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**ACU·RITE®**
DESIGNED TO WORK FOR YOU™

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.

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; US 7,637,141 B2

02005 INST 060512
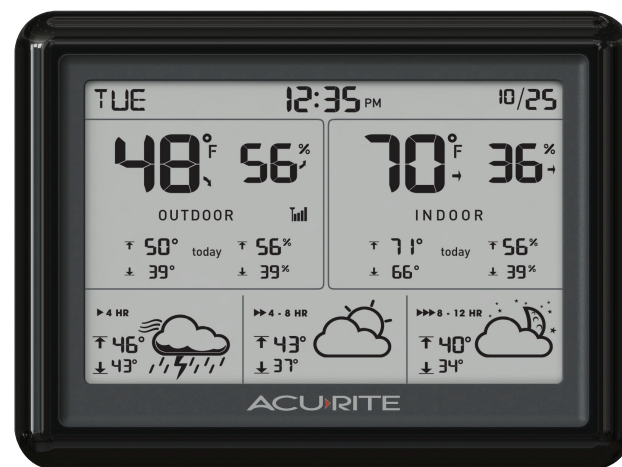
# Weather Station
*model #02005*

**Instruction Manual**

# Introduction

The AcuRite® Weather Station with wireless outdoor sensor collects outside weather data and sends it to the Display Console via wireless radio frequency. This weather station has been designed to be easy to install and use.

Precision Forecasting predicts the probability of precipitation, amount of cloud cover, and high/ low temperatures. Precision Forecasting technology introduces the newest methodology in weather prediction modeling by combining a region-specific ("Geo Zone") forecasting algorithm with current weather observations, taken at the source (from your AcuRite sensor), to develop a location-specific future forecast.

The sleek display console houses a liquid crystal display (LCD) which will calculate and display all the weather data received from the wireless sensor outside. The display console features a pressure sensor for measuring barometric pressure, a temperature sensor for measuring indoor temperature and a humidity sensor for measuring indoor humidity. The Display Console is powered with three "AA" alkaline batteries (not included).

The wireless outdoor sensor is completely wireless and contains a temperature sensor for measuring outdoor temperature and a humidity sensor for measuring outdoor humidity. The wireless outdoor sensor is powered with two "AA" alkaline or lithium batteries (not included).

Please read through this manual to learn more about the AcuRite® Weather Station. Keep this manual for future reference.

