



User Manual

4-Port DualView Mini DisplayPort KVM Switch with Peripheral Sharing

GCS1924

PART NO. M1203

www.iogear.com



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Package Content

- 1 x 4-port DualView Mini DisplayPort KVMP Switch
- 8 x Mini DisplayPort 1.1a Cable
- 4 x USB 2.0 Cable (Type A to Type B)
- 4 x 3.5mm Audio Cable (Green Head)
- 4 x 3.5mm Mic Cable (Pink Head)
- 1 x User Manuel
- 1 x Power Adapter
- 1 x Warranty Card

System Requirements

Console

- Two mini DisplayPort Monitors
- 1 x USB Keyboard
- 1 x USB Mouse
- Speaker / Microphone (Analog / Digital) – Optional *

* Front Audio Port supports Analog Audio output only

Computer

- mini DisplayPort (Single / Dual mini DisplayPort Video card)
- Type "A" USB Port

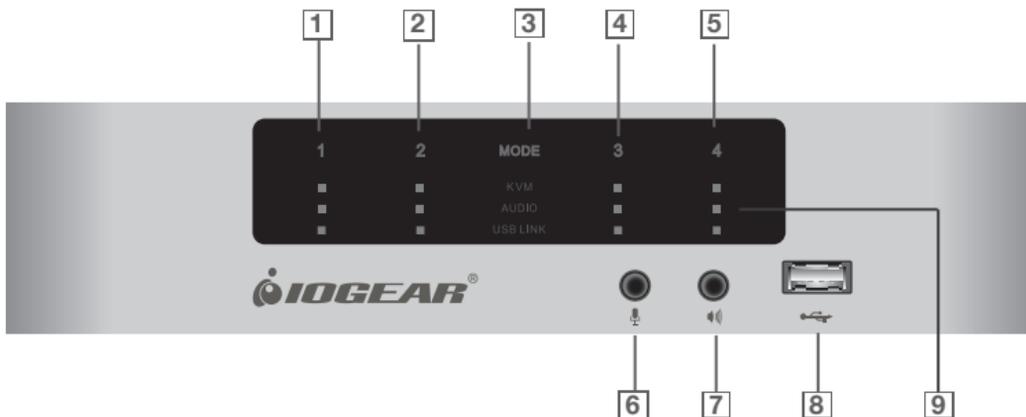
Operating System

- Window XP / VISTA / 7
- MAC OSX 10.5.4 or greater
- Linux
- Unix (Free BSI)
- Netware 6.0 / 6.5

GCS1924 Overview

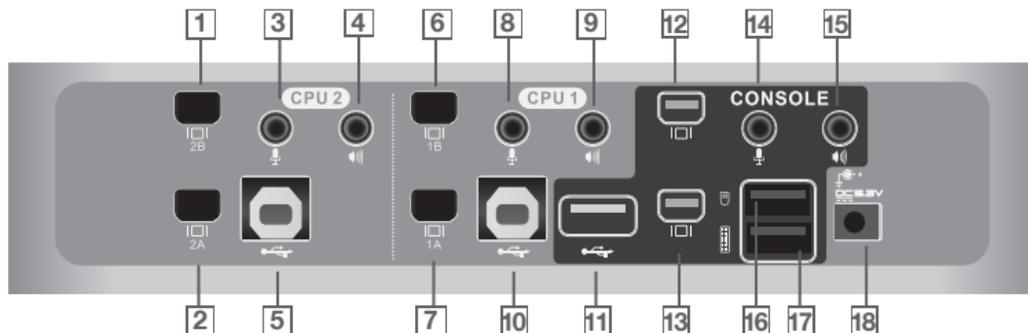
Front View

1. Port 1 Touch Panel
2. Port 2 Touch Panel
3. Mode Touch Panel
4. Port 3 Touch Panel
5. Port 4 Touch Panel
6. Front Panel Console Mic. Connection (analog only)
7. Front Panel Console Audio Connection (analog only)
8. Front Panel USB 2.0 Peripheral Sharing Port (w/ Quick Charge)
9. LEDs status



