

ACURITE®



Weather Stations



Temperature & Humidity



Weather Alert Radio



Kitchen Thermometers & Timers



Clocks

It's More than Accurate, it's ACURITE®.

AcuRite offers an extensive assortment of precision instruments, designed to provide you with information you can depend on to Plan your day with confidence™.

www.AcuRite.com

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ACURITE®

Instruction Manual

Weather Center

models 00607 / 00608BPDI



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Questions? Contact Customer Support at (877) 221-1252 or visit www.AcuRite.com.

SAVE THIS MANUAL FOR FUTURE REFERENCE.



Congratulations on your new AcuRite product. To ensure the best possible product performance, please read this manual in its entirety and retain it for future reference.

Unpacking Instructions

Remove the protective film that is applied to the LCD screen prior to using this product. Locate the tab and peel off to remove.

Package Contents

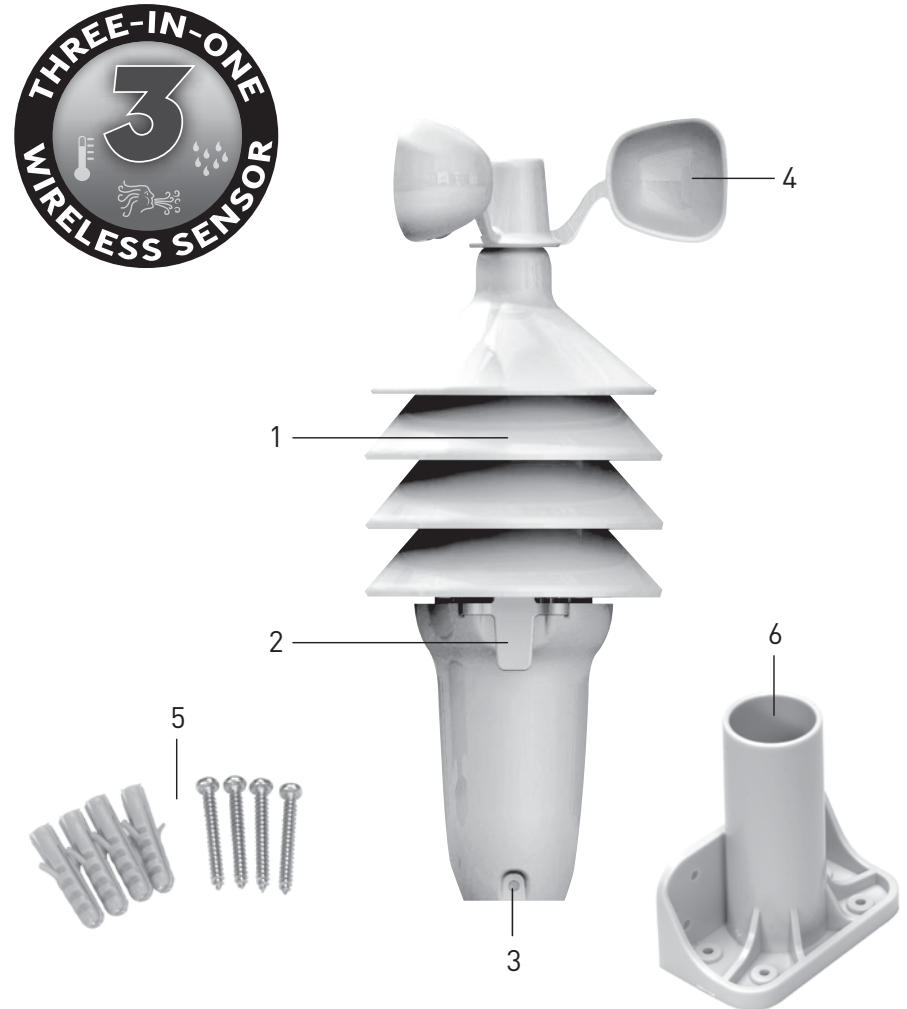
1. Display unit with tabletop stand
2. 3-in-1 sensor
3. Sensor mounting bracket
4. Mounting hardware
5. Instruction Manual

IMPORTANT PRODUCT MUST BE REGISTERED
TO RECEIVE WARRANTY SERVICE

PRODUCT REGISTRATION
Register online
to receive 1-year
warranty protection
www.AcuRite.com

