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User Manual

18.5" Widescreen Short Depth VGA LCD KVM Console

GCL1900W

PART NO. M1602

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Safety Instructions

- Read all of these instructions. Save them for future reference
- This device is for indoor use only
- 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 100-240V single 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 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 un-interruptible power supply (UPS)
- Position system cables and power cables carefully; Be sure that nothing rests on any cable
- 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 and replace with new power cord
 - 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 does not already exist. Circuit overloads can cause a fire and destroy equipment.

Rack Mounting

- Before working on the rack, please make sure that the stabilizers are secure to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install the 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
- Please 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
- 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



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. |
| 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 <i>Start</i> menu, then select <i>Run</i> |
|  | Indicates critical information |

Introduction

IOGEAR's GCL1900W is an 18.5" Widescreen Short Depth VGA LCD KVM Console with an integrated keyboard and touch pad. The short-depth design fits all 19" equipment cabinets, suitable for shallow racks and limited space setups. In addition to saving valuable space on the rack, the GCL1900W also provides a space-saving solution for special environment such as Outside Broadcast Vans (OB Vans) and compact control rooms.

The GCL1900W has dedicated front end sliding consoles, compatible with IOGEAR's VGA KVM Switches GCS1808 or GCS1716. This widescreen short depth VGA LCD KVM console has single rail design with an 18.5" widescreen LCD monitor, an integrated keyboard and touchpad.

For added convenience, users can choose to manage the computer from an external console. Ports for a second external KVM console with VGA monitor is provided on the rear panel. This LCD console is designed with two 3.5mm speaker ports for connecting audio speakers, one in the CPU section and the other in the external Console section on the rear panel. The GCL1900W also features a port for an external USB mouse, located on the unit's front panel, to be used with the built-in keyboard.

The GCL1900W LCD monitor supports resolution up to 1366 x 768 and aimed not just to achieve but to exceed the requirements for space utility optimization, adaptive deployment, and operational versatility. This LCD console is ideal for control rooms with limited space in any industry. Also with upgradable Firmware features, users can stay current with the latest updates by easily downloading the Firmware files from IOGEAR's website.

Package Contents

GCL1900W

- 1 x 18.5" Widescreen Short Depth VGA LCD KVM Console
- 1 x USB KVM Cable
- 1 x Firmware Upgrade Cable
- 1 x Grounding Wire
- 1 x Power Cord
- 1 x Quick Start Guide

Please verify that all components are present and nothing was damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedure to prevent any damage to the unit, and/or any of the devices connected to it

Features

- Integrated LCD KVM console with 18.5" widescreen LCD monitor in a single rail housing with top and bottom clearance for smooth operation in a 1U high system rack
- LCD monitor supports resolution of 1366 x 768 @60Hz
- Short depth design allows for rack-mounting in narrow spaces
- Supports VGA video input; supports an external console with USB/VGA connectors
- Built-in USB Type-A port on front panel for peripheral sharing
- Supports 2.1 audio
- Console lock design enables the console drawer to remain securely locked away in position when not in use
- Console selection via hotkey
- Multilingual keyboard mapping supports English (US), English (UK), French, German, German (Swiss), Greek, Hungarian, Italian, Japanese, Korean, Russian, Spanish, Swedish, Turkish and Traditional Chinese
- Standard rack mount kit included
- Plug-n-Play
- Firmware Upgradable
- Hot Pluggable

Requirements

Computers

- VGA, SVGA, or MultiSync video graphics card with an HDB-15 port
- Type-A USB port
- Audio port (optional)

External Console

- VGA monitor
- Standard 2 or 3-button wired USB mouse
- Standard 104-key wired USB keyboard
- Speaker (optional)

Cables

For optimum signal integrity, we recommend using high quality custom KVM cables sets that may be purchased separately. Please refer to the table below.

