



USER'S MANUAL

CS-912/912C

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-912 KVM Switch
- 2 KVM Custom Cable Sets (912C)
- 1 User Manual

©Copyright 1999 ATEN® International Co., Ltd.

Manual Part No.: PAPE-3364-100

Printed in Taiwan 10/1999

All brand names and trademarks are the registered property of their respective owners.

Table of Contents

- Overview
- Features
- Hardware Requirements
 - Console
 - PC
 - Cables
- Introduction
- Installation
- Operation
 - Manual Port Selection
 - Hot Key Port Selection
- Appendix
 - LED Display
 - Troubleshooting
 - Specifications
 - Radio & TV Interference Statement
 - Limited Warranty

Overview

The Master View CS-912 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-912, 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 installation routines or be concerned with incompatibility problems. Since the Master View CS-912 intercepts keyboard input directly, it works on any hardware platform and with all operating systems.

The Master View CS-912 provides two convenient methods to access the computers connected to the system: using the push button *Selection* switch located on the unit's side 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-912 installation. By allowing a single console to manage both of the attached PCs, the Master View CS-912 eliminates the expense of purchasing a separate keyboard, monitor, and mouse for each PC. Additionally, it saves 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
- Hot Pluggable
- Compatible With All Operating Platforms
- Caps Lock, Num Lock, and Scroll Lock States are Saved and Restored When Switching
- LED Display For Easy Status Monitoring
- Superior Video Quality - Ultra High 180 MHz Bandwidth Supports Up To 1920 x 1440 Resolution
- Saves Time, Space, Power, and Equipment Costs
- Non-powered
- Supports DDC, DDC2, DDC2B

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.
- 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.*

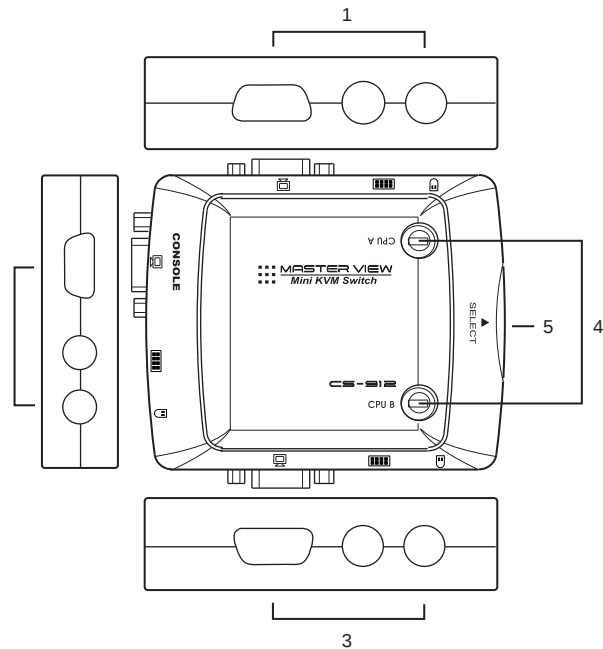
* See the note under Cables in the next section.

Cables

Although it is possible to use standard extender cables to connect the PCs to the Master View CS-912, 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 of CS-912C.

- 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 a PS/2-to-AT keyboard adapter (Part No. 2A-106 or any standard keyboard adapter), in order to plug the cable into the PC's keyboard port.
 - The CS-912 only supports PS/2 style mice - it does not support serial mice.

Introduction



- CPU Port A Connector Ports**
The extender cables that connect back to the mouse, keyboard, and video ports on the computer you are designating as Computer A 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.

- CPU Port B Connector Ports**

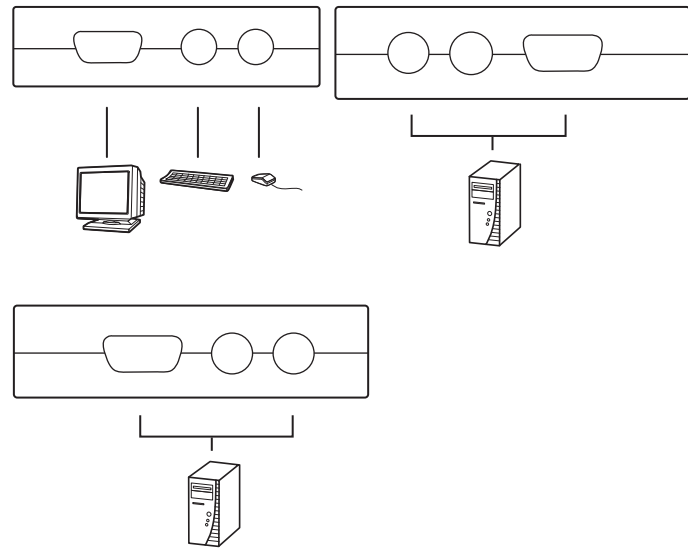
The extender cables that connect back to the video, keyboard and mouse ports on the computer you are designating as Computer B plug in here. Each port is identified by an appropriate icon.

- LEDs**
Lights when the port it corresponds to is 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).
- Port Selection Switch**
Pressing this push button switch toggles access back and forth between the PCs. The Selected LED lights to indicate which port is the active one.

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-912 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-912 CPU Ports, as shown in the diagram below.
Note: If your PCs use AT style connectors for the keyboard, refer back to the note in the Cables Section on p. 4.
- Turn on the power to the connected PCs.
Note: The CS-912's Power On default is to link to the first computer you turn on.



Operation

Controlling both PCs in your Master View CS-912 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 side 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-912 provides two *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-912'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

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	Unplug the keyboard from the Console Keyboard Port, then plug it back in.
	Master View needs to be reset	Turn off the PCs. Wait five seconds; then turn the PCs on.
	Master View is in Auto Scan Mode	Press the [Spacebar] to exit Auto Scan Mode.
Mouse Not Responding**	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. Wait five seconds; then turn the PCs on.
	Mouse in unsupported mode	Some mice can be set for PS/2 or serial mode. The Master View CS-912 does not support serial mice. Make sure the mouse is set to PS/2 mode. Some of the newer mice (with extra buttons and wheels) that come with their own drivers are not supported. Try using a regular mouse and a generic mouse driver (like the ones that come with the operating system).
Video Problems	Resolution and/or Bandwidth set too high	The Master View CS-912 supports VGA, SVGA, Multisync, and XGA (interlaced), with resolutions of up to 1920x1440 Hz.
	Cable quality not good enough	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-912 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-912 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 is the active computer.

Specifications

Power Consumption	DC 9V 80mA (max.)	
PC Connections	2	
Port Selection	Push Button Switch; Hot Keys	
LEDs	Selected	
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
		5 Seconds
Scan Interval	5° - 40° C	
Operating Temperature	-20° - 60° C	
Storage Temperature	0 ~ 80% RH, Noncondensing	
Humidity	Plastic	
Enclosure	140 g	
Weight	100 x 85 x 27 mm	
Dimensions (L x W x H)		

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.

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。