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. 8:00 A.M. to 4:45 P.M. (CST)

www.chaneyinstrument.com

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.

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.

Patent numbers: 5,978,738; 6,076,044; 6,597,990

ACU·RITE®
DESIGNED TO WORK FOR YOU™

Deluxe Weather Station Forecaster
with wireless wind and temperature sensors

#00825

Instruction Manual

A. Main Unit with Display Stand

Package Contents:
(A) Main Unit with Display Stand
(B) Wireless Temperature & Humidity Sensor
(C) Wireless Wind Sensor
(1) Hardware Bag
(1) Instruction Manual

What You Need:
• Philips Screwdriver
• (7) AA batteries
  –see "Install Batteries"

B. Wireless Temperature & Humidity Sensor with Mounting Bracket

C. Wireless Wind Sensor with Mounting Bracket

Thank You for purchasing this ACURITE® Weather Station. 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 clear film is applied to the LCD at the factory that must be removed prior to using this product. Locate the clear tab and simply peel to remove.

Instruction Manual Contents

Wind Gust
Month & Date
Atomic Clock
Wind Direction
Indoor Humidity
Indoor Temperature
Future Weather Forecast
Outdoor Temperature
Barometric Pressure
Outdoor Humidity
Barometric Pressure History
Wind Speed
Seasonal (wind chill)
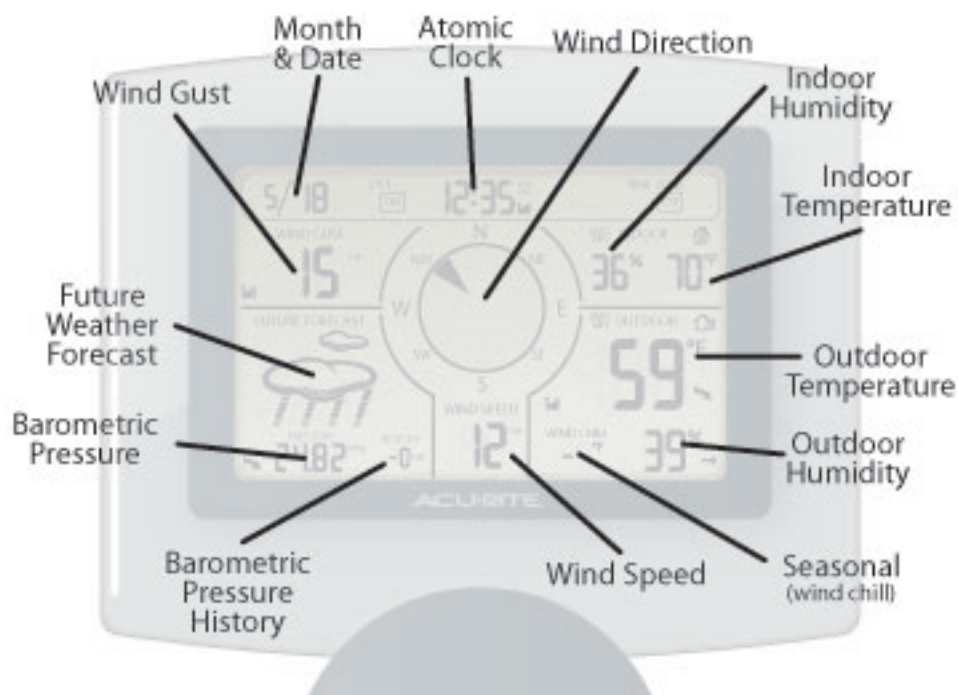
Wireless Temperature & Humidity Sensor

Sends temperature and humidity information to the main unit via a 433 mhz wireless signal. This sensor should be mounted out of direct sunlight to ensure accurate readings. Powered by 2 "AA" batteries.

Wireless Wind Sensor

Sends wind speed and direction to main unit via a 433 mhz wireless signal. This sensor should be mounted high enough to accurately record and transmit wind information. Powered by 2 "AA" batteries.

