Walfront Walfrontztcx8gqs0y

User Manual: HT-86 Temperature Humidity Meter

Model: HT-86 | Brand: Walfront

INTRODUCTION

The Walfront HT-86 Temperature Humidity Meter is a portable, digital instrument designed for accurate measurement of temperature and humidity. This device is suitable for a wide range of applications, including industrial, agricultural, meteorological, and daily life environments. This manual provides detailed instructions on the setup, operation, and maintenance of your HT-86 meter to ensure optimal performance and longevity.

PRODUCT OVERVIEW AND KEY FEATURES

The HT-86 meter offers a combination of precision and user-friendly features:

- **High Accuracy:** Double display for simultaneous temperature and humidity readings with a resolution of 0.01% RH and 0.01°C.

- **Portable & Backlight Design:** Compact and lightweight for easy carrying, equipped with a white backlight LCD screen for use in low-light conditions.

- **Versatile Application:** Ideal for use in offices, industry, agriculture, meteorology, medical fields, and more.

- **Multiple Functions:** Includes maximum and minimum value measurement, data hold, simultaneous temperature and humidity display, automatic shutdown, and disable automatic shutdown functions.

- **Comprehensive Temperature Readings:** Displays ambient temperature, dew-point temperature, and wet bulb temperature.

Figure 1: Front view of the Walfront HT-86 Temperature Humidity Meter, showing the display and control buttons.

HIGH PRECISION ELECTRONIC TEMPERATURE AND HUMIDITY METER

Professional Quality

0.01%RH, 0.01℃/F
Support Data Hold Function

Fast Response Time

Can quickly measure ambient
temperature and humidity

Figure 2: The HT-86 meter held in hand, illustrating its professional quality with 0.01% RH and 0.01°C/F accuracy, and fast response time for quick measurements.

Figure 3: Detailed diagram of the HT-86 meter, pointing out key components such as the double LCD display, data hold function, low battery warning, ergonomic design, automatic shutdown, fast response time, and maximum/minimum measurement capabilities.
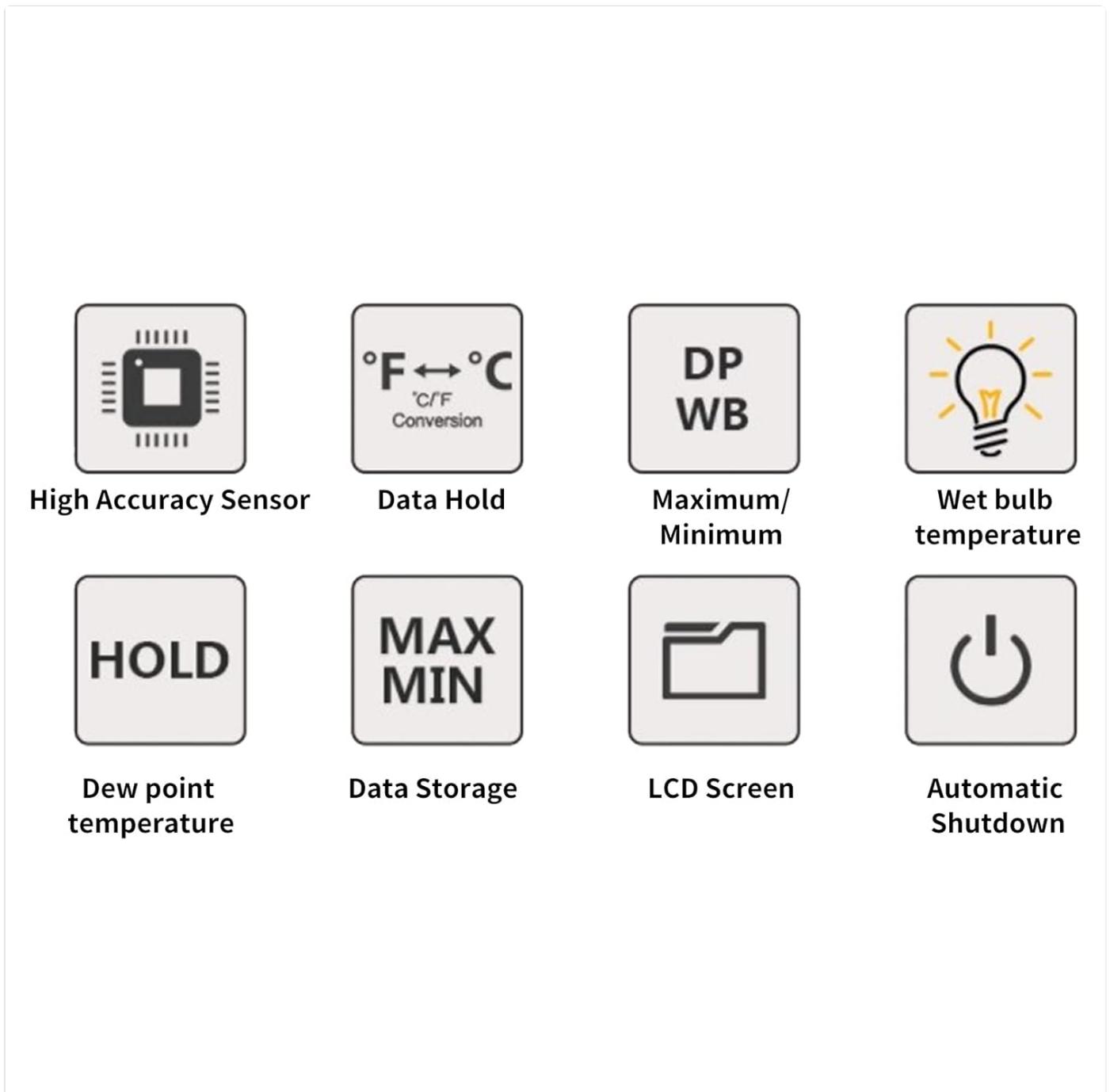
Figure 4: Visual representation of the meter's functions, including High Accuracy Sensor, Data Hold, C/F Conversion, Maximum/Minimum, Wet Bulb Temperature, Dew Point Temperature, Data Storage, LCD Screen, and Automatic Shutdown.

