

# AcuRite Iris™ (5-in-1) Weather Sensor (Single Solar Panel)

model 06004



1. AcuRite Iris Sensor

- 2. Mounting Hardware
- 3. Sensor Mounting Bracket
- 4. Instruction Manual

# **IMPORTANT**

PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

#### PRODUCT REGISTRATION

Register online to receive 1-year warranty protection www.acurite.com/product-registration

Questions? Visit www.acurite.com/support

SAVE THIS MANUAL FOR FUTURE REFERENCE.

## **Features & Benefits**



## **AcuRite Iris SENSOR**

#### 1. Rainfall Collector Funnel

#### 2. Solar Cell Panel

Converts sunlight into power to run internal aspirating fan.

## **Internal Aspirating Fan**

(not shown)

Draws ambient air into sensor to reduce solar radiation heating, resulting in more accurate temperature measurement.

#### 3. A-B-C Switch

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

### 4. Battery Compartment

- 5. Temperature & Humidity Sensors (internal)
- 6. Mounting Point
- 7. Wind Speed Anemometer
- 8. Wind Direction Vane
- 9. Mounting Bracket

### 10. Mounting Hardware

Includes 5 anchors & the following screws:

Qty	Diamet	er Length
5	#4	3/4"
1	#4	1/2"
1	#6	1/2"

#### 11. Debris Filter

Pre-installed to prevent debris from entering the rain gauge.

## **AcuRite Iris Sensor Setup**

## 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 choice for both the sensor and the companion unit (not included) in order for the units to synchronize.

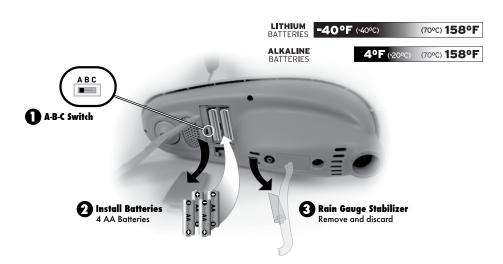
**Install or Replace Batteries** 

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

## Remove Rain Gauge Stabilizer

Locate and remove the rain gauge stabilizer (plastic tab) taped into the bottom of the sensor. The rain gauge will not function until this is removed.



# 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 that will not 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.

## **Placement for Maximum Accuracy**

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

### Th — Ch

#### **AcuRite Iris Sensor Placement**

The AcuRite Iris 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**

Sensor must be within 330 feet (100 m) of companion unit (not included).

#### **MAXIMIZE WIRELESS RANGE**

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

#### **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 & RAIN 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 measurement.

### **AcuRite Iris Sensor Installation Guidelines**

**INSTALLATION HEIGHT** Mount the sensor at least 5 feet (1.5 meters) off the ground in an open area. Higher is better for wind measurement- the National Weather Service recommends 33 feet (10 meters) high!

**MOUNTING OPTIONS** The included mounting bracket is designed to screw directly onto wooden posts or surfaces that are 2''x 4'' or larger. The sensor can also be mounted directly to 3/4'' steel pipe (available at hardware stores and home centers).

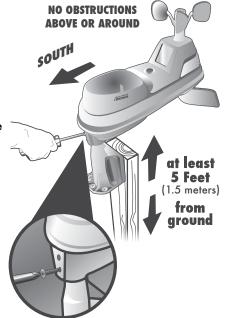
**LEVEL INSTALLATION** Use the bubble level on the top of the sensor to ensure level

installation for accurate wind and rain measurement.

**SOLAR CELL INSTALLATION** Install the sensor with the **solar cell facing SOUTH.** This ensures the cell receives as much sun as possible and orients wind direction.

#### **AcuRite Iris Sensor Installation**

- Fasten mounting base (included) to a post or pole (not included) using the 4 longer screws included in the hardware bag.
- 2. Insert the mounting base into the hole on the bottom of the sensor.
- Make sure the arrows on the top of the sensor are pointed in the proper direction and the bubble level is centered. The solar cell should be facing south to properly orient the wind direction.
- Fasten the sensor into the mounting base using the 2 shorter screws included in the hardware bag.



The AcuRite Iris sensor is now ready to use.

## **Basic Setup is Complete**

The AcuRite Iris sensor will now synchronize with the companion unit. It may take a few minutes for synchronization to complete.

## Calibrate the Rain Gauge

The rain gauge on the AcuRite Iris sensor can be calibrated to improve accuracy. **Items Needed**: AcuRite Iris sensor, companion unit, plastic cup, pin, screw driver

- 1. First, ensure AcuRite Iris sensor is perfectly level using built-in bubble level.
- 2. Use compatible companion unit or AcuRite software to monitor during calibration.
- 3. Make a pin hole in the bottom of a plastic cup. Hold the cup over the rain gauge and fill it with exactly 1 cup (8oz) of water, allowing the water to drip into the rain gauge. You should hear the internal buckets tip and see water drain through the rain gauge.
- A few seconds after each bucket tip, the companion unit displays rainfall in approximately 0.01" or more increments.
- 5. The cup of water should take more than 20 minutes to empty; a quicker period will result in inaccurate calibration. Try to simulate a normal steady rainfall. When cup is empty of water, companion unit should register 1.06"

### Tips

There should be nearly an equal number of water drops (about 25 water drops) between bucket tips.
If not, adjust the calibration screws on the bottom of the AcuRite Iris sensor until an equal number of
water drops are tipping the buckets.

