

LIMITED ONE YEAR WARRANTY

Chaney Instrument Company warrants that all products it manufactures to be of good material and workmanship and to be free of defects if properly installed and operated for a period of one year from date of purchase. REMEDY FOR BREACH OF THIS WARRANTY IS EXPRESSLY LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE ITEMS. 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. In all cases, 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 shall have received normal wear and tear, been damaged, tampered, abused, improperly installed, damaged in shipping, or repaired or altered by others than authorized representatives of Chaney.

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For in-warranty repair, please contact:

Customer Care Department
Chaney Instrument Company
965 Wells Street
Lake Geneva, WI 53147

Chaney Customer Care

877-221-1252

Mon-Fri 7:00 a.m. to 7:00 p.m. Central

www.AcuRite.com

This device complies with Part 15 of the FCC rules and Industry Canada licence-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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.

ACURITE®



Weather Center

Model:3N1TXCA2

Package Contents:

- (1) Main Unit with stand
- (1) Wireless Sensor with mounting bracket

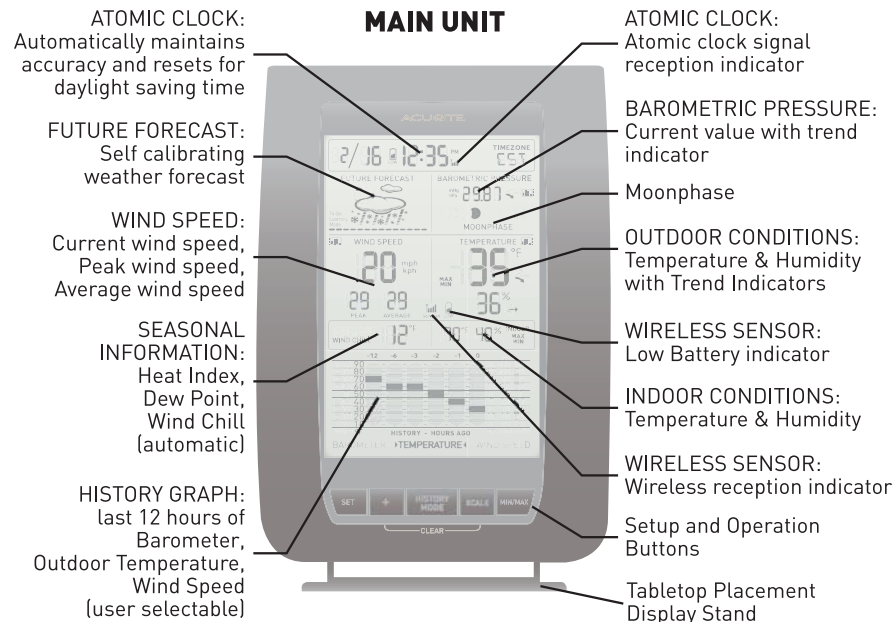
What You Need:

- Phillips Screwdriver
- (7) AA batteries

Thank You for purchasing this ACURITE® product. Please read this manual in it's entirety to fully enjoy the benefits and features of this product. Please keep this manual for future reference.

NOTE: A protective film is applied to the LCD at the factory that must be removed prior to using this product. Locate the pull tab and simply peel to remove.

