

Saras HT602

Saras HABOTEST HT602 Digital Sound Level Meter User Manual

1. INTRODUCTION

Thank you for choosing the Saras HABOTEST HT602 Digital Sound Level Meter. This device is designed for measuring sound levels in various environments, providing accurate readings of noise, temperature, and humidity. Please read this manual thoroughly before operation to ensure proper use and to maintain the device's performance and longevity.

2. SAFETY INFORMATION

- Do not attempt to disassemble or modify the device. This may cause damage and void the warranty.
- Keep the device away from water, moisture, and extreme temperatures.
- Avoid dropping the device or subjecting it to strong impacts.
- Remove batteries if the device will not be used for an extended period to prevent leakage.
- Use only the specified battery type (3 x 1.5V AAA batteries).
- Clean the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.

3. PRODUCT OVERVIEW

The HABOTEST HT602 is a compact and versatile sound level meter. It features a clear LCD display and intuitive button controls for easy operation.



Figure 3.1: Front view of the HT602 Sound Level Meter, showing the display, microphone, and control buttons.



Figure 3.2: Detailed view of the 2.2-inch LCD display, indicating sound level in dB, temperature in Celsius/Fahrenheit, and relative humidity (RH).



Figure 3.3: The HT602 meter held comfortably in one hand, highlighting its ergonomic and portable design.

Key Components:

- **Electret Condenser Microphone:** High-performance sensor for accurate sound measurement, protected by a windproof sponge.
- **2.2-inch LCD Display:** Large screen with white backlight for clear visibility of readings, including sound level, temperature, and humidity.
- **Control Buttons:** Power, MAX/MIN, Data Hold, Fast/Slow time weighting, and Backlight control.

4. SETUP

4.1 Battery Installation

The HT602 requires three 1.5V AAA batteries (not included) for operation. The battery compartment is located on the rear

of the device.

1. Locate the detachable rear cover of the battery compartment.
2. Gently slide or lift the cover to open it.
3. Insert three 1.5V AAA batteries, ensuring correct polarity (+ and -) as indicated inside the compartment.
4. Replace the battery compartment cover securely.



Figure 4.1: Illustration of the detachable battery compartment, showing the placement of three AAA batteries.

4.2 Powering On/Off

- **To Power On:** Press the **Power** button (🔘) located at the bottom left of the device. The LCD will light up.
- **To Power Off:** Press and hold the **Power** button for a few seconds until the display turns off. The device also features an automatic power-off function after 10 minutes of inactivity to conserve battery life.

5. OPERATING INSTRUCTIONS

The HT602 offers multiple functions for comprehensive environmental monitoring.



Figure 5.1: Overview of the various functions available on the HT602 Sound Level Meter.

5.1 Basic Measurement

Once powered on, the device will immediately begin measuring sound levels, temperature, and humidity. The current readings will be displayed on the LCD.

- **Sound Level:** Displayed in decibels (dB) with A-weighting.
- **Temperature:** Displayed in Celsius (°C) or Fahrenheit (°F). Press the **°C/°F** button to switch between units.
- **Humidity:** Displayed as relative humidity (RH%).



Figure 5.2: Example of the HT602 in use, measuring sound levels in an industrial environment.

5.2 MAX/MIN Function

This function allows you to view the maximum and minimum sound level readings recorded since the device was powered on or the function was reset.

- Press the **MAX/MIN** button once to display the maximum (MAX) sound level.
- Press the **MAX/MIN** button again to display the minimum (MIN) sound level.
- Press the **MAX/MIN** button a third time to return to real-time measurement.

5.3 Data Hold Function

To freeze the current reading on the display:

- Press the **H** button (Data Hold icon) once. The current readings will be held on the screen, and a 'HOLD' indicator may appear.
- Press the **H** button again to release the hold and resume real-time measurement.

5.4 Time Weighting (FAST/SLOW)

The HT602 supports two time weighting modes:

- **FAST (125ms):** Suitable for measuring rapidly changing noise levels.
- **SLOW (1s):** Suitable for measuring relatively stable noise levels.
- Press the **F/S** button to toggle between FAST and SLOW time weighting modes. The selected mode will be indicated on the display.

5.5 Backlight Control

The LCD display features a white backlight for improved visibility in low-light conditions.

- Press the **Backlight** button () to turn the backlight on or off.



Figure 5.3: The HT602 display with its HD backlight, ensuring clear readability even in dark environments.

6. MAINTENANCE

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use liquid cleaners or solvents.
- **Storage:** Store the device in a cool, dry place, away from direct sunlight and extreme temperatures. If storing for a long period, remove the batteries.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display to ensure accurate readings.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Batteries are dead or incorrectly installed.	Check battery polarity or replace with new AAA batteries.
Inaccurate readings.	Low battery, microphone obstructed, or device exposed to extreme conditions.	Replace batteries. Ensure microphone is clear. Operate within specified environmental conditions.
Display is dim or flickering.	Low battery.	Replace batteries.
Auto power-off occurs too quickly.	This is a standard feature to conserve battery.	The auto power-off is fixed at 10 minutes. Power on again if needed.

8. SPECIFICATIONS

Parameter	Value
Sound Level Measurement Range	30~130dBA
Sound Level Frequency Range	30Hz~8kHz
Dynamic Range	50dB
Accuracy	±1.5dB (94dB@1kHz), ±5dB (94dB@8kHz)
Frequency Weighting	A-weighting
Time Weighting	Fast: 125ms; Slow: 1s
Microphone	Electret Condenser
Temperature Range	-20~60°C (-4~140°F)
Temperature Accuracy	0~45°C (32~113°F): ±1°C/2°F; Other: ±1.5°C/3°F
Humidity Range	0~99%RH
Humidity Accuracy	20~80%: ±5RH; Other: ±6RH
Operating Environment	0~50°C, <80%RH
Altitude	<2000m
Storage Environment	-10~50°C, <80%RH
Material	ABS
Auto Power Off	10 minutes
Power Supply	3 * 1.5V AAA Battery (sold separately)
Product Size	143 * 58 * 26mm / 5.63 * 2.28 * 1.02in
Product Weight	115g / 4.07oz
Package Weight	188g / 6.63oz
Package Size	18.3 * 9 * 5.5cm / 7.20 * 3.54 * 2.17in

9. WARRANTY AND SUPPORT

This product comes with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your purchase or contact your retailer. For technical support or inquiries, please reach out to the customer service provided by Saras or your point of purchase.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question