USER'S MANUAL

CS-14 / CS-14c

PACKING LIST

This package contains:

1 x 4 Port Mini KVM Switch (CS-14 or CS-14c)

1 x User Manual

In addition, the CS-14c package also contains:

2 x CS Custom Extender Cables (1.2m)

2 x CS Custom Extender Cables (1.8m)

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

OVERVIEW

The Master View CS-14 Mini KVM Switch is a control unit that allows access to four PC systems from a single console (keyboard, mouse, and monitor). 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-14, you can easily access up to four computers in a cost effective manner.

The Master View CS-14 provides two convenient methods to access the PCs connected to the system: using the push button *Selection* switch located on the unit's right panel; and entering *Hot Key* combinations from the keyboard. Setup is fast and easy; plugging cables into their appropriate ports is all that is entailed. There is no software to configure, no installation routines, and no incompatibility problems. Since the Master View CS-14 intercepts keyboard input directly, it works on any hardware platform and with all operating systems.

There is no better way to save time and money than with a Master View CS-14 installation. By allowing a single console to manage all of the attached PCs, the Master View CS-14 eliminates the expense of purchasing a separate keyboard, monitor, and mouse for each system. Additionally, 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 PC to the other.

Features

- Supports Microsoft IntelliMouse and the Scrolling Wheel on Most ' Wheel ' Mice
- Keyboard and Mouse Emulation for Error Free PC booting.
- Caps Lock, Num Lock, and Scroll Lock States are Saved and Restored When Switching
- Supports 1920 x 1440 Resolution
- Easy to Install - No Software Required - Standard Cables to Connect to the PCs Is All It Takes
- Easy to Operate - PC Selection Via Push Button Switch or Hot Keys
- Auto Scan Function to Monitor PC Operation
- Compatible With All Operating Platforms
- LED Display For Easy Status Monitoring
- Saves Time, Space, Power, and Equipment Costs
- Non-powered
- Supports DDC2B (Display Data Channel)
- Hot Pluggable

Hardware Requirements

Console

- One VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any PC in the installation
- One PS/2 Mouse
- One PS/2 Style Keyboard or AT Style Keyboard, plus a keyboard adapter

PC

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

- A VGA, SVGA or Multisync card.
- A 6-pin mini-DIN (PS/2 style) mouse port.
- Either a 6-pin mini-DIN (PS/2 Style) keyboard port with +5V DC on pin 4 and Ground on pin 3, or a 5-pin DIN (AT Style) keyboard port with +5V DC on pin 5 and ground on pin 4. *
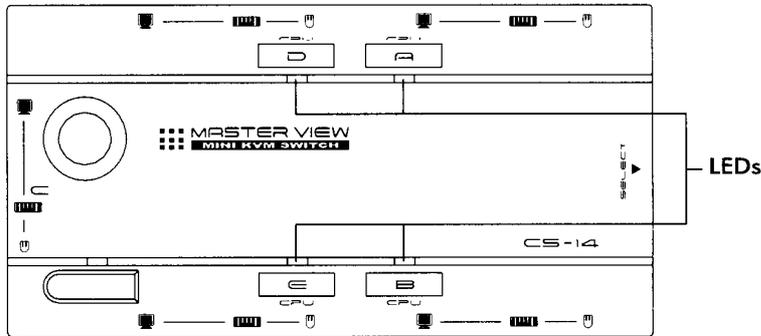 * See the note under Cables in the next section.

Cables

Although it is possible to use standard extender cables to connect the PCs to the Master View CS-14, for optimum signal integrity and to simplify the layout, we strongly recommend that you use high quality CS Custom Cables (Part Number 2L-1001P/C).

Note: The keyboard and mouse cables have PS/2 style connectors at each end:
- If your PC uses a standard AT style keyboard socket, you will need a PS/2-to-AT keyboard adapter (purchased separately), in order to plug the cable into the PC's keyboard port.
- The Master View CS-14 only supports PS/2 style mice - it does not support serial mice.
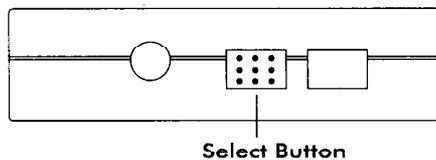
Introduction

Top View:

Selected LEDs:

Lights to indicate the currently selected port. Depending on the port's status, the LED may flash according to a specific pattern (see the table in the Appendix for details).
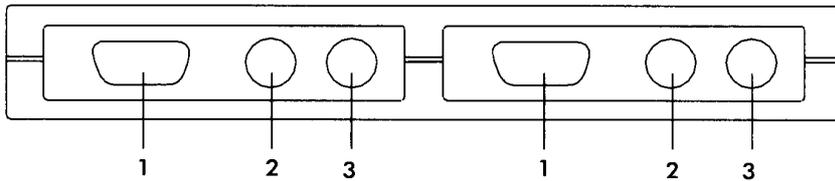
Right Side View:

Port Selection Button

Pressing this pushbutton switch cycles through the four CPU ports (A→B→D→E→A, etc.), to select the active port.

