

# User Manual

2/4-Port DisplayPort KVMP™ Switch  
with USB 3.0 Hub and Audio

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GCS1902 / GCS1904

PART NO. M1434-b / M1435-b



## Table of Contents

Introduction	4
Package Contents	4
Features	5
Requirements	6
Operating Systems	6
Overview	7
Hardware Setup	10
Basic Operation	13
Hotkey Operation	14
Advance Configuration	1
Keyboard Operating Platform	20
Keyboard Emulation	20
Firmware Upgrade Utility	23
Specification	26
Troubleshooting	27
Compliance Information	28
Limited Warranty	29
Contact	30

## Introduction

IOGEAR's GCS1902/1904 2/4-Port DisplayPort KVMP with USB 3.0 Hub and Audio takes a giant leap forward in KVM switch functionality by combining KVM switch with a DisplayPort video interface, and 2-Port USB 3.0 hub. DisplayPort technology provides up to 4K UHD - 3840 x 2160 @30Hz resolution that displays the most vivid high definition images available while delivering premium sound for music, movies, and gaming.

GCS1902/1904 allows users to access two or four DisplayPort computers from a single USB keyboard, USB mouse, and DisplayPort monitor console. In addition to the front panel pushbuttons and hotkeys, IOGEAR's GCS1902/1904 offers the latest mouse port-switching functionality to change ports. Power ON detection feature also ensures that if one computer is powered OFF, the GCS1902/1904 will automatically switch port to the next powered ON computer.

With built-in USB 3.0 hub, each connected computer has SuperSpeed 5Gbps transfer rate to all connected peripherals. GCS1902/1904's independent (asynchronous) switching feature allows it to focus on one computer with the USB peripheral focus on another computer. This eliminates the need to purchase separate USB hub or stand-alone peripheral sharing device – such as printer server, modem splitter, etc.

Featuring a revolutionary combination of 4K resolutions, the next generation USB 3.0 Hub, and enhanced user-friendly operation, IOGEAR's GCS1902/1904 provides the latest innovations in desktop KVM technology.

## Package Contents

### **GCS1902**

- 1 x GCS1902
- 2 x DisplayPort Cables
- 2 x USB 3.0 Cables
- 2 x Audio Cables
- 1 x Power Adapter
- 1 x User Manual

### **GCS1904**

- 1 x GCS1904
- 4 x DisplayPort Cables
- 4 x USB 3.0 Cables
- 4 x Audio Cables
- 1 x Power Adapter
- 1 x Use Manual

## Features

- 2 (GCS1902) or 4 (GCS1904)-Port DisplayPort KVMP Switch with USB 3.0 Hub and audio
- One USB console controls two (GCS1902) or four (GCS1904) computers and two USB 3.0 peripherals
- Computer selection via front panel pushbuttons, hotkeys, and mouse<sup>1</sup>
- Independent switching of KVM, USB, and Audio focus
- Superior 4K video quality – 3840x2160 @30Hz
- 2-Port USB 3.0 Hub with SuperSpeed 5Gbps transfer rate
- DisplayPort 1.1 compliant, HDCP compliant
- Supports HD audio through DisplayPort<sup>2</sup>
- Full bass response for high quality 2.1 channel surround sound systems
- Power On Detection – if a computer is powered OFF, GCS1902/1904 automatically switches to the next powered ON computer
- Dual-Mode DisplayPort (DP++) supports HDMI and DVI output with an adapter<sup>3</sup>
- Hot pluggable – add or remove computers without turning GCS1902/1904 power OFF
- Mouse emulation or bypass feature supports most mouse drivers and multifunction mice
- Multi-platform support –Windows<sup>®</sup>7, Windows<sup>®</sup>8.1, Windows<sup>®</sup>10, Mac<sup>®</sup>, and Linux<sup>®</sup>
- Multilingual keyboard mapping supports English, Japanese, French, and German keyboards
- Mac<sup>®</sup> keyboard support and emulation<sup>4</sup>
- Auto Scan Mode feature to monitor all computers
- Firmware upgradeable

### **Note:**

1. Mouse port switching supported by mouse emulation mode using a USB 3-button mouse wheel.
2. HD audio through DisplayPort cannot be switched independently.
3. Dual-Mode DisplayPort technology (DP++) does not require an active adapter for most single display setups. Active DisplayPort adapters are recommended if you are unsure of the video source's DP++ compatibility.
4. PC keyboard combinations emulate Mac<sup>®</sup> keyboards. Mac<sup>®</sup> keyboards only work using their own Operating System.

## Requirements

### Console

- 1 DisplayPort monitor
- 1 USB mouse
- 1 USB keyboard
- Speakers (optional)

### Computers

- DisplayPort port
- Type A USB port
- Audio ports (optional)

### Cables

Use only the included IOGEAR DisplayPort KVM cable sets, designed specifically to work with the GCS1902/1904.

