

# PS/2 KEYBOARD & MOUSE TO USB ADAPTER



## USER MANUAL

# UC-100KMA

Read this guide thoroughly and follow the installation and operation procedures carefully in order to prevent any damage to the units and/or any devices that connect to them.

This package contains:

- 1 UC-100KMA PS/2 Keyboard & Mouse to USB Adapter
- 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

Universal Serial Bus (USB) port technology has emerged in response to the proliferation of external peripheral devices (keyboards, mice, scanners, digital cameras, removable drives, etc.), that are increasingly being connected to the latest generation of PCs. The USB is much faster than conventional bus ports (i.e., serial, parallel, PS/2), and since it does not require any IRQs, the problem of IRQ conflict is eliminated, allowing many more devices to be attached to the system.

The UC-100KMA is a PS/2-to-USB Keyboard and Mouse interface converter. It allows PS/2 type keyboards and mice to connect to USB enabled PCs, notebooks, laptops, or handheld computing devices via the USB bus instead of using conventional bus technology.

An advantage of this for notebooks, for example, is that now an external mouse and keyboard can be connected up at the same time without causing conflict.

**Note:** Since most computers only have one or two USB ports, USB hubs are often used to provide additional ports so that numerous USB peripheral devices can be connected up at the same time.

The UC-100KMA improves on previous designs by including easy to use Hotkeys for selecting your computer's operating system and keyboard language input.

For further convenience - especially to users of notebooks, laptops, and handhelds - the UC-100KMA Adapter derives its operating power from the Universal Serial Bus itself, so no bulky external power supply needs to be taken along. And because it is a USB Specification compliant device, the UC-100KMA supports energy-saving suspend and resume operations.

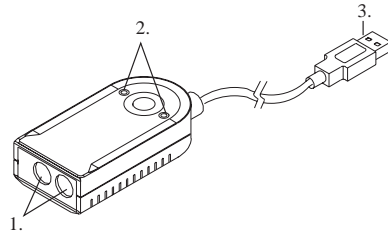
## **FEATURES**

- ◆ Two PS/2 Devices (Keyboard and Mouse) to USB Interface Converter
- ◆ Supports PS/2 Mouse and Microsoft IntelliMouse
- ◆ Hotkey selection for OS and keyboard language
- ◆ Supports:
  - Windows: 98SE / 2000 / Me / XP;
  - Apple(OS 8.6 or higher): G3 / G4 / iMac systems;
  - Sun Blade Servers (Sun Solaris 8): 2000 / 100;
  - Linux
- ◆ Built in Mouse Wake Up Function
- ◆ USB 1.1 Specification Compliant
- ◆ Easy Installation - No Software Required
- ◆ Bus Powered - External Power Adapter Not Required
- ◆ Compatible with KVM Devices

## **SYSTEM REQUIREMENTS**

- ◆ OS:
  - Windows: 98SE / 2000 / Me / XP or
  - Apple(OS 8.6 or higher): G3 / G4 / iMac systems or
  - Sun Blade Servers (Sun Solaris 8): 2000 / 100 or
  - Linux
- ◆ USB Host Controller installed on the system.

## TOP VIEW



### 1. Mouse and Keyboard Ports

The cables from the PS/2 Mouse and PS/2 Keyboard plug in here. The ports are marked with an icon to indicate which is which.

### 2. Mouse and Keyboard LEDs

The LED lights when its corresponding peripheral (mouse or keyboard) is connected to the UC-100KMA. It flashes when its corresponding peripheral is transmitting data packets.

### 3. USB A Type Connector

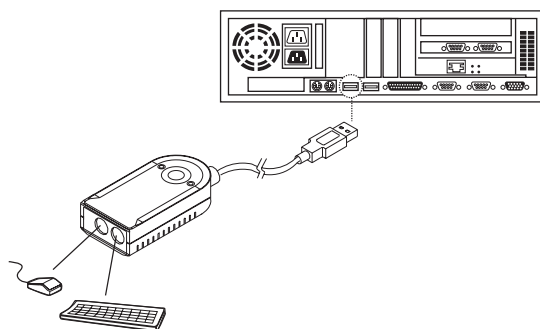
This connector plugs into the computer's USB port, or into a USB Hub that is connected back to the computer.

## INSTALLATION



1. Before you begin, make sure that power to all the devices you will be connecting up have been turned off. You must unplug the power cords of any computers that have the *Keyboard Power On* function. Otherwise, the UC-100KMA will receive power from the computer.
2. To prevent damage to your equipment, make sure that all devices you will be connecting up are properly grounded.