Length	Part Number
2m	G2L5202U, G2L5302U
3m	G2L5203U, G2L5303U
5m	G2L5205U, G2L5305U

Operating Systems

Supported Operating Systems include Windows, Mac, Linux and Sun

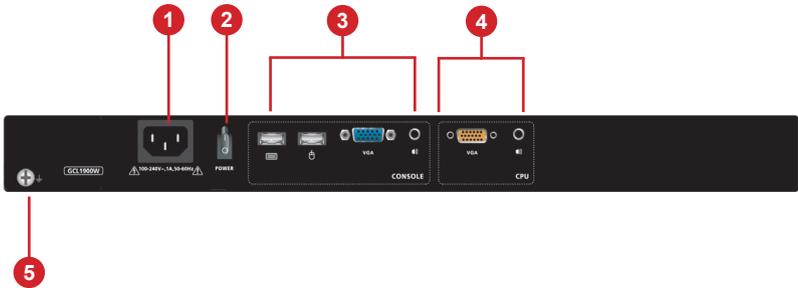
Overview

GCL1900W Front View Diagram



No.	Component	Description
1	Upper Handle with Release Bar	Pull to slide the LCD module out Push to slide the LCD module back in
2	LCD Module	After sliding the LCD module out, push the release bar on top of the handle to flip up the cover, accessing the LCD display
3	LCD Controls	The buttons to control the position and picture settings of the LCD display are located here
4	LCD On/Off Button	Push this button to turn the LCD monitor on and off. The button lights up when the LCD monitor is off Note: This button lights up to indicate that the monitor is off, not the KVM switch
5	Firmware Upgrade Switch	During normal operation and while performing a firmware upgrade, this switch should be in NORMAL position. If a firmware upgrade operation does not complete successfully, this switch will be used to perform a firmware upgrade recovery. See Firmware Upgrade Recovery for details
6	Firmware Upgrade Port	The firmware upgrade cable will be connected to this 3.5mm audio jack to perform Firmware Upgrade
7	Reset Switch	Located to the right of the Lock LEDs. Press this recessed switch 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 Mounting Tabs	Rack mounting tabs are located at each corner of the unit. The LCD KVM switch is designed for rack mounting. If the KVM switch is not rack mounted, make 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
10	Power LED	Lights green to indicate that the LCD KVM Console is powered ON
11	USB Port	The USB port is available for peripheral sharing with USB devices (flash drive, CD-ROM drive, etc) Or a USB mouse for users who prefer to use an external mouse
12	Touchpad	Standard mouse touchpad
13	Keyboard Module	Standard 99-key keyboard

GCS1900W Rear View



No.	Component	Description
1	Power Socket	This is a standard 3-prong AC power socket. Connect power cord from an AC source to this socket
2	Power Switch	This is a standard rocker switch that powers the GCL1900W On and Off
3	External Console Section	Connect the KVM cables to this port Note: the shape of these SPHD connectors have been specifically modified so that only KVM cables designed to work with this switch can be connected (see Cables for details) Do not attempt to use ordinary 15-pin VGA connector cables to link these ports to the computers.
4	KVM Port Section	Connect the included KVM cable to this port and the other end of the cable to the computer.
5	Grounding Terminal	Connect the grounding wire (used to ground the unit) into this port

