	Yes	Yes	Yes
CL3700	Yes	No	Yes	No	No
CL3100	Yes	Yes	No	Yes	No

Features

- Exclusive LED illumination — designed by ATEN to illuminate the keyboard and touchpad to allow visibility under low-light conditions

- Short-depth design allows you to work with your rack-mounting equipment in narrow spaces

- Integrated LCD KVM console with 18.5" LED-backlit widescreen LCD monitor in a dual rail housing with top and bottom clearance for smooth operation in a 1U-high system rack (CL3800 only)

- Dual rail design allows LCD monitor and keyboard / touchpad modules to operate independently (CL3800 only)

- Integrated LCD KVM console with 18.5" LED-backlit widescreen LCD monitor in a single rail housing with top and bottom clearance for smooth operation in a 1U high system rack (CL3700 and CL3100)

- Supports three types of video input — HDMI, DVI, and VGA[1]; supports an external console with USB / HDMI / VGA / DVI connectors[1] (CL3800 only)

- Supports HDMI video input; supports an external console with USB / HDMI connectors (CL3700 only)

- Supports VGA video input; supports an external console with USB / VGA connectors (CL3100 only)

- LCD monitor supports Full HD resolution of 1920 x 1080 @ 60 Hz (CL3800NW and CL3700NW only); LCD monitor supports resolution of 1366 x 768 @ 60 Hz (CL3800NX, CL3700NX, CL3100NX)

- External console supports input video resolutions up to 1920 x 1200 @ 60 Hz

- Audio support for connecting speakers (CL3800 and CL3100 only)

- Console lock — enables the console drawer to remain securely locked away in position when not in use

- Additional hot-pluggable USB mouse port on front panel (also functions as a USB peripheral port)

- Console selection via hotkey

- Standard 105-key keyboard

- Optional 2-in-1U Mounting Kit (2K-0001/2K-0002) – fitting the CL3800/CL3700/CL3100 and a rack KVM switch in 1U of space on a rack for space-saving, easy and flexible operation

- Optional rack mount kits available, including easy installation options
- No software required
- Firmware upgradable
- Supports hot-plugging
- High/ Low Temperature, Vibration and Shock Resistance Test – MIL-STD-810G certified (CL3700NW only)[2]

Note: 1. Only one video signal (HDMI, DVI-D, or VGA) can be displayed at time.

2. Suggest to collocate with 2K-0003/ 2K-0004, and 2X-EA12 (LockPro HDMI cable lock), 2X-EA07 (Lok-U-Plug cable holder) to install.

Requirements

LCD Console

◆ The CL3800 supports most ATEN HDMI, DVI, and VGA KVM switches; the CL3700 supports most ATEN HDMI KVM switches; the CL3100 supports most ATEN VGA KVM switches.

◆ For CL3800NW and CL3700NW models, the integrated LCD monitor's maximum resolution is 1920 x 1080 @ 60 Hz; for CL3800NX, CL3700NX, and CL3100NX models, the integrated LCD monitor's maximum resolution is 1366 x 768 @ 60 Hz. Make sure that none of the resolution settings of the connected computers exceed the LCD monitor's maximum resolution.

External Console

◆ An HDMI, DVI, or VGA monitor capable of displaying the highest resolution provided by any computer in the installation (CL3800).

◆ An HDMI monitor capable of displaying the highest resolution provided by any computer in the installation (CL3700).

◆ A VGA monitor capable of displaying the highest resolution provided by any computer in the installation (CL3100).

◆ 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.

CL3800		
Length (m)	Type	Part Number
1.80	USB, DVI	2L-7D02U
	USB, HDMI	2L-7D02UH
	USB, HDMI to DVI	2L-7D02DH
3.00	USB, DVI	2L-7D03U
5.00	USB, DVI	2L-7D05U

CL3700		
Length (m)	**Type**	**Part Number**
1.80	USB, HDMI	2L-7D02UH

CL3100		
Length (m)	**Type**	**Part Number**
1.20	USB, VGA	2L-5201U, 2L-5301U
1.80		2L-5202U, 2L-5302U
3.00		2L-5203U, 2L-5303U
5.00		2L-5205U,2L-5305U

Operating Systems

Supported operating systems include Windows, Mac, Linux, and Sun.

Components

CL3800 Front View
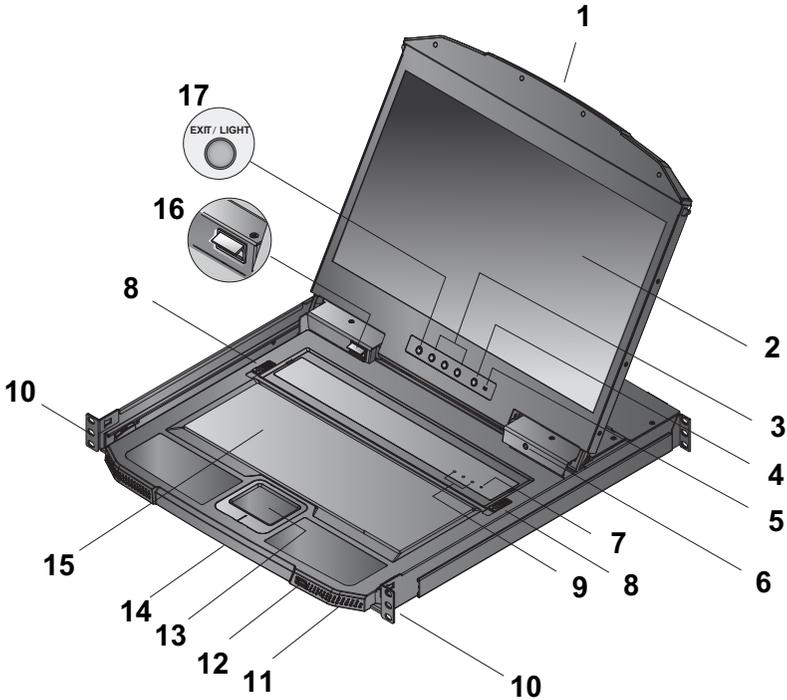
| No.	Component	Description
1	upper handle	Pull to slide the LCD module out; push to slide it in. See *Opening / Closing the Console*, page 29, for details on sliding the console in and out
2	LCD module	After sliding the LCD module out, flip up the cover to access the LCD display.
3	LCD controls	The buttons to control the position and picture settings of the LCD display are located here. See page 35, for details.
4	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.

| No.	Component	Description
5	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, see *Upgrade Failed*, page 46 for details on how to recover the situation.
6	firmware upgrade port	The firmware upgrade cable that transfers the firmware upgrade data from the administrator's computer plugs into this 3.5 mm audio jack.
7	reset button	Located to the right of the Lock LEDs. Press this button in with a thin object to perform a system reset.
8	keyboard module releases	These catches (one on each side) release the keyboard module so you can slide it away.
9	lock LEDs	The Num Lock, Caps Lock, Scroll Lock LEDs are located here.
10	rack mount brackets	The rack mount brackets are located at each corner of the unit. See *Standard Rack Mounting*, page 17, for details.
11	power LED	Lights (green) to indicate that the unit is receiving power.
12	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.
13	touchpad	Standard mouse touchpad.
14	bottom handle	Pull to slide the keyboard module out. See *Opening / Closing the Console*, page 29, for details on sliding the console in and out.
15	keyboard module	Standard 105-key keyboard.
16	LED illumination Light	Illuminates the keyboard and touchpad to allow visibility in low-light conditions.
17	Exit / Light pushbutton	Press the Exit / Light pushbutton for two seconds to turn the LED Illumination Light on or off. (Default: On)

CL3800 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 CL3800 on and off.
3	external console section	For flexibility and convenience, the CL3800 supports an independent, external, KVM console. The external console's USB keyboard and mouse, HDMI, DVI, or VGA monitor, and speaker cable plug in here.
4	KVM port section	The custom USB HDMI KVM cable supplied with the package for linking the CL3800 to a computer or switch plugs in here. Additional DVI and VGA ports are provided.
5	grounding terminal	The grounding wire (used to ground the unit) attaches here.

