# SPRINGFIELD®

P R E C I S E T E M P™

WIRELESS MULTI-ZONE
DIGITAL THERMOMETER
WITH RADIO CONTROL CLOCK

Model No. 91566
Instruction Manual
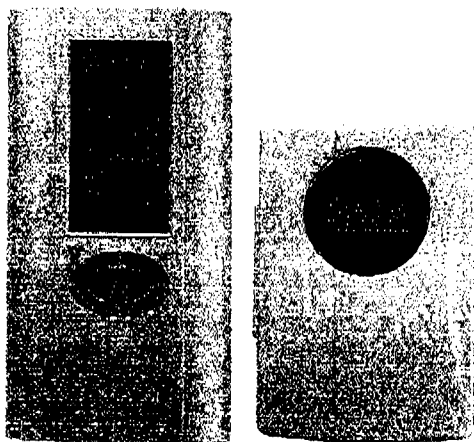
BASE STATION   REMOTE
                      SENSOR

FEATURES AND SPECIFICATIONS

BASE STATION

- Indoor / RF outdoor temperature
- Monitors temperature at up to 4 locations (additional sensors required)
- Auto scroll remote temperature reading
- Indoor / outdoor temperature displayed in °C or °F
- Indoor temperature range: 14°F to 131°F (-10°C to 55°C)
- Temperature tolerance: +/- 2°F (+/- 1.1°C)
- WWVB clock with alarm
- 12/24 hour selectable
- Calendar with day of the week display
- Tabletop easel stand or wall mount
- Requires (2) AAA batteries

REMOTE SENSOR

- 433 MHz transmission frequency
- Transmission range 80 ft. (range may be shorter based on interference present)

- LCD readout
- Temperature range: -4°F to 158°F (-20°C to 70°C)
- Temperature range via probe: -22°F to 158°F (-30°C to 70°C)
- Temperature tolerance: +/- 2°F (+/- 1.1°C)
- 10 ft. detachable waterproof sensor probe for use in pools, freezers or soil
- Wall mount with separate hanging bracket
- Requires (2) AAA batteries

