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## TOPTES TS-501A

# TOPTES TS-501A Decibel Meter User Manual

Model: TS-501A

## 1. INTRODUCTION

Thank you for choosing the TOPTES TS-501A Decibel Meter. This device is designed for measuring sound pressure levels (SPL) in various environments. It features A-weighting, a wide measurement range, and a clear backlit LCD screen, making it suitable for monitoring noise in homes, offices, factories, and other settings. Please read this manual thoroughly before use to ensure proper operation and to maximize the lifespan of your device.

## 2. SAFETY INFORMATION

- Do not attempt to disassemble or modify the device. Unauthorized modifications can lead to damage or injury.
- Keep the device dry. Exposure to moisture can damage internal components.
- Avoid extreme temperatures. Store and operate the device within the specified temperature range.
- Handle the microphone with care. The microphone is a sensitive component and should be protected from impact.
- Dispose of batteries properly according to local regulations.

## 3. PRODUCT OVERVIEW

The TOPTES TS-501A Decibel Meter is a portable instrument equipped with a precise condenser microphone and a 2.25-inch backlit LCD screen. It includes various functions for accurate and convenient sound level measurement.



**Figure 3.1:** TOPTES TS-501A Decibel Meter with included AAA batteries and protective cover. This image displays the TOPTES TS-501A Decibel Meter, its three AAA batteries, and the protective microphone cover, illustrating the complete package contents.

### Key Features:

- **A-Weighting:** Measures noise levels from 30 to 130 dB with an accuracy of 1.5 dB, frequency from 30 to 8000Hz, mimicking human hearing.
- **2.25-inch Backlit LCD Screen:** Provides clear and easy-to-read measurements, even in low-light conditions.
- **MAX/MIN Measurement:** Captures the highest and lowest sound pressure levels over a period.
- **Data Hold:** Freezes the current reading on the display.
- **Low Battery Alert:** Indicates when batteries need replacement.
- **Automatic Power-Off:** Extends battery life.



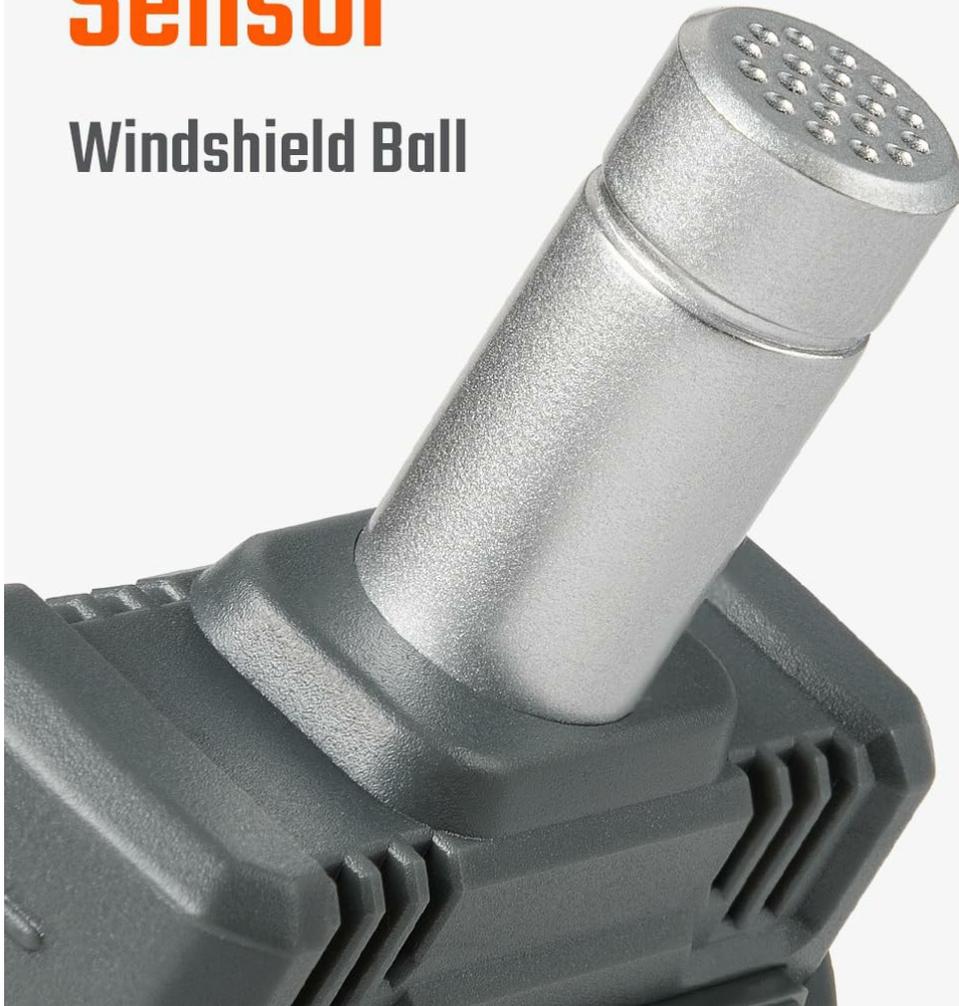
**Enjoy Big Screen  
Easy to Read backlit**

