



Model AWA5688 Sound Level Meter



FEATURES

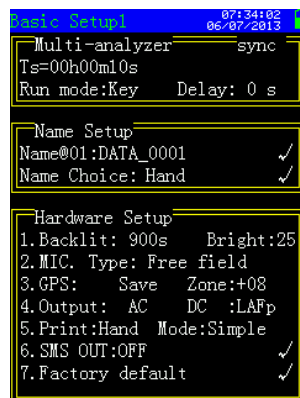
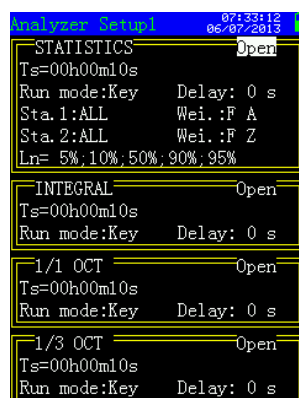
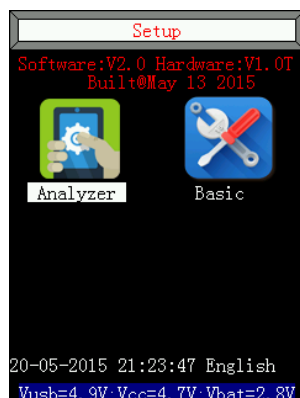
- ❖ A handheld noise measuring instrument
- ❖ **Multifunction and user- friendly** sound level meter(integrating SLM, 1/1 OCT, 1/3 OCT analyzer, FFT analyzer, Noise dosimeter, audio recording and data logging)
- ❖ 240×320 **color screen**
- ❖ Measure range up to **105 dB**
- ❖ **Synchronously** do integrating, statistical, real-time 1/1 OCT, 1/3 OCT, FFT analysis and noise dosimeter measure
- ❖ Comply with **IEC 61672 Class 2** and **IEC61260** and **IEC 61252**
- ❖ Modular design, integrating function is basic, other function is optional

USES

- ❖ Comprehensive noise measurements
- ❖ Environment noise certification
- ❖ Noise profile measurement of industrial noise
- ❖ Peak C sound level measurements
- ❖ Impulse noise measurements
- ❖ Workplace noise assessments
- ❖ Industry boundary assessments

OPTIONAL FUNCTION LIST

Menu Interface



1. Integrating Function

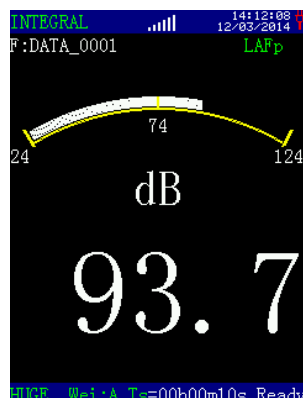
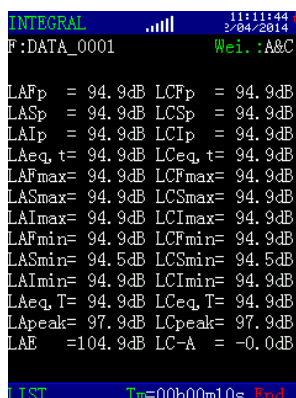
1) Measuring Interface: L_{xyi} , L_{xyp} , $L_{xeq,t}$, $L_{xeq,T}$, L_{xmax} , L_{xmin} , L_{xpeak} , LAE, LC-A, SEL

Note: x is A, C, Z, y is F, S, I

2) Integrating time: 1s~99h59m59s, set in random

3) Measuring Interface: Simple, List, Huge, Big interface

User interface



2. Statistical Analysis Function

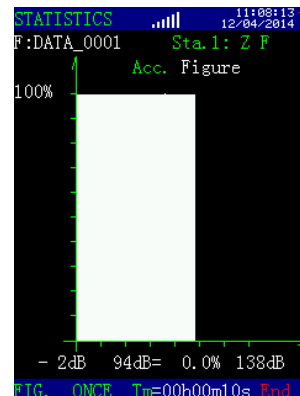
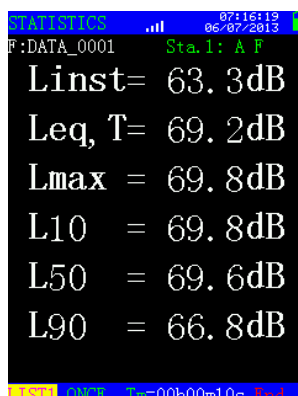
1) Main Function: The statistical analysis, 24 hours noise monitor automatically.

2) Mainly Measure Index: L_{xyp} , $L_{xeq,0.5s}$, $L_{xeq,T}$, L_{xymax} , L_{xymin} , L_{xyeqT} , SEL, Ln, SD

Note: x is A, C, Z, y is F, S, I, n is 1~99

24h measures index: L_d , L_n , L_{dn} .