### Note:

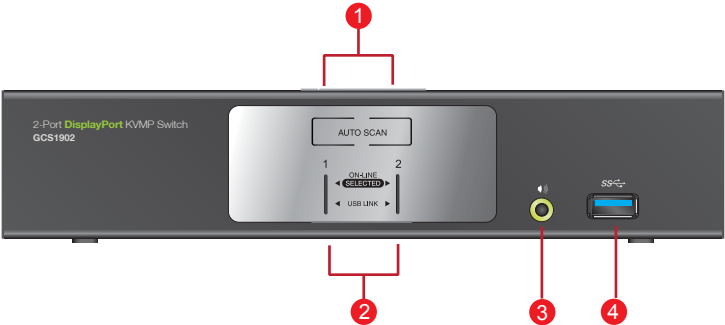
The quality of the display is affected by the quality and length of the cables. If you need additional cable set, please contact your dealer or IOGEAR to purchase IOGEAR approved cables.

## Operating Systems

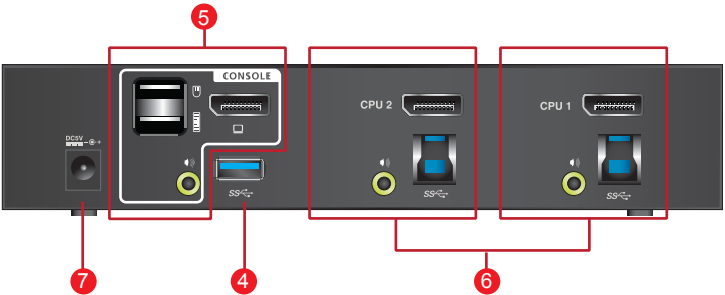
OS		Version
Windows		2000 / 7 / 8 / 8.1 / 10
Linux	RedHat	6.0 and higher
	SuSE	8.2 and higher
	Mandriva (Mandrake)	9.0 and higher
Novell	Netware	5.0 and higher
Mac		OS 9 and higher
DOS		6.2 and higher

