

## **Professional Weather Display**

model 06087



This product requires an AcuRite Notos® 3-in-1 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 LCD 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. Instruction Manual

## **IMPORTANT**

PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

#### **PRODUCT REGISTRATION**

Register online to receive 1 year warranty protection www.**AcuRite**.com

## Wi-Fi Setup for Weather Underground™

This weather station features wireless Internet connectivity in order to connect and send your data to Weather Underground. If you do not already have a WU (Weather Underground) account, please create your account at wunderground.com prior to the following Wi-Fi setup.

- 1. Add this weather station to your Weather Underground account:
  - Sign in to your Weather Underground account.
  - Navigate to My Profile > My Weather Stations > Add New PWS.
  - Enter all required location info.
  - When prompted for "Station Hardware", select "AcuRite Pro Weather Center".
  - You will be provided with a WU Station ID and Station Key once you have submitted all required info (record for step 5, below).
- 2. Power on the display (using included power cord).\*
- 3. Connect to the Wi-Fi signal (named AcuRite 06087M) of the AcuRite display from your computer or mobile device.
- 4. Open your web browser on the device that is connected to the AcuRite display. Type "192.168.4.1" in the address bar and hit enter to access the AcuRite Wi-Fi display settings website.
- Enter or select your wireless network name, network password, and the WU Station ID and Station Key (created in step 1).\*\* Press "Save" to save your credentials.
- A Wi-Fi status message will appear confirming your connection to the display. If the connection was not successful, please verify your credentials and/or visit the Troubleshooting section (see page 13).
- 7. Once connected, data from your 3-in-1 sensor will automatically begin to upload to Weather Underground™. Monitor sensor data remotely at www.wunderground.com or from a mobile device using the Weather Underground app, available from the iOS App Store or Google Play Store.

\*Wi-Fi setup page is available for 30 minutes after the display is powered on. After 30 minutes, press and release the " " button to re-activate the setup page.

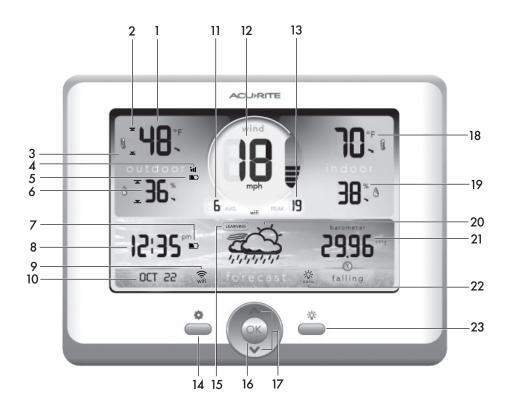
\* \* This weather station display only supports 2.4 GHz wireless networks

## **About Weather Underground**

Weather Underground is a commercial weather service providing real-time weather information via the Internet. Weather Underground provides weather reports for most major cities across the world on its website, as well as local weather reports for newspapers and websites. Its information comes from the National Weather Service, and over 250,000 personal weather stations.

## **Features & Benefits**

## Display



#### **DISPLAY FRONT**

#### 1. Current Outdoor Temperature

Arrow icon indicates direction the temperature is trending.

#### 2. Kon

Indicates high records are being viewed.

#### 3. Icon

Indicates low records are being viewed.

#### 4. Outdoor Sensor Signal Strength

#### 5. Sensor Low Battery Indicator

#### 6. Current Outdoor Humidity

Arrow icon indicates the direction the humidity is trending.

#### 7. Display Low Battery Indicator

#### 8. Clock

## 9. 🛜 Icon

Indicates display is connected to your wireless network.

#### 10. Date

#### 11. Average Wind Speed

Indicates the average of all speeds over the past 2 minutes.

#### 12. Current Wind Speed

#### 13. Peak Wind Speed

Indicates the highest speed from the last 60 minutes.

#### 14. A Button

For setup preferences.

#### 15. Learning Mode Icon

Disappears after weather forecast self-calibration is complete.

#### 16. OK Button

For setup preferences.

#### 17. v and A Buttons

For setup preferences and viewing high and low records.

#### 18. Current Indoor Temperature

Arrow icon indicates direction the temperature is trending.

#### 19. Current Indoor Humidity

Arrow icon indicates the direction the humidity is trending.

## 20. 12 to 24 Hour Weather Forecast

Self-calibrating forecasting pulls data from outdoor sensor to generate your personal forecast.

#### 21. Current Barometric Pressure

#### 22. 🔆 kon

Indicates display is in auto-dimming brightness mode (see page 8).

#### 23. 🌣 Button

For momentary backlight and dimmer settings.