SECTION 1 • OVERVIEW OF FEATURES



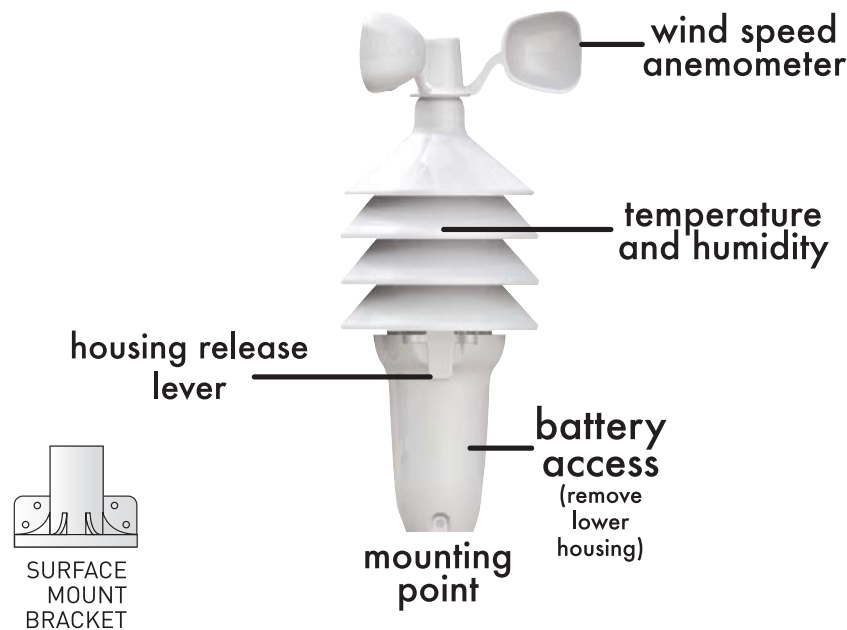
About the Atomic Clock

A clock is considered atomic if it has an accuracy of one second in a million years. Consumer clocks are considered atomic if they attain this accuracy by receiving a signal from an atomic clock. In North America, the National Institute of Standards and Technologies operates an atomic clock in Colorado which transmits the time codes via the radio station WWVB. The Acurite product you have purchased includes a built-in receiver which picks up the signal from the WWVB station. For the best possible reception, place the main unit with the back side facing Colorado. NOTE: Due to solar radiation in the atmosphere, the atomic clock signal is weaker during the day. Most synchronization with the WWVB atomic clock signal happens at night when there is less interference.

About the Wireless Sensor

This wireless weather center features a wireless sensor that provides wind, temperature and humidity data and broadcasts this information to the main display unit. This wireless sensor will provide accurate outdoor weather conditions when placed properly. The wireless sensor contains sensitive electronic components and a balanced anemometer (for wind speed measurement). Care must be taken during setup and when considering placement to make certain the unit is not dropped or struck with any falling debris from trees or structures.

WIRELESS SENSOR



SECTION 2 • SETUP

A/B/C Wireless Selection

To allow for more than one weather station and wireless sensor network to be used in close proximity, the main unit and the wireless sensor have a small switch labeled "A B C" within the battery compartments. This switch selects one of 3 wireless modes to use, and both switches **MUST** be set in matching positions (either A, B, or C) for wireless communication to take place successfully.

Battery Choice & Temperature Range

Extended periods of cold temperatures (below -4°F / -20°C) can cause alkaline batteries to function improperly. This will cause the outdoor wireless sensor to stop transmitting temperature readings. Use lithium batteries in these low temperature conditions to ensure continued operation for wireless sensors placed outdoors. NOTE: Rechargeable batteries are not recommended due to higher operating voltages.

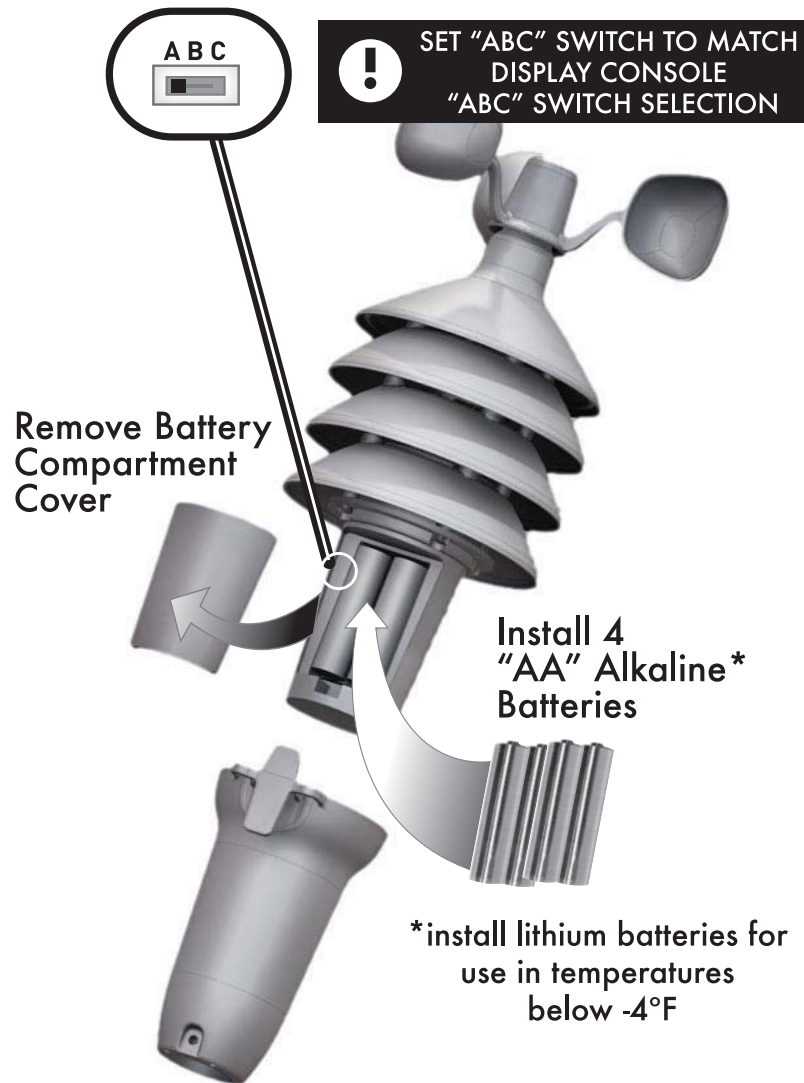
LITHIUM BATTERIES **-40°F** (-40°C) (70°C) **158°F**

