

USB KVM Switch

USER MANUAL

CS-102U

FCC INFORMATION

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 instruction manual, may cause 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 which the receiver is connected;
- ◆ Consult the dealer or an experienced radio/television technician for help.



CS-102U USER MANUAL

PACKAGE CONTENTS

The CS-102U package contains the following items:

- ◆ 1 CS-102U USB KVM Switch
- ◆ 2 USB/VGA Cables
- ◆ 1 User Manual*

Check to make sure that all the components are present and that nothing got damaged in shipping. If you encounter a problem, contact your dealer.

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

* Features may have been added to the CS-102U since this manual was printed. Please visit our website to download the most up-to-date version of the manual.

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OVERVIEW

The Master view CS-102U represents a revolutionary new direction in KVM Switches: a dual function 2 Port KVM Switch plus 2 Port USB Hub control unit. The CS-102U 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-102U allows access to two computer systems from a single console (keyboard, mouse, and monitor) utilizing the USB connection for the console's keyboard and mouse. At the same time, it allows the two 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 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 by simply pressing an electronic push button switch on the unit's top 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-102U, you can easily access up to two 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-102U installation. By allowing a single console to manage both of the attached computers and USB peripherals, the Master View CS-102U 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 2 Computers From a Single Console Over a USB Connection Using Standard USB Cables
- ◆ Simultaneous Reverse Operation - 2 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 DDC, DDC2, DDC2B
- ◆ Hot Pluggable

SYSTEM REQUIREMENTS

CONSOLE

The console must consist of the following components:

- ◆ A VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation.
- ◆ A USB keyboard
- ◆ A USB mouse

COMPUTERS

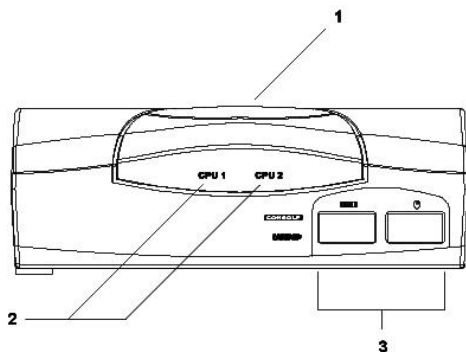
The following equipment must be installed on each computer that is to be connected to the system:

- ◆ Windows 98 / Mac OS 8.6 or higher
- ◆ A USB Host Controller installed on the system.
- ◆ A VGA, SVGA or Multisync card.

Note: Mac G3 and G4 systems have HDB 15 VGA connectors just like PCs do, For other Mac systems, a DB 15 to HDB 15 VGA adapter (purchased separately), is required.

COMPONENTS

FRONT VIEW



1. Port Selection / Auto Scan Switch:

This pushbutton has two functions:

- ◆ It toggles access back and forth between the computers.
- ◆ It activates / deactivates Auto Scan Mode. Holding this switch down for 2 seconds activates Auto Scan Mode; pressing and releasing the switch while Auto Scan Mode is active turns Auto Scan Mode Off.

2. Port LEDs:

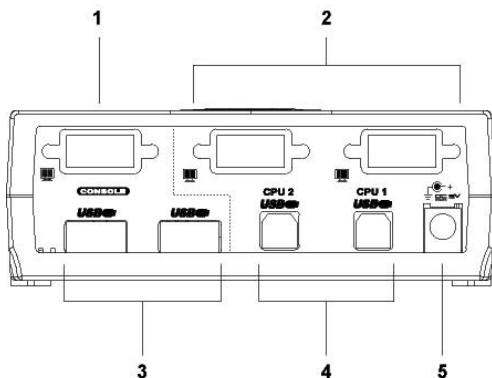
A LED lights to indicate that its corresponding port is the one that has the KVM focus. If the LED flashes, it indicates that the port is being accessed under Auto Scan Mode.

3. USB Ports:

The Console USB Keyboard and USB Mouse plug in here.

Note: Other peripherals can plug in here, as well. With USB, any peripheral can plug into any port.

REAR VIEW



1. Console Video Connector:

The monitor's video cable plugs in here.

2. CPU Video Ports:

These ports link to the video ports on the computers you are installing.

3. USB Peripheral Ports:

USB peripherals that you want to use on the installation plug in here. Devices can plug into any available port.

4. CPU USB Ports:

These ports link to the USB ports on the computers you are installing.

5. Power Jack:

If you choose to connect an (optional) external DC 5V Power Adapter, its power cable plugs in here.

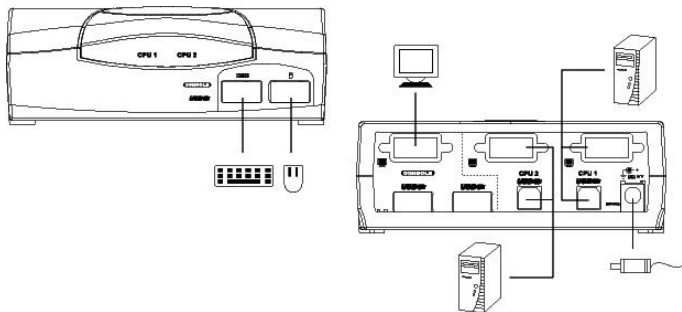
INSTALLATION



1. Make sure that the power to any device that you connect to the installation has been turned off. You must unplug the power cords of any computers that have the *Keyboard Power On* function.
2. To prevent damage to your equipment due to ground potential difference, make sure that all devices on the installation are properly grounded. Consult your dealer for technical details, if necessary.