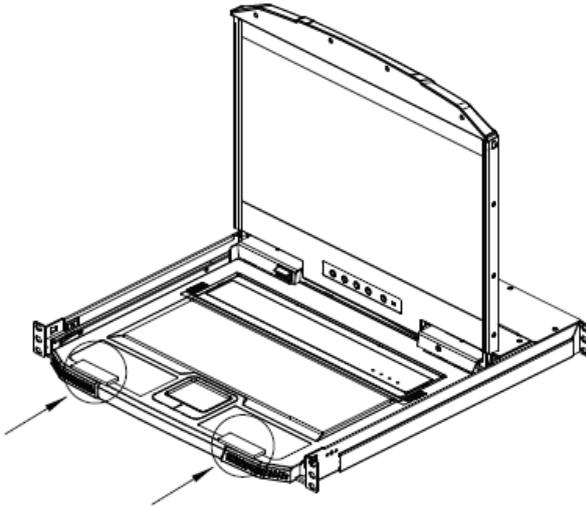
Hardware Setup

Before Installing

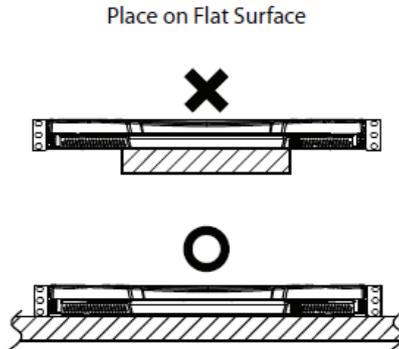
Please read Safety Instructions before proceeding with installation

Please make sure that all devices including the GCL1900W are powered OFF. Power cords of any computers that have the Keyboard Power On function must be unplugged.

Packing material may be inserted from factory to protect GCL1900W during shipping. Slide the LCD module out (see Opening / Closing the Console) until packing material is visible. Remove the packing material before installing the unit, as shown in diagram below

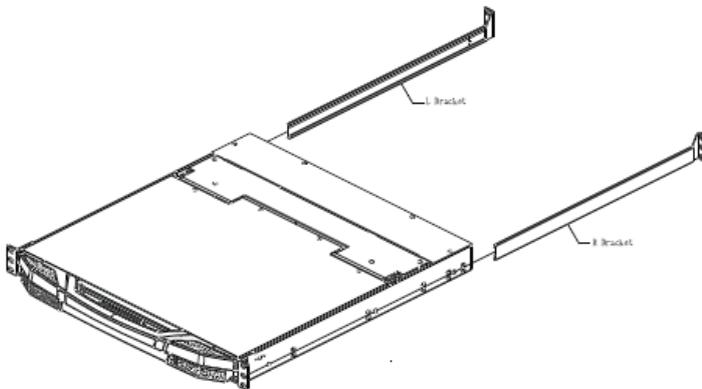


The GCL1900W is designed for rack mounting. If the GCL1900W is not rack mounted, please make sure to place it on a completely flat and firm surface before pulling the device in or out, preventing damage due to uneven force on the module.



Standard Rack Mounting

Please use the included standard rack mounting kit to mount the GCL1900W in a rack with a depth of 16.5"-28.3".

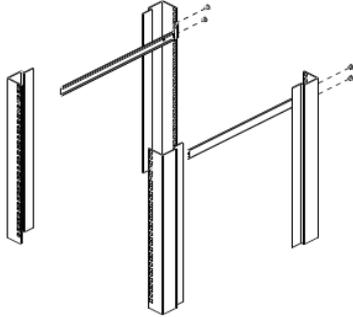


Note:

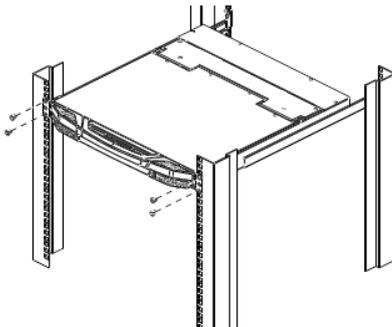
1. We highly recommend two people to mount the module: one to hold it in place and the other person to screw the module in.
2. The included standard rack mounting kit does not include screws or cage nuts. Please contact your sales representative for additional screws or cage nuts.

Please follow below steps to rack mount the GCL1900W

1. Attach the left and right mounting brackets to the back of the rack, installing four screws into the tabs to secure the brackets in place



2. While one person inserts the GCL1900W into place by sliding its left and right side bars into the mounting brackets (on the rack), have the second person install four screws in the front tabs to secure the module to the front of the rack.



