**AIRAIN TECH 6.5-inch Single screen**

# AIRAIN TECH Wireless Weather Station (6.5-inch Single Screen) Instruction Manual

Model: 6.5-inch Single screen

## Introduction

The AIRAIN TECH Wireless Weather Station provides comprehensive real-time weather data for both indoor and outdoor environments. This device features a high-precision Swiss temperature and humidity sensor, a radio-controlled clock, and capabilities to measure rainfall, wind speed, wind direction, moon phase, and barometric pressure. This manual will guide you through the setup, operation, maintenance, and troubleshooting of your weather station.

## Package Contents

Before beginning installation, please verify that all components are present and in good condition:

- Display Console ×1
- Outdoor Sensor ×1
- User Manual ×1
- Power Adapter ×1
- Feet ×1
- Mounting Bracket Backplate ×1
- Mounting Pole ×1
- Nuts (M3/M5) / Bolts (M3/M5)
- Screws




Image: All components included in the package, along with their dimensions.

## Product Overview

### Display Console

The indoor display console features a 6.5-inch color LCD screen that presents various weather data. It shows wind speed

and direction, weather forecast, indoor and outdoor temperature and humidity, barometric pressure, rainfall, moon phase, and time/date.

Image: Detailed view of the display console with labels for date, wind direction, wind speed, barometric pressure, rainfall, outdoor temperature/humidity, indoor temperature/humidity, time, moon phase, and weather trend indication.

### Outdoor Sensor

The outdoor sensor unit is a multi-functional device designed to collect environmental data. It integrates a rainwater collector, solar panel, wind vane, wind cup, thermo-hygrometer, and an antenna for wireless transmission.




Image: Detailed view of the outdoor sensor unit with labels for rainwater collector, solar panel, wind vane, wind cup, thermo-hygrometer radiation shield, antenna, battery compartment, LED indicator, and reset button.

## Setup

### Powering the Devices

The outdoor sensor is primarily solar-powered but requires 3 AAA batteries (included) for backup power. The display console is powered by the included power adapter.