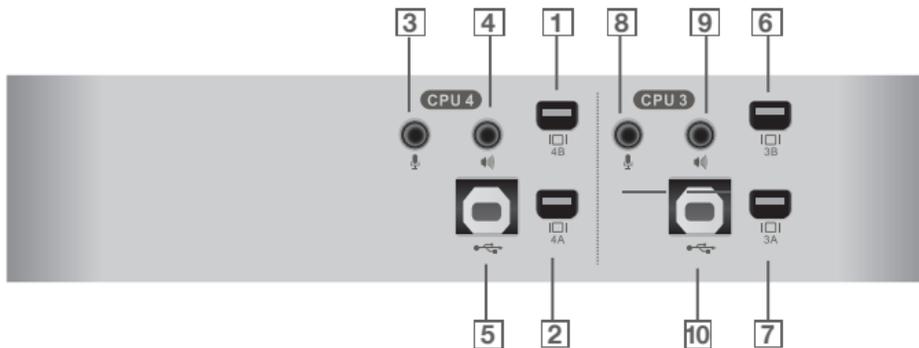
Rear View

1. CPU 2 Mini DisplayPort 2B
2. CPU 2 Mini DisplayPort 2A
3. CPU 2 Mini-TOSLINK Mic. (Digital/Analog)
4. CPU 2 Mini-TOSLINK Audio (Digital/Analog)
5. CPU 2 USB Connection
6. CPU 1 Mini DisplayPort 1B
7. CPU 1 Mini DisplayPort 1A
8. CPU 1 Mini-TOSLINK Mic. (Digital/Analog)
9. CPU 1 Mini-TOSLINK Audio (Digital/Analog)
10. CPU 1 USB 2.0 Connection
11. Console USB 2.0 Peripheral Sharing Port
12. Console Mini DisplayPort B
13. Console Mini DisplayPort A
14. Console Mini-TOSLINK Mic. (Digital/Analog)
15. Console Mini-TOSLINK Audio (Digital/Analog)
16. Console USB Mouse Port
17. Console USB Keyboard Port
18. DC Power Jack



Side View

1. CPU 4 Mini DisplayPort 4B
2. CPU 4 Mini DisplayPort 4A
3. CPU 4 Mini-TOSLINK Mic. Connection (Digital/Analog)
4. CPU 4 Mini-TOSLINK Audio Connection (Digital/Analog)
5. CPU 4 USB Connection
6. CPU 3 Mini DisplayPort 3B
7. CPU 3 Mini DisplayPort 3A
8. CPU 3 Mini-TOSLINK Mic. Connection (Digital/Analog)
9. CPU 3 Mini-TOSLINK Audio Connection (Digital/Analog)
10. CPU 3 USB 2.0 Connection



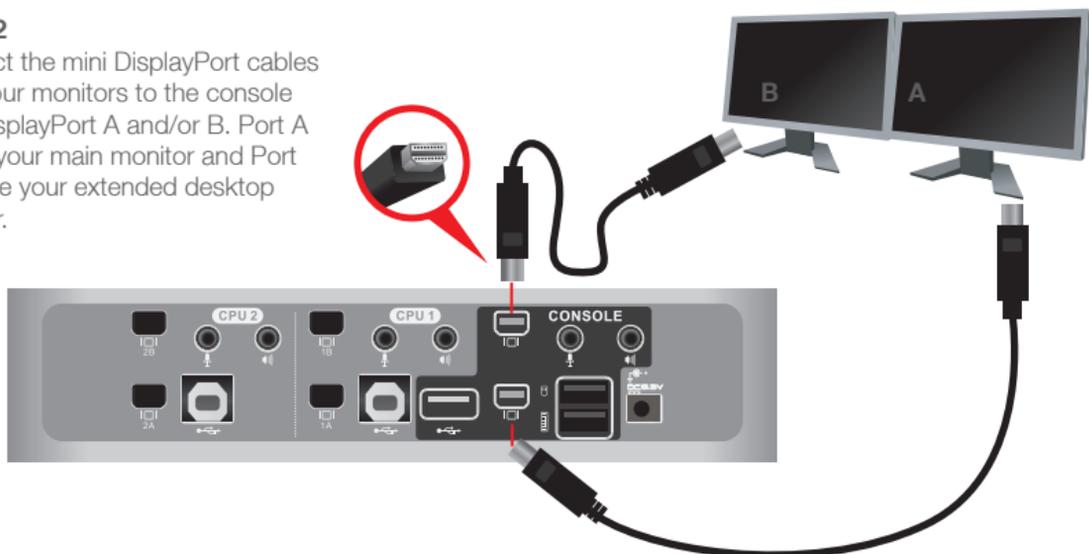
Installation

STEP 1

Please make sure your source devices and displays are powered off before you start.

