# 308-1711BL FAQS

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## **Batteries**

**Explanation:** Many problems are resolved with fresh batteries of the appropriate voltage. Many items sent in under warranty work when tested with fresh batteries. Batteries manufactured this year will have an expiration date 10 years (or more) in the future. Battery technology has improved and batteries will maintain voltage longer in storage. However, the environment the batteries reside in for the 10 years can deplete the power.

- ✓ We suggest name brand Alkaline batteries for indoor displays.
- ✓ Use Alkaline or Lithium batteries in the outdoor sensors.
- ✓ A minimum voltage of 1.48V for each battery is necessary for proper performance.
- ✓ Use batteries dated at least six years in advance of the current year. Batteries dated earlier than six years from now may still work, but may be unstable in performance.
- ✓ Good name brand batteries make less noise, which reduces the chance of RF (radio frequency) interference from the battery compartment.

## **Weather Station Factory Restart**

**Explanation:** The factory restart returns the weather station and outdoor sensor to an "out-of-the-box" state and often resolves an issue.

#### **Factory Restart:**

- 1. Remove all power from outdoor sensor and weather station.
- 2. Press one of the buttons on the weather station at least 20 times to clear all memory.
- 3. Verify that the weather station is blank before proceeding (some lines are painted on and will not disappear).
- 4. Leave batteries out of both units for 15 minutes (very important).
- 5. Insert fresh Alkaline batteries into the weather station.
- 6. Insert fresh batteries into the outdoor sensor.
- 7. Press the TX button on the outdoor sensor to transmit RF signal.
- 8. Keep the outdoor sensor 5-10 feet from the weather station.
- 9. When RF connection is established, the temperature will appear on the station. Allow the outdoor sensor and weather station to sit together for 15 minutes to establish a strong connection.
- 10. Do not press buttons for 15 minutes.
- ✓ For optimum 433MHz transmission, place the outdoor sensor no more than 300 feet (91 meters, open air) from the weather station.
- ✓ See the section on mounting and distance/resistance/interference for details on mounting the outdoor sensor.

## **Outdoor Temperature Sensor**

#### Compatible Outdoor Sensors

- ✓ The TX141TH-Av2 outdoor sensor comes packaged with this weather station.
- ✓ The TX141TH-B, TX141TH-Bv2 and TX141TH-A (433MHz) outdoor sensors are compatible with this weather station.

#### **Quick Connect**

**Explanation:** The quick connect is used for a weather station and outdoor sensor that have been working but lost connection due to interference or low batteries. This is not a thorough factory reset.

- 1. Bring the outdoor sensor and weather station together inside and place the units 5-10 feet apart with nothing between them.
- 2. Hold the SENSOR SEARCH button on the weather station. The outdoor temperature area will flash.
- 3. Remove battery cover from the outdoor sensor and press and release the TX button to send the signal.
- 4. Wait for 2 minutes for the outdoor temperature to appear on the weather station.
- ✓ Factory Restart: If the above procedure does not work, please try the factory reset.

#### Outdoor Temperature Signal Strength

**Explanation:** The weather station will search for the outdoor temperature/humidity outdoor sensor for 3 minutes after batteries are installed or the SENSOR SEARCH button is held for 3 seconds.

- ✓ The antenna symbol will flash during reception.
- ✓ The temperature display will be dashes "---".
- ✓ If synchronization fails once, the antenna will lose one bar.
- ✓ If synchronization fails twice, the antenna will lose two bars.
- ✓ If RF (radio frequency) reception fails five times, the antenna symbol will show without bars.
- ✓ The antenna will show full display with successful RF (radio frequency) reception.

## Dashes Show for Outdoor Temperature

**Explanation:** Dashes mean the connection is lost between the weather station and the outdoor sensor.

- ✓ Batteries often resolve the connection.
- ✓ <u>Distance/Resistance</u> can cause loss of connection between the outdoor sensor and the weather station.
- ✓ Turn the weather station 90 degrees towards the outdoor sensor to provide better reception. This allows more antenna surface to face the outdoor sensor signal.
- ✓ Try the <u>quick connect</u> or <u>factory restart</u>.