**Figure 3.2:** Close-up of the TOPTES TS-501A Decibel Meter's 2.25-inch backlit LCD screen. This image focuses on the meter's large 2.25-inch LCD screen, demonstrating its backlit feature for clear visibility in various lighting conditions.



# High Precision Sensor

## Windshield Ball



**Figure 3.3:** High-precision sensor and microphone windshield. The image highlights the meter's sensitive microphone sensor and the included foam windshield, which helps reduce wind interference for more accurate readings.

## 4. SETUP

### 4.1 Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Slide the cover open.
3. Insert three AAA batteries, ensuring correct polarity (+ and -).
4. Close the battery compartment cover securely.

The device comes with three AAA batteries included in the package.

## 5. OPERATING INSTRUCTIONS

### 5.1 Power On/Off

- To power on the device, press the **Power** button .
- To power off the device, press and hold the **Power** button for approximately 2 seconds. The device also features an automatic power-off function to conserve battery life.

### 5.2 A-Weighting Measurement

The TS-501A uses A-weighting, which is the most common weighting filter used to approximate the human ear's response to sound. This ensures that measurements reflect how humans perceive loudness.



30 ~ **A** Weighting 130 dB



TOPTES  
MAX MIN  
-888.888% RH  
FAST SLOW  
1888.8 A  
dB  
Sound Level Meter TS-501A



**Precision  
in Sound**

**Just as Your Ears Hear It!**

**Figure 5.1:** A-Weighting and Measurement Range. The image emphasizes the meter's measurement capabilities, specifically its 30 to 130 decibel range and the A-weighting function, which mimics human hearing sensitivity.



**Figure 5.2:** A-Weighted Measurement Icon. This icon represents the A-weighted measurement mode, which is designed to mimic human hearing response to sound.

### 5.3 Fast/Slow Response

Press the **F/S** button to switch between Fast and Slow response modes.

- **Fast Mode (125 ms):** This mode is suitable for measuring rapidly changing noise levels, approximating the human ear's quick response.
- **Slow Mode (1s):** This mode provides an averaged reading, ideal for measuring fluctuating noise levels over a longer period.