SUPPORT
Support Forum
Archived Products
▶ Register a Product

Features & Benefits



3-in-1 SENSOR

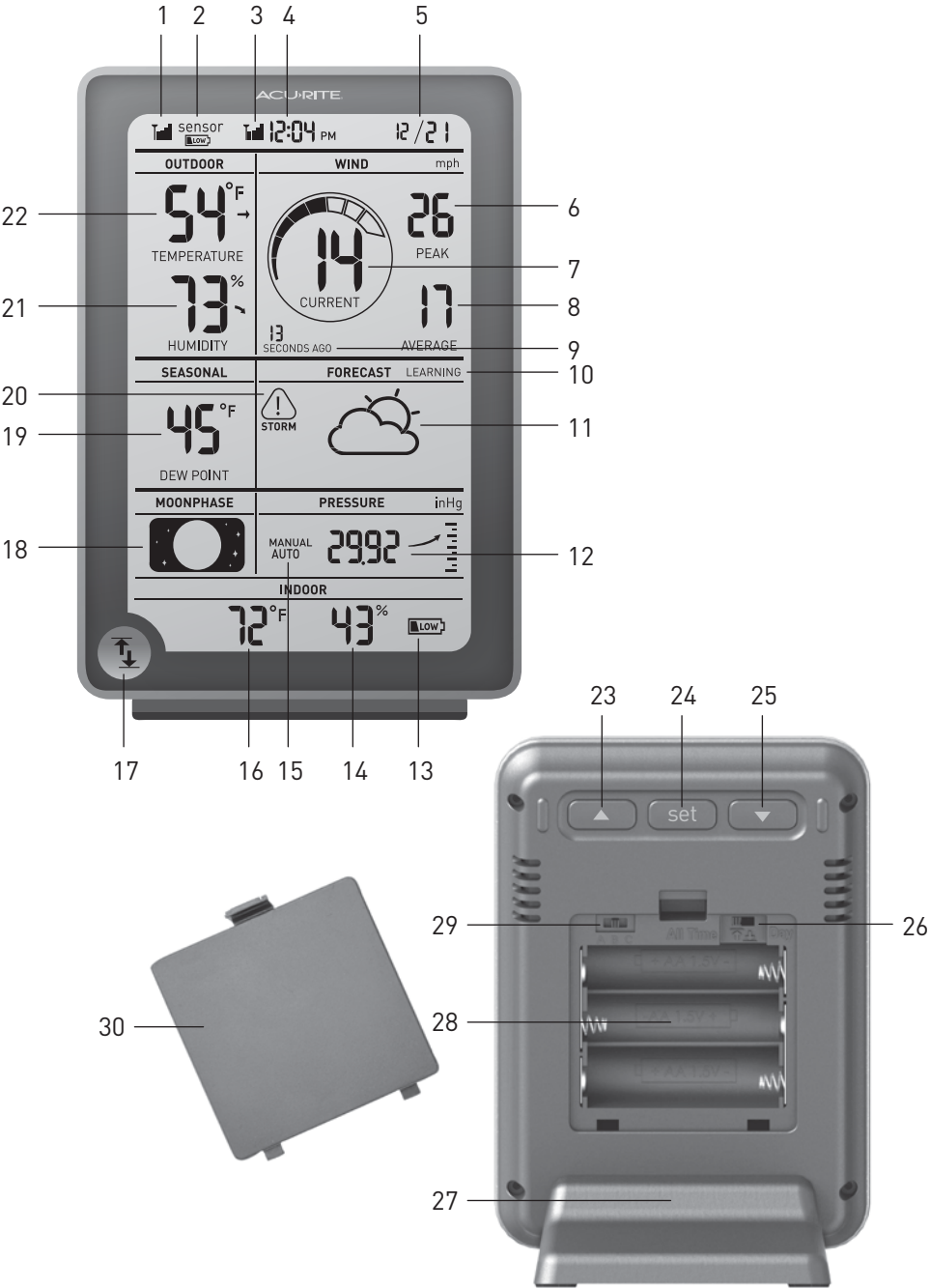
- 1. Temperature & Humidity Sensors**
(internal)
- 2. Release Lever for Battery Access**
- 3. Mounting Point**
- 4. Wind Speed Anemometer**

- 5. Mounting Hardware**
Includes anchors and screws.

