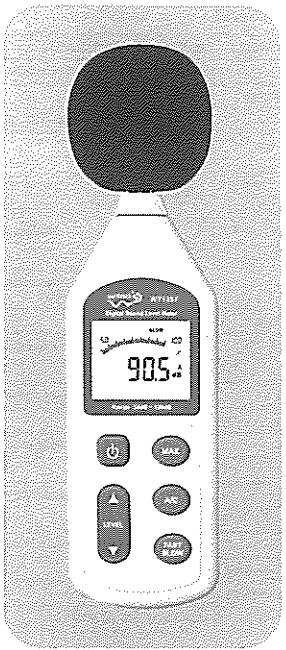
wintact®

Model: WT1357

Digital Sound Level Meter Operation manual



Version: WT1357-EN-00

A. Introduction

This equipment has been designed to meet the measurement requirement of Safety Engineers, Health, Industrial Safety offices and Sound Quality control in various environment, which include factory, office, traffic, family, and audio system.

This equipment has the following functions:

1. It is designed according to the IEC651 TYPE2 & ANSI S1.4 TYPE2
2. Accuracy up to +/- 1.5 dB
3. Measurement range: 30-130 dB
4. With two equivalent weighted sound pressure levels, A and C.
5. Fast & Slow dynamic characteristic modes.
6. AC and DC output for frequency analyzer level recorder, FFT analyzer, graphic recorder etc.

B. Safty Notice

Operation Environmental condition:

1. Below 2000 meters in height;
2. Humidity: <80%RH
3. Operation temperature: 0~40°C

Maintenence:

Use dry cloth to clean the unit, but never with any solvent.

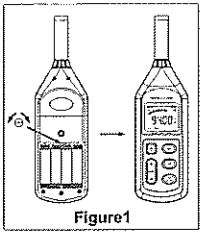


Figure1

B. Calibration Procedures:

Please use a Standard Acoustic Calibrator.

1. Make the following settings:
   - Equivalent weight: A
   - Time weight: FAST
   - Level range: 60 to 110 dB
   - Measurement mode: MAX function disable
2. Insert the microphone carefully into the 1/2 inch hole of the Calibrator.

3. Turn on the Calibrator and adjust the Protentiometer inside the battery compartment of the unit (shown in the Figure 1), until the LCD display the desired Level 94.0dB.

**Our products are all well calibrated before Shipment. Recommended recalibration cycle: 1 year.

D. Name and functions (Figure 2)

1. Electret Condenser Microphone.
2. LCD Display.
3. Power switch
4. Level range control switch:
   30dB~80dB; 50dB~100dB; 60dB~110dB;
   80dB~130dB; 30~130dB
5. Maximum value hold switch. (MAX)
6. Equivalent weight select switch:
   A: A weight for general sound level measurements.
   C: C weight for checking the low frequency content of noise.

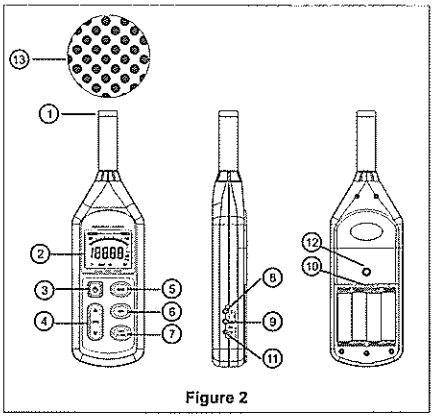


Figure 2

7. Time weight select switch:
   Fast: For normal measurements.
   Slow: For checking average level of fluctuating noise.
8. AC output terminal: 0.707 Vrms Correspo-
   nding to each range step.
9. DC out put terminal: output 10 mV/ dB
10. Calibration control
11. External DC 6V power supply terminal.
12. Tripod mounting screw.
13. Windscreen.

E. LCD Display (Figure 3)

1. Level range.
2. Under range.
3. Low battery indication.
4. Maximum value is held during measuring.
5. Measuring value.
6. Measuring Unit.
7. Frequency weight A/C.
8. Bar graph.
9. Over range.
10. Slow time weight.
11. Fast time weight.
12. Range under.

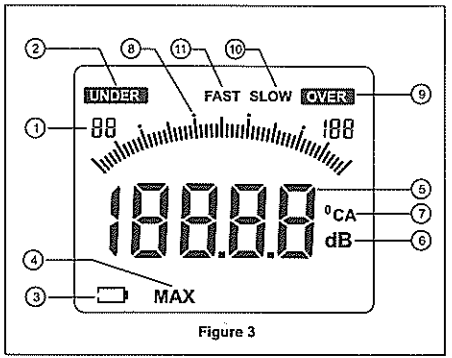


Figure 3

F. Pre-operations:

1. Open the battery door and insert 4 pieces AA battery into the battery compartment.
2. Cover the battery door.
3. When the battery voltage drops below the operating Voltage, mark "▭" appears . Please replaced with new batteries.
4. When the DC adapter is used, insert the plugs (3.5Φ) of the adapter into the DC 6V connector.

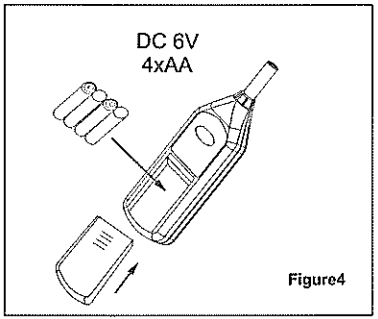


Figure4

G. Operation

1. Turn on the unit.
2. Select the desired measuring range until the LCD not display "Under" or "Over"
3. If measure general noise sound level, please select dBA.
4. If the sound source consists of the short brusts of only catching sound peak, set response to FAST. To measure average sound level, use the slow time weight.
5. When MAX mode is chosen.The instrument captures and hold the maximum noise level.

H. Caution

1. Do not operate the unit at high temperature and Humidity environment.
2. Please take out battery from unit if not in use for any extended period of time.
3. Once using the unit in the presence of wind, it is a must to mount the windscreen to not pick up undesired signals.

I. Specification

Measuring range	30~130dBA、35~130dBC
Accuracy	+/- 1.5 dB (under reference conditions)
Frequency range	31.5Hz~8.5KHz
Level range	30~80,50~100,60~110,80~130, 30~130dB
Linearity range	50dB / 100dB
Frequency weighting	A / C
Digital Display	4digits
Resolution	0.1dB
Sample rate	2 times/second
Bar graph	50 dB scale at 1 dB step for monitoring current sound pressure level display Sample rate: 20times/second
Over indication	OVER / UNDER
AC output	0.707Vrms at FS output impedance approx. 600 ohm
DC output	10mV/dB, output impendance approx. 100ohm
Time weight	FAST / SLOW
Microphone	1/2 inch electret condonser microphone
Max	MAX
Power supply	1.5V AA alkaline cells or DC 6V 100mA (maximum DC9V)
Power life	About 30 hours (alkaline battery)
Self calibration time	3 s
Operating condition	0~40°C, 10~80%RH
Storage condition	-10~60°C, 10~70%RH

Special Statement:
this company reserves the right of changing the product design and contents of instruction if changed the separate notice isn't given.

MADE IN CHINA CE