LATNEX®

Sound Level Meter
SM-130DB

CE

HB4SM130DB01
MADE IN TAIWAN

Contents:

1 Introduction

This sound level meter is a digital noise meter with an auto-shifting function that can be applied to the measurements for both environmental and mechanical noise.

2 Accessories

1	Meter
1	User's Manual
2	9V battery
1	Carrying case
1	Windscreen

3 Safety

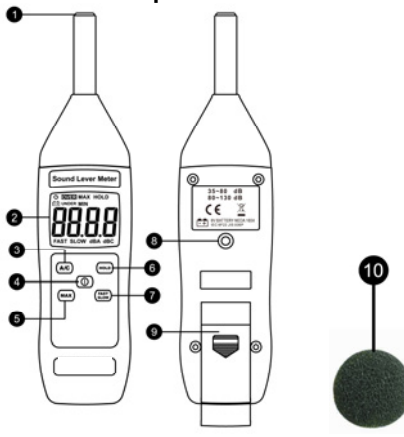
⚠	Caution! Please refer to this manual. Improper use may damage the meter and its components.
CE	Compliance with European Directive

- Do not operate in flammable gas or humid environments.
- Do not place the meter in locations with high temperature, humid, or exposed to direct sunlight.
- Operating altitude: 2000 meters below sea level.
- Operation environment: Indoor use; contamination level class 2.
- EMC: EN61326-1:CISPR 11:Group 1, Class B

✧ **Class B** – Equipment is suitable for use in domestic establishments and outside facilities.

✧ **Group 1** – RF energy generated is needed for internal functioning.

4 Meter description



1.Microphone
2.LCD display
3.A /C weighting select button
4.Power button
5.Maximum and Minimum hold button
6.Data hold button
7.Time weighting select button
8.Tripod nut
9.Battery cover
10.Windscreen

5 Operation

- Press (⏻) to turn on or turn off.
- Please select dBA for the measurement of acoustic noise, dBC for the measurement and analysis of mechanical noise, and click (A/C) to switch the modes.
- Select “FAST” to read the real-time noise level, “SLOW” to read the average noise level, and click (FAST SLOW) to switch the modes.
- Press (MAX) to capture the maximum or minimum noise level and to lock the readings.
- When measuring noise with the sound level meter by hand, keep the distance between the microphone and the sound source by about 1-1.5 meters.

Warning
Wind blowing across the microphone would bring additional extraneous noise. Once using the instrument in the presence of wind with a speed higher than 10m/s, the windscreen must be mounted to prevent the undesirable noise signals.

5.1 Disable auto power off

The meter is preset to shutdown automatically after 15-minute inactivity.

When powering on, press ⏻ for 2 seconds to disable the auto shutdown function which can be set to disable or enable as needed.

5.2 Maximum and Minimum hold

Click MAX for less than 1 second to view the maximum and minimum values cyclically, while pressing A/C and FAST SLOW for switching frequency weighting and time weighting. Press and hold MAX for more than 1 second to quit the function.

5.3 Data hold

Click HOLD to enable or disable the data hold function.

When "HOLD" is activated, all buttons will be disabled, except for ⏻.

5.4 94dB Calibration

- Carefully plug the microphone head into the 1/2 inch hole of the standard audio source (94dB, @1KHz sine wave).
- Turn on the power of the standard audio source (94dB, @1KHz sine wave).
- Press and hold A/C + HOLD for more than 1 second and enter the 94dB correction function.
- Press MAX for auto calibration.
- Press A/C to select frequency weighting.
- Use the HOLD / FAST SLOW to manually adjust the deviation value (±3.5dB).
- Press ⏻ to quit the 94dB correction function.

* Auto correction range is 90.5~97.5dB.

* The meter has been calibrated as ex-factory. The calibration period is recommended as 1 year.

6 General Specifications

- 4 digital LCD.
- Frequency weighting: dBA, dBC
- Time weighting: FAST, SLOW
- Data hold
- Auto ranging
- Auto power off (default 15 min)and disable auto power off
- Maximum and Minimum hold
- Overloading “OVER” or “UNDER”
- Low battery indication
- Battery: 9V (NEDA 1604、IEC 6F22 or JIS 006P)
- Battery life: About 50 hrs (alkaline Battery)
- Standby power consumption: 9uW
- Operating power consumption: 90mW
- Operation temperature and humidity:
  5 to 40ºC (41 to 104ºF) < 80%RH
- Storage temperature and humidity:
  -10ºC to 60ºC (14 to 140˚F) < 70%RH
- Weight: about 200g (including battery)
- Dimension: 235(L) x 56(W) x 40(H)mm

7 Electrical Specifications:

Environmental conditions at 23°C ± 5°C

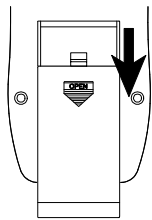
Sample rate	1 second
Standards Reviewed (For Reference Only)	IEC 61672-1:2002 class 2 IEC651 Type2 ANSI1.4 Type2
Microphone	1/2 inch Electret condenser microphone.
Dynamic Range	50 dB
Measuring range	35 ~ 130 dBA
	40 ~ 130 dBC
Frequency response	31.5 Hz ~ 8 KHz
Resolution	0.1 dB
Time weighting	FAST 125 ms ; SLOW 1s
Frequency weighting	A / C
Accuracy	±1.8 dB (reference SPL 94 dB @1KHZ)

8 Maintenance

1. When the  symbol is displayed on the LCD, it means that there is insufficient power; Change the battery immediately in order to ensure its accuracy.
2. Do not place the meter in locations that have high temperature, humidity, or with exposure to direct sunlight.
3. Remember to turn off the power after usage; Remove the battery if not used for a long period of time in order to prevent battery leakage and damage to internal components.
4. If the instrument fails to function, repair must be done by the authorized service provider.

9 Battery Replacement

1. Turn off the power.
2. Open the battery cover at the back of the meter to remove the batteries.
3. Please insert the new 9V batteries according to the polarities.
4. Put the battery cover back in place.



10 Disposal

Note: This symbol indicates that the meter and its accessories must be separated and processed properly.

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