Qty	Diameter	Length
4	#4	1"
2	#6	3/8"
- 6. Mounting Bracket**
- 7. A-B-C Switch** (not shown)
ID code that must match display's
A-B-C switch to ensure units synchronize.

Features & Benefits

Display Unit



Customer Support

AcuRite customer support is committed to providing you with best-in-class service. **For assistance**, please have the model number of this product available and contact us in any of the following ways:

 (877) 221-1252

 info@chaney-inst.com

24/7 support at www.AcuRite.com

- › Installation Videos
- › Register your Product
- › Instruction Manuals
- › Support User Forum
- › Replacement Parts
- › Submit Feedback & Ideas

IMPORTANT

PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

PRODUCT REGISTRATION

Register online to receive 1-year warranty protection

www.AcuRite.com

SUPPORT

Support Forum

Archived Products

▶ Register a Product

Limited One Year Warranty

At AcuRite, we proudly uphold our commitment to quality technology. Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase.

We recommend that you visit us at www.AcuRite.com for the fastest way to register your product. However, product registration does not eliminate the need to retain your original proof of purchase in order to obtain warranty benefits.

Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase. Remedy for breach of this warranty is limited to repair or replacement of the defective item(s). Any product which, under normal use and service, is proven to breach the warranty contained herein within ONE YEAR from date of sale will, upon examination by Chaney, and at its sole option, be repaired or replaced by Chaney. Transportation costs and charges for returned goods shall be paid for by the purchaser. Chaney hereby disclaims all responsibility for such transportation costs and charges. This warranty will not be breached, and Chaney will give no credit for products it manufactures which have received

normal wear and tear, been damaged (including by acts of nature), tampered, abused, improperly installed, damaged in shipping, or repaired or altered by others than authorized representatives of Chaney.

The above-described warranty is expressly in lieu of all other warranties, express or implied, and all other warranties are hereby expressly disclaimed, including without limitation the implied warranty of merchantability and the implied warranty of fitness for a particular purpose. Chaney expressly disclaims all liability for special, consequential or incidental damages, whether arising in tort or by contract from any breach of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Chaney further disclaims all liability from personal injury relating to its products to the extent permitted by law. By acceptance of any of Chaney's products, the purchaser assumes all liability for the consequences arising from their use or misuse. No person, firm or corporation is authorized to assume for Chaney any other liability in connection with the sale of its products. Furthermore, no person, firm or corporation is authorized to modify or waive the terms of this paragraph, and the preceding paragraph, unless done in writing and signed by a duly authorized agent of Chaney. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For in-warranty claims:
Chaney Instrument Co. | 965 Wells St. | Lake Geneva, WI 53147

Specifications

TEMPERATURE RANGE	Outdoor: -40°F to 158°F; -40°C to 70°C
	Indoor: 32°F to 122°F; 0°C to 50°C
HUMIDITY RANGE	Outdoor: 1% to 99%
	Indoor: 1% to 99%
WIND SPEED	0 to 99 mph; 0 to 159 kph
WIRELESS RANGE	330ft / 100m depending on home construction materials
OPERATING FREQUENCY	433mhz
POWER	Display: 3 x alkaline batteries
	Sensor: 4 x alkaline or lithium batteries
DATA REPORTING	Wind Speed: 18 seconds
	Outdoor temperature & humidity: 18 sec. updates
	Indoor temperature & humidity: 60 sec. updates

FCC Information

This device complies with part 15 of 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.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation of the device.

DISPLAY UNIT

1. Wireless Sensor Signal Strength

2. Low Sensor Battery Indicator

3. Atomic Clock Signal Strength

4. Atomic Clock

Maintains time with split-second accuracy and automatically updates for daylight saving time.

5. Date

6. Peak Wind Speed

Highest speed from past 60 minutes.

7. Current Wind Speed

8. Average Wind Speed

Based on all wind speed readings from the past 2 minutes.

9. Time Stamp for Last Wind Reading

Updates about every 18 seconds.

