



USER'S MANUAL

CS-142

Read this guide thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit and/or any devices that connect to it.

This package contains:

- 1 Master View CS-142 KVM Switch
- 2 KVM Custom Cable Sets
- 1 PS/2-to-Serial Mouse Adapter
- 1 PS/2-to-PC/AT Keyboard Adapter
- 1 User Manual

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Overview

The Master View CS-142 KVM (Keyboard, Video, Mouse), Switch is a control unit that allows access to two computers 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-142, you can easily access two computers in a cost effective manner.

Setup is fast and easy; plugging cables into their appropriate ports is all that is entailed. There is no software to configure, so there is no need to get involved in complex software installation routines or be concerned with incompatibility problems. Since the Master View CS-142 intercepts keyboard input directly, it works on any hardware platform and with all operating systems.

The Master View CS-142 provides two convenient methods to access the computers connected to the system: using the push button *Selection* switch located on the unit's top panel; and entering *Hot Key* combinations from the keyboard.

There is no better way to save time and money than with a Master View CS-142 installation. By allowing a single console to manage both of the attached PCs, the Master View CS-142 eliminates the expense of purchasing a separate keyboard, monitor, and mouse for each PC. 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

- Easy to Install - No Software Required - Connecting Cables 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
- Hot Pluggable
- Caps Lock, Num Lock, and Scroll Lock States are Saved and Restored When Switching
- LED Display For Easy Status Monitoring
- Mouse Protocol Conversion - Control both PC/AT and PS/2 PCs With One PS/2 Mouse
- Superior Video Quality - Ultra High 180 MHz Bandwidth Supports Up To 1920 x 1140 Resolution
- Saves Time, Space, Power, and Equipment Costs
- Non-powered

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

PC

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

- A VGA, SVGA or Multisync card.
- Either a 6-pin mini-DIN (PS/2 style), or DB-9 (standard serial), 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.

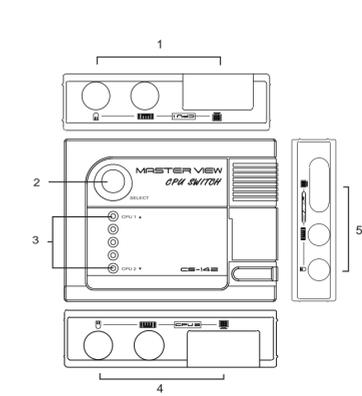
Cables

Although it is possible to use standard extender cables to connect the PCs to the Master View CS-142, for optimum signal integrity and to simplify the layout, we strongly recommend that you use the high quality KVM Custom Cables that are provided as part of the package.

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 to use the PS/2-to-AT keyboard adapter (Part No. 2A-106) provided with this unit in order to plug the cable into the PC's keyboard port.
- If your PC uses standard serial connectors for the mouse ports you will need to use a PS/2-to-Serial adapter (Part No. 2A-105, provided with this package), in order to plug the cable into the PC's mouse port.
- Only one keyboard and one mouse adapter are provided with this package. If both of your computers require the use of keyboard and mouse adapters, you will have to purchase the additional adapters separately. Any standard keyboard adapter will work, but the mouse adapter requires the use of our Part No. 2A-105.
- Because of the wiring and pin assignments, you cannot use a Serial-to-PS/2 adapter at the end that plugs into the CS-142. Therefore, attempting to use a standard serial extender cable with adapters at both ends will fail.

Introduction



- CPU Port 1 Connector Ports**
The extender cables that connect back to the video, keyboard and mouse ports on the computer you are designating as Computer 1 plug in here. Each port is identified by an appropriate icon.
- Port Selection Button**
Pressing the Selection Button switches access back and forth between the PCs. The Selected LED lights to indicate which port is the active one.

