

AcuRite Atlas® High-Definition Display

models 06104 / 06105



This product requires an AcuRite Atlas Weather Sensor (sold separately) to be operational.

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Questions? Visit www.acurite.com/support

SAVE THIS MANUAL FOR FUTURE REFERENCE.



Congratulations on your new AcuRite product. To ensure the best possible product performance, please read this manual in its entirety and retain it for future reference.

Unpacking Instructions

Remove the protective film that is applied to the LED screen prior to using this product. Locate the tab and peel off to remove.

Package Contents

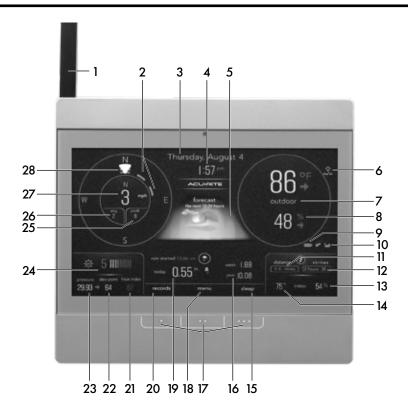
- 1. Display with Tabletop Stand
- 2. Power Adapter
- 3. Quick Start Guide

IMPORTANT

PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

PRODUCT REGISTRATION

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



Features & Benefits

Front of Display

1. Antenna

Keep in the vertical position for best signal strength.

2. Previous Two Wind Directions

3. Date & Day of the Week

4. Clock

5. 12 to 24 Hour Weather Forecast

Self-Calibrating Forecast pulls data from your AcuRite Atlas® Sensor to generate your personal forecast. Moon phase will be shown during evening hours when visibility allows (see page 8).

6. Kon

Indicates display is in auto dim mode.

7. Current Outdoor Temperature

Arrow indicates direction temperature is trending.

8. Current Outdoor Humidity

Arrow indicates direction humidity is trending.

9. Sensor Low Battery Indicator

10. Sensor Signal Strength

11. Estimated Distance to Storm Front

If using optional lightning sensor, updates with latest lightning strikes detected today. If not, shows current barometric pressure (#23).

12. Strike Counter

If using optional lightning sensor, displays most recent total of lightning strikes that have been detected (last 3 hours, today, this year). If not, shows current barometric pressure (#23).

13. Current Indoor Humidity

14. Current Indoor Temperature

15. Sleep Mode Access

While in normal operation mode, press the button below to enter sleep mode (see page 7).

16. Rainfall History

Displays rainfall records for the current week, and alternates between current month and year.

17. Menu Navigation Buttons

18. Menu Access

While in normal operation mode, press the button below to access the main menu (see page 7).

19. Current Rainfall

Displays rainfall from today.

20. Records Access

While in normal operation mode, press the button below to access daily and all-time records.

21. Seasonal Information

Heat Index calculation displays when temperature is 80°F (27°C) or higher. Wind chill calculation displays when temperature is 40°F (4°C) or lower.

22. Dew Point

23. Barometric Pressure

Arrow icon indicates direction pressure is trending.

24. Current UV Index

Indicates the level of UV radiation.

25. Peak Wind Speed

Highest speed from the last 60 minutes.

26. Average Wind Speed

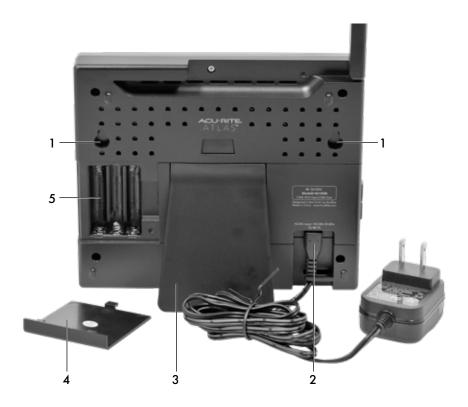
Average wind speed over the past 2 minutes.

27. Current Wind Speed

28. Current Wind Direction

Features & Benefits Back of Display

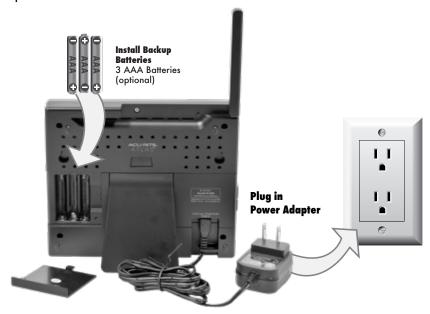
- I. Integrated Hangers
 For easy wall mounting.
- 2. Plug-in for Power Adapter
- 3. Display Stand
- 4. Battery Compartment Cover
- 5. Backup Battery Compartment



Display Setup

- Install or Replace Backup Batteries (optional; recommended)
 - 1. Remove the battery compartment cover.
 - 2. Insert 3 x AAA batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.
 - 3. Replace the battery cover.
- 2 Plug in Power Adapter

For the best performance, plug in the power adapter as the main power source for this product.



