

WELCOME TO OPTIMUS


Get ready to experience weather a whole new way with the all new AcuRite OPTIMUS all-in-one weather station. Engineered to deliver precise hyper-local weather information to you with industry leading accuracy and reliability. OPTIMUS keeps you in the know about your changing environment so that you can be prepared for whatever Mother Nature throws your way. Since 1943, AcuRite has been providing reliable, accurate instruments and technology to keep you well informed.

Thank you for choosing us, we won't let you down.


INCLUDES:

- AcuRite OPTIMUS wireless outdoor weather sensor, with directional wind vane and wind speed anemometer
- AcuRite OPTIMUS mounting adapter, for basic mounting on fence posts, deck railings, etc.
- Hardware bag, located in the battery bay


WIND VANE
(WIND DIRECTION)



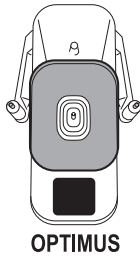
ANEMOMETER
(WIND SPEED)




HARDWARE
(IN BATTERY BAY)



OPTIMUS




MOUNTING BRACKET




WHAT YOU WILL NEED (not included):

- A compatible AcuRite OPTIMUS display to receive information from the outdoor weather sensor.
- CHOOSE A POWER OPTION:
 - A.)** OPTIONAL SOLAR POWER PACK with RECHARGEABLE LITHIUM BATTERY.
 - OR-
 - B.)** 4 x AA Batteries, Lithium type batteries recommended for temperatures below -4°F.
- Basic Phillips type screwdriver

PHILLIPS SCREWDRIVER

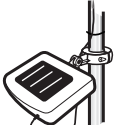


4 x AA BATTERIES



LITHIUM RECOMMENDED FOR COLDER CLIMATES

*** BATTERIES NOT REQUIRED IF YOU HAVE THE OPTIONAL #06051M SOLAR POWER PACK**



CHOOSING AN INSTALLATION SITE

Proper placement of both the sensor is critical to the overall accuracy and performance of this product. Mount on a LEVEL, strong post/pole, at least 5-8 ft. above the ground. 30+ ft. above the ground is IDEAL for wind measurement if possible. Choose an open location with no obstructions above or around the sensor for the most accurate measurements. IF mounting on a pole, ensure the pole is strong enough to not flex or bend. To ensure proper rigidity, you may need to construct a stepped reduction from a large pole down to the 1" O.D. pole that the sensor mounts on. **The Display and sensor must be within 330 feet (100 meters) of each other (about the length of a U.S. football field) for successful wireless communication to take place.**

MAXIMIZE WIRELESS RANGE

Place units away from large metallic items, thick walls, metal surfaces, or other objects that may limit wireless communication. Note that EACH object or surface between the outdoor sensor and the indoor display will limit the wireless range.

LIMIT POTENTIAL WIRELESS COMMUNICATIONS AND/OR LIGHTNING DETECTION INTERFERENCE

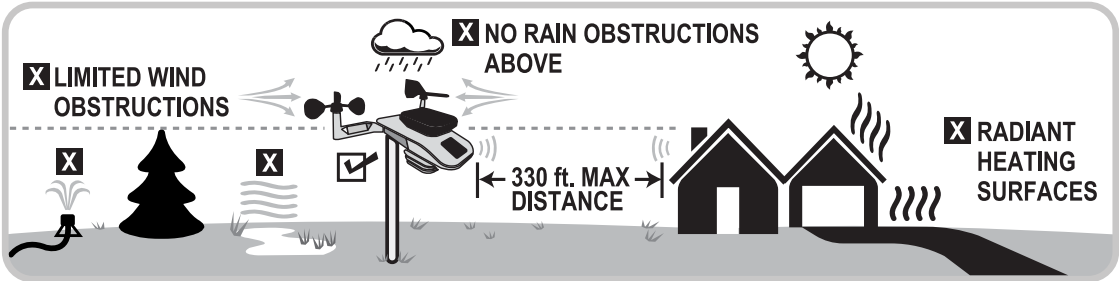
Place outdoor AND indoor units at least 3 feet (.9 m) AWAY from electronic devices (TV, computer, washing machines, clothes dryers, microwave, radio, etc.) Large motors like those found in well pumps, furnace fans, ceiling fans, exhaust fans can also interfere with the lightning detection sensitivity and effectiveness, so it's best to install away from those as well.