### Adjustment

If the rain gauge doesn't register close to 1.06", make an EQUAL adjustment to the two calibration screws on the bottom of the AcuRite Iris sensor. Turning screws clockwise increases rainfall; counter clockwise decreases rainfall.

- To adjust the rainfall reading by 2% turn both screws 1/8 of a turn.
- To adjust the rainfall reading by 4% turn both screws 1/4 of a turn.
- To adjust the rainfall reading by 8% turn both screws 1/2 of a turn.

## **Specifications**

TEMPERATURE RANGE Outdoor: -40°F to 158°F; -40°C to 70°C		
HUMIDITY RANGE	Outdoor: 1% to 99%	
<b>NIND SPEED</b> 0 to 99 mph; 0 to 159 kph; 0 to 86 knots		
WIND DIRECTION INDICATORS	16 points	
RAINFALL	0.01 inches (0.25 mm) and up	
WIRELESS RANGE 330 ft / 100 m depending on home construction materials		
OPERATING FREQUENCY	433 MHz	
POWER	4 x AA alkaline or lithium batteries	
DATA REPORTING  Wind Speed: 18 second updates; Direction: 36 second updates Outdoor temperature & humidity: 36 second updates		

#### **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:



Chat with our support team at www.acurite.com/support



Email us at support@chaney-inst.com

- Installation Videos
- Instruction Manuals
- Replacement Parts

# **IMPORTANT**

PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

#### **PRODUCT REGISTRATION**

Register online to receive 1-year warranty protection www.acurite.com/product-registration

## **Limited 1-Year Warranty**

AcuRite is a wholly owned subsidiary of Chaney Instrument Company. For purchases of AcuRite products, AcuRite provides the benefits and services set forth herein.

For purchases of Chaney products, Chaney provides the benefits and services set forth herein. We warrant that all products we manufacture under this warranty are of good material and workmanship and, when properly installed and operated, will be free of defects for a period of one year from the date of purchase.

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 us, and at our sole option, be repaired or replaced by us. Transportation costs and charges for returned goods shall be paid for by the purchaser. We hereby disclaim all responsibility for such transportation costs and charges. This warranty will not be breached, and we will give no credit for products which have received normal wear and tear not affecting the functionality of the product, been damaged (including by acts of nature), tampered, abused, improperly installed, or repaired or altered by others than our authorized representatives.

Remedy for breach of this warranty is limited to repair or replacement of the defective item(s). If we determine that repair or replacement is not feasible, we may, at our option, refund the amount of the original purchase price.

THE ABOVE-DESCRIBED WARRANTY IS THE SOLE WARRANTY FOR THE PRODUCTS AND IS EXPRESSIY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ALL OTHER WARRANTIES OTHER THAN THE EXPRESS WARRANTY SET FORTH HEREIN ARE HEREBY EXPRESSLY DISCLAIMED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

We expressly disclaim 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.

We further disclaim liability from personal injury relating to its products to the extent permitted by law. By acceptance of any of our products, the purchaser assumes all liability for the consequences arising from their use or misuse. No person, firm or corporation is authorized to bind us to any other obligation or liability in connection with the sale of our products. Furthermore, no person, firm or corporation is authorized to modify or waive the terms of this warranty unless done in writing and signed by a duly authorized agent of ours.

In no case shall our liability for any claim relating to our products, your purchase or your use thereof, exceed the original purchase price paid for the product.

#### **Applicability of Policy**

This Return, Refund, and Warranty Policy applies only to purchases made in the United States and Canada. For purchases made in a country other than the United States or Canada, please consult the policies applicable to the country in which you made your purchase. Additionally, this Policy applies only to the original purchaser of our products. We do cannot and do not offer any return, refund, or warranty services if you buy products used or from resale sites such as eBay or Craigslist.

#### **Governing Law**

This Return, Refund, and Warranty Policy is governed by the laws of the United States and the State of Wisconsin. Any dispute relating to this Policy shall be brought exclusively in the federal or State courts having jurisdiction in Walworth County, Wisconsin; and purchaser consents to jurisdiction within the State of Wisconsin.



## www.AcuRite.com

© Chaney Instrument Co. All rights reserved. AcuRite is a registered trademark of the Chaney Instrument Co., Lake Geneva, WI 53147. All other trademarks and copyrights are the property of their respective owners. AcuRite uses patented technology. Visit www.acurite.com/patents for details.