User manual

Sound Level Meter

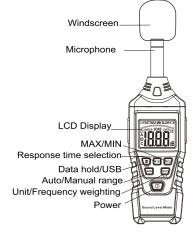


Before using the instrument, please read this manual carefully, and save it well for future using

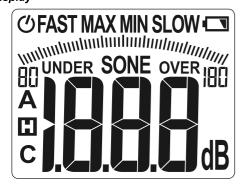
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Introduction

Sound level meter is used to measure the sound level of the environment: such as factories, workshops, schools, residential buildings, office areas, traffic roads, audio and other occasions of the sound level. It is also suitable for noise engineering, product quality control, health prevention and control, etc.



Display



| symbols | description | symbols | description |
|---------|----------------------|---------|---------------------|
| FAST | Fast response | | Data hold |
| SLOW | Slow response | А | A weighted |
| OVER | Exceed maximum range | С | C weighted (option) |
| UNDER | Exceed Minimum range | dB | Decibel unit |
| MAX | Maximum value | SONE | Loudness unit |
| MIN | Minimum value | | Low battery |
| USB | USB (option) | C | Auto power off |

Measurement Considerations

- Wind blowing across the microphone increases the noise measurement. Use the supplied windscreen to cover the microphone when applicable.
- Calibrate the instrument before each use if possible. Especially if the meter has not been used for a long period of
- Do not store or operate the instrument in areas of high temperature or humidity.
- Keep meter and microphone dry.
- Avoid severe vibration.
- Remove the battery when the meter is to be stored for long periods of time.

Operation

Sound level measure

- 1. Power the meter by pressing the $\, \bigcirc \,$ power button. The meter will begin displaying sound level readings
- 2. Hold the meter in hand facing the microphone toward the source of the sound to be measured.
- View the measurement on the LCD

A/C Frequency Weighting (option)

Press the UNIT button to select A or C frequency weighting. The "A" or "C" icon will appear in the display to indicate the weighting selected.

A weighting: The frequency response of the meter is similar to the response of the human ear. A weighting is commonly used for environmental or hearing conservation programs such as OSHA regulatory testing and noise ordinance law enforcement.

C weighting: It is a much flatter response and is suitable for the sound level analysis of machines, engines, etc.

Most noise measurements are performed using A Weighting and FAST Response.

FAST/SLOW Time Weighting

Use the F/S button to select FAST (125 ms) or SLOW (1 second) time weighting. The "FAST" or "SLOW" icon will appear in the display as selected.

Select FAST to capture noise peaks and noises that occur very quickly. Select the SLOW response to monitor a sound

source that has a consistent noise level or to average quickly changing levels.

Select FAST response for most applications.

Data hold

To freeze a displayed reading, press the 🔳 button. The "H" icon will appear and the most recent reading will appear in the display. Press the 🔳 button to exit the mode and return to normal operation

Auto/Manual range

Press the RAN button to put the manual range. Press the RAN key once to enter the next range

To exit the manual range mode to the Auto range mode, press and hold the RAN button (2 seconds).

Default auto range of power on.

MAX/MIN function

1. Press the REC button once to put the meter in MAX/MIN mode. The meter will now display the highest reading that occurs while the function is enabled. The "MAX" icon will appear in the display

- 2. Press the REC button again to display the lowest reading that occurs while the function is enabled. The "MIN" icon will appear in the display.
- 3. Press REC again to toggle between the MAX and MIN
- 4. To exit the MAX/MIN mode and return to the normal real time display, press and hold the REC button (2 seconds) until the MAX and MIN icons disappear.

Units of measure

Press the UNIT button to select the unit of measure. The "dB" or "SONG" will appear in the display.

USB (option)

Press and hold the 🗓 button (2 seconds) to Open USB, the "USB" will appear in the display

Press and hold the 🗓 button (2 seconds) again to Close USB, the "USB" will disappear in the display

Meter Power and Automatic Power Off

- Press the POWER button to turn the meter on.
- Press the POWER button again to turn the meter off.

- 3. The meter has an automatic power off feature that conserves battery energy. After 10 minutes the meter automatically shuts off.
- 4. To press and hold the button to turn the meter on, the auto power off function will be cancelled. And the ${\mathfrak O}$ icon disappears.

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Specifications

| Display | LCD display | | |
|----------------------|-----------------------------------|--|--|
| Range | 30—130dBA; 30—130dBC (option) | | |
| Frequency | 30Hz — 8KHz | | |
| Resolution | 0.1dB | | |
| A = 0.111 = 0.11 | \pm 1.5dB (94dB@1KHz) | | |
| Accuracy | ± 5 dB (94dB $@$ 8KHz) | | |
| Frequency weighting | A weighting; C weighting (option) | | |
| Time weighting | FAST: 125ms, SLOW: 1sec | | |
| Microphone | Electret condenser | | |
| Operating conditions | 0~40°C, <80%RH | | |
| Storage conditions | -10∼50°C,<80%RH | | |
| Auto power off | 10 minutes | | |
| Power | 3 x 1.5VAAA(LR03) batteries | | |

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Maintenance

Battery Replacement

When the battery voltage is low the 'a' symbol will appear on the display.

Replace the three (3) 1.5 'AAA' batteries by removing the rear (center) battery compartment screw and accessing the battery compartment. Observe polarity when placing the batteries in the compartment. Ensure that the compartment cover is securely fastened when finished.

Cleaning and storage

⚠Caution

To avoid damaging the instrument housing, do not use corrosive or solvent to clean the instrument.

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents

Store the meter in an area with moderate temperature and humidity (refer to the operating and storage range in the specifications chart earlier in this manual).

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