MISOL HP3001

MISOL Wireless Weather Station HP3001 User Manual

Model: HP3001

1. Introduction

The MISOL Wireless Weather Station HP3001 is designed to monitor temperature and humidity across multiple locations. It supports up to 8 sensors (5 included) and features a color screen display, data logging capabilities, and PC connectivity for advanced analysis. This manual provides instructions for setting up, operating, and maintaining your weather station.

2. Package Contents

- 1x Display Console
- 5x Thermo-hygrometer Transmitters (WH31)
- 1x USB Cable for PC Connection
- 1x Power Adapter (EU plug version, adapter may be required for other regions)
- 1x CD (Software)

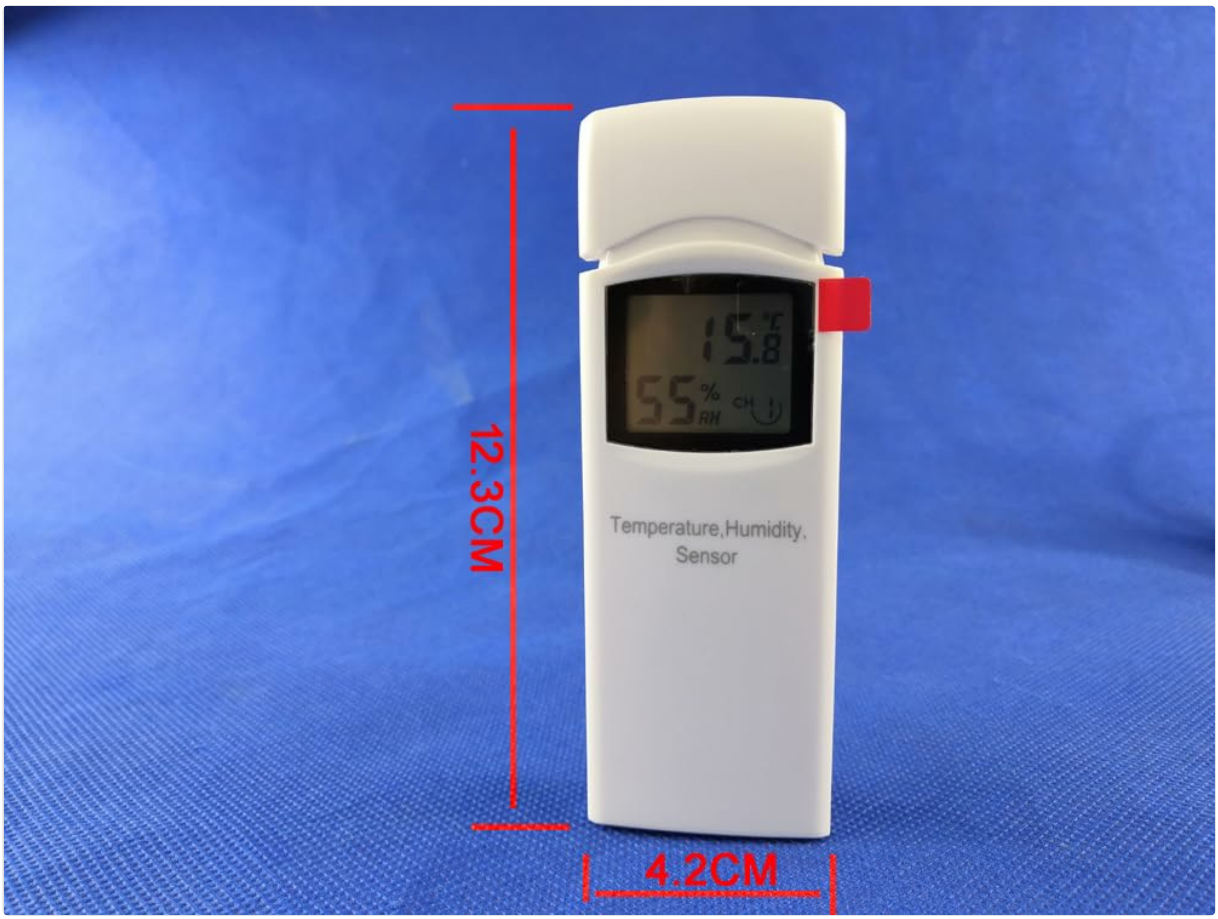

Image: Contents of the MISOL Wireless Weather Station HP3001 package, including the display console, five sensors, USB cable, power adapter, and software CD.