CL3700 / CL3100 Front View
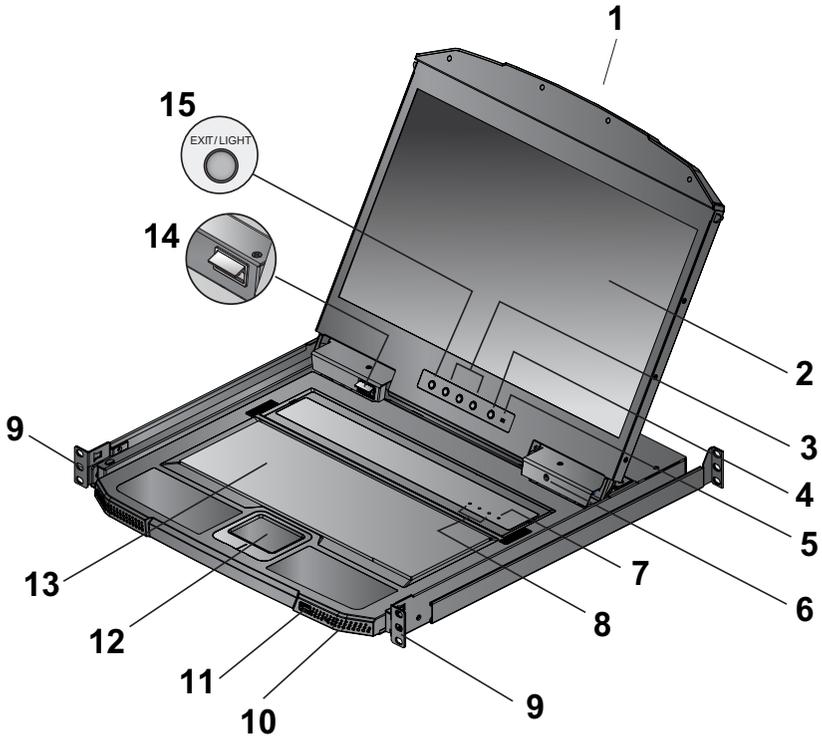
No.	Component	Description
1	upper handle with release bar	Pull to slide the LCD module out; push to slide it in. See *Opening / Closing the Console*, page 29, for details on sliding the console in and out
2	LCD module	After sliding the LCD module out, flip up the cover to access the LCD display.
3	LCD controls	The buttons to control the position and picture settings of the LCD display are located here. See page 35, for details.
4	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.
5	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, see *Upgrade Failed*, page 46 for details on how to recover the situation.
6	firmware upgrade port	The firmware upgrade cable that transfers the firmware upgrade data from the administrator's computer plugs into this 3.5 mm audio jack.
7	reset button	Located to the right of the Lock LEDs. Press this button in with a thin object to perform a system reset.
8	lock LEDs	The Num Lock, Caps Lock, Scroll Lock LEDs are located here.
9	rack mount brackets	The rack mount brackets are located at each corner of the unit. See *Standard Rack Mounting*, page 17, for details.
10	power LED	Lights (green) to indicate that the unit is receiving power.
11	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.
12	touchpad	Standard mouse touchpad.
13	keyboard module	Standard 105-key keyboard.
14	LED illumination light	Illuminates the keyboard and touchpad to allow visibility in low-light conditions.
15	Exit / Light pushbutton	Press the Exit / Light pushbutton for two seconds to turn the LED Illumination Light on or off. (Default: On)

CL3700 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 CL3700 on and off.
3	external console section	For flexibility and convenience, the CL3700 supports an independent, external, KVM console. The external console's USB keyboard and mouse, and HDMI cable plug in here.
4	KVM port section	The custom USB HDMI KVM cable supplied with the package for linking the CL3700 to a computer or switch plugs in here.
5	grounding terminal	The grounding wire (used to ground the unit) attaches here.

CL3100 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 CL3100 on and off.
3	external console section	For flexibility and convenience, the CL3100 supports an independent, external, KVM console. The external console's USB keyboard and mouse, VGA monitor, and speaker cable plug in here.
4	KVM port section	The custom KVM cable supplied with the package for linking the CL3100 to a computer or switch plugs in here.
5	grounding terminal	The grounding wire (used to ground the unit) attaches here.

This Page Intentionally Left Blank

Hardware Setup

Before you Begin

1. Important safety information regarding the placement of this device is provided on page 49. Please review it before proceeding.

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

3. (CL3800 only) Packing material has been inserted to protect the CL3800 during shipping. Slide the LCD module out (see *Opening / Closing the Console*, page 29), until the packing material is visible. Remove the packing material before installing the unit, as shown in the diagram below.
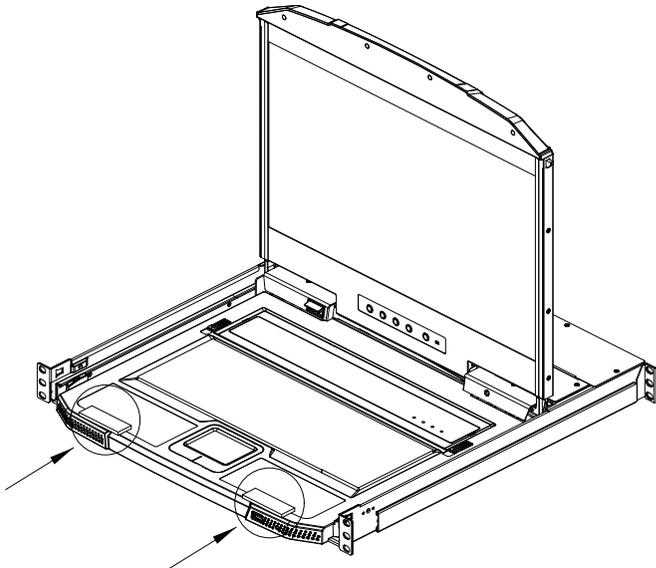
4. The LCD KVM switch is designed for rack mounting. If the KVM switch is not rack mounted be sure to place it on a completely flat and firm surface before pulling the device in or out to prevent damage due to uneven force on the module.

Place on Flat Surface
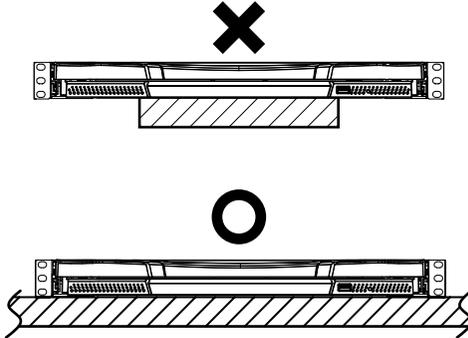
5. Please operate the device with caution when under high environmental temperatures, as the surface of the device may become overheated under such conditions. For instance, the surface temperature of the device may reach 70 ºC or higher when the environmental temperature reaches close to 50 ºC.

Standard Rack Mounting

A standard rack mount kit enables the CL3800 to be mounted in a rack with a depth of 47 – 75 cm. A standard rack mounting kit enables the CL3700/CL3100 to be mounted in a rack with a depth of 42 – 72 cm.


left & right L-shaped brackets
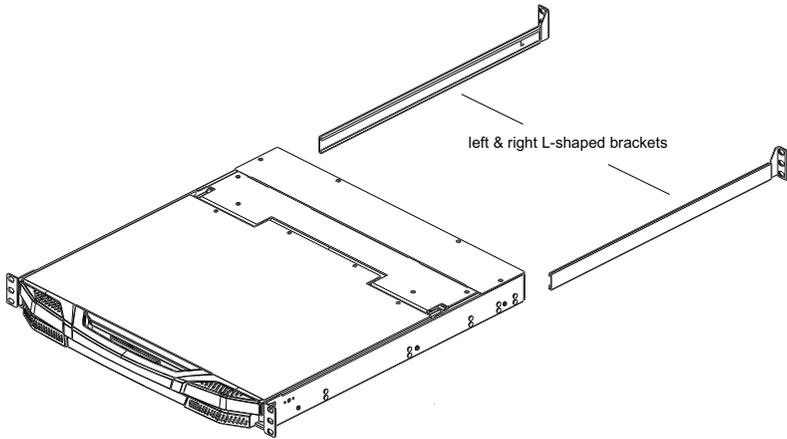
Note:	◆ It takes two people to mount the console.
	◆ The standard rack mount kit does not include screws or cage nuts. If you need additional screws or cage nuts, contact your rack dealer.

To rack mount the CL3800 / CL3700 / CL3100, do the following:

1. Attach the left and right L-shaped brackets to the back of the rack, installing four screws in the brackets to secure them in place.
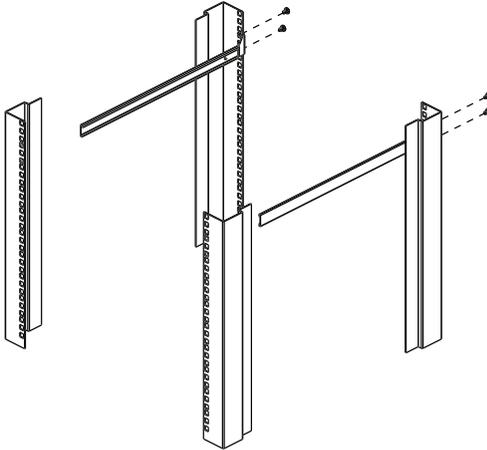
2. While one person inserts the unit into place by sliding its left and right side bars into the left & right L-shaped brackets (on the rack), have a second person screw the front brackets to the rack.
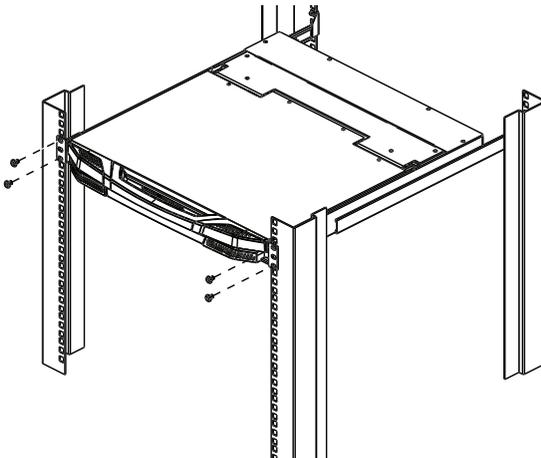

3. After the front brackets are secured, tighten all the screws.

   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.