SETUP

Battery Installation

The HT-86 Temperature Humidity Meter requires one 9-volt battery for operation. The battery compartment is located on the back of the device.

1. Locate the battery cover on the back of the meter.
2. Carefully slide or unclip the battery cover to open the compartment.
3. Insert a new 9-volt battery, ensuring the polarity (+/-) matches the indicators inside the compartment.
4. Replace the battery cover, ensuring it clicks securely into place.

Note: Always use a fresh 9-volt battery for optimal performance. The device may come with a battery pre-installed or included in the packaging.

Figure 5: Rear view of the HT-86 meter, showing the battery compartment and a warning label indicating it uses a 9V battery (NEDA 1604 IEC 6F22).

OPERATING INSTRUCTIONS

Power On/Off

Press the power button (usually marked with a power symbol) to turn the device on. Press and hold the power button to turn it off. The meter features an automatic shutdown function to conserve battery life, which can also be disabled if needed.

Taking Measurements

Once powered on, the meter will immediately begin displaying current temperature and humidity readings. Allow a few seconds for the readings to stabilize, especially when moving the meter to a new environment.

Mode Button

Use the "MODE" button to cycle through different display modes, such as ambient temperature, dew-point temperature,

and wet bulb temperature. Refer to the on-screen indicators to identify the current mode.

MAX/MIN Function

Press the "MAX/MIN" button to view the maximum and minimum recorded temperature and humidity values since the device was last reset or powered on. Press again to cycle through MAX, MIN, and current readings.

Data Hold Function

To freeze the current readings on the display, press the "HOLD" button. This is useful for recording values without needing to write them down immediately. Press the "HOLD" button again to release the data hold and resume live readings.

Temperature Unit Conversion (°C/°F)

The meter supports both Celsius (°C) and Fahrenheit (°F) temperature units. Consult the manual or device interface for specific instructions on how to switch between these units, typically via a dedicated button or a combination of button presses.

MAINTENANCE

Cleaning

To clean the meter, wipe the exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents, as these can damage the casing or display. Keep the sensor area clean and free from dust or debris for accurate readings.

Storage

When not in use for extended periods, remove the battery to prevent leakage and store the meter in a cool, dry place, away from direct sunlight and extreme temperatures.

Battery Replacement

Replace the 9-volt battery when the low battery indicator appears on the display. Follow the battery installation steps outlined in the "Setup" section.

TROUBLESHOOTING

- **No Display/Device Not Turning On:**

  Check if the battery is correctly installed and fully charged. Replace the battery if necessary.

- **Inaccurate Readings:**

  Ensure the sensor is clean and unobstructed. Allow sufficient time for the meter to stabilize in the environment. Avoid placing the meter near heat sources, direct sunlight, or strong air currents that could affect readings.

- **Display Flickering or Unresponsive:**

  This could indicate a low battery. Replace the battery. If the issue persists, try resetting the device by removing and reinserting the battery.

SPECIFICATIONS

Feature	Specification
Product Dimensions	6.89 x 2.36 x 1.38 inches; 5.33 ounces (17.5cm x 5cm)
Model Number	Walfrontztcx8gqs0y (HT-86)

Feature	Specification
Manufacturer	Walfront
Battery Type	9 volts (NEDA 1604 IEC 6F22)
Mounting Type	Tabletop
Upper Temperature Rating	80 Degrees Celsius (176°F)
Wet Bulb Temperature Range	0 to 80°C (32 to 176°F)
Dew-point Temperature Range	-20 to 80°C (-4 to 176°F)
Humidity Resolution	0.01% RH
Temperature Resolution	0.01°C

Figure 6: Dimensions of the HT-86 meter, showing its height of 17.5cm (6.9in) and width of 5cm (2in).

APPLICATION

The Walfront HT-86 Temperature Humidity Meter is a versatile tool suitable for a variety of professional and daily applications where precise environmental monitoring is crucial. Its robust design and accurate sensors make it an ideal instrument for:

- **Industrial Settings:** Monitoring conditions in manufacturing plants, warehouses, and production facilities to ensure optimal environmental control for sensitive materials or processes.

- **Agriculture:** Assessing humidity and temperature in greenhouses, farms, and storage areas to support plant growth and preserve agricultural products.

- **Meteorology:** Basic environmental monitoring for weather enthusiasts or educational purposes.

- **Medical Facilities:** Maintaining specific environmental conditions in laboratories or storage areas for medical supplies.

- **Daily Life & Home Use:** Monitoring indoor air quality, comfort levels, or conditions in wine cellars and basements.

- **Building Engineering:** Assessing environmental factors in construction or HVAC applications.

Figure 7: Examples of environments where the HT-86 meter can be effectively used, including greenhouses, residential spaces, medical facilities, laboratories, wine cellars, and industrial warehouses.