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› AcuRite 01517RM Wireless Weather Station User Manual

## AcuRite 01517RM

# AcuRite 01517RM Wireless Weather Station User Manual

Model: 01517RM

## 1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your AcuRite 01517RM Wireless Weather Station. This system includes a 5-in-1 wireless weather sensor and an illuminated color display unit. It is designed to provide accurate local weather conditions, including temperature, humidity, rainfall, wind speed, and wind direction.



Image 1.1: AcuRite 01517RM Wireless Weather Station components, including the 5-in-1 outdoor sensor and the indoor color display unit.

## 2. PACKAGE CONTENTS

- AcuRite 5-in-1 Wireless Weather Sensor
- Color Display Unit
- Mounting Hardware (brackets, screws, zip ties)
- Power Adapter for Display Unit
- Instruction Manual (this document)

**Note:** 4 AA batteries are required for the 5-in-1 sensor and 3 AA batteries for optional display backup, but are not included in the package.

## 3. SETUP

### 3.1. 5-in-1 Wireless Sensor Setup

1. **Install Batteries:** Open the battery compartment on the underside of the 5-in-1 sensor. Insert 4 AA alkaline or lithium batteries (lithium recommended for temperatures below -4°F/-20°C). Close the battery compartment securely.
2. **Select Channel:** Inside the battery compartment, select a channel (A, B, or C) for wireless communication. Ensure the display unit is set to the same channel.
3. **Mounting Location:** Choose an open location for the sensor, ideally 5-10 feet off the ground, away from heat sources, and with clear access to wind and rain. Ensure the solar panel faces south for optimal charging.
4. **Mount the Sensor:** Use the included mounting hardware to securely attach the sensor to a pole or post. Ensure it is level for accurate rainfall measurement.



Image 3.1: The 5-in-1 wireless sensor correctly mounted on a pole, elevated above the roofline for optimal data collection.

### 3.2. Display Unit Setup

1. **Power On:** Plug the power adapter into the display unit and then into a standard electrical outlet.

2. **Optional Battery Backup:** For power outage protection, install 3 AA alkaline batteries into the battery compartment on the back of the display unit.
3. **Select Channel:** On the back of the display unit, ensure the channel (A, B, or C) matches the channel selected on your 5-in-1 sensor.
4. **Placement:** Place the display unit indoors, away from direct sunlight and heat sources, and within 330 feet (100 meters) of the wireless sensor.



Image 3.2: Rear view of the display unit, highlighting the battery compartment and power adapter port.

### 3.3. Initial Synchronization

Once both the sensor and display unit are powered on and set to the same channel, the display will automatically search for the sensor's signal. This process may take a few minutes. A successful connection will show outdoor temperature,

humidity, wind, and rainfall data on the display.

## 4. OPERATION

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### 4.1. Display Overview

The color display unit provides a comprehensive view of current and historical weather data. Key areas include:

- **Outdoor Conditions:** Temperature, humidity, wind speed, wind direction, wind chill, and heat index.
- **Indoor Conditions:** Temperature and humidity.
- **Rainfall:** Daily, monthly, yearly, and all-time totals.
- **Weather Forecast:** 12 to 24-hour forecast based on self-calibrating technology.
- **Barometric Pressure:** Current pressure with 12-hour history.
- **Weather Ticker:** Scrolling text display for additional information like moon phase and comfort level.



Image 4.1: Detailed view of the color display unit, illustrating the layout of outdoor and indoor weather data, wind information, rainfall, and forecast icons.

## 4.2. Adjusting Settings

Use the buttons located below the display screen to navigate and adjust settings:

- **SELECT:** Cycles through various display modes and settings.
- **SET:** Confirms selections during setup or setting adjustments.
- **UP/DOWN Arrows:** Adjust values or navigate menus.

- **RAINFALL:** Accesses rainfall history and reset options.

The display features an adjustable dimmer for backlight brightness. Refer to the on-screen menu for specific unit conversions (e.g., °F/°C, mph/km/h).