### **Features & Benefits**



#### **BACK OF DISPLAY**

- 1. Integrated Hanger For easy wall mounting.
- RESET Button For full reset to factory defaults.
- 3. Backup Battery Compartment
- 4. Fold-out Tabletop Stand
- 5. Power Adapter

- 6. Plug-in for Power Adapter
- 7. A-B-C Switch

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

8. Battery Compartment Cover (not shown)

## **Display Setup**

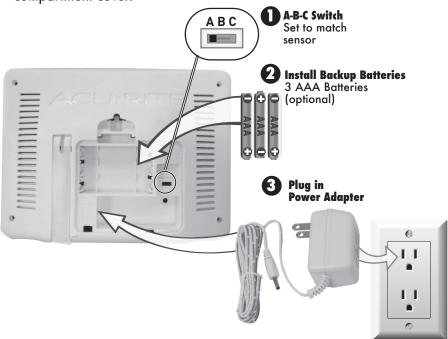
Set the A-B-C Switch

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 choices for both the display and the sensor in order for the units to synchronize.

- Install or Replace Backup Batteries (optional)
  - 1. Remove the battery compartment cover.

- Insert 3 x AAA alkaline batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.
- 3. Replace the battery cover.
- 3 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 recommended 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 that will not be used for an extended period of time. Follow the polarity (+/-) diagram in the battery compartment. Promptly remove dead batteries. Do NOT 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 hort-circuit the supply terminals.

## Set the Time, Date & Units

Press the "\$" button, located on the front of the display, to enter SET MODE. Once in set mode, the preference you are currently setting will blink on the display.

To adjust the currently selected (flashing) item, press and release the "\shi" or "\substant " buttons (press and HOLD to fast adjust).

To save your adjustments, press and release the "OK" button to adjust the next preference. The preference set order is as follows:

AUTO DST (YES or NO)\*

CLOCK HOUR
CLOCK MINUTE
CALENDAR MONTH
CALENDAR DATE
CALENDAR YEAR
TEMPERATURE UNITS (°F or °C)
WIND SPEED UNITS (mph, km/h, knots)
PRESSURE UNITS (inHq or hPa)

You will automatically exit SET MODE if no buttons are pressed for 8 seconds. Enter SET MODE at any time by pressing and holding the "\Phi" button.

\*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.

## **Display Backlight Settings**

This weather station's color display features three different lighting settings:

High (100%) brightness, Medium (60%) brightness and Low (15%) brightness.

When display is powered with the power adapter, backlight remains on at 100% brightness. Press the "" button once to dim to 60% brightness; press again to dim to 15%, press a third time to enter AUTO-DIM mode. "" will appear next to the clock.

NOTE: Pressing and holding the "or button for 5 seconds will disable the backlight. Once any button is pressed, the backlight will return to your selected setting.

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		

## **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 is 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(s) 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.).

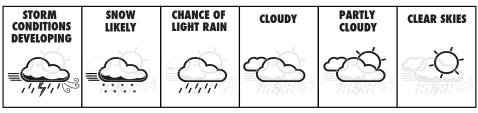
#### **OPERATION**

## Using the Professional Weather Center Learning Mode

Self-Calibrating Forecasting use 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.

### **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 the sensor in your backyard. It generates a forecast with pinpoint accuracy - personalized for your exact location.



View the complete list of icons at www.AcuRite.com/acurite-icons

#### **Barometric Pressure**

Subtle variations in barometric pressure greatly affect the weather. This weather station displays the current pressure with an indicator to show the direction the pressure is trending (FALLING or RISING).

## **High & Low Records**

High and low records reflect the minimum and maximum temperature and humidity recorded since the unit was powered on, since the batteries were replaced, or since the records were manually reset (whichever was most recent).

To view the LOW records, press and release the " $\vee$ " button. The low record indicator appears on the display next to the low records.

To view the HIGH records, press and release the "\times" button. The high record indicator appears on the display next to the high records.

To reset the LOW records, press AND HOLD the " V" button while viewing the low records. Dashes will display to confirm all low records have been reset.

To reset the HIGH records, press AND HOLD the "\(\Lambda\)" button while viewing the high records. Dashes will display to confirm all high records have been reset.

#### **Calibration**

The indoor/outdoor temperature and humidity readings, and barometric pressure can be calibrated on the display unit to improve accuracy. Calibration can improve accuracy when sensor placement or environmental factors impact the data accuracy.

- 1. To access calibration mode, press AND HOLD the "♣", "OK", and "☆" buttons simultaneously for at least 5 seconds.
- To adjust the currently selected (flashing) item, press and release the "∧" or "∨" buttons to calibrate the data value higher or lower than the actual reading.
- 3. To save your adjustments, press and release the "OK" button to adjust the next preference. The "" icon will remain illuminated next to calibrated values.