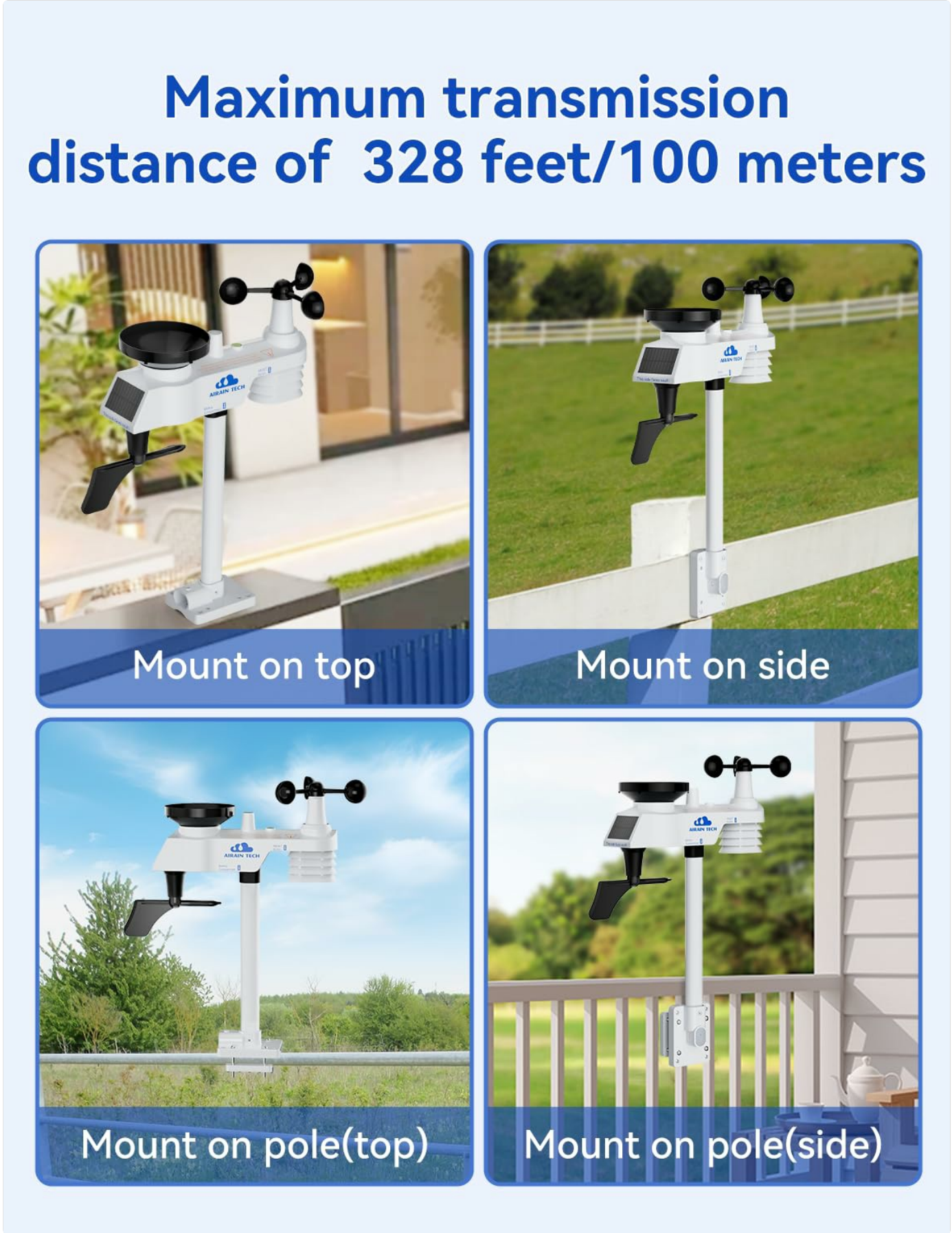



Image: Illustration of the outdoor sensor powered by a solar panel and 3 AA batteries, and the indoor monitor powered by a power adapter.

### Outdoor Sensor Installation

The outdoor sensor can be installed in various ways using the adjustable bracket and mounting pole. Ensure it is placed in an open area for accurate readings, away from obstructions. The wireless transmission range is up to 328 feet (100 meters) in open areas.

- **Mount on top:** Secure the sensor to a flat surface.
- **Mount on side:** Attach the sensor to a vertical surface.
- **Mount on pole (top/side):** Use the mounting pole to elevate the sensor.




Image: Four examples of mounting the outdoor sensor: on top of a surface, on the side of a fence, on top of a pole, and on the side of a pole.




Image: An outdoor sensor in a field with a display console indoors, showing a transmission distance of 328 feet/100 meters.

### Console Placement

The display console can be placed on a desktop using its stand or mounted on a wall. Choose a location that is easily visible and within range of the outdoor sensor.