ALKALINE BATTERIES **-4°F** (-20°C) (70°C) **158°F**

Install Batteries

NOTE: Install all batteries in both units within a 6 minute period to ensure proper wireless functionality. **Always install batteries into the wireless sensor FIRST.**

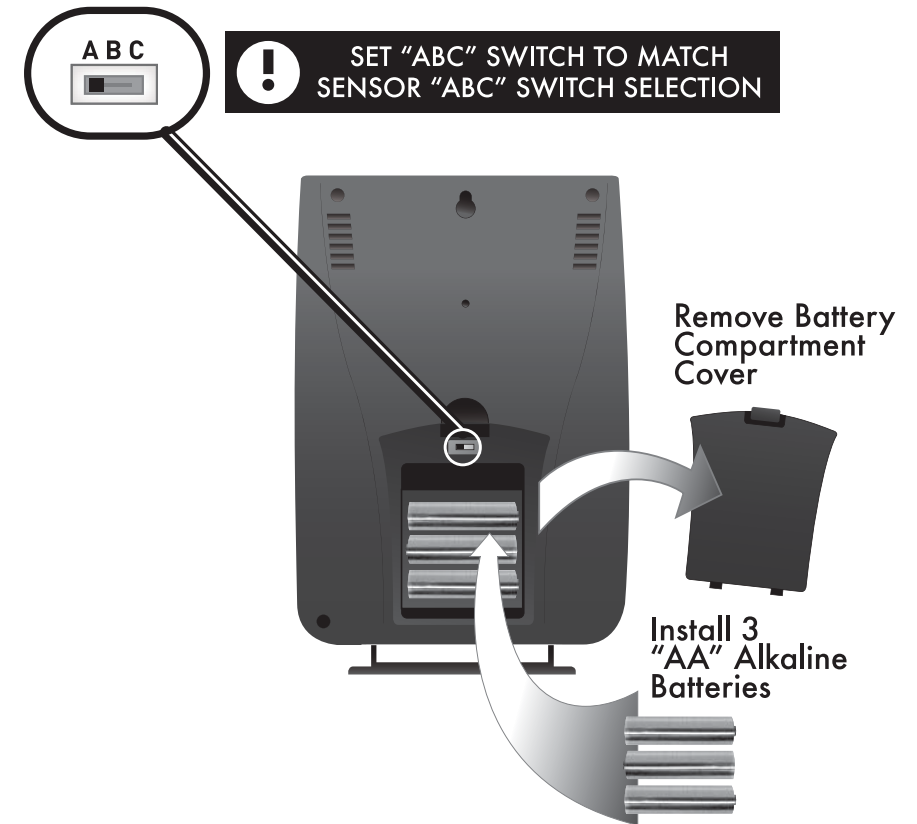
Wireless Sensor - 4 "AA" Batteries Required (not included)



Install Batteries

NOTE: Install all batteries in both units within a 6 minute period to ensure proper wireless functionality. **Always install batteries into the wireless sensor FIRST.**

Main Unit - 3 "AA" Batteries (not included)



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.

Main Unit : Basic Setup

After installing batteries, it is recommended that you set the clock and calendar initially. After the atomic clock signal is acquired, which may take up to 24 hours, the clock accuracy and daylight saving time changes will be automatically maintained.

To **set the clock and other preferences**, press AND HOLD the "SET" button for 5 seconds to enter into SET MODE. Once in set mode, the preference you are currently setting will blink on the display.