The preference set order is as follows:

OUTDOOR TEMPERATURE

**OUTDOOR HUMIDITY** 

INDOOR TEMPERATURE

INDOOR HUMIDITY

BAROMETRIC PRESSURE (must be set to MANUAL mode to calibrate)\*

\*To change from AUTO to MANUAL pressure mode and vice versa, press AND HOLD the "\$" button for 10 seconds. "auto" will disappear above the barometric pressure to indicate that manual mode has been activated. Press and HOLD the "\$" button for 10 seconds to return to AUTO mode.

After 10 seconds of inactivity, the display will save the adjustments and exit calibration mode.

**NOTE:** Calibrations will be erased if the display is reset or if batteries are removed and the power adapter is unplugged.

## **Troubleshooting**

Problem	Possible Solution
No outdoor sensor reception	<ul> <li>Relocate the display and/or the 3-in-1 sensor. The units must be within 330 ft (100 m) of each other.</li> <li>Make sure both units are placed at least 3 feet (.9 m) away from electronics that may interfere with the wireless communication (such as TVs, microwaves, computers, etc).</li> <li>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.</li> <li>NOTE: It may take a few minutes for display and sensor to synchronize after batteries are replaced.</li> <li>Synchronize the units:</li> <li>Bring both the sensor and display indoors and remove batteries/power adapter from each.</li> <li>Reinstall batteries in outdoor sensor.</li> <li>Reinstall batteries/power adapter in display.</li> <li>Let the units sit within a couple feet of each other for a few minutes to gain a strong connection.</li> </ul>
Outdoor temperature is flashing or showing dashes	Flashing of the outdoor temperature may be an indication of wireless interference.  • Make sure the A-B-C switch in the battery compartments of both the display and sensor are switched to the same letter. You may choose A, B or C; but both units must match to sync up. Sometimes changing to a different channel can help.
Inaccurate forecast	<ul> <li>Weather Forecast icon predicts conditions for the next 12 to 24 hours, not current conditions.</li> <li>Allow unit to run continuously for 33 days. Battery removal 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.</li> </ul>
Display screen not working	<ul> <li>Check that the power adapter is plugged into the display and an electrical outlet.</li> <li>Check that the batteries are installed correctly. Batteries may need to be replaced.</li> <li>Reset the display by pressing and HOLDING the "RESET" button, located on the back of the display. Date and time will need to be entered after a reset.</li> </ul>

## **Troubleshooting**

Problem	Possible Solution
DISPLAY NOT CONNECTING TO WI-FI	<ul> <li>Your internet router and display must be within range of each other. Relocate your display closer to your router.</li> <li>Ensure the network name (SSID) and password you've entered are correct. NOTE: Both network name and password are case sensitive.</li> <li>Reset the display by pressing and holding the RESET button for 10 seconds, located in the battery compartment of the display. Date and time will need to be entered after a reset.</li> <li>Make sure DCHP is enabled on your router. Most routers have DHCP enabled by default.</li> <li>Ensure your router is broadcasting a 2.4 GHz network. The weather station display is equipped with a Wi-Fi module that only supports 2.4 GHz wireless networks.</li> </ul>
DATA NOT UPLOADING TO WEATHER UNDERGROUND TM	Navigate to "192.168.4.1" in your web browser. Confirm that your Station ID and Station Key are entered correctly.
INACCURATE TEMPERATURE OR HUMIDITY	<ul> <li>Make sure both the display and 3-in-1 sensor are placed away from any heat sources or vents (see page 9).</li> <li>Make sure both units are positioned away from moisture sources (see page 9).</li> <li>Make sure 3-in-1 sensor is mounted at least 5 ft off of the ground.</li> </ul>
INACCURATE WIND READINGS	<ul> <li>What is wind reading being compared to? Pro weather stations are typically mounted at 30 ft high or more. Make sure to compare data using a sensor positioned at the same mounting height.</li> <li>Check location of the sensor. Ensure it's mounted a minimum of 3 ft in the air with no obstructions around it (within several feet).</li> <li>Ensure wind cups are spinning freely. If they hesitate or stop try lubricating with graphite powder or spray lubricant.</li> </ul>

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

# Care & Maintenance Display Care

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	Display: Indoor temperature & humidity: 60 second updates
DATA REPORTING	Wind Speed: 18 second updates Outdoor temperature & humidity: 36 second updates Indoor temperature & humidity: 60 second updates
WIFI	802.11.b/g/n Weather Underground <sup>™</sup> connectivity requires an active 2.4 GHz broadband internet connection and an active Weather Underground account.

### **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 EXPRESSIV 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.

### **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

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 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 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.

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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