Note:

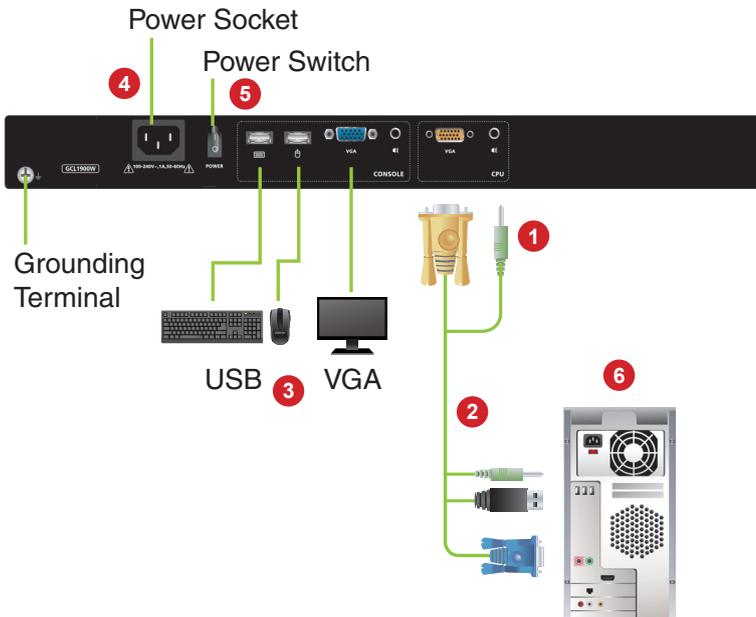
Please allow at least 2" on each side for proper ventilation and at least 5" at the back for the power cord and cable clearance

Connecting the GCL1900W

Refer to the installation diagram example below while following below instruction

1. Connect the VGA and audio connectors of the included KVM cable into the KVM ports located in the CPU section on the rear of the GCL1900W
Note: The GCL1900W supports speakers only. It does not support microphones. Connect the KVM cable's speaker jack (green) to the GCL1900W's audio port
2. Connect the USB, VGA and audio connectors of the KVM cable into their respective ports of a computer
3. If an external console is needed, connect the keyboard, mouse, VGA monitor and speakers (microphone not supported) into their respective ports on the Console Section of the GCL1900W
4. Connect the GCL1900W to an AC power source using the included power cord
5. Turn on the GCL1900W power
6. Turn on your PC power

Installation Diagram



Operation

Basic Operation

The GCL1900W's console is a single rail console: the LCD display module and the keyboard/touch pad module can only slide in/out together. Please refer to the diagram below to open or close the console

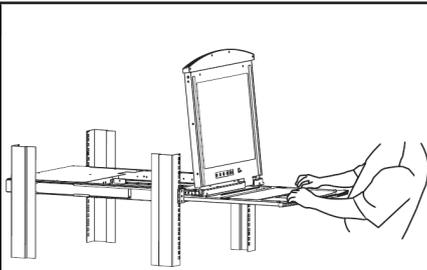
1. Pull on the Release Bar on the upper handle. Slide the console module out until it clicks in place, then raise the LCD Module lid
2. To close the console, lower the LCD Module until it lies flat, then slide the entire console in.



Operating Precautions

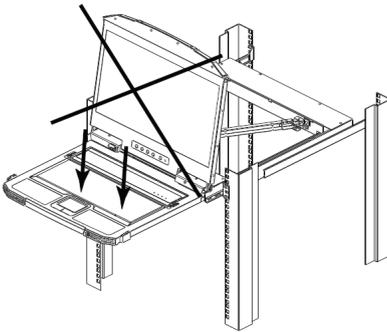


The maximum load bearing capacity of the keyboard module is 66lbs. Failure to heed below information can result in damage to the keyboard module.



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	<p>Press this button to invoke the Menu function and brings up the Main Menu, if you have not already entered the LCD OSD Menu function</p> <p>Press this button to bring up adjustment screen, if you have already entered the LCD OSD Menu function and reached a setting choice with the navigation buttons</p>
	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	<p>Press this button to perform an auto adjustment, if you have not already entered the LCD OSD Menu function. An auto adjustment automatically configures all the settings for the LCD panel to what the OSD considers their optimum values to be</p> <p>Press this button to exit the current menu and return to the previous menu, if you have already entered the LCD OSD Menu function. Use this button to leave an adjustment menu when you are satisfied with the adjustment made</p> <p>Press this button to exist the LCD OSD, if you are already at the Main Menu</p>

Adjustment Settings

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

Setting	Explanation
Brightness	Adjusts the background black level of the screen image
Contrast	Adjusts the foreground white level of the screen image
Phase	If the pixel jitters or horizontal line noise is visible on the display, the LED may have the wrong phase setting. Adjust the phase setting to eliminate these problems
Clock	If a vertical banding is visible on the display, the 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 menu 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 already set to.