User Interface



3. Real-time 1/1 Oct Spectrum Function

1) Filter type: Parallel (simultaneous) octave band filter,

$$G_{10}=10^{3/10}$$

2) Fulfills standards: IEC 61260: 1995 Class 2

3) Frequency bands: Octave bands 31.5Hz-8 kHz

4) Main Function: Noise real-time OCT spectral analysis

5) Frequency Weighting: A, C, Z can be chosen.

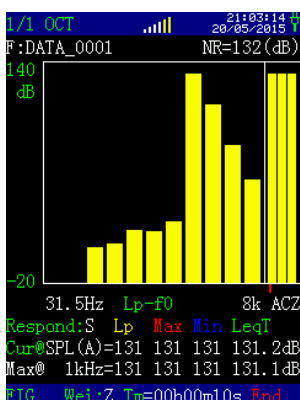
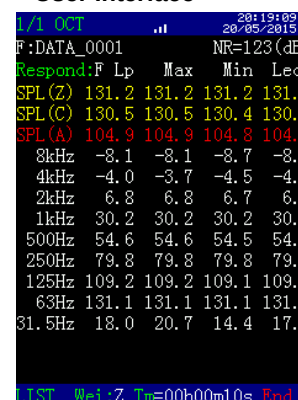
6) Filter Center Frequency (F_{0i}): 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1k Hz, 2 k, 4 kHz, 8 kHz Measuring Interface: List i and graph interface

7) Measuring Parameters: L_{xyp} , $L_{xeq,0.5s}$, $L_{xeq,T}$, L_{xymax} , L_{xymin} , Tm, NR (noise rating number)

Note: x is A, C, Z, F_{0i} y is F, S

8) Real-time Analysis Speed: 50 times/s

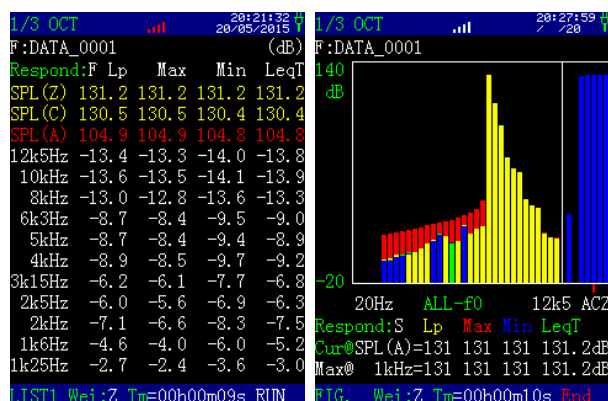
User Interface



4. Real-time 1/3 OCT Spectrum Function

- 1) Filter type: Parallel (simultaneous) 1/3 octave band filter, $G_{10}=10^{3/10}$
- 2) Fulfills standards: IEC 61260: 1995 Class 2
- 3) Frequency bands: 20Hz~12.5 kHz
- 4) Real-time Analysis Speed: 50 times/s
- 5) Measuring Interface: List interface and graph interface
- 6) Measuring Parameters: L_{xyp} , $L_{xeq,0.5s}$, $L_{xeq,T}$, $L_{xy\max}$, $L_{xy\min}$, T_m
Note: x is A,B,C,D,Z, F_{0i} y is F,S
- 7) Frequency Weighting: A, C, Z can be chosen

User Interface



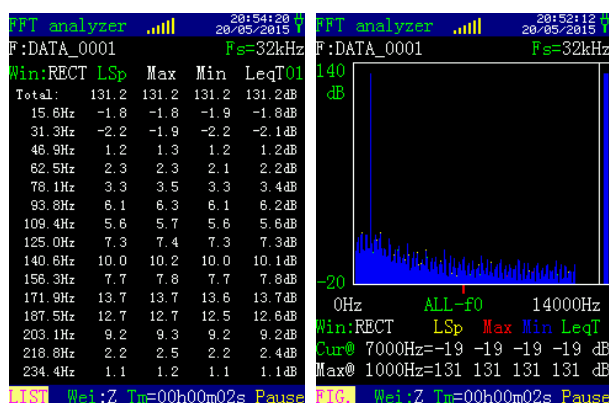
5. Dosimeter Function

- 1) Exchange rates: 3, 4, 5, 6
- 2) Fulfills standard: IEC 61252: 2002
- 3) Selectable Thresholds: 40-90dB
- 4) Selectable Criterion: 70-90dB
- 5) Lock and with limited access
- 6) Noise dose: 0.01%-999.99%
- 7) Measuring Parameters: L_{asp} , L_{asmax} , L_{asmin} , TWA , $L_{EX, 8h}$, L_{Cpeak} , L_{Zpeak} , $L_{Aeq,T}$, L_{AVG} , $DOSE$
- 8) Logging interval: 1min
- 9) Logging content: L_{AVG1m} , L_{Aeq1m} , L_{Cpeak} , L_{Zpeak} , L_{asmax} , L_{asmin}

6. Real-time FFT Analysis Function

- 1) Line Number: 2048 lines
- 2) Sampling Freq: 32 kHz, 16 kHz, 8 kHz, 4 kHz, 2 kHz
- 3) Measuring Parameters: MAX, MIN, L_{eqT}
- 4) Window Functions: hanning, blackman, flat-top, rectangular

User Interface



7. Data Logging Function

- 1) Logged data can be exported to PC
- 2) Logged content dependent on authorized and opening analyzer.
Logging of instantaneous data (L_p) and processed data (L_{eq} and other indexes), frequency analysis.
- 3) Logging interval: 20ms~2000ms can be chosen, a 20ms as adjustable unit.