STEP 2

Connect the mini DisplayPort cables from your monitors to the console mini DisplayPort A and/or B. Port A will be your main monitor and Port B will be your extended desktop monitor.



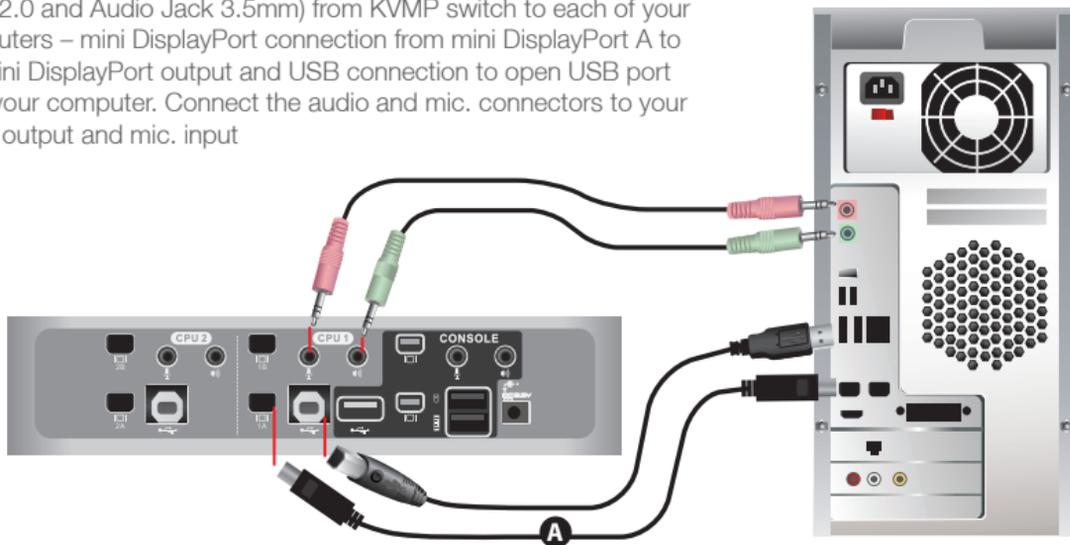
STEP 3

Connect your USB keyboard and mouse to the console USB keyboard port and console USB mouse port. Connect your USB devices to the USB peripheral port, you can add a USB hub if you need to connect multiple USB devices.



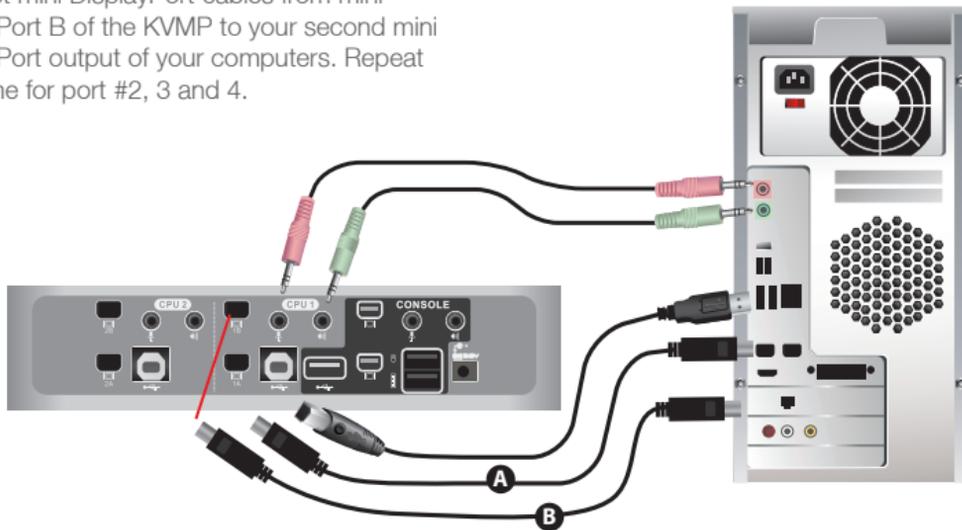
STEP 4

Connect your mini DisplayPort and a set of IOGEAR custom cable (USB 2.0 and Audio Jack 3.5mm) from KVMP switch to each of your computers – mini DisplayPort connection from mini DisplayPort A to the mini DisplayPort output and USB connection to open USB port from your computer. Connect the audio and mic. connectors to your audio output and mic. input



