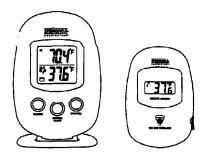


# **INSTRUCTION MANUAL**

# Multi Zone Wireless Indoor/Outdoor Thermometer



MODEL NO. 91049

#### **FEATURES**

#### **Base Station:**

- · Easy read 1.4"H x 1.3"W dual-view LCD window
- · Indoor/outdoor temperature displayed in °C or °F
- Three radio frequency channels to monitor temperature in three different locations up to 100 ft.
- · Temperature trend arrow indicates rising, falling or constant temperature
- · Programmable high/low temperature alert function
- · Memory function recalls min/max temperature readings at all locations
- · Indoor temperature range: 32°F to 122°F (0°C to 50°C)
- · Tabletop or wall mountable
- Low battery indicator
- · Requires 2 AA batteries (included)

#### Remote Sensor:

- · .5"H x 1"W LCD temperature window
- · Temperature displayed in °C or °F
- · Remote sensor temperature range: 32°F to 122°F (0°C to 50°C)
- Remote sensor temperature range with probe: -58°F to 158°F (-50°C to 70°C)
- 10 ft. detachable, weatherproof remote sensor probe for use in pools, freezers or soil
- · Tabletop or wall mountable
- · Requires 2 AAA batteries (included)

#### **LCD READOUTS**

**BASE STATION:** 

**Upper Display:** Indoor Temperature **Lower Display:** Outdoor Temperature

REMOTE SENSOR:

**Displays Outdoor Temperature** 

### **BATTERY INSTALLATION / ACTIVATING BASE STATION:**

- 1. Install batteries into the base station first before the remote sensor.
- The battery door is located in the back of the unit. Press and slide open the battery door. Install 2 AA size batteries into the battery compartment according to the polarity markings. Slide the battery door back into place.
- The lower LCD of the receiving unit will indicate "—" and is ready to register the remote sensor(s).

### **BATTERY INSTALLATION / ACTIVATING REMOTE SENSOR**

- 1. Place remote sensor near base station.
- Lift the click lock of the battery compartment and open the weatherproof battery cover.
- 3. Select the RF channel prior to installing the batteries. Slide the sensor switch to channel 1 for setup of the first remote sensor. Select channel 2 or 3 for a second or third sensor. Do not select the same channel (1, 2 or 3) for an additional sensor.
- 4. Install 2 AAA size batteries according to the polarity markings inside the battery compartment. Once the batteries are installed, push and hold the RESET button located inside the battery compartment for at least 3 seconds to send a registration signal to the base station. Release the RESET button and a beep will sound from the base station to confirm the new registration. The lower LCD of the base station will now show the selected channel number and the current temperature will be displayed.
- 5. Slide the C/F switch to the preferred temperature setting.
- Once registration & C/F selection is complete, slide the battery door back into place.
- To activate and register a second or third remote sensor with base station, follow steps 1 to 6 for each sensor.

A "low battery" icon will appear on the screen of the base station when the batteries of either the base station or remote sensors need to be replaced. In case of battery replacement for a remote sensor, follow the method at **DEACTIVATING REMOTE SENSOR** section to clear the memory at the base station first. Follow steps 1-7 above to register remote sensor.

DEACTIVATING REMOTE SENSOR / CLEARING BASE STATION MEMORY A remote sensor is deactivated once the batteries are removed from the unit. Once a remote sensor is deactivated, the base station's memory of the remote temperature needs to be cleared. If this is not done, the last temperature of the remote sensor will continue to show on the base station even though that remote sensor has been deactivated.

Press the RESET button on the back of the base station to clear the registration of a remote sensor that will no longer be in use. Hold the button for approximately 5 seconds until the base station beeps and "--- F" is displayed in the lower LCD. The base station is now ready to accept registration from a new remote sensor.

#### **REMOTE SENSOR TRANSMISSION**

The tower icon on the remote sensor LCD will blink for each RF temperature transmission. The sensor is designed with a battery saving mode. Transmission to the base station occurs every 2.5 minutes when the temperature change is less than 0.3 degrees Fahrenheit. Whenever the temperature change is more than 0.3 degrees Fahrenheit, the signal will be transmitted instantly to the base station. If transmission has not been made to the base station within 11 minutes, "——" will be displayed on the base station LCD. Try rotating the remote sensor in 45 degree steps to resolve the transmission problem. Wait at least 3 minutes after each position change to determine if transmission has been restored in the new position. If not, continue rotation or reposition both the base station and remote sensor until successful transmission.

Note: When the temperature falls below freezing point, the batteries of the remote sensor will freeze if left outside. This will lower their voltage supply and the effective range. It is best in freezing conditions to keep the remote sensor indoors and use the probe to measure outdoor temperature.

If there continues to be reception problem, contact Springfield Precision's Customer Service Department at 1-888-809-3284.

#### PRODUCT INSTALLATION

Choose a suitable place for the base unit and remote outdoor sensor. Place the base unit near a window, but away from direct sunlight or other sources of heat or air conditioning to ensure accurate air temperature readings.

The remote sensor should be located away from direct sunlight and sheltered from the rain. Locate the sensor unit in a clear area to avoid signal interference. The maximum transmission distance from the remote sensor to the base station is 100 feet. Actual transmission distance may be reduced by interference from buildings, obstructions or a screen between the sensor and the base station.

The remote sensor will display the general outdoor temperature. The detachable 10' probe can be used to determine the temperature in pools, freezers or soll. To install probe, open the plug-hole cover on the side of the remote sensor and insert probe plug. Place end of probe into the specific area to read corresponding temperature. If the probe is not necessary, it is best to insert the attached the rubber plug into the hole on the side of the sensor.