## CONNECTING UP



1. Plug the PS/2 Mouse and PS/2 Keyboard into the appropriate connectors on the UC-100KMA adapter. The ports are marked with an icon to indicate which is which.
2. Plug the UC-100KMA's USB plug into the computer's USB port, or into a USB Hub that is connected back to the computer.
3. Power On the computer.

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**OPERATING PLATFORM  
CONSIDERATIONS:**

**WINDOWS 98SE:**

1. The first time you start up, Windows detects the UC100KMA's presence. Follow along with the Installation Wizard to install the appropriate driver for it.
2. There is no need to restart Windows once the driver has been installed.

**WINDOWS 2000:**

1. The first time you start up, Windows detects the UC100KMA's presence and automatically installs the appropriate driver for it.
2. Once the driver has been installed you must restart Windows in order for it to take effect.

**WINDOWS ME / XP:**

1. The first time you start up, Windows detects the UC100KMA's presence and automatically installs the appropriate driver for it.
2. There is no need to restart Windows once the driver has been installed.

**RED HAT LINUX:**

USB keyboard and mouse drivers have to be installed on the system before Red Hat Linux will work with the the UC-100KMA. If the drivers aren't already installed, do the following to install them:

1. With the computer powered off, plug a USB keyboard and mouse into its USB ports.
2. Power on the computer.

After the system installs the drivers, you can use the UC-100KMA at any time.

**MAC:**

The Mac can have both a UC100KMA attached keyboard and mouse and a Mac keyboard and mouse connected to the computer at the same time.

**SUN:**

The first time the Sun is run with the UC100KMA, it cannot have a Sun keyboard and mouse connected at the same time. After the first time, it can have a Sun keyboard and mouse attached at the same time.



## HOTKEY SETTINGS

Hotkeys are used to select the keyboard layout, reset the USB, select the operating platform that the UC-100KMA works under, and obtain system setting information.

- Note:**
1. Use the Hotkeys to specify your OS and keyboard language layout the first time you run your computer with the UC-100KMA (see the table, on p. 8).
  2. After changing the keyboard language layout, you must restart your system in order for the change to take effect.

## HOTKEY ENTRY METHOD

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, on p. 8).
4. Release the Ctrl key

## HOTKEY SUMMARY TABLE

The following table shows the Hotkeys and their functions:

Hotkey	Function
Ctrl + F12, F1	Selects the PC Compatible (Windows, Linux, etc. operating platform
Ctrl + F12, F2	Selects the Mac operating platform
Ctrl + F12, F3	Selects the Sun operating platform
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, 2, 5	Selects the Spanish keyboard layout
Ctrl + F12, F5	USB reset
Ctrl + F12, F4	Provides system setting information

**Note:** Be sure that a text editor is running before using the system setting information hotkey.

## **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 8.

## **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].

## **WINDOWS WAKE UP FUNCTION**

When the UC-100KMA is connected to a KVM switch, sometimes Windows does not wake up from suspend mode when it receives keyboard or mouse input. If this occurs, you should disable suspend mode.

## **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. 8).

## KEYBOARD EMULATION MAPPINGS

### Sun Keyboard:

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 Keyboard	Sun Keyboard
[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

**Mac Keyboard:**

The keyboard emulation mappings from the Mac keyboard to the PS/2 keyboards (101 key and 104 key), are listed in the table below.

**Note:** When using key combinatons, press and release the first key (Ctrl or Alt), then press and release the activation key.

PS/2	Mac Keyboard
[Shift]	Shift
[Ctrl]	Ctrl
[Win]	
[Ctrl] [1]	
[Ctrl] [2]	
[Ctrl] [3]	
[Ctrl] [4]	
[Alt]	L Alt/Option
[Prt_Sc]	F13
[Scroll Lock]	F14
[Desktop Menu]	=
[Enter]	Return
[Back Space]	Delete
[Ins]	Help
[Ctrl] [Win]	F15

## APPENDIX SPECIFICATIONS

Function		Specification
Connectors	USB	1 Type A Plug
	PS/2	1 Keyboard; 1 Mouse
Cable Length		30cm
OS Platforms		Windows98/98SE/2000/Me/XP; Apple G3/G4/iMac systems w/OS 8.6 or higher; Sun Blade servers 2000/100 (Sun Solaris 8); and Linux
Transfer Rate		12 Mbps
USB Specs		USB 1.1 compatible
Power Mode		Bus powered
Power Consumption		500mW
Operating Temperature		0 - 50° C
Storage Temperature		-20 - 60° C
Humidity		0 - 80% RH Noncondensing
Housing		Plastic
Weight		80g
Dimensions (L x W x H)		8.2 x 5.5 x 2.3 cm

**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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