IMPORTANT: Batteries are a backup power source to preserve records in the event of a power outage. Power adapter is required as the primary power source to enjoy the full functionality of this product.

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.

Placement for Maximum Accuracy

AcuRite sensors are sensitive to surrounding environmental conditions. Proper placement of both the display and the sensor are critical to the accuracy and performance of this unit.

Display Placement



Place the display in a dry area free of dirt and dust. Display stands upright for tabletop use and and is also wall-mountable.

Important Placement Guidelines

- To ensure accurate temperature measurement, place units out of direct sunlight and away from any heat sources or vents.
- Display and sensor must be within 330 feet (100 m) of each other.
- To maximize wireless range, place units away from large metallic items, thick walls, metal surfaces, or other objects that may limit wireless communication.
- To prevent wireless interference, place units at least 3 feet (.9 m) away from electronic devices (TV, computer, microwave, radio, etc.).

Settings

After powering on for the first time, the display will automatically enter setup mode. Follow the on-screen instructions to set up the display.

To adjust the currently selected item as well as save your adjustments, use the menu navigation buttons. The preference set order is as follows:

CLOCK HOUR

CLOCK MINUTE

AUTO DST (daylight saving time YES or NO)*

CALENDAR MONTH

CALENDAR DATE

CALENDAR YEAR

MEASUREMENT UNITS (metric or U.S.)

WIND SPEED UNITS (MPH, KPH, Knots)

WIND DIRECTION DISPLAY (degrees or NNW)

ALARM VOLUME

*If you live in an area that observes daylight saving time, DST should be set to YES, even if it is not currently daylight saving time.

Enter setup mode at any time by navigating to "General Setup" in the menu using the menu navigation buttons.

Using the Weather Station

Navigate to the main menu at any time by using the menu navigation buttons below the display. From the main menu, you can set alarms, modify display settings, review your connection with the sensor, and more.



1. Connections

Access the "Connections" sub-menu to view your sensor's information, including battery life status and signal strength, and to add or remove a sensor.

2. Alarms

Access the "Alarms" sub-menu to set and edit alarm values for temperature, humidity, wind speed, rainfall, UV, and lightning (optional). This display will sound an alert to notify you when a value has been reached or exceeded. When an alarm is triggered, the display emits an audible beep and flashes data in the affected category.

3. General Setup

Access the "General Setup" sub-menu to enter the initial setup process and edit fields like time, date, and unit preferences.

4. Display Settings

Access the "Display Settings" sub-menu to adjust sleep mode, auto dim mode, or display brightness, contrast, and tint.

When sleep mode is activated, the backlight automatically turns off during the time frame you choose. Weather information will continue to be received as normal even with the backlight off. When auto dim mode is activated, the backlight automatically dims the brightness based on the time of day.

5. Calibration

Access the "Calibration" sub-menu to adjust display or sensor data. Select the category for which you wish to calibrate readings and follow the on-screen prompts to adjust the value.

6. Factory Reset

Access the "Factory Reset" sub-menu to revert the display back to factory defaults. Follow the on-screen prompts to perform the reset.

AUTO DIM MODE: Automatically adjusts display brightness based on time of day.

6:00 a.m. - 9:00 p.m. = 100% brightness

9:01 p.m. - 5:59 a.m. = 15% brightness

Weather Overview Dashboard

Weather Forecast

AcuRite's patented Self-Calibrating Forecasting provides your personal forecast of weather conditions for the next 12 to 24 hours by collecting data from a sensor in your backyard. It generates a forecast with pinpoint accuracy - personalized for your exact location.

Self-Calibrating Forecasting uses a unique algorithm to analyze changes in pressure over a time period (called Learning Mode) to determine your altitude. After 14 days, the self-calibrated pressure is tuned in to your location and the unit is ready for superior weather prediction.

Moon Phase

Near your personalized forecast, the moon phase displays between 7:00 p.m. and 5:59 a.m. when conditions allow for moon visibility. The phases of the moon are conveyed through these lunar phase icons:



Lightning Detection - Optional; May Be Sold Separately

When the lightning sensor is used, it allows the AcuRite Atlas sensor to detect lightning strikes within 25 miles (40 kilometers), track total strikes and estimate the distance of the most recent strike. The sensor detects cloud-to-cloud, cloud-to-ground and intra-cloud lightning. See instructions included with the lightning sensor for installation guidelines.

When strikes are recorded for today, the display shows the total strike count along with the estimated distance of the most recent strike. After 3 hours of no lightning activity, the display shows the total strike count for today along with how long it's been since the last strike was detected. If no strikes are recorded for today, the display shows the historical strike count for the year along with how long it's been since the last strike was detected.

Interference

The display features enhanced interference rejection capabilities to prevent false lightning detection. When the sensor cannot detect lightning due to interference from nearby equipment, the interference indicator will flash on the display.