Both the base station and remote sensor can be mounted on a wall or stand on a tabletop. To wall mount the units, drive a screw into the wall at the desired location until the head extends 1/8" from the wall. Locate back of the unit over the protruding screw head. To stand the base station or remote sensors on a tabletop, flip out the built-in stands.

### **OPERATION**

#### Selecting RF Channel:

Use the Channel button on the front of the base station to display the temperature at the desired remote sensor location. Press the CHANNEL button to scroll through each of the registered channels. The corresponding remote sensor number & the temperature will be displayed in the lower LCD window of the base station.

### Celsius/Fahrenheit Selection;

The temperature on the base station and remote sensor can be displayed in either Celsius or Fahrenheit. Press the °C/°F button located in the back of the base station and in the back of the remote sensor under the battery door, to change the display to the desired unit of measure. The selected unit of measure will be displayed in the LCD windows.

### Max/Min Memory Function:

This RF thermometer records and displays the maximum and minimum temperature readings of the receiver and all active remote sensors.

Press the MAX/MIN button on the front of the unit once to display the maximum temperature readings. The maximum temperature will be displayed for approximately 10 seconds and MAX will appear in the right portion of the indoor and outdoor LCDs. Press the MAX/MIN button a second time while the maximum temperature is being displayed and the minimum temperature will be displayed. MIN will appear in the right portion of the indoor and outdoor LCDs. To return back to the current temperature, either press the MAX/MIN button a third time or wait approximately 10 seconds and the current temperature will be displayed automatically.

### Clearing Max/Min Memory:

To clear the maximum and minimum temperature records, press the MAX/MIN CLEAR button while either the max/min indoor temperature or the max/min outdoor temperature is being displayed. The corresponding indoor or outdoor max/min temperature record being displayed when the MAX/MIN CLEAR button is pushed will be erased and "----" will appear briefly in the max/min display screen until the unit displays new maximum and minimum temperatures.

### Temperature Trend Indicator:

This unit displays the trend of outdoor temperature via an arrow on the lower LCD window.

- · An arrow pointing down indicates falling temperature
- · An arrow pointing up indicates rising temperature
- · A straight arrow indicates constant temperature conditions

The temperature trend arrow will change when the cumulative temperature readings have increased or decreased by more than 1 degree Fahrenheit. If the temperature does not change by more than 1 degree Fahrenheit within one hour, then the temperature trend arrow will be straight indicating constant temperature conditions.

# **Temperature Alert Function:**

This unit can be programmed to alert you that the temperature has risen above or below a pre-determined range at the base station or any of the three remote sensor locations. When the temperature alert occurs, it will beep for 30 seconds and then repeat every 5 minutes until pressing any key to stop the temperature alert from beeping.

### To Program the Temperature Alert Feature:

1. Press and hold ALERT button for 3 seconds. The top LCD display is used to set the lower limit and the bottom LCD display will set the upper limit. Both readouts will display "--- " and the unit is ready to be set.

- 2. Use the CHANNEL button to select the channel that the alert will be programmed for. The channel selected will appear on the lower-left portion of the LCD readout. If you want to program the alert for the base unit, press CHANNEL until IN appears in the upper-left portion of the top LCD display.
- 3. After selecting the channel, press the ALERT button once to set the upper limit. The lower LCD numbers will flash. The display will show the last upper limit set for the channel you have selected. Press the + or button to change the upper limit alert value by 1.8°F (or 1°C) intervals. When the desired setting is reached, press the ALERT button once to confirm the setting. The lower LCD display will show the new setting and the top display will flash.
- 4. Set the lower limit in the same manner by pushing the + or button until the lower limit is set to the desired temperature in the top LCD readout. Press the ALERT button once to confirm the setting & return to the current indoor and outdoor temperature readouts.

# To Activate the Temperature Alert Feature:

Press the ALERT button to enable or disable both the upper and lower temperature alarms. The upper and lower arrow icons appear in the bottom-right portion of the lower LCD when temperature alert is enabled. If enabled, all alarms previously set for the base station and each channel become active and will signal if limits are reached or passed. If the alarm sounds because a temperature alert is reached and it is not from the indoor temperature or the current RF channel on display, the number of the channel will flash. Push the CHANNEL button to display the appropriate channel.

#### **PURCHASING ADDITIONAL SENSORS**

Additional sensors like the one furnished with this set may be ordered directly from Springfield Precision Instruments by calling 1-888-809-3284. Please have a major credit card ready when placing the call.

### **LIMITED WARRANTY**

Springfield warrants this product to be free from defects in workmanship or material for a period of one year from the date of purchase. During the warranty period, such defects will be repaired or the defective instrument will be replaced, at our option, without charge. This warranty does not cover damage through accident or misuse. All implied warranties, including, but not limited to, warranties of fitness and merchantability are hereby limited in duration to a period ending one year from date of purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, which vary, from state to state. Repair or replacement will be made at our option if the instrument is returned postpaid with \$4.00 for return postage and handling to:

### SPRINGFIELD PRECISION INSTRUMENTS, INC.

76 Passaic Street, Wood-Ridge, NJ 07075-1091 1-888-809-3284

Made in China to Springfield's Precise Specifications

This device complies with Part 15 of the FCC rules.
Operation is subject to the following conditions:
This device may not cause harmful interference and must accept any interference received, Including interference that may cause undesired operation.

Modifications not authorized by the manufacturer may void users authority to operate this device