Refer to the diagram on the next page as you perform the following steps:

1. Plug the cables for the USB keyboard, USB mouse, and monitor into the CS-102U's Console port connectors.
2. Plug the USB B end of one the KVM cables supplied with this package into the CS-102U's CPU 1 USB Port; plug the cable's video connector into the CPU 1 Video Port.
3. Plug the USB A end of the KVM cable into the first computer's USB Port; plug the cable's video connector into the computer's Video Port.
4. Plug the USB B end of the second KVM cable supplied with this package into the CS-102U's CPU 2 USB Port; plug the cable's video connector into the CPU 2 Video Port.
5. Plug the USB A end of the KVM cable into the second computer's USB Port; plug the cable's video connector into the computer's Video Port.
6. If you choose to use an (optional) external 5V power adapter, plug the adapter into an AC source, then plug the adapter cable into the unit's Power Jack.
7. Power on all devices.



Note: 1. For PC users (Mac users do not need to do this step), at bootup, enter the PC's CMOS Setup program (see the on screen instructions at bootup for how to enter the CMOS Setup program), and make the following changes:

- ◆ 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.
2. The CS-102U'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 top panel), to switch to the active computer port.
 3. When you start Computer 2 and the KVM focus is on CPU 1, Computer 2's bootup routine will not autodetect the monitor's capability. Under such circumstances, the PC reverts to VGA mode. If this occurs, switch to CPU2, then use Control Panel to reset the resolution.
 4. The Mac's keyboard Power On function is not supported. You must start the Mac with its Power On switch.
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OPERATION

MANUAL PORT SELECTION

With Manual Port Selection you simply press the Port Selection Button on the CS-102U's top panel to switch the KVM focus back and forth between computers. The Port LEDs light to indicate which port has the focus.

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.

AUTO SCAN MODE

The Auto Scan feature automatically switches between the two computers at regular 5 seconds intervals, so that you can monitor their activity without having to take the trouble of switching yourself.

To invoke Auto Scan Mode, simply hold down the Port Selection push button switch for two seconds. The Port LEDs flash when their corresponding ports are accessed under Auto Scan Mode.

To turn Auto Scan Mode Off, simply press and release the Port Selection switch. The LEDs stop flashing when Auto Scan Mode is no longer in effect.

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- Note:**
1. While Auto Scan Mode is in effect, ordinary keyboard and mouse functions are suspended. You must exit Auto Scan Mode in order to regain normal use of 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-102U's USB peripheral ports, you must be sure that the USB drivers for them are shut down on both computers before invoking Auto Scan Mode.
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TROUBLESHOOTING

Problem	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/them back in.
	CS-102U needs to be reset.	Turn off the computers and the CS-102U. Wait five seconds; turn the CS-102U on; turn the computers on.
	CS-102U is in Auto Scan mode.	Press the push button selection switch 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.
	CS-102U needs to be reset.	Turn off the computers and the CS-102U. Wait five seconds; turn the CS-102U on; turn the computers on.
	CS-102U is in Auto Scan mode.	Press the push button selection switch to exit Auto Scan Mode.
	Mouse is incompatible with the Mac OS	Some mice are incompatible with the Mac. Make sure that the mouse is compatible with the Mac OS. Replace the mouse, if necessary.
Video Problems	Resolution and/or Bandwidth set too high.	This unit supports VGA, SVGA, Multisync, and XGA (interlaced), with resolutions of up to 1920x1440. The maximum bandwidth is 150 MHz.
	Cable quality not good enough.	We strongly recommend that you use the high quality cables provided with this package. Using high quality cables should eliminate possible video problems.

SPECIFICATIONS

Function		Specification
Computer Connections		2
Port Selection		Push Button Switch
LEDs		2 - Selected Port
Connectors	USB Type A	4 - USB Peripherals
	USB Type B	2 - Link to Computers
	Video	1 x HDB-15 Female - Console 2 x HDB-15 Male - Link to Computers
	Power	1 x DC 5V Jack
Power Consumption		DC 5V 11 mA (max.)
Scan Interval		5 sec
USB Specification		1.1 Compliant
Environment	Operating Temp.	5–40° C
	Storage Temp.	-20–60° C
	Humidity	0–80% RH, Non-condensing
Physical Properties	Housing	Plastic
	Weight	150 g
	Dimensions (L x W x H)	120 x 67 x 44 mm

LIMITED WARRANTY

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

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and specially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update the device or documentation without obligation to notify any individual or entity of such revisions, or update. For further inquires please contact your direct vendor.