

# PROJECTION WEATHER STATION

D P W S - O U T- 0 0 2



Manual US



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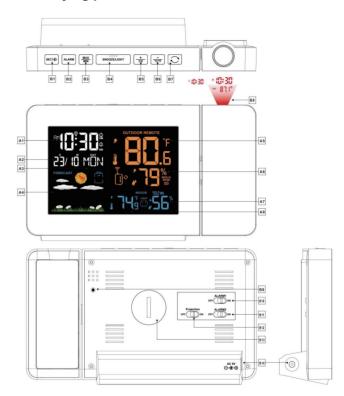
#### 1. Features

- WWVB radio time calibration
- Perpetual calendar up to year 2099
- Time in optional 12/24-hour format
- Two daily alarms
- · Automatic snooze function
- Humidity:
  - Indoor & Outdoor measurable range: 20%RH ~ 95%RH
- Temperature:
  - Indoor temperature measurement ranges: 15°F (-9.9°C) to 122°F (50°C)
  - Outdoor temperature measurement ranges: -40°F (-40°C) to 158°F (70°C)
  - Temperature can be displayed in °F or °C
  - Outdoor thermometer and frost alert
- Display minimum/maximum air humidity and temperature
- Outdoor dew point temperature and heat index query
- · Mold risks displayed in three levels
- · Wireless Outdoor Sensor:
  - Wall mount or placing it on table
  - 433.92MHz RF transmitting frequency
  - 200-foot transmission range in an open area
- The weather forecast function
- · Colorful backlight function
- Power Supply:
  - Weather Station:

Battery: 1x CR2032, 3.0V DC-Power: DC5.0V, 150mA

— Wireless Remote Sensor: Battery: 2 x LR06 AA, 1.5V

# 2. Identifying parts



#### Part A- Weather station

A1: Time

A2: Calendar

A3: Week

A4: Weather forecast

A5: Outdoor temperature

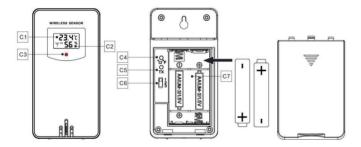
A6: Outdoor humidity

A7: Indoor humidity

A8: Indoor temperature

#### Part B - Buttons and switches

- B1: "SET/ ※ " button
- B2: "ALARM" button
- B3: "MAX button
- B4: "SNOOZE/LIGHT" button
- B6: " button
- B7: " C " button
- **B8**: Projection
- B9: Temperature sensor
- B10: Alarm 1 on/off switch
- B11: Alarm 2 on/off switch
- B12: Projection on/off switch
- B13: Battery compartment
- B14: Power supply socket



#### Part C - Wireless remote sensor

- C1: LCD screen Temperature
- C2: LCD screen Humidity
- C3: LED indicator
- C4: "°C/°F" button
- C5: "TX" button
- C6: "Channel 1, 2, or 3" switch
- C7: Battery compartment

# 3. Preparation

- Insert the power cord to the socket (B14) of your Weather Station.
- When the Weather Station is connected to the power supply, all the icons on the LCD screen will briefly light up for 3 seconds. Followed by a beep, the Weather Station starts measuring indoor temperature and humidity.
- Peel the battery insulation sheet from the battery compartment (B13). Follow
  the labeled OPEN direction to unscrew the battery cover to insert the battery.
  Then put the cover back.
- The Weather Station starts to connect the Remote Sensor, which takes about 3 minutes. A flashing RF antenna symbol will be displayed in the area below "OUTDOOR REMOTE" on the Weather Station.
- Open the battery compartment (C7) of the Wireless Remote Sensor. Set a channel of the sensor via "Channel 1, 2, or 3" switch (C6). Insert 2 x AA batteries according to the "+" and "-" polarity marks.
- When the Wireless Remote Sensor is put into batteries, all the icons on the LCD will briefly light up for 3 seconds and the sensor starts measuring outdoor temperature and humidity. At the same time, the LED (C3) flickers once when the sensor automatically transmits wireless signals.
- The Weather Station will receive the signals sent by the Wireless Remote Sensor. Then, the readings of temperature and humidity will be displayed in the OUTDOOR REMOTE column. Meanwhile, the channel number appears on the Wireless Remote Sensor.
- It takes about 3 minutes for the Weather Station to receive the signal from the Wireless Remote Sensor. If the signals are received in 3 minutes, the Weather Station enters the receiving mode to synchronize time while the backlight will go off.