To **adjust** the currently selected (flashing) preference item, press the "+" button (press and HOLD to fast adjust).

To **save** your adjustments, press the "SET" button again to move on to adjusting the next preference. The preference set order is as follows:

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

DST (Daylight Saving Time ON OR OFF)

CLOCK HOUR

CLOCK MINUTE

YEAR

CALENDAR MONTH

CALENDAR DATE

You will automatically exit SET MODE if no buttons are depressed for 10 seconds. You may enter basic setup mode again at any time by pressing AND HOLDING the "SET" button.

Main Unit : Scale Selection

The main unit is capable of displaying some values in an alternate scale mode. To switch between modes, press the "SCALE" button.

SCALE MODE 1 - U.S. Standard

Temperature - °F (fahrenheit)

Barometric Pressure- inHg (inches of mercury)

Wind Speed/Peak/Average- mph (miles per hour)

SCALE MODE 2 - Imperial Standard

Temperature - °C (Celsius)

Barometric Pressure- hPa (Hectopascal)

Wind Speed/Peak/Average- kph (kilometers per hour)

NOTE: The "WIND SPEED" history mode chart will not change to "kph" scale, it will remain displaying "mph" data.

Setup is Now Complete

The wireless sensor will soon send a signal to the main unit and the two units will be synchronized. It may take a few minutes for synchronization to be complete. If both or one of the units appear to be functioning improperly, refer to the troubleshooting section in this manual.

SECTION 3 • OPERATION



A 14 Day Learning Mode

This weather station has a patented "fourteen day learning mode" calibration process. During this learning mode the weather station will make altitude calculations that may affect the accuracy of the forecast. Once the 14 day learning mode process is complete, the learning mode icon will disappear and the weather forecast should be ready for superior operation.

14 day
Learning
Mode



B Future Forecast Icon

The future forecast feature automatically gives you the predicted weather forecast icon for the next 12 to 24 hours based on an advanced algorithm that analyzes barometric pressure changes and temperature. This weather forecaster will provide the most accurate forecast that a single station instrument can provide.

rain or snow



rain or snow



HEAVY STORM

heavy stormy
weather
conditions are
forecasted
when flashing

STORMY

stormy conditions
are forecasted
next 12-24 hours

MOSTLY CLOUDY

mostly cloudy
conditions
are forecasted
next 12-24 hours

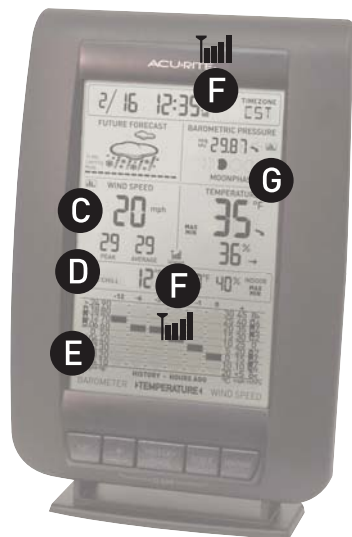
PARTLY CLOUDY

partly cloudy
conditions
are forecasted
next 12-24 hours

MOSTLY SUNNY

mostly sunny
conditions
are forecasted
next 12-24 hours

SECTION 3 • OPERATION



C Wind Speed Data Window

This weather station features an advanced wind speed data window that provides the wind speed, the peak value and the average value.

WIND SPEED: most current wind speed reading, this value is updated every 18 seconds.

PEAK: the highest wind speed reading recorded in the last hour.

AVERAGE: the combined averaged wind speed readings from the last 2 minutes.

NOTE: The wireless sensor must be placed outdoors to observe outdoor wind speed.

D Seasonal Window (wind chill/dew point/heat index)

This weather station features a "Seasonal" window which will automatically display the wind chill, the dew point or the heat index information when it is relevant.

less than 40°F (4°C)

WIND CHILL

**between 41°F - 79°F
(5°C - 26°C)**

DEW POINT

above 80°F (27°C)

HEAT INDEX

E History Mode Graphing

This weather station features a selectable history mode which will graph and display the changes for the last 12 hours (-12,-6,-3,-2,-1, 0). There are 3 selectable weather categories; Barometer (barometric pressure), Temperature or Wind Speed. Press the "HISTORY MODE" button to alternate through the 3 options. Note the graphing icon "  " next to the currently selected data window.

BAROMETER: hourly reading on the hour.

