

EXHIBIT B

[FCC Ref. 2.1033(b)(4)]

"Description of Circuit Functions"

## **Description of Circuit Function for Remote Thermo Station Clock Series RM1HX, WS10 & WS44X**

### **RM1HX**

RM1HX is a remote thermo battery operated 433.92MHz transmitter. Two AA Size 1.5-volt batteries are used to supply power to the transmitter module and power to the micro-controller. U1 is the micro-controller which have sensors to detect Temperature & Humidity (Option) and generates the pulse train to be transmitted in every minute. This signal is passed to the transmitter module to act as Temp/Humidity data modulation. In the transmitter module, transistor Q2 is used as the oscillator while the frequency control element is the SAW resonator (Y1) and Q3 is used as the RF power amplifier. A trace on the printed circuit board is used as the built-in antenna. LED is lighted during transmission operation.

### **WS10**

WS10 is a 3V DC remote receiver of the thermo station. U1 is the micro-controller which have connected to sensors to detect Temperature and Humidity (Option) and RF receiver receives the pulse from remote transmitter for up to 4 remote temperature/Humidity, the data will show on LCD display.

In the receiver section, L1, C1 and C2 forms the frequency selection circuit and Q1 is used as an regenerative receiver circuit. The received signal is then amplified and shaped by the Operational Amplifier IC U1. The output from the amplifier is then input to the micro-controller. The micro-controller decodes the signal from the receiver and also checks the data(s) input. The output from the micro-controller is used to show the temperature(s)/humidity through LCD display.

### **WS44X**

WS44X is a 3V DC remote receiver of the thermo station with real time clock and daily alarm. U1 is the micro-controller which have connected to sensors to detect Temperature and Humidity (Option) and RF receiver receives the pulse from remote transmitter for up to 4 remote temperature/Humidity, the data will show on LCD display.

In the receiver section, L1, C1 and C2 forms the frequency selection circuit and Q1 is used as an regenerative receiver circuit. The received signal is then amplified and shaped by the Operational Amplifier IC U1. The output from the amplifier is then input to the micro-controller. The micro-controller decodes the signal from the receiver and also checks the data(s) input. The output from the micro-controller is used to show the temperature(s)/humidity through LCD display.