



Making Your Job More Enjoyable

**Sound Meter
Operating Instruction
VMS-1**



1.Introduction

VMS-1 is a stable, safe, reliable sound meter, widely used in noise detection, quality control, health control, environmental noise measurement in factory, traffic, home audio and other places.

This operating manual includes relevant safety information and warnings. Please read this manual carefully and observe all cautions.

⚠ Warning:

Before using the product, please read the operation rules carefully.

2.Out of the Box

Open the packing box and take out the meter. Please check carefully if any items are missing or damaged.

- 1.AAA Batteries-----3
- 2.Wind-proof ball-----1
- 3.Operating manual-----1

3.Operation Safety

This product strictly follows the requirements of "General specification for sound level meters" in design and production.

- 1.Please check the meter and the accessories before using and beware of any damage or abnormal phenomenon. If you find the case is damaged or the LCD shows nothing, or you consider that the meter could not work properly anymore, please stop using it.
- 2.Observe the operating instructions while measuring.
- 3.Do not open the meter at will or change internal wiring to avoid damages to the meter.
- 4.When the LCD displays "🔋", replace the battery timely. Remove the battery if the meter is not used for a long time.
- 5.Do not store or use the meter in high temperature, high humidity, flammable, combustible or strong electromagnetic environment.
- 6.Please use soft cloth and neutral detergent to clean the case for maintenance. Do not use grinding agent and solvent to avoid case corrosion and damage to the meter.

4.Product Outlook

| | | | |
|---|-----------------|---|-------------|
| 1 | Wind-proof ball | 2 | Microphone |
| 3 | Meter case | 4 | LCD display |
| 5 | Function keys | | |

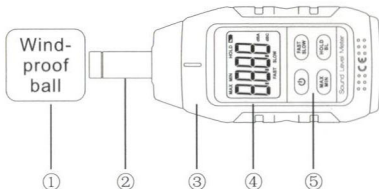


Figure 1

5. Display Interface

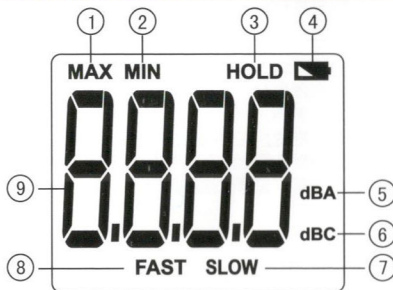


Figure 2

| | | | |
|---|---------------------|---|--------------------|
| 1 | Maximum measurement | 5 | A weighted |
| 2 | Minimum measurement | 6 | C weighted |
| 3 | Data hold | 7 | Slow response rate |
| 4 | Low battery | 8 | Fast response rate |
| 9 | Measurement value | | |

6. Key Function and Setup


1. ON/OFF:
 - Short press once to start up; short press again to power off.
 - Note: Product's auto power off feature can be disabled: Press and hold "HOLD" and then press "ON/OFF" key to enable/disable auto power off, LCD will display "APO OFF" to indicate status.
2. FAST/SLOW:
 - Sampling time: When measuring, pressing this key to select between fast time of 125ms and slow time of 1s.
3. MAX/MIN:
 - Pressing this key to select maximum, minimum and normal value measurement; when maximum or minimum measurement is selected, the meter always shows the maximum reading or the minimum reading.
4. HOLD/BL:
 - HOLD: Short press this key once to hold the measurement; short press the key once again to exit data hold and continue normal measurement.
 - BL: long press this key to turn on backlight, and long press it again to turn off backlight.

7. Technical Specifications

1. Noise (dB)

| Function | Range | Resolution | Accuracy | Description |
|------------------------|----------|------------|----------|--|
| Sound Level | 30~130dB | 0.1 dB | ± 1.5 dB | Rate response: 31.5Hz~8KHz |
| Sampling Time | FAST | | | 125ms |
| | SLOW | | | 1000ms |
| Overload Indication | | | | Shows "UN" and "OL" |
| MAX/MIN Measurement | | | | Shows "MAX/MIN" |
| Data Hold/ Backlight | | | | Shows "HOLD" and turns backlight on or off |
| Auto Power Off | | | | Automatically power off after 5mins without operation. |
| Low Battery Indication | | | 3.0~3.5V | Shows low battery prompt when power is 3.0~3.5V |

2. General Type:

- LCD display: 4-bit LCD display. The maximum display is 9999.
- Overload indication: The meter shows "UN" when under range, and shows "OL" when over range.
- Low battery indication: prompt "  ". The new battery should be replaced in time.
- Sampling rate: fast rate 1/125ms, slow rate 1/1s
- Sensor type: 1/2 inch condenser microphone
- Impact strength: Can withstand the impact of landing from 1 meter height
- Power requirement: 1.5V batteries (AAA) ×3
- Product size: 155×57×35mm
- Weight: 88g

3. Environment Specification

- Indoor use
- Altitude height: 2000m
- Safety: EN61326-1
- Pollution level: 2
- Working temperature and humidity:
0°C~30°C (not greater than 80%RH)
30°C~40°C (not greater than 80%RH)
40°C~50°C (not greater than 45%RH)
- Storage temperature and humidity:
-20°C~60°C (not greater than 80%RH)

4. Electrical Specifications

- Accuracy: ±1.5dB (@1kHz Standard audio source). Calibration period is 1 year.
- Environment temperature: 23°C ± 5°C
- Environment humidity: ≤80%RH
- Temperature coefficient: 0.1 × (Accuracy)/°C

5. General Maintenance

- Warning: please do not open the meter case to avoid affecting device accuracy or damage to the meter.
- Maintenance and service of the meter should be accomplished by professional personnel or designated maintenance department.
 - Clean the case by dry cloth periodically. Detergent with abrasive or solvent composition shall not be used.

6. Battery Installation and Replacement

- This device uses 3 pieces of AAA 1.5V batteries. Please see below for steps of battery installation and replacement.
- Turn the panel down, push the battery cover open in the direction of the arrow, lift the cover and remove the batteries; install new batteries in accordance of polarity indications.
- Please use batteries of same type instead of improper ones.
- Close the cover tightly after installing new batteries.



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