

PS/2 TO SUN USB CONSOLE CONVERTER



USER MANUAL

CV-131

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

This package contains:

- 1 CV-131 PS/2-to-SUN USB Console Converter
- 1 Custom KVM Cable (1.2m)
- 1 User 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-131 is a PS/2 to SUN interface converter that translates PS/2 keyboard, PS/2 mouse, and PC video signals to Sun keyboard, mouse, and video signals. In this way, the CV-131 allows you to control a USB enabled SUN workstation from an IBM compatible KVM (keyboard, video, mouse) console.

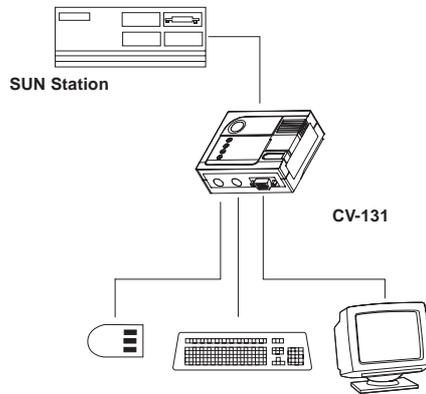
The CV-131 improves on previous designs by taking advantage of the USB bus to transfer keyboard and mouse input to the SUN system. This provides fast, reliable, data transfers, and makes for a neat and tidy installation.

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

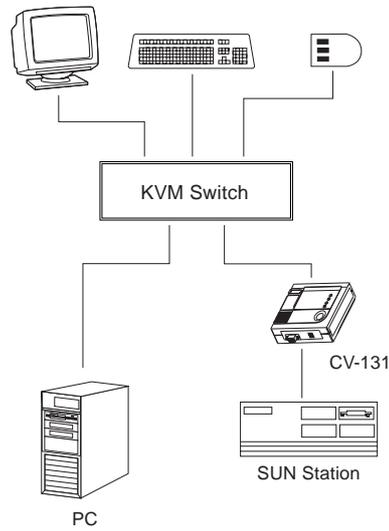
In addition, the CV-131 fully supports ATEN PS/2 KVM switches, so you can use it to easily integrate Sun workstations into your PC KVM network. All computers on the installation can be controlled from a single PC style console.

The CV-131 also supports ATEN's PS/2 Console Extender products, allowing you to control your Sun workstation from a PC console located up to 150m away.

**SAMPLE CONFIGURATAIONS
STANDALONE:**



KVM:



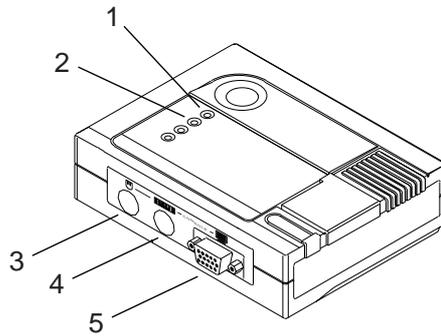
FEATURES

- ◆ USB 1.1 specification compliant
- ◆ Compatible with Sun Systems
- ◆ Composite Sync Video support
- ◆ Hotkey keyboard language selection
- ◆ Bus powered - external power adapter not required
- ◆ Built-in mouse and keyboard wake up function
- ◆ Easy installation - no software required
- ◆ Supports PS/2 mouse and Microsoft Intelimouse
- ◆ Supports ATEN PS/2 KVM switch and PS/2 console extender products

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

CONSOLE SIDE COMPONENTS



Your console devices (mouse, keyboard, monitor) plug into this side of the CV-131.

1. Power LED

Lights to indicate the unit is receiving power and is ready to operate.

2. Data LED

Flashes to indicate Keyboard or Mouse data is being transmitted.

3. Mouse Port

Your PS/2 mouse plugs into this connector.

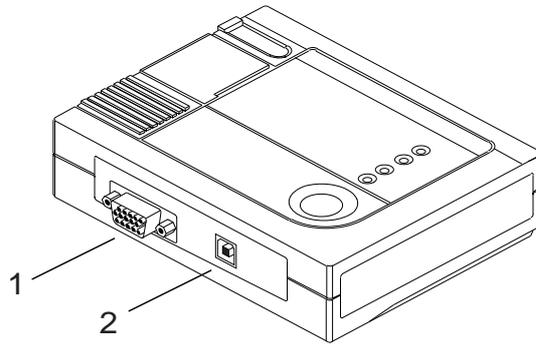
4. Keyboard Port

Your PS/2 keyboard plugs into this connector.

5. Monitor Port

Your monitor plugs into this connector.

CPU SIDE COMPONENTS



The cables that connect the CV-131 to the computer or KVM switch plug into this side of the device.

1. Video Port

The female end of the VGA cable that links the CV-131 to the computer's video port plugs in here.

2. USB Port

The **B Connector** end of the USB cable that links the CV-131 to the computer's USB port plugs in here.

