

SOUND LEVEL METER

72-6635

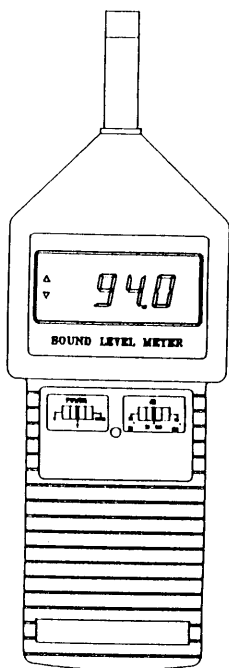


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1. FEATURES

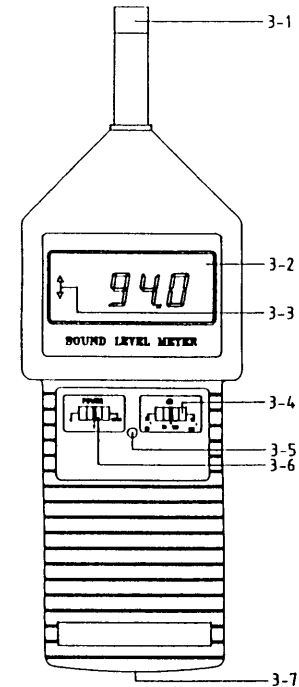
- * Large LCD display, easy to read.
- * Characteristic of " A " frequency weighting network are designed to meet IEC 651 type 2.
- * " Fast " time weighting characteristic mode.
- * Build in adj. VR is available for easy calibration.
- * Condenser microphone for high accuracy & long-term stability.
- * Hold function to freeze the display value.
- * Warning indicator for over and under range.
- * LCD display for low power consumption & clear read-out even in bright ambient light condition.
- * Durable, long-lasting components, including a strong, light weight ABS plastic case.
- * Small and light weight design allow one hand operation.
- * Low battery indicator.
- * High quality with economical cost.

2. SPECIFICATIONS

Display	18 mm (0.7") LCD (Liquid Crystal Display), 3 1/2 digits.
Measurement Range	35 to 130 dB, 3 ranges : range 1 – 35 to 80 dB, range 2 – 50 to 100 dB, range 3 – 80 to 130 dB, * Each range with warning indicator for over & under load.
Resolution	0.1 dB.
Measurement Frequency	31.5 Hz to 8,000 Hz.
Frequency Weighting	Characteristics of " A " frequency weighting network. * The " A weighting " characteristic is simulated as "Human Ear Listing" response.

Time Weighting	Default to " Fast " time weighting characteristics. * " Fast time weighting " is simulated the human ear response character.
Accuracy (23 ± 5 °C)	Characteristics of " A " frequency weighting network meet IEC 651 type 2. Under 94 dB input signal, the accuracy are : 31.5 Hz – ± 3 dB, 63 Hz – ± 2 dB, 125 Hz – ± 1.5 dB 250 Hz – ± 1.5 dB 500 Hz – ± 1.5 dB, 1 kHz – ± 1.5 dB 2 kHz – ± 2 dB, 4 kHz – ± 3 dB, 8 kHz – ± 5 dB <i>Remark :</i> <i>The above spec. are tested under the environment RF Field Strength less than 3 V/M & frequency less than 30 MHz only.</i>
Calibrator	B & K (Bruel & kjaer), multi-fuction acoustic calibrator, model : 4226.
Microphone	Electric condenser microphone.
Size of microphone	1/2 inch standard size.
Calibration VR	Build in external calibration VR, easy to calibrate on 94 dB level by screw driver.
Data Hold	Hold function to freeze the display value.
Operating Temp.	0°C to 50°C (32°F to 122°F).
Operating Humidity	Less than 80% RH.
Power Supply	<i>Alkaline or Heavy duty type, 9V d.c.</i> 006 P, MN1604(PP3) or equivalent.
Power Consumption	Approx. DC 6 mA.
Dimension	225 x 70 x 28 mm (8.9 x 2.8 x 1.1 inch).
Weight	250 g/0.55 LB (including battery).
Standard Accessories	Instruction Manual 1 PC.

3. FRONT PANEL DESCRIPTION



- 3-1 Electric condenser microphone
- 3-2 Display
- 3-3 Range upper / lower indicator
- 3-4 Range switch
- 3-5 External calibration VR
- 3-6 Power ON/OFF/Hold switch

 " 1 " = Power ON " 0 " = Power OFF

- 3-7 Battery compartment / Cover

4. MEASURING PROCEDURE

1) Slide the " Power ON/OFF/Hold switch " (3-6, Fig. 1) to the " 1 " position will power on the meter.

• 1 • = Power ON. • 0 • = Power OFF.

2) Select range with range switch (3-4, Fig. 1).

When LCD indicator arrows show out of range, select the next appropriate range.

3) Hold the instrument in your hand and point the microphone at the noise source to be measured.

The sound level will be displayed in dB (decibel) units.

4) During the measurement, if you slide the power switch (3-6, Fig. 1) to the " hold " position the value will be held on the display. Switching back to the " 1 " position will resume normal operation.

5. REPLACEMENT OF BATTERY

1) When the LCD display shows " BAT " it is necessary to replace the battery. Measurements may still be made several hours after the "BAT" indicator appears before the instrument becomes inaccurate.

2) Slide the battery cover (3-7, Fig. 1) and remove the battery.

3) Replace 9V battery (Alkaline or heavy duty type, 006 P, MN1604/PP# or equivalent) and re-install battery cover.

6. CALIBRATION

** The sound level meter has an externally accessible calibration VR (3-5, Fig. 1) on the front panel.*

** Please use the following procedures when calibration is required.*

1) Attached a sound calibrator to the electric condenser microphone (3-1, Fig. 1) of the sound level meter.

2) Slide the range switch (3-4, Fig. 1) to the 50 - 100dB position.

3) Carefully adjust the calibration VR (3-5) until the display reads $94.0\text{dB} \pm 0.2\text{dB}$.

7. FREQUENCY WEIGHTING CHARACTERISTICS OF " A " NETWORKS

Frequency Hz	A Weighting Character	Tolerance (IEC 651 type 2)
31.5	-39.4 dB	± 3 dB
63	-26.2 dB	± 2 dB
125	-16.1 dB	± 1.5 dB
250	-8.6 dB	± 1.5 dB
500	-3.2 dB	± 1.5 dB
1 K	0 dB	± 1.5 dB
2 K	+1.2 dB	± 2 dB
4 K	+1 dB	± 3 dB
8 K	-1.1 dB	± 5 dB