

AcuRite 06016

AcuRite 06016 Standard Color Display Instruction Manual

Add-On Display for 5-in-1 Weather Sensors

1. INTRODUCTION

This instruction manual provides detailed guidance for the setup, operation, maintenance, and troubleshooting of your AcuRite 06016 Standard Color Display. This display unit is designed to work as an add-on or replacement for an existing AcuRite 5-in-1 Weather Sensor (sensor sold separately). It provides comprehensive weather information, including indoor and outdoor temperature, humidity, wind speed, wind direction, rainfall, and a weather forecast.

2. PACKAGE CONTENTS

- AcuRite 06016 Standard Color Display
- Power Adapter
- Instruction Manual (this document)

3. SETUP

3.1 Powering the Display

The display requires the included 4.5V power adapter for continuous operation. For backup power during outages, install 6 AA alkaline batteries (not included).

1. Insert 6 AA alkaline batteries into the battery compartment on the back of the display. Ensure correct polarity (+/-).
2. Plug the power adapter into a standard electrical outlet and then into the power jack on the back of the display.

Note: Batteries are primarily for backup. The display's full functionality and illuminated screen require the

power adapter.



Image: Rear view of the display, highlighting the power adapter input and the battery compartment for backup power.

3.2 Sensor Connection

The AcuRite 06016 display automatically connects to your existing AcuRite 5-in-1 Weather Sensor. Ensure your 5-in-1 sensor is powered on and within range (typically up to 330 feet or 100 meters, depending on environmental factors).

1. Once powered, the display will begin searching for the sensor signal. This may take a few minutes.
2. A signal strength indicator on the display will show when a connection is established.

3.3 Initial Configuration

After establishing a sensor connection, set the time, date, and measurement units.

1. Press the 'SET' button to enter setup mode.
2. Use the 'UP' or 'DOWN' arrows to adjust values.
3. Press 'SET' again to confirm and move to the next setting (e.g., Time Zone, DST, Hour, Minute, Year, Month, Day, Temperature Units (°F/°C), Wind Speed Units (mph/kmh), Rainfall Units (in/mm), Pressure Units (inHg/hPa)).
4. Press 'SELECT' at any time to exit setup mode.

3.4 Placement

The display can be placed on a tabletop using its integrated stand or mounted on a wall.

- **Tabletop Placement:** Ensure the stand is securely attached and place the display on a flat, stable surface.
- **Wall Mounting:** Use the integrated keyhole on the back of the display. Secure a screw (not included) into the wall, leaving the head slightly exposed, and hang the display.



Image: Front view of the AcuRite 06016 display, showing various weather parameters and the color screen.

4. OPERATION

4.1 Display Overview

The illuminated color display presents various weather data points:

- **Outdoor Temperature & Humidity:** Current readings from the 5-in-1 sensor.
- **Indoor Temperature & Humidity:** Readings from the display's internal sensors.
- **Wind Speed & Direction:** Current wind conditions.
- **Rainfall:** Daily, weekly, monthly, and historical rainfall data.
- **Weather Forecast:** 12 to 24-hour forecast based on barometric pressure changes.
- **Barometric Pressure:** Current atmospheric pressure.
- **Time & Date:** Current time and calendar.
- **Weather Ticker:** Streams additional information like 'feels like' temperature, days since last rain, etc.



Image: Close-up of the display's lower section, showing the 'SELECT', 'SET', 'UP', 'DOWN', and 'RAINFALL' buttons.

4.2 Button Functions

- **SELECT:** Cycles through different display modes or confirms selections.
- **SET:** Enters setup mode or confirms settings.
- **UP (▲):** Adjusts values up in setup mode or cycles through historical data.
- **DOWN (▼):** Adjusts values down in setup mode or cycles through historical data.
- **RAINFALL:** Displays various rainfall statistics.

4.3 Display Brightness

The display features adjustable brightness. Press the light bulb icon button on the back of the display to cycle through brightness settings (100%, 60%, 30%, 15%, OFF).

5. MAINTENANCE

5.1 Cleaning the Display

Clean the display with a soft, damp cloth. Do not use abrasive cleaners or chemicals that may damage the screen or casing.

5.2 Battery Replacement

Replace the 6 AA backup batteries approximately every 12-24 months, or when the low battery indicator appears on the display. Always replace all batteries at the same time with new ones.

5.3 Sensor Maintenance

While this manual focuses on the display, ensure your AcuRite 5-in-1 sensor is regularly cleaned and free of debris for accurate readings. Refer to your 5-in-1 sensor's instruction manual for specific maintenance guidelines.

6. TROUBLESHOOTING

Problem	Possible Solution
Display is blank or not powering on.	Ensure the power adapter is securely plugged into both the display and a working electrical outlet. Check that the electrical outlet has power. If using backup batteries, ensure they are new and correctly installed.
No outdoor sensor data (dashes on display).	Verify the 5-in-1 sensor is powered on and within range. Try relocating the display or sensor to improve signal. Perform a hard reset: remove power adapter and batteries from display and sensor, wait 1 minute, then re-power sensor first, then display.
Inaccurate temperature or humidity readings.	Ensure the sensor is placed in an appropriate location, away from direct sunlight, heat sources, or excessive moisture. Allow up to 30 minutes for readings to stabilize after setup.
Weather forecast is inaccurate.	The forecast icon predicts conditions for the next 12 to 24 hours based on barometric pressure changes. It requires 14 days of continuous operation to calibrate and provide the most accurate forecast.

Problem	Possible Solution
Display backlight is not working or flickering.	Ensure the power adapter is connected, as the backlight requires AC power. Check brightness settings using the light bulb button on the back. If the issue persists, contact AcuRite support.

7. SPECIFICATIONS

- **Model:** 06016
- **Display Dimensions:** 8.2" W x 6.7" H x 2.7" D (20.8 cm W x 17 cm H x 6.9 cm D)
- **Power Source:** 4.5V Power Adapter (included), 6 x AA Alkaline Batteries (not included) for backup
- **Connectivity:** Wireless (433 MHz or 868 MHz) to 5-in-1 sensor
- **Measurement Ranges:**
 - Indoor Temperature: 32°F to 122°F (0°C to 50°C)
 - Indoor Humidity: 1% to 99% RH
 - Outdoor Temperature: -40°F to 158°F (-40°C to 70°C) (sensor dependent)
 - Outdoor Humidity: 1% to 99% RH (sensor dependent)



Image: Diagram illustrating the product dimensions of the AcuRite 06016 display.

8. WARRANTY AND SUPPORT

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

Online Support: Visit www.acurite.com/support