# Easy to Carry

## Portable Size

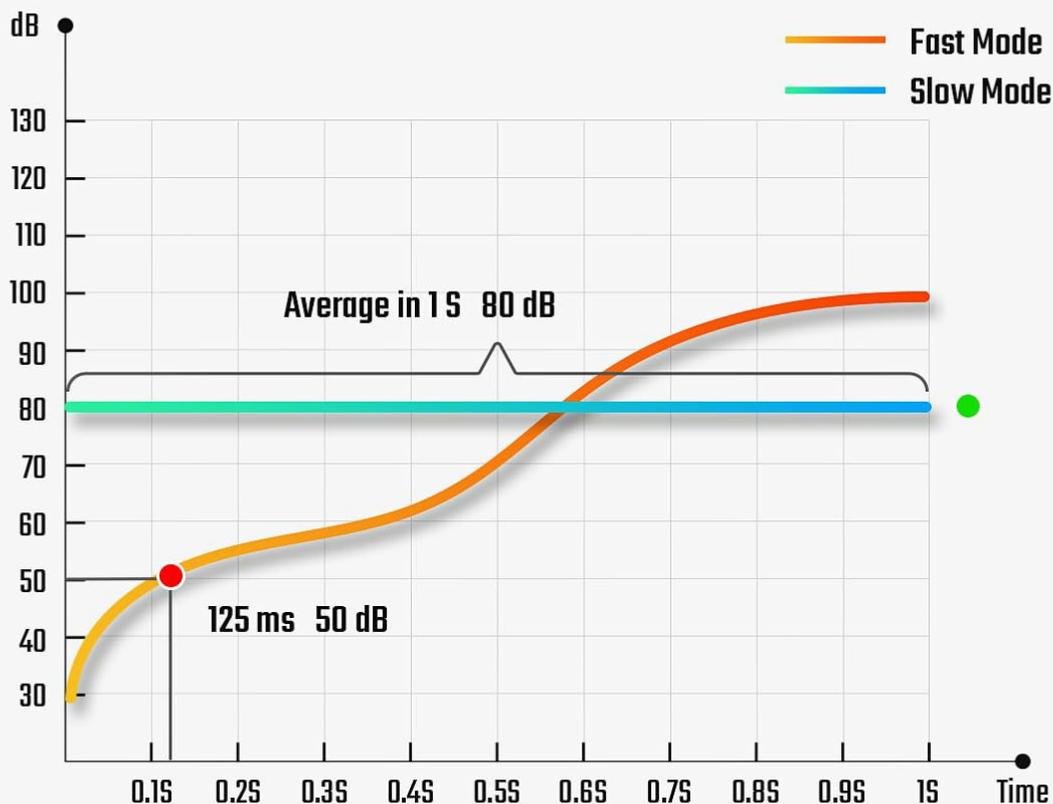


**Figure 5.3:** Fast and Slow Response Modes. The diagram differentiates between Fast and Slow response modes, explaining that Fast mode approximates the ear's response to sudden sounds, while Slow mode provides an average for fluctuating noise.

### 5.4 MAX/MIN Measurement

Press the **MAX/MIN** button to activate the maximum and minimum value recording function.

- When activated, the meter will display the highest (MAX) or lowest (MIN) sound level recorded since the function was enabled.
- Press the button repeatedly to cycle between MAX, MIN, and normal measurement modes.



## Fast Mode (125 ms)

Fast weighting is approximate to the ears' time response.



## Slow Mode (1s)

Slow weighting is used to indicate the average level of fluctuating noise.

**Figure 5.4:** MAX/MIN Value Explanation. This graphic illustrates how the MAX/MIN function captures the highest and lowest sound pressure levels detected during a measurement period, useful for analyzing sound fluctuations.

### 5.5 Data Hold

To freeze the current reading on the display, press the **H** button (  ). Press it again to release the hold and resume live measurements.

### 5.6 Backlight

To turn the backlight on or off, long press the **Backlight** button (  ). This feature enhances readability in dimly lit environments.

### 5.7 Low Battery Alert

A low battery indicator (  ) will appear on the screen when the battery level is low, reminding you to replace the

batteries.

## 6. SPECIFICATIONS

Feature	Specification
Measurement Range	30-130 dB
Accuracy	±1.5 dB
Frequency Range	30 Hz - 8000 Hz
Weighting	A-Weighting
Response Time	Fast (125 ms), Slow (1s)
Display	2.25-inch Backlit LCD
Power Source	3 x AAA Batteries (included)
Product Dimensions	2.17 x 1.02 x 5.51 inches
Item Weight	9.88 ounces
Model Number	TS-501A

## 7. MAINTENANCE

### 7.1 Cleaning

- Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Ensure the microphone foam cover is clean and free of debris. Replace if damaged.

### 7.2 Storage

- When not in use for extended periods, remove the batteries to prevent leakage.
- Store the device in its protective carry case in a cool, dry place, away from direct sunlight and extreme temperatures.