STEP 5

Connect mini DisplayPort cables from mini DisplayPort B of the KVM to your second mini DisplayPort output of your computers. Repeat the same for port #2, 3 and 4.



STEP 6

Plug the power adapter into the power outlet and connect it to the DC power jack from the KVMP



Final Step

Installation is complete. Turn on your computers and other devices and enjoy.

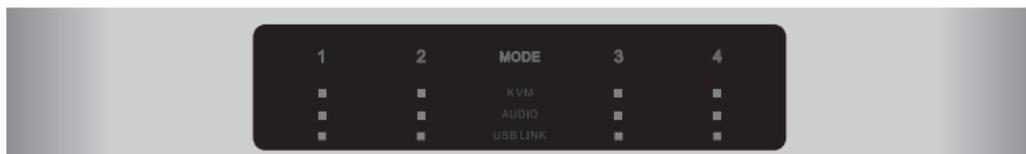
LED Indication

LED		Description
Online / Selected	Dim Orange	A device is connected to the KVMP switch but the port is not on focus
	Bright Orange	The specific port has focus on the KVM (Keyboard, video and mouse)
Audio	Green	The specific port has focus on the audio
USB Link	Green	The specific port has focus on the USB peripheral sharing ports

Port Switching

Simply touch the front panel from the multimedia KVM switch or trigger hotkeys from your keyboard.

Port Switching via Front Panel Touch



Function	Touch Panel Control
Switch all focus (KVM, audio and USB) to a specific port	<ol style="list-style-type: none">1. Touch MODE once, KVM, AUDIO, and USB LINK LEDs will flash2. Then touch the specific port to switch all focus to that port
Switch KVM focus to a specific port	<ol style="list-style-type: none">1. Touch MODE twice, KVM LED will flash2. Then touch the specific port to switch KVM port to that port



Switch audio focus to a specific port	<ol style="list-style-type: none">1. Touch MODE three times, AUDIO LEDs will flash2. Then, touch the specific port to switch Audio port to that port
Switch USB focus to a specific port	<ol style="list-style-type: none">1. Touch MODE four times, USB LINK LED will flash2. Then, touch the specific port to switch USB focus to that port

Port Switching via Hotkeys

Port Switching via Hotkeys

All port switches begin with tapping the **Scroll Lock** key twice. The table below describes 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 page 20 for details).

Hotkeys	Description
[Scroll Lock] [Scroll Lock] [Enter]	Switch all focus (KVM, audio and USB) to the next port
[Scroll Lock] [Scroll Lock] [n] [Enter]	Switch all focus (KVM, audio and USB) to port n*
[Scroll Lock] [Scroll Lock] [k] [Enter]	Switch KVM focus to the next port

Continue next page

Port Switching via Hotkeys

[Scroll Lock] [Scroll Lock] [n] [k] [Enter]	Switch KVM focus to port n*
[Scroll Lock] [Scroll Lock] [s] [Enter]	Switch audio focus to the next port
[Scroll Lock] [Scroll Lock] [n] [s] [Enter]	Switch audio focus to port n*
[Scroll Lock] [Scroll Lock] [u] [Enter]	Switch USB focus to the next port
[Scroll Lock] [Scroll Lock] [n] [u] [Enter]	Switch USB focus to port n*
[Scroll Lock] [Scroll Lock] [n] [k] [u] [Enter]	Switch KVM and USB focus to port n*
[Scroll Lock] [Scroll Lock] [n] [k] [s] [Enter]	Switch KVM and audio focus to port n*
[Scroll Lock] [Scroll Lock] [n] [u] [s] [Enter]	Switch USB and audio focus to port n*

*Note: n is an interval that stands for the Port number

k stands for KVM focus

s stands for audio focus

u stands for USB focus

Auto Scanning

You can either activate Autoscan Mode via front panel push button or hotkeys.

