INSTRUCTION MANUAL

Locations of Control
Main Unit (Receiver)

A MODE BUTTON
B + BUTTON
C MAX/MIN BUTTON
D RESET BUTTON
E RE-SYNC BUTTON
F IN/OUT TEMP BUTTON
G - BUTTON
H CLEAR BUTTON

4581
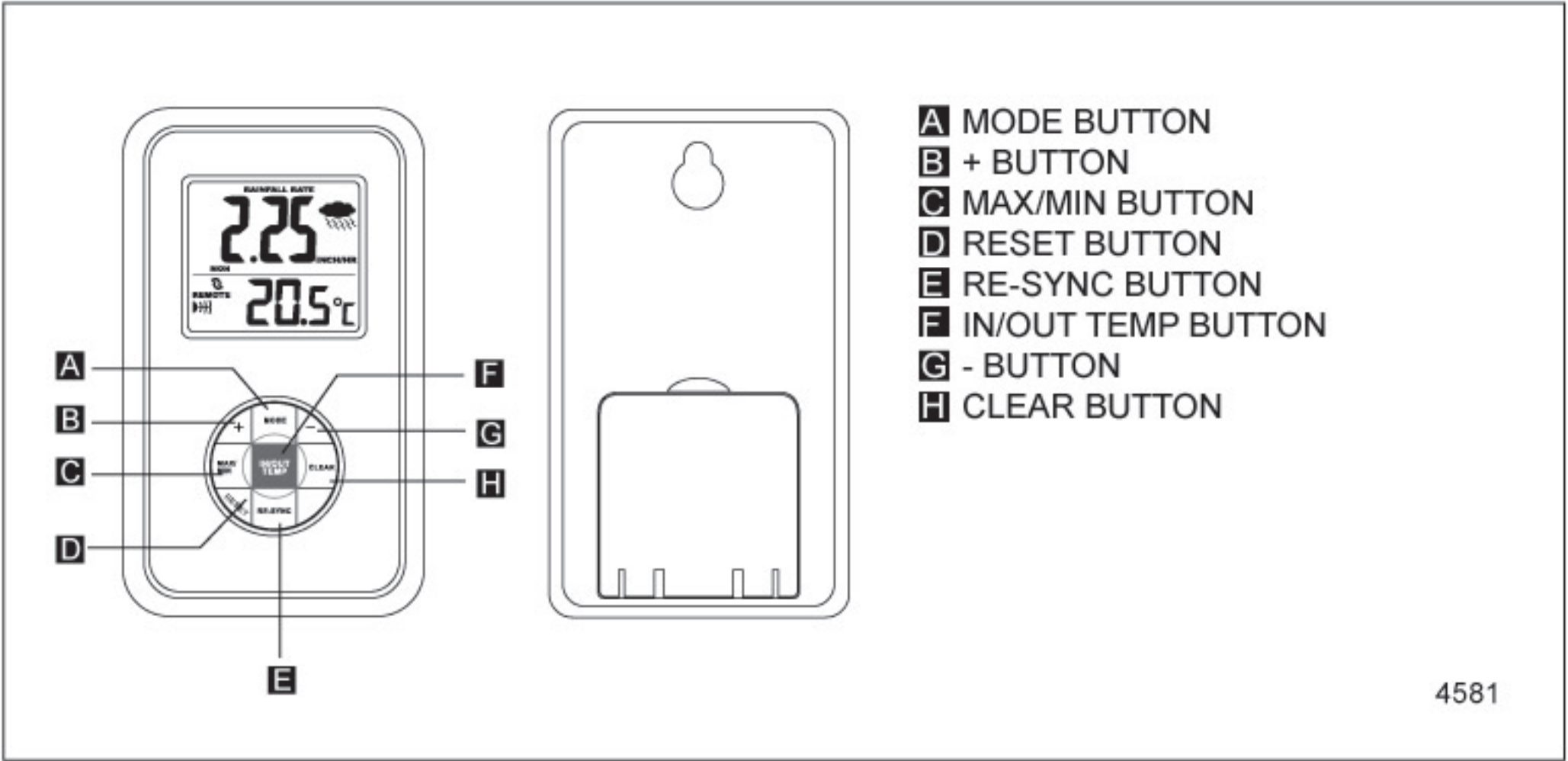
Remote Unit (Wireless Rain Gauge)

