

# Installation Guide

2/4-Port HDMI Multimedia KVMP Switch with Audio

GCS1792 / GCS1794 PART NO. M1085 / M1086

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## **Package Contents**

- 1 x 2/4-Port HDMI KVMP Switch
- 2/4 x HDMI KVM Cables (2 for GCS1792 / 4 for GCS1794)
- 1 x USB to PS/2 Converter
- 1 x Firmware Upgrade Cable
- 1 x Power Adapter
- 1 x Installation Guide
- 1 x Warranty Card

### Requirements

Console

- A display with an HDMI or DVI input\*
- A USB Keyboard and Mouse

### Source Devices

- Source devices with HDMI or DVI outputs\*
- USB port (if source supports keyboard, mouse or peripheral)

Optional Analog Audio

- Analog audio connections for speakers and mic.

\*Note: To connect to a DVI computer or monitor, please use the GHDMIFDVIM adapter, available at www.iogear.com

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### GCS1792 Overview

### **Front View**

- 1. Port 1 Pushbutton
- 2. Port 2 Pushbutton
- 3. Front Panel Console Mic. Port

4. Front Panel Console Analog Audio Port
 5. Front Panel USB 2.0 Peripheral Sharing Port



### **Rear View**

- 1. Firmware Upgrade Port
- 2. DC Power Jack
- 3. Console USB Mouse Port
- 4. Console USB Keyboard Port
- 5. USB 2.0 Peripheral Sharing Port
- 6. Console Mic. Port
- 7. Console HDMI Video Port
- 8. Console Analog Audio Port

- 9. CPU2 Mic. Port
   10. CPU2 Analog Audio Port
   11. CPU2 HDMI Video Port
   12. CPU2 USB Port
   13. CPU1 Mic. Port
   14. CPU1 Analog Audio Port
   15. CPU1 HDMI Video Port
- 16. CPU1 USB Port



## GCS1794 Overview

### **Front View**

- 1. Port 1 Pushbutton
- 2. Port 2 Pushbutton
- 3. Port 3 Pushbutton

- 4. Port 4 Pushbutton
- 5. Front Panel Console Mic. Port
- 6. Front Panel Console Analog Audio Port
- 7. Front Panel USB 2.0 Peripheral Sharing Port



### **Rear View**

- 1. Firmware Upgrade Port
- 2. DC Power Jack
- 3. Console USB Mouse Port
- 4. Console USB Keyboard Port
- 5. USB 2.0 Peripheral Sharing Port
- 6. Console Mic. Port
- 7. Console HDMI Video Port
- 8. Console Analog Audio Port
- 9. CPU4 Mic. Port
- 10. CPU4 Analog Audio Port
- 11. CPU4 HDMI Video Port
- 12. CPU4 USB Port

- 13. CPU3 Mic. Port
- 14. CPU3 Analog Audio Port
- 15. CPU3 HDMI Video Port
- 16. CPU3 USB Port
- 17. CPU2 Mic. Port
- 18. CPU2 Analog Audio Port
- 19. CPU2 HDMI Video Port
- 20. CPU2 USB Port
- 21. CPU1 Mic. Port
- 22. CPU1 Analog Audio Port
- 23. CPU1 HDMI Video Port
- 24. CPU1 USB Port



## Installation

### Step 1

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

### Step 2

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



Connect the HDMI cable from your display to the console HDMI port.



\*If your display has a DVI input instead of HDMI, please connect the HDMI (F) to DVI (M) Adapter (Model No: GHDMIFDVIM) between your HDMI cable and your DVI connection from your display.

Connect your USB keyboard and mouse to the console USB keyboard port and console USB mouse port.



\*If you are using PS/2 keyboard and mouse, please use the included PS/2 to USB converter. Simply connect the PS/2 keyboard and mouse to the PS/2 keyboard and mouse port from the converter, then connect the USB port to the console USB keyboard port.

Connect a set of your HDMI KVM cable from the multimedia KVMP switch to each of your source devices – HDMI cable to the HDMI output and USB cable to open USB port from your source device. Connect the optional analog audio and mic connectors to your source device and if your device does not pass audio through HDMI cable.



\*If your source device has a DVI output instead of HDMI, please connect the HDMI (F) to DVI (M) Adapter (Model No: GHDMIFDVIM) between your source device and your HDMI cable. \*If your source device does not support USB keyboard, mouse or peripheral, simply leave the USB connection

\*"If your source device does not support USB keyboard, mouse or peripheral, simply leave the USB connection unconnected.