## Power Requirements

- ✓ 2-AA batteries power the outdoor sensor.
- ✓ We recommend Alkaline batteries for the outdoor sensor.
- ✓ You may choose to use Lithium batteries for temperatures below -20°F/-28.8°C.

## Inaccurate Outdoor Temperature Reading

**Explanation:** High outdoor temperature readings are generally a location issue. Low outdoor temperature readings are power related or a sensors going bad.

- ✓ The outdoor sensor reads the environment where it is mounted. When mounted inside the home, it will read inside temperature/humidity.
- ✓ When the outdoor sensor reads high during the day, but not at night, it is a positioning problem.
- ✓ Look for heat sources such as sunlight, door or window frames or reflected heat.

**Side-by-side test:** Bring the outdoor sensor in the house and place it next to the weather station for 2 hours.

- ✓ Compare indoor and outdoor temperature. The temperatures should be within 4 degrees to be within tolerance.
- ✓ If the outdoor sensor reads correctly when next to the weather station, try a different location outside.

#### Intermittent Outdoor Temperature/Humidity

**Explanation:** Intermittent problems are the hardest to resolve. RF (radio frequency) communication may come and go occasionally. This can be normal in some environments (e.g. moister climates). If outdoor sensor signal is lost, please wait 2-4 hours for the signal to reconnect on its own.

- ✓ Move the outdoor sensor to a closer location.
- ✓ Distance/Resistance can cause loss of outdoor sensor signal.
- ✓ Check Batteries.

**Freezer test:** Confirm the weather station is reading the correct outdoor sensor. Place the outdoor sensor in the freezer for an hour and watch the temperature drop on the weather station.

**Indoor distance test:** Please complete the <u>Restart</u> with outdoor sensor and weather station 5-10 feet apart and inside to establish a strong connection.

- ✓ After 15 minutes, if there is a reading in the outdoor temperature area, move the outdoor sensor to another room with one wall between the outdoor sensor and the weather station.
- ✓ Observe to see if the temperature remains on consistently for 1 hour.
- ✓ If the temperature remains on while in the house, then it is likely a distance/resistance issue.
- ✓ Move the outdoor sensor to different locations outside to find a location where the temperature reading will hold.

## Outdoor Temperature is stuck or HH.H, LL.L

**Explanation:** These symbols are error messages indication the outdoor sensor is outside of its readable range.

- ✓ Check <u>Batteries</u>. Overpowered or underpowered batteries can cause this reading.
- ✓ Replace outdoor sensor.

**Note:** The last outdoor reading may remain (not change) for several hours when connection is lost. The outdoor temperature reading will flash when the connection is first lost or intermittent.

## Outdoor sensor drains batteries quickly

- ✓ Test a new set of alkaline batteries. Write down the date of installation and the voltage of the batteries.
- ✓ When the batteries fail, please note the date and voltage again.
- ✓ Check the <u>distance</u> and <u>resistance</u> between the outdoor sensor and weather station. Outdoor sensors at the end of the range may work while batteries are fresh but not after they drain a bit.
- ✓ Check for leaking batteries, which may damage the outdoor sensor.

## Outdoor sensor fell. The sensor no longer works

**Explanation:** If there is no physical damage to the outdoor sensor, the fall may not have caused internal damage. A fall can shock the outdoor sensor or the batteries in the outdoor sensor. Batteries that have fallen on a hard surface may be damaged and unable to function properly.

- ✓ Complete a Restart with fresh batteries.
- ✓ Use <u>Batteries</u> dated at least six years in advance of the current year. Batteries dated earlier than six years from now may still work, but may be unstable in performance.

