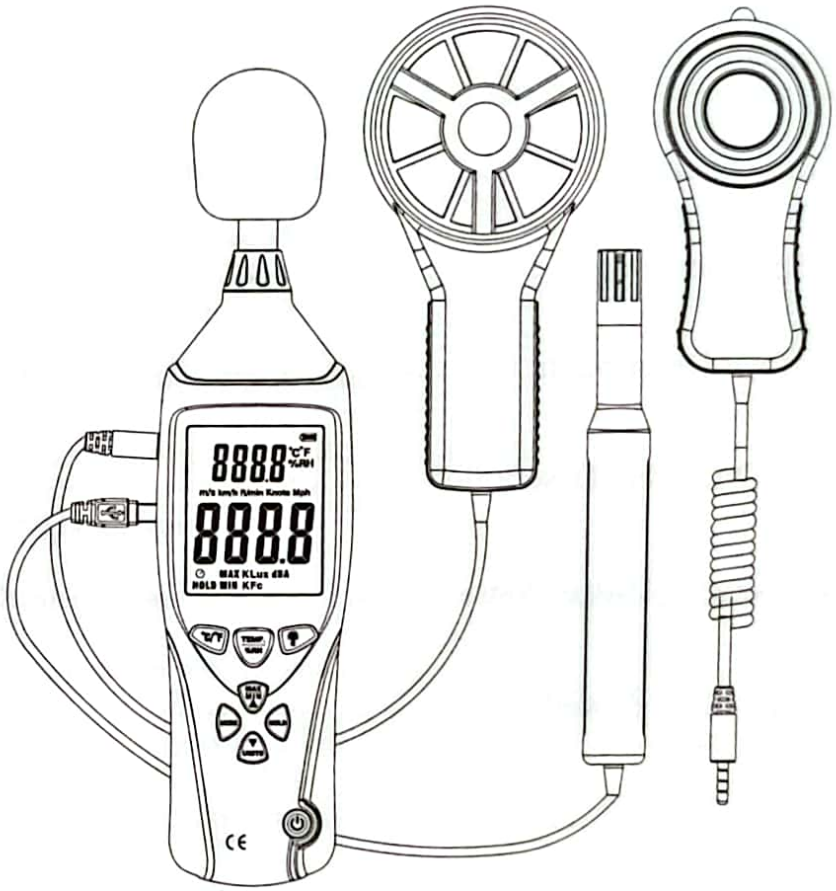
User's Manual

5 In 1 Multifunctional Environment Meter



Please read this user's manual thoroughly before using this unit and keep it properly for your future

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1. ⚠ Safety

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

Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.

◆ **Environment conditions:**

Altitude less than 2000 meters

RH≤90%（Non-Condensation）

Operating Temperature: -30℃ ～ 60℃

◆ **Maintenance**

Repairs or servicing not covered in this manual should only be performed by qualified personnel.

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

◆ **Safety Symbol**

CE Comply with EMC

2.Introduction

The 5 in 1 digital Multifunctional Environment Meter is designed to combine the functions of Sound Level Meter, Light Meter, Anemometer, Humidity Meter and Temperature Meter. It is an ideal Multifunctional Environment Meter with different practical applications for professional and home use, like monitoring and collecting data of environment temperature and humidity, measuring noise in factories, schools, offices, airports, home, etc.,

3. Specifications

Sound Level	
Accuracy	±2.0dB
Display	4digts
Resolution	0.1dB
Frequency response	31.5Hz～8kHz
Measurement range	Auto：35dB～130dB
Frequency weighting	dBA
Microphone	1/2 inch Electric condenser microphone
Light	
Measuring range	0 Lux～200K Lux, 0Fc～20KFc
Spectral response	CIE photopic（CIE human eye response curve）
Spectral accuracy	CIE Vλfunction f1'≦6%
Cosine response	f2'≦2%
Accuracy	±4% rdg±0.5%f.s.(<10,000Lux) ±5% rdg±10dgts.(>10,000Lux)
Photo detector	One silicon photo diode with filter
Air velocity	
Air velocity range	0.5m/s～30.0m/s
Air velocity accuracy	±（3%±0.3d）
Measurement units	m/s, km/h, ft/min, knots, Mph,
Temperature	

Measurement range	-40～70℃（-40～158℉）
Accuracy	±2.0℃，±3.6℉
Measurement units	℃/℉
Resolution	0.1
Humidity	
Measurement range	10～95%RH
Accuracy	±5RH%
Resolution	0.1
Data update	1 time/sec
Maximum value	MAX
Minimum value	MIN
Data Hold	HOLD
Auto power off	Automatically power off after approx. 15 minutes of inactivity
Power supply	one 9V battery with type of 006P、NEDA1604 or IEC6F22
Battery life	About 30 hours
Operating condition	-20℃～60℃，10%RH～90%RH
Storage condition	-40℃～60℃，10%RH～75%RH
Dimensions	252 (L) *66 (W) *33(H) mm
Weight	568g

