SUN CONSOLE CONVERTER CABLE

USER MANUAL

CV-131A / CV131B

Read this guide thoroughly and follow the installation and operation procedures carefully in order to prevent any damage to the CV-131A / CV-131B and/or any devices that connect to it.

This package contains:

- 1CV-131A or CV-131B SUN Signal Converter Cable
- 1User Manual

If anything is damaged or missing, contact your dealer.

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Note: 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.

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Overview

The CV-131A and CV-131B are PS/2 to SUN interface converters. They translate PS/2 keyboard, PS/2 mouse signals to Sun keyboard and mouse signals, allowing you to easily and conveniently integrate Sun servers into an IBM compatible KVM (keyboard, video, mouse) installation. All computers on the installation can be controlled from a single PC style console.

The CV-131A / CV-131B fully supports ATEN PS/2 KVM switches. ATEN KVM switches are designed in two basic types: Those that use specially designed 15 pin Special High Density connectors (SPHD-15) to transmit the KVM date between the switch to the computers; and those that use statndard PS/2 and VGA connectors.

The CV-131A and CV-131B are identical in their functions, except that the CV-131A is for use with SPHD-15 switches, whereas the CV-131B is designed for PS/2-VGA switches.

The CV-131A / CV-131B both take advantage of the USB bus to transfer keyboard and mouse input to the SUN system. This provides fast, reliable, data transfers, and makes for a neat and tidy installation.

Mulitiple keyboard language support (American English, Japanese, French) is built in. Hotkeys, rather than complicated DIP switches, are used to set up the keyboand language configuration.

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Features

- Compatible with Sun Systems
- Composite Sync Video support
- Hotkey keyboard language selection
- Bus powered - external power adapter not required
- Easy installation - no software required
- Keyboard and mouse emulation - computers boot even when the KVM focus is elsewhere
- Supports PS/2 mice and Microsoft Intelimouse
- Supports hot plugging of KVM switch ports
- Supports high resolution video - including Sun 1152 x 900, 1280 x 1024, and 1600 x 1200

System Requirements

- Sun Blade Server 2000/100 (Sun Solaris 8)
- HDB-15 (PC style) video port installed on the system
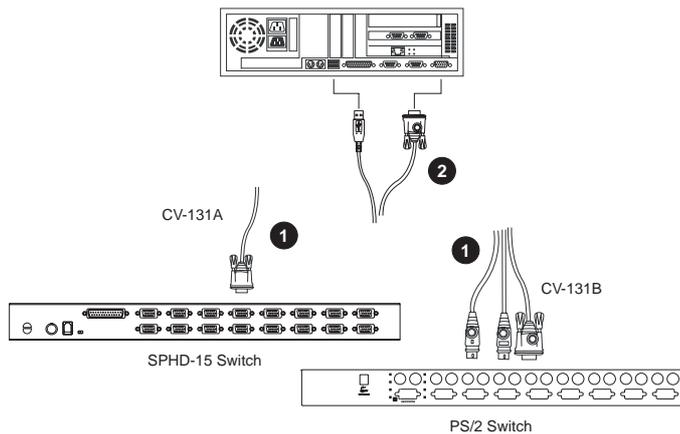- USB Host Controller installed on the system

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Installation

Installation is simply a matter of plugging in the cables. Refer to the installation diagram as you perform the steps below.

Note: Make sure that all the equipment to be connected up is powered Off and properly grounded.

1. Plug the KVM switch end of the converter cable into any available CPU port on the KVM switch.

   * For SPHD-15 type switches, plug in the CV-131A's single SPHD-15 connector.

   * For PS/2 type switches, plug the CV-131B's keyboard, monitor, and mouse connectors into their respective ports in the CPU section of the switch.

   Note: SUN workstations use a three button mouse. To fully emulate its functions, you need to use a three button PS/2 mouse.

2. Plug the other end of the cable into the Sun station's USB and video ports.

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Hotkey Operation

Hotkeys are used to select the keyboard layout, reset the USB, select the CV-131A / CV-131B's operating platform, and obtain system setting information.

The Hotkey entry method is as follows:

1. Press and hold either Ctrl key
2. Press and release the F12 Function key
3. Press and release the appropriate hotkey (see below)
4. Release the Ctrl key

> **Note:** 1. After changing the keyboard language layout, you must restart your system.
> 2. Be sure that a text editor is running before using the system setting information hotkey.

The following table shows the Hotkeys and their functions:

Hotkey	Function
Ctrl + F12, 3, 3	Selects the American English keyboard layout
Ctrl + F12, 0, 8	Selects the French keyboard layout
Ctrl + F12, 1, 5	Selects the Japanese keyboard layout
Ctrl + F12, F5	USB reset
Ctrl + F12, F3	Selects the Sun system platform
Ctrl + F12, F4	Provides system setting information

The system setting information hotkey returns a code that looks similar to the example, below:

```
O 03 L 33
```

Where **O 03** represents the Sun operating platform, and **L 33** represents the American English keyboard language.

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Sun Keyboard Emulation

The PS/2 (101/104) key keyboard can emulate the functions of the SUN keyboard when the Control key (Ctrl) is used in conjunction with other keys. The corresponding functions are shown in the table below.

Note: When using Control Key ([Ctrl]) combinatons, press and release the Control key, then press and release the activation key.

PS/2	SUN
[Ctrl] [T]	Stop
[Ctrl] [F2]	Again
[Ctrl] [F3]	Props
[Ctrl] [F4]	Undo
[Ctrl] [F5]	Front
[Ctrl] [F6]	Copy
[Ctrl] [F7]	Open
[Ctrl] [F8]	Paste
[Ctrl] [F9]	Find
[Ctrl] [F10]	Cut
[Ctrl] [1]	▭ ◀
[Ctrl] [2]	◑- ◀
[Ctrl] [3]	◑+ ◀))
[Ctrl] [4]	☾
[Ctrl] [H]	Help

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TROUBLESHOOTING

Problem	Cause	Action
Wake up function doesn't work.	System not responding to mouse or keyboard input.	Press the POWER key ([Ctrl] [4]). If the system still fails to respond, Click the left and right mouse buttons at the same time or press [Esc].
Keyboard and mouse stop responding after hot plugging USB devices	USB needs to be reset.	There are two methods that can be used to reset the USB: 1. Unplug and replug the USB cable from the computer's USB port; 2. Press the USB Reset Hotkey combination (see p. 4).
Video problems.	Wrong display resolution for monitor.	Some monitors cannot support a display resolution of 1152 x 900. Set the resolution to either 1280 x 1024, or 1024 x 768.

SPECIFICATIONS

Function		CV-131A	CV-131B
Connectors	To Switch	1 x SPHD -15 M	2 x 6 pin mini DIN M 1 x HDB-15 F
	To Sun	1 X HDB-15 M 1 x USB Type A M	
LEDs		1 Power	
Emulation		Sun Keyboard and Mouse	
Resolution		Sun specific 1152 x 900; 1280 x 1024; 1600 x 1200	
Environment		Operating Temperature: 0 - 50° C	
		Storage Temperature: -20 - 60° C	
		Humidity: 0 - 80% RH Noncondensing	
Cable Length		1.8m	
Housing		Plastic; 10.65 x 4.2 x 2.31 cm	
Weight		0.2kg	0.24kg

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