Select Button

CPU & Console Connectors:

There are three connectors for each of the four CPU ports, as well as for the console. Each connector is indicated by an appropriate icon
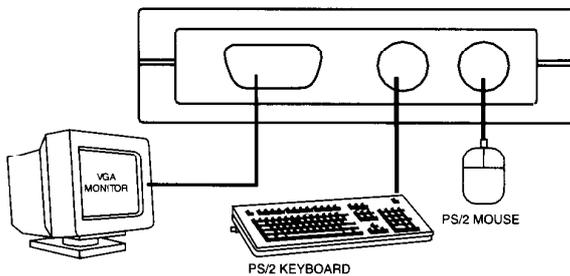

1. Video Connector
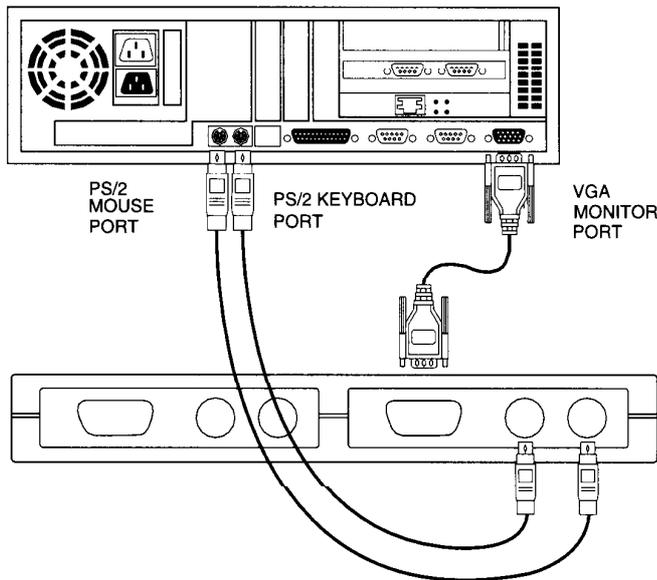2. PS/2 Style Keyboard Connector
3. PS/2 Style Mouse Connector

Installation

Before you begin, make sure that power to all the devices you will be connecting up (Master View CS-14, the monitor, and the connected PCs) have been turned off.

1. Plug the monitor, keyboard, and mouse into the Console port connectors of the Master View CS-14 unit.

2. Use the extender cables (as described in the *Hardware Requirements* section), to connect the monitor, keyboard and mouse ports of the PCs to the Master View CS-14 CPU Ports, as shown in the diagram below.

> **Note:** If your PCs use AT style connectors for the keyboard ports, refer back to the note in the Cables Section on p.3.

3. Turn on the power to the monitor and the connected PCs.

> **Note:** The CS-14's Power On default is to link to Port A. If the PC attached to Port A is inactive, the monitor will be blank so it may appear as if the unit is not functioning. This is not the case. Simply use one of the Port Selection methods (described below), to switch to an active PC on one of the other ports (B, D, or E).

Operation

Controlling the PCs in your Master View CS-14 installation from a single console could not be easier. Two port selection methods that provide instant access to the PCs are available:

• Manual Port Selection
• Hot Key Port Selection

Manual Port Selection

With Manual Port Selection, you simply press the Port Selection button on the Master View's right panel to cycle among the computers (A→B→D→E→A, etc.). The Selected LED on the top panel lights to indicate which port is active.

Hot Key Port Selection

Hot Key navigation allows you to select the active PC directly from the keyboard, instead of having to manually select it by pressing the Port Selection button. The Master View CS-14 provides several Hot Key navigation features. These are:

• Selecting the Active Port
• Auto Scan Mode
• Last/Next Mode

Note: All Hot Key operations begin by pressing and releasing the Alt+Ctrl+Shift combination. The combination must all be on the same side (i.e., LeftAlt+LeftCtrl+LeftShift or RightAlt+RightCtrl+RightShift).

Selecting the Active Port:

Each CPU port is assigned an alpha ID (CPU A, CPU B, CPU D, CPU E). A Port ID Number is associated with each letter (see table, below).You access the PC attached to a port by specifying the Port ID as part of the Hot Key combination as follows:

1. Press and release Alt+Ctrl+Shift
2. Key in the appropriate Port ID Number (1, 2, 3, or 4)
3. Press [Enter]

The Port ID numbers that correspond to the port letters are as follows:

Port Letter	Port ID Number
A	1
B	2
D	3
E	4

Auto Scan Mode:

The Master View CS-14's Auto Scan feature automatically switches among the four PCs at regular intervals so that you can monitor their activity without having to take the trouble of switching yourself. To invoke Auto Scan Mode, key in the following Hot Key combination:

1. Press and release Alt+Ctrl+Shift
2. Press and release 0 (zero)
3. Press [Enter]

Once scanning begins, it continues until you press the [Spacebar] to exit Auto Scan Mode. The port that was currently active at the time scanning stopped remains active.