### **Final Step**

Turn on your source devices.

## **LED** Indication

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

\*Note: Online status is detected by the USB connection from the KVM cable; therefore, if your source device does not support USB, the KVM will not have online status light up as dim orange. When that source is selected, the LED will light up as dim orange instead of bright orange.

## **Port Switching**

Simply press the front panel Pushbutton from the multimedia KVMP switch or trigger hotkeys from your keyboard.

### Port Switching via Front Panel Pushbutton

Function	Description
Switch all focus (KVM, analog audio and USB) to a specific port	Press and hold the correspond push button for 2 seconds for the desire port that you wish to switch focus to.
Switch KVM focus to a specific port	Press the correspond push button once for the desire port that you wish to switch focus to.
Switch analog audio focus to a specific port	Press the correspond push button twice for the desire port that you wish to switch focus to.
Switch USB focus to a specific port	Press the correspond push button 3 times for the desire port that you wish to switch focus to.

### Port Switching via Front Panel Pushbutton (Alternative Settings)\*

Function	Description
Switch all focus (KVM, analog audio and USB) to a specific port	Press the correspond push button once for the desire port that you wish to switch focus to.
Switch KVM focus to a specific port	Press and hold the correspond push button for 2 seconds for the desire port that you wish to switch focus to.
Switch analog audio focus to a specific port	Press the correspond push button twice for the desire port that you wish to switch focus to.
Switch USB focus to a specific port	Press the correspond push button 3 times for the desire port that you wish to switch focus to.

\*Note: Please see page 23 about how to change the front panel pushbutton to the alternative settings.

## Port Switching via Hotkeys

### Port Switching via Hotkeys

Hotkeys	Description
[Scroll Lock] [Scroll Lock] [Enter]	Switch all focus (KVM, analog audio and USB) to the next port
[Scroll Lock] [Scroll Lock] [n] [Enter]	Switch all focus (KVM, analog audio and USB) to port $\ensuremath{n}^*$
[Scroll Lock] [Scroll Lock] [k] [Enter]	Switch KVM focus to the next port
[Scroll Lock] [Scroll Lock] [n] [k] [Enter]	Switch KVM focus to port n*
[Scroll Lock] [Scroll Lock] [s] [Enter]	Switch analog audio focus to the next port**
[Scroll Lock] [Scroll Lock] [n] [s] [Enter]	Switch analog 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*

Port Switching via Hotkeys

 [Scroll Lock]
 [n] [k] [u] [Enter]

 [Scroll Lock]
 [Scroll Lock]
 [n] [k] [s] [Enter]

 [Scroll Lock]
 [Scroll Lock]
 [n] [u] [s] [Enter]

Switch KVM and USB focus to port n\* Switch KVM and analog audio focus to port n\* \*\* Switch USB and analog audio focus to port n\*

\*Note: n is an interval that stands for the Port number k stands for KVM focus s stands for analog audio focus u stands for USB focus \*\*Note: If the audio is going though the HDMI cable along with the video signal, this hotkey WILL NOT switch the audio focus. But instead, the audio will follow the KVM focus. You can either activate Autoscan Mode via front panel push button or hotkeys.

	Function	Description
Front Panel Push Button	Press and hold port 1 and port 2 Pushbutton simultaneously for 2 seconds to activate Autoscan Mode*	Activate Autoscan mode. It will cycle from port to port every 5 seconds (default)
Hotkeys	[Scroll Lock] [Scroll Lock] [a] [Enter]	Activate Autoscan mode. It will cycle from port to port every 5 seconds (default)
Hotkeys	[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) desire for scanning each port.