**Note:** An outdoor sensor that has fallen into puddle, snow, or other standing water, will likely have water damage and needs to be replaced. Outdoor sensors are water resistant, not waterproof.

#### Replacement Outdoor Sensors

√ Visit your local Retailer or La Crosse Technology® Store (Please copy and paste this link to your browser address bar).

Note: Be sure to order the correct model and frequency to avoid receiving the incorrect item.

✓ Call La Crosse Technology® Store or e-mail from our website if you are unsure about the correct item to order. Each item carries the original new product warranty and includes access to La Crosse Technology technical support.

## Temperature Trend Arrows

**Explanation:** The indoor and outdoor temperature trend indicators will update every 30 minutes or less. These trends represent temperature changes over the past three hours.

- ✓ UP ARROW: Temperature rose more than 2°F /1°C in the past three hours
- ✓ RIGHT ARROW: Temperature has not changed more than 2°F /1°C in the past three hours
- ✓ DOWN ARROW: Temperature fell more than 2°F /1°C in the past three hours

## MIN/MAX Temperature readings

**Explanation:** The weather station shows the daily minimum and maximum temperatures each day starting at midnight (12:00 AM). The weather station automatically resets the MIN/MAX temperatures at midnight (12:00 AM).

- ✓ View MIN data: Press and release the MIN TEMP button to view the minimum Indoor and Outdoor Temperatures.
- ✓ Reset MIN data: Hold the MIN TEMP button for 5 seconds and the Indoor and all Outdoor Minimum Temperatures will reset. The temperature area will show dashes briefly then return to current temperatures.
- ✓ View MAX data: Press and release the MAX TEMP button to view the maximum Indoor and Outdoor Temperatures.
- ✓ Reset MAX data: Hold the MAX TEMP button for 5 seconds and the Indoor and all Outdoor Maximum Temperatures will reset. The temperature area will show dashes briefly then return to current temperatures

#### Heat Index/Dew Point temperature

**Explanation:** Heat Index combines the effects of heat and humidity. It is the apparent temperature of how hot it feels to a human being. As humidity increases, the body is unable to cool effectively. The temperature will feel warmer.

**View Heat Index:** From a normal display, press the HEAT/DEW button once and Heat Index will show instead of the outdoor ambient temperature.

**Note:** Heat index will be the same number as the temperature until the outdoor temperature is above 26.7°C (80°F).

#### **Dew Point Temperature:**

Dew Point Temperature is the saturation point of the air, or the temperature to which the air has to cool in order to create condensation. The higher the dew points, the higher the moisture content of the air at a given temperature.

**View Dew Point Temperature:** From a normal display, press the HEAT/DEW button twice and Dew Point will show instead of the outdoor ambient temperature. The words "Dew Point" will show near outdoor temperatures.

**Note:** Dew Point is lower than the actual temperature.

#### Mounting/Positioning Outdoor sensor

**First:** Place the outdoor sensor in the desired shaded location and the weather station in the home. Wait approximately 1 hour before permanently mounting the outdoor sensor to ensure that there is proper reception.

#### **POSITION**

- ✓ Mount outdoor temperature outdoor sensors vertically.
- ✓ Protect the outdoor sensor from standing rain or snow and from the overhead sun, which can cause it to read incorrectly.

- ✓ Mounting under an eave or deck rail works well.
- ✓ If you choose, you can construct a small roof or box for the outdoor sensor. Be sure a box has vents.
- ✓ Mount the outdoor sensor on the North side where to prevent sun from causing incorrect readings.
- ✓ Mount at least 6 feet in the air for a strong RF (radio frequency) signal.
- ✓ Outdoor sensors are water resistant, not waterproof.
- ✓ Avoid more than one wall between the outdoor sensor and the weather station.
- ✓ The maximum transmitting range in open air is over 300 feet (91 meters).
- ✓ Obstacles such as walls, windows, stucco, concrete and large metal objects can reduce the range.
- ✓ Do not mount near electrical wires, transmitting antennas or other items that will <u>interfere</u> with the signal.
- ✓ RF (radio frequency) signals do not travel well through moisture or dirt.
- ✓ Do not mount the outdoor sensor on a metal fence. This significantly reduces the effective range.

