2025

Mini Bass Meter
(Second Edition)

Sound Pressure Level Meter with Voltmeter Function

Table of Contents

Purpose and Features

Overview

The SPL-Lab Mini Bass Meter SE is an updated, portable device for measuring sound pressure level (SPL) and voltage. This version goes beyond peak SPL detection — it also calculates the average SPL from music or noise signals over a designated measurement period. Additional features include tracking maximum and minimum vehicle voltage during a measurement session, as well as voltage values corresponding to peak pressure. It also supports averaging voltage over time for assessing power system performance under sustained load.

This device is plug-and-play with no calibration or setup required. Simply connect it to your vehicle's cigarette lighter socket and start measuring. It mounts easily to your windshield, allowing measurements while driving. Its fully autonomous design eliminates errors due to external equipment or software.

Design & Ergonomics

The Mini Bass Meter SE features a compact body, a four-segment display, three control buttons, and connectors for Mini-USB (power/firmware update) and a cigarette lighter adapter. Its sleek, neutral design blends seamlessly into most vehicle interiors.

Technical Specifications

Parameter	Value
Sound Pressure Range	110–185 dB
Frequency Range	10–120 Hz
DC Voltage Range	5–20 V
Measurement Accuracy	0.1 dB, 0.1 V, 1–2 Hz
Data Refresh Rate	1 or 0.5 seconds
Algorithms	SPL (peak), AVG (time-averaged)
Power Supply	Mini-USB or Cigarette Lighter
Display	4-segment
Connectors	Mini-USB, 12V Adapter
Operating Voltage	10–20 V
Dimensions (W×H×D)	69×50×21 mm

Operation & Safety Guidelines

Safety Guidelines

! The manufacturer assumes no responsibility for direct or indirect damage resulting from use.

! Always inspect the device for cracks or damage before use.

! Do not use damaged cables to avoid electric shock.

! Avoid exceeding measurement limits.

! Connect/disconnect cables only when power is off.

! Do not use or store in humid, high-temperature, or strong magnetic environments.

! Avoid synthetic cleaners and solvents during maintenance — use damp cloths or wipes.

Functional Elements

Item #	Description
1	Display
2	Button 1
3	Mini-USB Port
4	Button 2
5	Power Adapter Port
6	Button 3
7	Suction Mounts
8	Pressure Sensor

Button Functions

Button	Function
Button 1	Toggle between SPL, Frequency, and Voltage views
Button 2	Select measurement mode
Button 3	Reset readings

SPL Mode

The SPL ("P") mode measures peak sound pressure with a 1 Hz resolution, analyzing 1-second segments. You can monitor:

- Current voltage

- Max/min voltage

- Average voltage

- Voltage at peak SPL

To change modes:

- Press Button 2 to view the current setting.

- Use Buttons 1 and 3 to select the desired mode.

- Press Button 2 to confirm.

Mode	Description
P0	Peak SPL, no data hold
P1	Hold peak SPL + voltage at peak
P2	Hold peak SPL + max voltage
P3	Hold peak SPL + min voltage
P4	Hold peak SPL + average voltage over time

When active, values blink once per second.

AVG Mode

The AVG ("A") mode calculates time-averaged SPL with 2 Hz resolution, analyzing 0.5-second signal segments. Final readings are based on the average of peak values recorded during a user-defined period.

Voltage metrics include:

• Current

• Max/min

• Average

• Voltage at peak SPL

On activation or reset (Button 3), a 5-second countdown starts.

To change modes:

• Press Button 2 to view the current setting.

• Use Buttons 1 and 3 to select the desired mode.

• Press Button 2 to confirm.

Mode	Description
A0	Average SPL, no voltage hold
A1	Average SPL + voltage at peak
A2	Average SPL + max voltage
A3	Average SPL + min voltage
A4	Average SPL + average voltage over time

Values blink twice per second in AVG mode.

Configuration Mode

Used to fine-tune measurement behavior.

To enter:

- Hold Buttons 1 and 2 while powering on.
- "CFG" will blink on the display.

Then:

- Press Button 2 to cycle through settings.
- Use Buttons 1 (–) and 3 (+) to adjust.
- Press Button 2 on the last item to save and exit.

Menu	Function
TYP	Calibration Type (1 = TERM-LAB Classic, 2 = TERM-LAB Magnum)
U	Voltage Correction Multiplier (Default: 0.5)
P	AVG Mode Period (Default: 1)
T	Measurement Duration in AVG Mode (seconds)