4. Meter Description

① Windscreen microphone cover

② Microphone

③ LCD display

④ Temp./Humidity selection key

⑤ Backlight ON/OFF key

⑥ HOLD key

⑦ Units selection key

⑧ Power ON/OFF key

⑨ Function selection key

⑩ MAX/MIN

⑪ ℃/℉ selection key

⑫ Potentiometer calibration for sound level

⑬ Anemo-probe and Photo detector terminal

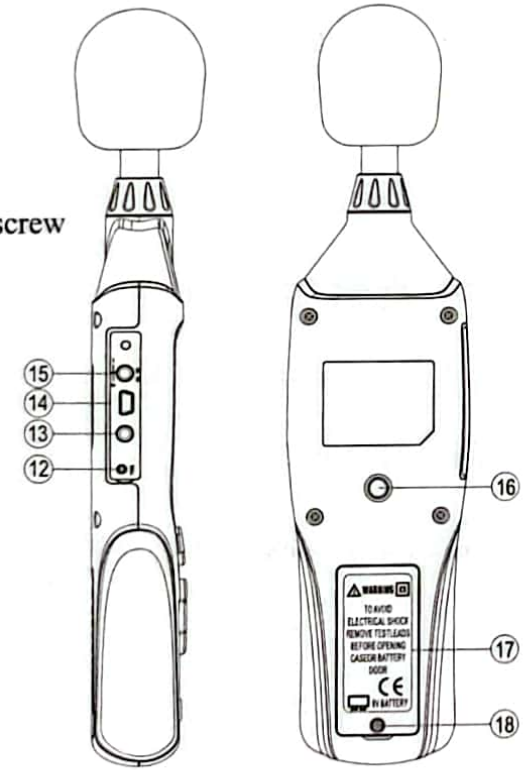
⑭ Temperature and Humidity sensor interface

⑮ External DC 9V power supply terminal(positive inside and negative outside; Pore size： OD 3.5mm, ID 1.35mm)

⑯ Tripod nut

⑰ Battery Compartment

⑱ Battery Compartment screw



5. LCD Display Description

① Temp./Humidity reading display

② Battery indication

③ Temperature unit icon

④ Humidity unit icon

⑤ Air velocity unit icon

⑥ Sound level, Air velocity or Light reading display

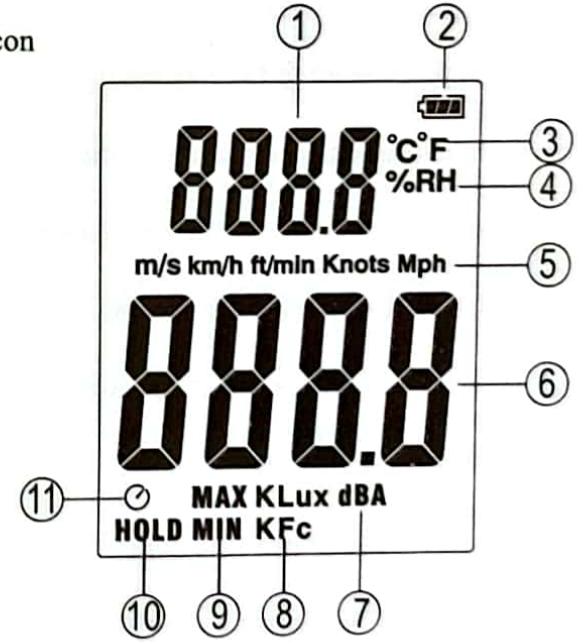
⑦ Sound level unit icon

⑧ Light unit icon

⑨ MAX/MIN

⑩ Data Hold

⑪ Power off Timer



6. Operating Instructions

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

(2) Install the battery compartment and lock the screw.

(3) Power the meter on.

(4) Press "MODE" key to select the desired function.

Notes:

- When the low battery icon " " appears, replace the meter's battery.
- Hold the meter in hand or use the tripod to affix the meter in the desired location. The best measuring distance is 1~1.5m away from the microphone to the sound source.
- When the AC adapter is used, insert the plug of the adapter （3.5φ） into the DC 9V connector on the side panel
- Please connect the Humitiy and Temperature probe before powering the meter on while conducting the humidity and temperature measuring.