Function	Description	
Auto Scan Hotkeys	[Scroll Lock] [Scroll Lock] [a] [Enter]	Activate Autoscan mode. It will cycle from port to port every 5 seconds (default)
	[Scroll Lock] [Scroll Lock] [a] [n] [Enter]	Activate Autoscan mode. It will cycle from port to port every n seconds**

*Note: Autoscan Mode from front panel push button will be scanning a port every 5 seconds by default. If you wish to have the Autoscan Mode be scanning with different time interval, please refer to trigger Autoscan Mode from hotkeys.

**Note: n is an interval between 1 and 99 that stands for the time (in second) desired for scanning each port.

Hotkey Setting Mode (HSM)

Hotkey Setting Mode (HSM) is used to set up your GCS1924 configuratio. All operations begin with invoking Hotkey Setting Mode (HSM). When HSM is active, the Caps Lock, and Scroll Lock LEDs flash in succession to indicate that HSM is in effect. They stop flashing and revert to normal status when you exit HSM. Ordinary keyboard and mouse functions are suspended - only Hotkey compliant keystrokes and mouse clicks (described in the sections that follow) can be input.

At the conclusion of some hotkey operations, you automatically exit hotkey mode. With some operations, you must exit manually. To exit HSM manually, press **Esc** key, or the **Spacebar**.

Hotkey	Description
<ol style="list-style-type: none">1. Press and hold [Num Lock] (Use the [Clear] key on a Mac keyboard.)2. Press and release [-]3. Release [Num Lock] (Use the [Clear] key on a Mac keyboard.)	Invoking hotkey setting mode
Invoke HSM, then press [h]	To change the HSM invocation keys from [NumLock] and [-] to [Ctrl] and [F12].

Hotkey	Description
Invoke HSM, then press [t]	To toggle port switching hotkeys between [Scroll Lock] [Scroll Lock] and [Ctrl Ctrl].
Invoke HSM, then press [B]	To toggle the beeper on and off.
Invoke HSM, then press [F2]	To enable the Mac keyboard emulation.
Invoke HSM, then press [F10]	To change the keyboard emulation from Mac or SPC mode to PC mode.
Invoke HSM, then press [n]	To toggle between keyboard emulation enabled and disabled.
Invoke HSM, then press [m]	To toggle between mouse emulation enabled and disabled.
Invoke HSM, then press [w]	To toggle between mouse port switching enabled and disabled. Mouse port switching allows you to use the mouse wheel button (clicking twice) to switch ports.

Hotkey	Description
Invoke HSM, then press [d]	To store console monitor's EDID in order to optimize the display resolution.
Invoke HSM, then press [e]	To toggle between power on detection enabled and disabled. Power on detection allows the switch to automatically switch to the next powered on video source when the current one is powered off.
Invoke HSM, then press [i]	To toggle the front panel USB function from Datalink mode to Quick Charge mode.
Invoke HSM, then press [F1]	To set the keyboard and mouse to SPC mode, so they work under special operating systems as a standard 104 key keyboard and mouse.
Invoke HSM, then press [r] [Enter]	To reset the hotkey setting to their default settings.
Invoke HSM, then press [x] [Enter]	To enable/disable the port switch hotkeys ([Scroll Lock] [Scroll Lock]/[Ctrl] [Ctrl]).

Hotkey	Description
Invoke HSM, then press [u] [p] [g] [r] [a] [d] [e] [Enter]	To invoke the firmware upgrade mode - front panel LED will start flashing indicating that the firmware upgrade mode is on.
Invoke HSM, then press [nn] [Enter]	To set the keyboard language layout. "nn" is the two digit number that represents the keyboard language code: 33 for US English; 08 for French; 15 for Japanese.
Invoke HSM, then press [F4]	To list the switch's current settings via a text editor or word processor.
Invoke HSM, then press [F5]	To perform a reset on all USB devices.