10. Learning Mode Icon

Disappears after weather forecast self-calibration is complete.

11. 12 to 24 Hour Weather Forecast

Self-Calibrating Forecasting pulls data from the outdoor sensor to generate your personal forecast.

12. Barometric Pressure

Arrow icon indicates the direction the pressure is trending.

13. Low Battery Indicator

14. Current Indoor Humidity

15. Auto or Manual Pressure Mode

Indicates pressure mode preference.

Auto Pressure Mode

Pressure will self-calibrate over a 14 day Learning Mode.

Manual Pressure Mode

Indicates the pressure has been manually calibrated.

16. Current Indoor Temperature

17. Record Highs & Lows Button

View records for temperature and humidity.

18. Moon Phase

19. Seasonal Select

Wind chill will show when temperatures are below 40°F, Dewpoint when temperatures are between 41°F and 79°F and Heat Index when temperatures are above 80°F.

20. Oncoming Storm Icon

Indicates a large, rapid pressure drop has been detected.

21. Current Outdoor Humidity

Arrow icon indicates direction humidity is trending.

22. Current Outdoor Temperature

Arrow icon indicates direction temperature is trending.

Back of Display Unit

23. "▲" Button

for setup preferences.

24. SET Button

for setup preferences.

25. "▼" Button

for setup preferences.

26. Daily / All-Time Records Button

Selects desired records to be viewed using Records Button (17).

27. Removable Tabletop Stand

28. Battery Compartment

29. A-B-C Switch

ID code that must match sensor's A-B-C switch to ensure units synchronize.

30. Battery Compartment Cover

3-in-1 Sensor Setup

1 Set the A-B-C Switch

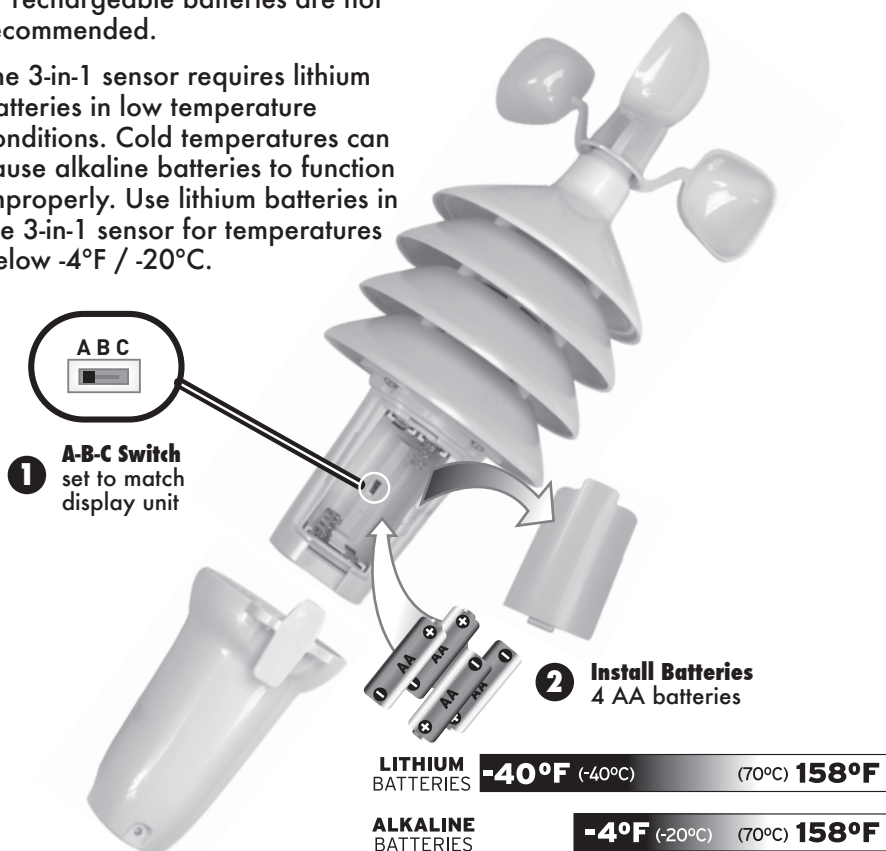
The A-B-C switch is located inside the battery compartment. It can be set to A, B or C. However, you must select the same letter choices for both the sensor and the display unit in order for the units to synchronize.