## 8. TROUBLESHOOTING

### 8.1 Device Does Not Power On

- Check if the batteries are inserted correctly with the right polarity.
- Replace the batteries with new ones if they are depleted.

### 8.2 Inaccurate Readings

- Ensure the microphone is not obstructed and the foam windshield is properly in place.
- Avoid measuring in windy conditions without the windshield, as wind can affect readings.
- Verify that the device is operating within its specified temperature and humidity ranges.

### 8.3 Display Not Visible

- Activate the backlight by long-pressing the backlight button.

- Check battery level; a very low battery might affect display visibility.

## 9. WHAT'S IN THE BOX

The TOPTES TS-501A Decibel Meter package includes the following items:

- 1x TOPTES TS-501A Decibel Meter
- 3x AAA Batteries
- 1x User Manual
- 1x Carry Case



**Figure 9.1:** Package Contents. This image displays all items included with the TOPTES TS-501A Decibel Meter: the device itself, the user manual, a protective carry case, and three AAA batteries.

## 10. WARRANTY AND SUPPORT

TOPTES products are designed for reliability and performance. For warranty information or technical support, please refer to the contact details provided on the official TOPTES website or the product packaging. Keep your purchase receipt as proof of purchase for warranty claims.

### Related Documents - TS-501A

 <p>校准证书 CALIBRATION CERTIFICATE</p>	<p><a href="#">Calibration Certificate for TOPTES Guard-101 Gas Detector</a></p> <p>This document is a calibration certificate issued by Guangdong Jingheng Detection Technology Co., Ltd. for the TOPTES Guard-101 gas detector. It details the calibration results, standards used, and environmental conditions for various gas measurements including Hydrogen Sulfide, Combustible Gas, Carbon Monoxide, and Oxygen.</p>
 <p>Ultrasonic Liquid Level Meter User Manual</p>	<p><a href="#">Ultrasonic Liquid Level Meter User Manual - TS-FT003 &amp; TS-FT005</a></p> <p>Comprehensive user manual for Sunsky's Ultrasonic Liquid Level Meter, featuring TS-FT003 and TS-FT005 transmitters. Learn about installation, features, and settings for accurate water level and temperature monitoring.</p>
 <p>TS-FT001 Ultrasonic Liquid Level Meter User Manual English Version</p>	<p><a href="#">TS-FT001 Ultrasonic Liquid Level Meter User Manual</a></p> <p>Comprehensive user manual for the TS-FT001 Ultrasonic Liquid Level Meter by Dongguan Taishen Electronics Co., Ltd., detailing installation, setup, features, specifications, and troubleshooting.</p>
 <p>Manual / 使用手册 / Operating Manual Model: TS-FT002</p>	<p><a href="#">TS-FT002 Water Tank Level Monitoring Operating Manual</a></p> <p>This operating manual provides detailed instructions for the installation, operation, and troubleshooting of the TS-FT002 water tank level monitor, including features like temperature display, alarm functions, and min/max level tracking.</p>
 <p>Wireless Ultrasonic Tank Liquid Level Meter Model: TS-FT002</p>	<p><a href="#">TS-FT002 Wireless Ultrasonic Tank Liquid Level Meter</a></p> <p>Monitor your outdoor water tank's liquid level and temperature from indoors with the TS-FT002 Wireless Ultrasonic Tank Liquid Level Meter. This device features a 12/24 hour time display, indoor and tank temperature monitoring, a 10-element LCD bar graph for water level, and records min/max temperatures and levels. It includes high/low level alarms, an empty tank alert, and a low battery indicator for the transmitter. The system updates tank levels every 30 seconds when changing or every 3 minutes when stable, offering a transmission range of up to 100 meters (300 feet) in open areas.</p>



[MAC Medical TS-Series Warming Cabinets: Installation, Operation, and Maintenance Guide](#)

Comprehensive instruction manual for MAC Medical TS-Series Warming Cabinets, covering installation, operation, maintenance, safety guidelines, and technical specifications. Essential guide for healthcare facilities.

Documents - TOPTES – TS-501A

no relevant documents