8. SD Card & Sound Recording Function

- 1) The SD card can be used as a memory card after installing the program. Saved files can be opened in the EXCEL directly
- 2) When connected to the computer via USB interface, it changes SD card into U disk
- 3) Record Format: 8000 samples/s@8bit, 32000 samples/s@32bit
- 4) File Format: 'WAV' including calibration information
- 5) Record Time: fs=32k, record time less than 1h per file
fs=8k, record time less than 12h per file
- 6) Replay: by the meter or computer

Data is captured to the SD memory card inserted in the sound level meter

9. GPS Positioning Function

Measure longitude, latitude, altitude, movement speed which can be recorded together with the noise measurement result.

ACCESSORIES SUPPLIED



Φ60mm windscreen AWA8734



Power adaptor AWA8522 (5V, 2A)



USB cable with connector mini-USB
AWA 8730



U-disk (Transfer Software inside)



Carrying case AWA8780

OPTIONAL ACCESSORIES



AH40 mini-printer



Tripod (1.46m height)



32G memory SD card

Note: The SD card can be used as a memory card after installing the program.



GPS module



Class 2 Sound calibrator AWA6221B



Outdoor noise monitoring case AWA2581



Extension cable AWA8732 (5m, 10m, 20m)

SPECIFICATIONS

Fulfills Standards	IEC 61672 Class 2
	IEC 61260 Class 2
	IEC61252:2002
Microphone	1/2" prepolarized condenser microphone for free field (Sensitivity Level: -40dB)
Preamplifier	AWA14602 removable preamplifier
Frequency Range	20 Hz ~ 12.5kHz $\pm$ 1 dB (not including microphone)
Total Measurement Range	28dB-133dB
Self-generated Noise	<23 dB(A), 28 dB(C), 35 dB(Z)
Frequency Weighting.	Parallel (simultaneous) A, C, Z, B, D
Time Weighting	Parallel (simultaneous) F, S, I, Peak
Measurement Parameters	L_{xyp} , L_{xyi} , $L_{xeq,1s}$, $L_{xeq,T}$, L_{AE} , E , C_{peak} , L_{AFmax} , L_{Amin} , L_{AfeqT} , L_{AseqT} , L_{AieqT} . Note: X is A, C, Z and Y is F, S, I
A/D Bits:	24 bits
Sampling Frequency	32 kHz.
Calibration	Using Sound Calibrator Class 2 model AWA6221B
Correction Function	Diffusion field correction in order to comply with standards ANSI S1.4
Delay Time	The meter can delay 0~99s after pressing start measuring button
Back Erase Function	Elimination of undesired noise; example barking dogs, cars, doors
Display	240×320 color screen, adjustable brightness, backlight can be closed
Display Resolution	0.1 dB
Low battery indication	Symbol  indicate low battery
Data Storage (32 Mb FLASH RAM. 32G SD memory card is optional)	➤ 3328 groups of integrating measuring results only.
	➤ 3328 groups of statistical results only ('statistical 1' and 'statistical 2' analysis index are same.)
	➤ 2663 groups of statistical results only ('statistical 1' and 'statistical 2' analysis index are different.)
Print	Mini-printer
Internal Clock	Error less than 1 min/month
Output Interface	AC Output (full scale): 1.0V AC RMS; Output Impedance: 1k Ω ; Connector: ϕ 3.5 mm stereo plug
	DC Output: 20mV/dB; Output Impedance: 1k Ω ; Connector: DB-9 plug
	RS232 Interface: To computer for output some measurement results instantaneous values , also to mini-printer for printing Transmission speed: 4800, 9600,115200 bps
	USB Interface: available and no need device drive. Allow USB to be controlled via communication commands
Power Supply	4×LR6 alkaline battery or rechargeable batteries
	5 V external power supply
Battery Life	Longest time of 30 hours continuously with 4×LR6 alkaline battery
Dimensions	240 (H) x 80 (W) x 30 (D), mm.
Weight	0.35 kg. (include batteries)

EMC	Type X
Environment:	Working Temperature: -10 ~ 50 °C Storing Temperature: -20 ~ 70 °C Relative Humidity: 25 ~ 90 %
Accessories	AC adaptor, USB cable, windscreen, hand strap, windscreen fall prevention rubber, carrying case, USB-disk, user's manual
Bluetooth Module (Optional)	Can communicate with smart phone and realize wireless control sound level meter