

Display for 5-in-1 Weather Sensor model 1500RX



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. Peak Wind Speed**
Highest speed from past 60 minutes.
- 2. Average Wind Speed**
of all speeds from past 2 minutes.
- 3. Learning Mode Icon**
Disappears after weather forecast self-calibration is complete.
- 4. Weather Select**
Heat index, dew point, wind chill, indoor temperature / humidity, rainfall rate (rain per hour)
- 5. 12 to 24 Hour Weather Forecast**
Self-Calibrating Forecasting pulls data from the outdoor sensor to generate your personal forecast.
- 6. Weather Select Button**
Press to change the Weather Select category data being displayed.
- 7. 5-in-1 Sensor Signal Strength**
- 8. Alarm On/Off Indicator**
for Selectable Category (#31).
- 9. Programmable Alarm Settings**
- 10. ✓ icon**
Indicates active Weather Ticker message.
- 11. ✗ icon**
Indicates deactivated Weather Ticker message.
- 12. ALARM On/Off Button**
Activates alarm; press and hold to adjust alarm values.
- 13. ✗_{remove} Button**
Deactivates Weather Ticker Message.
- 14. ▲/▼ Buttons**
For category selection & setup preferences.
- 15. SET Button**
For setup preferences.
- 16. ↻ Button**
For manually cycling Weather Ticker messages.
- 17. HISTORY MODE Button**
Press for all-time low and date recorded for current category selected on display (#31). Press twice for all-time high and date recorded.
- 18. add ✓ Button**
Activates Weather Ticker message.
- 19. Current Outdoor Temperature**
Arrow icon indicates direction temperature is trending.
- 20. Outdoor Temperature Alarm On Indicator**
- 21. Current Outdoor Humidity**
Arrow icon indicates direction humidity is trending.
- 22. Outdoor Humidity Alarm On Indicator**
- 23. Storm Alert Alarm On Indicator**
- 24. Current Rainfall**
Accumulates data during rainfall.
- 25. Rain Alarm On Indicator**
- 26. Current Barometric Pressure**
- 27. All-Time Total Rainfall**
- 28. Current Month Total Rainfall**
- 29. Date**
- 30. Clock**
- 31. Selectable Category**
- 32. Record Highs**
Shown for current category selected on the display (#31).
- 33. Record Lows**
Shown for current category selected on the display (#31).
- 34. Weather Ticker™**
- 35. Current Wind Direction**
- 36. Previous 2 Wind Directions**
- 37. Touch Activated Backlight**
Momentary during battery power, always on/off for power adapter.
- 38. Current Wind Speed**
- 39. Wind Speed Alarm On Indicator**

Back of Display Unit



BACK OF DISPLAY UNIT

- 1. Integrated Hang Hole**
for easy wall mounting
- 2. Plugin for Power Adapter**
- 3. A-B-C Switch**
ID code that must match 5-in-1 sensor's A-B-C switch to ensure units synchronize
- 4. CLEAR TODAY Button**
Clears data recorded since 12:00am
- 5. CLEAR ALL Button**
Clears all recorded data without having to reset time and date
- 6. RESET Button**
Full reset to factory defaults
- 7. Battery Compartment**
- 8. Power Adapter**
- 9. Battery Compartment Cover**
(not shown)

Display Unit Setup

The display unit operates with batteries and/or power adapter. Regardless of the power source, it is recommended that batteries always be installed to ensure continuous operation (and retain records) in case of a power outage.

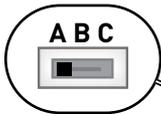
1 Set the A-B-C Switch

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 Install or Replace Batteries

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

3 Plug Power Adapter into Electric Outlet (optional)



1 A-B-C Switch set to match sensor

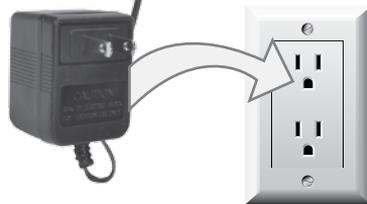
2 Install Batteries 6 AA Batteries





Momentary backlight during battery power. Backlight can always remain on (or off) when power adapter is plugged in.

LIGHT



3 Plug in Power Adapter (optional)

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

The clock and calendar are utilized to time stamp history records and other data, so it is important to set the time and date soon after you power on the display unit.



Note: The "ק" stays in Selectable Categories, even after setup.



Set the Time

1. Press the "▲" or "▼" buttons until "SET CLOCK?" is displayed on the Selectable Category part of the display unit.
2. Press the "SET" button to set the clock.
3. Press the "▲" or "▼" buttons to adjust the hour. Note the "AM" and "PM" indicators.
4. Press the "SET" button to confirm hour selection.
5. Press the "▲" or "▼" buttons to adjust minutes.
6. Press the "SET" button to confirm minute selection.

The clock is now set.

Set the Date

1. Press the "▲" or "▼" buttons until "SET DATE?" is displayed on the Selectable Category part of the display unit.
2. Press the "SET" button to set the date.
3. Press the "▲" or "▼" buttons to adjust the month.
4. Press the "SET" button to confirm month selection.
5. Press the "▲" or "▼" buttons to adjust the day.
6. Press the "SET" button to confirm day selection.
7. Press the "▲" or "▼" buttons to adjust the year.
8. Press the "SET" button to confirm year selection.

