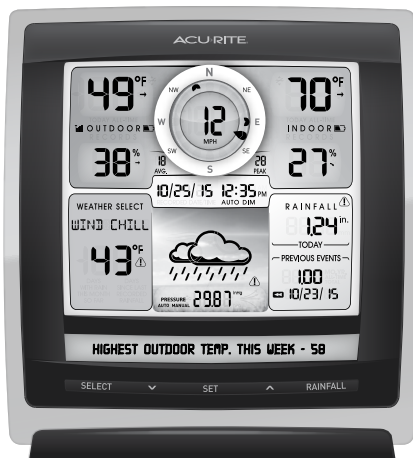


Display for 5-in-1 Weather Sensor model 06016RM



Package Contents

1. Display unit with tabletop stand
2. Power adapter
3. Instruction Manual

This product requires an AcuRite 5-in-1 Weather Sensor (sold separately) to be operational.

IMPORTANT

PRODUCT MUST BE REGISTERED
TO RECEIVE WARRANTY SERVICE

PRODUCT REGISTRATION

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

SUPPORT

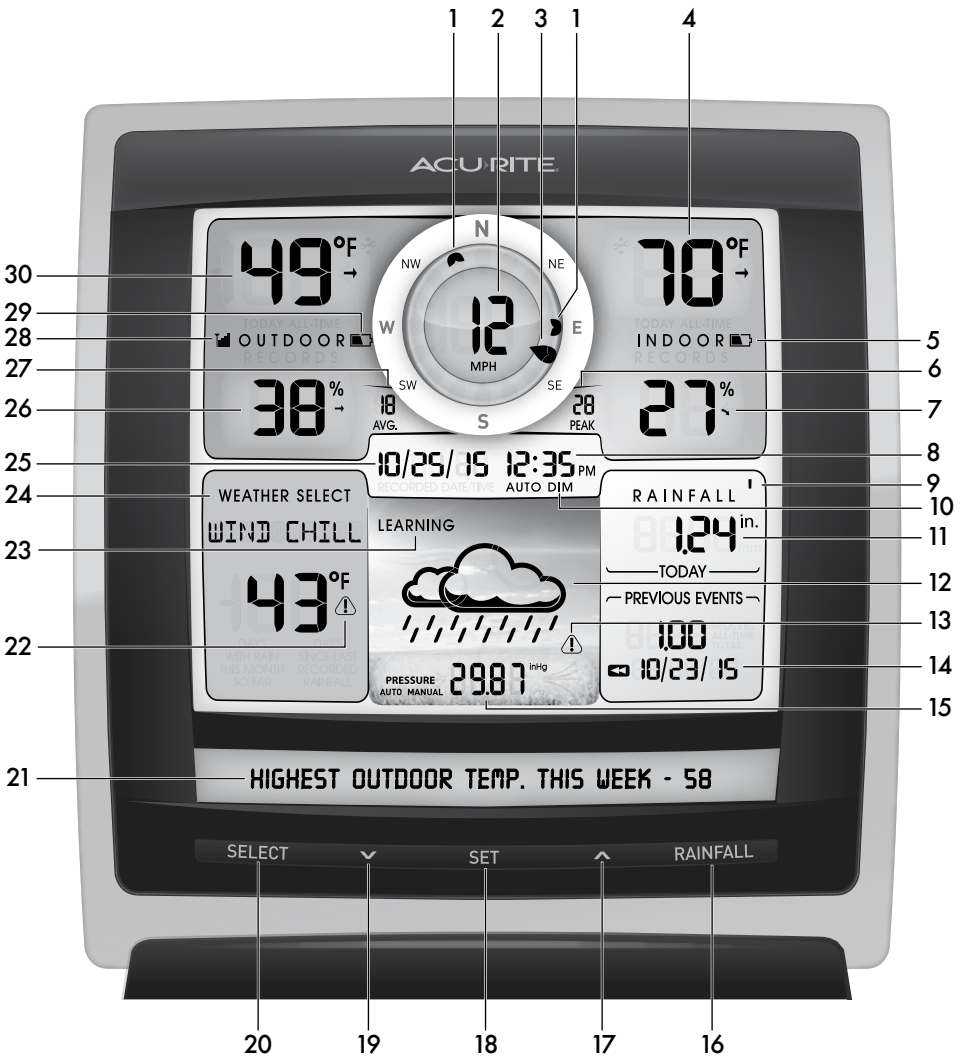
Support Forum
Archived Products
▶ Register a Product

Questions? Contact Customer Support at
(877) 221-1252 or visit www.AcuRite.com.

SAVE THIS MANUAL FOR FUTURE REFERENCE.

