

ECOWITT WN1920

ECOWITT WN1920 Weather Station Console User Manual

Model: WN1920

1. INTRODUCTION

The ECOWITT WN1920 Wi-Fi Weather Station Console is designed to display indoor environmental data and act as a gateway for external weather sensors. It features a 5.3-inch color LCD and an integrated 3-in-1 sensor for indoor temperature, humidity, and barometric pressure. This console can connect to various Ecowitt external sensors (sold separately) to provide comprehensive weather data and upload it to internet weather services.

2. PACKAGE CONTENTS

- WN1920 Display Console
- Integrated 3-in-1 Sensor (Temperature, Humidity, Air Pressure)
- USB Power Cable
- User Manual

Please inspect all components for any damage. If any items are missing or damaged, contact customer support.



Image 2.1: The ECOWITT WN1920 Weather Station Console, displaying various weather parameters.

3. PRODUCT OVERVIEW

The WN1920 console is equipped with an integrated 3-in-1 thermo-hygrometer barometric antenna. This allows it to directly display indoor temperature, humidity, and barometric pressure, along with their changing trends. When paired with compatible external sensors (such as WS69/WS90, sold separately), the console can also display outdoor temperature, humidity, wind speed/direction, and rain data.

The console serves as a Wi-Fi gateway, enabling it to connect to other Ecowitt sensors and upload collected weather data to various internet weather services.

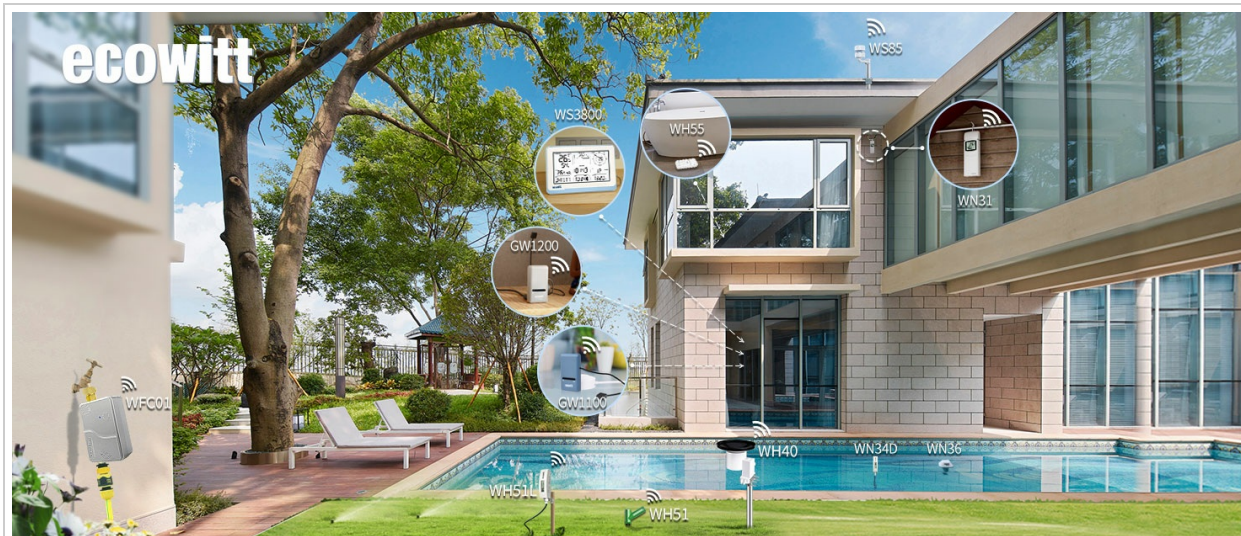


Image 3.1: An overview of the ECOWITT weather station system, showing the console and various external sensors communicating wirelessly around a home environment.

4. SETUP

4.1 Powering the Console

The WN1920 console can be powered in two ways:

- **USB Power:** Connect the provided USB cable to the console and a compatible USB power adapter (not included). This allows for continuous backlight operation.
- **Battery Power:** Insert 2 AA batteries (not included) into the battery compartment. This provides portable power, but the backlight will only activate temporarily.

4.2 Wi-Fi Configuration

To enable internet connectivity and data upload, configure the Wi-Fi connection using one of the following methods:

1. Using the Ecowitt App:

- Download the 'Ecowitt' or 'WS View Plus' application from your mobile device's app store.
- Open the app, add a new device, and select the WN1920 model.
- Follow the on-screen instructions within the app to complete the Wi-Fi setup process.