The date is now set.

Select Measurement Units

To select between standard units (mph, °F, etc.) or metric units (kph, °C, etc.):

1. Press the "▲" or "▼" buttons until "SET UNITS?" is displayed on the Selectable Category part of the display unit.
2. Press the "SET" button to set the unit preference.
3. Press the "▲" or "▼" buttons to select "STAND" for standard or "METRIC" for metric units.
4. Press the "SET" button to confirm your selection.
5. Next, you will see "WIND MPH". Press the "▲" or "▼" buttons to select MPH, KPH, or KNOTS for wind speed units.
6. Press the "SET" button to confirm your selection.

Units are now set.



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.

Important Placement Guidelines

Display unit and sensor must be within 330 feet (100 m) of each other.

MAXIMIZE WIRELESS RANGE

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

PREVENT WIRELESS INTERFERENCE

Place both units at least 3 feet (.9 m) away from electronic devices (TV, computer, microwave, radio, etc.).

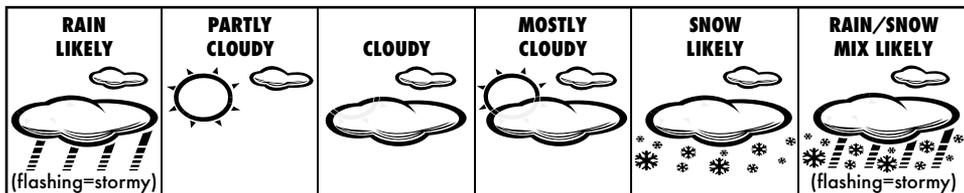
Using the Professional Weather Center

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.



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

Weather Select

The Weather Select area on the display includes the following weather data and calculations: heat index, dew point, wind chill, indoor temperature and humidity, and rainfall rate (inches/hour). To toggle between Weather Select categories, press the "▶" button, located left of the Weather Select display area.

Rainfall Event

The rainfall feature tracks rain accumulation over all-time, the current month, and current rainfall event. Current event clears when no rain registers for 8 hours OR no rain registers for 1 hour and pressure rises by .03inhg or more.

Barometric Pressure

This weather center displays the current pressure with an indicator for FALLING, STEADY, or RISING for the direction the pressure is trending.

Weather Ticker™

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

You can manually cycle through all the available messages by pressing "SET".

Default WEATHER TICKER messages are pre-loaded as follows:

| | |
|---|--|
| FORECAST | 12 to 24 hour future weather forecast |
| MOON PHASE | Current moon phase |
| INDOOR COMFORT | Dry, OK or humid comfort level |
| IT FEELS LIKE ___ OUTSIDE | Calculates what temperature it feels like outdoors (based on temperature, humidity and wind speed) |
| OUTDOOR TEMP THIS WEEK HIGH | Highest temperature recorded this calendar week |
| OUTDOOR TEMP THIS WEEK LOW | Lowest temperature recorded this calendar week |
| OUTDOOR TEMP THIS MONTH HIGH | Highest temperature recorded this calendar month |
| OUTDOOR TEMP THIS MONTH LOW | Lowest temperature recorded this calendar month |

Additional Messages Include:

NEW HIGH TEMPERATURE RECORD

NEW LOW TEMPERATURE RECORD

NEW WIND SPEED RECORD TODAY

CURRENT RAINFALL RATE

CURRENT RAIN EVENT STARTED

NO RAIN RECORDED SINCE ____

WEATHER ALARM MESSAGES

SENSOR BATTERIES LOW

SENSOR SIGNAL LOST

Adjust the Weather Ticker Speed

1. Press the "▲" or "▼" buttons until "TICKER SPEED" is displayed on the Selectable Category part of the display unit.
2. Press the "SET" button to set the speed preference.
3. Press the "▲" or "▼" buttons to select a speed: SLOW, NORMAL, or FAST.
4. Press the "SET" button to confirm your selection.

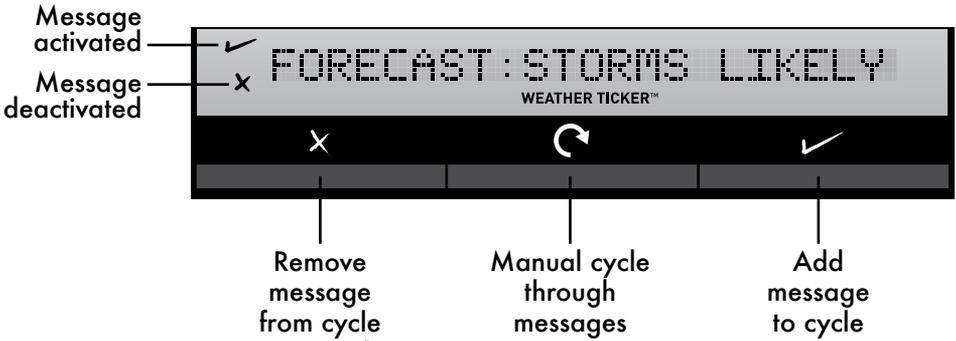
Weather Ticker speed is now set.

