Gain Express HTM-49

Gain Express Digital Humidity and Temperature Meter (Model HTM-49)

User Manual

1. Introduction

This manual provides detailed instructions for the operation and maintenance of your Gain Express Digital Humidity and Temperature Meter, Model HTM-49. This device is designed for accurate measurement of ambient temperature, relative humidity, dew point, and wet-bulb temperature. Please read this manual thoroughly before use to ensure proper functionality and to extend the life of the instrument.

Image 1.1: The Gain Express Digital Humidity and Temperature Meter, Model HTM-49. This handheld device features a digital display and an integrated sensor at the top.

2. Product Overview

2.1 Device Components

Image 2.1: Front and back view of the meter with labeled components. Key parts include the humidity and temperature sensor at the top, the LCD display, the Data Hold button, the Min/Max button, the On/Off and Backlight button, and the battery compartment on the rear.

2.2 LCD Display Elements

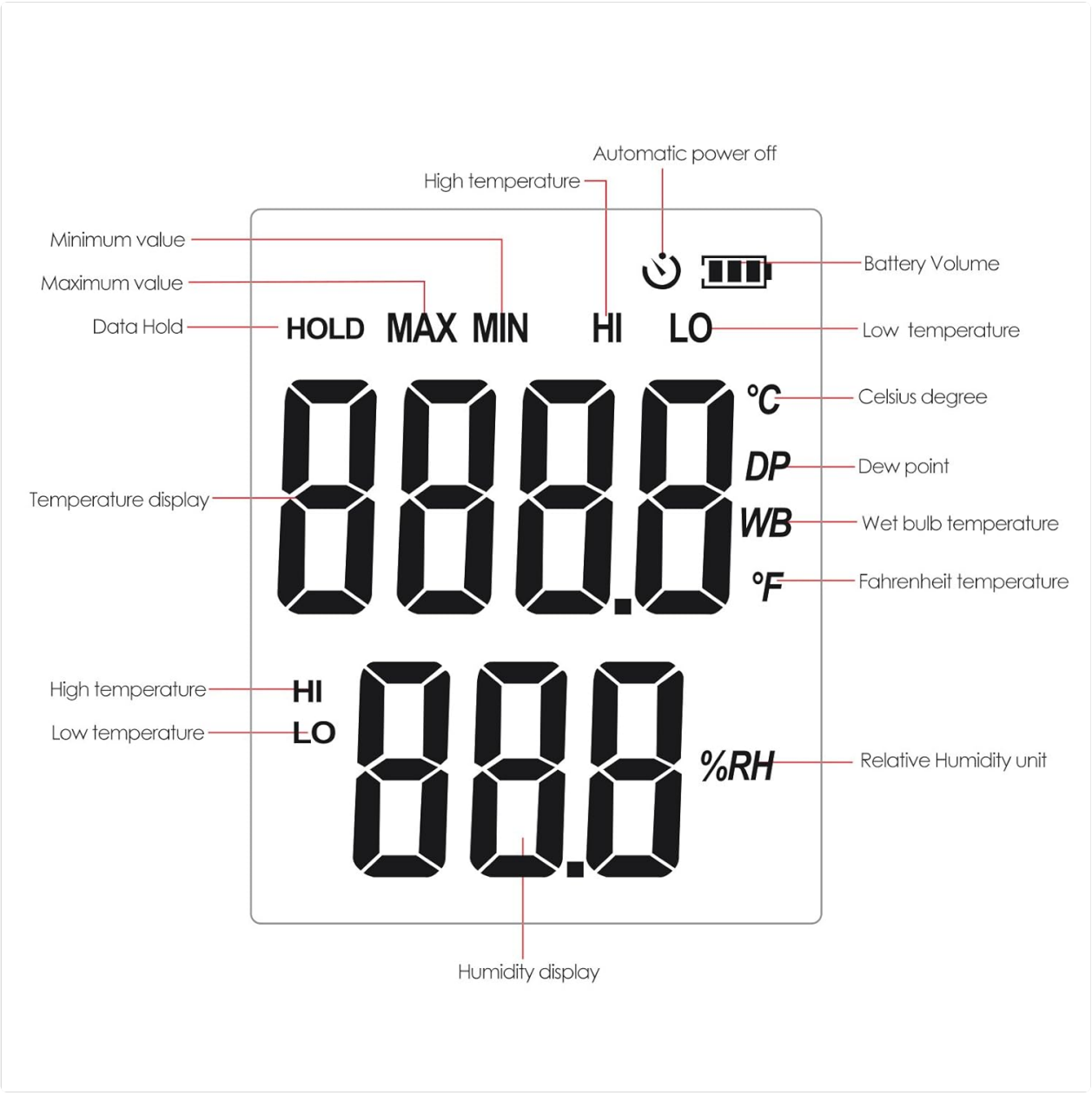


Image 2.2: Detailed view of the LCD display showing various indicators. These include Temperature Display, Humidity Display, Data Hold (HOLD), Minimum Value (MIN), Maximum Value (MAX), High Temperature (HI), Low Temperature (LO), Automatic Power Off icon, Battery Volume indicator, Celsius degree (°C), Dew Point (DP), Wet Bulb temperature (WB), Fahrenheit temperature (°F), and Relative Humidity unit (%RH).

3. Key Features

- **Accurate Readings:** Equipped with high-precision sensors for reliable humidity and temperature measurements.
- **Clear LCD Display:** Shows both humidity and temperature readings simultaneously for easy monitoring.
- **Data Hold Function:** Freezes current readings on the screen for convenient recording.
- **Min/Max Hold:** Records and displays the minimum and maximum measured values.
- **Automatic Power-Off:** Helps conserve battery life by shutting down after a period of inactivity.
- **Multiple Units of Measure:** Displays temperature in both Celsius (°C) and Fahrenheit (°F).