Note: While Auto Scan Mode is in effect, none of the other keyboard keys will function. You must exit Auto Scan Mode by pressing the [Spacebar] in order to use the console for anything else.

Last / Next Mode:

The Last/Next feature enables you to quickly switch back and forth between computers in order to monitor them manually, instead of using Auto Scan Mode. This method lets you dwell on a particular port for as long or as little as you like - as opposed to Auto Scan Mode, which switches after a fixed interval. To invoke Last/Next Mode, key in the following Hot Key combination:

1. Press and release Alt+Ctrl+Shift
2. Press and release 9
3. Press [Enter]

Once Last/Next Mode is active pressing the left Shift key (LShift), switches to the previous computer (from the currently active one); pressing RShift switches to the next computer in the installation.

Note: While Last/Next Mode is in effect, none of the other keyboard keys will function. You must exit Last/Next Mode by pressing the [Spacebar] in order to use the console for anything else.

Appendix

SELECTED LED Display:

Activity	Meaning
Off	Port is not selected.
On (Steady)	Port is connected to an active PC.
Flashing (On and Off equal)	Port is connected to an active PC and is being accessed in Auto Scan mode.
Flashing (On long; Off short)	Port is connected to an active PC and is being accessed in Last/Next mode.

Specifications

PC Connections		4
Port Selection		Push Button Switch Hot Keys
LEDs		4 Selected
Connectors	Keyboard	1 x 6 pin mini-DIN female (PS/2 style) - Console 4 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Mouse	1 x 6 pin mini-DIN female (PS/2 style) - Console 4 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Video	1 x HDB-15 female (std. VGA/SVGA) - Console 4 x HDB-15 male (std. VGA/SVGA) - CPU Ports
Operating Temperature		5 ~ 40°C
Storage Temperature		-20 ~ 60°C
Humidity		0 ~ 80% RH, Noncondensing
Enclosure		Plastic
Weight		250 g
Dimensions (L x W x H)		170 x 87 x 28.5 mm

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	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.	Turn off the PCs and the Master View CS-14. Wait five seconds; turn the Master View unit on; then turn the PCs on.
	Master View is in Auto Scan Mode or Last/Next Mode.	Press the [Spacebar] to exit Auto Scan or Last/Next Mode.
Pressing *Hot Keys* Gets No Response.	Selected port connects to a powered Off computer.	Change the port manually by pressing the appropriate Port Selection switch.
		Resend the *Hot Key* command selecting a port that has a powered On computer attached.
	Hot Key sequence input incorrectly.	Resend the *Hot Key* command - press and release each key in the sequence individually: [Ctrl] then [Shift] then [Alt] then the Port ID number, then [Enter].
	Master View is in Auto Scan Mode or Last/Next Mode.	Press the [Spacebar] to exit Auto Scan or Last/Next Mode.

Symptom	Cause	Symptom Cause Action
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.
	Use of Mouse Port Adapters.	This unit is designed to only work with PS/2 mice and computers with PS/2 type mouse ports. PS/2 mouse signals and serial mouse signals are different - adapters will not convert the signals - therefore, the computer must be equipped with a PS/2 type mouse port. Serial mouse ports with adapters cannot be used.
	Mouse needs to be reset.	Unplug the mouse from the Console Keyboard Port, then plug it back in.
	Master View needs to be reset.	Turn off the PCs and the Master View CS-14. Wait five seconds; turn the Master View unit on; then turn the PCs on.
	Mouse set to Serial Mode.	Some mice can be set to act as either a PS/2 or serial mouse. Make sure the mouse is set to PS/2 mode.
	Incorrect Mouse Driver.	Check your *Device Manager* to be sure that the correct driver for your mouse (obtained from the manufacturer, or supplied by the operating system), has been installed. Because of the wide variety of mouse driver standards for the modern series of mice (the ones with the extra buttons and wheels), the CS-14 only supports all the extra features of the Microsoft Intellimouse. It supports the scrollwheel function of most other mice.

Symptom	Cause	Symptom Cause Action
Video Problems.	Resolution and/or Bandwidth set too high.	The Master View CS-14 supports VGA, SVGA, Multisync, and XGA (interlaced), with resolutions of up to 1280x1024 @ 80 Hz. The maximum bandwidth is 150 MHz.
	Cable quality not good enough.	We strongly recommend that you use high quality cables. Using high quality cables should eliminate possible video problems.

* The Master View CS-14 is designed to work with AT and PS/2 keyboards. Older XT (84 key) and some older AT keyboards (those with the function keys on the side), will not work.

** Some Notebook computers, notably the IBM Thinkpad and Toshiba Tecra, have trouble working with the Master View CS-14 when their mouse and keyboard ports are used simultaneously. To avoid this problem, only connect the mouse port or the keyboard port to the Master View unit. If you connect the mouse port, you will need to use the notebook's keyboard when the notebook becomes the active computer.

Radio & TV Interference Statement

WARNING!!! 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. This equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Limited Warranty

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