A/B/C Wireless ID Selection

To allow for more than one weather station and wireless sensor network to be used in close proximity, the main unit and both wireless sensors have a small switch labeled "A B C" in the battery compartments. These switches are all factory preset into the same position (either A, B, or C). This switch selects one of 3 wireless modes to use, and all 3 switches in all 3 components MUST be set in matching positions (either A, B, or C) for wireless communication to take place successfully. See page 11 for more details.

Install Batteries

Batteries must be installed into all three of the wireless sensors BEFORE installing batteries into the main display unit. Use only fresh or new batteries in all cases, and install correctly according to the polarity (- & +) symbols marked on the batteries and in the battery compartments. We suggest using lithium batteries for better cold weather performance. Do not mix old and new batteries.

Wireless Temperature & Humidity Sensor

INSTALL BATTERIES:

1. Remove larger rounded solar shield.

2. Remove the battery compartment cover.

3. Install 2 "AA" batteries into the battery compartment.

4. Replace the compartment cover and replace the solar shield.

INSTALL BATTERIES

REMOVE BATTERY DOOR
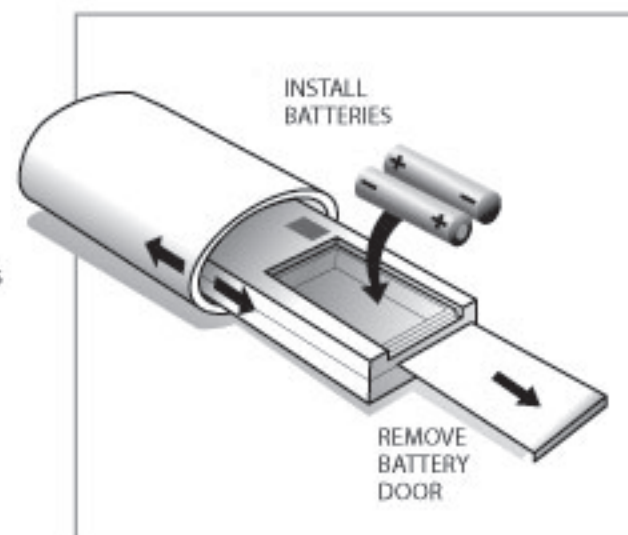
Wireless Wind Sensor

INSTALL BATTERIES:

1. Unscrew and remove bottom case section.

2. Remove the battery compartment cover..

3. Install 2 "AA" batteries into the battery compartment.

4. Replace the battery compartment cover and replace and rotate the bottom cone section until it is securely tightened.

INSTALL BATTERY

INSTALL BATTERY

REMOVE SLIDING BATTERY COMPARTMENT COVER

UNSCREW BOTTOM CASING

Main Unit

INSTALL BATTERIES:

1. Remove the battery compartment cover.

3. Install 3 "AA" batteries into the battery compartment.

4. Replace the battery compartment cover.

INSTALL 3 " AA" BATTERIES

REMOVE BATTERY COMPARTMENT COVER

Main Unit Startup

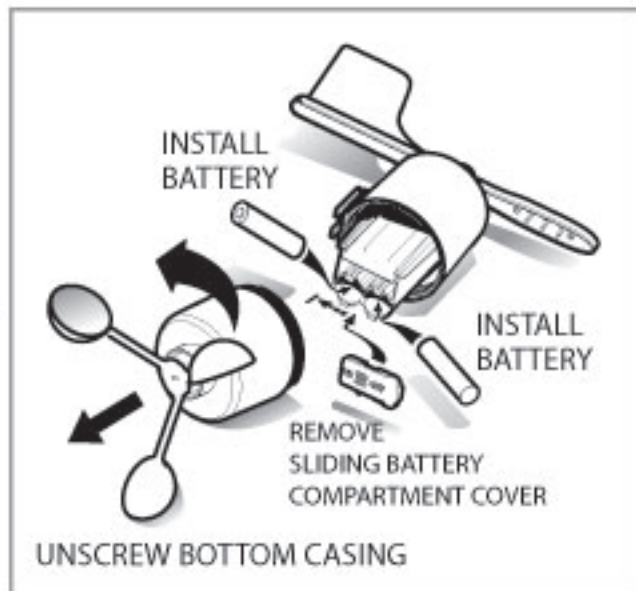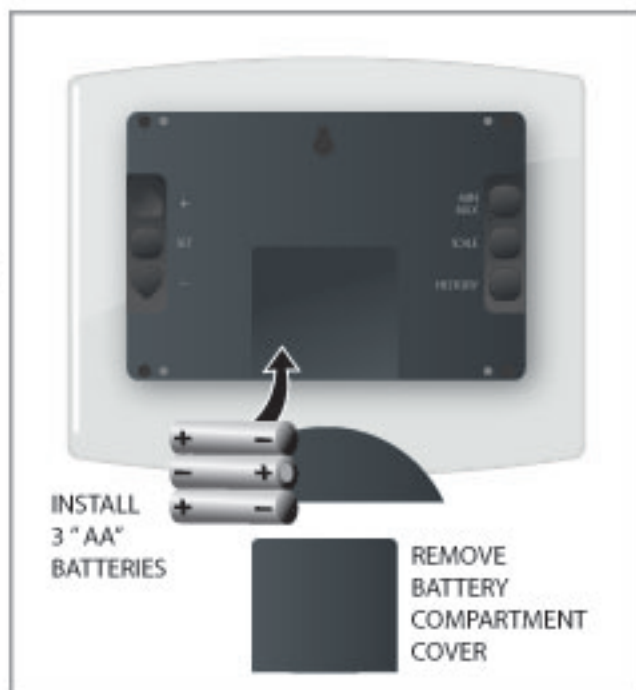After batteries are installed in both wireless sensors and the main unit is powered up, the main unit will search for the wireless sensor signals. After the sensors signals are received, the main unit will search for the atomic clock signal. After the atomic clock signal is received, the time and date will be maintained automatically. This may take up to 24 hours and may not occur at all depending on your geographical location and your physical surroundings. See "troubleshooting" for atomic clock tips.

You may "force" the unit to search for the atomic clock at any time by pressing and holding the "-" button on the back of the main unit for 3 seconds.

Time & Date Setup

It is recommended that the time and date be manually set initially to ensure that they are accurate until the atomic clock signal is captured.

To enter into SET MODE, press and hold the "SET" button for 3 seconds. Use the "-" and "+" buttons to adjust the selected preference, press the "SET" button again to confirm the adjustment and move on to the next preference.

The main unit will automatically exit out of SET MODE after a 10 second period of inactivity.

SET MODE in this order:
1. Time zone (Pacific, Mountain, Central, Eastern)
2. Daylight Saving Time (DST on or off)
3. Time (hour first, then minutes)
4. Year
5. Month
6. Date

Scale Setup

You may choose to display readings in U.S. or Metric scales (example °F or °C). To change the scale preferences, enter into scale set mode.

To enter into SCALE MODE, press the "SCALE" button.

Use the "-" and "+" buttons to adjust the selected preference, press the "SCALE" button again to confirm the adjustment and move on to the next preference.