## Parts List model #02005

1. Display console
2. Wireless outdoor sensor
3. Instruction manual

# Display Console Features

current outdoor temperature & relative humidity

Intelli-Time® clock display

geographic region selection

date display

current indoor temperature & relative humidity

wireless sensor reception indicator

forecasted high temperature

forecasted low temperature

daily/ all-time high & low records

12 Hour Forecast Display
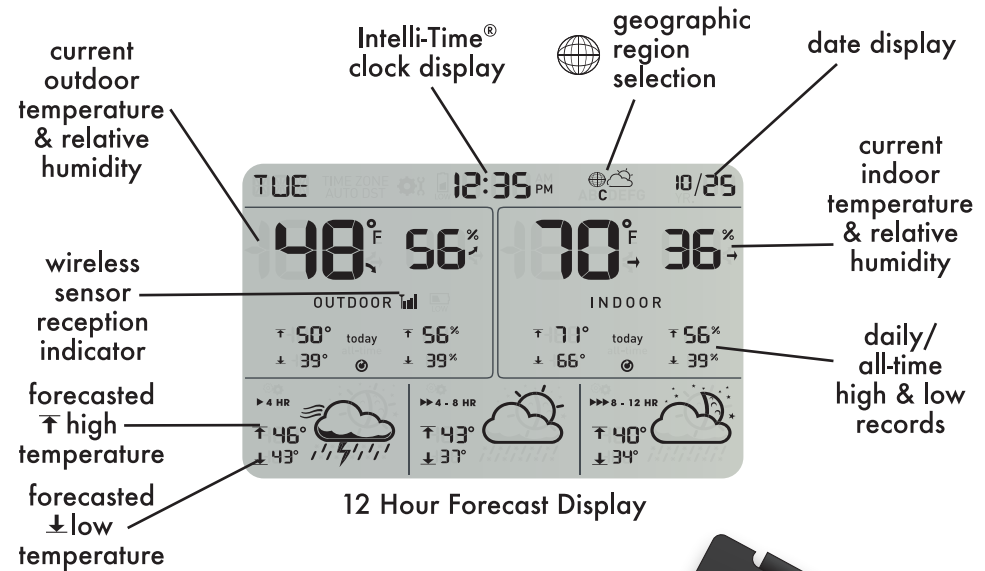
setup buttons

records button

A-B-C Wireless Selection Switch

Precision Forecast Geographic Region Selection Button

display kickstand
(fold out for tabletop placement)

Time Zone Selection Button

Reset Button

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# 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 readings. Use lithium batteries in these low temperature conditions to ensure continued operation for wireless sensors placed outdoors.

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

# A/B/C Wireless Selection

**To allow for more than one weather station and wireless sensor network to be used in close proximity, the display 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.**

# Installing Batteries - Wireless Sensor

Remove the battery compartment cover. Install 2 fresh "AA" batteries as shown here.

BATTERIES MUST BE INSTALLED FOR THE SENSOR TO OPERATE

**NOTICE!**

A - B - C

SWITCH SELECTION MUST MATCH DISPLAY UNIT SWITCH SELECTION
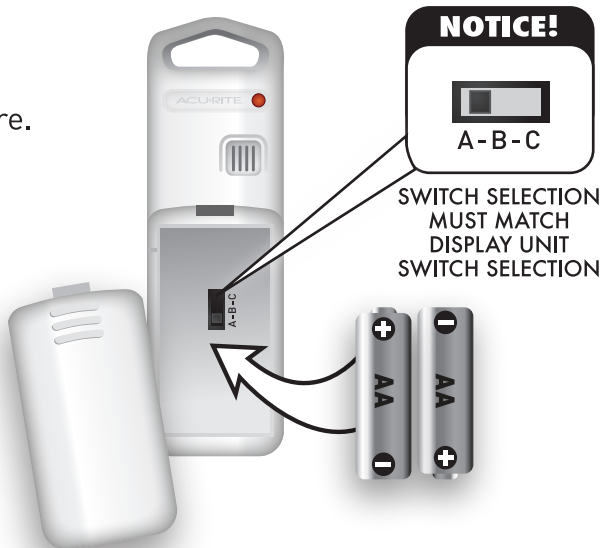
# Installing Batteries - Display Console

Remove the battery compartment cover. Install 3 fresh "AA" batteries as shown here.

**NOTICE!**

A - B - C
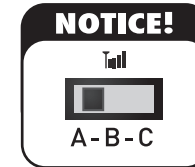
SWITCH SELECTION MUST MATCH WIRELESS SENSOR SWITCH SELECTION
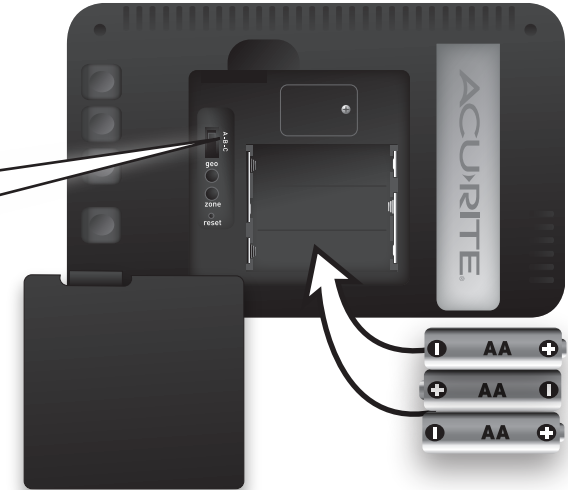
**WARNING: THIS PRODUCT CONTAINS A BUTTON-CELL BATTERY. IF SWALLOWED, IT COULD CAUSE SEVERE INJURY OR DEATH IN JUST 2 HOURS. SEEK MEDICAL ATTENTION IMMIDIATELY IF INGESTED.**