#### F.Y.I.:

- The Weather Stations can receive signals from up to 3 Wireless Remote Sensors (make sure each sensor uses different channels).
- The CR2032 battery is the backup power source for the Weather Station.
   When the Weather Station is not connected with the power adapter, nothing will be displayed on the LCD screen.
- Note that when you enter the radio receiving mode, the backlight will go off automatically, which is normal. Once the radio signals are received, the backlight will be lit again.

# 4. Reception of radio signals

- The clock automatically starts the WWVB signal search after 7 minutes of any restart or replacing new batteries. The radio mast icon begins to flash.
- At 1:00 / 2:00 / 3:00 a.m., the clock goes through synchronization procedure
  with the WWVB signals to calibrate time. If synchronization is unsuccessful (the
  radio mast icon disappears from the screen), the system will make another
  attempt in the next one hour. The procedure will be repeated automatically up
  to maximum 5 times.
- To start WWVB signal reception manually, press and hold " TOFF " button for more than 3 seconds. If no signals are received within 7 minutes, then the search for WWVB signal stops (the radio mast icon disappears) and restarts in the next one hour.
- To end searching for radio signals during the reception, press and hold " \(\frac{\tau}{\tau\_{CFF}}\)" button for over 3 seconds.

#### F.Y.I.:

- A flashing radio mast icon indicates that the WWVB signal reception has started.
- A continuously displayed radio mast icon indicates that the WWVB signals are received successfully.
- We recommend a minimum distance of 8.2 feet to all sources of interference, such as televisions or computer monitors.

- Radio reception is weak in rooms with concrete walls (e.g. cellars, offices, etc.).
   In this condition, please place your Weather Station close to a window.
- In radio receiving mode, only the "-" button functions. If you want your Weather Station to perform other functions, please press and hold the "-" button more than 2 seconds to get out of the radio receiving mode.

# 5. Setting time manually

- Press and hold the "SET/ 🕸 " button for more than 3 seconds, the RCC icon starts flashing. Use the " 📆 " and " 😇 " buttons to switch on/off the radio time calibration

- Press "SET/ ★" to confirm your setting and the 24Hr display starts to flash.

  Use the "+ GH" and " GFF " buttons to set the time format, 24Hr mode or 12Hr mode.

  The setting and the 24Hr display starts to flash.

- Press "SET/ ★" button to confirm your setting and the **Date** icon starts to flash.

  Use "ਜਿ" and "ਜਿ" buttons to set the correct date.
- Press "SET/ ※" button to confirm your setting, the Month and Date icon display starts to flash. Use " → and " → buttons to set the date format, Month/Date or Date/Month.
- Press "SET/ ♣" button to confirm your setting and the weather forecast
  pattern icon starts to flash. Use "+ CH" and "- CF" buttons to select the current
  weather pattern.

Press "SET/ \* " to confirm your setting and end the setting procedures.

#### F.Y.L:

- The setting is consecutive and you have to press buttons, follow the steps until it comes to the specific setting you want to change.
- After 30 seconds without pressing any buttons, the clock switches automatically from Setting Mode to Normal Time Mode.
- America time zone:

AST: Altantic Standard Time	<del>-</del> 4
EST: Eastern Standard Time	<b>-</b> 5
CST: Central Standard Time	<b>-</b> 6
MST: Mountain Standard Time	-7
PST: Pacific Standard Time	-8
AKT: Alaska Standard Time	<b>-</b> 9
HAT: Hawaii-Aleutian Standard Time	-10

- The time zone must be set correctly according to your location. If not, the time will be incorrect when the time signals are received.
- When the daylight saving time system is not implemented in this area, please turn off DST.