Now that setup is complete, you must choose a location to place the 3 wireless sensors and the main unit. The wireless sensors MUST be placed LESS THAN 100 feet 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 away from appliances (TV, microwave, radios, etc.) or objects (large metal surfaces, thick stone walls, etc.) that may interfere with the wireless communication.
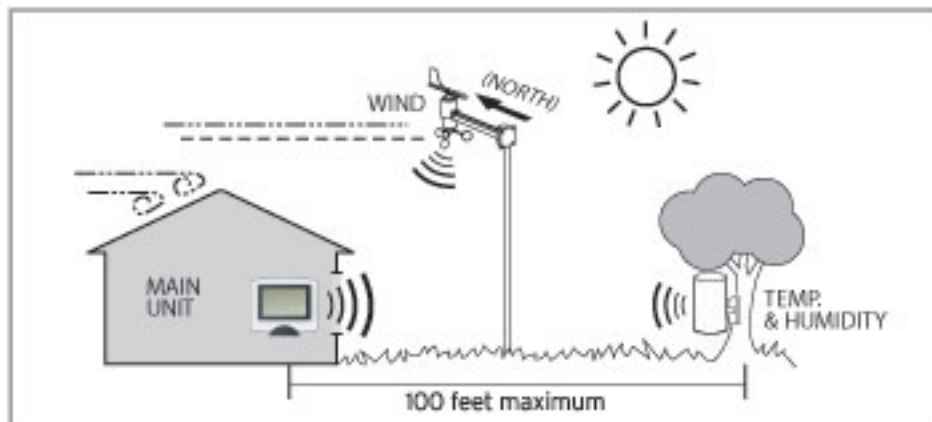
Placement of Main Unit

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.

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

Placement of Sensors

The wireless sensors MUST BE PLACED OUTDOORS to observe outdoor weather conditions and relay them to the main unit display. The wireless sensors must be placed less than 100 feet from the main unit.

Wireless Wind Sensor

PLACEMENT

1. Attach the wind sensor to the mounting bracket by simply sliding into the bracket.

2. The sensor must be mounted with the bracket pointing NORTH as indicated on the bracket and on the top surface of the wind sensor itself. The wireless wind sensor should be mounted high above all potential wind obstructions for maximum performance, keeping in mind it must remain within the 100 ft. wireless range of the main display unit.

Attach to a solid surface utilizing screws and wall anchors (if applicable). Depending on the mounting surface, other steps may need to take place to ensure the sensor is mounted successfully.
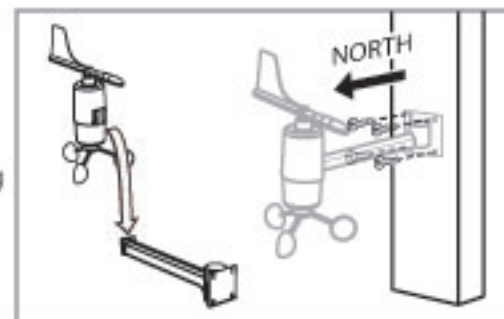
Wireless Temperature & Humidity Sensor

PLACEMENT

1. Attach to a solid vertical OR horizontal surface out of direct sunlight for maximum performance. Attach the mounting bracket utilizing the included screws and wall anchors (if applicable). Depending on the mounting surface, other steps may need to be taken to ensure the sensor is mounted securely.

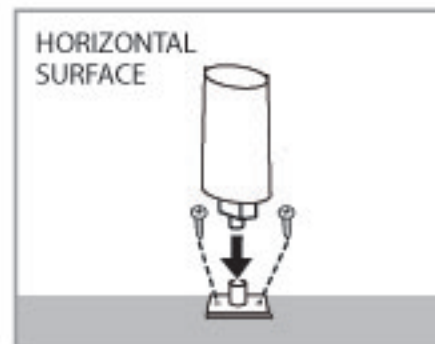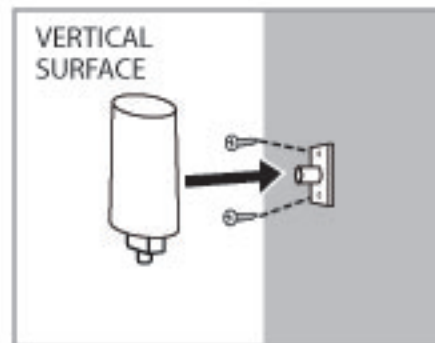2. Attach the temperature & humidity sensor to the mounting bracket by simply sliding into the bracket.