3. Product Overview

3.1 Display Console

The main display console features a color LCD screen that shows real-time temperature, humidity, dew point, and heat index data from up to 8 channels. It includes buttons for navigation, graph display, and menu access.

Image: The MISOL Wireless Weather Station HP3001 display console shown with five remote thermo-hygrometer sensors.

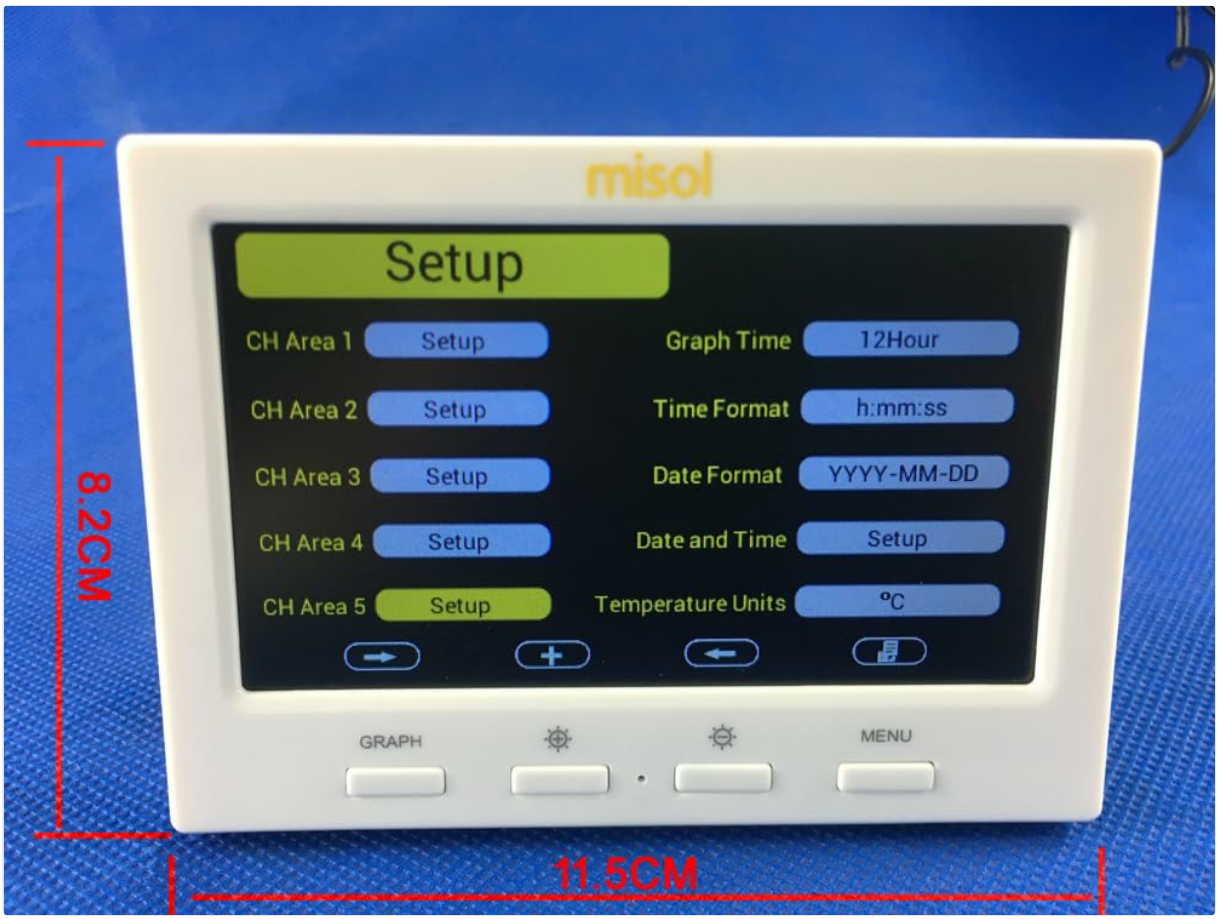

Image: Close-up of the display console showing temperature and humidity readings for multiple channels, along with a historical data graph.