A RESET BUTTON
B RE-SYNC BUTTON

9311
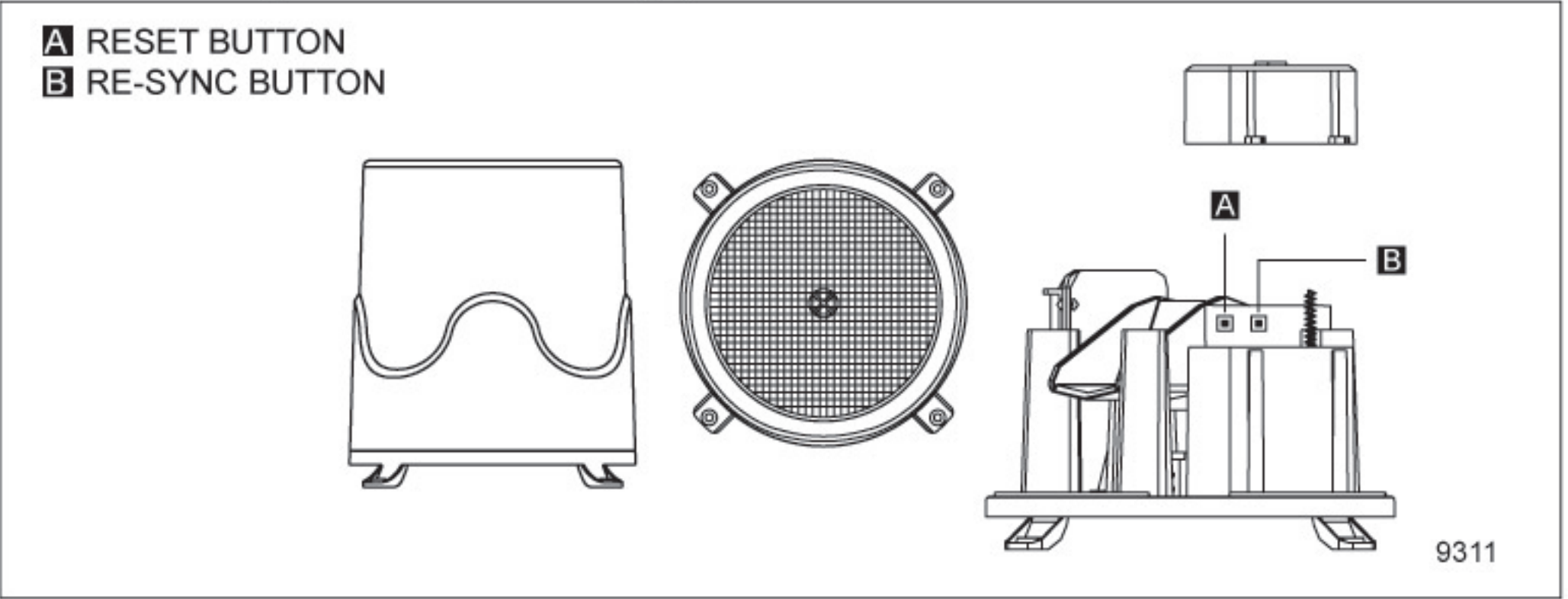
- The configuration of your clock may differ somewhat from that shown in the illustration.
- "AA" or "AAA" size battery. This clock may use more than one piece of battery. Please refer to the engraved battery marks inside the battery compartment for the correct battery type.

FEATURES AND SPECIFICATIONS

BASE UNIT
- RF rainfall and temperature measurement
- Rainfall history tracking: last hour, last 24 hours
- Daily Min. / Max. rainfall tracking with auto daily clearing
- Features Decline Principal Rain Measurement Technology*
- Indoor / RF outdoor temperature, auto scroll
- Indoor temperature range: 32°F to 122°F (0°C to 50°C)
- C/F selectable
- Memory function to recall Min./Max. temperature readings
- Temperature trend arrow indicates rising, falling or constant temperature
- 12 or 24 hour selectable clock
- Calendar with day of the week display
- Low battery indicator for base station and rain collector
- Table top stand or wall mount
- Requires 2 AAA batteries (not included)

RAIN COLLECTOR / REMOTE SENSOR
- Self-emptying, waterproof with oversized collection area
- Wide base to minimize tip-over
- Transmission range: 100 ft. (range may be shorter based on interference present)
- Transmission frequency: 433MHz
- Outdoor temperature range: -4°F to 140°F (-20°C to 60°C)
- Includes (4) stainless steel screws and (4) spikes for mounting to solid surface or ground
- Requires 2 AA batteries (not included)

BATTERY INSTALLATION AND ACTIVATION

Warning
- 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 32F, 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.

Battery installation of Base Unit
- Open the battery door at the back of the base unit and insert (2) AAA batteries according to the polarity markings. Replace the battery door.
- Press the RESET button.
- Set the clock and calendar as follows.

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Setting the Calendar, Clock, °C / °F

* When either the clock or calendar is being displayed, press and hold the MODE button for 3-4 seconds until the year display is flashing
* Press + or - to set the year
* Press MODE to display the date
* Press + or - to set the month and day
* Press MODE to display time
* Press + or - to set the time
* Press MODE and the display will show 12 hr
* Press + or - to set your clock to 12 hr or 24 hr time format
* Press MODE and the temperature field will be flashing
* Press + or - to select °F or °C format
* Press MODE to lock in the settings

Note: If you set the time and date after initial activation, the accuracy of the rainfall history data may be affected. Reset the unit to clear the history by pressing the RESET button then set your desired time and date.

* Press the RE-SYNC button.
* Position the Rain Collector/Remote Sensor close to the base unit.