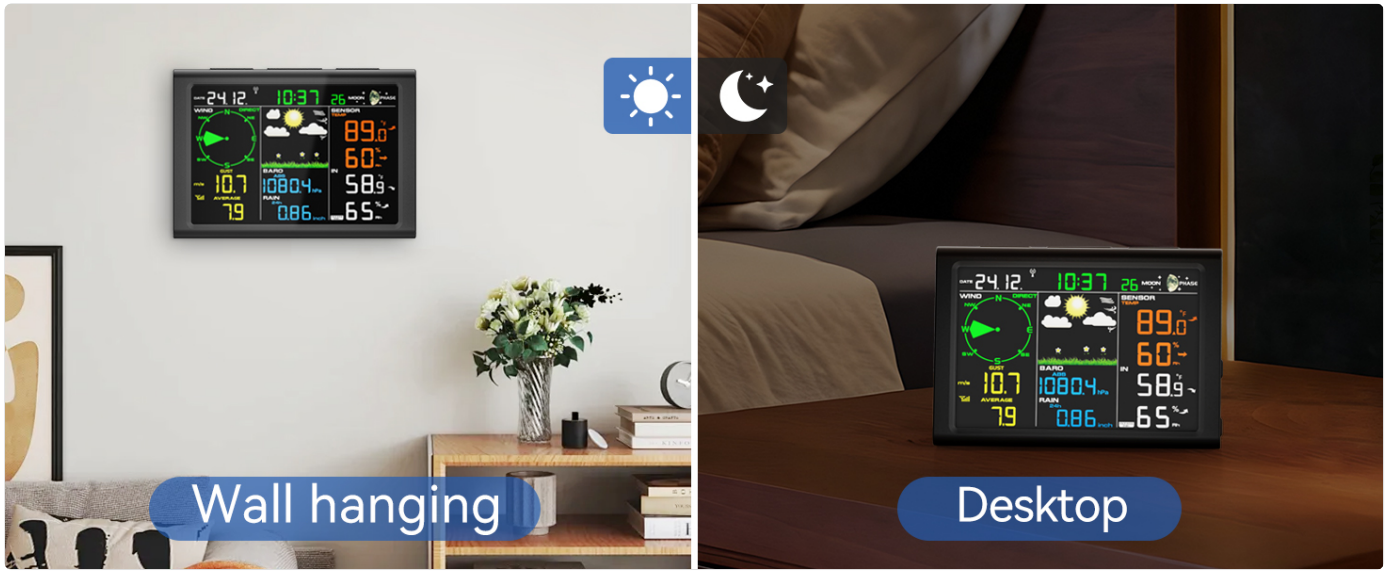



Image: The display console shown in two common placements: wall hanging and desktop.

### Synchronization

After powering both the outdoor sensor and the display console, the devices will automatically attempt to connect and synchronize data. This process typically takes a few minutes.

## Operating Instructions

### Reading the Display

The 6.5-inch LCD screen provides a clear overview of current weather conditions. Refer to the 'Product Overview' section for a detailed labeled diagram of the display console.

### Weather Forecast

The weather station provides a localized weather forecast based on changes in barometric pressure. Icons on the display indicate conditions such as sunny, partly cloudy, cloudy, or rainy.

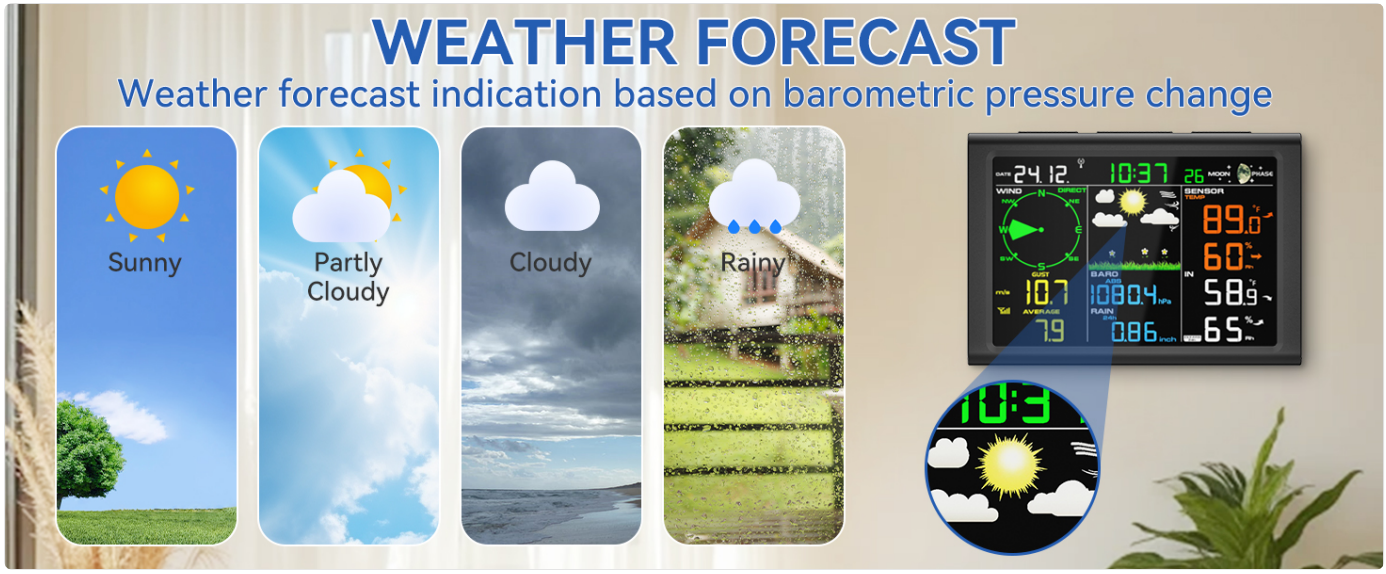



Image: Examples of weather forecast icons (Sunny, Partly Cloudy, Cloudy, Rainy) and how they appear on the display console.