# Overview

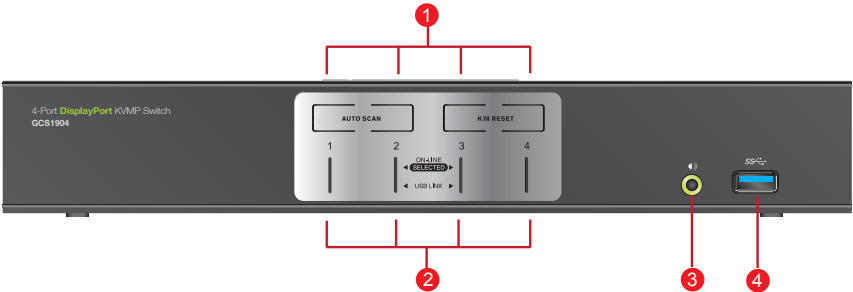
GCS1902 Front View



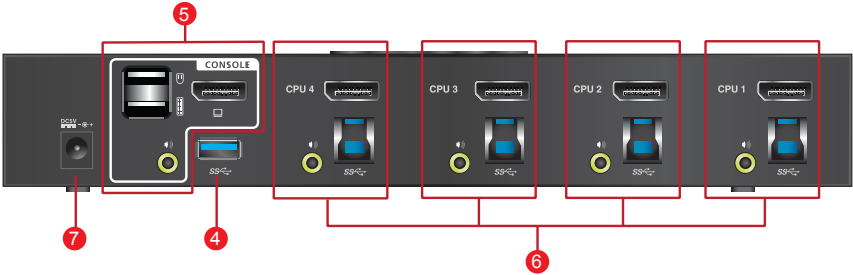
GCS1902 Back View



GCS1904 Front View



GCS1904 Back View



No.	Component	Description
1	Port Selection Pushbuttons	<p>For manual port selection (see Manual Switching)</p> <ul style="list-style-type: none"> <li>• Press a port selection pushbutton for longer than two seconds to bring the KVM, USB hub, and audio focus to the computer connected to its corresponding port.</li> <li>• Press a port selection pushbutton twice to bring the audio focus to the computer connected to its corresponding port.</li> <li>• Press a switch for less than two second to bring only the KVM focus to the computer connected to its corresponding port.</li> <li>• Press Auto Scan switch to start Auto Scan Mode or press switches 1 and 2 simultaneously for two seconds.</li> </ul>
2	Port LEDs	<p>The Port LEDs are built into the Port Selection Pushbuttons. The upper LEDs are KVM Port LEDs, the lower LEDs are the USB LEDs:</p> <p><b>KVM</b></p> <ul style="list-style-type: none"> <li>• An ONLINE LED lights DIM ORANGE to indicate that the computerconnected to the corresponding port is up and running.</li> <li>• A selected LED lights BRIGHT ORANGE to indicate that the computer connected to the corresponding port is the one that has the KVM FOCUS.</li> <li>• LED flashes to indicate that the computer connected to its corresponding port is being accessed under Auto Scan Mode.</li> </ul> <p><b>USB</b></p> <p>A selected LED lights GREEN to indicate that the computer connected to its corresponding port has the access to the USB Peripherals.</p>
3	Audio Ports	The cable from the main speakers is to be connected into this audio port. Speaker connected into these audio ports have priority over those connected in the rear side panel.
4	USB 3.0 hub	USB peripherals (printers, scanners, etc.) can be connected into these ports, designated with USB 3.0 specifications - up to 5 Gbps transfer code.
5	Console Ports	The cables from the DisplayPort monitor, USB keyboard, USB mouse, and speakers are plugged into these ports. Each connector is marked with an appropriate icon to indicate its use.
6	KVM Ports	The KVM cables connecting the computers to the GCS1902/1904 are plugged into these ports. Each KVM port section is comprised of a speaker jack, USB type B socket and a DisplayPort connector.
7	Power Jack	The power adapter cable is plugged into this jack.

## Hardware Setup

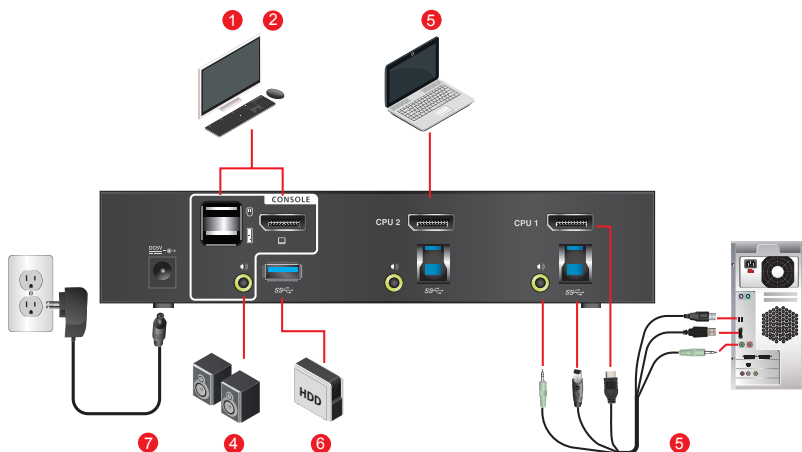
Please make sure that all devices including the GCS1902/1904, DisplayPort monitor, and computers are powered **OFF**.

1. Connect the USB keyboard and the USB mouse to the GCS1902/1904 Console ports located on the rear side panel.
2. Connect the DisplayPort monitor to the GCS1902/1904 Console DisplayPort port located on the rear side panel. Then, turn DisplayPort monitor on.
3. Connect the main speakers into the GCS1902/1904 speaker jacks located on the front side panel. The speakers connected into this front port have priority over those connected on the rear port of GCS1902/1904.
4. Connect the secondary speakers into the GCS1902/1904 Console speaker jacks located on the rear panel.
5. Using the provided cables from IOGEAR;
  - a. Connect the provided DisplayPort connector into DisplayPort ports in the KVM Port section of the GCS1902/1904.
  - b. Connect the provided USB and speaker connector into their corresponding USB and speaker ports on the GCS1902/1904.
  - c. Connect the other end of the KVM cables into their respective DisplayPort, USB and speaker ports on the computers.
6. Connect up to two USB peripherals into the USB type A ports in the USB 3.0 hub section (front and rear panel of the GCS1902/1904).
7. Connect the provided power adapter to an AC power source. Then, connect the power adapter cable into the GCS1902/1904 power jack.
8. Turn all connected computers power to **ON**.

### **Note:**

1. Verify that all connectors are on the same KVM Port sockets (all in Port 1, all in Port 2, etc.) and that each socket is marked with an appropriate icon to indicate self.
2. By default the switch links to the first computer that is powered on.
3. It is recommended that the total cable length from the PC to monitor is less than 3 meters.
4. Choosing high quality cables helps to ensure that 3840x2160 @30Hz resolutions can be reached.