# 6. Setting daily alarms

- Press "ALARM" button to switch between Alarm 1 and Alarm 2.
- Long press "ALARM" button for more than 3 seconds until the **Hour icon** of the Alarm 1 starts to flash. Use the "H" and "TF" buttons to set the desired hour.
- Press "ALARM" button to confirm your setting and the **Minute icon** of the Alarm

  1 starts to flash. Use the " $\frac{+}{CH}$ " and " $\frac{-}{CH}$ " buttons to set the desired minute.
- Press "ALARM" button to confirm your setting and the Repeat icon "M-F" of the Alarm 1 starts to flash. Use the " † and " buttons to set the alarm repeat mode, "M-F" / "S-S" / "M-F" and "S-S".
- Press "ALARM" button to confirm your setting and the Snooze Time icon of the Alarm1 starts to flash. Use the " + OH " and " - OFF " buttons to set the minute of snooze you need.

- Press "ALARM" button to confirm your setting and the Minute icon of the Alarm 2 starts to flash. Use the "

   of the desired minute.
- Press "ALARM" button to confirm your setting and the Snooze Time icon of the Alarm 2 starts to flash. Use the " 
   <del>\*\*</del> " and " 
   <del>\*\*</del> " buttons to set the minute of snooze you need.
- Press "ALARM" button to confirm your setting and end the setting procedures.

#### F.Y.I.:

- After 30 seconds without pressing any buttons, the clock switches automatically from Setting mode to Normal clock mode.
- The alarm will ring for 2 minutes if you do not deactivate it by pressing any buttons. The alarm will repeat automatically after 24 hours as well.
- "M-F": the alarm function will only be activated from Monday to Friday.
   "S-S": the alarm function will only be activated on Saturday and Sunday.
   "M-F" and "S-S": the alarm function will be activated throughout the whole week.
- The volume of sound (crescendo, duration: 2 minutes) will increase for 4 times to make sure the alarm can be heard.
- The snooze time setting range: 5 ~ 60 minutes / OFF. OFF means snooze function is deactivated.

#### 7. Activate/deactivate alarms

- When the switch of Alarm 1 or Alarm 2 is turned "ON", the " 
   <sup>a</sup> or " 
   <sup>a</sup> icon and the repeat icon of alarm are displayed on LCD screen. The Alarm 1 or Alarm 2 is activated.

#### F.Y.I.:

- The alarm will ring for 2 minutes if you do not deactivate it by pressing any buttons. In this condition, the alarm will be repeat automatically after 24 hours
- The volume of sound (crescendo, duration: 2 minutes) will increase for 4 times to make sure the alarm can be heard.

# 8. Turning off alarms

• Press any buttons except the "SNOOZE/LIGHT" button to stop the alarm.

#### 9. Snooze function

- Press the "SNOOZE/LIGHT" button to enter snooze mode. After the snooze timer expires, the alarm will ring again.
- In snooze mode, press any buttons other than the "SNOOZE/LIGHT" button or long press the "SNOOZE/LIGHT" button for 2 seconds to get out of the snooze mode.

# 10. Displaying temperature/humidity and trends

- The current indoor temperature/humidity and trends (indoors) are displayed on the LCD screen.
- Once connected with the Wireless Remote Sensor, the Weather Station can display the remote temperature/humidity and the temperature/humidity trends (outdoors).
- You may refer to the following icons:

  - : the temperature/humidity is decreasing.

No display: The temperature/humidity is remaining constant.

# 11. °C or °F (temperature units) display

• The temperature is measured by °C or °F. Briefly pressing the "  $\frac{1}{1000}$ " button to switch temperature units.

# 12. Transmission of the wireless remote sensor

 When the Weather Station receives signals from a Wireless Sensor, the temperature and humidity readings from the sensor are displayed in the "OUTDOOR REMOTE" column of the Weather Station.

- The Weather Station can connect up to 3 Wireless Sensors via 3 channels (channel 1, 2, and 3). Different sensors cannot choose the same channel at the same time.
- Press the "+" button to switch the display of temperature and humidity recorded by different outdoor sensors. " " means readings of different outdoor sensors take turns to display every 5 seconds.
- If the Weather Station fails to receive transmission from outdoor sensor ("--" will be displayed on the LCD). Long press " to utton for 3 seconds to receive transmission manually. During the reception, there will be an animation of the RF antenna symbol on the Weather Station.