## Hotkey Setting Mode (HSM)

Hotkey	Description
<ol> <li>Press and hold [Num Lock] ([Clear] key on Mac keyboard)</li> <li>Press and release [-]</li> <li>Release [Num Lock] ([Clear] key on Mac keyboard)</li> </ol>	Invoking hotkey setting mode
Invoke HSM, then press [h]	Change the HSM invocation keys from [Num Lock] to [Ctrl] and from [-] to [F12]
Invoke HSM, then press [t]	Switch port switching hotkey sequence between [Scroll Lock] [Scroll Lock] and [Ctrl] [Ctrl]
Invoke HSM, then press [F2]	Enables Mac keyboard emulation
Invoke HSM, then press [F10]	Auto-detect the keyboard operating platform (for PC compatible systems). Activates Pass Through Keyboard Mode (keystrokes are sent directly to the computer instead of through the Mac emulator).
Invoke HSM, then press [F4]	List hotkey settings – simply invoke the hotkey and then open a text editor, such as notepad, and use the Paste function to display the hotkey settings.
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Invoke HSM, then press [F5]	USB Reset
Invoke HSM, then press [b]	Toggle hotkey beepers on or off
Invoke HSM, then press [x] [Enter]	Disable or enable port switching hotkey
Invoke HSM, then press [u] [p] [g] [r] [a] [d] [e] [Enter]	Activate Firmware Upgrade Mode – Front panel KVM LED will flash indicating Firmware Upgrade Mode is activated.
Invoke HSM, then press [r] [Enter]	Restore default settings
Invoke HSM, then press [d]	Enable or disable video emulation
Invoke HSM, then press [s]	Toggles between default and alternative front panel pushbutton operation settings. See page 18 for details.
Invoke HSM, then press [m]	Enable or disable mouse emulation
Invoke HSM, then press [F1]	Reset keyboard and mouse under some special OS' that do not support USB 2.0

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

## 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
[Crtl]	Ctrl
	H
[Ctrl] [1]	-
[Ctrl] [2]	
[Ctrl] [3]	<b>(</b> )
[Ctrl] [4]	<b>▲</b>

[Alt]	Alt
[Print Screen]	F13
[Scroll Lock]	F14
Ē.	=
[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**

Function	Default
Port Switching	[Scroll Lock] [Scroll Lock]
Invoking HSM	[Num Lock] [-]
Auto Scan Interval	5 Seconds
Beeper	On
Keyboard Operating Platform	PC Compatible
Port Switching Keys	Enabled
Mouse Emulation	On

## **Firmware Upgrade**

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

#### Step 1

Connect the provided firmware upgrade cable to the firmware upgrade port of the KVM and the serial port of your 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.

### 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.)

### Step 4

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

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.

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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)

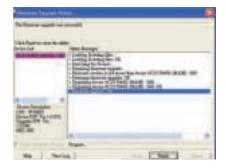
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If you have checked the "Check Firmware Version" checkbox, then the utility will check the current firmware that is on your KVM. If the current firmware is newer than the firmware that you wish to upgrade to, a window will popup and prompt you to ask 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.

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 No the KVM will reset by itself and it will be ready for usage after the rest.

## **Upgrade Fail**

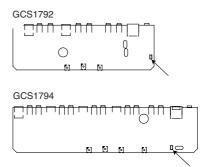
If you don't see "Firmware upgrade OK" in the "Status Messages" window, it means the utility has failed to complete the firmware successfully. If that occurs, please do the following:

Step 1

Unplug the DC connector from the KVM, then remove the housing of the KVM.

#### Step 2

Using a jumper cap, short the jumper on the main board labeled J11 (for GCS1792) / J17 (for GCS1794).



Step 3 Now plug the DC connector back into the DC jack from the KVM. This will restore the KVM with factory default firmware.

Step 4 Perform the firmware upgrade again.

Step 5

When the firmware upgrade is completed, unplug the DC connector from the KVM. Then remove the jumper from J11 (for GCS1792) / J17 (for GCS1794) and put the housing back together.

Final Step Plug DC connector back into the KVM, then the KVM will be ready for usage again.

## Federal Communications Commission (FCC) Statement

### 15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

### 15.105(b)

his 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 installation. This equipment generates, uses and can radiate radio frequency energy and, 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.

# THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- 1. this device may not cause interference and
- 2. this device must accept any interference, including interference that may cause undesired operation of the device.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **CE Statement**

This device has been tested and found to comply with the requirements set up in the council directive on the approximation of the law of member states relating to EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC and R&TTE Directive 99/5/EC.

The product has been approved for LVD and covered the following countries: Belgium, Denmark, France, Germany, Italy, Portugal, U.K., Spain, Sweden

### **Limited Warranty**

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK, OR ITS DOCUMENTATION EXCEED THE PRICE PAID FOR THE PRODUCT.

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IOGEAR is an environmentally conscious company that emphasizes the importance of conserving natural resources. The use of our technology solutions helps reduce electronic waste.

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IOGEAR supports healthy and fit lifestyles. By integrating products with the latest scientific developments, IOGEAR's solutions enhance the life of end-users.