Features & Benefits

Display Unit



- 1. Previous 2 Wind Directions**
- 2. Current Wind Speed**
- 3. Current Wind Direction**
- 4. Current Indoor Temperature**
Arrow icon indicates direction temperature is trending.
- 5. Display Low Battery Indicator**
- 6. Peak Wind Speed**
Highest speed from the last 60 minutes.
- 7. Current Indoor Humidity**
Arrow icon indicates direction humidity is trending.
- 8. Clock**
- 9. Rainfall Alert Indicator**
Indicates rainfall of more than 1" of rain in 2 hours or less.
- 10. AUTO DIM Indicator**
- 11. Current Rainfall**
Accumulates data during rainfall.
- 12. 12 to 24 Hour Weather Forecast**
Self-Calibrating Forecasting pulls data from your 5-in-1 sensor to generate your personal forecast.
- 13. Storm Alert Indicator**
- 14. Month/Year/All-Time Rainfall**
- 15. Current Barometric Pressure**
Arrow icon indicates direction pressure is trending.
- 16. RAINFALL Button**
Press to change the RAINFALL data being displayed (Month, Year, All-Time).
- 17. ^ Button**
for setup preferences.
- 18. SET Button**
for setup preferences.
- 19. v Button**
for setup preferences.
- 20. SELECT Button**
Press to change the WEATHER SELECT category data being displayed.
- 21. Weather Ticker™**
- 22. Heat Index/ Wind Chill Alert Indicator**
- 23. Learning Mode Icon**
Disappears after weather forecast self-calibration is complete.
- 24. WEATHER SELECT**
Displays heat index, dew point, wind chill, feels like, days with rain this month, and days since last recorded rainfall.
- 25. Date**
- 26. Current Outdoor Humidity**
Arrow icon indicates direction humidity is trending.
- 27. Average Wind Speed**
of all speeds from past 2 minutes.
- 28. 5-in-1 Sensor Signal Strength**
- 29. Sensor Low Battery Indicator**
- 30. Current Outdoor Temperature**
Arrow icon indicates direction temperature is trending.



BACK OF DISPLAY UNIT

1. Integrated Hang Hole
for easy wall mounting.

2. Backlight Button
Dimmer control while using power adapter. Activates momentary backlight while on battery power.

3. Plug-in for Power Adapter

4. Removable Tabletop Stand

5. CLEAR ALL/RESET Button
Press and HOLD for 10 seconds for full reset to factory defaults.



6. A-B-C Switch
ID code that must match 5-in-1 sensor's A-B-C switch to ensure units synchronize.

7. Power adapter

8. Battery Compartment Cover
(not shown)

Display Unit Setup

AcuRite recommends high quality alkaline batteries for the best product performance. Heavy duty or rechargeable batteries are not recommended.

1 Set the A-B-C Switch

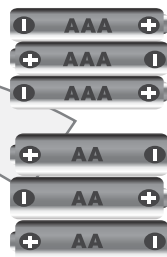
The A-B-C switch is located inside the battery compartment. It can be set to A, B or C. However, you must select the same letter choices for both the sensor and the display unit in order for the units to synchronize.

2 Plug Power Adapter into Electrical Outlet

3 Install or Replace Batteries (optional)

Insert 6 x AA alkaline batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.

3 Install Backup Batteries 6 AA Batteries



2 Plug in Power Adapter



IMPORTANT: Batteries are a backup power source to preserve records in the event of a power outage. Power adapter is the recommended 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.

Set the Time, Date & Units

Press the "SET" button, located on the front of the display unit, 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 "▲" or "▼" buttons (press and HOLD to fast adjust).

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

TOP DISPLAY:

CLOCK HOUR

CLOCK MINUTE

CALENDAR MONTH

CALENDAR DATE

CALENDAR YEAR

TEMPERATURE UNITS (°F or °C)

WIND SPEED UNITS (MPH, KPH, Knots)

RAINFALL UNITS (in or mm)

PRESSURE UNITS (inHg or hPa)

TICKER DISPLAY:

LANGUAGE (English, French, Spanish)

WEATHER TICKER SPEED (SLOW, MEDIUM, FAST)

You will automatically exit SET MODE if no buttons are pressed for 20 seconds. Enter SET MODE at any time by pressing the "SET" button.

Display Backlight Settings

This weather station's color display features three different lighting settings: High (100%) brightness, Medium (60%) brightness and Low (30%) brightness

Using battery power alone, the backlight is available momentarily for 10 seconds by pressing the "BACKLIGHT" button.