TEMPERATURE: hourly (outdoor) temperature reading on the hour.

WIND SPEED: hourly wind speed AVERAGE reading.

SECTION 3 • OPERATION

F Wireless Signal Reception Icons

The main unit has a signal reception icon in the outdoor wind speed/temperature display area. If most or all four of the bars are present, wireless reception is good and no action is required. If there are a low number of "bars" present, you may experience wind speed/temperature inaccuracy. In either case, you may need to relocate the main unit or the wireless sensor.

The main unit has a signal reception icon near the atomic clock display. If the atomic clock signal bars are low, the clock may be inaccurate or may not automatically adjust for daylight saving time (DST). Refer to the troubleshooting section in this manual if you are having reception issues.

G Moonphase

This weather station features a moonphase window which will automatically display the current moonphase, provided the calendar is set properly.



NEW



**WAXING
CRESCENT**



**1ST
QUARTER**



**WAXING
GIBBOUS**



FULL



**WANING
GIBBOUS**



**3RD
QUARTER**



**WANING
CRESCENT**

Main Unit : MIN/MAX Memory

This wireless weather station features a MIN/MAX memory feature which records the MINIMUM and MAXIMUM indoor & outdoor temperature and humidity readings.

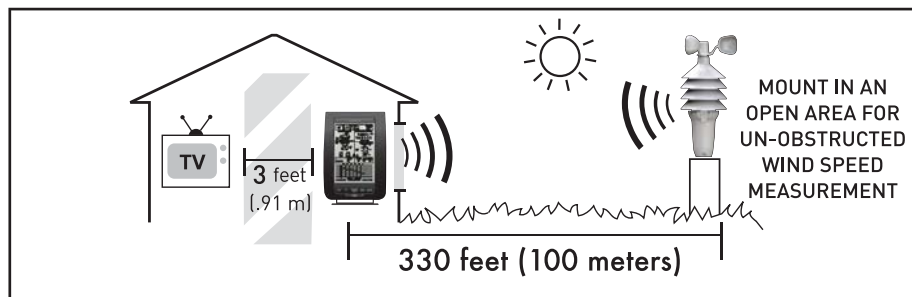
To view the MINIMUM temperature and humidity readings, press and release the "**MIN/MAX**" button. Note the "MIN" icon on the display.

To **clear** the MIN recorded values, press **and hold** the "+" and "**SCALE**" buttons simultaneously for 3 seconds while in the MIN view mode. Dashes will display in the display to confirm you have cleared the MIN values for outdoor temperature and indoor temperature/humidity.

To view the MAXIMUM temperature and humidity readings, press and release the "**MIN/MAX**" button. Note the "MAX" icon on the display.

To **clear** the MAX recorded values, press **and hold** the "+" and "**SCALE**" buttons simultaneously for 3 seconds while in the MAX view mode. Dashes will display in the display to confirm you have cleared the MAX values for outdoor temperature and indoor temperature/humidity.

SECTION 4 • PLACEMENT



Now that setup is complete and you understand how to operate the weather station, you must choose a location to place the wireless sensor and the main unit. The wireless sensor **MUST** be placed less than 330 feet (100 meters) away from the main unit.

This wireless weather station uses radio frequency for communication, which is susceptible to interference from other electronic devices and large metallic items or thick walls. Always place both units at least 3 feet (.91 m) away from appliances (TV, microwave, radios, etc.) or objects that may interfere with the wireless communication (large metal surfaces, thick stone walls, etc.).

Please **USE EXTREME CARE** when handling the wireless sensor and the main unit. The wireless sensor contains sensitive electronic components and a balanced anemometer (for wind speed measurement). Care must be taken during setup and when considering placement to make certain the unit is not dropped or struck with any falling debris from trees or structures.

USE CAUTION when utilizing tools or equipment for mounting the wireless sensor. Enlist the help of another individual when necessary.



Placement of Main Unit

Place the main unit in a dry area free of dirt and dust. To help ensure an accurate indoor temperature measurement, be sure to place the main unit out of direct sunlight, and away from any heat sources or vents in your home. For the best atomic clock signal reception, place the main unit with the back side facing the state of Colorado.

There are 2 placement options for the main unit. You may hang the main unit on a wall using the integrated hang hole. Alternatively, you may place the main unit on a table top or other flat surface using the included detachable table top display stand.