#### **MOUNT**

#### Option 1:

- ✓ Install one mounting screw (not included) into a wall.
- ✓ Place the outdoor sensor onto the screw (hanging hole on the backside).
- ✓ Gently pull down to lock the screw in place.

#### Option 2:

- Insert the mounting screw through the front of the outdoor sensor and into the wall.
- ✓ Tighten the screw to snug (do not over tighten).

## Position Weather Station

- ✓ The weather station has a wide base to sit on a desk or table.
- ✓ Place within range of the outdoor sensor.
- ✓ The maximum transmitting range in open air is 300 feet (91 meters).
- ✓ Obstacles such as walls, windows, stucco, concrete and large metal objects can reduce the range.
- ✓ Choose a location 6 feet or more from electronics such as cordless phones, wireless gaming systems, televisions, microwaves, routers, baby monitors, etc., which can prevent signal reception.
- ✓ Be aware of electrical wires and plumbing within a wall. This will interfere with RF (radio frequency) signal reception.

#### Distance/Resistance/Interference

#### Distance:

- ✓ The maximum transmitting range in open air is over 300 feet (91 meters) between the outdoor sensor and the weather station. This range is in open air with ideal conditions.
- ✓ Consider what is in the signal path between the weather station and the outdoor sensor.
- ✓ Avoid placing electronic in the signal path between the weather station and the outdoor sensor.

### Resistance:

- ✓ Obstacles such as walls, windows, stucco, concrete and large metal objects can reduce the range.
- ✓ When considering the distance between the outdoor sensor and the weather station (300 feet open air), cut that distance in half for each wall, window, tree, bush or other obstruction in the signal path.
- ✓ Closer is better.
- ✓ Windows reflect the RF (radio frequency) signal.
- ✓ Metal absorbs the signal and reduces the range.
- ✓ Stucco has a metal mesh that absorbs the signal.
- ✓ Do not mount the outdoor sensor on a metal fence. This significantly reduces the effective range.

#### Interference:

- ✓ Consider items in the signal path between the outdoor sensor and the weather station.
- ✓ Sometimes a simple relocation of the outdoor sensor or the weather station will correct the interference.
- ✓ Windows can reflect the radio signal.
- ✓ Metal will absorb the RF (radio frequency) signal.
- ✓ Stucco has a metal mesh that absorbs signal.
- ✓ Avoid transmitting antennas: (ham radios, emergency dispatch centers, airports, military bases, etc.)
- ✓ Electrical wires (utilities, cable, etc.)
- ✓ Vegetation is full of moisture and reduces signal.

✓ It is difficult for RF (radio frequency) signal to travel through a hill.

## **Temperature Alerts**

**Explanation:** The outdoor and indoor temperature alerts are set in two separate steps.

- Set the alert value.
- ✓ Arm/Disarm the alert.

#### Select Temperature Alert Values:

Hold the TEMP ALERT button for five seconds to select and set temperature alert values.

- OUTDOOR HI alert will flash. Press the ▲ or ▼ buttons to set the alert value, and press the TEMP ALERT button to confirm and switch to OUTDOOR LOW setting.
- 2. **OUTDOOR LO** alert will flash. Press the ▲ or ▼ buttons to set the alert value, and press the TEMP ALERT button to confirm and switch to INDOOR HI setting.
- 3. **INDOOR HI** alert will flash. Press the ▲ or ▼ buttons to set the alert value, and press the TEMP ALERT button to confirm and switch to INDOOR LOW setting.
- INDOOR LO alert will flash. Press the ▲ or ▼ buttons to choose the value, and press the TEMP ALERT button to confirm and exit.