## Radio Controlled Clock (RCC)

The console features a WWVB radio-controlled clock function, which automatically synchronizes the time and date. The console will perform an RCC signal search at 2:00, 8:00, 14:00, and 20:00 daily to ensure accurate timekeeping.

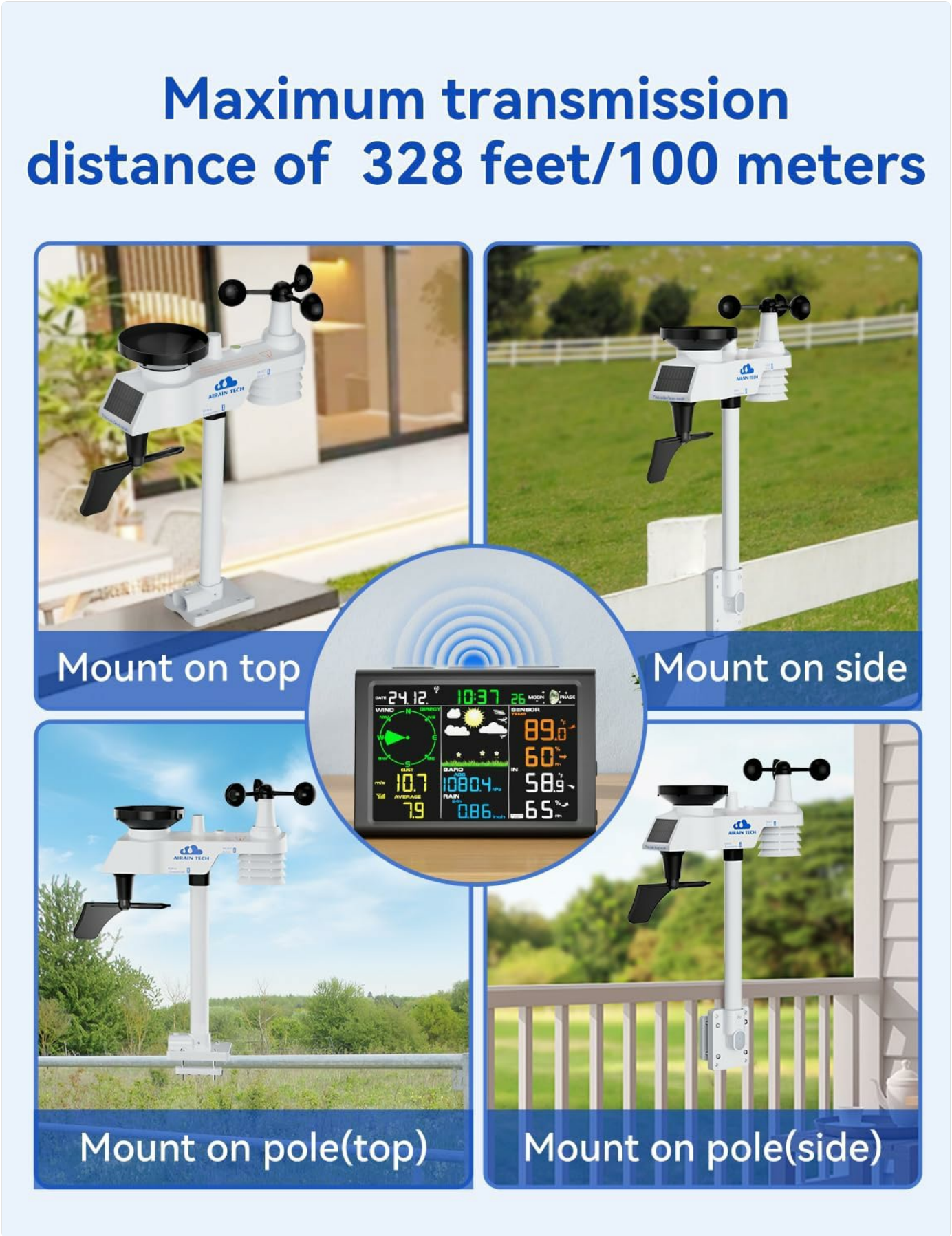



Image: The display console highlighting the WWVB icon, indicating active radio-controlled clock synchronization.

