

Benetech GM8910

Benetech GM8910 Multi-Purpose Anemometer Instruction Manual

Model: GM8910

1. INTRODUCTION

The Benetech GM8910 is a multi-purpose anemometer designed for comprehensive environmental measurements. This device integrates eight functions into one unit, allowing for precise measurement of temperature, humidity, wind chill, dew point, wind speed, barometric pressure, altitude, and illumination. It features a matrix liquid-crystal display with backlighting, unit switching, and data saving capabilities, making it a versatile tool for various applications.

This manual provides detailed instructions for the proper setup, operation, and maintenance of your GM8910 anemometer to ensure accurate readings and prolonged device life.

2. PRODUCT OVERVIEW

The Benetech GM8910 is a compact and robust device, typically yellow and black, featuring a clear LCD screen and intuitive control buttons. It includes a built-in fan for wind speed measurement and various sensors for other environmental parameters.



Figure 1: Front view of the Benetech GM8910 Multi-Purpose Anemometer. The device is yellow and black with a display screen and control buttons.



Figure 2: The Benetech GM8910 Anemometer shown alongside its instruction manual, indicating the product packaging and included documentation.

3. FEATURES

- **8-in-1 Measurement:** Measures Temperature, Humidity, Wind Chill, Dew Point, Wind Speed, Barometric Pressure, Altitude, and Illumination.
- **Wide Measurement Ranges:**
 - Temperature: -20~60°C
 - Humidity: 0~100%RH
 - Wind Chill: -40.0~10.0°C
 - Dew Point: -40.0~60.0°C
 - Wind Speed: 0.7~30.0m/s
 - Barometric Pressure: 300~1100hPa
 - Altitude: -500~9000m
 - Illumination: 0-55000Lx
- **Data Saving Function:** Manual saving and automatic recording of data.
- **Unit Switching:** Supports various measurement units.
- **Matrix LCD Screen:** Rich display content with backlighting for clear visibility.
- **Battery Level Display:** Indicates current battery status.

4. SETUP AND GETTING STARTED

4.1 Battery Installation

The GM8910 anemometer requires batteries for operation (batteries are not included). Locate the battery compartment on the back of the device. Open the compartment cover, insert the required batteries according to the polarity indicators, and then securely close the cover.

4.2 Powering On/Off

To power on the device, press and hold the power button (usually marked with a  symbol) until the display illuminates. To power off, press and hold the power button again until the display turns off.

5. OPERATING INSTRUCTIONS

5.1 Main Menu Interface

After powering on, the device will display a logo for approximately 1 second, then transition to the main menu interface. This interface allows you to select the desired measurement function.

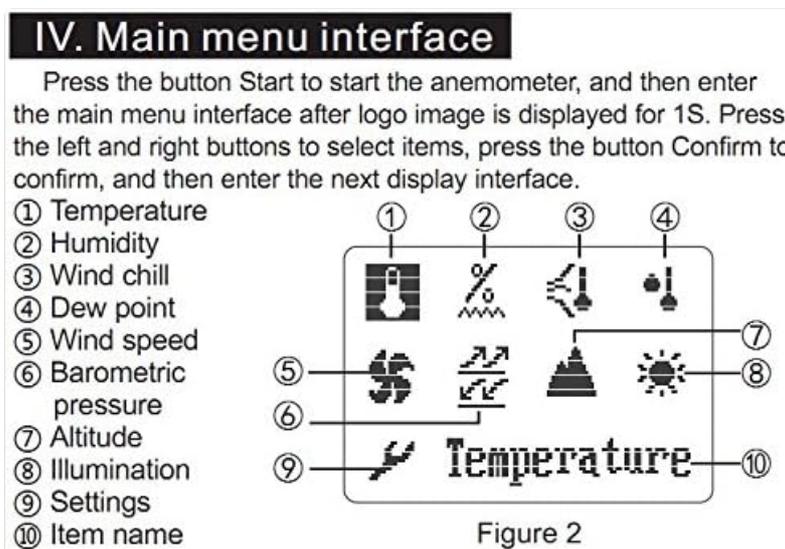


Figure 3: The main menu interface of the GM8910 anemometer, showing icons for various measurement functions. The numbered labels correspond to: (1) Temperature, (2) Humidity, (3) Wind chill, (4) Dew point, (5) Wind speed, (6) Barometric pressure, (7) Altitude, (8) Illumination, (9) Settings, (10) Item name.

