# **User's Manual**

(M/N:SPR-8695TU)

Sejin Electron Inc.

# **FCC NOTICE**

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC FULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITION:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDERSIRED OPERATION.

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 communication. 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 difference from that to which the receiver is connected.
- Consult the dealer of an experienced radio/TV technician for help.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

#### Thanks for using SEJIN Mini-keyboard with track ball (MODEL:SPR-8695TU)

#### THE SEJIN Mini-keyboard with Track-ball

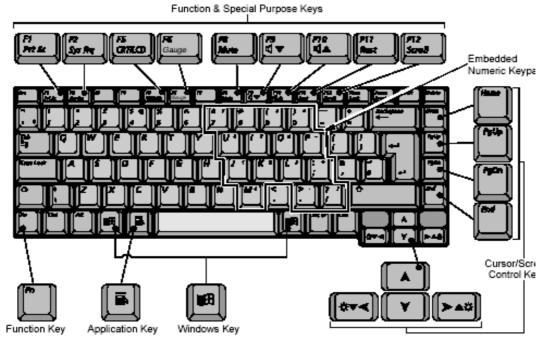
- Designed with the users in mind, it has a pleasant appearance and is Convenient to use.
- No extra power supply is required.
- It is compatible with the Microsoft Keyboard and Trackball

#### Mini-keyboard with Track-ball INSTALLATION

- Turn the power supply off to your computer.
- Check the USB keyboard/mouse port at the back of your computer and insert The connector at the end of the Mini key-board cables into the usb port.
- Turn the power supply on to your computer.

## Using the Mini-keyboard with track ball

you can have access to all the key functions of a full-sized keyboard.





Although the layout of the keys on your computer's keyboard is different from that on a desktop computer's keyboard, the keyboard feels like a full-sized keyboard when you use it.

The keys on the keyboard can be grouped into the following categories:

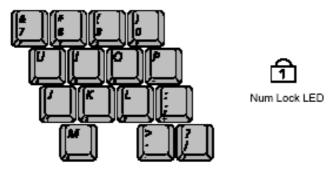
#### The keys on the keyboard can be grouped into the following categories:

- Full-sized Alphanumeric typewriter keys are arranged like a standard typewriter keyboard and are used for text entry. The Windows keys on either side of the spacebar open Windows menus and perform other special functions.
- Function keys, when pressed together with the key, enable special functions.
- Cursor and Screen control keys move the cursor. They may perform other functions, depending on your software.

To clean the computer keyboard, use slightly damp cotton swabs. Scrub the keys and the surface around the keys.

#### Using the Numeric KeyPad

Your keyboard includes a numeric keypad, which is a group of keys that you can set to type numbers and mathematical symbols, such as the plus sign. A number or symbol on the right corner of each keypad key shows its numeric function.



Press to turn on the embedded numeric keypad. The numeric functions of the keypad are enabled and the Num Lock LED turns on. (See "Reading the System Status Lights" on page 20 for the location of the Num Lock LED.)

While the numeric functions are enabled, you can temporarily return a key to its normal function by pressing and the key. For example to type the letter m, press + + , this operation displays the letter m.

To turn the numeric keypad off, press again. The Num Lock LED turns off.

#### Scope

This document provide a specifications for the Sejin standard USB MINI keyboard With trackball (Model No.: SPR-8695TU)

which is electrically compatible to IBM PC/AT and USB systems.

# **Environmental Requirement**

#### Ambient temperature and humidity(operation)

\* temperature :  $0 \sim 50_{\parallel} C$ 

\* humidity : 10%~85% RH

# Ambient temperature and humidity (storage)

\* temperature :  $-20 \sim +60_{||}C$ 

\* humidity : 10%~95 % RH

## **Electrical performance**

\*Voltage : DC 5V +/- 10%

\*Current : 170 mA(Max)

\*Contact resistance( sheet) : 800 ohm Max

\*Insulation resistance : 100M ohm Min(DC250V)

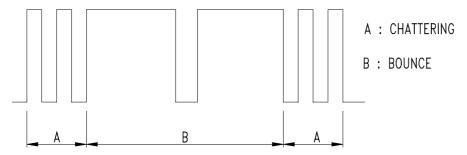
\*Withstand voltage : AC 150V/Min

\*Character and bounce:

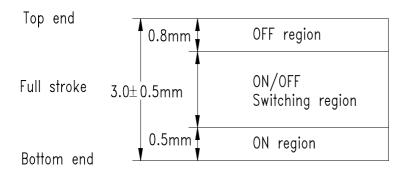
Operation force shall be applied according to the normal operating method at 5V DC, 5 mA.

There shall be no bounce and chattering within 10 msec when it is measured a specially prepared tester or synchroscope.

# Chattering and bounce are defined in the following diagram;



\*Operation resign



\*Mouse resolution : 200DPI (hardware)

\*Mouse Tracking speed: 250mm/sec max

#### Mechanical performance

- 1) Operation system: Non-lock tactile rubber feeling
- 2) Stroke : a)KBD key top :3.0  $_{/}$  0.5mm with an applied measurement load of 200gf.

b)mouse switch : 1.0mm  $\pm$  0.3mm 150gf(Max)

- 3) Operation force : Relationship between the operating force and travel is given by the following graph ; The operation force has a tolerance of 50  $_{/}$  20 gf.
- 4) Drop force :  $5 \sim 35$  gf
- 5) Operating feeling

No definite stickiness or other abnormality shall be allowed when force is applied with a finger on the key top center at the rate of 3 times a second.

6) End stroke strength

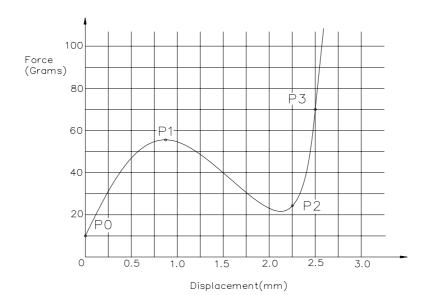
End stroke should withstand a static load of 500 gf applied on the key stem in the perpendicular direction for a minute.

7) Keytop full strength

A key op shall not be pulled off unless applying a force of  $1 \sim 2$ Kg range in the vertical direction.

8) Wrap (due to the applying the force)

Shall be 5 mm or less when applying 1 kgf static force to the center of keyboard. The keyboard is held by static rails at space bar side and opposite side.



# **Environmental**

Items	Test condition	Requirements
5-1 Resistance at Low Temperature	Measurement after the test with following condition and leaving(normal temperature, normal humidity) for an hour (1) Temperature : -25 / 30    C	4-1 through 4-6 5-1 through 5-7 7,8,9
	(2) Time : 240 hours	
5-2	Measurement after the test with following condition and	4-1 through 4-6
Heat	leaving(normal temperature, normal humidity) for an hour	5-1 through 5-7
Resistance	(1) Temperature : $-70 / 30_{\parallel}$ C	7,8,9
	(2) Time : 240 hours	