Hot Plugging

The GCL1900W supports hot plugging – components can be removed and added to the console by unplugging their KVM cables from the ports without the need to shut the GCL1900W down

Powering Off and Restarting

If it becomes necessary to Power Off the GCL1900W (to upgrade the firmware for example), simply turn off the power to the unit, using the rear panel power switch. To restart the GCL1900W, turn the rear panel power switch back on.

Port ID Numbering and Port Selection

If a KVM switch is connected to the GCL1900W, Port ID numbering and Port selection will follow the method used by the connected KVM Switch. Please refer to the KVM switch's user manual for details.

Hotkey Operation

IOGEAR's GCL1900W provides an extensive, easy-to-use, hotkey function for convenience in controlling and configuring KVM installation from the keyboard.

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][L][Enter]	Activates the Firmware Upgrade Mode Note: this Hotkey sequence only works when the Firmware Upgrade Recovery Switch is in 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 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	2	None

Note:

1. Press the keys in sequence, one key at a time. First [Ctrl], then [Alt], then [Shift], etc.
2. When activating hotkey combinations [Ctrl] [Alt] [Shift], make sure you are using the keys on the same side of the keyboard.
3. Console selections are not saved. If the GCL1900W is powered off, it will revert to the default setting when it is powered on again
4. If a KVM switch connected to the GCL1900W uses the [Ctrl][Alt][Shift] combination to invoke its hokey mode, you would not be able to access any of its hotkey operations because the GCL1900W will capture the combination for the console selection first.

Keyboard Emulation

Mac Keyboard Emulation

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

Sun Keyboard

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

PC Keyboard	Sun Keyboard
[Ctrl] [T]	Stop
[Ctrl] [F2]	Again
[Ctrl] [F2]	Props
[Ctrl][F4]	Undo
[Ctrl][F5]	Front
[Ctrl][F6]	Copy
[Ctrl][F7]	Open
[Ctrl][F8]	Paste
[Ctrl][F9]	Find
[Ctrl][F10]	Cut
[Ctrl] [F1]	
[Ctrl] [F2]	
[Ctrl] [F3]	
[Ctrl] [F4]	
[Ctrl] [H]	Help
	Compose
	

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

The Firmware Upgrade Utility

Firmware Upgrade Configuration

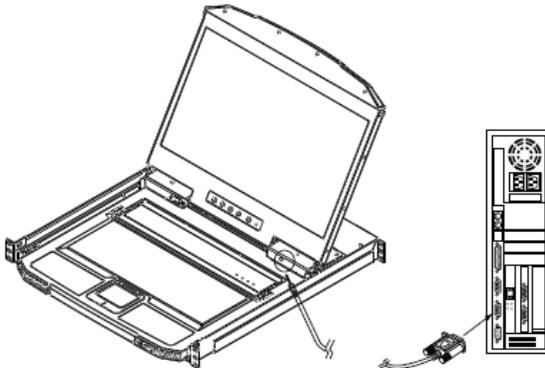
GCL1900W Windows based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth-automated process for firmware upgrade.

The Utility comes as part of a Firmware Upgrade Package that is specific for each device. New firmware upgrade packages are posted on our IOGEAR.COM website, as new firmware revisions become available. Please check the website regularly to find latest packages and information relating to firmware revisions and upgrades.