2 Install or Replace Batteries

Batteries **MUST** be installed for this product to operate. AcuRite recommends high quality alkaline or lithium batteries for the best product performance. Heavy duty or rechargeable batteries are not recommended.

The 3-in-1 sensor requires lithium batteries in low temperature conditions. Cold temperatures can cause alkaline batteries to function improperly. Use lithium batteries in the 3-in-1 sensor for temperatures below -4°F / -20°C.

1. Press the release lever and pull off the lower housing of the sensor.
2. Remove the battery compartment cover. Take note of the A-B-C switch setting inside the battery compartment.
3. Insert 4 x AA batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.
4. Replace the battery cover and lower housing of the sensor.



Calibration

Calibrate Temperature & Humidity

The indoor / outdoor temperature and humidity readings can be calibrated on the display unit to improve accuracy. Calibration can improve accuracy when 3-in-1 sensor placement or environmental factors impact your data accuracy.

1. Locate the "▲", "SET", and "▼" buttons on the back of the display unit. Press AND HOLD all three buttons for at least 5 seconds.
2. The temperature will begin flashing, indicating it is ready to be calibrated.
3. Press the up or down arrow buttons to calibrate the data value higher or lower from the actual reading.
4. Press the "SET" button to confirm the calibration adjustment. Note: The "∞" icon remains illuminated next to calibrated values.
5. The next calibratable data will begin flashing, indicating it is ready to be calibrated. Repeat Steps 1 - 4 to calibrate additional data.

Calibrate Barometric Pressure

The Weather Center default pressure mode is "AUTO". In auto mode, the pressure will calibrate itself over a 14 day Learning Mode. Barometric pressure can be manually calibrated:

1. Locate the "▲", "SET", and "▼" buttons on the back of the display unit. Press AND HOLD all three buttons for at least 5 seconds.
2. Press the "SET" button to cycle through data until the pressure value begins flashing.
3. Press the "▲" or "▼" button to select "MANUAL" pressure mode.
4. Press the "SET" button to confirm.
5. Press the "▲" or "▼" buttons to calibrate the pressure value higher or lower from the self-calibrated reading.
6. Press the "SET" button to confirm the calibration adjustment. Note: The "∞" icon remains illuminated next to the calibrated value.

Care & Maintenance

Display Unit Care

Clean with a soft, damp cloth. Do not use caustic cleaners or abrasives. Keep away from dust, dirt and moisture. Clean ventilation ports regularly with a gentle puff of air.

3-in-1 Sensor Care

Clean The Sensor

Clean with a soft damp cloth. Do not use caustic cleaners or abrasives.

Insect Prevention

Insects may cause obstructions and interrupt data by nesting in or on the 3-in-1 sensor. To limit this problem, spray sensor with a household insect repellent. Consult the insect repellent instructions prior to use.

Snow & Freezing Weather

The 3-in-1 sensor will not be damaged by freezing conditions.

Clean the Wind Anemometer

Remove foreign matter from the outside of the sensor for free movement of the wind anemometer. If needed, use a small amount of clear silicone spray lubricant or graphite powder on the anemometer for improved movement.