A DAILY MINIMUM/MAXIMUM TEMPERATURE MEMORY DISPLAY:

Press the MIN/MAX button once to view the MINIMUM recorded values for temperature, humidity and wind speed. Press the "MIN/MAX" button again to view the MAXIMUM recorded values for temperature, humidity and wind speed. While viewing the MINIMUM or MAXIMUM, press and hold the "MIN/MAX" button for 2 seconds to clear the currently viewed recorded values.

B PRESSURE HISTORY:

Also available to you is the option to go back through the last 12 hours of pressure readings. Press the "HISTORY" button repeatedly to go through the barometric pressure history. You must have at least 1 hour of pressure records to go back through pressure history. WHen the pressure history reads "-0", the current pressure is being displayed.

C WEATHER FORECAST: ICONS

This feature gives you the predicted weather forecast for the next 12 to 24 hours based on an advanced algorithm that includes barometric pressure system and temperature tracking. This weather station will provide the most accurate forecast that a single station weather instrument can provide.

SUNNY   PARTLY COUDY   MOSTLY CLOUDY   RAIN   SNOW

The forecast will likely show one of the above conditions most of the time, but will show a combonation when appropriate, and will show flashing icons when a storm is forecasted.

WEATHER FORECAST: 14 DAY LEARNING MODE

D This weather station has a patent pending 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. You can track the progress of the learning mode by viewing the progress bar located beside the future forecast weather icon display area.

WIRELESS SIGNAL: RECEPTION ICONS

E The main unit has signal reception icons in the outdoor sensor display areas and near the atomic clock display. If there are a low number of "bars" present, you may experience no temperature display ("--") or inaccuracy. See the troubleshooting section for more tips on wireless signal reception for the sensors and for the atomic clock signal.
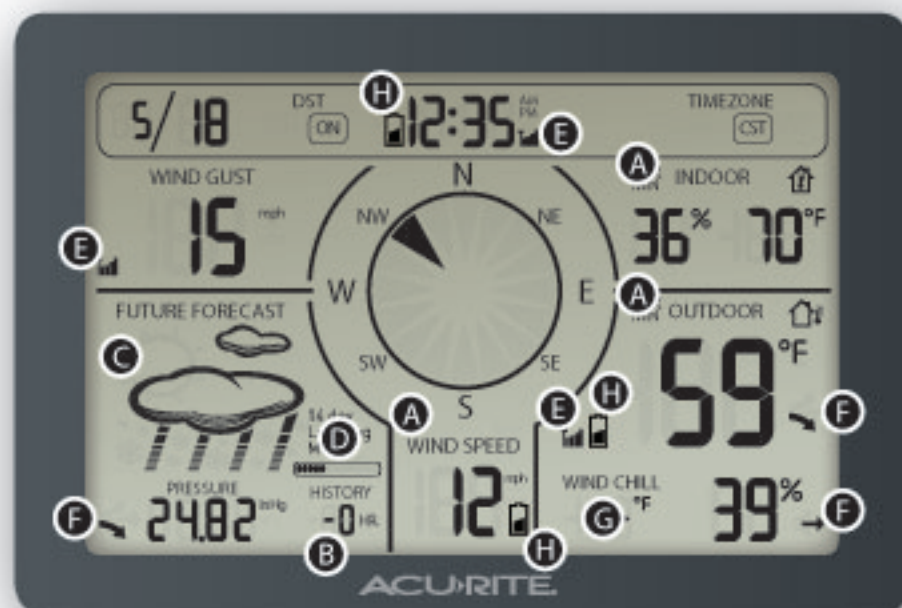
F TREND INDICATOR ICONS:

Trend arrow icons will display next to the outdoor temperature and humidity display as well as next to the (barometric) pressure display. These arrows will show at a glance if these values are falling, steady or rising.

G WIND CHILL:

When the outdoor temperature falls below 40°F, the wind chill will be automatically calculated and displayed. The wind chill display will show no reading until a wind chill reading is relevant, based on current conditions.