**Note:** After selecting temperature alert values, use the next step to arm or disarm individual alerts.

#### Arm/Disarm Temperature Alerts

- 1. In normal mode, hold then release the TEMP ALERT button to toggle the alerts:
  - Outdoor HI
  - Outdoor LO
  - Indoor HI
  - Indoor LO
- 2. Press the ▲ button to arm the selected alert. The alert icon (bell) appears next to the alert, when the alert is active.
- 3. Press the ▼ button to disarm the selected alert.

Note: When no temperature alerts are set, the Temperature Alert area will show ALERTS OFF.

#### **Active Temperature Alert**

- ✓ When temperature alert sounds, the corresponding alert icon (bell) will flash.
- ✓ The alert beeps once every minute, until the temperature is out of alert range.
- ✓ Press any button to stop alert. The alert symbol will still show.

#### **Weather Station**

#### How tall are the time numbers?

The time numbers are 0.5 inches tall.

#### **Power Requirements**

✓ 2-AA Alkaline batteries power this weather station.

## 12-Hour or 24-Hour time format

- ✓ Time can display in 12-hour (am, pm) or 24-hour format.
- ✓ Default is 12-hour time.
- ✓ Use the Program Menu to switch time formats.

## Fahrenheit/Celsius

Use the program menu to switch between Fahrenheit and Celsius.

#### Dashes, HH.H, LL.L or stuck Indoor Temperature/Humidity

**Explanation:** These symbols are error messages indication the indoor sensor is outside of its readable range. For indoor readings, this is generally a power related issue.

- ✓ Batteries may be overpowered or underpowered. Remove batteries from the weather station.
- ✓ Press any button 20 times. Leave the weather station unpowered for 1-2 hours.
- ✓ Install fresh Alkaline batteries with correct polarity.
- ✓ If the indoor temperature is still shows dashes, HH.H or LL.L, the weather station may need replacement.

#### Inaccurate Indoor Temperature Reading

**Explanation:** When the indoor temperature is inaccurate, it is often due to the location of the display or overpowered/under powered batteries. You can test the accuracy at you home.

**Side-by-side test:** Bring the outdoor sensor in the house and place it next to the weather station for 2 hours.

- ✓ Compare indoor and outdoor temperature. The temperature should be within 4 degrees to be within tolerance.
- ✓ Look for heat sources such as sunlight, door or window frames or reflected heat or cold near the weather station.

Check batteries.

## Set Time Alarm

In normal mode, hold the TIME ALARM button for three seconds to enter alarm set mode.

- 1. HOUR: The **Hour** will flash, use the ▲ or ▼ buttons to set the hour, and press TIME ALARM button to confirm and switch to minutes.
- 2. MINUTES: The **Minutes** will flash, use the ▲ or ▼ buttons to set the minutes, and press TIME ALARM button to confirm.
- 3. Press the SETTINGS button to return to normal mode.

**Note:** When no buttons are pressed for ten seconds, the weather station will save the last change and default back to normal mode

#### Activate/Deactivate time alarm

- ✓ In normal mode, press and release the TIME ALARM button once to show alarm time.
- ✓ Press and release the TIME ALARM button repeatedly to turn ON/OFF alarm.
- ✓ **Note:** The alarm will ring for 2 minutes then turn off if no buttons are pressed.

#### Snooze Alarm

- ✓ When the alarm sounds, press the TIME ALARM button to snooze the alarm for 10 minutes.
- ✓ The snooze option can repeat three times.
- ✓ Note: while the alarm sounds press any button except the TIME ALARM button to turn the alarm off.

#### Time is off by hours

- ✓ This weather station has manual set time.
- ✓ Use the program menu to set the time.

## Manually Set Time/Date: Program Menu

Hold the SETTINGS button for three seconds to enter time set mode.

1. YEAR: The **Year** will flash, use the ▲ or ▼ buttons to choose the year, and press the SETTINGS button to confirm and move to the month.

