# SILITEK CORPORATION

## **User Manual**

Keyboard Model: SK-2315

Version: 1

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WARNING: 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 radiated 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. Shielded interface cables must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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in Ubereinstimmung mit den Bestimmungen der BMPT-AmtsblVfg 243/1991 funk-entstort ist. Der vorschriftsmaBige Betrieb mancher Gerate (z.B. MeBsender) kann allerdings gewissen Einschrankungen unterliegen. Beachten Sie deshalb die Hinweise in der Bedienungsanleitung Dem Bundesamt fur Zulassungen in der Telekommunikation wurde das Inverkehrbringen dieses Gerates angezeigt und die Berechtigung Zur Überprüfung der Serie auf die Einhaltung der Bestimmungen eingeraumt.

## Silitek Corporation

Model: SK-2315

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- (1) Silitek Corp. reserves the right to make changes or improvements in the products described in this manual without notice at any time.
- (2) Silitek is a registered trademark of Silitek Corporation.

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Thank you for choosing this innovative product.

This keyboard is one of the SK-2315 series products, which are 104/105 keys enhanced keyboards for USB connector and its compatibles.

There are no software modifications or special interfaces needed. It can be used in Win 98 (Memphis) or OSR2.1 with keyboard driver. It uses the same as that described in the Personal Computer Guide to Operations Handbook you received with your Personal Computer.

#### **OPERATION**

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3.1 USB Connection This keyboard is designed to USB connection.
All data transfer follow USB protocol requirements.

3.2 Mode Indicators

There are three LEDs on the keyboard to indicate 'Caps Lock', 'Num Lock' and 'Scroll Lock'. The LEDs are 'toggled'. The first depression of the key turns on the LED. The second depression turns the LED off and so on. LEDs are off on power-up or software reset, but will flash during power-on initialization.

3.3 Type Ahead Capability

The keyboard has 16 keys type ahead capability. This means that you can depress 16 keys before host can receive. If more keys are pressed before the host allows keyboard output, the additional data will lost.

3.4 Typematic Delay and Repeat Rate With the exception of the Pause key, all keys are typematic. When a key is pressed and held down, the keyboard delays 0.5 sec. and begins sending a make code for that key at a rate of 10.9 characters per second. (The delay is called typematic Delay and the rate is called Repeat Rate.)

3.5 Pseudo N key The 'N' key roll-over capability where 'N' is the total number of keys on the keyboard 'N' key roll is the

### Roll-over Capability

number of keys that may be held depressed simultaneously and have the keyboard generate the appropriate code for each pressed and released key without keyboard interruption. Normally 'N' equal to two.

## 3.6 Diagnostic Test

The keyboard microprocessor will perform a diagnostic self-test after Power-up or after the host system signals the keyboard to perform a software Reset.

Initial steps are I/O port initialization, memory test on internal RAM, USB interface initialization, read and save vender options, keyboard initialization, timer 0 initialization, USB enumeration, PS/2 mouse initialization.

#### CABLE AND CONNECTOR

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The keyboard cable is a 5-ft. long cable. The keyboard cable is connected to the host unit through a USB connector. The following figure lists the connector pins and their signals.



signal name	contact number
vcc	1
data -	2
data +	3
ground	4

TECHNICAL DATA	5	

5.1 Electrical Input Power: +5 VDC, 500 mA max. Characteristic Power Consumption: 2.5 watts max.

5.2 Mechanical Total Travel: 3.5 +/- 0.4 mm Characteristics Pre-travel: 2.3 +/- 0.2 mm

Operating Life: 10 million cycles

Dimension: 417 \* 180 \* 40mm (W \* D \* H)

5.3 Environmental Operating Temperature: -0 C to 35 C Storage Temperature: -10 C to 50 C

Relative Humidity: under 95% non-condensing