LOCATE AWAY FROM HEAT & HUMIDITY SOURCES

Position sensor away from heaters, air conditioners, chimneys, exhaust vents, asphalt and concrete (surfaces that radiate heat), pools and bodies of water. 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 or above it. Consider a location that is as wide an open area as possible, with few structures around to ensure accurate measurements.



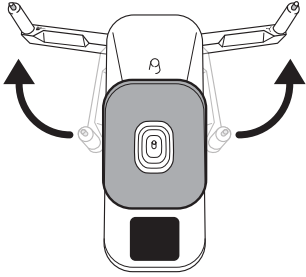
Mount level on a sturdy post/pole, at least 5-8 ft. above ground- higher is better.

BASIC ASSEMBLY & INSTALLATION OF OUTDOOR SENSOR

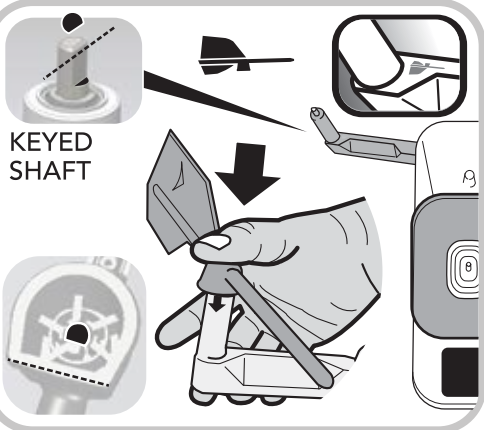
NOTE: If you have purchased a bundle, you may have already been instructed to assembled the outdoor sensor. If so, please disregard these assembly instructions and skip to the next section.

1 Fully deploy wind direction and wind speed sensor arms

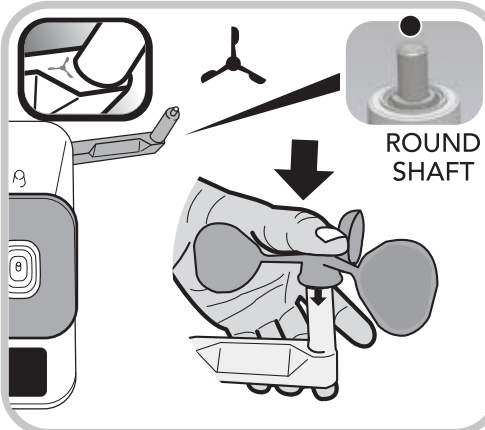
Grasp each arm by the end and rotate out until they reach the stop position.



2 Firmly press on the wind vane, aligning with keyed shaft




3 Firmly press the anemometer wind cups on to the round shaft



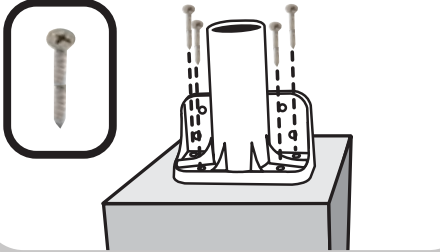
4 For high wind locations, firmly tighten wind arm lock screws

Use a Phillips hand screw driver to firmly tighten lock screws, preventing movement from wind



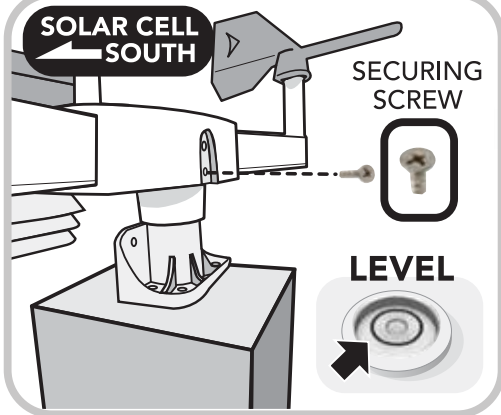
5 Install sensor outside utilizing the adapter or a suitable pole

Mount AT LEAST 5-8 feet off of the ground, higher is better! DO NOT mount above pavement or other surfaces that will reflect sunlight and/or radiate heat up to sensor



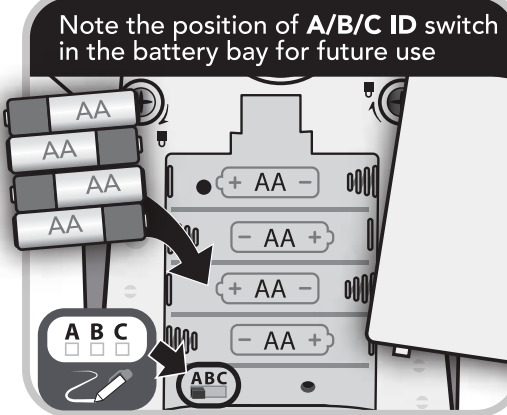
6 Install sensor on mounting location with SOLAR CELL FACING SOUTH

MAKE SURE SENSOR IS LEVEL BEFORE SECURING, UTILIZING THE INTEGRATED TOP BUBBLE LEVEL. ENSURE ITS SECURE!