3.2 Thermo-hygrometer Sensors (WH31)

Each sensor measures temperature and humidity and transmits data wirelessly to the display console. They are battery-powered and feature DIP switches for channel selection.

Image: A single MISOL WH31 remote thermo-hygrometer sensor, displaying temperature and humidity.

4. Setup

4.1 Sensor Battery Installation and Channel Selection

1. Open the battery compartment on the back of each WH31 sensor.
2. Insert 2x AA 1.5V alkaline batteries (not included), observing polarity.
3. Use the DIP switches inside the battery compartment to select a unique channel (1-8) for each sensor. Ensure no two sensors are set to the same channel. The product includes 5 sensors, so assign channels 1 through 5.
4. Close the battery compartment securely.

Image: The open battery compartment of a WH31 sensor, showing the slots for two AA batteries and the DIP switches for channel selection.

4.2 Display Console Power-Up

1. Connect the provided power adapter to the display console's power input.
2. Plug the power adapter into a suitable electrical outlet. The console will power on and begin searching for sensors.

4.3 Pairing Sensors with Console

Once the console is powered on and sensors have batteries installed with unique channels selected, the console will automatically attempt to pair with the sensors. Ensure sensors are within range (up to 100 meters in open field). It may take a few minutes for all sensor data to appear on the display.

5. Operation

5.1 Display Modes and Information

- The console displays temperature, humidity, dew point, and heat index.
- It supports both vertical and horizontal display orientations, which can be switched via the menu.
- Min/Max records for temperature and humidity are maintained.
- An LED backlight ensures readability in various lighting conditions.

Image: The display console showing temperature and humidity readings for up to eight channels simultaneously.

5.2 Button Functions

The console features several buttons for interaction:

- **GRAPH:** Toggles the display to show historical data graphs.
- **MENU:** Accesses the settings menu for configuration options such as time, date, alarms, and unit calibration.
- **Navigation Buttons:** Used to navigate through menu options and adjust settings.

Image: The display console showing the 'Setup' menu, with options for channel area setup, graph time, time format, date format, date and time, and temperature units.

5.3 PC Connection and Data Logging

The weather station can connect to a PC via the included USB cable for data logging and advanced settings. The provided software (on CD) allows for:

- Live Data Display
- Setting Alarms
- Calibrating Temperature and Humidity
- Exporting historical data from an optional TF card (not included) in CSV format.
- Synchronizing Date and Time from the computer.

To use data logging, insert a TF card (MicroSD card) into the designated slot on the console. Data will be saved in CSV format.

