



SCARLET | TECH

Professional Class 1 Sound Level Meter

ST-12D

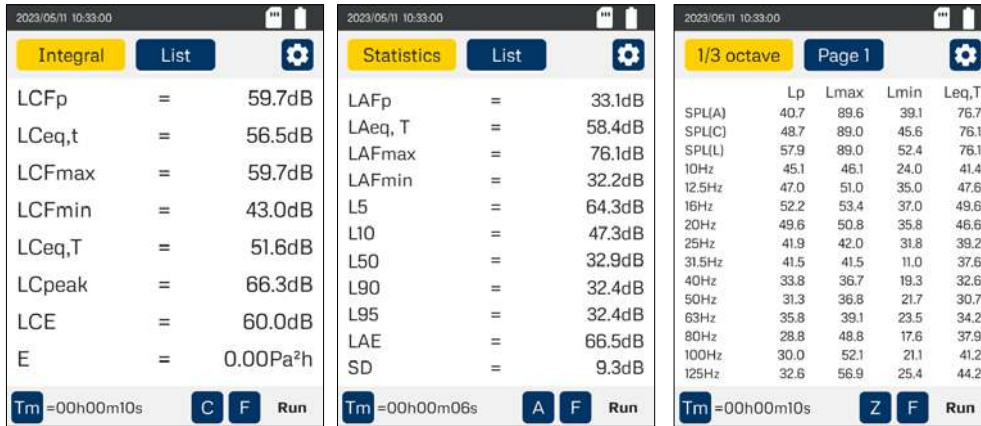


- IEC 61672-1: 2013 Class 1
- Easy-to-use interface
- Precise audio recording
- 2.4" full-color display
- Real-time sound monitoring via PC software
- Leq value with A/C/Z frequency weightings

Comprehensive Noise Measurement Capability

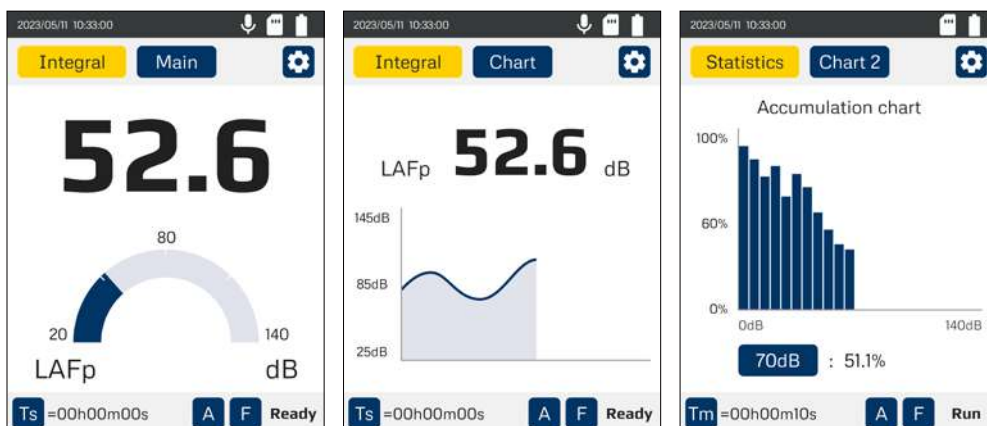
Designed as a professional Class 1 IEC 61672-1: 2013 precision sound level meter, ST-12D is an essential tool for noise safety across various applications.

Scarlet ST-12D is the next-generation model of ST-11D. It has the capability of conducting precise noise measurements with its comprehensive sound analyzers that calculate all the crucial parameters, such as Leq, Lpeak, Lmax, Lmin, and the optional ones of 1/1 or 1/3 octave band filters.



Various display modes

The ST-12D provides a clear full-color display of sound pressure levels in both list and chart formats, enabling quicker response times to critical conditions. The user-friendly interface makes it simple for both beginners and occupational safety experts to conduct environmental noise assessments and save time on additional training. ST-12D comes with PC software that enables viewing real-time noise data and all historical records directly on a computer.



Key Features

• High Precision Class 1 Microphone

Equipped with a IEC 61672-1: 2013 Class 1 microphone, ST-12D precisely measures noise levels from 25 to 140 dB, making it perfect for industrial and research applications.



• Output Interfaces

ST-12D includes various output interfaces, such as USB-C and serial ports for simple data retrieval and integration with your system, as well as an AC/DC port for analog signal output.



• Comprehensive Sound Analyzers

The standard model features a comprehensive analyzer for both sound and frequency analysis, with the option of upgrading to advanced functions once required. The analyzers include:

- Integral calculation
- Statistical calculation
- Dosimeter function
- (Optional) Real-time 1/1 & 1/3 octave band analysis



• Smart Management via PC Software

ST-12D can be connected with an intuitive PC software developed by Scarlet for:

- Retrieving measurement data from ST-12D
- Monitoring real-time noise levels
- Viewing historical records with charts and tables
- Replaying audio recordings



Package Contents

- ST-12D Class 1 sound level meter
- Windscreen
- USB-C cable
- RS232 cable
- AA batteries
- Calibration certificate
- User manual
- Waterproof carrying case



Optional Accessories

	Class 1 Sound Calibrator	<ul style="list-style-type: none">• IEC 60942 Class 1 / ANSI S1.40-1984 standards accuracy• For 1/2" condenser microphone calibration• Stably output sound level at 94dB & 114dB
	Portable Thermal Printer	<ul style="list-style-type: none">• Thermal printing of measurement results• Supports wireless pairing with ST-12D via Bluetooth or cable
	Microphone Extension Cable	<ul style="list-style-type: none">• Available in 2.5m & 5m lengths• Allows the microphone to be positioned away from the meter• Fits between the meter top and the preamplifier
	Outdoor Kit	<ul style="list-style-type: none">• Ideal for long-term outdoor noise monitoring• IP65 waterproof handy case keeps the SLM protected• Content includes: outdoor windshield, power bank, microphone extension cable

Specifications

Model	ST-12D
Fulfils Standard	IEC 61672-1: 2013 Class 1
Dimensions	250 × 76 × 33mm
Weight	340 g
Display	2.4-inch 240 × 320 pixel full-color display Adjustable brightness & backlight can be turned off.
Display Resolution	0.1 dB
Refresh Rate	0.5 s
Main Parameters of Measurement	LXYp, LXYmax, LXYmin, LXeq, LXeq,T, LXeq,t, LXpeak, L5, L10, L50, L90, L95, SD, Ld, Ln, Ldn, SEL, LXE, E, TWA, Lex, 8h, LAVG, DOSE X = A, C, Z Y = F, S, I, I10
Measurement Range	25 ~ 140 dB (143 dB C Peak)
Accuracy	± 0.5 dB
Frequency Range	10 Hz ~ 20 kHz
Frequency Weighting	A, C, Z
Time Weighting	F, S, I, I10
Integrating Time	1s ~ 99 h 59 m 59 s
Audio Recording	Record noise data in MP3/WAV format Synchronize/Trigger mode Sampling rate: 12 kHz, 24 kHz, 48 kHz / 16 bit, 24 bit
Storage Capacity	4 GB internal memory 64 GB SD card
Output Interface	USB type-C, Bluetooth, AC/DC signal, Serial
Power Supply	4 x AA alkaline batteries External power supply (USB type-C adapter): 5V, 1A
Operation Time	Max 24hrs by 4 x AA alkaline batteries (The operation time varies depending on the device settings and battery type)
Operation Environment	Working temperature: -20 ~ 60 °C Relative humidity: 20% ~ 90%



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