



## USER'S MANUAL

### CS-104U

Please read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the CS-104U and/or any devices it connects to.

- This package contains:
- CS-104U
  - User Manual

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Note: 1. For PC users, since you are using a USB Keyboard and/or Mouse, make the following changes to your CMOS Setup program (see the on screen instructions at bootup for how to enter the CMOS Setup program):

- In STANDARD CMOS, set HALT ON ERROR to ALL BUT KEYBOARD
- In PNP AND PCI SETUP, set PNP OS INSTALLED to YES; set USB IRQ to ENABLED

(Mac users do not have to do this.)

2. The drivers for most USB devices (CCD Cameras, Scanners, Printers, e.g.), are required to be shut down before you disconnect the device, or else the system may crash. When you switch computers with the Port Selection Switch, it is the equivalent of disconnecting the device. Therefore, if you have peripheral devices (other than a second keyboard and mouse) connected to these ports, you must be sure to shut down the USB drivers for them before switching computers.

## Overview

The Master View CS-104U represents a revolutionary new direction in KVM Switches: a dual function 4 Port KVM Switch / 2 Port USB Hub control unit. The CS-104U incorporates USB technology to handle the data connection between itself and the connected computers, and to provide two USB ports for peripheral devices that the connected computers can share.

As a KVM switch, the CS-104U allows access to four computer systems from a single console (keyboard, mouse, and monitor) utilizing the USB connection for the keyboard and mouse. At the same time, it allows the four PCs and/or Macs to utilize the USB port connection to access two USB peripheral devices (printers, scanners, modems, etc.), on a "one computer at a time" basis.

Installation and operation are as easy as can be. Simply connect the cables. The computers will recognize the USB peripherals the first time they come in contact with them and automatically install the necessary drivers. There is no other software installation necessary. You select the active computer (that the console controls and has access to the USB peripheral devices), by simply pressing an electronic pushbutton switch on the unit's right panel.

Before the development of the Master View, the only way to control multiple computer configurations from a single console was through a complex and costly network system. Now, with the Master View CS-104U, you can easily access up to four computers and two USB peripheral devices in a cost effective manner.

There is no better way to save time and money than with a Master View CS-104U installation. By allowing a single console to manage all of the attached computers and USB peripherals, the Master View CS-104U eliminates the expense of purchasing separate keyboards, monitors, mice, and peripherals for each system. Moreover, it saves all the extra space they would take up, and eliminates the inconvenience and wasted effort involved in constantly having to move from one computer to the other.

## Features

- Dual Function KVM / USB Switch - Two Switches In One
- Controls 4 Computers From a Single Console Over a USB Connection Using Standard USB Cables
- Simultaneous Reverse Operation - 4 Computers Can Share 2 USB Peripheral Devices
- Eliminates Driver Conflict Between the Console's Mouse and the Computers' Configuration
- Notebooks Can Use the Console's Mouse and Keyboard At the Same Time
- Easy to Install - No Software Required - Standard Cables to Connect to the Computers Is All It Takes
- Easy to Operate - Computer Selection Via Push Button Switch
- Auto Scan Function to Monitor Computer Operation
- LED Display For Easy Status Monitoring
- Saves Time, Space, Power, and Equipment Costs
- Supports DDC2 (Display Data Channel)
- Hot Pluggable

## System Requirements

### Console

- One VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation
- One USB Mouse
- One USB Keyboard

### Computer

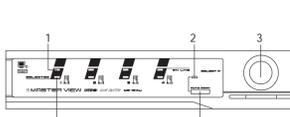
The following equipment must be installed on each computer that is to be connected to the system:

- PC with Windows 98 or Mac (G3 or iMac)
- USB Host Controller installed on the system.
- A VGA, SVGA or Multisync card.

Note: A DB 15 to HDB 15 VGA adapter (purchased separately), is required in order to connect a Mac to the CS-104U.

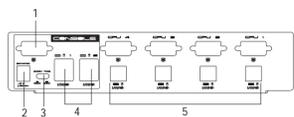
## Introduction

### Front View:



- Selected LEDs:** Lights to indicate the currently selected port.
- Auto Scan LED** The Auto Scan LED flashes when Auto Scan Mode is in effect.
- Port Selection Switch** The Port Selection Switch is located on the right panel, just opposite the Select Arrow on the front panel. Press this pushbutton to cycle among the connected computers to select the active port. The Selected LED on the front panel lights to indicate which port is selected.
- On Line LEDs** Lights to indicate that a computer is properly connected to the port, and that it is powered up and operational.
- Auto Scan Switch** Press this pushbutton In, to turn Auto Scan Mode On. Press it again, to pop the button out, to turn Auto Scan Mode Off.

### Rear View:



- Console Video Connector** The monitor's video cable plugs in here.
- Power Jack** If you choose to connect an external DC 5V Power Adapter, it's power cable plugs in here.
- Scan Time Selection Switch** This slide switch selects the amount of time the CS-104U dwells on each port (3 seconds, or 15 seconds), when Auto Scan Mode is in effect.
- USB Ports for the Console Mouse and Keyboard, and USB peripheral devices** Plug the peripherals into any of the ports.  
 Note: The drivers for most USB devices (CCD Cameras, Scanners, Printers, e.g.), are required to be shut down before you disconnect the device, or else the system may crash. When you switch computers with the Port Selection Switch, it is the equivalent of disconnecting the device. Therefore, if you have peripheral devices (other than a second keyboard and mouse) connected to these ports, you must be sure to shut down the USB drivers for them before switching computers.