# Front-L Brackets Mounting (CL3800 only)

To have a comfortable and safe posture, install the Front-L brackets which provide an extension at the front of the rack to help the unit slide further out and thus allowing you to tilt the LCD screen more. Instructions to use this option are shown below:

1. Attach the left and right Front-L brackets to the front of the rack, placing screws in the tabs to secure them in place.
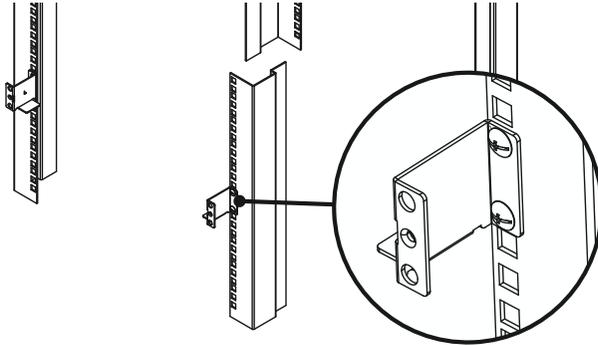
Note: Rack screws are not provided to mount the unit. We recommend that you use M5 x P0.8 screws.

2. Attach the left and right L-shaped brackets to the back of the rack, installing four screws in the brackets to secure them in place.
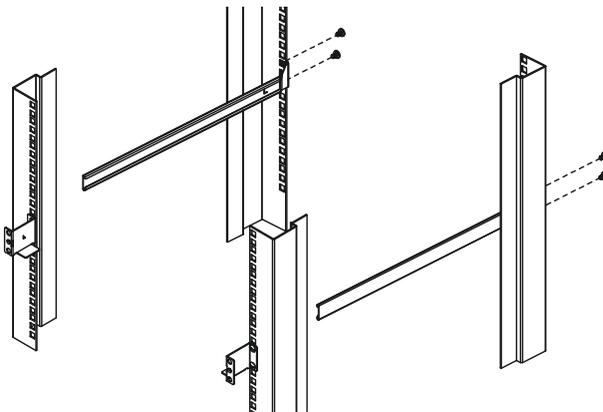
3. While one person inserts the unit into place by sliding its left and right side bars into the left and right L-shaped brackets (on the rack), have a second person screw the front brackets to the front-L bracket.
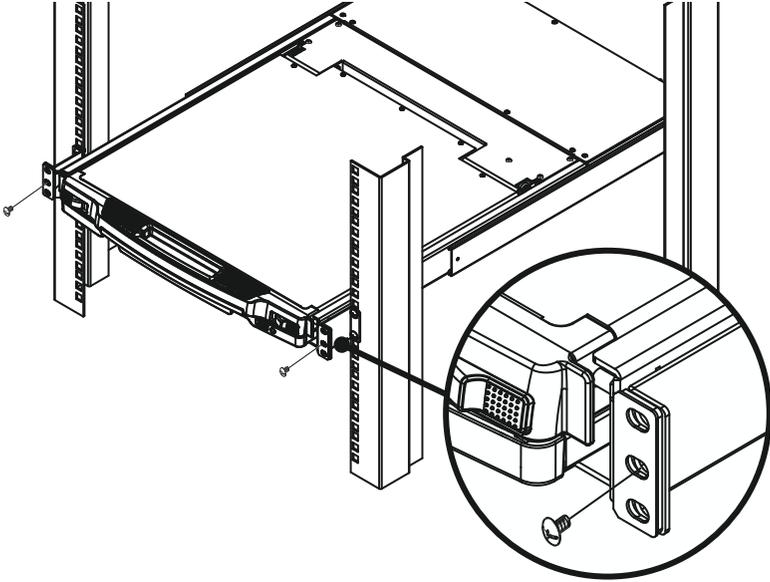
4. After the front brackets are secured, tighten all the screws.

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 - CL3800

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

1. Plug the USB, audio and one of HDMI, DVI-D, or VGA connectors of a KVM cable (either supplied with the unit, or purchased separately, see *Cables*, page 5) into the KVM ports located in the CPU section on the rear of the CL3800.

   > **Note:** The CL3800 supports speakers only. It does not support a microphone. Connect the KVM cable's speaker jack (green) to the CL3800'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.

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 CL3800.

   > **Note:** The CL3800 supports an HDMI, DVI-D, or VGA external console monitor, but only one video signal (HDMI, VGA, or DVI-D) can be displayed at a time. The DVI monitor will display a DVI-D signal only.

4. Plug the CL3800's power cord into the CL3800's power socket and into a power source.

5. Turn on the power to LCD console.

6. Power on your PC.

Installation Diagram

HDMI, DVI-D,
or VGA

CL3800 (Rear)

KVM Switch (Rear)
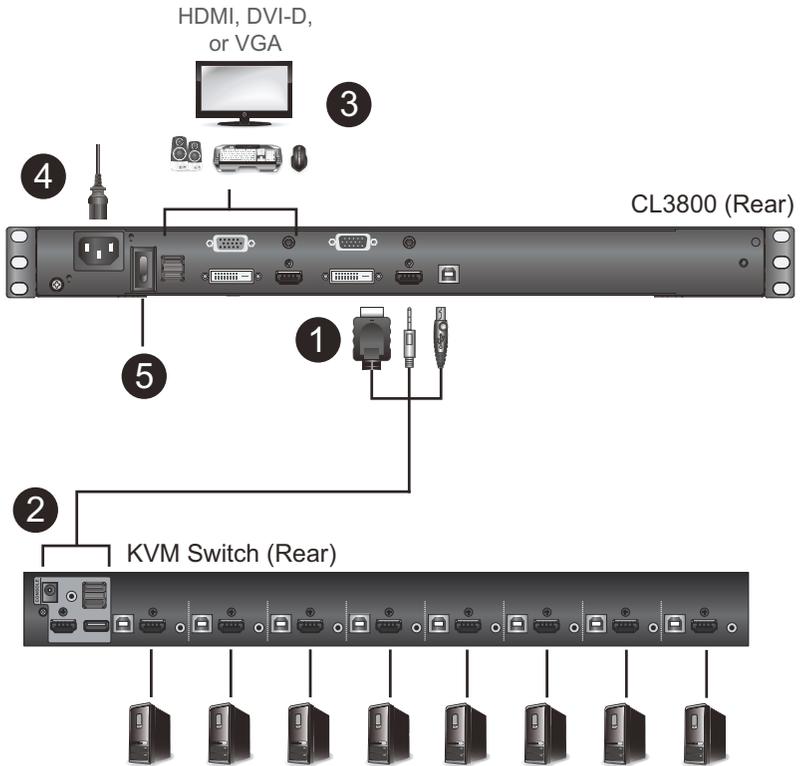
Connecting Up — CL3700

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

1. Plug the HDMI and USB Type B connectors of a KVM cable into the KVM ports located in the CPU section on the rear of the CL3700.

2. Plug the HDMI and USB Type B connectors of the KVM cable into their respective ports in the console section of a KVM switch.

3. If you are installing an external console, plug your keyboard, mouse, and monitor into their respective ports on the console section of the CL3700.

