Walfront GT8907

Walfront GT8907 Digital Anemometer User Manual

Handheld Multi-Function Wind Speed, Temperature, and Air Volume Tester

1. Introduction

The Walfront GT8907 is a handheld digital anemometer designed for precise measurement of wind speed, temperature, and air volume. This device is suitable for various applications including industrial settings, environmental monitoring, HVAC system analysis, and outdoor activities. It features a high-definition large screen display for clear readings and soft rubber buttons for comfortable operation. This manual provides detailed instructions for the proper setup, operation, and maintenance of your GT8907 anemometer.

Figure 1: Walfront GT8907 Anemometer with its wind fan probe connected, displaying wind speed and temperature.

2. Package Contents

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

- Walfront GT8907 Digital Anemometer Unit
- Wind Fan Probe (connected via cable)
- USB Cable (for data transfer, if applicable)
- User Manual (this document)
- Carrying Case

Figure 2: The protective carrying case for the GT8907 anemometer, designed for safe storage and transport.

3. Device Overview

Familiarize yourself with the components and controls of the GT8907 anemometer:

Figure 3: Detailed diagram of the GT8907 anemometer, highlighting the main unit's screen and buttons, and the wind fan probe with its telescopic rod and handle.

1. **Screen:** High-definition LCD display for readings.
2. **Lock Button:** To hold current readings.
3. **Mode Switch / Enter Button:** To cycle through measurement modes and confirm selections.
4. **Air Volume Switch:** To switch to air volume measurement.
5. **ON/OFF / Unit Button:** Power on/off the device; short press to change units.
6. **Setting Area:** For configuring measurement area for air volume.
7. **Save Button:** To save data.
8. **Read Data Button:** To recall saved data.
9. **Delete Data Button:** To delete saved data.
10. **Wind Fan:** Rotates to measure wind speed.
11. **Telescopic Rod:** Extends the wind fan for reaching measurement points.
12. **Handle:** Ergonomic grip for the wind fan probe.

4. Setup

4.1 Battery Installation

The GT8907 anemometer requires four (4) 1.5V AAA batteries (not included). Follow these steps to install the batteries:

1. Locate the battery compartment cover on the back of the main unit.
2. Slide the cover downwards or press the latch to open it.
3. Insert four AAA batteries, ensuring correct polarity (+ and -) as indicated inside the compartment.
4. Replace the battery compartment cover, ensuring it clicks securely into place.

Figure 4: The open battery compartment of the GT8907, showing the correct orientation for inserting four AAA batteries.

4.2 Probe Connection

Ensure the wind fan probe is securely connected to the main unit via its cable. The connector should fit snugly into the port on the top of the main unit.

5. Operating Instructions

5.1 Power On/Off

- To power on the device, press and hold the **ON/OFF** button.
- To power off the device, press and hold the **ON/OFF** button again. The device also features an auto-power-off function to conserve battery life.

5.2 Changing Measurement Units

With the device powered on, short press the **UNIT** button (which is also the ON/OFF button) to cycle through available wind speed units (m/s, Ft/min, Knots, Km/h, Mph) and temperature units (°C, °F).

5.3 Wind Speed and Temperature Measurement

The device automatically displays wind speed and temperature upon power-on. Extend the telescopic rod of the wind fan probe and position the fan in the airflow you wish to measure. Ensure the fan is facing directly into the wind for accurate readings.

Figure 5: The GT8907 anemometer in use, showing its digital display with wind speed and temperature readings against a backdrop of wind turbines.

5.4 Air Volume Measurement (CFM/CMM)

1. Press the **VEL/FLOW** button to switch to air volume measurement mode.
2. Press the **AREA/SAMPLE** button to enter the area setting mode.

3. Use the arrow buttons (if available, or other designated buttons) to adjust the measurement area (e.g., duct dimensions). Refer to the on-screen prompts.
4. Press **ENTER** to confirm the area setting.
5. Position the wind fan probe in the airflow. The device will display the air volume in CFM (Cubic Feet per Minute) or CMM (Cubic Meters per Minute).

5.5 Data Hold Function

Press the **HOLD** button to freeze the current readings on the display. Press it again to release the hold function and resume live measurements.

5.6 Data Storage and Recall

- To save a reading, press the **SAVE** button.
- To recall saved data, press the **READ** button. Use navigation buttons (if available) to browse through saved records.
- To delete saved data, press the **DEL** button.

6. Maintenance

6.1 Cleaning

Wipe the device and probe with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure the wind fan is free from dust and debris for accurate operation.

6.2 Battery Replacement

When the low battery indicator appears on the display, replace all four AAA batteries as described in Section 4.1. Remove batteries if the device will not be used for an extended period to prevent leakage.

6.3 Storage

Store the anemometer in its protective carrying case in a cool, dry place, away from direct sunlight and extreme temperatures. Ensure the wind fan probe is retracted or protected to prevent damage.

7. Troubleshooting

- **Device does not power on:**
  - Check if batteries are installed correctly with proper polarity.
  - Replace with fresh AAA batteries.
- **Inaccurate readings:**
  - Ensure the wind fan is clean and rotates freely.
  - Verify the probe is securely connected to the main unit.
  - Confirm the device is set to the correct measurement unit.
  - Ensure the wind fan is positioned directly in the airflow.
- **Display is dim or blank:**
  - Replace batteries.
  - Ensure the device is not exposed to extreme temperatures.

8. Specifications

Parameter	Specification
Model	GT8907
Wind Speed Measurement Range	0.0 - 45.0 m/s; 0.0 - 8800 Ft/min; 0.0 - 88.0 Knots; 0.0 - 140.0 Km/h; 0.0 - 100 Mph
Wind Speed Resolution	0.01 (m/s, Knots, Mph); 0.01/0.1/1 (Ft/min); 0.01 (Km/h)
Wind Speed Precision	±3% ±0.1 (m/s); ±3% ±20 (Ft/min); ±3% ±0.2 (Knots); ±3% ±0.4 (Km/h); ±3% ±0.2 (Mph)
Air Volume Measurement Range (CFM)	0 - 999900 ft^3/min
Air Volume Measurement Range (CMM)	0 - 999900 m^3/min
Temperature Measurement Range	0 - 45°C / 32 - 113°F
Temperature Resolution	0.1°C / 0.18°F
Temperature Accuracy	±1.0°C / ±1.8°F
Humidity Measurement Range	10 - 90% RH (without condensation)
Humidity Resolution	0.1% RH
Humidity Precision	±5%
Working Environment Temperature	0 - 50°C (32 - 122°F)
Working Environment Humidity	40 - 80% RH
Storage Condition Temperature	-40 - 60°C (-40 - 140°F)
Storage Condition Humidity	≤80% RH
Power Supply	4 x 1.5V AAA batteries
Weight	Approximately 1214 g / 42.8 oz
Dimensions (L x W x H)	3.94 x 3.94 x 3.94 inches (Main Unit)

9. Warranty and Support

Walfront products are designed for reliability and performance. For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official Walfront website. Keep your purchase receipt as proof of purchase for warranty claims.

For further assistance, you may contact Walfront customer service through their official channels. Please have your model number (GT8907) and purchase details ready.