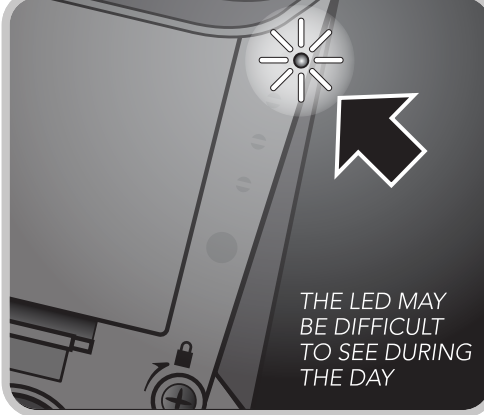
7 Install 4 x "AA" batteries according to polarity markings

Note the position of A/B/C ID switch in the battery bay for future use



NOTE that the "TRANSMIT" LED indicator near the battery bay

THE LED MAY BE DIFFICULT TO SEE DURING THE DAY



WHEN CONSIDERING A MOUNTING SPOT, CHOOSE A LEVEL, STURDY LOCATION WITH NO OBSTRUCTIONS ABOVE

SELECT OPTIMUS DISPLAYS ALSO HAVE AN A/B/C ID SWITCH THAT NEEDS TO BE SET TO MATCH THE SENSOR SETTING.

WHEN POWERED ON AND OPERATING NORMALLY, THE TRANSMIT INDICATOR WILL FLASH BRIEFLY EVERY 18 SECONDS.



I JUST SETUP MY OPTIMUS OUTDOOR SENSOR, WHY IS THERE ALREADY RECORDED RAIN SHOWING ON MY DISPLAY?

Through the process of installing, cleaning, or otherwise servicing the OPTIMUS outdoor sensor, the sensor may get jostled around and /or bumped to the point where the sensitive tipping bucket mechanism is moved enough to erroneously measure rainfall. If this happens during installation, simply reset your display to factory defaults to clear out any memory. On HD displays, go to the MENU, and navigate to "RECORDS." You will now be viewing "TODAY's RECORDS." Follow the on-screen instructions to "CLEAR TODAY'S RECORDS." That day's total rainfall will be erased from the overall rainfall totals.

GENERAL OPERATION AND MAINTENANCE INFORMATION

The Optimus system has been designed and engineered with all we have learned in our 80 years in the weather information business. From the automotive grade exterior materials, to the stainless steel hardware, Optimus will provide you with years of reliable service. But Mother Nature is punishing, and will age, degrade, and try to wear out everything that's out there, especially if its out there 24/7. Optimus is no exception. However, with a little bit of maintenance and some routine care, Optimus will continue to provide accurate information so you can make informed decisions quickly.

SELF-EMPTYING RAIN GAUGE

The rain gauge will operate best if the funnel is kept free of debris and the surface is cleaned a few times a year. Wipe the collection funnel clean with a soft, damp cloth, try to avoid scratching the funnel surfaces with anything textured or with paper products.

Also, regularly remove and clean the debris strainer and empty it of any seeds, leaves and other debris. To remove the debris strainer, firmly pull up on the handle to remove it for cleaning.

SOLAR PANEL

The solar panel exclusively powers the internal aspirating fan when the sun is out, to draw ambient air in for proper temperature and humidity measurement, but also to help ventilate the entire OPTIMUS sensor housing. To keep the solar panel clear of physical debris and free from dust and grime build up, regularly wipe it clean with a soft, damp cloth. DO NOT use caustic cleaning agents or solvents.

COVERED IN SNOW? Note that modern solar panels can regularly operate even under a moderate snow cover. The dark color of the panel itself also helps to gather heat and help melt off any snow covering. No need to worry about clearing ice or snow.

WILL SNOW & ICE DAMAGE OPTIMUS?

No, Optimus is designed to withstand snow and freezing conditions. You do NOT need to bring the Optimus sensor in for the winter.

WIND DIRECTION & WIND SPEED

The anemometer and wind vane shafts are stainless steel and each feature dual sealed bearings for durability and stability.

