

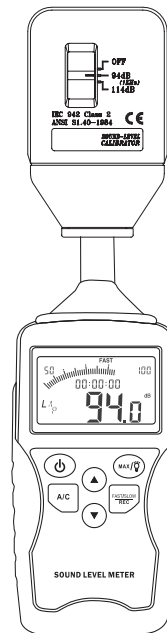
Please read this instruction manual thoroughly and carefully before put it into use . The sound level meter is widely used in the noise control project , quality control and other location that easily influenced by the noise such as plant, school , office room, home, road engineering etc.

impedance 600Ω  
Power supply:1x9V 6F22;  
adaptor (DC9.0V, 100mA)  
Battery life: 8h,(alkaline battery, without backlit)  
Ambient condition:0 to 40°C;10 to 80%RH  
Storage Condition:-10 to 60°C;10 to 70%RH  
Size: 220\*73\*35mm  
Weight:290g  
Accessories: instruction manual, wind screen, batteries (6F22 9V, alkaline batterx1) carrying case, DC output cable.

### 3. Calibration

▲ Use calibrator of 94dB @ 1KHz  
3.1 Ready the meter for calibration :  
Frequency weighting: A; Time weighting: Fast ; Range : 50-100dB , inactivate Max function .  
3.2 Fix the microphone into the calibrator carefully .  
3.3 Switch the calibrator on , if it does not display 94 , adjust the potentiometer covered by the QC sticker on the back of the housing, till the meter displays 94.

Note : The meter has already been factory calibrated, it is strongly recommended calibration be taken once a year.



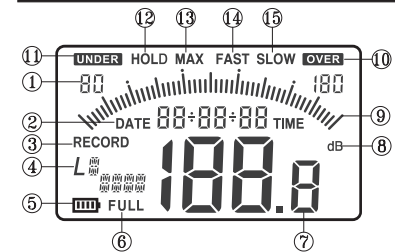
### 1. Safety

1.1 Only operate the meter properly, for its intended purpose and within the parameters specified in the technical data.  
1.2 Ambient condition:  
Altitude: < 2000 meters  
Relative humidity ≤ 80%RH  
Temperature: 0-40°C  
Only for Indoor use  
1.3 Storage and maintenance  
Take the meter to the professionals if the necessary repair is not specified in the instruction manual .  
Clean the housing with dry cloth , always keep it dry

### 2. Technical Data

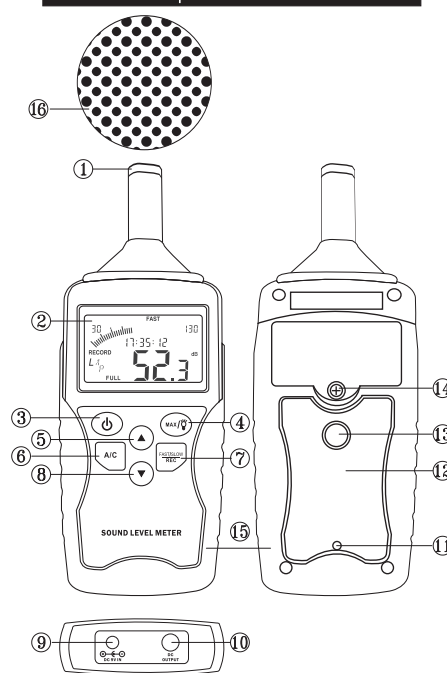
Standard: JGJ 188-2002  
IEC 61672-1:2002 type 2  
Accuracy: ± 1.5dB (at 1 KHz 94dB)  
Frequency: 31.5Hz to 8KHz  
Dynamic indicator range : 50dB  
Measuring range: 30-130dBA;  
35~130dBC  
Frequency weighting: A/C  
Time weighting: Fast (F) / Slow (S)  
Sensor: 1/2 polarization capacity microphone  
Display: LCD with 4 digits  
0.1dB resolution, sampling rate 1s  
Bar graph: 1 scale for 1dB, 125ms  
Manual Range: 30-80dB; 50-100dB;  
60-110dB; 80-130dB  
Measuring parameters:  
Lp: sound pressure level  
Laeq: equivalent continuous sound pressure level  
Lae: sound exposure level  
Lcpeak: peak sound level under C frequency weighting  
Data recording: 10. (Manually recording)  
Over range indicator: "OVER", "UNDER"  
DC output: 0-2.5V, 25mV/dB, output

### 4. LCD display



- 1) Measuring Range
- 2) Calendar (Year, Month, Date) and time
- 3) Recording
- 4) Sound pressure (LAp, L Cp, LAeq, LAe, Lcpeak)
- 5) Battery indicator
- 6) Memory full
- 7) Measuring value
- 8) Noise unit : dB
- 9) Bargraph: dynamic indicator of the noise (1 for 1 dB)
- 10) Over range indicator: displayed when the measured source exceed the Max value of the selected range
- 11) Under range indicator : displayed when the measured source is under the Min value of the selected range
- 12) Data holding
- 13) Max value
- 14) Time weighting : Fast
- 15) Time weighting : Slow

### 5. Meter description



- 1) Capacitance microphone
  - 2) LCD screen
  - 3) Power button
  - 4) Max/backlight
  - 5) Button for higher range
  - 6) A/C switching
  - 7) Fast/Slow and manually recording
  - 8) Button for lower range
  - 9) Jack for adaptor
  - 10) DC output jack
  - 11) Calibration potentiometer
  - 12) Holder
  - 13) Tripod mounting screw hole
  - 14) Battery cover
  - 15) Protection cover
  - 16) wind screen (used in windy condition)
- 5.1 "⏻"  
Switch on : Install battery, press the "⏻" all elements will be displayed quickly, and be ready for measurement . The default measuring range is : 30-80dB  
Switch off : Meter automatically goes off after 10 minutes without any operation or press "⏻" manually.