When display is powered with the power adapter, backlight remains on at 100% brightness. Press "BACKLIGHT" button once to dim to 60% brightness; press again to dim to 30%, press a 3rd time to enter "AUTO DIM" mode. "AUTO DIM" will appear below the time.

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

MARCH 11- NOVEMBER 4	6:00 a.m. - 9:00 p.m. = 100% brightness
	9:01 p.m. - 5:59 a.m.= 30% brightness
NOVEMBER 5 - MARCH 10	7:30 a.m. - 7:00 p.m.= 100% brightness
	7:01 p.m. - 7:29 a.m. = 30% brightness

Placement for Maximum Accuracy

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



Display Unit Placement

Place the display unit in a dry area free of dirt and dust. To ensure accurate temperature measurement, place out of direct sunlight and away from heat sources or vents. Display unit stands upright for tabletop use or is wall-mountable.

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 Learning Mode icon disappears from the display screen. At this point, 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.

STORMY & WINDY	SNOW LIKELY	SNOW / RAIN MIX LIKELY	CHANCE OF RAIN	CLOUDY
				
(flashing=stormy)				

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

Weather Select

Weather Select displays data including wind chill, dew point, heat index, feels like, days with rain this month, and days since last recorded rainfall. To change the "Weather Select" category shown, press the "SELECT" button on the front of the display.

Barometric Pressure

Subtle variations in barometric pressure greatly affect the weather. This weather center displays the current pressure with an arrow icon to indicate the direction the pressure is trending (FALLING, STEADY, or RISING).

Rainfall Tracking

This weather station features enhanced tracking of historical rainfall data. Rain accumulation data is recorded for today, over all-time, by year, by month, and by rainfall event.

Press the "RAINFALL" button to review rainfall records. The  icon is shown on the display while historical data is being viewed.

Records are shown in the following order:

PREVIOUS RAINFALL #1 *

PREVIOUS RAINFALL #2 *

PREVIOUS RAINFALL #3 *

CURRENT MONTH TOTAL RAINFALL

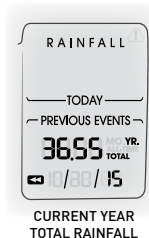
PREVIOUS MONTH TOTAL RAINFALL

2 MONTHS AGO TOTAL RAINFALL

CURRENT YEAR TOTAL RAINFALL

PREVIOUS YEAR TOTAL RAINFALL

ALL-TIME TOTAL RAINFALL (date shown is start date of the all-time total;
the date the display was powered on)



*Previous rainfall is the amount of rain recorded from 12:00am to 11:59pm on the date shown.

Weather Ticker™

The Weather Ticker automatically flashes your real-time weather information and alerts as text in the lower part of the display unit screen.

The possible WEATHER TICKER messages are as follows:

HEAT INDEX-XX

WINDCHILL-XX

DEW POINT-XX

IT FEELS LIKE XX OUTSIDE

7 DAY HIGH TEMP. XX- MM/DD

7 DAY LOW TEMP. XX- MM/DD

30 DAY HIGH TEMP. XX- MM/DD

30 DAY LOW TEMP. XX- MM/DD

ALL TIME HIGH TEMP. XXX...RECORDED MM/DD/YY

ALL TIME LOW TEMP. XXX...RECORDED MM/DD/YY

24 HOUR TEMP. CHANGE +XX

ALL TIME HIGH WIND XX MPH...RECORDED MM/DD/YY

7 DAY AVERAGE WIND XX MPH

TODAY'S AVERAGE WIND XX MPH

MOON- NEW

MOON- WAXING CRESCENT

MOON- FIRST QUARTER

MOON- WAXING GIBBOUS

MOON- FULL

MOON- WANING GIBBOUS

MOON- LAST QUARTER

MOON- WANING CRESCENT

INDOOR HUMIDITY OK

INDOOR HUMIDITY HIGH

INDOOR HUMIDITY LOW

NEW LOW TEMP. RECORD XX

NEW HIGH TEMP. RECORD XX

NEW WIND RECORD TODAY XX

CURRENT RAINFALL X.XX/HR.

RAIN EVENT STARTED XX HRS. AGO

SENSOR BATTERIES LOW

DISPLAY BATTERIES LOW

SENSOR SIGNAL LOST...CHECK BATTERIES AND PLACEMENT

CAUTION- HEAT INDEX IS XXX

CAUTION- WIND CHILL IS XXX

CALIBRATION

Troubleshooting

Problem	Possible Solution
Inaccurate temperature or humidity	• Make sure both the display unit and 5-in-1 sensor are placed away from any heat sources or vents (see page 7). • Make sure both units are positioned away from moisture sources (see page 7). • Make sure 5-in-1 sensor is mounted at least 5 ft off of the ground. • Calibrate indoor and outdoor temperature and humidity (see page 11).
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. • Calibrate the Rain Gauge (see page 11). • 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. Video available at www.acurite.com/5in1
Inaccurate wind readings	• 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. • Check location of the sensor. Ensure it's mounted a minimum of 5 ft 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.
Display screen not working	• Check that the batteries are installed correctly. Batteries may need to be replaced. • Reset the display by pressing and holding the CLEAR ALL/RESET button for 10 seconds, located in the battery compartment of the display unit. Date and time will need to be entered after a reset.