SECTION 4 • PLACEMENT

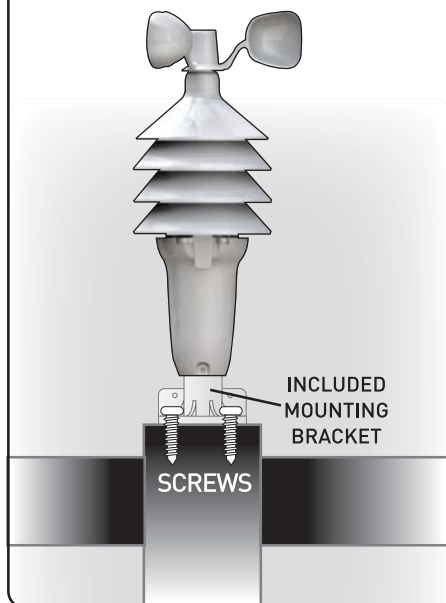
Placement of Wireless Sensor

After installing batteries into the Wireless Multi-sensor, you must choose a location to install the sensor. To ensure that your weather center performs at its best, follow these guidelines to choose a mounting location for the wireless multi-sensor:

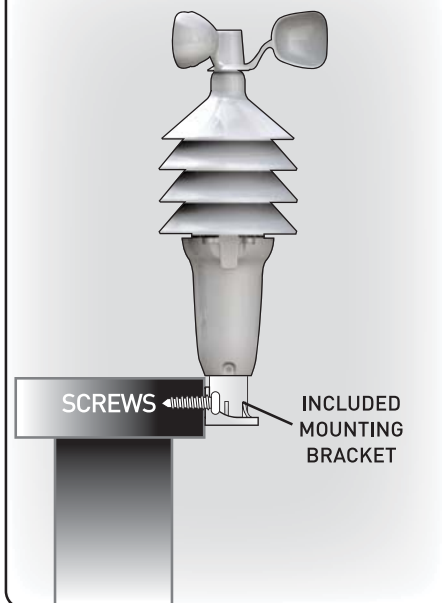
- **INSTALL AWAY FROM HEAT & HUMIDITY SOURCES:**
DO NOT Place the wireless multi-sensor near localized heat sources like heaters, air conditioners, chimneys and exhaust vents. Install the wireless multi-sensor away from asphalt or concrete as these surfaces radiate heat from the sun. Also avoid installing the sensor near pools, spas, or other bodies of water as these water sources may affect the accuracy of the humidity.
- **INSTALL AWAY FROM SPRINKLER HEADS:**
DO NOT install the wireless multi-sensor where it will be directly sprayed by a sprinkler system, this may force water into the housing.
- **WIND OBSTRUCTIONS:**
DO consider a mounting location that has very little structures around the sensor, to ensure proper wind speed measurements.
- **INSTALLATION HEIGHT:**
DO Mount the wireless multi-sensor at least 5 feet off the ground (higher is better for accurate wind measurements) in an open area **NO FURTHER** than 330 feet (100 meters) from the display console. A typical installation would involve mounting the bracket to a secured length of 2x4 or 4x4 wood (not included).
- **LEVEL INSTALLATION:**
DO Install the wireless multi-sensor as level as possible to ensure accurate wind measurements. Use a bubble level (not included) to help ensure a level installation.

SECTION 4 • PLACEMENT

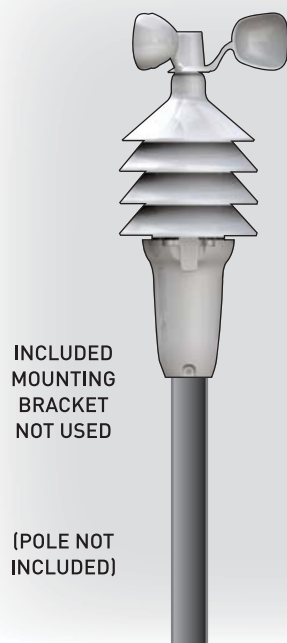
"FENCE POST" OR SIMILAR MOUNTING



"RAILING" OR SIMILAR MOUNTING



"POLE" OR SIMILAR MOUNTING



Mount the sensor onto a 3/4" schedule 40 PVC (25.8 mm O.D.) pole (not included). PVC plastic pipe is recommended over a metallic pipe due to lower risk of lightning strikes.

Insert the pole completely into the bottom of the wireless sensor. Use the included screw to securely mount the sensor so it will not fall or slide off of the pole in high winds.

