

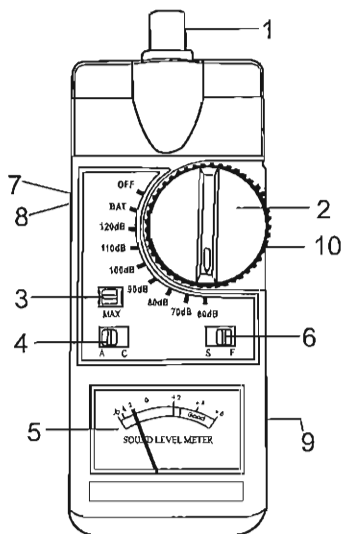
INSTRUCTION MANUAL

Analog Sound Level Meter



Model: 8926

CONTROLS and INDICATORS



1. Microphone
2. OFF / Range Selector
3. Max Hold button
4. A /C weighting selector
5. dB indicating scale
6. Fast / Slow selector
7. Cal.(Calibration) Adjustment (side)
8. Output Jack (side)
9. Battery Cover (Rear)
10. Tri-pod mount (Rear)

INTRODUCTION

The Analog Sound Level Meter is a versatile device which measures sound level in any acoustic environment. The meter will enable you to easily measure sound or noise levels that are loud or soft, high or low-pitched, broadband, intermittent, or in factories, schools, offices, airports, sound studios, theaters, auditoriums, automobiles, and in the home. This precisely calibrated meter features a large, easy-to-read analog indicator and is battery powered for convenient, portable use.

IMPORTANT NOTE

Continuous high pressure levels (> 100 dB) can permanently damage your ears. Always set the volume accordingly when testing. Continuous high pressure levels can permanently damage your loudspeakers.

Remember noise levels above 85 dB will harm hearing over time. Noise levels above 140dB can cause damage to hearing after just one exposure.

The meter is calibrated before ex-factory ,using a standard acoustic calibrator which generate "94dB" output .

We would recommend you to re-calibrate the meter with a cycle one year .

NOISE LEVELS IN ENVIRONMENT FACT SHEET

Points of Reference measured in dBA or decibels :

- 0 The softest sound a person can hear with normal hearing
- 10 normal breathing
- 20 whispering at 5 feet
- 30 soft whisper
- 50 rainfall
- 60 normal conversation
- 110 shouting in ear
- 120 thunder

HOME

- 50 refrigerator
- 50 - 60 electric toothbrush
- 50 - 75 washing machine
- 50 - 75 air conditioner
- 50 - 80 electric shaver
- 55 coffee percolator
- 55 - 70 dishwasher
- 60 sewing machine
- 60 - 85 vacuum cleaner
- 60 - 95 hair dryer
- 65 - 80 alarm clock
- 70 TV audio
- 70 - 80 coffee grinder
- 70 - 95 garbage disposal
- 75 - 85 flush toilet
- 80 pop-up toaster
- 80 doorbell
- 80 ringing telephone
- 80 whistling kettle
- 80 - 90 food mixer or processor
- 80 - 90 blender
- 80 - 95 garbage disposal
- 110 baby crying
- 110 squeaky toy held close to the ear

WORK

40 quiet office, library
50 large office
65 - 95 power lawn mower
80 manual machine, tools
85 handsaw
90 tractor
90 - 115 subway
95 electric drill
100 factory machinery
100 woodworking class
105 snow blower
110 power saw
110 leafblower
120 chain saw, hammer on nail
120 pneumatic drills, heavy machine
120 jet plane (at ramp)
120 ambulance siren
125 chain saw

RECREATION

40 quiet residential area
70 freeway traffic
85 heavy traffic, noisy restaurant
90 truck, shouted conversation
95 - 110 motorcycle
100 snowmobile
100 school dance, boom box
110 disco
110 busy video arcade
110 symphony concert
110 car horn
110 -120 rock concert
112 personal cassette player on high
117 football game (stadium)
120 band concert
125 auto stereo (factory installed)

SPECIFICATION

Ranges:
Range Setting (Usable range):
54 to 126dB in 7 ranges
referenced to 0.00002
ubar