4. Plug one end of the CL3700's power cord into the CL3700's power socket, and plug the other end into a power source.

5. Turn on the power to the LCD console.

6. Power on your PC.

Installation Diagram
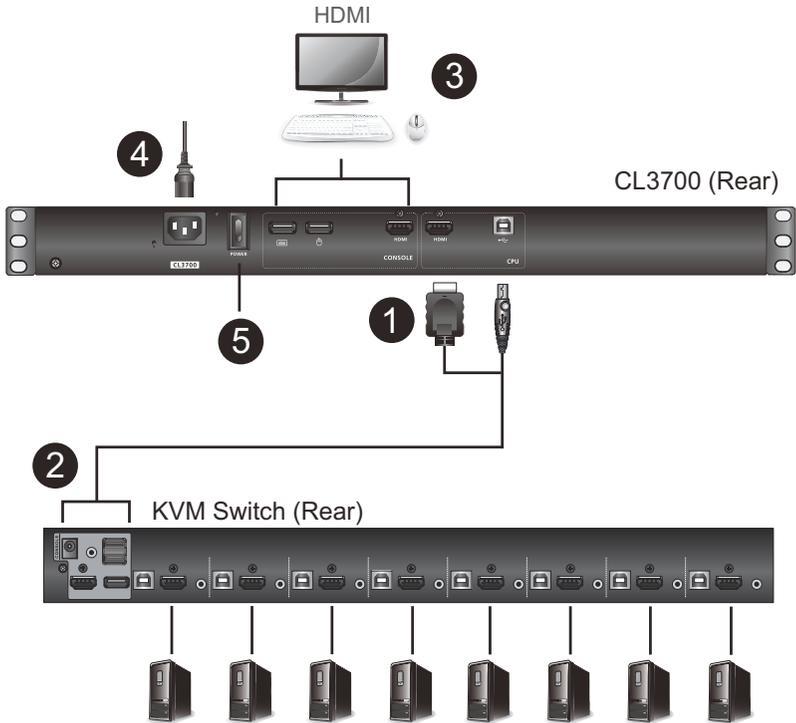
Connecting Up — CL3100

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

1. Plug one end of the KVM cable into the KVM ports located in the CPU section on the rear of the CL3100.

   Note: The CL3100 supports speakers only. It does not support a microphone. Connect the KVM cable's speaker jack (green) to the CL3100's audio port.

2. Plug the other end of the KVM cable into the console section of a KVM switch.

3. If you are installing an external console, plug your keyboard, mouse, monitor, and speakers (microphone not supported) into their respective ports on the console section of the CL3100.

4. Plug one end of the CL3100's power cord into the CL3100's power socket, and plug the other end into a power source.

5. Turn on the power to LCD console.

6. Power on your PC.

Installation Diagram
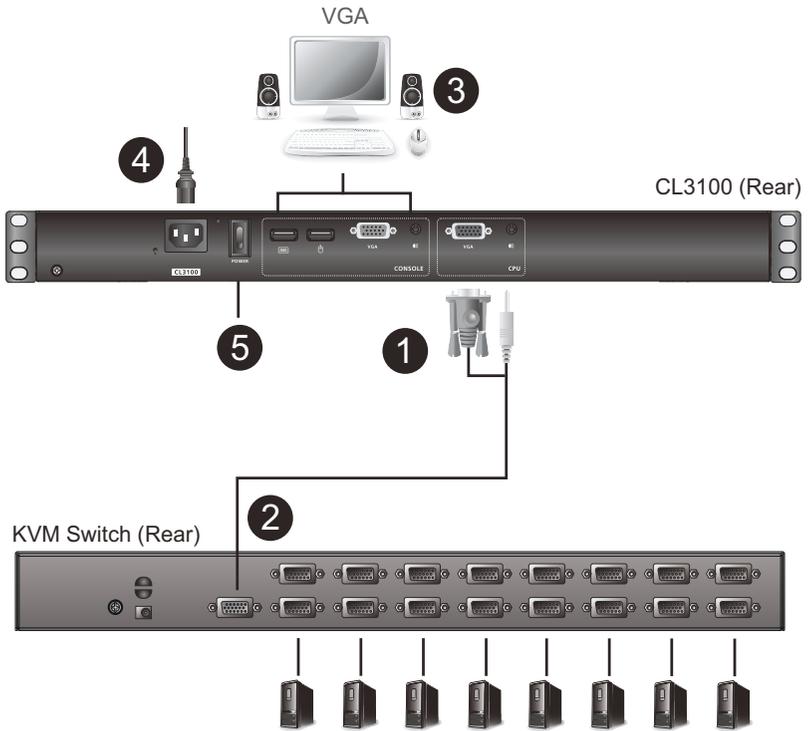
This Page Intentionally Left Blank

Operation

Opening / Closing the Console

The CL3800's console consists of two modules: an 18.5" LCD display module located under the top cover; and a keyboard / touch pad module below the LCD module. The modules can either slide together, or independently. This allows you to have the LCD display available for viewing while the keyboard / touch pad module is conveniently out of the way when not in use.

The CL3700 and CL3100 are single rail consoles and so the LCD display module and keyboard/touch pad module can only slide in/out together.

### CL3800

1. Use the upper release bar handle to pull the panel module straight out.
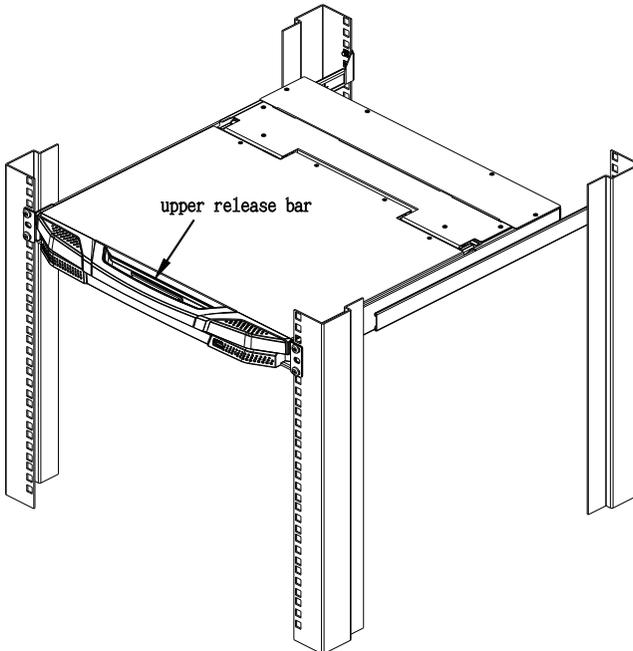
upper release bar

2. Pulling, slide the panel module out until it clicks in place.
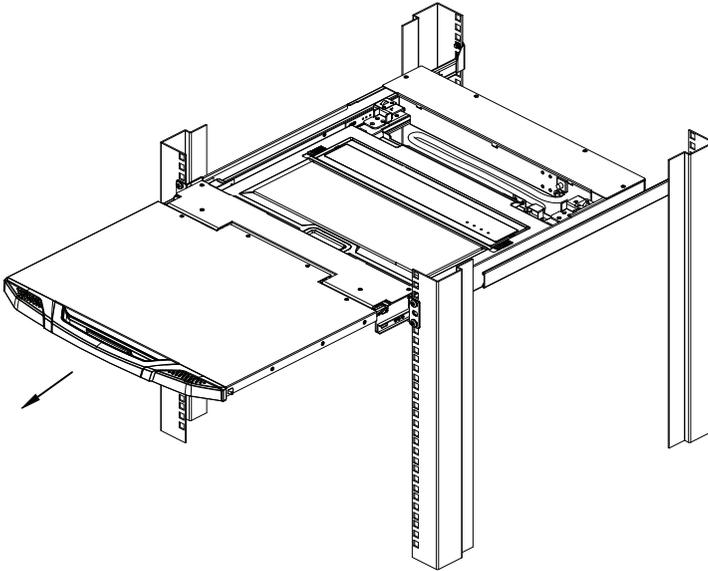
3. Raise the top panel all the way back to expose the LCD screen.
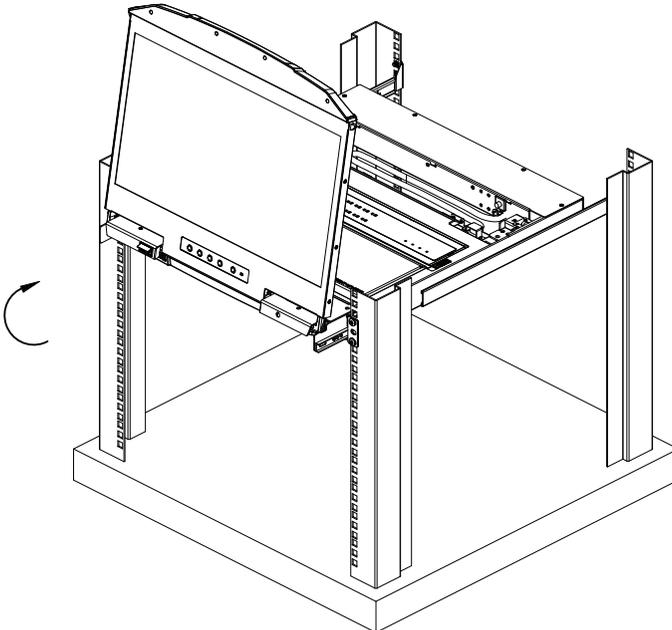
4. Use the lower release bar handle to pull the keyboard module straight out unit it clicks in place.

