



Manuals.plus /

› RISEPRO /

› RISEPRO WS2020-N Wireless Weather Station User Manual

RISEPRO WS2020-N

RISEPRO WS2020-N Wireless Weather Station User Manual

Model: WS2020-N

1. INTRODUCTION

Thank you for choosing the RISEPRO WS2020-N Wireless Weather Station. This device provides accurate indoor and outdoor temperature and humidity readings, along with a 12-24 hour weather forecast. It also features an alarm clock, calendar, and Max/Min record functions. This manual will guide you through the setup, operation, and maintenance of your weather station.



Figure 1.1: The RISEPRO WS2020-N Wireless Weather Station main display unit and its accompanying outdoor remote sensor. The main unit features a color LCD display showing indoor and outdoor environmental data.

2. PACKAGE CONTENTS

Please check the package contents to ensure all items are present:

- RISEPRO WS2020-N Main Display Unit
- Wireless Outdoor Remote Sensor
- USB Power Cable
- Instruction Manual (this document)

3. SETUP AND INSTALLATION

3.1 Powering the Units

The main display unit can be powered by a 5V DC adapter (recommended for continuous backlight) or 3 x AAA batteries (for backup power, backlight activates for 5 seconds with key press). The outdoor sensor requires

batteries.

1. **Outdoor Sensor:** Open the battery compartment on the back of the outdoor sensor. Insert 2 x AAA batteries, ensuring correct polarity (+/-). Close the compartment securely.
2. **Main Display Unit:**
 - For continuous backlight: Connect the provided USB power cable to the DC 5V plug-in port on the main unit and plug the other end into a compatible USB power adapter (not included) or USB port.
 - For backup power: Open the battery compartment on the back of the main unit. Insert 3 x AAA batteries, ensuring correct polarity (+/-). Close the compartment.



Figure 3.1: Illustration of power supply options. The main unit can be powered by a DC 5V adapter for continuous backlight or by AAA batteries for backup power, which activates the backlight for 5 seconds per press.

3.2 Sensor Placement

Proper placement of the outdoor sensor is crucial for accurate readings.

- Place the outdoor sensor in a shaded area, away from direct sunlight, which can cause artificially high temperature readings.
- Ensure the sensor is protected from direct rain and snow. An overhang or protective cover is recommended.

- Position the sensor within the wireless range of the main display unit (typically up to 100 feet/30 meters in open air). Walls and obstacles can reduce this range.
- Avoid placing the sensor near large metal objects, electrical appliances, or other sources of electromagnetic interference.



Figure 3.2: Depiction of wireless indoor/outdoor transmission. The main unit receives data wirelessly from the remote sensor, allowing flexible placement within range.

3.3 Initial Synchronization

After powering both units, the main display unit will automatically attempt to connect with the outdoor sensor.

- The outdoor temperature and humidity readings should appear on the main display within a few minutes.
- If the outdoor readings do not appear, ensure both units are within range and try re-inserting the batteries in the outdoor sensor. You may also press and hold the "UP.CH" button on the main unit to manually search for the sensor.

4. OPERATION

4.1 Display Overview

The color LCD display provides a clear overview of all relevant information.



Figure 4.1: Detailed diagram of the main display unit, indicating key areas such as outdoor temperature, weather forecast icon, indoor temperature, DC 5V plug-in, outdoor humidity, time, day/date, and indoor humidity.

- **Outdoor Temperature:** Displays the current temperature from the remote sensor.
- **Indoor Temperature:** Displays the current temperature measured by the main unit.
- **Outdoor Humidity:** Displays the current humidity from the remote sensor.
- **Indoor Humidity:** Displays the current humidity measured by the main unit.
- **Weather Forecast Icon:** Predicts the weather for the next 12-24 hours (Sunny, Partly Cloudy, Cloudy, Rainy).
- **Time/Calendar:** Shows the current time and date.
- **Trend Arrows:** Indicate rising, falling, or stable trends for temperature and humidity.
- **Comfort Levels:** An icon indicating the indoor comfort level based on temperature and humidity.
- **Wireless Reception:** Icon indicating the signal strength from the outdoor sensor.



Temperature



Weather Forecast



Humidity



Alarm/Snooze



Calendar



Comfort Levels



Trend arrow



Wireless Reception

Figure 4.2: Visual representation of various display icons including Temperature, Weather Forecast, Humidity, Alarm/Snooze, Calendar, Comfort Levels, Trend arrow, and Wireless Reception. Also shows the dimensions of the main unit and sensor.

4.2 Button Functions

The main unit has several buttons for setting and controlling functions:

- **TIME:** Press to view time/date. Press and hold to enter time setting mode.
- **ALARM:** Press to view alarm time. Press and hold to enter alarm setting mode.
- **MEM:** Press to view Max/Min temperature and humidity records.
- **UP.CH:** In setting mode, increases value. In normal mode, manually searches for outdoor sensor.
- **DOWN.C/F:** In setting mode, decreases value. In normal mode, switches between Celsius (°C) and Fahrenheit (°F).