The anemometer is specially designed to be light enough to register a breeze, but strong enough to withstand strong storms. To help keep the performance intact, ensure no debris builds up on the spinning components, and keep it free from spider webs- which CAN be strong enough to prevent each component from registering in light to medium winds.

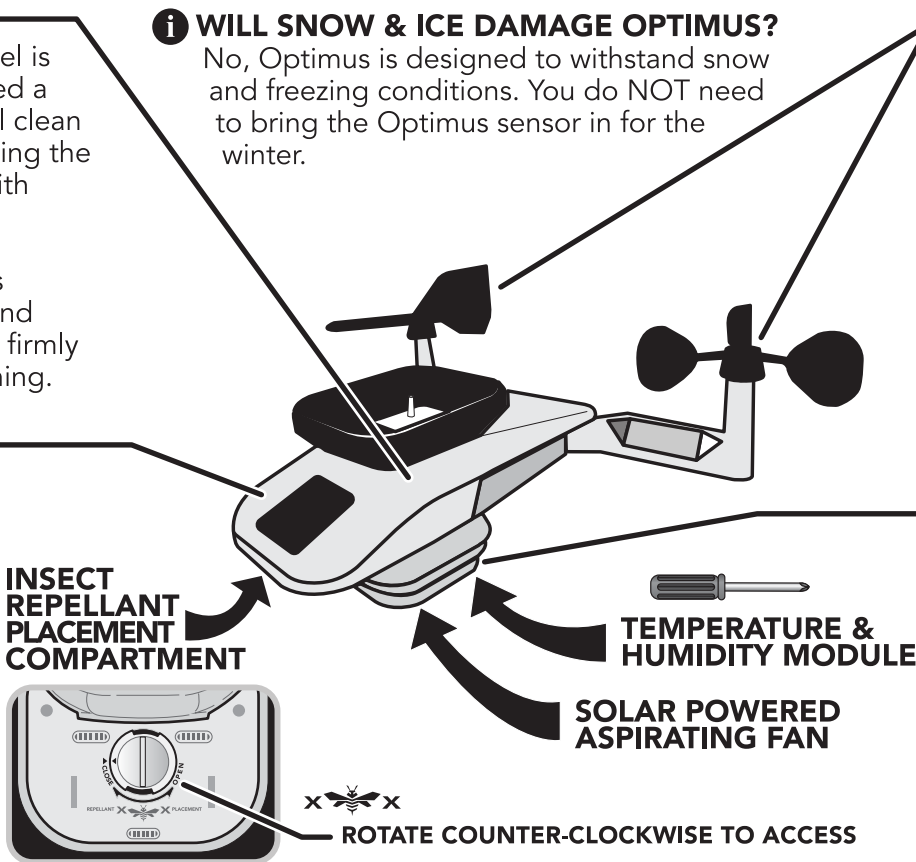
TEMPERATURE & HUMIDITY

To accurately measure temperature and humidity, you have to measure the outside air. OPTIMUS features a standard solar powered aspirating fan that draws outside air in, right past the sensor components. The TEMPERATURE & HUMIDITY module does get contaminated with microscopic debris over time, which degrades its performance.

This module should be replaced annually to MAINTAIN accuracy and performance.

#06195 OPTIMUS MAINTENANCE KIT

The Optimus Maintenance Kit comes with everything you need to restore the factory performance of your weather station, including a new TEMPERATURE & HUMIDITY MODULE. Visit www.AcuRite.com to order yearly for best performance!



This special compartment is designed to take advantage of Optimus' natural heat zones and resulting convection to distribute aromas and products that bugs don't like. This can help deter bugs from camping out in your outdoor weather sensor. Regularly place a moth ball, or cotton ball soaked with your pest deterrent product of choice in this removeable cup/compartment to help keep bugs at bay. Follow deterrent manufacturers instructions for use and cautions.