lower release bar
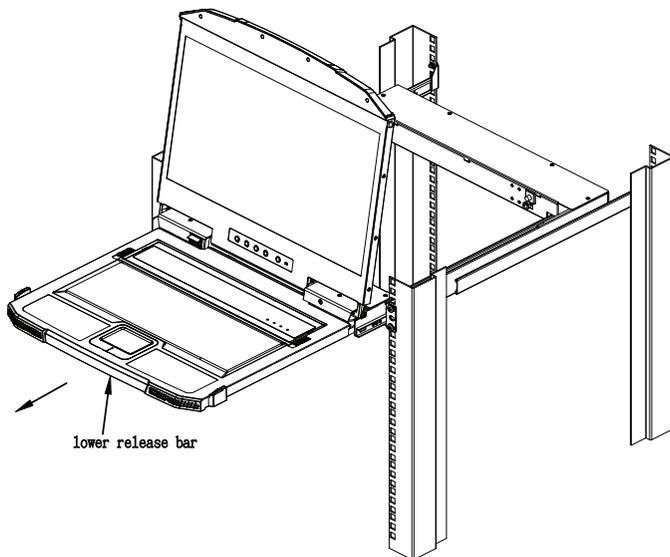
5. To independently retract the keyboard into the rack, slide both keyboard module releases and push the keyboard module all the way in.
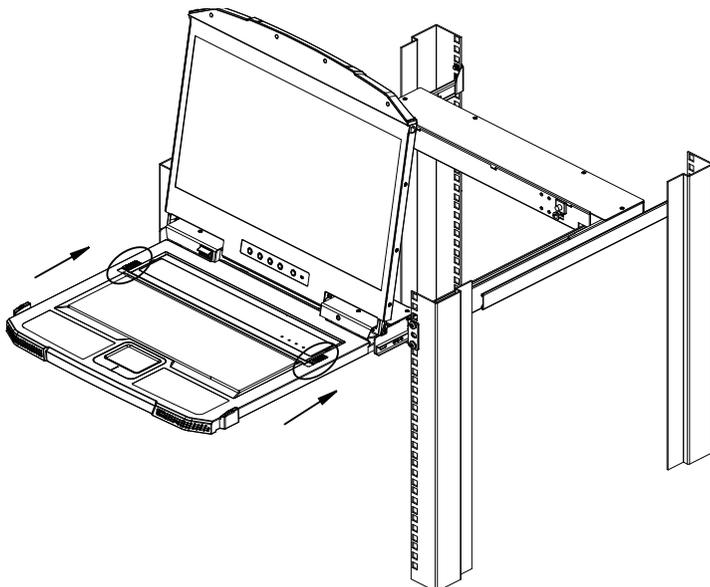
6. Slide the keyboard in until it's completely inserted into the rack.
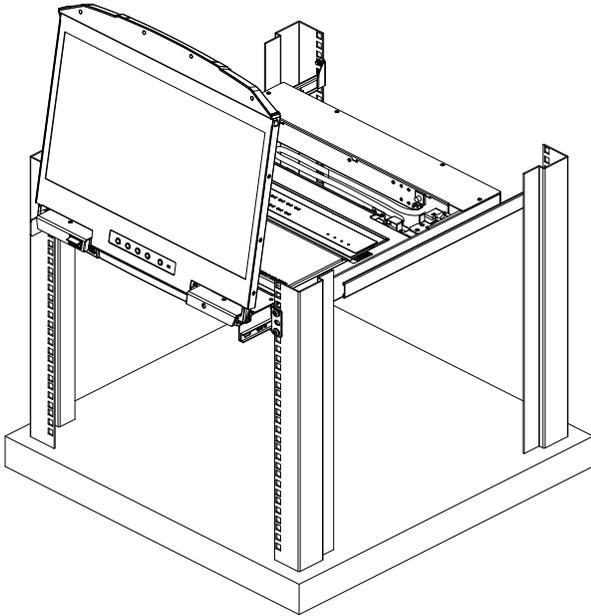
7. To close the LCD screen, lower the panel module until it lies flat and slide it back in.
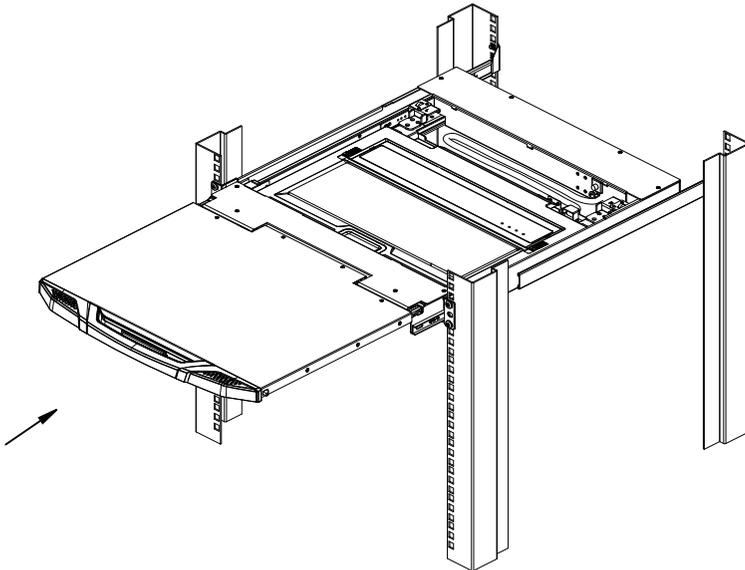
CL3700 / CL3100

Refer to the diagrams below to open or close the console as you do the following:

1. Pull on the release bar on the upper handle. Slide the console module out until it clicks in place, and then raise the LCD module lid.

2. To close the console, lower the LCD module until it lies flat, and slide the full console in.
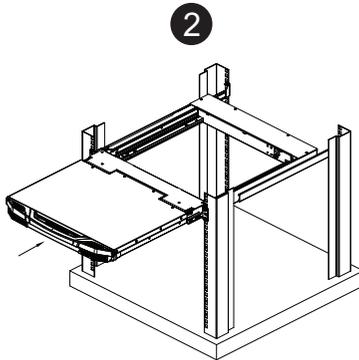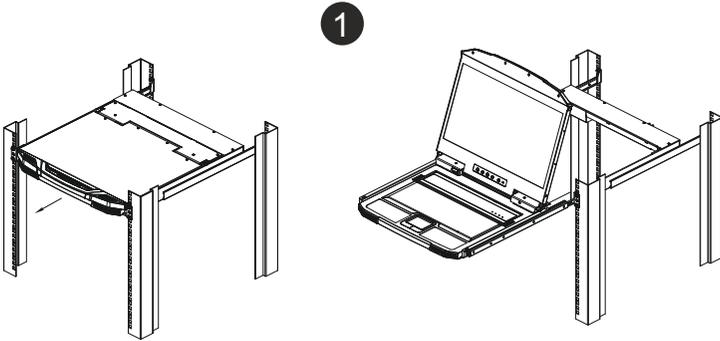
Operating Precautions

 The maximum load bearing capacity of the keyboard module is 20 kg. Failure to heed the information below can result in damage to the keyboard module.
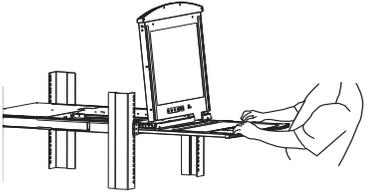
	Right! Rest your hands and arms lightly on the keyboard module as you work.
	Wrong! ◆ **DO NOT** lean your body weight on the keyboard module. ◆ **DO NOT** place heavy objects on the keyboard module.
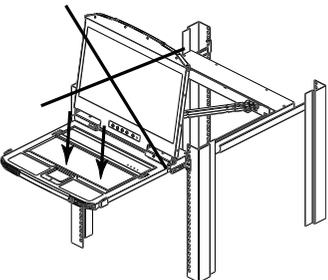
LCD OSD Configuration

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.

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.
Input Source	Lets you select an *Analog* (VGA) or *Digital* (HDMI, DVI) input source for connecting an external console to the CL3800. This option is not available for the CL3700 or CL3100 as they only have one input source option. See *external console section*, page 9.
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 CL3800 / CL3700 / CL3100 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 CL3800 / CL3700 / CL3100.

Powering Off and Restarting

If it becomes necessary to Power Off the CL3800 / CL3700 / CL3100 (to upgrade the firmware, for example), simply turn off the power to the unit using the rear panel power switch. To restart the CL3800 / CL3700 / CL3100, turn the rear panel power switch back on.

Port ID Numbering & Port Selection

If you connect a KVM switch to the CL3800 / CL3700 / CL3100, Port ID numbering and Port Selection follow the method used by the connected KVM switch. 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 42) 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] [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
[Ctrl] [Alt] [Shift] [F4] [Enter]	Print the switch's current settings via a text editor or word processor.	None	None
[Ctrl] [Alt] [Shift] [F11] [F] [Enter]	Set the KVM port to USB full speed.	2	None
[Ctrl] [Alt] [Shift] [F11] [L] [Enter]	Set the KVM port to USB low speed.	1	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 CL3800 / CL3700 / CL3100 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. However, when activating hotkey combinations **[Ctrl] [Alt] [Shift]**, make sure you are using the keys on the same side of the keyboard.

