

Instruction Manual

CE

325-01 JAN. 2001

MINI SOUND LEVEL METER

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SOUND LEVEL METER

I. Safety Information

Read the following safety information carefully before attempting to operate or service the meter. Use the meter only as specified in this manual, otherwise, the protection provided by the meter may be impaired.

➤ Environment Conditions

- ⊕ Altitude up to 2000 meters
- ⊕ Relative humidity 90% max.
- ⊕ Operation Ambient 0 to 40°C

➤ Maintenance & Clearing

- ⊕ Repairs or servicing not covered in this manual should only be performed by qualified personnel.
- ⊕ Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this instrument.

➤ Safety symbols

- Ⓢ Comply with EMC

When servicing, use only specified replacement parts.

II. General Description

Thank you for using our Sound Level Meter. To ensure that you can get the most from it, we recommend that you read and follow the manual carefully before use.

This unit conforms to the IEC651 type2, ANSI S1.4 Type2 for Sound Level Meters.

This Sound Level Meter has been designed to meet the

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- Display with 0.1dB steps on a 4-digit LCD.
- Two equivalent weighted sound pressure levels, A and C.
- AC signal output is available from standard 3.5mm coaxial socket suitable for a frequency analyzer, level recorder, FFT analyzer, graphic recorder, etc.

III. Specifications

Standard Applied: IEC651 Type2, ANSI S1.4 Type2.

Frequency Range: 31.5Hz to 8KHz

Measuring Level Range: 32dB to 130dB

Frequency Weighting: A / C

Microphone: 1/2 inch electret condenser microphone

Display: LCD

Digital Display: 4 digit

Resolution: 0.1dB

Display Update: 0.5 sec.

Time Weighting: FAST (125mS), SLOW (1 sec.)

Level Ranges: Lo: 32 dB to 80 dB

Med: 50 dB to 100 dB

Hi: 80 dB to 130 dB

Accuracy:

±1.5dB (under reference conditions, 94dB@1kHz)

Dynamic Range: 50 dB

Alarm Function: "OVER" is when input is more than

AC Output: 1 Vrms at FS (full scale).
 Output impedance : Approx. 100 Ohms
 FS: means the upper limit of each level range.

Power Supply:

One 9V battery, 006P or IEC 6F22 or NEDA 1604.

Power Life: Approximately 70hours (Alkaline Battery)

Operation Temperature: 0 to 40°C (32 to 104°F)

Operation Humidity: 10 to 90%RH

Storage Temperature: -10 to 60°C (14 to 140°F)

Storage Humidity: 10 to 75%RH

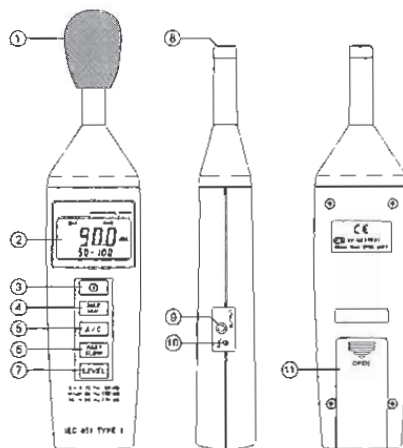
Dimensions: 9.1" L x 2.1" W x 1.3" H

23.1 cm x 5.3 cm x 3.3 cm

Weight: .75 lbs (.34kg) (including battery)

Accessories: 9V battery, screwdriver, instruction manual
 and windscreen.

IV. Name And Functions



① **Windscreen**

If you operate at wind speed over 10m/sec, please put
 protective accessories in front of the microphone.

② **Display**


Minimum indication


Fast response

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③ **Power Button**
the ① key turns the sound level meter ON or OFF.

④ **MAX / MIN Hold button**

Press  button to enter the maximum and minimum recording mode. Select the proper Level range before using MAX/MIN to ensure that reading value will not exceed the measurement range. Press once to select MAX value. Press again to select MIN value, and press again to select current Value with " MAX MIN " annunciator blinking.

Press  and hold down button for 2 seconds to exit the MAX/MIN mode.

Note: If change sound level range or change A-C weight, the MAX.MIN mode will clear.

⑤ **Frequency Weighting Select Button**

A: A - Weighting. for general sound level measurements.
C: C - Weighting. for checking the low-frequency content of noise.

(If the C-Weighted level is much higher than the A-weighted level, then there is a large amount of low-frequency noise)

⑥ **Time Weighting Select Button.**

FAST : for normal measurements

SLOW : for checking average level of fluctuating noise.

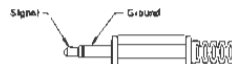
⑦ **Level Range Control Button**

Each time the level button is pressed, the level range will change between "Lo" level, "Med" level and "Hi"

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Output impedance: 100 ohms

Output signal by standard 3.5mm coaxial socket signal on pin.



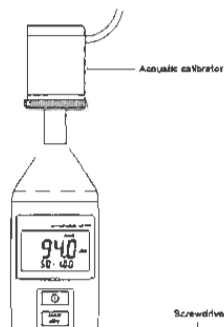
⑩ **CAL Potentiometer**

Calibration control , for level calibration adjustment.

⑪ **Battery Cover**

V. Calibration Procedures


Using a standard Acoustic Calibrator
(94dB , 1KHz Sinewave)



SOUND LEVEL METER

- (1) Make the following switch settings.
Display : dBA
Time Weighting : FAST
Measurement Mode : MAX/MIN Mode function disable.
Level Range : 50 to 100dB
- (2) insert the microphone housing carefully into the insertion hole of the calibrator.
- (3) Turn on the switch of calibrator and adjust the CAL potentiometer of the unit . The level display will indicate the desired level .
All our products are well calibrated before shipment.
Recommended Recalibration cycle : 1 year.

VI . Measurement Preparation

- (1) **Battery Loading**
Remove the battery cover on the back and put in one 9V Battery.
- (2) **Battery Replacement**
When the battery voltage drops below the operating voltage, this symbol will appear. 
Replace 9 Volt battery.

VII. Operating Precautions

- (1) Wind blowing across the microphone will bring additional extraneous noise.

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- (3) Do not store or operate the instrument at high temperature and high humidity environment.
- (4) Keep microphone dry and avoid severe vibration.
- (5) Please take out the battery and keep the instrument in low humidity environment when not in use.

VIII. Measurement

- (1) Open battery cover and install a 9V battery in the battery compartment.
- (2) Turn power ON and select the desired response time and weighting. If the sound source consists of short bursts or only catching sound peak, set response to FAST. To measure average sound level, use the SLOW setting.
Select A- weighting for general noise sound level and C-weighting for measuring sound level of acoustic material.
- (3) Select desired Level.
- (4) Hold the instrument comfortably in hand and point the microphone at the suspected noise source , the sound pressure level will be displayed.
- (5) When MAX/MIN (maximum, minimum hold) mode is chosen. The instrument captures and holds the maximum and minimum noise level for a long period using any of the time weightings and ranges.
Press the MAX/MIN button 2 seconds to clear the MAX/MIN reading . " MAX/MIN " symbol disappears.