- 2. MONTH: The **Month** will flash, use the ▲ or ▼ buttons to choose the month, and press the SETTINGS button to confirm and move to the date.
- 3. DATE: The **Date** will flash, use the ▲ or ▼ buttons to choose the date, and press the SETTINGS button to confirm and move to 12/24 hour time.
- 4. 12/24-HOUR: The time format **12H** will flash, use the ▲ or ▼ buttons to choose 12-hour or 24-hour time format and press the SETTINGS button to confirm and move to hour.
- 5. HOUR: The **Hour** will flash, use the ▲ or ▼ buttons to choose the hour, and press the SETTINGS button to confirm and move to minutes.
- 6. MINUTES: The **Minutes** will flash, use the ▲ or ▼ buttons to choose the minutes, and press the SETTINGS button to confirm and move to select Fahrenheit/Celsius.
- 7. FAHRENHEIT/CELSIUS: **°F or °C** will flash. Use the ▲ or ▼ buttons button to select Fahrenheit or Celsius. Press and release the SETTINGS button to confirm and exit the program menu.

**Note:** When no buttons are pressed for ten seconds, the weather station will save the last change and default back to normal mode.

## Moon Phase

**Explanation:** The Moon Phase is based on the date manually set on the weather station. The moon is divided by 6 sections, showing 12 phases of the moon.

- ✓ Waxing indicates growing or expanding illumination and happens after a new moon.
- ✓ Waning indicates decreasing illumination and occurs after a full moon.
- ✓ Crescent refers to the moon being less than half-illuminated. Crescents can be waning or waxing.
- ✓ **Gibbous** describes a moon phase when more than half is illuminated. Gibbous can be waxing or waning.
- ✓ New Moon occurs when the moon is between the earth and sun, so the illuminated portion of the moon is on the backside facing the sun and we cannot see it. After a new moon, the illuminated portion will increase or wax until the full moon occurs.
- ✓ **Full Moon** occurs when the earth, moon and sun are in approximate alignment, with the moon and the sun on opposite sides of the earth. The illuminated portion of the moon faces the earth, giving us complete visibility of one side of the entire moon. After a full moon, the illuminated portion will decrease or wane until the new moon occurs.
- ✓ First Quarter and Last Quarter moons occur when the moon is at a 90-degree angle to the earth and sun. We see half of the moon illuminated and the other half is in shadow.

### Weather Station is dim

**Explanation:** Most weather stations have a gray background. Place the weather station at eye level, to determine if it is dim. Weather stations that sit in the sunlight can develop a cloudy film over time.

- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the weather station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.

#### Weather Station has distorted or frozen display

**Explanation:** On a brand new weather station, check for thin plastic film of **printed scratch guard** that may be on the screen of the weather station. This thin piece of plastic has printed numbers for store displays. When the batteries are installed, the "real" numbers show behind the printed scratch guard and create distortion.

- ✓ With all power removed, the weather station should be blank.
- ✓ If numbers still appear, please check for scratch guard.

#### Power:

- ✓ Check that the batteries are installed correctly.
- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered.
- ✓ Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.
- ✓ Insert batteries into the weather station.

## Weather Station is blank: No letters, numbers or dashed lines

- ✓ Check that the batteries are installed correctly.
- ✓ <u>Batteries</u> may be overpowered or underpowered.
- ✓ Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.
- ✓ Insert batteries into the weather station.

# Weather Station drains batteries quickly

- ✓ Test a new set of alkaline batteries. Write down the date of installation and the voltage of the batteries.
- When the batteries fail, please note the date and voltage again. This is helpful in determining the problem.
- Check for leaking batteries, which may damage the weather station.
- ✓ Battery life is over 12 months when using reputable battery brands.

## Weather Station has missing segments

**Explanation:** When parts of numbers, letters, or pictures are missing on the display, it is often power related.

- ✓ Batteries may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the weather station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.

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