4. If the KVM switch connected to the CL3800 / CL3700 / CL3100 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 CL3800 / CL3700 / CL3100 will capture the combination for console selection first.

This Page Intentionally Left Blank

Firmware Upgrade

The Firmware Upgrade Utility

As new firmware revisions become available for the CL3800 / CL3700 / CL3100, 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 CL3800 / CL3700 / CL3100'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 CL3800 / CL3700 / CL3100 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 CL3800 / CL3700 / CL3100.
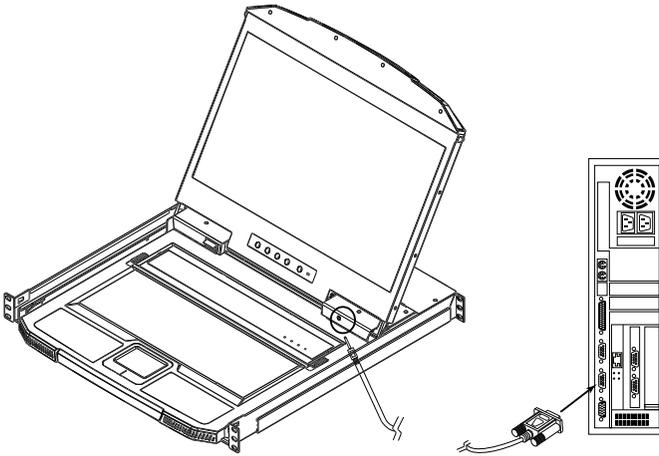
Firmware Upgrade Mode

The CL3800 / CL3700 / CL3100's firmware upgrade mode can be accessed one of two ways: by entering a hotkey sequence (see *Hotkeys*, page 38), or by sliding the firmware upgrade switch of the CL3800 / CL3700 / CL3100 to RECOVER (see *Upgrade Failed*, page 46).

Note: In order to activate the Firmware Upgrade Mode using a hotkey sequence, the firmware upgrade switch (see page 8) must be set to the **Normal** position.

---

1. Turn off the power to the CL3800 / CL3700 / CL3100 using the power switch located on the back side of the console.

2. Slide the firmware switch to RECOVER (see page 8).

3. Turn on the power to the CL3800 / CL3700 / CL3100 using the power switch located on the back side of the console.

When the CL3800 / CL3700 / CL3100 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 47.

Performing the Upgrade

Starting the Upgrade:

1. With the CL3800 / CL3700 / CL3100 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:
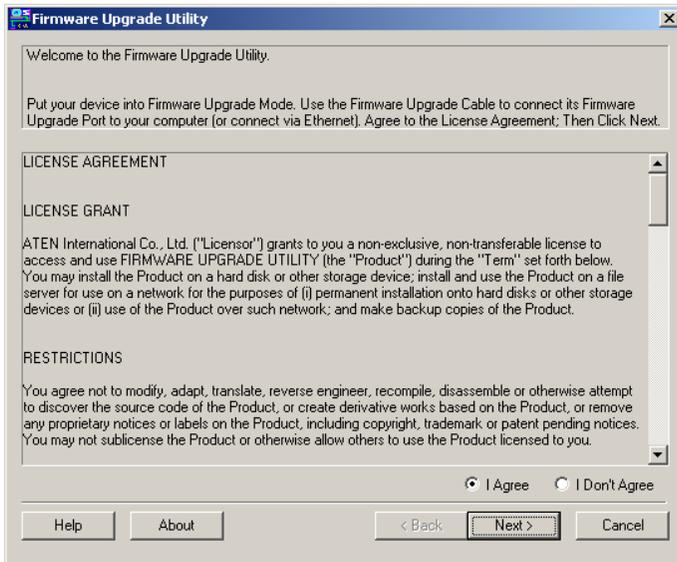
2. Read and *Agree* to the License Agreement (enable the I Agree radio button).

(Continued from previous page.)

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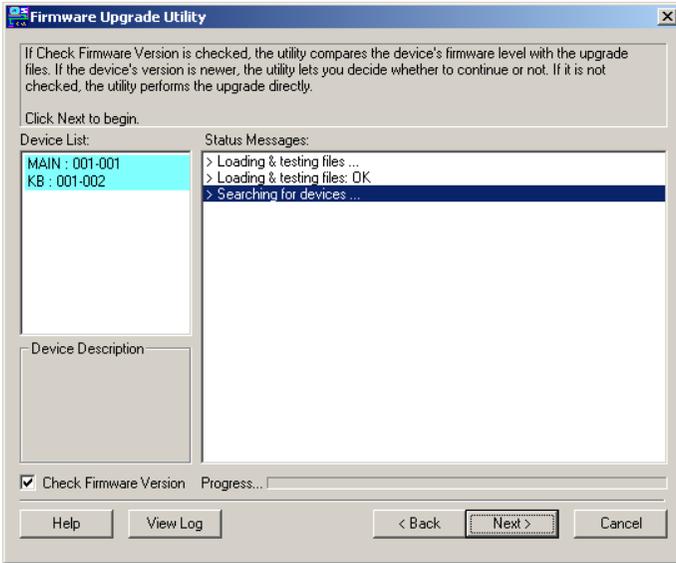
The Utility inspects your installation. All the devices capable of being upgraded by the package are listed in the *Device List* panel.

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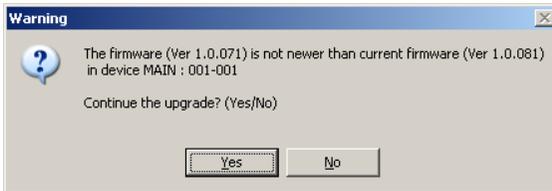
    If you didn't enable *Check Firmware Version*, the Utility installs the upgrade files without checking whether they are a higher level, or not.

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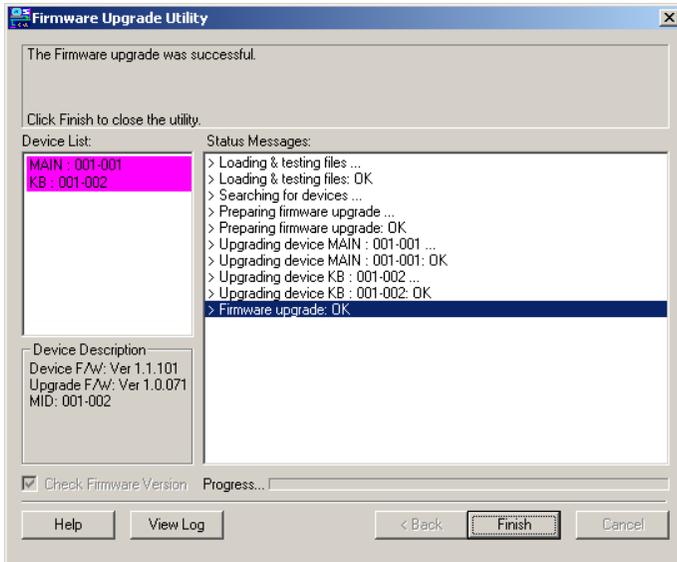
Click **Finish** to close the Firmware Upgrade Utility.

Upgrade Failed

If the firmware upgrade fails (*Upgrade Succeeded* screen does not appear), you can recover the situation.
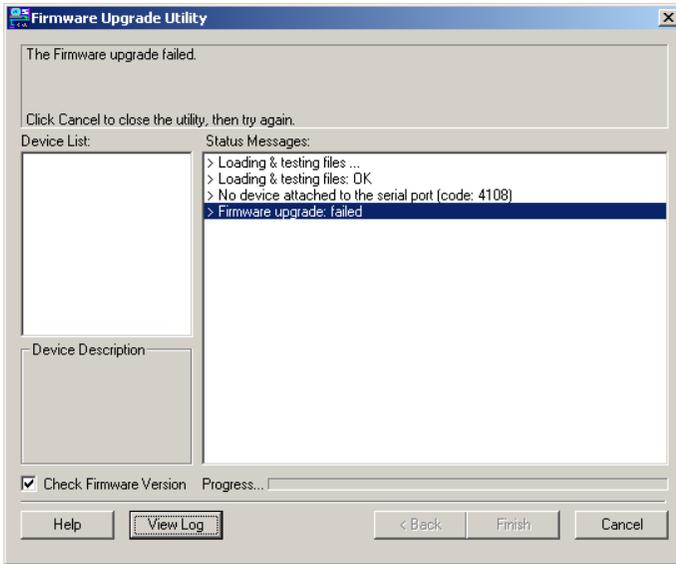
Possible reasons for firmware upgrade failure are:

◆ 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. Power off the unit.