Use the left and right arrow buttons to navigate and select items on the main menu. Press the 'Confirm' button (often labeled 'FUNC' or similar) to enter the selected display interface.

5.2 Measurement Functions

Once a measurement function is selected from the main menu, the device will display the corresponding readings. For example, selecting 'Temperature' will show the current temperature.

Production specification				
Measuring item	Measuring range	Resolution	Accuracy	Response time
Temperature	-20.0~60.0°C	0.1°C	±1.0°C	1S
Humidity	0~100.0%RH	0.1%RH	±5%RH	1S
Wind chill	-40.0~10.0°C	0.1°C	±2.0°C	1S
Dew point	-40.0~60.0°C	0.1°C	±2.0°C	1S
Wind speed	0.7~30.0m/s	0.1m/s	±3% or ±0.3m/s	1S
Barometric pressure	300~1100hPa	0.1hPa	±1.0hPa	1S
Altitude	-500~9000m	1m	-	1S
Illumination	0~55000Lx	1Lx	±3%	1S
Size	48•21.2•122mm			

Figure 4: The Benetech GM8910 anemometer displaying a temperature reading in Celsius.

To switch units (e.g., from Celsius to Fahrenheit for temperature, or m/s to km/h for wind speed), press the 'UNIT/ESC' button. This button also serves to exit the current measurement screen and return to the main menu.

For specific measurements:

- **Temperature & Humidity:** Ensure the sensors are exposed to the environment you wish to measure.
- **Wind Speed:** Position the device so the built-in fan is facing the wind direction.
- **Illumination:** Point the light sensor towards the light source.
- **Barometric Pressure & Altitude:** These measurements are typically taken automatically by internal sensors.

6. SPECIFICATIONS

The following table details the measurement ranges, resolutions, and accuracies for the Benetech GM8910 Multi-Purpose Anemometer:



Figure 5: Detailed production specifications for the Benetech GM8910, including measuring item, range, resolution, accuracy, and response time.

Measuring Item	Measuring Range	Resolution	Accuracy	Response Time
Temperature	-20~60°C	0.1°C	±1.0°C	1S
Humidity	0~100%RH	0.1%RH	±5%RH	1S
Wind Chill	-40.0~10.0°C	0.1°C	±2.0°C	1S
Dew Point	-40.0~60.0°C	0.1°C	±2.0°C	1S
Wind Speed	0.7~30.0m/s	0.1m/s	±3% or ±0.3m/s	1S
Barometric Pressure	300~1100hPa	0.1hPa	±1.0hPa	1S
Altitude	-500~9000m	1m	-	1S
Illumination	0~55000Lx	1Lx	±3%	1S

Measuring Item	Measuring Range	Resolution	Accuracy	Response Time
Size	48 x 21.2 x 122mm			
Item Weight	1.5 kg			

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the device. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures. If storing for extended periods, remove the batteries to prevent leakage.
- **Sensor Care:** Keep the wind impeller free from obstructions. Ensure humidity and temperature sensors are clean for accurate readings.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display.

8. TROUBLESHOOTING

- **Device does not power on:** Check battery installation and ensure batteries have sufficient charge. Replace batteries if necessary.
- **Inaccurate readings:** Ensure sensors are clean and unobstructed. Verify the device is used within its specified operating conditions.
- **Display issues:** If the display is dim or flickering, replace the batteries. If the issue persists, contact customer support.

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact Benetech customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.