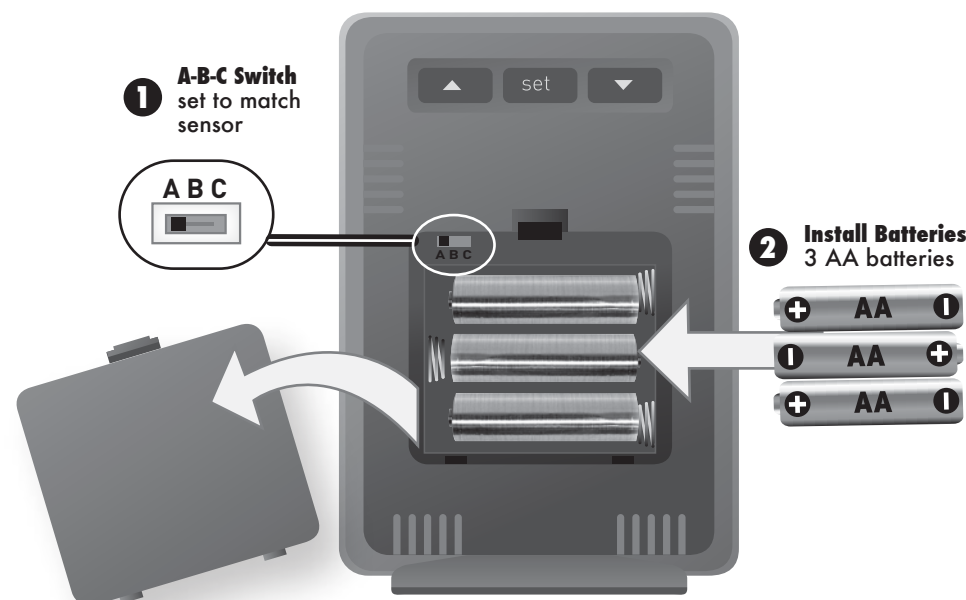
Display Unit Setup

1 Set the A-B-C Switch

Locate the A-B-C switch inside the battery compartment. Set the A-B-C switch to A, B or C. You must select the same letter choices for both the display unit and the sensor in order for the units to synchronize.

2 Install or Replace Batteries

1. Remove the battery compartment cover.
2. Insert 3 x AA alkaline batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.
3. Replace the battery cover.



PLEASE DISPOSE OF OLD OR DEFECTIVE BATTERIES IN AN ENVIRONMENTALLY SAFE WAY AND IN ACCORDANCE WITH YOUR LOCAL LAWS AND REGULATIONS.

BATTERY SAFETY: Clean the battery contacts and also those of the device prior to battery installation. Remove batteries from equipment which is not to be used for an extended period of time. Follow the polarity (+/-) diagram in the battery compartment. Promptly remove dead batteries from the device. Dispose of used batteries properly. Only batteries of the same or equivalent type as recommended are to be used. DO NOT incinerate used batteries. DO NOT dispose of batteries in fire, as batteries may explode or leak. DO NOT mix old and new batteries or types of batteries (alkaline/standard). DO NOT use rechargeable batteries. DO NOT recharge non-rechargeable batteries. DO NOT short-circuit the supply terminals.

Atomic Clock

AcuRite atomic clocks use a radio-controlled signal to synchronize to the correct time broadcast by the National Institute of Standards and Technology (NIST) Radio Station WWVB, located near Fort Collins, Colorado. WWVB broadcasts the current time and date with split-second accuracy.

This AcuRite atomic clock will maintain itself to the correct time, and automatically adjust itself for daylight saving time to provide the most accurate timekeeping standard possible.

Please note: The atomic signal generally takes a few hours to synchronize, so it is important to manually set the time and date after powering on the display.

Set the Time, Date & Units

The clock and calendar are utilized to time stamp history records and other data, so it is important to set the time and date soon after you power on the display unit.

Press and HOLD the "SET" button to enter SET MODE. Once in set mode, the preference you are currently setting will blink on the display.

To adjust the currently selected (flashing) item, press and release the "▲" or "▼" buttons (press and HOLD to fast adjust).

To save your adjustments, press and release the "SET" button again to adjust the next preference. The preference set order is as follows:

TIME ZONE (PST MST CST EST AST HAT [HAST] AKT [AKST])

AUTO DST (Automatically adjust time +/- on DST dates)*

CLOCK HOUR

CLOCK MINUTE

CALENDAR MONTH

CALENDAR DATE

CALENDAR YEAR

UNITS: TEMPERATURE (°F or °C)

UNITS: PRESSURE (inHg or mb)

UNITS: WIND SPEED (mph, kph, knots)

You will automatically exit SET MODE if no buttons are touched for 30 seconds. Enter basic setup mode at any time by pressing the "SET" button.

*If you live in an area that observes Daylight Saving Time, DST should be set to ON even if it is not currently Daylight Savings Time.