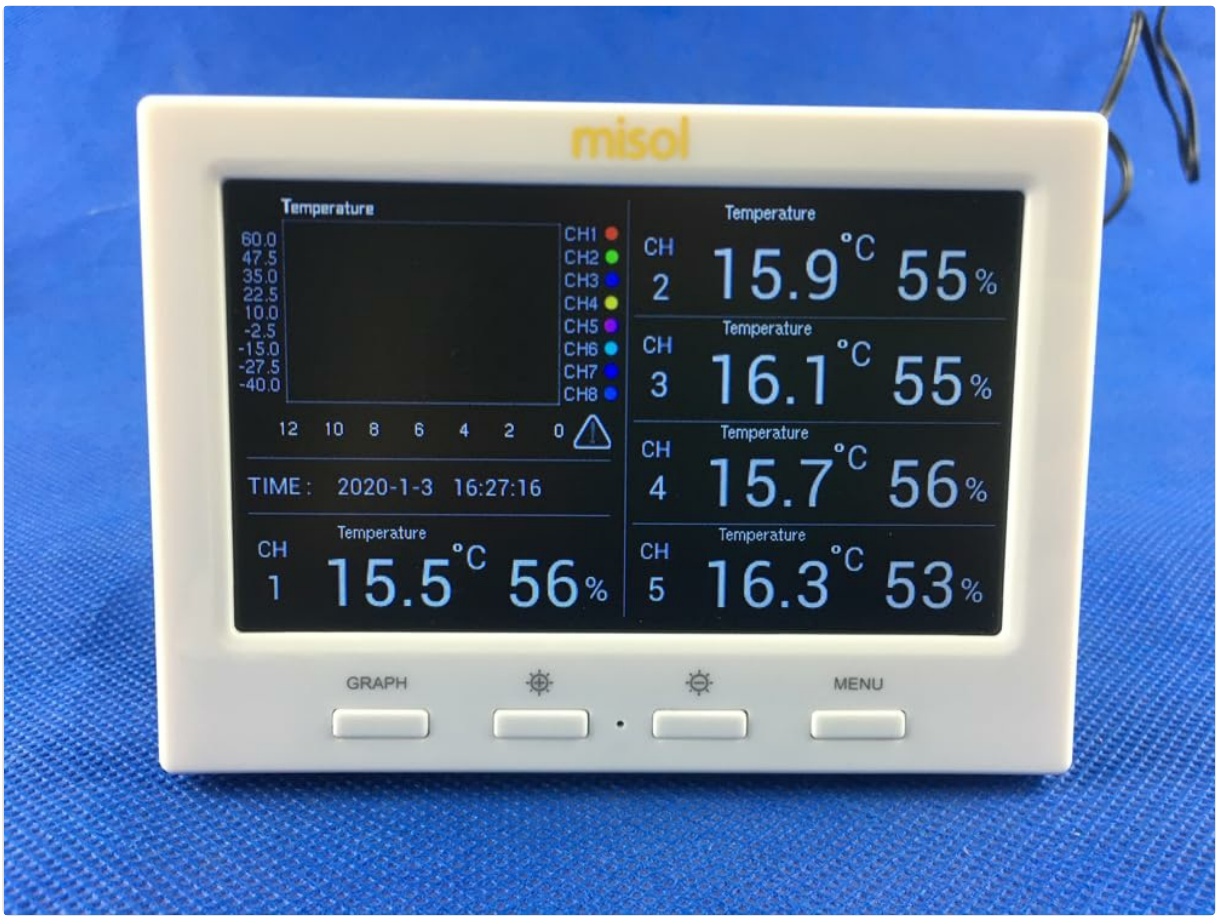

Image: Rear view of the display console, highlighting the USB port for PC connection and the TF card slot for data logging.

6. Maintenance

- **Battery Replacement:** Replace sensor batteries (2x AA) when the low battery indicator appears on the console for that channel.
- **Cleaning:** Wipe the display console and sensors with a soft, damp cloth. Avoid abrasive cleaners or solvents.
- **Sensor Placement:** For accurate outdoor readings, place sensors in a shaded area, away from direct sunlight and heat sources, to prevent false readings.

7. Troubleshooting

- **No Sensor Data Displayed:**
  - Ensure sensor batteries are correctly installed and not depleted.
  - Verify each sensor has a unique channel selected via its DIP switches.
  - Check if sensors are within the wireless transmission range (100m max in open field) and without significant obstacles.
  - Restart both the console and the sensors.
- **Inaccurate Readings:**
  - Ensure sensors are not exposed to direct sunlight, rain, or extreme heat/cold sources.
  - Calibrate temperature and humidity using the PC software if necessary.
- **PC Software Connection Issues:**
  - Ensure the USB cable is securely connected to both the console and the PC.

- Install the software from the provided CD.
- Check device manager for proper driver installation.

8. Specifications

Feature	Specification
Transmission Distance (open field)	100 meters max
Frequency	868MHz
Temperature Measure Range	-40 to 60°C
Temperature Resolution	0.1°C
Temperature Accuracy	+/-1°C
Humidity Measuring Range	10% to 99%
Humidity Accuracy	+/-5% (20 to 90% under 0-45°C)
Alarm Duration	120 seconds
Waterproof Level (Sensors)	IPX3
Display Console Dimensions (LxHxW)	11.5 x 8.2 x 4 cm
Display LCD Dimensions (LxW)	9.5 x 5.5 cm
Sensor Dimensions (LxHxW)	12 x 4.2 x 1.8 cm
Console Power Consumption	5V DC adapter (included)
Remote Sensor Power	2x AA 1.5V alkaline batteries (not included)

9. Warranty and Support

For warranty information and technical support, please refer to the documentation included with your product or contact MISOL customer service. Keep your purchase receipt for warranty claims.

For further assistance, visit the official MISOL website or contact your retailer.