## 5. MAINTENANCE

### 5.1. 5-in-1 Sensor Maintenance

- **Cleaning:** Periodically clean the rain collector funnel and debris filter to ensure accurate rainfall measurements. Clear any obstructions from the wind cups and wind vane.
- **Battery Replacement:** Replace batteries approximately every 2 years, or when the low battery indicator appears on the display. Use fresh alkaline or lithium batteries.

### 5.2. Display Unit Maintenance

- **Cleaning:** Wipe the display screen and casing with a soft, damp cloth. Avoid abrasive cleaners.
- **Battery Backup:** If using battery backup, replace batteries annually to ensure continuous operation during power outages.

## 6. TROUBLESHOOTING

| Problem                         | Possible Solution                                                                                                          |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| No outdoor data on display      | Ensure sensor and display are on the same channel (A, B, or C). Check sensor batteries. Relocate sensor closer to display. |
| Inaccurate temperature/humidity | Ensure sensor is not in direct sunlight or near heat sources. Allow 30 minutes for readings to stabilize after setup.      |
| Inaccurate rainfall             | Check rain collector for debris. Ensure sensor is level.                                                                   |
| Wind readings are incorrect     | Ensure wind cups and wind vane rotate freely. Check for obstructions.                                                      |
| Display screen is dim or blank  | Check power adapter connection. Adjust dimmer settings. Replace battery backup batteries if applicable.                    |

## 7. SPECIFICATIONS

| Feature                 | Detail                                                                     |
|-------------------------|----------------------------------------------------------------------------|
| Model Number            | 01517RM                                                                    |
| Power Source (Display)  | Corded Electric (Power Adapter included), 3 AA batteries (optional backup) |
| Power Source (Sensor)   | 4 AA batteries (not included)                                              |
| Connectivity Technology | Wireless (330 ft / 100 m range)                                            |

| Feature                      | Detail                           |
|------------------------------|----------------------------------|
| Temperature Accuracy         | ±1°C (±2°F)                      |
| Upper Temperature Rating     | 122°F (50°C)                     |
| Display Type                 | LCD Color Display                |
| Material                     | Plastic                          |
| Product Dimensions (Display) | 8.2 x 2.7 x 6.7 inches (approx.) |
| Item Weight                  | 5.68 pounds (total package)      |

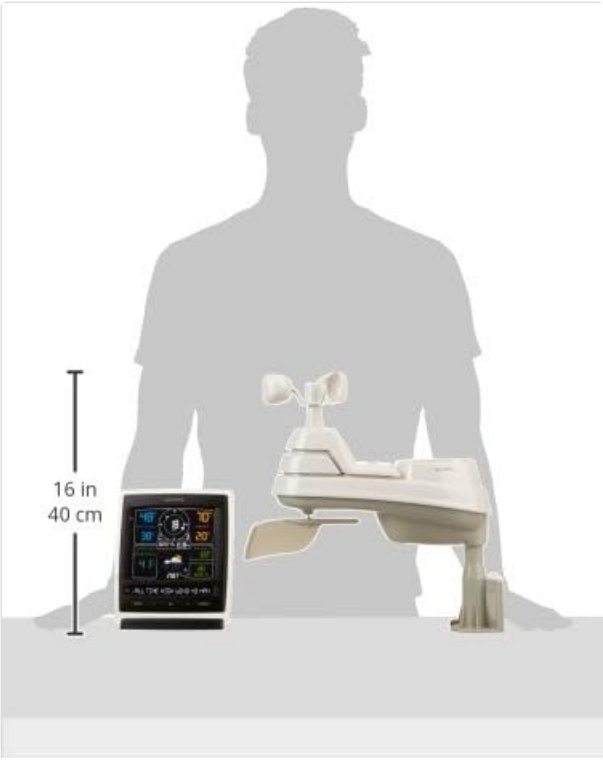


Image 7.1: Dimensional diagram illustrating the approximate sizes of the display unit and the 5-in-1 sensor.

## 8. WARRANTY AND SUPPORT

AcuRite products are designed with quality and precision. For warranty information, product registration, or technical support, please refer to the official AcuRite website or contact their customer service directly. Keep your purchase receipt as proof of purchase.

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Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

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