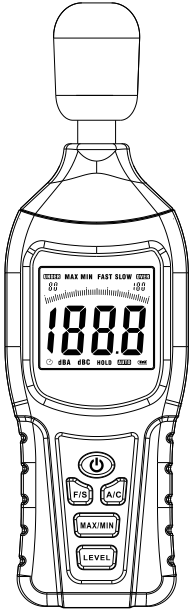
User Manual

Professional Sound Level Meter



Please read this user manual thoroughly before using this unit and keep it for your future reference.

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1. ⚠ Safety

Read the following safety information carefully before attempting to operate the meter.

Use the meter only as specified in this manual; otherwise, the warranty may be invalidated.

◆ **Environment conditions:**

Altitude up to 2000 meters

RH≤90％（Non-Condensation）

Operating Temperature: -20°C ～ 60°C

◆ **Maintenance**

Repairs or servicing should only be performed by ATP Instrumentation Ltd.

Cleaning: Wipe the unit with a dry soft cloth. Do not use abrasives or solvents on this instrument.

◆ **Safety Symbol**

CE Complies with EMC

2. Applications and Features

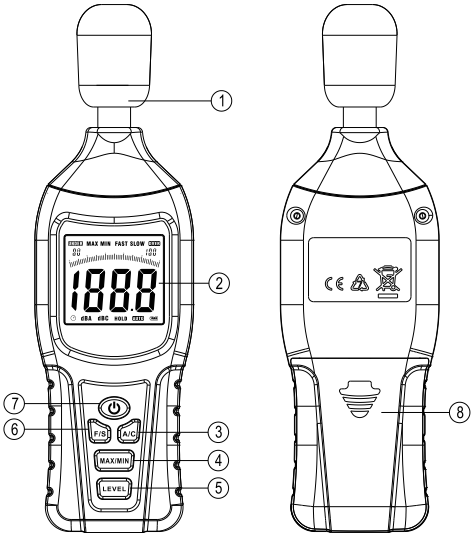
This Sound Level Meter is designed to meet the measurement requirements of safety engineers, health and safety legislation, industrial safety officers and sound quality control in various environments like factories, schools, construction sites etc.

- ◆
- ◆ Max/Min/Data Hold
- ◆ Over-range indication
- ◆ Under-range indication
- ◆ A & C Weighting
- ◆ FAST & SLOW response

3. Specifications

Applied standard	
Frequency range	31.5Hz～8kHz
Dynamic range	50dB
Measuring level range	Lo：30dB～80dB Med：50dB～100dB Hi：80dB～130dB Auto：30dB～130dB
Accuracy	±1.4dB
Time weighting	FAST: 125ms – SLOW: 1s
Microphone	1/2 inch electret condenser microphone
Display	3½ digits LCD display with a resolution of 0.1dB
Frequency weighting	A & C
Data update	2 times per second
Alarm function	“OVER” – input is more than upper range limit. “UNDER” – input is less than lower range limit.
Auto power off	Meter automatically shuts down after approx. 15 minutes inactivity.
Power supply	1x 9V battery, 006P or IEC 6F22 or NEDA 1604.
Battery life	at least 30 hours
Operating conditions	-20℃～60℃，10％RH～90％RH
Storage conditions	-20℃～60℃，10％RH～75％RH
Weight	178g
Dimension(L*W*H)	158 x 62 x 32mm