LOW BATTERY INDICATORS:

H When the batteries in the main display unit or in the outdoor sensors are low, the low battery icon will display. For the main display unit, the low battery icon will display next to the time. For the outdoor temperature and humidity sensor, the low battery icon will display next to the outdoor temperature. For the wind sensor, the low battery icon will display next to the wind speed.

When batteries need to be replaced, follow the instructions in section 2. It may take some time for the sensors to reconnect with the main unit after batteries are replaced.

WIreless RF technology is subject to interference from many sources, as mandated by the FCC. Occasionally, there will be temporary disconnection to the wireless sensor. This device is designed to search and acquire the signal again if there is interference or temporary loss of signal. In most cases, the temperature will show again if the main unit and wireless temperature sensor are able to re-connect automatically. If the disconnection lasts longer than a few hours, refer to this troubleshooting guide.

Troubleshooting

| Problem	Possible Solution
Bad Wireless Sensor Reception ▼ll no bars	Relocate the main unit and/or the wireless sensors. All units must be within 100 feet from each other. Make sure both units are placed at least 3 feet 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 sensors when batteries are replaced. Use lithium batteries in sensors when temperature is below -4ºF.
Bad Atomic Clock Reception ▼ll no bars	Relocate the main unit. It is important that the atomic clock sensor (located in the wireless temperature/humidity sensor) is located in an area clear of any large stone or metallic surfaces. Make sure the main unit is placed at least 3 feet from other electronic appliances and devices that may interfere with the wireless communication (such as TV's, microwaves, computers etc). Large metallic surfaces will also interfere with the atomic clock signal.
No Wireless Sensor Data (no communication) ▼ll no bars and flashing " -- " data	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 next page.
Main Unit Display Not Working	Make certain that the batteries are installed correctly. The batteries may need replacing. If you are using the AC power adaptor, make certain it is plugged in and the outlet power is switched on.

Set Wireless ID

REMOVE BATTERY COMPARTMENT COVER

All wireless ID's must match

A B C
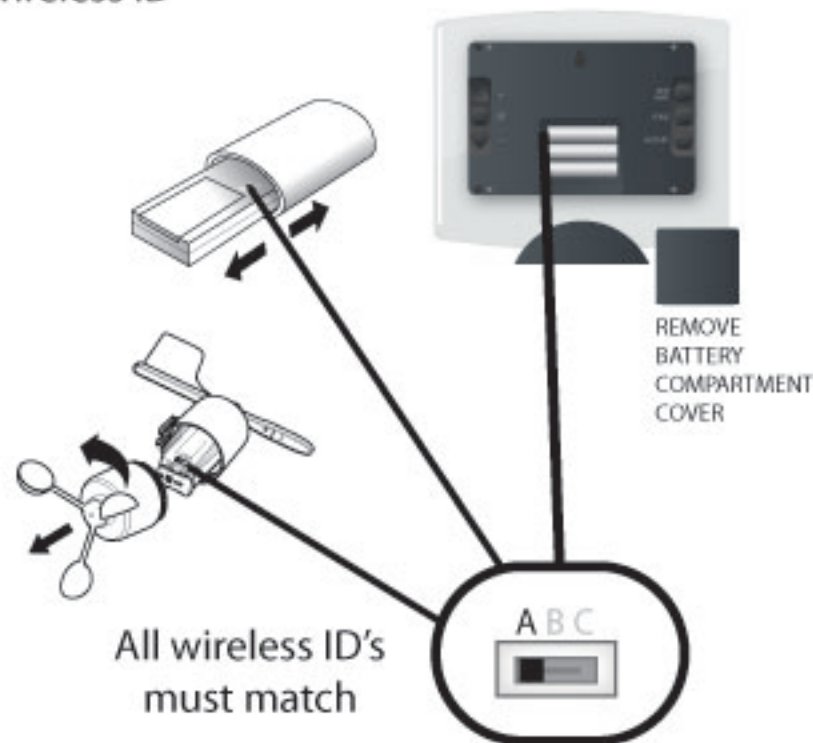
This wireless weather station uses long range 433mhz radio frequency for communication.