Customize Weather Ticker Messages

Customize which messages you want to scroll across the WEATHER TICKER:

1. Press the "↻" button to manually cycle through each message available.
2. During the MANUAL REVIEW: PRESS the "✓" button to activate the current scrolling message. The corresponding "✓" appears on screen to the left of the message to indicate the message is now active in the ticker cycle. PRESS the "✕" button to deactivate the current scrolling message. The corresponding "✕" appears on screen to the left of the message to indicate the message is now deactivated from the ticker cycle.

Please note: Messages can only be added and removed to the ticker cycle during manual review. The "✓" and "✕" buttons do not add or remove messages during the automatic cycle.



Programmable Weather Alarms

Each Selectable Weather Category features an alarm option. When an alarm sounds, the display unit emits audible beeping and flashes the affected category, its alarm settings, and any other relevant data.

Some alarms can be customized to alert you when your programmed value is reached. Alarms include:

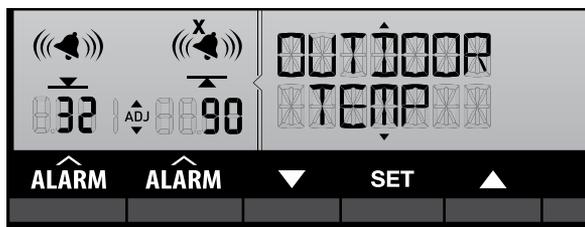
| | | |
|------------------|------|------|
| OUTDOOR HUMIDITY | LOW | HIGH |
| OUTDOOR TEMP | LOW | HIGH |
| STORM ALARM | HIGH | |
| INDOOR HUMIDITY | LOW | HIGH |
| INDOOR TEMP | LOW | HIGH |
| WIND CHILL | LOW | |
| DEW POINT | LOW | HIGH |
| HEAT INDEX | HIGH | |
| RAIN | HIGH | |
| WIND SPEED | HIGH | |

The rain alarm does not require a preset numerical value, but instead sounds as soon as rain is recorded. Similarly, the storm alarm sounds when a large atmospheric pressure drop occurs, which usually indicates an oncoming storm. Note: The storm alarm is NOT intended to be a safety device or warning system.

Set a Weather Alarm

1. Choose the weather category for which you wish to set an alarm by pressing the "▲" or "▼" buttons until the category is displayed on the Selectable Category part of the display unit.
2. To program a value (only applies to alarms that require a value), press AND HOLD the "((◀))" button underneath the alarm you wish to set until the "ADJ" indicator appears and the alarm setting flashes.
3. Adjust the alarm value by pressing the "▲" or "▼" buttons.
4. Press the "((◀))" button to confirm a value.
5. Next, press the "((◀))" button to activate the alarm (the X indicator disappears when alarm is activated).

Alarm is now programmed and turned on.



ICON DEFINITIONS

-  = Alarm On
-  = Alarm Off
-  = Adjust Mode
-  = Low Value
-  = High Value

BUTTON FUNCTIONS

-  Press to activate or deactivate an alarm.
- ALARM**  Press and hold to set or adjust an alarm value.

Silence a Sounding Alarm

The alarm sounds initially for a few minutes, then silences itself. The alarm then sounds every few minutes afterwards until one of the following happens:

1. "SNOOZE" - Press any button. Alarm silences, but sounds again if the alarm condition reoccurs.
2. Turn alarm "OFF" - Deactivates alarm.

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

Calibrate Temperature & Humidity

The indoor / outdoor temperature and humidity readings can be calibrated on the display unit to improve accuracy. Calibration improves accuracy when 5-in-1 sensor placement or environmental factors impact your data accuracy.

1. Choose the weather category you wish to calibrate by pressing the "▲" or "▼" buttons until the category is displayed on the Selectable Category part of the display unit.
2. Press AND HOLD the "▲" and "▼" buttons and the "SET" button all at the same time for 15-20 seconds.
 - The display unit beeps, and all display data is hidden except for the value being calibrated.
 - "▲
ADJ
▼" (calibrate) and arrows appear next to the value being calibrated.
3. Press the "▲" or "▼" buttons to calibrate the data value higher or lower from the actual reading.
4. Press the "SET" button to confirm the calibration adjustment. Note: The "▲
ADJ
▼" icon remains illuminated next to calibrated values.



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: 16% to 98% |
| WIND SPEED | 0 to 99 mph; 0 to 159 kph |
| WIND DIRECTION INDICATORS | 16 points |
| RAINFALL | 0 to 99.99 in; 0 to 9999 mm |
| WIRELESS RANGE | 330ft / 100m depending on home construction materials |
| OPERATING FREQUENCY | 433 MHz |
| POWER | Display: 4.5vdc power adapter 6 x AA alkaline batteries |
| DATA REPORTING | Wind Speed: 18 second updates; Direction: 30 seconds Outdoor temperature & humidity: 36 second updates Indoor temperature & humidity: 60 second updates |

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

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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