Sensor may detect interference if located near:

- Electric motors (windshield wiper motor or fan motors in cars, hard drive and optical drive motors on your PC and AV equipment, well pumps, sump pumps)
- CRT monitors (PC monitors, TV's)
- Fluorescent light fixtures (turned off or on)
- Microwave ovens (while in use)
- PC's and mobile phones

WARNING: Take shelter IMMEDIATELY when lightning is present, whether or not it has been detected by the lightning sensor. If you are concerned about lightning strikes, follow all safety precautions to keep yourself and others safe. DO NOT rely on this lightning sensor as your only source for warnings about potentially deadly lightning strikes or other severe weather conditions.

NOTE: Under no circumstances shall the Lightning Detection Sensor, Chaney Instrument Co. or the Primex Family of Companies be held responsible for any damages whatsoever that may result from the use of or inability to use this product, including without limitation any indirect, incidental, special, exemplary or consequential damages, which are expressly disclaimed. This disclaimer of liability applies to any damages or injury caused by any failure of performance. error, omission, inaccuracy, interruption, deletion, defect, delay in operation or transmission software virus, communication failure, theft or destruction or unauthorized access to, alteration of, or use of the product, whether for breach of contract, tortuous behavior (including, without limitation, strict liability), negligence, or under any other cause of action, to the fullest extent permissible by law. This does not affect any statutory rights which may not be disclaimed. The contents of this product, including all lightning and weather data are provided "as is" and without warranty or condition of any kind, express or implied, including, without limitation, any warranty of merchantability or fitness for a particular purpose. Change Instrument Co. & the Primex Family of Companies do not warrant that this product or the data that it provides will be free of errors, interruptions, viruses or other harmful components. Chancy Instrument Co. & the Primex Family of Companies do not warrant the accuracy or reliability of any lightning strike alerts, weather data or other information provided by the product. Chaney Instrument Co. & the Primex Family of Companies reserve the right to alter the product or withdraw it from the market at its sole discretion.

Troubleshooting

Problem	Possible Solution	
No reception To bars	 Relocate the display and/or the AcuRite Atlas® sensor. The units must be within 330 ft (100 m) of each other. Make sure both units are placed at least 3 ft (.9 m) away from electronics that may interfere with the wireless communication (such as TVs, microwaves, computers, etc). Use standard alkaline batteries (or lithium batteries in sensor when temperature is below -4°F/-20°C). 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. Navigate to the "Connections" sub-menu to remove and readd your sensor (see page 7). Confirm the red light indicator on the bottom of the sensor is blinking every 10 seconds. If it's not blinking, perform a factory reset on the display by navigating to the "Factory 	
Temperature is showing dashes	Reset" sub-menu (see page 7). When the outdoor temperature is showing dashes, it may be an indication of wireless interference between the sensor and display. • Re-add sensor to display by accessing the "Connections" sub-menu (see page 7).	
Inaccurate forecast	 Weather Forecast icon predicts conditions for the next 12 to 24 hours, not current conditions. Allow product to run continuously for 33 days. Powering down or resetting the display will restart Learning Mode. After 14 days, forecast should be fairly accurate, however Learning Mode calibrates for a total of 33 days. 	

Problem	Possible Solution
Inaccurate wind readings	What is wind reading being compared to? Pro weather stations are typically mounted at 30 ft (9 m) 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 with graphite powder or spray lubricant.
Inaccurate temperature or humidity	Make sure both the display and AcuRite Atlas® sensor are placed away from any heat sources or vents (see page 6).
	 Make sure both units are positioned away from moisture sources (see page 6).
	 Make sure AcuRite Atlas sensor is mounted at least 5 ft (1.5 m) off of the ground.
	Calibrate indoor and outdoor temperature and humidity (see "Calibration" on page 7).
Display screen not working	 Is the display in sleep mode? Press any button to wake it up. Check that the power adapter is plugged into the display and an electrical outlet.
No rainfall	Check to ensure the rain gauge stabilizer (plastic tab) has been removed from the bottom of the sensor.
	Clear debris, such as leaves, out of the rain collector funnel and debris screen.
	 Verify the sensor's internal tipping lever is moving freely by dripping a little water through the rain collector. You should hear the lever tipping. If you do not hear it, you may need to clean inside the sensor.

If your AcuRite product does not operate properly after trying the troubleshooting steps, visit www.acurite.com/support.

Care & Maintenance

Clean with a soft, damp cloth. Do not use caustic cleaners or abrasives. Keep away from dust, dirt, and moisture. Clean ventilation ports regularly with a gentle puff of air.

Specifications

DISPLAY'S BUILT-IN TEMPERATURE SENSOR RANGE	32°F to 122°F; 0°C to 50°C	
DISPLAY'S BUILT-IN HUMIDITY SENSOR RANGE	1% to 99%	
OPERATING FREQUENCY	433 MHz	
POWER	5V power adapter 3 x AAA alkaline batteries (optional)	
DATA REPORTING	Indoor temperature & humidity: 60 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 by visiting www.acurite.com/support

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 eBoy 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.

FCC Information

This device complies with part 15 of 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. This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation of the device.



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