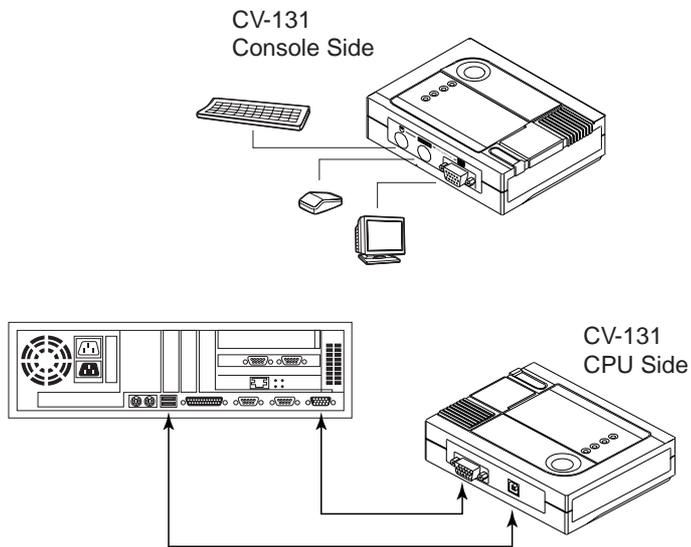
INSTALLATION

Installation is simply a matter of plugging in the cables. For standalone installation, refer to the diagram on the next page. For KVM installation, refer to the diagram on p. 8.

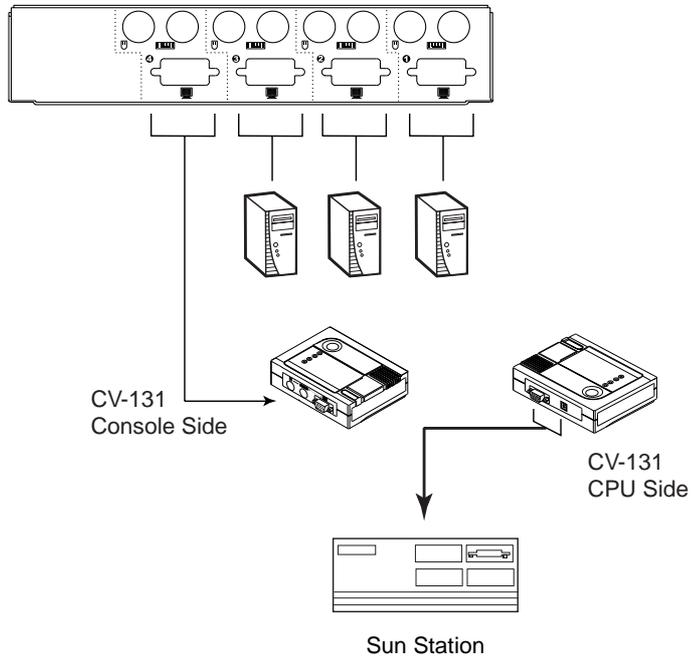
1. Make sure that all the equipment to be connected up is powered Off.
2. Plug the cables from the console devices (keyboard, monitor, mouse), into their ports on the Console side of the CV-131.
Note:
 1. If you are using the CV-131 with a KVM switch plug the KVM cables from the CPU ports of the switch into the Console side of the CV-131.
 2. SUN workstations use a three button mouse. To fully emulate its functions, you need to use a three button PS/2 mouse.
3. Plug the **B Connector** end of a USB cable into the USB port on the CPU side of the CV-131. Plug the A Connector end of the cable into the computer's USB port.
4. Plug the female end of a VGA cable into the VGA connector on the CPU side of the CV-131. Plug the male end of the cable into the computer's video port.

Note: Use of substandard cables may damage the connected devices or degrade overall performance. For optimum signal integrity and to simplify the layout, we strongly recommend that you use the high quality integrated cable included with this package.

STANDALONE INSTALLATION



KVM INSTALLATION



HOTKEY OPERATION

Hotkeys are used to select the keyboard layout, reset the USB, select the operating platform that the CV-131 works under, 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 invocation keys (see the table, below)
4. Release the Ctrl key

- Note:**
1. After changing the keyboard language layout, you must restart your system in order for the change to take effect.
 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

SYSTEM INFORMATION

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

O 03 L 33

Where **O** represents the operating platform, and **L** represents the keyboard language. The codes for the operating platform and keyboard language are provided in the table on page 9.

SUN WAKE UP FUNCTION

Normal use of either the mouse or keyboard on Sun systems should initiate the wake up function. If the system fails to respond, 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].

USB RESET

After hot plugging USB devices, if you find that the keyboard and mouse stop responding, there are two methods that can be used to reset them:

- ◆ Unplug and replug the USB cable
- ◆ Press the USB Reset Hotkey combination (see p. 9).

SUSPEND MODE PROBLEM

In some cases, when the CV-131 is connected to a KVM switch, Windows does not wake up from suspend mode when it receives keyboard or mouse input. If this occurs, you should disable suspend mode.

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]) combinations, 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

SPECIFICATIONS

Function		Specification
Console Connectors	Keyboard	1 x 6 pin mini DIN female
	Monitor	1 X HDB-15 female
	Mouse	1 x 6 pin mini DIN female
CPU Connectors	USB	1 x Type B
	Video	1 X HDB-15 male
LEDs	Power	1 x Orange
	Data	1 x Green
Transfer Rate	12 Mbps	
USB Specs	USB 1.1 compatible	
Power Mode	Bus powered	
Environment	Operating Temperature: 0 - 50° C	
	Storage Temperature: -20 - 60° C	
	Humidity: 0 - 80% RH Noncondensing	
Housing	Plastic	
Weight	120g	
Dimensions (L x W x H)	10 x 8 x 3.5 cm	

TROUBLESHOOTING

Problem	Cause	Action
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.

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.

Notes:

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