5.2 "MAX/☀"  
Press "max/☀" at any time, back light will be switched on.  
Long press it, the MAX function is activated and it displays only the Max value, the display update every time a higher reading encountered. Press "max/☀" again, back to normal measuring mode.

5.3 "▲▼"  
The keys are used to choose measuring range . the selectable range : 30dB-80dB, 50dB-100dB, 60dB-110dB, 80dB-130dB . The default range is 30dB-80dB.

5.4 "A/C"  
Press A/C to switch frequency weighting between A and C, and the parameters will switch between LAP, LCP, LAEQ, LAE and Lcpeak. those icons will indicated on the display one by one .  
With "A" weighting selected , the device responds like the human ear (boosting and cutting the noise amplitude over the frequency spectrum). "A" weighting is used for environmental measurements , OSHA regulatory testing , law enforcement, and workplace design .

Select "C" weighting for flat response measurements (no boost or cut). "C" weighting is suitable for the sound level analysis of machines, engines, etc. Most OSHA related testing is performed using A weighting and Slow response time settings.

5.5 "FAST/SLOW" "REC"  
Select FAST to capture noise peaks and noises that occur very quickly . In FAST mode , the meter responds in 125ms. Select the SLOW mode (meter responds in 1s) to monitor a sound source that has a reasonably consistent noise level or to average quickly changing levels such as the sound of printer, photocopier etc. Selection of Fast or Slow is determined by the application and any directives or standards related to that application .

### 6. Pre- operation

- 1) Install a 9.0V battery ,
- 2) Replace a new battery , if "🔋" indicates on the display.
- 3) when use DC adaptor, insert it into the adaptor jack at the bottom of meter .
- 4) Set the time and date:

▲ Press the back light key and the power key together, enter the mode of time and date setting , press back light key to confirm the setting.

### 7. Operation

- 1) Switch it on with the "⏻" key .
- 2) Adjust it to the appropriate measuring range till "UNDER" and "OVER" disappear .
- 3) Select the frequency weighting, A or C (refer to 5.4 to select the right frequency weighting)
- 4) Select the time weighting : Fast or Slow (refer to 5.5 to select the right time weighting)

8. Data recording and delete  
Data recording : Long press FAST / SLOW / REC, RECORD indicates on the display , the data recording function is activated, press it again , record the current reading , time and measuring mode. "FULL" icon displayed if the records reaches 10 .

Press FAST / SLOW / REC to display the the recorded data , when "CAL" appears, the first memorized data will be displayed, Use "▲▼" to browse more data. "----" indicated when there is no record available.

▲ Data delete : long press "A/C", when "CL" appears , all the records are deleted.

### 9. Avoiding the measurement error

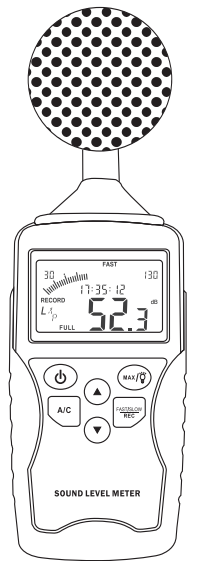
Factor 1 : Human body  
Experiments show that human body and the housing of the device could affect the measurement accuracy by blocking or reflecting the sound signal. The difference can reach 6dB, for the measurement taken within 1m from human body while the frequency is 400Hz.

(The difference could be smaller under other frequency). It is strongly recommended that the device should be 30cm away from human body , 50cm would even better .

Factor 2 : Absolute pressure  
The measurement will slightly be affected by the absolute pressure result from different altitude too , please refer to the following information to make necessary revise for the measuring results ( Add the corresponding compensation value to the reading, for example , if the altitude is 500m, the correct measurement should be the reading plus -0.1) .  
Recalibrate the device every time before use it on a different altitude can avoid the error. Please refer to 3, for the calibration details.

Altitude(m)	Pressure (mbar)	Compensation (dB)
0 - 250	1013 - 984	0.0
>250 - 850	983 - 915	-0.1
>850 - 1450	914 - 853	-0.2
>1450 - 2000	852 - 795	-0.3

## Sound Level Meter Instruction Manual



CE

V1.0  
Made in china

### 10. Maintaining

▲ Do not use it at places with high temperature and humidity .

Take out the battery if the meter is not going to be used for a long time .  
The sound signal of the measured object received by the microphone can be mixed by the sound signal of the wind , therefore, cover the microphone with the wind screen in windy condition.