7. Operating Procedures

7.1 Temp./Humidity reading selection

After power the meter on, press"

" key to select Temperature reading or Humidity reading.

7.2 Backlight ON/OFF:

After power the meter on, press " " key once, the backlight will be on, press this key again to turn it off . The backlight will be automatically turned off after approx. 30 seconds of inactivity

7.3 Data Hold

Press "

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

7.4 Units selection

7.4.1 Measuring Air Velocity

(1) After entering Air Velocity mode, press "

" button to select desired units, they appear in turns cyclically: m/s, km/h, ft/min,knots, Mph

7.4.2 Measuring Light

(2) After entering Light mode, press "

" button to select Lux or Fc.

7.5 Power ON/OFF

Turn the meter on by pressing "

" button for 1 second, and turn the meter off by pressing and holding "

" button for at least 3 seconds

7.6 MODE button

After power the meter on, press "

" button to select desired function, they appear in turns cyclically: Sound Level, Air Velocity, Light.

7.7 MAX/MIN record

In the measurement mode, press the "

" key for one time to enter MAX/MIN measurement, 'MAX' will appear on lower LCD, the captured maximum value will be displayed on the LCD. Press the key again, 'MIN' will appear on lower LCD and minimum value will be displayed on the LCD. Press the key once again to exit MAX/MIN measurement mode.

7.8 Temperature units selection

After enter measuring mode, press "

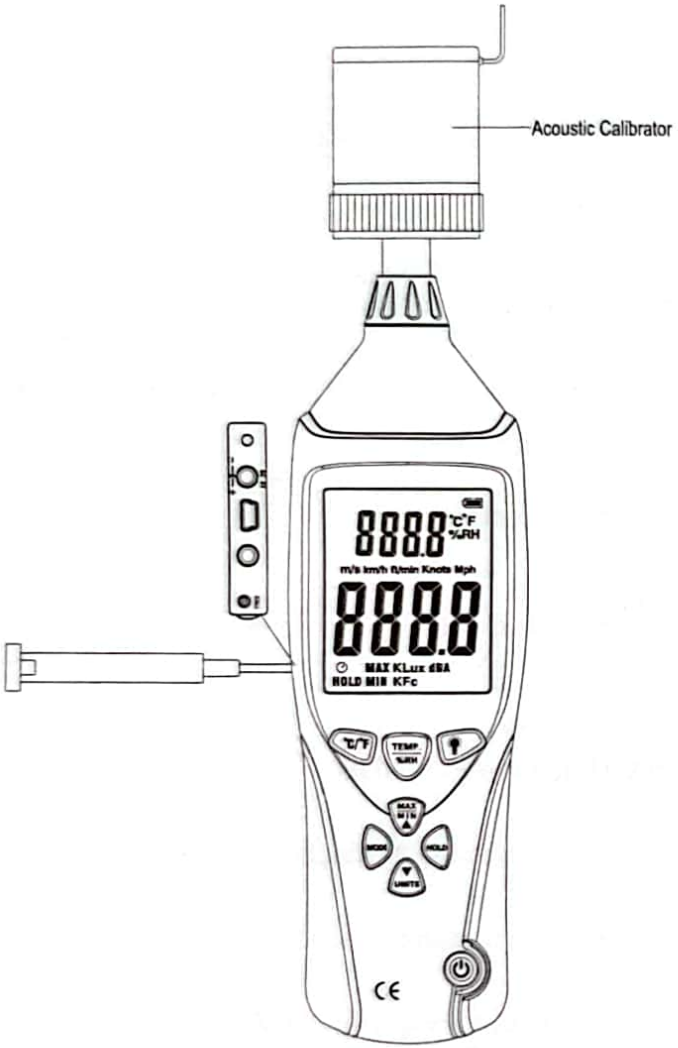
" button to select ℃ or ℉.

7.9 Sound Level Calibration Procedure

7.9.1 Set frequency weighting as A-weighting(dBA)

7.9.2 Insert the microphone housing carefully into the 1/2 inch insertion hole of the calibrator（94dB @ 1kHZ）

7.9.3 Turn on the switch of calibrator and adjust the CALL potentiometer until 94.0dB is displayed.



NOTE: All products are well calibrated before delivery.

Recommended recalibration cycle: 1 year.

8. 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 increases the noise measurement. Use the supplied windscreen to cover the microphone when appliance.

(4) Keep microphone dry and avoid severe vibration.

9. Accessories

① User's manual

② Temperature and Humidity probe

③ Anemo-probe

④ Light detector

⑤ Windscreen

⑥ Screw-driver

⑦ Tripod(Optional)

⑧ 9V battery and Adaptor(Optional)