POISON   POISON

# About the Self-Setting Intelli-Time® Clock

Your new weather station is equipped with Intelli-Time® technology. Intelli-Time technology has a built-in calendar that tells it the exact day and hour to change for Daylight Saving Time (DST). All you need to do is select your Time Zone and Daylight Saving Time preferences. Then, the clock will automatically spring forward and fall back for Daylight Saving Time (DST).

**PRODUCT REGISTRATION**

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# Quick Setup - Display Console

After installing batteries, the Intelli-Time® clock and calendar will automatically set to the correct time, all you need to do is select your time zone.

**PRESS THE "zone" BUTTON LOCATED IN THE BATTERY COMPARTMENT TO SELECT YOUR TIME ZONE**
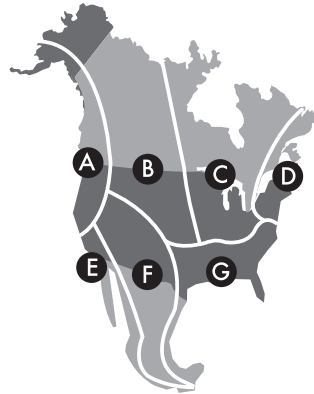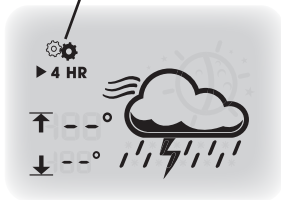
zone

Next, select your Geographic Region according to the map below. Precision Forecasting analyzes outdoor temperature, outdoor humidity, pressure changes and your geographic region to generate the most accurate weather forecast for your exact location.

**PRESS THE "geo" BUTTON LOCATED IN THE BATTERY COMPARTMENT**

geo

A  B  C  D

E  F  G

Learning Mode Indicator

▶4 HR

NOTE: The weather station will not display predicted high or low temperatures for the first few hours after powering on or resetting. During this initial **Learning Mode**, the weather station will observe changes in the weather patterns to increase the forecasting accuracy.

FORECAST TIP: if you are are on the border of two geographic regions, choose the region that most fits your geographic region and weather type. You may want to try both regions (try for a minimum time frame of a few days for each region selection) to see which region selection provides the best forecast for you.

# ⚙ Manual Setup - Display Console

Press the "SET" button to enter manual setup mode. The time zone will begin blinking.

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

To save your adjustments, press and release 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 HAST AKST)
AUTO DST (Automatically adjust time -/+ on DST dates)
CLOCK HOUR
CLOCK MINUTE
CALENDAR MONTH
CALENDAR DATE
CALENDAR YEAR
UNITS: TEMPERATURE (°F or °C)

You will automatically exit SET MODE if no entries are made for 30 seconds. You may enter basic setup mode again at any time by pressing and releasing the "SET" button.

Now that setup is complete, you must choose a location to place the wireless sensor and the display console. The wireless sensor MUST be placed less than 330 feet (100 meters) away from the display console.

This wireless forecaster 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. ).



AT LEAST
3 feet
(.91 m)
APART
TV

(330 feet maximum)
(100 meters)
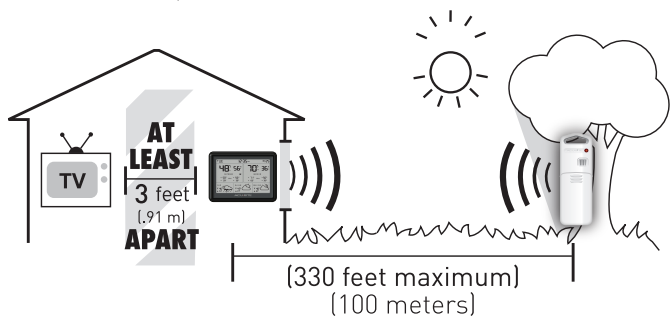
## Placement of Display Console

Place the display console in a dry area free of dirt and dust. To help ensure an accurate indoor temperature measurement, place the display console out of direct sunlight, and away from heat sources or vents in your home. The integrated display kickstand allows for placement of the display console on a table top or other flat surface. Adjustable for the best viewing angle.