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

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

4. Power the unit back on and repeat the upgrade procedure (see *Starting the Upgrade:* on page 43).

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

6. 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 8) to the **Normal** position.

2. Power off and restart the CL3800 / CL3700 / CL3100 according to the instructions given in the *Powering Off and Restarting* section (see page 37).

This Page Intentionally Left Blank

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 Audio Jack connector marked "UPGRADE" to a public telecommunication network.

- Avoid circuit overloads. Before connecting equipment to a circuit, know the power supply's limit and never exceed it. Always review the electrical specifications of a circuit to ensure that you are not creating a dangerous condition or that one doesn't already exist. Circuit overloads can cause a fire and destroy equipment.

- Suitable for installation in Information Technology Rooms in accordance with Article 645 of the National Electrical Code NFPA 75.

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.

Consignes de sécurité

Général

- Ce produit est destiné exclusivement à une utilisation à l'intérieur.

- Veuillez lire la totalité de ces instructions. Conservez-les afin de pouvoir vous y référer ultérieurement.

- Respectez l'ensemble des avertissements et instructions inscrits sur l'appareil.

- Ne placez jamais l'unité sur une surface instable (chariot, pied, table, etc.). Si l'unité venait à tomber, elle serait gravement endommagée.

- N'utilisez pas l'unité à proximité de l'eau.

- Ne placez pas l'unité à proximité de ou sur des radiateurs ou bouches de chaleur.

- Le boîtier de l'unité est doté de fentes et d'ouvertures destinées à assurer une ventilation adéquate. Pour garantir un fonctionnement fiable et protéger l'unité contre les surchauffes, ces ouvertures ne doivent jamais être bloquées ou couvertes.

- L'unité ne doit jamais être placée sur une surface molle (lit, canapé, tapis, etc.) car ses ouvertures de ventilation se trouveraient bloquées. De même, l'unité ne doit pas être placée dans un meuble fermé à moins qu'une ventilation adaptée ne soit assurée.

- Ne renversez jamais de liquides de quelque sorte que ce soit sur l'unité.

- Débranchez l'unité de la prise murale avant de la nettoyer. N'utilisez pas de produits de nettoyage liquide ou sous forme d'aérosol. Utilisez un chiffon humide pour le nettoyage de l'unité.

- Evitez toute surcharge du circuit. Avant de connecter l'equipement a un circuit, verifiez la limite de l'alimentation et ne la depassez pas. Controlez toujours les caracteristiques electriques d'un circuit pour vous assurer de ne pas creer de situation dangereuse ou qu'il n'y en a pas deja. Les surcharges du circuit peuvent provoquer un incendie et detruire l'equipement.

- L'appareil doit être alimenté par le type de source indiqué sur l'étiquette. Si vous n'êtes pas sûr du type d'alimentation disponible, consultez votre revendeur ou le fournisseur local d'électricité.

- Afin de ne pas endommager votre installation, vérifiez que tous les périphériques sont correctement mis à la terre.

- L'unité est équipée d'une fiche de terre à trois fils. Il s'agit d'une fonction de sécurité. Si vous ne parvenez pas à insérer la fiche dans la prise murale, contactez votre électricité afin qu'il remplace cette dernière qui doit être obsolète. N'essayez pas d'aller à l'encontre de l'objectif de la fiche de terre. Respectez toujours les codes de câblage en vigueur dans votre région/pays.

- L'équipement doit être installé à proximité de la prise murale et le dispositif de déconnexion (prise de courant femelle) doit être facile d'accès.

- La prise murale doit être installée à proximité de l'équipement et doit être facile d'accès.

- Veillez à ce que rien ne repose sur le cordon d'alimentation ou les câbles. Acheminez le cordon d'alimentation et les câbles de sorte que personne ne puisse marcher ou trébucher dessus.

- En cas d'utilisation d'une rallonge avec cette unité, assurez-vous que le total des ampérages de tous les produits utilisés sur cette rallonge ne dépasse pas l'ampérage nominal de cette dernière. Assurez-vous que le total des ampérages de tous les produits branchés sur la prise murale ne dépasse pas 15 ampères.

- Pour contribuer à protéger votre système contre les augmentations et diminutions soudaines et transitoires de puissance électrique, utilisez un parasurtenseur, un filtre de ligne ou un système d'alimentation sans coupure (UPS).

- Placez les câbles du système et les câbles d'alimentation avec précaution ; veillez à ce que rien ne repose sur aucun des câbles.

- Lors du branchement ou du débranchement à des blocs d'alimentation permettant la connexion à chaud, veuillez respecter les lignes directrices suivantes:

- Installez le bloc d'alimentation avant de brancher le câble d'alimentation à celui-ci.

- Débranchez le câble d'alimentation avant de retirer le bloc d'alimentation.

- Si le système présente plusieurs sources d'alimentation, déconnectez le système de l'alimentation en débranchant tous les câbles d'alimentation des blocs d'alimentation.

- N'insérez jamais d'objets de quelque sorte que ce soit dans ou à travers les fentes du boîtier. Ils pourraient entrer en contact avec des points de tension dangereuse ou court-circuiter des pièces, entraînant ainsi un risque d'incendie ou de choc électrique.

- N'essayez pas de réparer l'unité vous-même. Confiez toute opération de réparation à du personnel qualifié.

- Si les conditions suivantes se produisent, débranchez l'unité de la prise murale et amenez-la à un technicien qualifié pour la faire réparer:

  - Le cordon d'alimentation ou la fiche ont été endommagés ou éraillés.

  - Du liquide a été renversé dans l'unité.

  - L'unité a été exposée à la pluie ou à l'eau.

  - L'unité est tombée ou le boîtier a été endommagé.

  - Les performances de l'unité sont visiblement altérées, ce qui indique la nécessité d'une réparation.

  - L'unité ne fonctionne pas normalement bien que les instructions d'utilisation soient respectées.

- N'utilisez que les commandes qui sont abordées dans le mode d'emploi. Le réglage incorrect d'autres commandes peut être à l'origine de dommages qui nécessiteront beaucoup de travail pour qu'un technicien qualifié puisse réparer l'unité.

- Ne connectez pas le connecteur RJ-11 portant la marque « Sensor » (Capteur) à un réseau de télécommunication public.

- Peut être installé dans des salles de matériel de traitement de l'information conformément à l'article 645 du National Electrical Code et à la NFPA 75.

Montage sur bâti

- Avant de travailler sur le bâti, assurez-vous que les stabilisateurs sont bien fixées sur le bâti, qu'ils sont étendus au sol et que tout le poids du bâti repose sur le sol. Installez les stabilisateurs avant et latéraux sur un même bâti ou bien les stabilisateurs avant si plusieurs bâtis sont réunis, avant de travailler sur le bâti.

- Chargez toujours le bâti de bas en haut et chargez l'élément le plus lourd en premier.

- Assurez-vous que le bâti est à niveau et qu'il est stable avant de sortir une unité du bâti.

- Agissez avec précaution lorsque vous appuyez sur les loquets de libération du rail d'unité et lorsque vous faites coulisser une unité dans et hors d'un bâti ; vous pourriez vous pincer les doigts dans les rails.

- Une fois qu'une unité a été insérée dans le bâti, étendez avec précaution le rail dans une position de verrouillage puis faites glisser l'unité dans le bâti.

- Ne surchargez pas le circuit de l'alimentation CA qui alimente le bâti. La charge totale du bâti ne doit pas dépasser 80 % de la capacité du circuit.

- Assurez-vous que tous les équipements utilisés sur le bâti, y-compris les multiprises et autres connecteurs électriques, sont correctement mis à la terre.

- Assurez-vous que les unités présentes dans le bâti bénéficie d'une circulation d'air suffisante.

- Assurez-vous que la température ambiante de fonctionnement de l'environnement du bâti ne dépasse pas la température ambiante maximale spécifiée pour l'équipement par le fabricant.

- Ne marchez sur aucun appareil lors de la maintenance d'autres appareils d'un bâti.

- **Attention**: Glisser / rail (LCD KVM) monté l'équipement ne doit pas être utilisé comme une étagère ou un espace de travail.

Technical Support

International

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

 * For telephone support, see *Telephone Support*, page iv.