- **Backlight:** Provides illumination for the display in low-light conditions.
- **Portable Design:** Lightweight and compact for easy carrying and use in various environments.

4. Setup

4.1 Battery Installation

1. Locate the battery compartment on the back of the device (refer to Image 2.1).
2. Slide the battery compartment cover downwards to open it.
3. Insert three (3) 1.5V AAA batteries, ensuring correct polarity (+/-) as indicated inside the compartment.
4. Replace the battery compartment cover, sliding it upwards until it clicks securely into place.

The device is now ready for operation.

5. Operating Instructions

5.1 Power On/Off and Backlight

- To power on the device, press the **On/Off / Backlight** button (red button with power symbol).
- To activate or deactivate the display backlight, briefly press the **On/Off / Backlight** button while the device is on.
- To power off the device, press and hold the **On/Off / Backlight** button for approximately 2 seconds.

5.2 Taking Measurements

Once powered on, the device will immediately begin displaying current temperature and relative humidity readings. Ensure the sensor at the top of the device is exposed to the environment you wish to measure.

5.3 Switching Temperature Units (°C/°F)

To switch between Celsius (°C) and Fahrenheit (°F), briefly press the **MIN/MAX** button.

5.4 Data Hold Function

- To freeze the current readings on the display, press the **HOLD** button. The 'HOLD' indicator will appear on the LCD.
- To release the data hold and resume live readings, press the **HOLD** button again.

5.5 Minimum/Maximum Readings

- To view the maximum recorded temperature and humidity since the device was powered on or reset, press the **MIN/MAX** button once. The 'MAX' indicator will appear.
- Press the **MIN/MAX** button again to view the minimum recorded temperature and humidity. The 'MIN' indicator will appear.
- Press the **MIN/MAX** button a third time to return to live readings.
- To reset the Min/Max values, press and hold the **MIN/MAX** button for approximately 2 seconds while in MAX or MIN display mode.