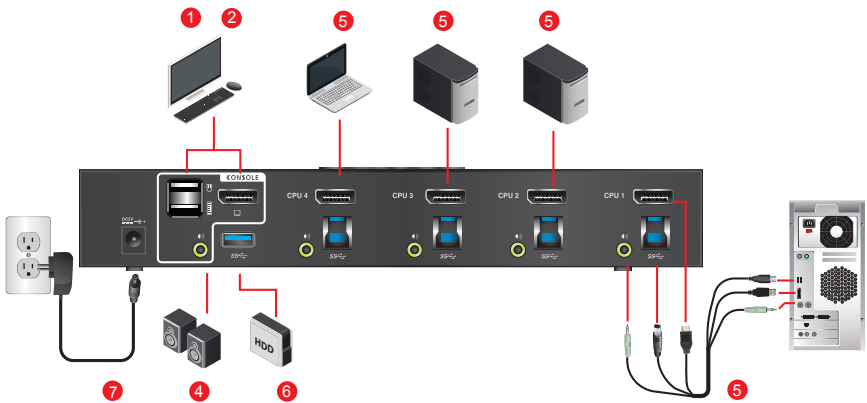
## GCS1902 Back View



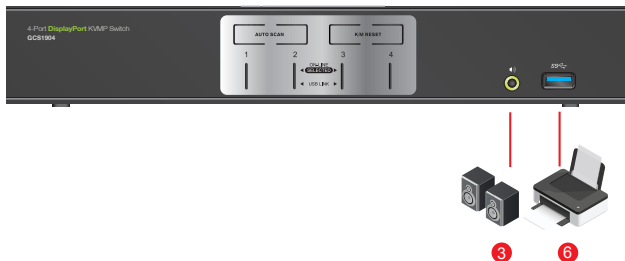
## GCS1902 Front View



## GCS1904 Back View



## GCS1904 Front View



## Basic Operation

There are three convenient methods to access the computer:

- **Manual** – involves pressing the port selection pushbuttons located on the GCS1902/1904's front panel.
- **Hotkey** – involves entering combinations from the keyboard (see **Hotkey Operation** section for details).
- **Mouse** – involves pressing the mouse wheel button (clicking it twice) to switch between ports (see **Mouse Emulation** and **Mouse Port Switching** section for more details).

### Manual Port Selection:

- Press and release a port selection pushbutton to bring the focus of the KVM focus to the computer attached to the corresponding port. USB and Audio focus do not change – they stay with the port that they are already on.
- Press a port selection pushbutton twice to bring the audio focus to the computer attached to its corresponding port.
- Press and hold a port selection pushbutton for more than 2 seconds to bring the KVM focus, plus the USB and Audio focus to the computer attached to its corresponding port.
- Press and hold port selection pushbutton 1 and 2 for more than 2 seconds to start Auto Scan Mode (see **Auto Scan Mode** section for more details).
- Press and release either port selection pushbutton to stop Auto Scan Mode. The KVM focus goes to the computer attached to the corresponding port of the switch you pressed.

### Hot Plugging

The GCS1902/1904 support USB hot plugging – components can be removed and added back into the installation by unplugging their cables from the USB hub ports, without the need to shut the unit down.

### Powering OFF and Restarting

If it becomes necessary to Power OFF the GCS1902/1904, before switching it back ON, you must follow below steps:

1. Shut down or Power OFF all computers that are attached to the GCS1902/1904.
2. Unplug the power adapter cable from GCS1902/1904.
3. Wait for 10 (ten) seconds, then connect the power adapter cable back into the GCS1902/1904.
4. After the GCS1902/1904 turns ON, power ON all the attached computers.

### Port ID Numbering

1. Each KVM port section on the GCS1902/1904 is assigned a port number 1 or 2 for the GCS1902  
1, 2, 3, or 4 for the GCS1904
2. The port numbers are marked on the rear panel of the GCS1902/1904.
3. The Port ID of a computer is derived from the KVM port number it is connected to. For example, a computer connected to KVM port 2 has a Port ID of 2.
4. The Port ID is used to specify which computer gets the KVM, USB peripheral, and audio focus with the Hotkey port selection method (see **Hotkey Operation** for details).

## Hotkey Operation

IOGEAR's GCS1902/1904 provides an extensive, easy-to-use, hotkey function for convenience in controlling and configuring KVM installation from the keyboard. Hotkeys provide asynchronous (independent) switching of the KVM, USB hub, and audio focus. Therefore, users can give one computer the KVM focus, another the USB hub focus, while a third has the audio focus.

### Port Switching

All port switching begins by clicking **[Scroll Lock]** twice. The tables below describe the actions that each combination performs.

**Note:** If using the **[Scroll Lock]** key conflicts with other programs running on the computer, the **[Ctrl]** key can be used, instead. See **Alternate Port Switching Key** for details.

### Cycling Through the Ports

Hotkey	Function
[Scroll Lock] [Scroll Lock] [Enter]	Brings the KVM, USB hub, and Audio focus to the next higher port (1 to 2; 2 to 3; 3 to 4; 4 to 1).  <b>Note:</b> The KVM, USB hub, and Audio focus all go to this port even if they were on different ports to begin with.
[Scroll Lock][Scroll Lock][K][Enter]	Brings only the KVM to the next higher port. The USB and audio focus remain where they are.
[Scroll Lock][Scroll Lock][U][Enter]	Brings only the USB to the next higher port. The KVM and audio focus remain where they are.
[Scroll Lock][Scroll Lock][S][Enter]	Brings only the Audio to the next higher port. The KVM and USB hub remain where they are.

