## **User's Manual**

FCC ID: GYUR95SK

**Model: SK-8810** 

**RF** Wireless Keyboard



Department: Wireless BU Date: July-14-2001

### FEDERAL COMMUNICATIONS COMMISSION

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### 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. 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.

## 1. General

This Product Specification is for SK-8810, the product is composed of a 27MHz RF wireless desk top PC keyboard and a PS2 dual function receiver. The receiver supports both keyboard and pointing function. The keyboard includes eight easy access keys and a built-in I-Point device supporting pointing function. The product package includes wireless keyboard and receiver.

#### 1.1 Main feature

The product provides 2 channels /16 ID operation to prevent frequency interference. The receiver interface with both the wireless keyboard and pointing to the system through the PS2 port.

The product set supports both keyboard and point device function..

There is a LED on the keyboard for the indication of low battery power, two LEDs on the receiver for the indication of power and data receiving.

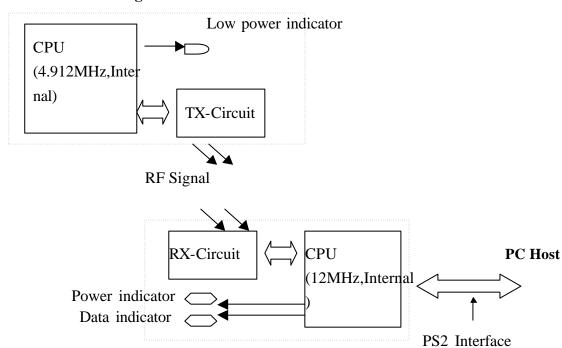
A channel-selection button on Keyboard transmitter and receiver for channel setting purpose.

## 1.2 Features of keyboard

- ◆ This model contains special function keys. There is one LED on the keyboard for battery low power indication.
- Four AA batteries are to be installed at the bottom of the keyboard for operation.
- There is a Channel Selection button at the side of the keyboard near the hot keys row.

# 2 System Block Diagram

### **Functional Block diagram:**



## 3. Electrical Specification

### 3.1 Keyboard Transmitter

#### 3.1.1 Operating voltage

The operating voltage range for keyboard is  $4.5 \sim 5.2$  Vdc. There are 4 AA batteries providing 6.0V for operation, fed to keyboard via voltage regulator.

#### 3.1.2 Current consumption

Typical current consumption is 30 mA, .Maximum at 50 mA

#### 3.2 Receiver

#### 3.2.1 Operating voltage

Voltage supplied to keyboard: 5+/-0.25 VDC

With ripple lower than 150mv, and capable of supply load current up to 100 mA with voltage drop less than 0.25 VDC

#### 3.2.2 Current consumption

Under nominal 5 VDC power supplied, typical current

Consumption is 33 mA at normal operation, 60mA at maximum.

### 3.2.3 Pin outs of 6 pin PS2 min-DIN connector

Compatible with IBM PS2 spec.

#### 3.2.4 LED indicators

There are two indicators(green) on the receiver: Receiving Data and Power. The Data indicator will be ON only when data is receiving from the transmitter. The Power will be ON only when the system is ON. During the Suspend and Sleep modes, the Power LED will be OFF.

#### 3.2.5 Cable

PS2 mini-DIN plug connector at two end of "Y" cable for both keyboard and pointing device .

## 3.3 Operations

#### 3.3.1 Battery removal

When the batteries are removed from the keyboard, the channel goes back to its default setting on the keyboard while the channel in Receiver is no change.

#### 3.3.2 Default - Channel-setting (Channel Reset)

Procedure is as follows:

- 1. Press once on the Channel Selection button on Rx (see Note 1 below).
- 2. Press on the Channel Selection button on Tx (see Note 2 below).

Note 1: (on Receiver)

Press once to clear all channel and ID from the memory of EEPROM. The LED on the Rx will then be ON and being ready to receive setting information of channel and ID from the Tx.

Note 2: (on Keyboard)

- Press and hold the button for more than 3 seconds: both channel and ID go to Default. The LED on RX will be OFF after finish receiving data from TX.
- It can also be done by re-installing the batteries.

#### 3.3.3 Channel change

Operated by following step:

- 1. Press once on the Channel Selection button on RX ,the LED at RX will be ON.
- 2. Press on the Channel Selection button on TX ,the LED at RX will be OFF after finish receiving data from TX.

The computer screen will display the Channel number-

## 3.3.4 Easy Acess Key Code Table

All Easy Acess Keys are the use of reserved PS2 scan code for extension use.

There are listed by sequence below, it correspond to the easy access keys from left to right on keyboard:

Key	US Key	SCAN SET 1		SCAN SET 2		SCAN SET 3		
Address	Assignment	Make	Break	Make	Break	Make	Break	Attr.
66	M2 (Left)	E0 25	E0 A5	E0 42	E0 F0 42	<i>9D</i>	F0 9D	M/B
67	<i>M3</i>	E0 18	E0 98	E0 44	E0 F0 44	<i>9F</i>	F0 9F	M/B
65	M1	E0 17	E0 97	E0 43	E0 F0 43	98	F0 98	M/B
68	M4	E0 32	E0 B2	E0 3A	E0 F0 3A	<i>97</i>	F0 97	M/B
56	M13	E0 20	E0 A0	E0 23	E0 F0 23	<i>9B</i>	F0 9B	M/B
63	M14	E0 26	E0 A6	E0 4B	E0 F0 EB	9C	F0 9C	M/B
71	<i>M7</i>	E0 12	E0 92	E0 24	E0 F0 24	96	F0 96	M/B
73	M9 (Right)	E0 24	E0 A4	E0 3B	E0 F0 3B	94	F0 94	M/B