5.6 Automatic Power Off

The device features an automatic power-off function to save battery life. If no buttons are pressed for approximately 15 minutes, the device will automatically shut down. This feature is indicated by the automatic

power-off icon on the display (refer to Image 2.2).

6. Maintenance

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Sensor Care:** Keep the humidity and temperature sensor free from dust, dirt, and moisture. Avoid touching the sensor directly.
- **Storage:** When not in use for extended periods, remove the batteries to prevent leakage. Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display to ensure accurate readings.

7. Troubleshooting

- **Device does not power on:** Check battery installation and ensure batteries are fresh. Replace if necessary.
- **Inaccurate readings:** Ensure the sensor is clean and unobstructed. Allow the device to stabilize in the measurement environment for a few minutes. If issues persist, replace batteries.
- **Display is dim or flickering:** This indicates low battery. Replace all three AAA batteries.
- **No response from buttons:** Try removing and reinserting the batteries. If the problem continues, the device may require service.

8. Specifications

Image 8.1: A visual representation of the device's technical specifications, including ranges and accuracies for temperature, humidity, dew point, and wet-bulb measurements.

Parameter	Value
Model Number	HTM-49
Temperature Range	-20 to 70°C (-4 to 158°F)
Temperature Accuracy	±1°C (between 5~50°C / 41~122°F)
Humidity Range	0 to 100% RH
Humidity Accuracy	±0.4% RH (25°C / 77°F) / 10% RH ~ 90% RH, Full range accuracy ±5% RH
Dew Point & Wet-Bulb Range	-20 to 50°C
Dew Point & Wet-Bulb Accuracy	±2°C (5~50°C / 41~122°F) / 10~90% RH
Maximum Response Time	30 seconds
Power Supply	3 x 1.5V AAA Batteries
Product Dimensions	2.2 x 2.2 x 7 inches (5.6 x 5.6 x 17.8 cm)

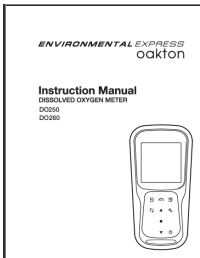
Parameter	Value
Weight	7.76 ounces (220 grams)

9. Warranty and Support

For warranty information or technical support, please refer to the documentation included with your purchase or contact Gain Express directly through their official website or customer service channels. Please retain your proof of purchase for any warranty claims.

Related Documents - HTM-49

	ThermoPro TP-49 Indoor Humidity and Temperature Monitor - User Manual Get detailed instructions for your ThermoPro TP-49 indoor humidity and temperature monitor. Learn about features, setup, specifications, care, disposal, and warranty.
	HATOR Pulsar 2 PRO Wireless Gaming Mouse User Manual Comprehensive user manual for the HATOR Pulsar 2 PRO Wireless gaming mouse, covering specifications, setup, operation, features, and warranty information.
	LMS Express Operators Manual This manual provides comprehensive instructions for operating the LMS Express and LMS Express RT monitoring systems. It covers features, data analysis, reporting, and system setup for environmental monitoring.
Haier 	Haier Refrigerator User Manual: HTM-776XNF, HTM-776SNF, HTM-777XNF Comprehensive user manual for Haier refrigerators (models HTM-776XNF, HTM-776SNF, HTM-777XNF) covering safety precautions, operation, maintenance, and troubleshooting.
ENVIRONMENTAL EXPRESS oakton Instruction Manual HANDHELD WATER QUALITY METERS 300 series 	Oakton 300 Series Handheld Water Quality Meter Instruction Manual Instruction manual for Oakton 300 Series handheld water quality meters (models 350, 360, 380). Covers operation, calibration, maintenance, safety, and specifications for accurate water analysis.



Oakton DO250/DO260 Dissolved Oxygen Meter Instruction Manual

Comprehensive instruction manual for the Oakton DO250 and DO260 Dissolved Oxygen Meters, covering product overview, basic operations, calibration, data management, setup, maintenance, troubleshooting, and safety precautions.