In the event that you have reception problems due to interference, both the main unit and both wireless sensors have a selectable wireless ID. The ID switches are located within the battery compartments of the main unit and the wind sensor. The switch is located near the battery compartment cover on the temperature sensor.

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

Operating Range of Batteries

| LITHIUM BATTERIES | -40 ºF (-40ºC) | (70ºC) 158ºF |
| ALKALINE BATTERIES | -4ºF (-20ºC) | (70ºC) 158ºF |

Extended periods of cold temperatures (below -4ºF / -20ºC) 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.

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 signal is transmitted in a very low frequency (60,000 Hz). The Acurite clock you have purchased includes a built-in receiver which picks up the signal from the WWVB station. NOTE: Due to solar radiation in the atmosphere, the atomic clock signal is weak during the day. Most synchronization with the WWVB atomic clock signal happens at night when there is less interference.

Measurement Ranges

Temperature
Main Unit Temperature: 32°F to 122°F / 0°C to 50°C
Wireless Sensors:
temperature sensor: -40°F to 158°F / -40°C to 70°C
humidity sensor: 16% RH to 99% RH
wind sensor: up to 99 mph / 159 Kph (depending on conditions)

Specifications

Power Requirements
Main Unit: 3 x "AA" alkaline batteries
Wireless Sensors:
temperature & humidity sensor: 2 x "AA" alkaline or lithium (recommended) batteries
wind sensor: 2 x "AA" alkaline or lithium (recommended) batteries

Wireless Communication
Radio Frequency: 433 mhz
Transmission Intervals: every 16 seconds

Atomic Clock
Frequency: WWVB 60Khz
Synchronizes Daily

SAFETY:
DAMAGE CAUSED BY FAILURE TO COMPLY WITH THIS INSTRUCTION MANUAL WILL INVALIDATE ANY MANUFACTURER GUARANTEE. THE MANUFACTURER AND SUPPLIER WILL NOT BE HELD LIABLE FOR DAMAGES DUE TO FAILURE TO COMPLY WITH THIS INSTRUCTION MANUAL OR FROM DATA INACCURACIES THAT MAY OCCUR WITH THIS PRODUCT.

IN CASE OF HARM OR DAMAGE TO A PERSON OR PROPERTY CAUSED BY IMPROPER HANDLING OR FAILURE TO COMPLY WITH THIS INSTRUCTION MANUAL, THE MANUFACTURER AND SUPPLIER CANNOT BE HELD LIABLE.

- **Inserting batteries in an incorrect polarity will cause damage to this weather station and remote sensors.**
- **Do not dispose of new or used batteries in a fire as they may explode or could release dangerous chemicals.**
- **Please participate in the preservation of the environment by properly disposing of all discarded batteries in designated disposal receptors.**
- **Do not subject the main unit or remote sensors to excessive force, shock, dust, temperature or humidity, as these conditions may shorten the life of the main unit and/or remote sensors.**
- **To operate main unit and remote sensors, use only recommended battery types.**
- **Altering the main unit or remote sensors in any way is strictly prohibited.**
- **Do not leave discharged batteries in the device as these may corrode and/or release chemicals that may damage this product.**
- **This product is not to be used for medical, commercial or public purposes.**
- **This product is not a toy and should be kept out of reach of children.**

ALWAYS USE PROPER TOOLS AND MOUNT/PLACE SENSORS IN AREAS THAT WILL BE SAFE TO YOURSELF AND OTHERS. SEEK PROFESSIONAL ASSISTANCE IN MOUNTING/PLACING THE WIRELESS SENSORS AND FOLLOW YOUR LOCAL LAWS AND REGULATIONS WHEN CHOOSING A MOUNTING/PLACEMENT LOCATION FOR THE WIRELESS SENSORS

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