## Going Directly to a Port

Hotkey	Function
[Scroll Lock] [Scroll Lock] [n][Enter]	Brings the KVM, USB hub, and Audio focus to computer attached to [n] port.  [n] stands for the computer's Port ID number. Replace [n] with the appropriate Port ID when entering hotkey combinations.  <b>Note:</b> The KVM, USB hub, and Audio focus all switch to this port even if they were on different ports to begin with.
[Scroll Lock][Scroll Lock][n][K][Enter]	Brings only the KVM to the computer on [n] port. The USB hub and audio focus remain where they are.
[Scroll Lock][Scroll Lock][n][U][Enter]	Brings only the USB hub focus to the computer on [n] port. The KVM and audio focus remain where they are.
[Scroll Lock][Scroll Lock][n][S][Enter]	Brings only the Audio to the computer on [n] port. The KVM and USB hub focus remain where they are.
[Scroll Lock][Scroll Lock][n][K][U][Enter]	Brings the KVM and the USB hub focus to the computer on [n] port. The audio focus remain where it is.
[Scroll Lock][Scroll Lock][n][K][S][Enter]	Brings the KVM and Audio focus to the computer on [n] port. The USB hub focus remain where it is.
[Scroll Lock][Scroll Lock][n][U][S][Enter]	Brings the USB hub and Audio focus to the computer on [n] port. The KVM focus remain where it is.

## Auto Scan Mode

GCS1902/1904's Auto Scan feature allows you to monitor computer activities without switching from port to port manually. This feature automatically cycles the KVM focus through the computer ports at regular intervals. See table below for details.

Hotkey	Function
[Scroll Lock][Scroll Lock][A][Enter]	Invokes Auto Scan The KVM focus cycles from port to port at <b>5 seconds</b> (default) intervals.
[Scroll Lock][Scroll Lock][A][n][Enter]	The KVM focus cycles from port to port at <b>[n]</b> second intervals.

### **Note:**

1. The [n] stands for the number of seconds that the GCS1902/1904 should dwell on a port before moving on to the next port. Replace [n] with a number between 1 and 99 when entering this hotkey combination.
2. While Auto Scan Mode is in effect, ordinary keyboard and mouse functions are suspended – only Auto Scan Mode compliant keystrokes and mouse clicks can be input. You must exit Auto Scan Mode in order to regain normal control of the console.
3. Although the video focus switches from port to port, the keyboard, mouse, and USB focus do not switch. They stay at the port they were on when Auto Scanning started.
4. To exit Auto Scan Mode, press **[Esc]** or **Spacebar**.

## **Advance Configuration**

### **Hotkey Setting Mode**

Hotkey Setting Mode is used to set up your GCS1902/1904 switch configuration. All operations begin with invoking Hotkey Setting Mode (HSM).

To invoke HSM (Default)

1. Press and hold down **[Num Lock]** (use **[Clear]** on Mac)
2. Press and release **[-]** minus key
3. Release **[Num Lock]** key (use **[Clear]** on Mac)
4. To exit HSM manually, press **[Esc]** or **Spacebar**

### **Note:**

The **[-]** minus key must be released within one half second, otherwise Hotkey invocation is cancelled.

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

Only Hotkey compliant keystrokes and mouse clicks (described on **Hotkey Settings Mode Summary Table**) function. Ordinary keyboard and mouse functions are suspended while on HSM.

At the conclusion of some hotkey operations, you can automatically exit hotkey mode. With some operations, you must exit manually by pressing **[Esc]** or **Spacebar**.

### Alternate HSM Invocation Keys

In some instances, the default hotkey settings conflict with programs running on your computer and in some instances the default hotkeys either do not exist on your keyboard (Mac keyboards do not have **[Scroll Lock]**), or are inconvenient to use, Hotkey Setting Mode allows you to select alternate configurations for the KVM's hotkeys. An alternate set of HSM invocation keys is provided in case the default set conflicts with programs running on the computers.

#### To switch to the Alternate HSM invocation set:

1. Invoke HSM
2. Press and release **[H]**  
On Alternate HSM, the HSM invocation keys become the **[Ctrl]** key (instead of **Num Lock**) and **[F12]** (instead of **[-]** minus key).

#### Note:

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

### Alternate Port Switching Keys

The port switching activation keys can be changed from clicking **[Scroll Lock]** key twice (**[Scroll Lock][Scroll Lock]**) to clicking **[Ctrl]** key twice (**[Ctrl][Ctrl]**).