Troubleshooting

Problem	Possible Solution
Inaccurate temperature or humidity	• Make sure both the display unit and 3-in-1 sensor are placed away from any heat sources or vents (see page 9). • Make sure both units are positioned away from moisture sources (see page 9). • Make sure 3-in-1 sensor is mounted at least 5ft off of the ground. • Calibrate indoor and outdoor temperature and humidity (see page 15).
Inaccurate wind readings	• What is wind reading being compared to? Pro weather stations are typically mounted at 30ft high or more. Make sure to compare data using a sensor positioned at the same mounting height. • Check location of the sensor. Ensure it's mounted a minimum of 5ft in the air with no obstructions around it (within several feet). • Ensure wind cups are spinning freely. If they hesitate or stop try lubricating with graphite powder or spray lubricant.
Display screen not working	• Check that the batteries are installed correctly. Batteries may need to be replaced.
Atomic signal or time syncing problems	For additional troubleshooting, please visit: http://www.nist.gov/pml/div688/grp40/radioclocks.cfm

If your AcuRite product does not operate properly after trying the troubleshooting steps, visit www.AcuRite.com or call (877) 221-1252 for assistance.

Troubleshooting

Problem	Possible Solution
No outdoor sensor reception  no bars	- Relocate the display unit and/or the 3-in-1 sensor. The units must be within 330ft (100m) of each other. - Make sure both units are placed at least 3 feet (.9m) away from electronics that may interfere with the wireless communication (such as TVs, microwaves, computers, etc). - Use standard alkaline batteries (or lithium batteries in sensor when temperature is below -4°F/-20°C). Do not use heavy duty or rechargeable batteries. NOTE: It may take up to 20 minutes for display unit and sensor to synchronize after batteries are replaced. - Synchronize the units: - Bring both the sensor and display unit indoors and remove batteries from each. - Reinstall batteries in outdoor sensor. - Reinstall batteries in display unit. - Let the units sit within a couple feet of each other for about 20 minutes to gain a strong connection.
Outdoor temperature is flashing or showing dashes	Flashing of the outdoor temperature may be an indication of wireless interference. Make sure the A-B-C switch in the battery compartments of both the display unit and sensor are switched to the same letter. You may choose A, B or C; but both units must match to sync up. Sometimes changing to a different channel can help.
Inaccurate forecast	- Weather Forecast icon predicts conditions for the next 12 to 24 hours, not current conditions. - Has Learning Mode icon disappeared from the display unit? Learning Mode must complete before forecast and pressure will be accurate. - Allow unit to run continuously for 33 days. Battery removal or resetting the display unit will restart Learning Mode. After 14 days, forecast should be fairly accurate, however Learning Mode calibrates for a total of 33 days.

Placement for Maximum Accuracy

AcuRite sensors are sensitive to surrounding environmental conditions. Proper placement of both the display unit and the sensor are critical to the accuracy and performance of this product.



Display Unit Placement

Place the display unit in a dry area free of dirt and dust. To ensure accurate temperature measurement, place out of direct sunlight and away from heat sources or vents. Display unit stands upright for tabletop use or is wall-mountable.



3-in-1 Sensor Placement

The 3-in-1 sensor is designed to remain outdoors all year long. Choose an open location with no obstructions above or around the sensor for the most accurate measurements.

Important Placement Guidelines

Display unit and sensor must be within 330ft (100m) of each other.

MAXIMIZE WIRELESS RANGE

Place units away from large metallic items, thick walls, metal surfaces, or other objects that may limit wireless communication.

PREVENT WIRELESS INTERFERENCE

Place both units at least 3ft (.9m) away from electronic devices (TV, computer, microwave, radio, etc.).

LOCATE AWAY FROM HEAT SOURCES

Position sensor away from heaters, air conditioners, chimneys, exhaust vents, asphalt and concrete (surfaces that radiate heat).

LOCATE AWAY FROM HUMIDITY SOURCES

Avoid installing the sensor near pools, spas, or other bodies of water. Water sources may impact humidity accuracy.

LOCATE AWAY FROM SPRINKLER HEADS

DO NOT install the sensor where it will be sprayed by a sprinkler system. This may force water inside the sensor.

LOCATE AWAY FROM WIND OBSTRUCTIONS

DO NOT mount the sensor with obstructions around it. Consider a location that is a wide open area, with few structures around to ensure accurate wind speed measurement.