4. Meter Description



①Microphone ②LCD display

③Frequency weighting A/C selection key

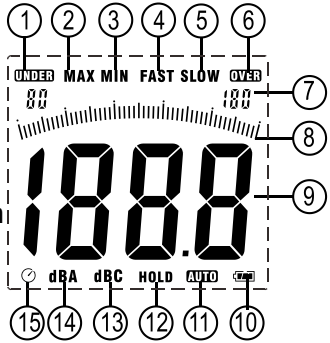
④MAX/MIN Key

⑤Range Level selection key

⑥Response time FAST/SLOW selection key

⑦Power ON/OFF key ⑧Battery Compartment

5. LCD Display Description



①Under-range icon

②MAX hold

③Min hold

④Fast sampling time icon

⑤Slow sampling time icon

⑥Over-range icon

⑦Level range display

⑧Analog bar

⑨Measurement reading

⑩Battery icon

⑪Auto range icon

⑫Data hold icon

⑬dBC icon

⑭dBA icon

⑮Auto power off icon

6. Operation Instruction

(1) Power ON/OFF: Turn the meter on by pressing the " " button for 1 second. To turn the meter off, press and hold the " " button for approx. 3 seconds then release the button.

(2) Backlight:

After turning the meter on, momentarily press the " " key, the backlight will turn on/off. It will automatically turn off after approx. 30 seconds of inactivity.

(3) Frequency weighting A/C selection:

Press "

" key to select A or C.

dBA: “A“ frequency weighting (designed to reflect the response of the human ear to noise which is most sensitive between 500Hz and 6000Hz)

dBC: “C” frequency weighting (commonly used to measure peak sound pressure levels)

(4) FAST/SLOW selection

With the meter powered on; press the "

" button to select FAST or SLOW measurement mode.

FAST: Fast sampling time measurement, 1 time per 125ms.

SLOW: Slow sampling time measurement, 1 time per second.

(5) MAX/MIN

With the meter powered on, press and hold the "

" button for 3 seconds to enter MAX measurement. After 3 seconds, release the button while the flashing 'MAX' icon appears on the LCD. The maximum measured value will be displayed. Press the button again to alternate back and forth between 'MIN' and 'MAX' modes. Press and hold the button for 3 seconds to exit MAX/MIN measurement mode.

(6) Data HOLD:

After turning the meter on, momentarily press the "

" button. "HOLD" icon will appear on the LCD, which indicates the data is frozen. To release the held reading, press the button again.

(7) Level range selection:

Press the "

" key and the level range will change from 'Lo', 'Med', 'Hi' to 'Auto' in turn.

Lo：30dB～80dB　　Med：50dB～100dB

Hi：80dB～130dB　　Auto：30dB～130dB

7. Calibration

The recommended recalibration period is 1 year.

Calibration, repairs or servicing should only be performed by ATP Instrumentation Ltd.

8. **Basic Operation**

(1) Open battery cover and install a 9-volt battery in the battery compartment.

(2) Press the '

', button to select desired level range.

(3) Select 'dBA' for general noise sound levels or 'dBC' for measuring peak sound levels.

(4) Select 'FAST' for instant response or 'SLOW' for an average sound level over 1 second.

(5) Select the '

', button to view the maximum and minimum noise level readings.

(6) Hold the meter in hand or use the tripod to affix the meter in the desired location. The best measuring distance is 1m to 1.5m away from the sound source to the microphone.

9. Notes

(1) Do not store or operate the meter in high temperature or humidity.

(2) Remove the battery when the meter is to be stored for long periods of time to avoid battery leakage.

(3) Wind blowing across the microphone will affect the noise measurement. Use the supplied wind muffler to cover the microphone during applications involving turbulent air.

(4) Keep microphone dry and avoid severe vibration.

(5) If the date and time automatically reset to the default setting after powering the meter on, this indicates the battery power is low. The meters' battery should then be replaced.

(6) When the low battery icon " " appears, replace the meters' battery.

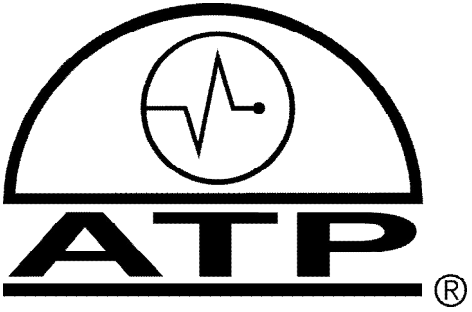
10. Accessories

① User Manual

② Wind Muffler

③ Regulator Rod

④ 9V battery



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