## Placement of Sensor

The wireless sensor MUST BE PLACED OUTDOORS to observe outdoor temperatures. The wireless sensor must be placed less than 330 feet (100 meters) from the display console. The wireless sensor is water resistant and is designed for general outdoor use. However, to extend the life of the product, place the wireless sensor in an area protected from direct weather elements. To ensure an accurate outdoor temperature measurement, be sure the wireless sensor is placed out of direct sunlight and away from heat sources.

There are 2 placement options for the wireless sensor. You may hang it using one of the two integrated hang holes, or use string (not included) to hang it from a suitable location, like a well covered tree branch.

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# Precision Future Forecast

⚙ **Initial Learning Mode**
The Precision Forecast will not display predicted high or low temperatures for the first few hours after powering on. During this initial Learning Mode, the weather station will observe changes in weather patterns to increase the forecast accuracy.

**Precision Forecast Display**
The Precision Forecast display area gives you the predicted weather forecast for the next 4-hour, 4 to 8-hour, and 8 to 12-hour time periods (morning, noon & night). Each time period will also display the predicted high and low temperatures.

The weather station is always analyzing the available data, and constantly updates the forecast icons and highs / lows as time goes on. This will help you to plan ahead for the next 12 hours of weather at any given time.

The weather forecast icon will display one of 18 different weather conditions. The moon will show (as a simplified Moon Phase) instead of the sun when the forecast time period occurs overnight.

Below is an example of three of the forecast icons.



Stormy/Windy          Cloudy          Clear
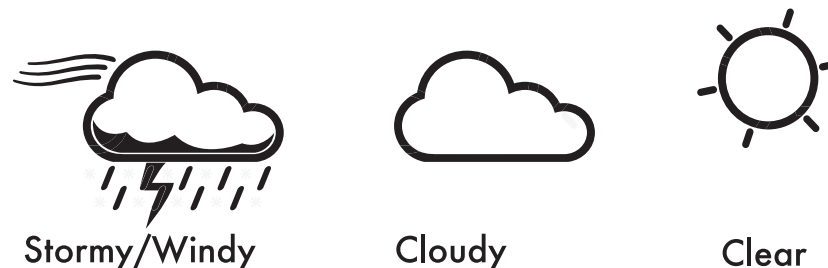
Please visit AcuRite.com for the complete list of forecast icon definitions
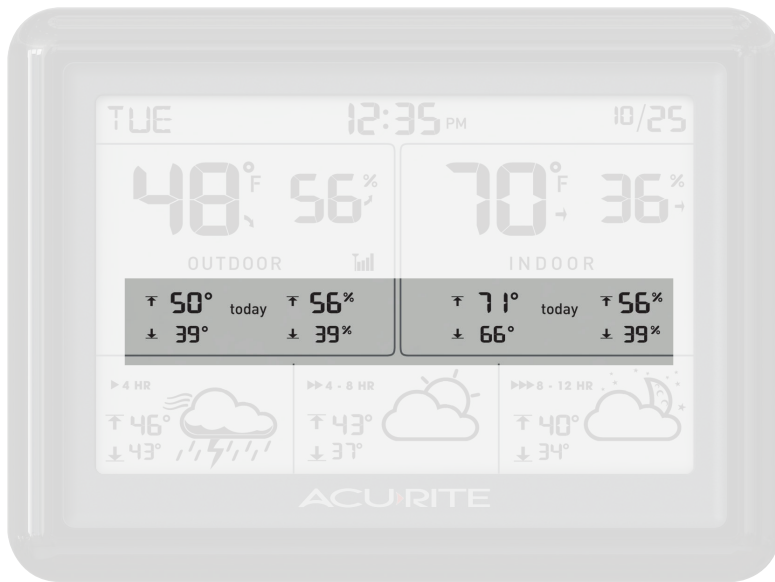
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# Weather History