60dB (54 to 66), 70dB (64 to 76),
80dB (74 to 86), 90dB (84 to 96).
100dB (94 to 106), 110dB (104
to 116), 120dB (114 to 126)

Resolution: Analog Continuous

Accuracy: ± 3 dB at 94 dB sound
level at 1kHz

Frequency weighting: A and C

Meter response: Fast and Slow

Microphone type: Electret
Condenser

Analog output: AC: 0.707Vrms

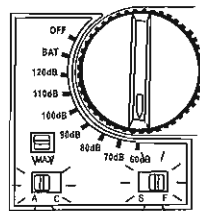
Power: Meter powered by 9V
battery ;120 hour battery
life

Dimensions/Weight: 2.7x7.1x1.4"
(68 x 180 x 36mm) / 5.1 oz.
(160g)

METER OPERATION

WEIGHTING A / C

When the A/C Weighting Switch is set to A, the meter primarily measures frequencies in the 500 to 10000 Hz range, which is the area of greatest sensitivity to the human ear. When set to C Weighting, the meter measures uniformly over the frequency range of 32 to 10000 Hz, giving an overall sound level indication.



A-weighting takes into account the typical human ear response, reducing the frequency response of the SPL meter to the 500 - 10,000 Hz range, where our ears are mostly sensitive.

B-weighting measures the whole range from 32 to 10,000 Hz.

C-weighting is for HiFi-measuring purposes, we would suggest to use the wider set up.

FAST (F) AND SLOW (S) RESPONSE

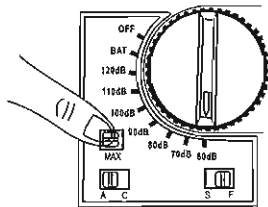
The S and F Switch sets the meter's response time.

- In the Slow position, the measurement is damped and indicates an average sound level. The Slow response is most commonly used for workplace and environmental noise studies.
- In the Fast position, the meter reacts rapidly to any change in the sound level. Set the meter to "F" if the noise to be measured consists of short bursts, or if peak values are to be observed.

MAX HOLD

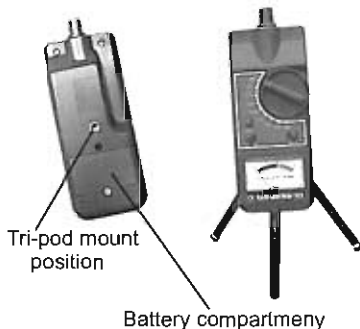
Maximum Hold permits the user to freeze the meter's maximum reading by locking the pointer at the sound level peak. Hold down the **MAX** button to activate **MAX**. Hold. Release the button for normal operation.

To measure a peak sound level, set the F/S switch to F(Fast), and make sure of the **MAX** button.



TRIPOD MOUNTABLE

You can mount the meter on a camera tripod with standard thread to reduce hand noise and minimize the effects of sound reflected from your body. This is an auxiliary testing equipment.



REPLACE BATTERY

Always remove power to the instrument whenever it is not being used to preserve battery life.

The meter supplied with a 9 volt battery, to replace with a new battery, first lay the meter facedown on a clean, flat surface. Remove the battery cover by using a screwdriver, observe polarity and replace a new battery, then close the battery cover by screwdriver.

ALALOG OUTPUT

A phono-type output jack is provided on the meter for connection to external test equipment. It outputs an AC voltage (0.707V RMS maximum), which is a linearized representation of the analog scale reading.

Connect this output jack to a datalogger, chart recorder, etc. for logging purposes.

WARRANTY

The meter is warranted to be free from defects in material and workmanship for a period of one years from the date of purchase.

This warranty covers normal operation and does not cover batteries, misuse, abuse, alteration, tampering, neglect, improper maintenance, or damage resulting from leaking batteries. Proof of purchase is required for warranty repairs.

RETURN AUTHORIZATION

Authorization must be obtained from the supplier before returning items for any reason.

When requiring a RA (Return Authorization), please include data regarding the defective reason, the meters are to be returned along with good packing to prevent any damage in shipment and insured against possible damage or loss.