9113H USB KEYBOARD USER'S GUIDE

Product Overview

This document describes the functional specification of standard **USB** keyboard and standard **USB Hub** keyboard. Its function is fully compatible with the **U**niversal **S**erial **B**us Specification Revision 1.1 as well as the **H**uman **I**nterface **D**evices (HID) class specification 1.1.

The **USB Hub** keyboard processes the keyboard input and interconnects with two or more downstream ports, which are for other USB devices to attach.

The chip in the **USB Hub** keyboard is a USB target device application, which follows the **HUB** specification in Chapter 11 and **USB Device Framework** defined in Chapter 9 of the USB Specification 1.1. It supports the device states of Attached, Powered, Default, Address, Configured and Suspended, Error recovery.

The **USB Hub** keyboard is a "high power, bus-powered device" instead of "self-powered device", that is the electrical power of this keyboard is supplied by the computer host, not by itself.

USB Interface Features:

- ✍ USB is a "must-have" feature in the current market.
- ✍ The instant way to expand your PC. You never to open your PC and you don't need to worry about add-in cards, DIP switch setting or IRQs.
- ✍ "Hot-swapping" feature: You don't even need to shut down and restart your PC to attach or remove a peripheral. Just plug it in and go!
- ✍ USB Hubs have additional ports that let you "daisychain" multiple devices together. Technically, you can connect up to 127 individual USB peripherals at one time in a PC system, such as: a digital joy-stick, a scanner, a set of digital speakers, a digital camera, a PC telephone, etc.

The ACPI Power Management Keys and Their Functions

System requirement:

- ✍ Microsoft? Windows? 98 operating system.
- ✍ The system supporting ACPI or APMII.
- ✍ ATX motherboard and ATX power supply.

The functions of the power management are specified and performed by Windows? 98 operating system, no vendor-specified driver is needed to use them, but the Windows? 98 operating system is necessary. There could be one or two or three ACPI power management keys on the keyboard, those functions are as follows.

Power off key: Power down the system.

Sleep key: Put the system to sleep.

Wake up key: Wake up or powers up the system.

Power key: (Single key with three functions above)

    ✍ Press this key and hold over four seconds to power down the system.

    ✍ Press this key and release it within four seconds to put the system to sleep.

    ✍ When the system is asleep or powered down, press this key and release it within four seconds to wake up or power up the system.

USB Cable, Plug Contact Numbering & Ports

USB keyboard has a cable for sub-channel device and a series A plug, which fully comply with the **USB** specification 1.1.

Contact Number	Signal Name	Comment		
1	VCC	Cable power		
2	- Data			
3	+ Data			
4	Ground	Cable ground	**USB plug**	**USB downstream ports**

PS/2 Mouse Connector Contact Numbering & Port *(if equipped)*

Contact Number	Signal Name		
1	Mouse data		
2	Reserved		
3	Ground		
4	Reserved		
5	+ 5VDC		
6	Mouse clock		**PS/2 port for mouse**

FCC GUIDELINES

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 instructions may cause harmful 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 to which the receiver is connected.
- ? Consult the dealer or an experienced radio/TV technician for help.
- ? Use only shielded cables to connect I/O devices to this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, (2) this device must accept any interference received, including interference that may cause undesired operation.

Information to User:

- ? *Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. Shielded interface cable, if any, must be used in order to comply with emission limits.*

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