Visit us online to view installation photos and video, or learn more about AcuRite technology:

www.AcuRite.com/3in1



View Video

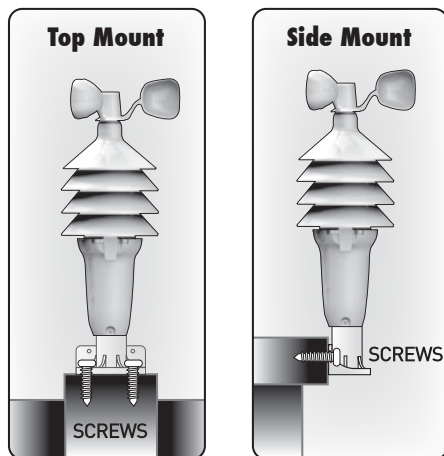
3-in-1 Sensor Installation Guidelines

INSTALLATION HEIGHT Mount the sensor at least 5 feet (1.5 meters) off the ground (higher is better for wind measurement) in an open area. Secure to fence post, 2"x4" wood, 3/4" pole, etc. (not included)

LEVEL INSTALLATION Use a bubble level (not included) to ensure level installation for accurate wind measurement.

Top or Side Mount

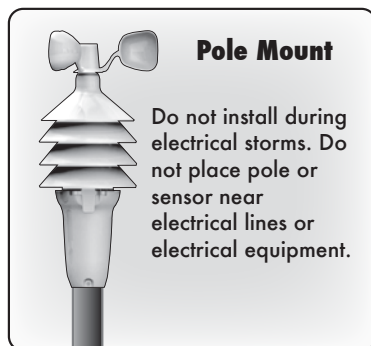
1. Insert the mounting base into the hole on the bottom of the sensor.
2. Use one of the screws included in the hardware bag to fasten the lower sensor housing to the mounting base.
3. Make sure the sensor is level using a bubble level.
4. Fasten mounting base to a post or railing using 2 screws.



Pole Mount

1. Insert 3/4" schedule 40 PVC (25.8 mm O.D.) pole (not included) or similar item all the way into the hole on the bottom of the sensor. Note: Mounting base not used.
2. Use one of the screws included in the hardware bag to fasten the lower sensor housing securely to the pole.
3. Make sure the sensor is level using a bubble level.

The 3-in-1 sensor is now ready to use.



Basic Setup is Complete

The 3-in-1 sensor will now synchronize with the display unit. It may take a few minutes for synchronization to complete. If both or one of the units appear to be functioning improperly, please refer to the troubleshooting section.

Using the Weather Center

Learning Mode

Self-Calibrating Forecasting use a unique algorithm to analyze changes in pressure and temperature over a time period (called Learning Mode) to determine your altitude. After 14 days, the Learning Mode icon disappears from the display screen. At this point, the self-calibrated pressure is tuned in to your location and the unit is ready for superior weather prediction.

Weather Forecast

AcuRite's patented Self-Calibrating Forecasting provides your personal forecast of weather conditions for the next 12 to 24 hours by collecting data from the sensor in your backyard. It generates a forecast with pinpoint accuracy - personalized for your exact location.

EXAMPLE OF WEATHER FORECAST DISPLAY ICONS	RAIN LIKELY (flashing=stormy)	LIGHT RAIN LIKELY	PARTLY CLOUDY	CLEARING
RAIN/SNOW MIX LIKELY (flashing=stormy)	SNOW LIKELY	LIGHT SNOW LIKELY	CLOUDY	MOSTLY CLOUDY

View the complete list of icons at www.AcuRite.com/acurite-icons

Barometric Pressure

Subtle variations in barometric pressure greatly affect the weather. This weather center displays the current pressure with an arrow icon to indicate the direction the pressure is trending (FALLING, STEADY, or RISING).

High & Low Records

The Record Highs & Lows button (↕) displays minimum and maximum recordings for outdoor and indoor temperature and humidity. To select between viewing daily (since midnight) or all-time records, slide the switch located on the back of the display. To reset low records, press and hold the (▼) button while viewing low records. To reset high records, press and hold the (▲) button while viewing high records.

Wind Speed

The Wind area of the display features WIND SPEED PEAK, AVERAGE, CURRENT WIND SPEED, and a graphic representation of current wind speed. There is also a time stamp for the last wind speed reading.