TROUBLESHOOTING

NO RECEPTION FROM OUTDOOR SENSOR



- Confirm the RED LED transmit indicator is flashing on the bottom of the outdoor sensor (near the battery bay). Look carefully, it blinks briefly every 18 seconds or so, and can be difficult to see during the daylight hours. IF it's not operating, you may need to check or replace the batteries.
 - IF your display has a battery compartment on the back, there is likely an "A/B/C" position switch located within. Ensure the "A/B/C" switches in the display & in the outdoor sensor MATCH.
 - Relocate one or both units and ensure they are placed within 330 feet of each other and at least 3 feet (.9 m) away from electronics that may interfere with the wireless communication (TVs, microwaves, PC's, etc).
 - Use standard alkaline or lithium batteries in sensor when temperature is below -20°C/-4°F). Do not use heavy duty or rechargeable batteries.
- NOTE: It may take a few minutes for display and sensor to synchronize after batteries are replaced.
- RE-Synchronize the indoor display and outdoor sensor:
 1. Bring both the sensor and display indoors and reset power and/or batteries.
 2. Reinstall batteries or/power adapter in outdoor sensor.
 3. Let the units sit within a couple feet of each other for a few minutes to gain a strong connection.

INACCURATE WIND READINGS

- What is wind reading being compared to? Pro weather stations are typically mounted at 30 ft (9 m) high or higher. 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 5 ft (1.5 m) in the air with no obstructions around it (within several feet).
- Ensure wind cups are spinning freely. If they hesitate or stop try lubricating the top bearings with graphite powder or spray lubricant.

INACCURATE TEMPERATURE &/OR HUMIDITY READINGS

- What is the temperature or humidity being compared to? Temperature and Humidity readings can vary by a few degrees just a few miles away. Make sure both the display and outdoor sensor are placed away from any heat sources or vents.
- If the temperature is running significantly higher than actual, ensure the aspirating fan is operating (you should hear a low hum sound and see the fan spinning through the bottom of the lovers).
- Make sure both units are positioned away from moisture sources
- The temperature and humidity module will become contaminated over time, and will begin to degrade and lose accuracy. This replaceable component should be replaced every 1-2 years, sooner in hot, dusty environments, and less often in more moderated conditions. The #06195 OPTIMUS MAINTENANCE KIT includes a new temperature and humidity module, which can be replaced easily with a small phillips type screwdriver. Order at www.AcuRite.com.

SPECIFICATIONS

| | |
|-------------------------|--|
| TEMPERATURE RANGE | -40°F to 158°F (-40°C to 70°C), REQUIRES LITHIUM BATTERIES for -4°F and BELOW |
| HUMIDITY RANGE | 1% to 99% |
| WIND SPEED RANGE | 0 to 125 mph |
| WIND DIRECTION POINTS | 360 individual position detection |
| RAINFALL | .01 inches and up |
| OPERATING FREQUENCY | 433 Mhz, RANGE 330 FEET (100 meters) open field |
| DATA REPORTING INTERVAL | Wind Speed: 18 seconds, Wind Direction: 30 seconds, Temp. & Humidity: 36 seconds |



IMPORTANT: PRODUCT WARRANTY REGISTRATION

PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE.

REGISTER ONLINE:

www.AcuRite.com/product-registration

AcuRite is a business unit and brand of Combex, Inc. (referred to as "Combex," "we," "us," or "our" in this document). For purchases of AcuRite products, Combex provides the benefits and warranty services described below.

We warrant to the original purchaser that the Optimus Weather Station & Display we manufacture under this warranty will be free from defects in materials and workmanship for the life of the product (the "Original Purchaser Warranty").

The Original Purchase Warranty does not cover consumable components which include: the rain funnel, rain debris screen, wind cups, wind vane, and temperature-humidity sensor module.

Any product which, under normal use and service and after examination by us, fails to meet the Original Purchaser Warranty will, at our sole option, be repaired or replaced by us. Although, as explained below, in some cases a refund will be provided. Transportation costs and charges for returned goods shall be paid for by the original purchaser. We hereby disclaim all responsibility for such transportation costs and charges. The Original Purchaser Warranty does not cover, and we will not repair or replace products which have received normal wear and tear not affecting the functionality of the product, or that have been damaged (including by acts of nature), tampered, abused, improperly installed, or repaired or altered by anyone other than our authorized representatives.

The remedy under the Original Purchaser 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 ORIGINAL PURCHASER WARRANTY IS NOT TRANSFERABLE AND IS THE SOLE WARRANTY FOR THE PRODUCTS AND IS EXPRESSLY 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 our 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 OUR duly authorized agent.

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 WARRANTY

The Original Purchaser Warranty 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 warranties, if any, applicable to the country in which you made your purchase. As noted, the Original Purchaser Warranty applies only to the original purchaser of our products. We cannot and do not offer any return, refund, or warranty if you buy products used or from resale sites such as eBay or Craigslist.

GOVERNING LAW

The Original Purchaser Warranty is governed by the laws of the United States and the State of Wisconsin. Any dispute relating to the warranty 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.