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

CL3800NW / CL3800NX

Function	CL3800NW	CL3800NX
Computer Connections		
Direct	1	
Console Selection	Hotkey	
Connectors		
External Console Ports	1 x HDMI Female 1 x DVI-D Female (White) 1 x HDB-15 Female (Blue) 2 x USB Type A Female 1 x 3.5 mm Audio Jack Female (Green)	
KVM Ports	1 x HDMI Female 1 x DVI-D Female (White) 1 x HDB-15 Male (Blue) 1 x USB Type B Female 1 x 3.5 mm Audio Jack Female (Green)	
External Mouse / Peripheral	1 x USB Type A Female (Front)	
Firmware Upgrade	1 x 3.5 mm Audio Jack Female (Black)	
Power	1 x IEC 60320/C14	
Switches		
Reset	1 x Semi-recessed Pushbutton	
Firmware Upgrade	1 x Slide	
Power	1 x Rocker	
LCD Power	1 x Pushbutton	
LCD Adjustment	4 x Pushbutton	
LEDs		
Power	1 x KVM Console (Dark Green) 1 x LCD (Orange)	
Lock	1 x Num Lock (Green) 1 x Caps Lock (Green) 1 x Scroll Lock (Green)	
Video		
Input Video Resolution	up to 1920 x 1200 @ 60 Hz; 1920 x 1080 @ 60 Hz, DDC2B	up to 1920 x 1200 @ 60 Hz; 1366 x 768 @ 60 Hz, DDC2B

Function	CL3800NW	CL3800NX
Panel Spec		
LCD Module	18.5" TFT-LCD	
Resolution	1920 x 1080 @ 60 Hz	1366 x 768 @ 60 Hz
Pixel Pitch	0.213 mm x 0.213 mm	0.3 mm x 0.3 mm
Response Time	20 ms	5 ms
Viewing Angle	178° (H), 178° (V)	170° (H), 160° (V)
Contrast Ratio	1000:1	1000:1
Support Color	16.77M colors	16.77M colors
Luminance	350 cd/m²	250 cd/m²
Emulation		
Keyboard / Mouse	USB	
Maximum Input Power Rating	100 – 240 V AC; 50 – 60 Hz; 1 A	
Power Consumption	AC110V:26.6W:140BTU/h AC220V:26.8W:141BTU/h	AC110:18.3W:101BTU/h AC220:17.8W:98BTU/h
	Note: ◆ The measurement in Watts indicates the typical power consumption of the device with no external loading. ◆ The measurement in BTU/h indicates the power con-sumption of the device when it is fully loaded.	
Environmental		
Operating Temperature	0 – 40 °C	
Storage Temperature	-20 – 60 °C	
Humidity	0–80% RH Non-condensing	
Physical Properties		
Housing	Metal + Plastic	
Weight	9.61 kg (21.17 lb)	9.79 kg (21.56 lb)
Dimensions (L x W x H)	48.06 x 51.42 x 4.28 cm (18.92 x 20.24 x 1.69 in)	
Body Dimensions (L x W x H)	44.92 x 46.74 x 4.28 cm (17.69 x 18.40 x 1.69 in)	

Note: 1. For some rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

2. Body Dimensions exclude I/O ports, handles, and mounting brackets.

CL3700NW / CL3700NX

Function	CL3700NW	CL3700NX
Computer Connections		
Direct	1	
Console Selection	Hotkey	
Connectors		
External Console Ports	1 x HDMI Female 2 x USB Type A Female	
KVM Ports	1 x HDMI Female 1 x USB Type B Female	
External Mouse / Peripheral	1 x USB Type A Female (Front)	
Firmware Upgrade	1 x 3.5 mm Audio Jack Female (Black)	
Power	1 x IEC 60320/C14	
Switches		
Reset	1 x Semi-recessed Pushbutton	
Firmware Upgrade	1 x Slide	
Power	1 x Rocker	
LCD Power	1 x Pushbutton	
LCD Adjustment	4 x Pushbutton	
LEDs		
Power	1 x KVM Console (Dark Green) 1 x LCD (Orange)	
Lock	1 x Num Lock (Green) 1 x Caps Lock (Green) 1 x Scroll Lock (Green)	
Emulation		
Keyboard / Mouse	USB	
Video		
Input Video Resolution	up to 1920 x 1200 @ 60 Hz; 1920 x 1080 @ 60 Hz, DDC2B	up to 1920 x 1200 @ 60 Hz; 1366 x 768 @ 60 Hz, DDC2B
Panel Spec		
LCD Module	18.5" TFT-LCD	
Resolution	1920 x 1080 @ 60 Hz	1366 x 768 @ 60 Hz
Pixel Pitch	0.213 mm x 0.213 mm	0.3 mm x 0.3 mm

Function	CL3700NW	CL3700NX
Response Time	20 ms	5 ms
Viewing Angle	178° (H), 178° (V)	170° (H), 160° (V)
Contrast Ratio	1000:1	1000:1
Support Color	16.77M colors	16.77M colors
Luminance	350 cd/m²	250 cd/m²
Maximum Input Power Rating	100 – 240 V AC, 50 – 60 Hz, 1 A	
Power Consumption	AC110V:23.3W:124BTU/h AC220V:23.9W:127BTU/h	AC110V:13.6W:79BTU/h AC220V:13.5W:78BTU/h
	Note: ♦ The measurement in Watts indicates the typical power consumption of the device with no external loading. ♦ The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.	
Environmental Test	Low temperature operating test according to MIL-STD-810G Method 502 procedure II Cool down to 0°C and maintain for 4hours. High temperature operating test according to MIL-STD-810G Method 501 procedure II Heat up to 50°C and maintain for 4hours Vibration test according to MIL-STD-810G Method 514 procedure I Power Spectrum Density: 10 ~ 20Hz: +3dB/oct; 20 ~ 50Hz: 0.01g2/Hz; 50 ~ 200Hz: -3dB/oct. Grmslevel: 1 grms. Test time: 30 minutes/axis, Longitudinal (X), Transverse (Y) and Vertical (Z) axis Shock test according to MIL-STD-810G Method 516 procedure I Peak :20 g Duration:11 ms Pulse form:Sawtooth Shock times:One times for each of ±X, ±Y, ±Z directions	
Environmental		
Operating Temperature	0 – 40 °C	
Storage Temperature	-20 – 60 °C	

Function	CL3700NW	CL3700NX
Humidity	0–80% RH Non-condensing	
Physical Properties		
Housing	Metal + Plastic	
Weight	9.01 kg (19.85 lb)	9.03 kg (19.89 lb)
Dimensions (L x W x H)	48.06 x 47.70 x 4.28 cm (18.92 x 18.78 x 1.69 in)	
Body Dimensions (L x W x H)	44.92 x 43.00 x 4.28 cm	

Note: 1. For some rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

2. Body Dimensions exclude I/O ports, handles, and mounting brackets.

CL3100NX

Function	CL3100NX
Computer Connections	
Direct	1
Console Selection	Hotkey
Connectors	
External Console Ports	1 x HDB-15 Female (Blue) 2 x USB Type A Female 1 x 3.5 mm Audio Jack Female (Green)
KVM Ports	1 x SPHD Female (Yellow) 1 x 3.5 mm Audio Jack Female (Green)
External Mouse / Periph-eral	1 x USB Type A Female (Front)
Firmware Upgrade	1 x 3.5 mm Audio Jack Female (Black)
Power	1 x IEC 60320/C14
Switches	
Reset	1 x Semi-recessed Pushbutton
Firmware Upgrade	1 x Slide
Power	1 x Rocker
LCD Power	1 x Pushbutton
LCD Adjustment	4 x Pushbutton
LEDs	
Power	1 x KVM Console (Dark Green) 1 x LCD (Orange)
Lock	1 x Num Lock (Green) 1 x Caps Lock (Green) 1 x Scroll Lock (Green)
Emulation	
Keyboard / Mouse	USB
Video	
Input Video Resolution	1920 x 1200 @ 60 Hz
Panel Spec	
LCD Module	18.5" TFT-LCD
Resolution	1366 x 768 @ 60 Hz
Pixel Pitch	0.3 mm x 0.3 mm
Response Time	5 ms

Function	CL3100NX
Viewing Angle	170° (H), 160° (V)
Contrast Ratio	1000:1
Support Color	16.7M colors
Luminance	250 cd/m²
Maximum Input Power Rating	100 – 240 V AC, 50 – 60 Hz, 1 A
Power Consumption	AC110:13.8W:80BTU/h AC 220:14.1W:81BTU/h
	Note: ♦ The measurement in Watts indicates the typical power consumption of the device with no external loading. ♦ The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental	
Operating Temperature	0 – 40 ºC
Storage Temperature	-20 – 60 ºC
Humidity	0–80% RH Non-condensing
Physical Properties	
Housing	Metal + Plastic
Weight	9.07 kg (19.98 lb)
Dimensions (L x W x H)	48.06 x 47.70 x 4.28 cm (18.92 x 18.78 x 1.69 inc.)
Body Dimensions (L x W x H)	44.92 x 43.00 x 4.28 cm

Note: 1. For some rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

2. Body Dimensions exclude I/O ports, handles, and mounting brackets.

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 CL3800 is too great. The maximum DVI cable distance should not exceed 20 m 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 64) to achieve all Sun keyboard functions.

ATEN Standard Warranty Policy

Limited Hardware 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. For UPS products, the device warranty is two [2] years but battery is one [1] year. 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/