- 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).
- CPU Port 2 Connector Ports**
The extender cables that connect back to the mouse, keyboard, and video ports on the computer you are designating as Computer 2 plug in here. Each port is identified by an appropriate icon.
- Console Connector Ports**
Your mouse, keyboard and monitor cables plug in here. Each port is identified by an appropriate icon.

Installation

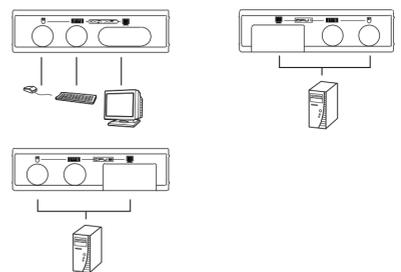
Before you begin, make sure that power to all the devices you will be connecting up have been turned off.

- Plug the monitor, keyboard, and mouse into the Console port connectors of the Master View CS-142 unit.
- 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-142 CPU Ports, as shown in the diagram below.

Note: If your PCs use AT style connectors for the keyboard and mouse ports, refer back to the note in the Cables Section on p. 4.

3. Turn on the power to the connected PCs.

Note: The CS-142's Power On default is to link to the first computer you turn on.



Operation

Controlling both PCs in your Master View CS-142 installation from a single console could not be easier. Two port selection methods that provide instant access to either PC 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 top panel to switch back and forth between computers. 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-142 provides several *Hot Key* navigation features:

- Selecting the Active Port
- Auto Scan Mode

Selecting the Active Port:

You can toggle between the two PCs by pressing and releasing the left or right Ctrl key twice [Ctrl]+[Ctrl].

Note: The combination must be on the same side (Left [Ctrl]+[Ctrl], or Right [Ctrl]+[Ctrl]).

Auto Scan Mode:

The Master View CS-142's *Auto Scan* feature automatically switches between the two PCs 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, press and release the left Shift key, then press and release the right Shift key (Left [Shift]+Right [Shift]).

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.

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.

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*	Keyboard needs to be reset Master View needs to be reset Master View is in Auto Scan Mode	Unplug the keyboard from the Console Keyboard Port, then plug it back in. Turn off the PCs, wait five seconds; then turn the PCs on. Press the [Spacebar] to exit Auto Scan Mode.
Mouse Not Responding**	Mouse needs to be reset Master View needs to be reset Mouse in unsupported mode	Unplug the mouse from the Console Keyboard Port, then plug it back in. Turn off the PCs. Wait five seconds; then turn the PCs on. The Master View CS-142 does not support some combo mice (with extra buttons and wheels) which can be used as either a PS/2 or serial mouse when they are in serial mode - switch the mouse to PS/2 mode if you wish to use the extra buttons/wheels.
Video Problems	Resolution and/or Bandwidth set too high Cable quality not good enough	The Master View CS-142 supports VGA, SVGA, Multisync, and XGA (interlaced), with resolutions of up to 1920x1140 Hz. The maximum bandwidth is 180 MHz. We strongly recommend that you use the high quality cables provided with this package. Using high quality cables should eliminate possible video problems.

* The Master View CS-142 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-142 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 you switch to make the notebook the active computer.

Specifications

Power Consumption	DC 9V 80mA (max)
PC Connections	2
Port Selection	Push Button Switch; Hot Keys
LEDs	2
Connectors	Keyboard
	1 x 6 pin mini-DIN female (PS/2 style) - Console
	2 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Mouse
	1 x 6 pin mini-DIN female (PS/2 style) - Console
	2 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Video
	1 x HDB-15 female (std. VGA/SVGA) - Console
	2 x HDB-15 male (std. VGA/SVGA) - CPU Ports
Scan Interval	5 Seconds
Operating Temperature	5° - 40° C
Storage Temperature	-20° - 60° C
Humidity	0 - 80% RH, Noncondensing
Enclosure	Plastic
Weight	190 g
Dimensions (L x W x H)	130x100x35 mm

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 B 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

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.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and especially 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 updates. For further inquiries please contact your direct vendor.