Use caution when installing sensor or erecting the pole. Do not install during electrical storms. Do not place pole or sensor near electrical transmission lines or electrical equipment.

Troubleshooting

Problem	Possible Solution
Bad Wireless Sensor Reception  no bars	Relocate the main unit and/or the wireless sensor. Both units must be within 330 feet (100 m) from each other. Make sure both units are placed at least 3 feet (.91 m) from other electronic appliances and devices that may interfere with the wireless communication (such as TV's, microwaves, computers etc). NOTE: It may take up to 20 minutes for the main unit to re-synchronize with the sensor when batteries are replaced. Use lithium batteries in sensor when temperature is below -4°F (-20°C).
Bad Atomic Clock Reception  no bars	Rotate the wireless sensor 90° on its mounting point to re-orient the antenna. Make certain there are no large stone or metallic surfaces disrupting the signal line-of-sight to the state of Colorado. Make sure the main unit and wireless sensor are placed at least 3 feet (.91 m) from other electronic appliances and devices that may interfere with the wireless communication (such as TV's, microwaves, computers etc). Large metallic surfaces will interfere with the atomic clock signal.
No Wireless Sensor Data (no communication)  no bars and flashing antenna icon	If wireless reception is bad (no bars), see "Bad Reception" section above. The wireless ID setting on each unit must match for all units to communicate properly. See "Set Wireless ID" on the previous page.
Main Unit Display Not Working	Make certain that the batteries are installed correctly and that they are contacting the terminals. Make certain all contacts are clean. The batteries may need replacing.



Please DO NOT return product to the retail store. For technical assistance and product return information, please call Customer Care: **877-221-1252** Mon. - Fri. 7:00 A.M. to 7:00 P.M. (Central)

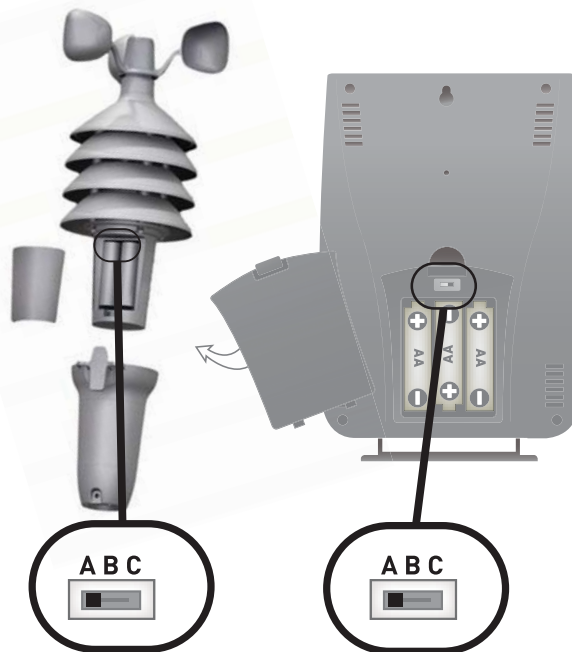
www.AcuRite.com

Set Wireless ID

This wireless thermometer uses long range 433mhz radio frequency for communication.

In the event that you have reception problems due to interference, both the main unit and the wireless sensor have a selectable wireless ID. The ID switches are located within the battery compartments of the main unit and the wireless sensor.

You may choose A, B or C; but both the **main unit** and the **wireless sensor ID's must match** for successful synchronization.



**Both wireless ID's
must match**



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Support Forum
Archived Products
▶ Register a Product

SECTION 5 • PRODUCT SPECIFICATIONS

Product Facts

Batteries: 7 x "AA" (not included)

Lithium Batteries Recommended in **Outdoor Sensor** if temperatures are below -4°F

Measurement Ranges

Outdoor Temperature: **-40°F to 158°F**
-40°C to 70°C

Outdoor Humidity: **1% to 99%**

Wind Speed: **0 to 99mph**
0 to 159 kph

Indoor Temperature: **32°F to 122°F**
0°C to 50°C

Indoor Humidity: **16% to 98%**

Wireless Range: 330 ft / 100 m MAX
Depending on home construction materials

MADE IN CHINA
HECHO EN CHINA

Limited One
Year Warranty
Instructions &
Warranty Enclosed

Customer Care:
877-221-1252

www.AcuRite.com

Patent numbers: 5,978,738; 6,076,044; 6,597,990; US 7,637,141 B2
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