Before Starting Firmware Upgrade

In order to better perform a firmware upgrade, using a computer that is not connected to the GCL1900W setup is recommended. To set GCL1900W to Firmware Upgrade Mode:

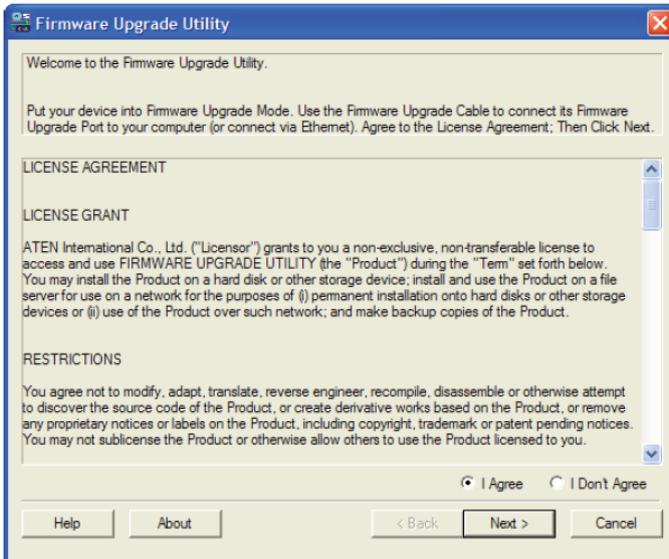
1. From a computer that is not part of the KVM installation, go to www.iogear.com/product/GCL1900W to get a list of available Firmware Upgrade Packages
2. Choose the Firmware Upgrade Package (usually the most recent one), and download the file to a computer that is not part of the KVM installation
3. Use the included Firmware Upgrade Cable to connect a COM port from your computer to the Firmware Upgrade Port of the GCL1900W



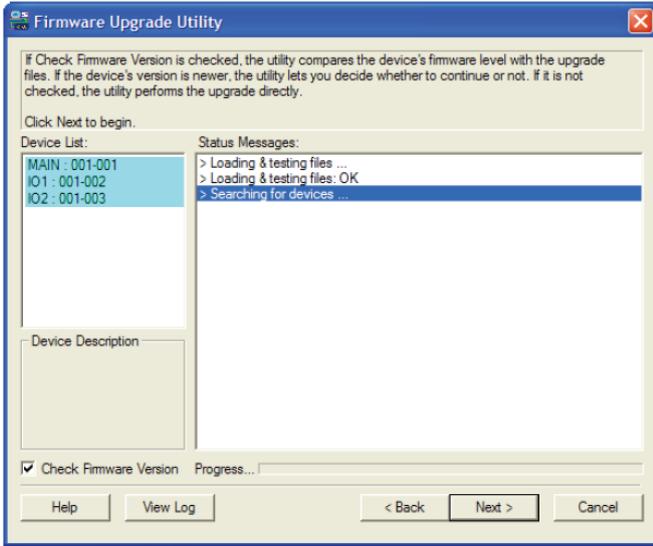
4. From your GCL1900W console, login to the OSD as the administrator and select the F4 ADM function.
5. Scroll down to FIRMWARE UPGRADE. Press [Enter], then press [Y] to invoke Firmware Upgrade mode

Starting Firmware Upgrade

1. With the GCL1900W on 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 the full path and filename

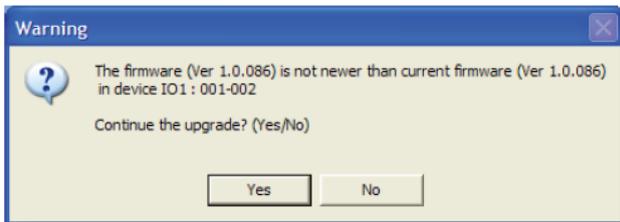


2. Read and Agree to the License Agreement (enable the "I Agree" radio button)
3. Click Next. The Firmware Upgrade Utility main screen appears



The Utility inspects your installation. All devices capable of being upgraded by the package are listed under the *Device List* panel