Battery installation of Rain collector

* Open the rain collector unit outer case as indicated and remove the inner cover to access RESET/RE-SYNC buttons.
* Using a screwdriver, unscrew the battery door at the side of rain collector and insert (2) AA batteries according to the polarity markings.
* Press the RESET button.
* Replace the battery door.
* Remove the tape from the pendulum inside to allow it to move freely.
* Close the outer case.

Note : Make sure the battery door is closed securely to prevent water leakage.
* When the REMOTE temperature is shown on the display of the base unit, synchronization between the base unit and the remote sensor is complete.

POWER UP SYNCHRONIZATION

The base unit will search for the RF signal from the rain collector for 6 minutes after reset or after batteries are inserted. When the temperature display on the main unit shows the REMOTE temperature, synchronization between the base unit and remote unit is complete.

The bottom, left of the base unit display will show the)))) icon to indicate signal transmission. If the REMOTE temperature does not show on the display within 6 minutes after reset, press the RE-SYNC button and the main unit will search for the RF signal for another 6 minutes. If the base unit still fails to show the out temperature, refer to the **LOSING SYNCHRONIZATION** section.

Locating the Base Unit and Remote Sensor

* Choose a suitable place for the base unit 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 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 unit should be positioned in a location that minimizes these obstructions. Other interference from electrical sources such as home security systems, wireless doorbells and wireless home entertainment equipment may interrupt the transmission signal temporarily.

Notes

* The outdoor rain collector must be placed on a level, horizontal surface for accurate rainfall measurement.
* Warning: Ice will affect the accuracy of rainfall readings and will damage the internal mechanism of the rain collector. In temperatures below freezing the collector can remain outdoors for temperature data transmission, but the unit must be placed in a protected area to prevent ice damage.

INDOOR AND OUTDOOR TEMPERATURE

* The indoor temperature is shown after activation until the first outdoor temperature signal is received. The display will then change to the outdoor temperature reading.
* Press the IN-OUT TEMP button to toggle between indoor and outdoor temperature.
* To activate Auto Scroll mode, press and hold the IN-OUT TEMP button for 3-4 seconds. Double curved arrows will show at the bottom of the LCD display and the unit will automatically toggle between indoor and outdoor temperature. Press and hold the IN-OUT TEMP button for 3-4 seconds to de-activate Auto-Scroll mode.
* The temperature trend arrow which is located directly above the temperature reading will indicate the trend of indoor and outdoor temperatures during the last three minutes.

VIEWING CLOCK, CALENDAR, RAINFALL RATE AND TOTAL RAINFALL
· Press the MODE button to toggle the main display between time, date, rainfall rate and total rainfall.
· The rainfall reading is accumulative data since the last press of either the RESET or CLEAR button. To clear the rainfall reading, press the CLEAR button when the rainfall reading is shown on the display.

RAIN FALL HISTORY
This unit has a large capacity memory that can store and display:
· Last hour rain fall
· Last 24 hours total rain fall

MAXIMUM AND MINIMUM RECORDS

Temperature Maximum and Minimum
The highest and lowest record of indoor temperature, outdoor temperature and rainfall are stored automatically after you activate the base unit. You can recall the records at any time by pressing the MAX/MIN button. With each press of the button, in sequence the display will show; indoor maximum reached, indoor minimum reached, outdoor maximum, outdoor minimum, rainfall maximum and rainfall minimum. The corresponding MAX or MIN icon will be displayed each time. To clear any maximum or minimum record, press the CLEAR button when the appropriate record is shown on the display.

Rainfall Maximum and Minimum
The rainfall maximum and minimum record is a daily record which counts from 12:00am to 11:59pm every day.
Aside from the automatic daily clear, the rainfall maximum or minimum record can be cleared by pressing the CLEAR button when the appropriate record is shown on the display.

LOSING SYNCHRONIZATION
If the main unit displayed a proper REMOTE temperature and rainfall rate, but now displays blanks "--.-°F" or "--.-in", the unit may have lost synchronization. If this occurs, press the RE-SYNC button of the main unit and the RE-SYNC button on the rain collector. The base unit will search for the RF signal for 6 minutes and will re-initialize synchronization with the remote unit.

*DECLINE PRINCIPAL RAIN MEASUREMENT TECHNOLOGY
One of the features that defines our wireless rain gauge as superior to competition is Decline Principle Rainfall Technology.

Inside the collector housing there is a teeter bar that has a spoon shaped collector on each end. When it rains, the rain drains into one of the spoons until the weight of the rain causes the teeter bar to tip to one side. When the opposing spoon collects enough rain it will cause the teeter bar to tip the other way. The rate of the rocking back and forth of the teeter bar is translated into a measurement of rainfall and this data is transmitted to the base station. The software of competitive units also measures the rocking back and forth of this teeter motion but has a flaw. When rain is falling steadily and then slows to a trickle it will give a reading based on the last tip of the teeter bar. It will assume the same continued rate of rainfall from the last tip and does not recognize the sudden change. Your Springfield rain gauge with Decline Principal Rainfall Technology is superior in that it is programmed to account for this sudden difference in rainfall rate. This translates to more accurate readings.

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 or 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.