## Backlight Adjustment

The display console features a 3-level backlight brightness adjustment. Press the**[SNOOZE/LIGHT]** key to cycle through the three brightness levels or turn the backlight off.




Image: The display console shown with 100%, 60%, and 30% backlight brightness levels, and the location of the SNOOZE/LIGHT button.

### Wind Chill and Dew Point

The weather station analyzes wind chill index and outdoor dew point data. This information can be used to assess how cold the weather feels and to plan safe outdoor activities.




Image: The display console showing temperature readings, with text indicating its use for wind chill and dew point analysis to help plan safe outdoor activities.

## Maintenance

- **Cleaning:** Periodically clean the display console with a soft, dry cloth. For the outdoor sensor, gently wipe away any dirt or debris from the solar panel, rain collector, and wind sensors to ensure accurate readings.
- **Battery Replacement:** Replace the 3 AAA batteries in the outdoor sensor annually or when the low battery indicator appears on the display console. Ensure proper polarity when inserting new batteries.
- **Sensor Placement:** Regularly check the outdoor sensor's mounting to ensure it remains secure and unobstructed.

## Troubleshooting

| Problem | Possible Cause | Solution |
|---|---|---|
| No outdoor data displayed | Outdoor sensor not powered or out of range. | Check outdoor sensor batteries. Ensure sensor is within 328 ft (100m) of the console and free from major obstructions. Re-synchronize if necessary. |
| Inaccurate temperature/humidity readings | Sensor exposed to direct sunlight or heat sources. | Relocate the outdoor sensor to a shaded area, away from direct sunlight or heat-emitting surfaces. Ensure the radiation shield is clean. |
| Inaccurate wind speed/direction | Obstructions near the sensor or sensor not level. | Ensure the outdoor sensor is mounted in an open area, free from trees or buildings that could block wind. Verify the sensor is level. |
| Rainfall not registering | Rain collector blocked or dirty. | Clean the rain collector funnel and ensure the tipping bucket mechanism moves freely. |
| Time not synchronizing (RCC) | Weak WWVB signal or interference. | Place the console near a window, away from electronic devices that may cause interference. Allow time for automatic synchronization. |

## Specifications

- **Brand:** AIRAIN TECH
- **Model:** 6.5-inch Single screen

- **Recommended Uses:** Garden, Home
- **Specific Uses:** Temperature, humidity, air pressure, wind speed, wind direction, rainfall, moon phase, calendar
- **Power Source:** Solar Powered (Outdoor Sensor), Power Adapter (Display Console)
- **Special Features:** Radio Controlled Clock, Wireless Transmission
- **Outdoor Sensor Batteries:** 3 AAA batteries (included)
- **Temperature Accuracy:** ±2°F / 1°C
- **Outdoor Temperature Range:** -40°F to 140°F
- **Humidity Range:** 10% to 99%
- **Wireless Transmission Range:** Up to 328 ft (100 meters) in open areas
- **Display Size:** 6.5-inch color LCD
- **Smart Home Compatibility:** Not Smart Home Compatible
- **Item Weight:** 1.7 Kilograms

## Warranty and Support

AIRAIN TECH provides 2 years of high-quality after-sales service for this product. Our goal is to design high-quality, easy-to-use personal weather stations. If you encounter any technical issues or require assistance, please contact our dedicated after-sales team.

- **After-Sales Service Phone Number:** 904-652-2795 (Monday to Friday, 9:00 a.m. to 6:00 p.m. Eastern Time)
- **Email:** Refer to the front of the product packaging for the email address. Replies are typically within 24 hours on weekdays.




Image: Information regarding on-time after-sales service located in Florida, USA, available Monday through Friday, 9:00 AM to 6:00 PM ET.


### Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

**Name**

Anonymous

**Email**

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

**Question**

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.

**Submit question**