2. Using a Web Browser:

- Ensure your mobile device or computer is connected to the Wi-Fi network broadcast by the WN1920 console (usually named 'WN1920X-WIFIXXX').
- Open a web browser and enter '192.168.4.1' in the address bar.
- On the configuration page, select your home Wi-Fi network (SSID) and enter its password.
- Save the settings to connect the console to your network.

4.3 Connecting External Sensors

The WN1920 console supports various external Ecovitt sensors, such as the WS69 multi-sensor (wind, rain, temperature, humidity) or the WS90 multi-sensor (wind, rain, temperature, humidity, light, UV). These sensors are sold separately.

- Ensure external sensors are powered on and within range of the WN1920 console.

- The console will automatically detect and display data from compatible sensors. Refer to the specific sensor's manual for installation and pairing instructions.



Image 4.1: The WN1920 console displaying data received from an external multi-sensor, which measures wind speed, wind direction, and rainfall.

5. OPERATING INSTRUCTIONS

5.1 Display Information

The 5.3-inch color LCD displays various weather parameters. The layout typically includes:

- Indoor Temperature and Humidity
- Barometric Pressure and Trend
- Outdoor Temperature and Humidity (if external sensor connected)
- Wind Speed and Direction (if external sensor connected)
- Rainfall Data (if external sensor connected)
- Time and Date
- Weather Forecast Icons

5.2 Backlight Operation

- **USB Powered:** When the console is powered via USB, the backlight can be continuously active. Press the 'LIGHT' button to cycle through brightness levels: High, Low, and Off.
- **Battery Powered:** When powered by 2 AA batteries (without USB connection), pressing any button will temporarily activate the backlight for 15 seconds.

5.3 Viewing Live Data & Publishing to Internet Weather Services

To access advanced features and share your weather data:

- **Mobile Application:** Use the 'WS View Plus' or 'Ecowitt' mobile application to view live collected data, configure sensor calibration, and manage sensor selection.

- **Internet Upload:** The WN1920 Wi-Fi weather station supports uploading all sensor data to popular internet weather services such as Weather Underground, WOW, Weather Cloud, Ecowitt Weather, and other custom websites. This can be done via the Wunderground or Ecowitt protocols. Ensure your Wi-Fi is configured correctly for this feature.

6. MAINTENANCE

- **Cleaning:** Wipe the console and sensors with a soft, damp cloth. Avoid abrasive cleaners or solvents.
- **Battery Replacement:** If using battery power, replace AA batteries when the low battery indicator appears on the display.
- **Sensor Placement:** Ensure external sensors are placed in locations that provide accurate readings and are protected from direct impact or extreme conditions. Regularly check for obstructions.
- **Firmware Updates:** Check the Ecowitt website or mobile application periodically for firmware updates to ensure optimal performance and new features.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display on console	No power or low batteries.	Connect USB power or replace AA batteries.
External sensor data not displayed	Sensor not powered, out of range, or not paired.	Ensure sensor is powered, move closer to console, or re-pair according to sensor manual.
Wi-Fi connection failed	Incorrect Wi-Fi password, network issues, or console too far from router.	Verify Wi-Fi password, restart router, or move console closer to router. Re-attempt Wi-Fi configuration.
Inaccurate readings	Sensor placement, calibration needed, or interference.	Ensure proper sensor placement away from direct sunlight/heat sources. Calibrate sensors via the app if necessary.

8. SPECIFICATIONS

- **Model:** WN1920
- **Display:** 5.3-inch Color LCD
- **Connectivity:** Wi-Fi
- **Power Source:** USB cable (for continuous backlight) or 2 x AA batteries (for temporary backlight)
- **Integrated Sensor:** Indoor Temperature, Indoor Humidity, Barometric Pressure
- **Temperature Accuracy:** ± 1 °C
- **Supported External Sensors:** WS69, WS90, and other Ecowitt sensors (sold separately)
- **Material:** Copper (internal components, as per product data)
- **Color:** Black
- **Manufacturer:** ECOWITT

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official ECOWITT website or contact their customer service directly. Keep your purchase receipt for warranty claims.

Online Resources:

- Ecowitt Official Website: www.ecowitt.com
- Ecowitt Support Page: (Check official website for specific support links)