If your AcuRite product does not operate properly after trying the troubleshooting steps, visit www.AcuRite.com or call (877) 221-1252 for assistance.

Care & Maintenance

Display Unit 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.

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 “^”, “SET”, and “v” buttons simultaneously for at least 5 seconds.
2. To adjust the currently selected (flashing) item, press and release the “^” or “v” buttons to calibrate the data value higher or lower from the actual reading.
3. To save your adjustments, press and release the “SET” 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 “SET” button for at least 10 seconds. The display indicates the current pressure mode selected, “AUTO” or “MANUAL”.

After 20 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.

Calibrate the Rain Gauge

The rain gauge on the 5-in-1 sensor can be calibrated to improve accuracy.

Items Needed: 5-in-1 sensor, display unit, plastic cup, pin, screw driver

1. First, ensure 5-in-1 sensor is perfectly level using built-in bubble level.
2. Place display unit close so you can monitor it 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.

4. A few seconds after each bucket tip, the display 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, display 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 5-in-1 sensor until an equal number of water drops are tipping the buckets. Then, restart the calibration procedure.
- If you don't hear the buckets tipping and see water dripping alternately out of each drain, there may be an issue with the rain gauge or it's adjustment. See Troubleshooting on page 15.

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 5-in-1 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
	Indoor: 32°F to 122°F; 0°C to 50°C
HUMIDITY RANGE	Outdoor: 1% to 99%
	Indoor: 1% to 99%
WIND SPEED	0 to 99 mph; 0 to 159 kph
WIND DIRECTION INDICATORS	16 points
RAINFALL	0 to 393 in; 0 to 9999mm
WIRELESS RANGE	330ft / 100m depending on home construction materials
OPERATING FREQUENCY	433 MHz
POWER	4.5V, 250mA AC adapter 6 x AA alkaline batteries (optional)
DATA REPORTING	Wind Speed: 18 second updates; Direction: 30 seconds Outdoor temperature & humidity: 36 second updates Indoor temperature & humidity: 60 second updates

**If your AcuRite product does not operate properly,
visit www.AcuRite.com or call (877) 221-1252 for assistance.**

For more information, visit our Knowledge Base at <http://www.AcuRite.com/kbase>

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.

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.

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:



(877) 221-1252



info@chaney-inst.com

24/7 support at www.AcuRite.com

- Installation Videos
- Register your Product
- Instruction Manuals
- Support User Forum
- Replacement Parts
- Submit Feedback & Ideas

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Limited One Year Warranty

At AcuRite, we proudly uphold our commitment to quality technology. Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase.

We recommend that you visit us at www.AcuRite.com for the fastest way to register your product. However, product registration does not eliminate the need to retain your original proof of purchase in order to obtain warranty benefits.

Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase. Remedy for breach of this warranty is limited to repair or replacement of the defective item(s). 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 Chaney, and at its sole option, be repaired or replaced by Chaney. Transportation costs and charges for returned goods shall be paid for by the purchaser. Chaney hereby disclaims all responsibility for such transportation costs and charges. This warranty will

not be breached, and Chaney will give no credit for products it manufactures which have received normal wear and tear, been damaged (including by acts of nature), tampered, abused, improperly installed, damaged in shipping, or repaired or altered by others than authorized representatives of Chaney.

The above-described warranty is expressly in lieu of all other warranties, express or implied, and all other warranties are hereby expressly disclaimed, including without limitation the implied warranty of merchantability and the implied warranty of fitness for a particular purpose. Chaney expressly disclaims 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. Chaney further disclaims all liability from personal injury relating to its products to the extent permitted by law. By acceptance of any of Chaney's products, the purchaser assumes all liability for the consequences arising from their use or misuse. No person, firm or corporation is authorized to assume for Chaney any other liability in connection with the sale of its products. Furthermore, no person, firm or corporation is authorized to modify or waive the terms of this paragraph, and the preceding paragraph, unless done in writing and signed by a duly authorized agent of Chaney. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For in-warranty claims:

Chaney Instrument Co. | 965 Wells St. | Lake Geneva, WI 53147

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