The upper display of the weather station features a high and low history records display for outdoor and indoor temperature and humidity. Press the history button (◄◄) to display today's recorded highs and lows, the all-time recorded highs and lows, or push the history button again to auto cycle today AND all-time records display. The cycle icon ( ⟲ ) will appear on the display when auto cycle mode is enabled.

**Reset Low Records**
To manually reset the low records being displayed, press and hold the "adjust down" ( ▼ ) button while viewing the low records.

**Reset High Records**
To manually reset the high records being displayed, press and hold the "adjust up" ( ▲ ) button while viewing the records.

⤒ = HIGH record

⤓ = LOW record

| Problem | Possible Solution(s) |
|---|---|
| **Bad Wireless Sensor Reception**  ▯▮▮▮ no bars | Relocate the display console and/or the wireless sensor. Both units must be within 330 feet (100 meters) 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 display console to re-synchronize with the sensor when batteries are replaced. Use lithium batteries in sensor when temperature is below -4°F (-20°C). Make sure the A-B-C switch selection  in the battery compartments of the display unit and sensor match. |
| **Display Console Screen Not Working** | Batteries may need replacing. Check that batteries are correctly installed. Reset the display unit and wireless sensor. |
| **Precision Forecast displaying "- -" for highs/lows** | The Precision 12 hour Forecast will not display predicted high or low temperatures for the first few hours after powering on or resetting. During this initial learning mode, the weather forecast will observe changes to learn your weather patterns and increase the accuracy of the forecast. |
| **Precision Forecast Inaccuracies** | As with any weather forecast, 100% accuracy is not possible. However, if the forecast seems wildly inaccurate, make certain that your geographic region is selected properly. The geographic region selection can drastically affect the accuracy of the forecast. See "FORECAST CALIBRATION" to learn how you may improve the accuracy of the forecasting feature. |
| ↩ reset | NOTICE: The display may fail to start properly due to static discharge. Press the reset button located on the back of the display unit to reset the entire unit. Please note that all of the date and time information will need to be entered manually after a reset. |

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This weather device forecast allows for calibration. If you feel that the forecast could be "dialed in" to be more accurate - you may calibrate the forecast to be less or more "wet." Essentially, calibrating the forecast will either reduce or increase how much moisture is present within the forecast software algorithm.

For example, if you feel the forecast is showing rain too often, you may want to remove 10% of the moisture from the forecast equation. To calibrate the weather forecast, you must enter into the calibration mode.

TIP: if you are are on the border of two geographic regions, choose the region that most fits your geographic region and weather type. You may want to try both regions (try for a minimum time frame of a few days for each region selection) to see which region selection provides the best forecast for you.

## Forecast Calibration Mode

To access the forecast calibration mode, press AND HOLD the "▼" and "▲" buttons together for at least 5 seconds. NOTE: After 20 seconds of inactivity, the display will save your adjustments and automatically exit calibration mode and return to normal operation.

Press the "▼" button to remove moisture to the forecast. Press the "▲" button to add moisture to the forecast. Note that the forecast graphics will change accordingly. Calibrating the forecast may take some trial and error.

Press the "SET" button to confirm your calibration changes and exit.