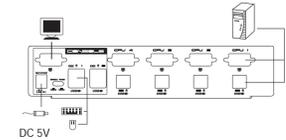
### 5. CPU Port Section

Cables that link the CS-104U to the computers plug in here. See the Installation section for details.

## Installation

Before you begin, make sure that power to all the devices you will be connecting up (Master View CS-104U, the monitor, and the connected computers) have been turned off.

- Plug the monitor, keyboard, and mouse into the Console port connectors of the Master View CS-104U unit.
- If you choose to use an external 5V power adapter, plug the adapter into an AC source, then plug the adapter cable into the unit's Power Jack.
- Use the video extender cables to connect the CS-104U's video ports to the video ports on the corresponding computers, as shown in the diagram below.
- Use standard USB cables to connect from the CS-104U's USB ports (B connector) to the USB ports on the corresponding computers (A connector), as shown in the diagram below.
- Power on all devices.



Note: The CS-104U's Power On default is to link to Port 1. If the computer attached to Port 1 is inactive, the monitor will be blank so it may appear as if the unit is not functioning. This is not the case. Simply press the Port Selection Switch (located on the unit's right panel), to switch to an active computer on one of the other ports.

## Operation

### Manual Port Selection

Controlling the computers in your Master View CS-104U installation from a single console could not be easier. Simply keep pressing the Port Selection button on the Master View's right panel until the computer you wish to access becomes the selected one.

Note: The drivers for most USB devices (CCD Cameras, Scanners, Printers, e.g.), are required to be shut down before you disconnect the device, or else the system may crash. When you switch computers with the Port Selection Switch, it is the equivalent of disconnecting the device. Therefore, if you have peripheral devices (other than a second keyboard and mouse) connected to the CS-104U's USB peripheral ports, you must be sure to shut down the USB drivers for them before switching computers.

### Auto Scan Mode

The Master View CS-104U's Auto Scan feature automatically switches among the four computers at regular intervals (3 or 15 seconds), so that you can monitor their activity without having to take the trouble of switching yourself.

To invoke Auto Scan Mode, simply press the Auto Scan button (located on the Master View's front panel). In The Auto Scan LED flashes to indicate that Auto Scan Mode is in effect.

To turn Auto Scan Mode Off, press the Auto Scan button again, to pop the button out. The Auto Scan LED stops flashing when Auto Scan Mode is no longer in effect.  
 Note: 1. While Auto Scan Mode is in effect, neither the keyboard nor the mouse will function. You must turn off Auto Scan Mode in order to be able to use the console.  
 2. The drivers for most USB devices (CCD Cameras, Scanners, Printers, e.g.), are required to be shut down before you disconnect the device, or else the system may crash. When the computers switch under Auto Scan Mode, it is the equivalent of disconnecting the device. Therefore, if you have peripheral devices (other than a second keyboard and mouse) connected to the CS-104U's USB peripheral ports, you must be sure that the USB drivers for them are shut down on all machines before invoking Auto Scan Mode.

## Appendix

### Troubleshooting

Note: If you are experiencing problems, first make sure that there are no problems with the cables, and that they are all properly connected.

Symptom	Cause	Action
Keyboard Not Responding	Loose cables.	Check all keyboard cable connections to make sure they are completely seated in their sockets.
	Keyboard needs to be reset	Unplug the keyboard from the Console Keyboard Port, then plug it back in.
Master View needs to be reset	Master View needs to be reset	Turn off the computers and the Master View CS-104U. Wait five seconds; turn the Master View unit on; then turn the computers on.
	Master View is in Auto Scan Mode	Press the Auto Scan Switch (located on the unit's front panel), to exit Auto Scan Mode.
Mouse Not Detected or Does Not Respond Correctly	Loose cables.	Check all mouse cable connections to make sure they are completely seated in their sockets.
	Mouse needs to be reset	Unplug the mouse from the Console Mouse Port, then plug it back in.
Master View needs to be reset	Master View needs to be reset	Turn off the computers. If you are using a power adapter, unplug it. Wait five seconds. If you are using a power adapter, plug it in; turn the computers on.
	Resolution and/or Bandwidth set too high	The Master View CS-104U supports VGA, SVGA, Multisync, and XGA (interlaced), with resolutions of up to 1920x1440 @ 80 Hz. The maximum bandwidth is 180 MHz.
Video Problems	Cable quality not good enough	We strongly recommend that you use high quality cables. Using high quality cables should eliminate possible video problems. High quality cables are optionally provided with some CS-104U packages - otherwise, see your dealer to purchase them.

## Specifications

Computer Connections	4	
Port Selection	Push Button Switch	
LEDs	Selected 4 On Line 4 Auto Scan 1	
Connectors	USB Type A	4 (Mouse, Keyboard & USB Peripheral)
	USB Type B	4 (PC USB Ports)
	Video	1 x HDB-15 female (opt. VGA/SVGA) - Console 4 x HDB-15 male (opt. VGA/SVGA) - CPU Ports
Power Consumption	15 mA	
Scan Interval	3 / 15 seconds	
Operating Temperature	5 - 40° C	
Storage Temperature	-20 - 60° C	
Humidity	0 - 80% RH, Noncondensing	
Enclosure	Plastic, 7 Meter	
Weight	1100 g	
Dimensions (L x W x H)	224 x 152 x 52 mm	

## Radio & TV Interference Statement

WARNING! 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 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.

### 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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