#### To change port switching activation keys:

1. Invoke HSM
2. Press and release **[T]** key

#### Note:

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

### List Switch Settings

To see a listing of the current switch settings:

1. Open a text editor or word processor and place the cursor in the page window
2. Invoke HSM
3. Press and release **[F4]** to display the settings

### USB Reset

If the USB loses focus and needs to be reset:

1. Invoke HSM
2. Press and release **[F5]**

## Keyboard Language

To change the keyboard language:

1. Invoke HSM
2. Press **[F6] [nn] [Enter]**

**Note:** [nn] is a two-digit number that represents the keyboard language code

US English: **33**

French: **08**

Japanese: **15**

German: **09**

## Hotkey Beeper

The Beeper can be hotkey toggled ON and OFF. To toggle the Beeper:

1. Invoke HSM
2. Press and release **[B]**  
The Beeper toggles ON or OFF

## Port Switching Keys

To disable the Port Switching Keys (**[Scroll Lock][Scroll Lock]**) or (**[Ctrl][Ctrl]**):

1. Invoke HSM
2. Press **[X] [Enter]**

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

## Restore Default Settings

To reset the GCS1902/1904 to its default hotkey settings:

1. Invoke HSM
2. Press **[R][Enter]**

## Alternative Manual Port Selection

To toggle between the default and the alternative front panel pushbutton manual port selection settings:

1. Invoke HSM
2. Press **[S]**

## Mouse Emulation

To toggle between mouse emulation enabled and disabled:

1. Invoke HSM
2. Press **[M]**

## Mouse Port Switching

Mouse Port Switching allows you to use the mouse wheel button (clicking it twice) to switch between ports. Mouse Emulation (above) must be *enabled* in order for Mouse Port Switching to work. To toggle between mouse port switching enabled and disabled:

1. Invoke HSM
2. Press **[W]**

This procedure is a toggle. Repeat Step 1 and 2 to disable Mouse Port Switching

**Note:** This feature is only supported by 3-key USB scroll wheel mice. The default setting is OFF. This feature is only supported when **mouse emulation** is also enabled.

## Power on Detection

With Power on Detection, if the focus computer is powered OFF, the GCS1902/1904 will automatically switch to the next powered ON computer. Power on Detection can be enabled or disabled. The default setting is enabled. To disable Power on Detection:

1. Invoke HSM
2. Press and release **[E]**

This setting is a toggle. Repeat Step 1 and 2 to disable Power on Detection

## Monitor Re-detection

If the monitor's display shows blank, use the following hotkey combination to re-detect the monitor's EDID. Monitor re-detection can be enabled or disabled. The default setting is disabled. To enable monitor re-detection, follow below steps:

1. Invoke HSM
2. Press **[Q] [n] [Enter]**

[n] is a one-digit number that represents the port number:

n is 1 – 2 for GCS1902, n is 1 – 4 for GCS1904

This procedure is a toggle. Repeat to revert to the original setting.

## Keyboard Operating Platform

GCS1902/1904 default port configuration is for PC compatible keyboard operating platform. If your console uses a PC compatible keyboard and you have a Mac or Sun computer attached to GCS1902/1904, you can change the port's Keyboard Operating Platform configuration so that the PC compatible keyboard emulates Mac keyboard, by:

1. Bring the KVM focus to the port you want to set
2. Invoke HSM
3. Press and release the appropriate Function keys listed on table below

Key	Function
[F1]	To set the keyboard/mouse to use SPC mode so that it can work under special operating systems as a standard (104 keys) keyboard/mouse
[F2]	Enables Mac keyboard emulation, see <b>Mac Keyboard Emulation</b> .
[F10]	Disables keyboard emulation. Key presses are passed straight through. You're your console uses a Mac keyboard to access a Mac attached to a port, for example. Automatically detects and sets the keyboard operating platform.

4. You will automatically exit HSM once this procedure is completed

## Keyboard Emulation

Console keyboard port emulation/bypass feature supports most gaming/multimedia keyboards. The default setting is enabled. To disable:

1. Invoke HSM
2. Press **[N]**  
This procedure is a toggle. Repeat Step 1 and 2 to enable Keyboard Emulation

**Note:** When keyboard emulation is disabled, the **[M]**, **[W]**, **[F2]**, **[F3]**, **[F4]**, **[F5]**, **[F6]**, and **[F10]** are also disabled

### SPC Mode

To set the keyboard/mouse to use SPC mode so that it can work under special operating systems as a standard (104 key) keyboard/mouse:









1. Invoke HSM
2. Press **[F1]**

## Hotkey Settings Mode Summary Table

Key	Function
[B]	Enables/Disables the buzzer.
[E]	Enables/Disables Power ON Detection feature.
[F1]	Allows the keyboard and mouse to work under special operating systems as a standard (104 key) keyboard/mouse
[F2]	Enables Mac keyboard emulation.
[F4]	Lists current switch settings via Paste function of a text editor.
[F5]	Performs a reset on all USB devices.
[F6][nn][Enter]	<div> Sets the keyboard language  Note: nn is a two-digit number that represents one of the following keyboard language code:  - US English:33  - French:08  - Japanese:15  - German: 09 </div>
[F10]	Automatically detects and sets the keyboard operating platform.
[H]	Toggles between the default ([Num Lock] [-]) and alternate ([Ctrl][F12]) combination
[M]	Enables/Disables mouse emulation.
[N]	Enables/Disables Keyboard emulation
[Q][n][Enter]	Enable/Disables monitor re-detection on port [n]
[R][Enter]	Resets the hotkey settings to their default statuses
[S]	Toggles between the default and alternate manual port selection pushbutton settings.
[T]	Toggles between the default port switching keys ([Scroll Lock] [Scroll Lock]) and alternate ([Ctrl][Ctrl]).
[W]	Enables/Disables mouse port-switching.
[u][p][g][r][a][d][e][Enter]	Invokes Firmware Upgrade Mode.
[X][Enter]	Enables/Disables the port switching keys.

### Mac Keyboard Emulation

PC compatible (101/104 key) keyboards 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
[Ctrl] 	F15

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

## Firmware Upgrade Utility

### Firmware Upgrade Configuration

GCS1902/1904 Windows based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth-automated process for upgrading GCS1902/1904's firmware.

The Utility comes as part of a Firmware Upgrade Package that is specific for each device. New firmware upgrade packages are posted on our 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 perform a firmware upgrade, need to use a computer that is not connected to the GCS1902/1904. To set GCS1902/1904 to Firmware Upgrade Mode:

1. From a computer *that is not part of the KVM installation*, go to [www.iogear.com/product/GCS1902](http://www.iogear.com/product/GCS1902) or [www.iogear.com/product/GCS1904](http://www.iogear.com/product/GCS1904) to get a list of available Firmware Upgrade Packages.
2. Choose the Firmware Upgrade Package (usually the most recent one), and download it to a computer that is not part of the KVM installation.
3. Disconnect the GCS1902/1904 from the KVM installation and power the switch OFF.
4. Connect one of the USB DisplayPort KVM cable set's Type A USB connectors to a USB Type A port on the computer that is not part of your KVM installation.
5. At the other end of the cable set, connect the USB Type B connector to the Type B USB port in Port 1 KVM section on the GCS1902/1904.

Note: The USB DisplayPort KVM cable set's USB Type B connector can be connected to any USB Type KVM Port Section, but the Port Selection pushbutton in **Step 6** below must be Port 1

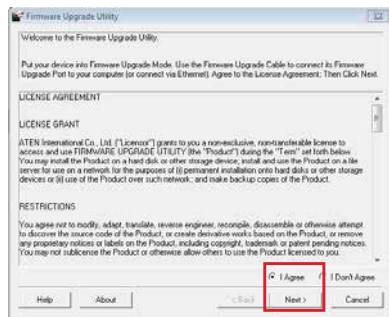
6. Press and hold Port 1 selection pushbutton.
7. While holding Port 1 selection pushbutton, connect the power adapter to the GCS1902/1904 to enter Firmware Upgrade Mode.
8. The front panel LEDs will flash together, indicating Firmware Upgrade Mode is in effect.

## Starting Firmware Upgrade

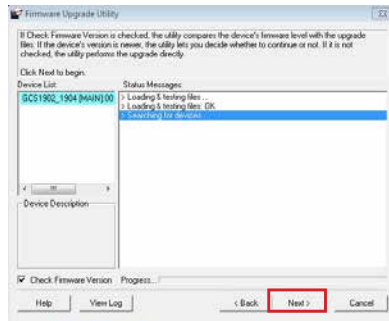
1. Run the downloaded Firmware Upgrade Package file – either by double clicking the file icon, or using a command line to enter the full path.
2. The Firmware Upgrade Utility Welcome screen appears.



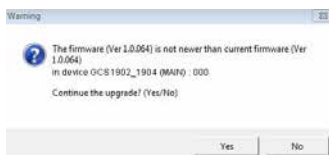
3. Read the License Agreement and click **"I Agree"** button and click **"Next"**.



4. 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.
5. As you select a device from the list, the device's description appears in the Device Description panel. After you have made your device selection(s), Click **"Next"** to perform the upgrade.