Note that all calibration changes will be lost if you reset the display unit or remove the batteries.
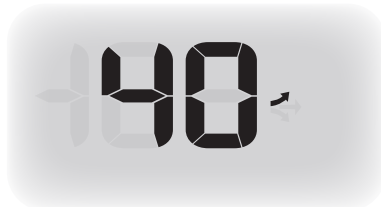
adding moisture +

no calibration
(actual sensor reading)

removing moisture -

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# IMPORTANT NOTICE

YOUR PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

**PRODUCT REGISTRATION**

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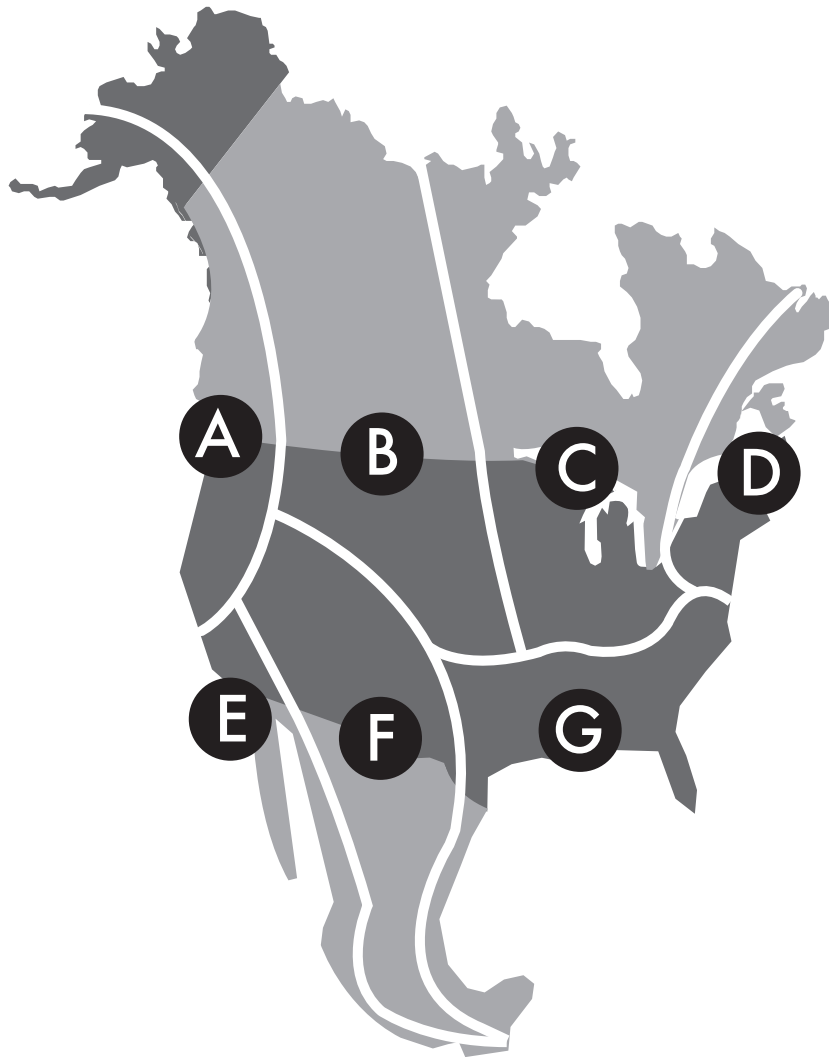
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# Precision Forecast Geographic Region Selections

## Product Facts

Batteries: 5 x "AA" (not included)

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

### Measurement Ranges

Outdoor Temperature : **-40ºF to 158ºF**
*-40ºC     70ºC*

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

Indoor Temperature : **32ºF to 122ºF**
*0ºC    50ºC*

Indoor Humidity: **1% to 99%**

**Wireless Range :** **330 ft /** 100 m MAX

Limited One Year Warranty      **MADE IN CHINA**

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Patent numbers:
5,978,738; 6,076,044; 6,597,990; US 7,637,141 B2
ACURITE® is a registered trademark of
Chaney Instrument Co. Lake Geneva, WI 53147

**PRESS THE "geo" BUTTON LOCATED IN THE BATTERY COMPARTMENT TO SELECT YOUR GEOGRAPHIC REGION**

geo

**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 battteries from equipment which is not to be used for an extended perid 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.