RC signal icon

Wave
Time Set

Alarm Set

Reset

▲
Alarm On/Off
Zone

Channel
Min/Max

▼
°C/°F
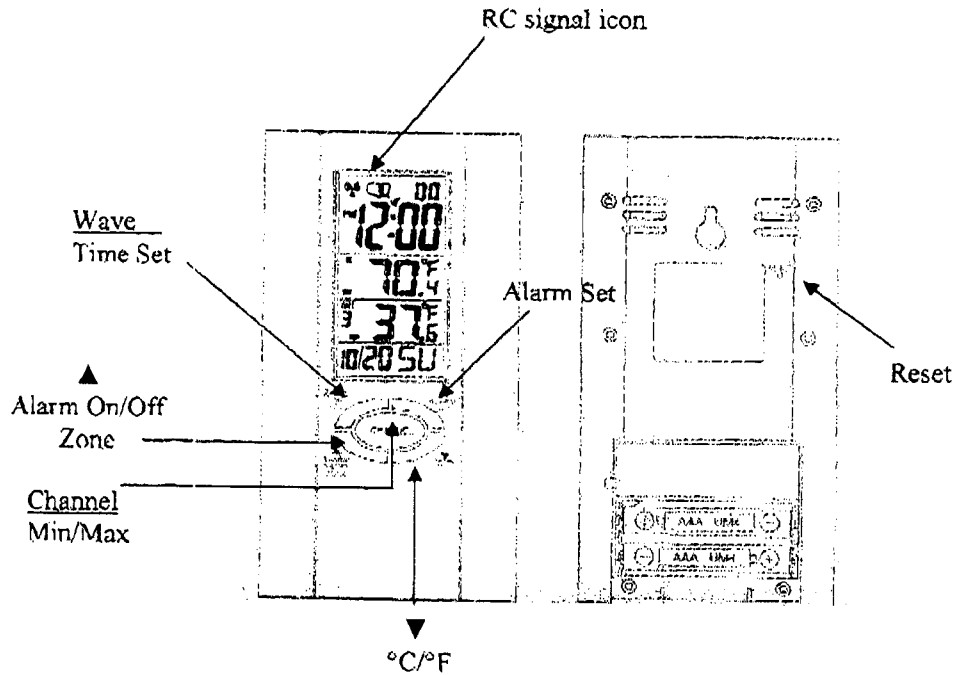
BATTERY INSTALLATION AND SETUP

Note: The initial remote sensor / base station connection cannot be made and you cannot enter most settings if the base station is searching for the RC signal (the signal icon is showing at the top left of the display). After you have installed the batteries, if the icon is showing press WAVE/TIME SET until the icon is no longer displayed. After you have completed entering the settings and you have established initial RF contact, press WAVE/TIME SET until the signal icon is once again displayed.

- Position the remote sensor near the base station.
- Remove the wall mounting bracket from the remote sensor.
- Open the battery compartment using a screwdriver to remove 4 screws at the bottom, back of the unit.
- The remote is preset to channel "1". If you are installing additional remotes, slide the channel selector switch to the desired channel
- Insert (2) AAA batteries according to the polarity markings.
- Press the °C/°F button to select your preferred setting.
- Slide open the battery door at the back of the base station and insert (2) AAA batteries according to the polarity markings. Slide the battery door closed.
- The base station will begin to look for the RF signal from the remote sensor
- When the outdoor temperature reading is shown on the base station the connection is confirmed. The connection may take several minutes

- Press the CHANNEL button until the number matches the channel on the remote sensor.
- There may be interference present that prevents the base station from picking up the RF signal on a particular channel. If you are not getting a signal connection, slide the channel selector switch on the remote sensor to another channel and switch to the corresponding channel on the base station.
- If you have installed more than one sensor, press CHANNEL to select the remote channel you want displayed permanently on the base station. Or press CHANNEL until you observe a circular arrow on the base station LCD display. The unit will then auto-scroll through the channels.
- The TX button in the battery compartment of the remote sensor can be pressed to establish manual contact between the base station and remote sensor. Press and hold for 5 seconds. This can be done for test purposes but should not be necessary.
- Replace the battery compartment cover of the remote sensor and re-install 4 screws. Do not over-tighten the screws.

Notes:
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon zinc), or rechargeable (nickel cadmium) batteries.
- For maximum performance in normal conditions we recommend using good quality alkaline batteries. When temperatures are below 32°F, alkaline batteries can lose power resulting in a loss of remote transmission. If you reside in an area that experiences frequent temperatures below freezing, we recommend using lithium batteries to minimize the loss of transmission.

Locating the Base Station and Remote Sensor
- Choose a suitable place for the base station and remote outdoor sensor, within the transmission distance.
- Place the base unit near a window, but away from direct sunlight or sources of heat or air conditioning to ensure accurate temperature readings.
- The remote sensor is water resistant, but not waterproof. Locate the sensor in an area where it will not be exposed to rain, snow or ice which can damage the electronic circuitry.
- In areas of extreme low temperatures, re-locate the remote sensor indoors. Plug the sensor wire (included) into the remote and route the wire through a nearby window. Be sure to plug in the wire securely. Poor contact will result in a "LL" reading on the base station outdoor temperature display.
- The location you choose is critical for maximizing the transmission range. The remote sensor is designed to transmit unimpeded 80 to 100 ft. Transmitting through walls, metal doors and metal framed windows may reduce the transmission range. To optimize the transmission distance, the remote should be positioned in a location that minimizes these obstructions. Interference from other sources such as home security systems, wireless doorbells and wireless home entertainment equipment may interrupt the transmission signal temporarily.

OPERATING INSTRUCTIONS

°C / °F Selection
- Press the °C / °F button to display the temperature in °Celsius or °Fahrenheit.