*Note: To exit HSM manually, press Esc or spacebar

Digital & Analog Audio Setup Table

GCS1924 offers both digital and analog Audio; the rule of the audio distribution is “**digital in digital out**” and “**analog in analog out**”. The table below explains this in detail.

	KVM Console Audio Out	"Digital Audio Out (Refer to #15 on Page 7)"	"Analog Audio Out (Refer to #15 on Page 7 and #7 on Page 6)"
KVM CPU Audio			
CPU 1	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out
CPU 2	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out
CPU 3	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out
CPU 4	Digital In	Digital Out	No Audio
	Analog In	No Audio	Analog Out

***For Front Panel Audio/Mic, it only outputs Analog signal through sound stereo devices.**

****When both Console Audio and Front Panel Audio are connected, “Only” Front Panel Audio will output Audio signal.**

Mac Keyboard Emulation

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

PC Keyboard	Mac Keyboard
[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 second key.

Factory Default Hotkeys Settings

Setting	Default	Alternate
Port Switching	[Scroll Lock] [Scroll Lock]	[Ctrl] [Ctrl]
Invoke HSM	[Num Lock] + -	[Ctrl] + [F12]
Auto Scan Interval	5 Seconds	1~99 Seconds
Keyboard OS Platform	PC Compatible	Mac, Linux
Mouse Emulation	Enabled	Disabled
Mouse Port-switching	Disabled	Enabled
Power-on Detection	Enabled	Disabled
Keyboard Emulation	Enabled	Disabled
Firmware Upgrade Mode	Disabled	Enabled
Port Switching Keys	Enabled	Disabled
Buzzer	Enabled	Disabled
Keyboard Language Layout	English	Japanese, French

Firmware Upgrade

The Window-based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth, automated process for upgrading the GCS1924 firmware.

Note: In order to perform a firmware upgrade, you need to use a computer that's not connected to the KVM.

Step 1

Connect a USB cable to any open USB port of the KVM and the any open USB port on the computer. Connect power adapter to your power outlet and the KVM.

Step 2

Go to www.iogear.com to download the latest available firmware or the specific firmware that you wish to upgrade to the computer.

Step 3

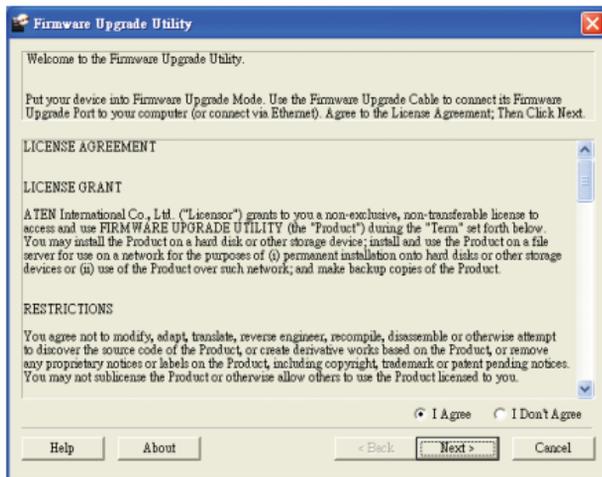
Shut down all the computers that are connected to the KVM. Then Invoke Firmware Upgrade Mode. (Please refer to Hotkeys Setting Mode section.) The front panel LEDs flash together to indicate Firmware Upgrade Mode is in effect.

Step 4

Extract the file with WinRAR or compatible software. Then double click on the execute file to begin with the Firmware Upgrade Utility.

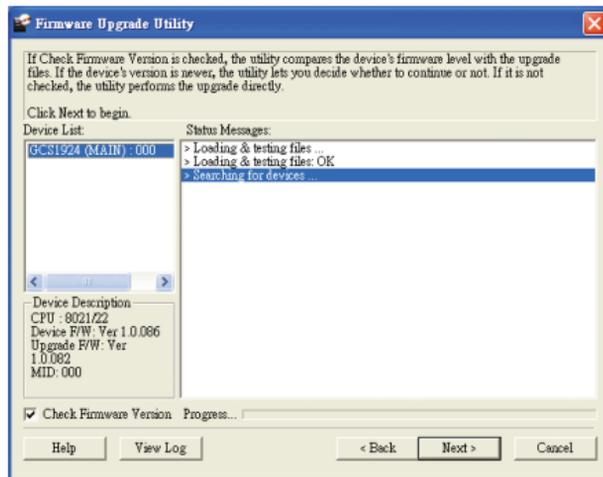
Step 5

The Firmware Upgrade Utility welcome screen appears. Read the License Agreement and click "I Agree" then click "Next" if you wish to continue with the firmware upgrade. Otherwise, click "Cancel" to exit.