#### F.Y.I.:

 As a Wireless Sensor is connected with the Weather Station, the Weather Station will display the same channel number used by the sensor in "OUTDOOR REMOTE" column. When no signal is transmitted via any channel, "-" will be displayed on the Weather Station.

# 13. Maximum/minimum temperature/humidity, dew point temperature, and heat index

- To switch between indoor/outdoor maximum, minimum temperature data, outdoor dew point temperature data, and heat index, press the "MX" button:
  - Once to display the indoor/outdoor maximum temperature readings.
  - Twice to display the indoor/outdoor minimum temperature readings.
  - Three times to display the outdoor dew point temperature readings.
  - Four times to display the outdoor heat index.
  - Five times to return to interface of current temperature readings.
- Press " 🛨 " button to display data from other Wireless Remote Sensors via different channels when you check the readings.
- To reset the maximum and minimum temperature, long press the "MN" button for more than 2 seconds. This will clean all data recorded before.

#### F.Y.I.:

 If the real-time temperature reading is below the measurement range of the Weather Station, LL. L will be displayed on the LCD screen; if the real-time temperature reading is above the measurement range, HH.H will be displayed instead.

#### 14. Outdoor frost alert

 When the outdoor temperature ranges from −1°C to 3°C or from +30°F to +37°F, the frost alert icon " tsarts flashing.

### 15. Mold risk

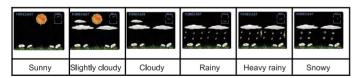
 Total 3 levels are used to determine mold risk: LO, ME, and HI. When the risk level is HI, we advise you to take measures to dehumidify your room.

# 16. Low battery

- If the battery icon " is displayed in the "INDOOR" column, you need to replace the Weather Station's battery as soon as possible.
- If the battery icon " is displayed in the "OUTDOOR REMOTE" column, you
  need to replace the corresponding Wireless Remote Sensor's battery based
  on the channel number displayed on the Weather Station.

#### 17. Weather forecast

- The Weather Station makes a weather forecast for the next 12 hours based on the trends of barometric pressure. This forecast can't be compared with that of professional weather services supported by satellites and high performance computers. The Weather Station merely makes an inference according to current weather conditions. Please take both the weather forecast from your local weather forecast service as well as the forecast from your Weather Station into account. If there are discrepancies between the results from your device and that of the local weather forecasting service, please follow the advice from the latter one.
- The Weather Station displays the following weather symbols:



- The Weather Station can display the barometric pressure trends.
- You may see the following displays:
  - The barometric pressure will rise.
  - The barometric pressure will remain constant.
  - The barometric pressure will decline.

# 18. Projection

- Once the projection switch is "ON", the projection will be activated.
- When the projection switch is "OFF", the projection will be closed.
- Press and hold " \(\bigcirc\)" button for more than 3 seconds to lower brightness of the projection; long press the " \(\bigcirc\)" button for another 3 seconds and the brightness will be adjusted to high levels.
- The recommended projection distance is between 3.3 feet and 10 feet. At night, the Weather Station can project clear images (time and other contents) on walls or ceilings (make sure there is no interference from lamps).
- The displayed contents include time and indoor/outdoor temperature. Indoor and outdoor temperature take turns displaying every 5 seconds.
- Press " \(\infty\)" button to change the projection's direction. 2 angles are available.

#### F.Y.I.:

During the reception of radio signals, the projection will be automatically closed to prevent the interference from the radio wave.

# 19. Backlight

When the Weather Station is connected to the power adapter, the battery will automatically stop supplying power and the screen will always be lit. Press the "SET/ \*\* " button to adjust the brightness of the backlight, which includes 4 options: 3 different brightness levels and turning off the backlight. Users can adjust brightness according the personal preferences or turn off the backlight. When the backlight is dim, press the "SNOOZE/LIGHT" button and the LCD screen will stay lit for 15 seconds.

#### F.Y.I.:

During the reception of the radio signals, the backlight will be automatically turned off to prevent the interference from the radio wave.