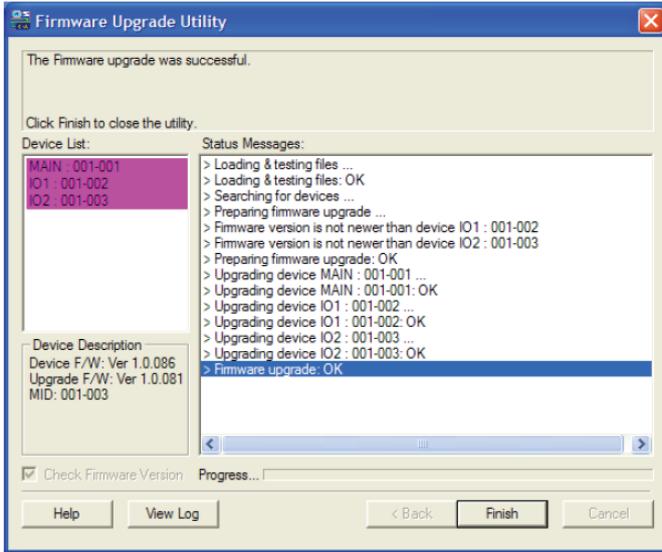
4. Click **Next** to perform the upgrade.
 - a. If the Check Firmware Version is enabled, the Utility compares the device's firmware level with that of the upgrade files. If it finds that the device's version is higher than the upgrade version, it brings up a dialog box informing you of the situation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



- b. If Check Firmware Version is disabled, the Utility installs the upgrade files without checking whether they are at higher level or not
- c. As the Upgrade proceeds, status messages appear in the Status Messages panel and the progress towards completion is shown on the Progress bar

Firmware 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

If the firmware upgrade fails, the Upgrade Succeeded screen will not appear.

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 unable to be operated
- When a firmware upgrade procedure is interrupted

To recover a failed firmware upgrade, do the following:

1. Power OFF the GCL1900W
2. Connect the Firmware Upgrade Cable to the Firmware Upgrade Port
3. Slide the Firmware Upgrade Switch to the Recover position
4. Power ON the GCL1900W and repeat the Firmware Upgrade Procedure
5. After the GCL1900W has been successfully upgraded, power the KVM console OFF, and slide the Firmware Upgrade Switch back to the Normal position.
6. Then, power the GCL1900W back on again

Specifications Chart

Function	GCL1900W
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 3.5mm Audio Jack Female (Green)
KVM Ports	2 x USB Type-A Female
USB Port	1 x 3.5mm Audio Jack Female (Green)
Firmware Upgrade	1
Power	1 x 3.5mm Audio Jack Female (Green)
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	1366 x 768 @60Hz
Panel Spec	
LCD Module	18.5" TFT-LCD
Resolution	1366 x 768 @60Hz
Response Time	5ms
Viewing Angle	170° (H), 160° (V)

Contrast Ratio	700:1
Support Color	16.7M colors
Luminance	200 cd/m2
Maximum Input Power Rating	100-240 V AC, 50-60Hz, 1A
Power Consumption	110V, 13.8W/220V, 14.1W
Environmental	
Operating Temperature	0-40 C
Storage Temperature	-20-60 C
Humidity	0-80% RH Non-condensing
Physical Properties	
Housing	Metal + Plastic
Weight	4.13lb
Dimensions (L x W x H)	122" x 121" x 10.88"
Body Dimension (L x W x H)	114" x 109.22" x 10.87"

Note:

1. For some rack mount products, please note that the standard physical dimensions of W x D x H are expressed using a L x W x D format
2. Body Dimensions exclude I/O ports, handles and mounting brackets

Trouble Shooting

Symptom	Action
Some characters entered 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, please change the keyboard layout setting for the port to match the layout of the keyboard you are using
Cannot use the special keys on Sun external keyboard to control Sun computers	Please use the <i>Sun keyboard emulation</i> keystrokes to achieve all Sun keyboard functions

FCC Information

FEDERAL COMMUNICATIONS COMMISSION 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.

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.

This 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.

CE Statement

This device has been tested and found to comply with the following European Union directives: Electromagnetic Capability (2014/30/EU) and Low Voltage (2006/95/EC).

 **WARNING:** This product may expose you to chemicals including Cadmium which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