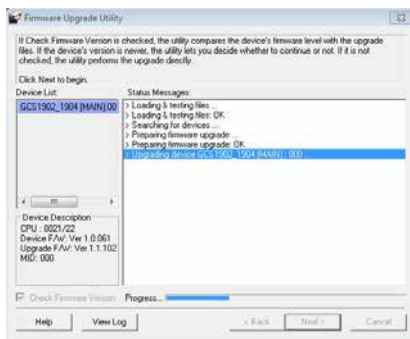


6. If you enabled Check Firmware Version, the Utility compares the device's firmware level with that of the upgrade files. If the device's version is higher than the upgrade version, a dialog box below will give you the option to Continue or Cancel.

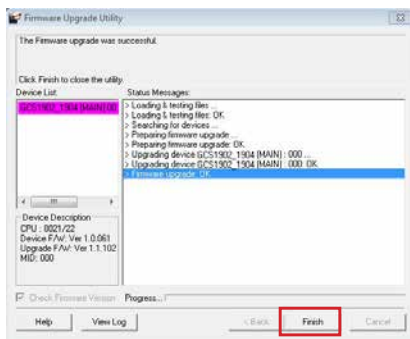


7. If you did not enable Check Firmware Version, the Utility installs the upgrade files without checking whether they are of higher level, or not.

8. As the Firmware Upgrade proceeds, a status message will appear in the Status Messages panel, and the progress toward completion is shown on the Progress bar.



9. After the upgrade has completed, a screen appears to inform you that the procedure was successful. Click **Finish** to close the Firmware Upgrade Utility.



10. After a successful completion, the GCS1902/1904 will exit the Firmware Upgrade Mode and resets itself.

## Firmware Upgrade Fail

If the Upgrade Succeeded screen does not appear, this means that the upgrade failed to complete successfully. If this occurs, repeat the upgrade procedure from the beginning (see **Before Starting Firmware Upgrade**).

## Specification

Function			GCS1902	GCS1904
Connections	Computer		2	4
	Console		1	
Port Selection			Pushbuttons, Hotkey, Mouse*	
Connectors	Console Ports	Keyboard	1 x USB Type A (Black)	
		Video	1 x DisplayPort (White)	
		Mouse	1 x USB Type A (Black)	
		Speakers	1 x 3.5 mm Mini Stereo Jack (Green; Front) 1 x 3.5 mm Mini Stereo Jack (Green; Rear)	
	KVM Ports	KB / Mouse	2 x USB 3.0 Type B (Blue)	4 x USB 3.0 Type B (Blue)
		Video	2 x DisplayPort (Black)	4 x DisplayPort (Black)
		Speakers	2 x 3.5 mm Mini Stereo Jack (Green)	4 x 3.5 mm Mini Stereo Jack (Green)
	USB Hub		1 x USB 3.0 Type A (Blue; Front) 1 x USB 3.0 Type A (Blue; Rear)	
	Power		1 x DC 5V Jack	
Switches	Selected	2 x Pushbutton	4 x Pushbutton	
LED	On Line / Selected	2 (Orange)	4 (Orange)	
	USB Link	2 (Green)	4 (Green)	
Emulation	Keyboard / Mouse		USB	
Video		3840x2160 @ 30 Hz; 2560x1600 @ 60 Hz		
Scan Interval		1–99 secs (5 secs. default)		
Power Consumption		DC 5 V		
Environment	Operating Temp.		0–50° C	
	Storage Temp.		-20-60° C	
	Humidity		0–80% RH, Non-condensing	
Physical Properties	Housing		Metal	
	Weight		1.46lb	1.9lb
	Dimensions (L x W x H)		7.8" x 1.7" x 2.9"	10.3" x 1.7" x 2.9"

\*Port switching works only with a 3-key USB mouse wheel in emulation mode.

## Troubleshooting

Operation problems occur due to variety of causes. The first step in solving them is to make sure that all cables are securely attached and plugged in completely in their sockets.

In addition, updating the GCS1902/1904's firmware may solve problems that have been discovered and resolved since the prior version was released. If your product is not running the latest firmware version, we strongly recommend that you upgrade. See **Firmware Upgrade Utility** for upgrade details.

## Compliance Information

### FCC Statement

This equipment has been tested and found to comply with the limits for Class B digital service, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

### 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.

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.

## Limited Warranty

### Warranty Information

This product carries a 3 Year Limited Warranty. For the terms and conditions of this warranty, please go to <http://www.iogear.com/support/warranty>

Register online at <https://www.iogear.com/registration>

Important Product Information

Product Model \_\_\_\_\_

Serial Number \_\_\_\_\_

## Contact

### WE'RE HERE TO HELP YOU! NEED ASSISTANCE SETTING UP THIS PRODUCT?

Make sure you:

1. Visit **www.iogear.com** for more product information
2. Visit **www.iogear.com/support** for live help and product support

#### **IOGEAR**

[www.iogear.com](http://www.iogear.com)

[iogear.custhelp.com](http://iogear.custhelp.com)

[support@iogear.com](mailto:support@iogear.com)