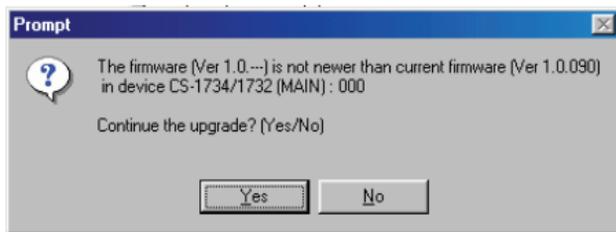
Step 6

Choose the correct KVM that you wish to perform firmware upgrade from the “Device List” and then click “Next” to continue. Then the Firmware Upgrade Utility will verify if there is a KVM connected to the computer by the firmware upgrade cable. (Check Firmware Version checkbox is optional)



Step 7

If you have checked the “Check Firmware Version” checkbox, then the utility will check the current firmware that is on your KVM. If the current firmware is newer than the firmware that you wish to upgrade to, a window will popup and prompt you to ask if you wish to proceed. Simply click “Yes” to start the upgrade and “No” to cancel the upgrade.



Note: If you did not check the “Check Firmware Version” checkbox, utility will perform the upgrade automatically no matter what version of firmware you have in the KVM.

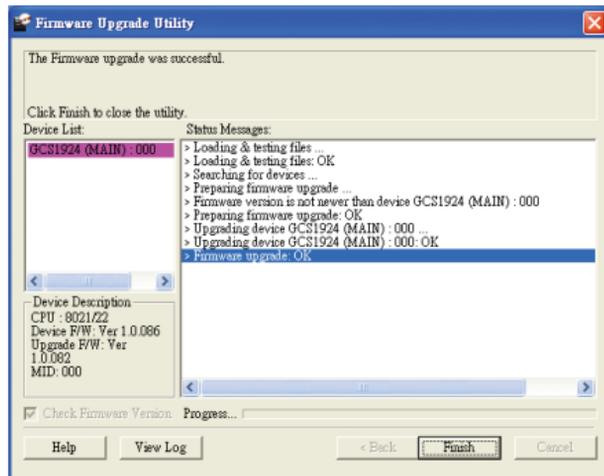
Step 8

When the firmware upgrade is done, you will see “Firmware upgrade OK” in the “Status Messages” window. Then simply click “Finish” to complete the whole firmware upgrade process.

Final Step

Now the KVM will reset by itself and it will be ready for usage after the rest.

Note: If you see warning message of Mac O.S. version incompatible, please contact IOGEAR service staff for latest firmware upgrade tool



Upgrade Fail

If you don't see "Firmware upgrade OK" in the "Status Messages" window, it means the utility has failed to complete the firmware successfully. If that occurs, please do the following:

Step 1

Unplug all USB cables and DC power adapter from GCS1924.

Step 2

Plug single USB cable in the last CPU port with PC powered on.

Step 3

Plug DC power adapter, the GCS1924's port LED will start flash after powered on.

Step 4

Run FW upgrade program again

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential setting. This product generates, uses, and can radiate radio frequency energy and, if not installed and used as directed, it may cause harmful interference to radio communications. Although this product complies with the limits for a Class B digital device, there is no guarantee that interference will not occur in a particular installation.

CE Compliance

This device has been tested and found to comply with the following European Union directives: Electromagnetic Capability (89/336/EMC), Low Voltage (73/23/EEC) and R&TTED (1999/5/EC).

SJ/T 11364-2006

The following contains information that relates to China.

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电器部件	●	○	○	○	○	○
机构部件	○	○	○	○	○	○

○:表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下。

●:表示符合欧盟的豁免条款，但该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。

x:表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。



Limited Warranty

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

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 <http://www.iogear.com/register>

Important Product Information

Product Model _____

Serial Number _____

Contact

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