2018

Mini Bass Meter User Manual

Sound pressure meter with voltmeter function



SPL-Laboratory 01.01.2018

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Functions and technical features of the device



Description

Spl-Lab Mini Bass Meter is a new device for measuring sound pressure and voltage. This device is, probably, the most compact SPL meter of those available on the market today. The uniqueness of this device is in its capability of simultaneously measuring sound pressure and voltage. At the same time, it is possible to capture sound pressure at the moment of reaching the highest SPL value. The measured signal can be provided by both industrial equipment and acoustic systems. The device is simple in use and does not require additional settings and calibration. It is enough to simply connect the device to a car cigarette lighter for measuring sound pressure and voltage. The device can be attached to the windshield of a car and the measurements taken while driving. The Mini Bass Meter is completely autonomous, which eliminates inaccurate readings.

Ergonomics

Spl-Lab Mini Bass Meter has a compact case, including a four segment display, 3 control buttons, Mini-USB slot for power supply and updating the firmware and an input for connecting to a cigarette lighter socket. The design of the device allows it to practically fit into any car interior.

Technical features

- Completely autonomous
- Bright green display
- Includes portable Power Supply
- Frequency range from 20 to 120 Hz
- Amplitude range from 120 to 165 dB
- Measuring voltage from 1 to 20 volt*
- Calibrated according to TERM-LAB Classic and Magnum
- Updatable software

Measured value of direct current voltage	USB- 1-5 volts 12v In- 6-20 volts
Measurement accuracy	0.1 dB, 0.1 volt, 1 Hz
Data refresh speed	1 second
Algorithm	Measuring the SPL peak value
Power	Mini-USB slot or input for connecting to a cigarette lighter socket.
Display	Four segment display
Sockets/connectors:	Mini-USB, car cigarette lighter socket (Type H Barrel)
Supply voltage	from 6 to 20 volt
Dimensions: (LBH)	2.72" x 1.97" x 0.83"

Working with the device

Important safety information:

- ! The manufacturer does not bear responsibility for damage, caused directly or indirectly, as a result of improper device use.
- ! Before using the device, examine its case for cracks and splits. Any depressurization of the device will result in possible damage.
- ! To avoid the risk of electric shock, all connector cables should not have insulation defects.
- ! Avoid measuring load beyond its maximum limit.
- ! All operations of connecting and disconnecting cables should be performed with equipment off.
- ! Do not use or store the device in areas with high humidity or heat, as well as, close to devices generating a strong magnetic field.
- ! During the preventive maintenance of the device, do not use synthetic detergents or solvents. Using wet wipes is more preferable.

Identifying the functional parts of the device:



Number of the element	Description
1	Display
2	Functional button #1
3	Mini-USB slot for auxiliary power supply and updating the firmware
4	Functional button #2
5	Primary Power socket for connecting the adaptor and measuring voltage
6	Functional button #3
7	Suction cups for attaching the device to the windshield
8	Sound pressure meter

Button assignment

Button	Assignment
Functional button #1	Selecting the type of displayed value (SPL, frequency, voltage)
Functional button #2	Enabling the hold mode.
Functional button #3	Resetting readings in the hold mode.

Hold mode

Press Functional button #2: currently selected hold mode will be displayed. Using buttons #1 & #3, select the required mode according to the table below. For completing this procedure, press Functional button #2.

Type of mode	Description
OFF	Peak hold is switched off
P1	The maximum pressure and voltage that corresponds to this pressure are being held
P2	The maximum pressure and maximum voltage are being held
P3	The maximum pressure and minimum voltage are being held

Values on screen will blink if the Hold Mode is enabled.

Service mode

For entering Service Mode, press buttons #1 & #2 when switching the device on and wait until the blinking text, "CFG", appears on screen.

- Select necessary parameter by pressing Functional button #3.
- Set the necessary parameter value using Functional buttons #1 (decreasing value) and #3 (increasing value).
- After setting the last parameter and pressing Functional button #2, the device will save the selected parameters and will change to measuring mode.

Menu item	Assignment
ТҮР	Setting the device calibration type. 1 - TERM-LAB Classic 2 - TERM-LAB Magnum
dB	Adjusting the correction of the sound pressure (0.0 by default)
U	Adjusting the correction coefficient for voltage (0.5 by default)