Setting Time and Date
The Radio Control clock receives the precise time broadcast from the National Institute of Standards and Technology in Boulder, Colorado and will automatically adjust itself to the correct time. Depending on your location, it may take several hours for the signal to be received at the base unit. Follow these instructions to adjust the time manually while the base station is searching for the signal. If you are in an area that does not receive the NIST time signal, your clock will operate as a normal non-RC digital clock.

- Press and hold the TIME SET button 3-4 seconds until the year is flashing
- Press ▲ or ▼ to set the year.

- Press TIME SET and the month will be flashing.
- Press ▲ or ▼ to set the month.
- Press TIME SET and the date will be flashing.
- Press ▲ or ▼ to set the date.
- Press TIME SET and the hour will be flashing.
- Press ▲ or ▼ to set the hour.
- Press TIME SET and the minutes will be flashing.
- Press ▲ or ▼ to set the minutes.
- Press TIME SET and 12 hr will be flashing
- Press ▲ or ▼ to select 12 or 24 hr timing.
- Press TIME SET twice to lock in the settings.
- Press the WAVE / TIME SET button once and the RC signal icon ((•)) will appear at the top left of the LCD display. The unit will begin searching for the NIST time signal.

**See *Note* under the BATTERY INSTALLATION AND SETUP section.

Setting the Time Zone
- Press and hold the ALARM ON/OFF ZONE button 3-4 seconds until highlighted area on the time zone map moves one zone.
- Repeat until you have selected the correct time zone.

Setting the Alarm
- Press and hold the ALARM SET button for 3-4 seconds until the alarm time is flashing.
- Press ▲ or ▼ to set the hour.
- Press ALARM SET and the minutes will be flashing.
- Press ▲ or ▼ to set the minutes.
- Press ALARM SET to lock in the setting.
- The alarm icon will display above the time.

De-activating the Alarm
- After the alarm sounds, press the ALARM ON/OFF button once to silence the alarm. The alarm icon will continue to be displayed and the alarm will sound again at the pre-set time each day until de-activated.
- To de-activate the alarm press ALARM ON/OFF once. The alarm will be turned off and the alarm icon will no longer be displayed.
- To re-activate the alarm to signal at the pre-set time, press ALARM ON/OFF once and the alarm icon will again be displayed.

Maximum and Minimum Temperature Memory
- Press the MAX/MIN button once to display the highest recorded indoor and outdoor temperature readings since the last reset.
- MAX will show on the display.
- Press MAX/MIN again to display the lowest recorded indoor and outdoor temperature readings since the last reset.
- MIN will show on the display.
- Press MAX/MIN again to return to the normal display or wait 5-6 seconds and the display will revert automatically. The MAX or MIN icon will no longer be displayed.
- To clear either the maximum or minimum record manually, when the appropriate record is on the display press and hold MAX/MIN for 3-4 seconds until the beep sounds.

RESET

Your multi-zone thermometer can be re-set in case of malfunction. Locate the RESET at the back of the base station. Insert the end of a paper clip into the RESET hole and push the button. The unit will return to its original factory settings.

PURCHASING ADDITIONAL SENSORS

The remote sensor for this unit is SPRINGFIELD P/N 91568.
Additional sensors 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.

FCC STATEMENT OF COMPLIANCE

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.
Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
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 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 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 of more of the following measures:
  • Reorient or relocate the receiving antenna.
  • Increase the separation between the equipment and the 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.

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. 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 THE 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. During the warranty period, such defects will be repaired or the defective instrument will be replaced at our option. This warranty does not cover damages through accident or misuse. IN ADDITION, SPRINGFIELD IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES INCURRED AS A RESULT OF DEFECT. Repair or replacement will be made at our option without additional charge if the instrument is returned postpaid with $4.00 for return postage and handling to:

SPRINGFIELD.
PRECISION INSTRUMENTS

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Made in China
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