4.3 Setting Time and Date

1. Press and hold the **TIME** button for 3 seconds. The hour digit will flash.
2. Use the **UP.CH** or **DOWN.C/F** buttons to adjust the hour.
3. Press **TIME** again to confirm and move to the next setting (minute, year, month, day).

4. Repeat steps 2 and 3 until all time and date settings are complete.
5. Press **TIME** one last time to exit setting mode.

4.4 Setting the Alarm

1. Press and hold the **ALARM** button for 3 seconds. The alarm hour digit will flash.
2. Use the **UP.CH** or **DOWN.C/F** buttons to adjust the alarm hour.
3. Press **ALARM** again to confirm and move to the alarm minute setting.
4. Use the **UP.CH** or **DOWN.C/F** buttons to adjust the alarm minute.
5. Press **ALARM** one last time to exit setting mode.
6. To activate/deactivate the alarm, press the **ALARM** button briefly in normal display mode. An alarm icon will appear/disappear on the display.
7. When the alarm sounds, press any button (except **ALARM**) to activate the snooze function for 5 minutes. Press **ALARM** to stop the alarm for 24 hours.

4.5 Max/Min Temperature and Humidity Records

The weather station records the maximum and minimum indoor/outdoor temperature and humidity values.

- Press the **MEM** button once to display the maximum recorded values (MAX).
- Press the **MEM** button a second time to display the minimum recorded values (MIN).
- Press the **MEM** button a third time to return to current readings.
- To clear the Max/Min records, press and hold the **MEM** button while viewing the Max or Min values.

4.6 Temperature Unit Selection

To switch between Celsius (°C) and Fahrenheit (°F), briefly press the **DOWN.C/F** button in normal display mode.

5. MAINTENANCE

5.1 Battery Replacement

- **Outdoor Sensor:** Replace batteries when the low battery indicator appears for the outdoor section on the main display. Use 2 x AAA batteries.
- **Main Display Unit:** If using batteries for backup, replace them when the low battery indicator appears for the indoor section. Use 3 x AAA batteries.
- Always replace all batteries in a unit at the same time with new ones. Do not mix old and new batteries.

5.2 Cleaning

Wipe the display unit and sensor with a soft, damp cloth. Do not use abrasive cleaners or solvents, as these may damage the plastic components or the display.

5.3 Environmental Considerations

To ensure longevity and accuracy, avoid exposing the outdoor sensor to extreme conditions beyond its operating range. Protect it from direct impact, prolonged submersion in water, and excessive dust.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No outdoor temperature/humidity display.	<ul style="list-style-type: none"> Outdoor sensor batteries are low or depleted. Outdoor sensor is out of range or obstructed. Synchronization failure. 	<ul style="list-style-type: none"> Replace batteries in the outdoor sensor. Move the sensor closer to the main unit or remove obstructions. Press and hold the UP.CH button on the main unit to manually search for the sensor.
Inaccurate temperature/humidity readings.	<ul style="list-style-type: none"> Outdoor sensor exposed to direct sunlight or heat source. Sensor placed near a vent or window. 	<ul style="list-style-type: none"> Relocate the outdoor sensor to a shaded, protected area. Ensure the main unit is not near heat/cold sources.
Display is dim or blank.	<ul style="list-style-type: none"> Main unit batteries are low or depleted. DC adapter not connected or faulty (if continuous backlight desired). 	<ul style="list-style-type: none"> Replace batteries in the main unit. Ensure the DC adapter is securely connected and functioning.

7. SPECIFICATIONS

Model Number	WS2020-N
Brand	RISEPRO
Connectivity Technology	Wireless
Power Source (Main Unit)	5V DC Adapter (recommended) or 3 x AAA Batteries (backup)
Power Source (Outdoor Sensor)	2 x AAA Batteries
Temperature Accuracy	±1 °C
Included Components	Main Unit, Outdoor Sensor, USB Cable, Instruction Manual
Color	Black
Dimensions (Main Unit)	Approximately 15.4 cm (6.06 in) width x 10.2 cm (4.01 in) height
Dimensions (Outdoor Sensor)	Approximately 3.5 cm (1.37 in) width x 10.4 cm (4.09 in) height

8. WARRANTY INFORMATION

RISEPRO products are manufactured with high-quality standards. For specific warranty details, please refer to the warranty card included with your product or contact RISEPRO customer support. Keep your purchase receipt as proof of purchase.

9. CUSTOMER SUPPORT

If you encounter any issues or have questions regarding your RISEPRO WS2020-N Wireless Weather Station that are not covered in this manual, please contact RISEPRO customer support.

For the most up-to-date support information, please visit the official RISEPRO website or refer to the contact details provided on your product packaging.

