



SV 973

MICROPHONE
LIFETIME
WARRANTY



Class 2 Sound Level Meter & Sound Exposure Meter

The SV 973 is a Class 2 sound level meter, with a microphone based on MEMS technology, covered by a lifetime warranty. The meter's measurement range from 25 to 128 dB enables its use in industrial and environmental noise measurements. For measurements of noise at work, the intelligent sound exposure meter function shifts the measuring range to 141 dB Peak. The SV 973 can measure broad-band results with all of the necessary weighting filters as well as 1/1 octave or 1/3 octave band filters.





SV 973

Sound Level Meter Class 2



Updated hardware

New microphone with
a lifetime warranty



H&S Assistant

Application for
mobile devices



New Options

RT 60 and STIPA
measurements

The SV 973 Sound Level Meter is equipped with an innovative microphone that combines two MEMS microphones in one 1/2" housing. This solution makes it possible to obtain two measuring ranges with a total value from 25 dBA up to 141 dBA in the frequency range up to 10 kHz.

The SV 973 uses the new low-power Bluetooth® interface enabling the current results to be previewed on a smartphone or tablet as well as controlling the measurement Start / Stop. The Assistant application also sounds an alarm when preset noise limits are exceeded.

Analyzer options such as 1/1 and 1/3 real-time octave analysis, audio recording, reverberation time measurement, and even STIPA speech intelligibility significantly exceed the capabilities offered by other class 2 meters, and in many cases class 1 meters.

Key Features



Life-time warranty on
MEMS microphone

The SV 973 is a Class 2 sound level meter with a wide frequency range up to 10 kHz. A unique feature of the SV 973 is the microphone based on MEMS technology with a lifetime warranty.



Occupational noise
measurements

The meter is suitable for measurements of noise at work in accordance with standards such as ISO 9612, OSHA, MSHA and ACGIH, and hearing protector selection in accordance with ISO 4869-2.



Real-time
frequency analysis

The 1/1 octave analysis is often used for the selection of hearing protectors. The 1/3 octave function makes it possible to determine the influence of high or low frequencies on the overall values. The STIPA and RT 60 can be used in applications where it is permissible to use class 2 meters for measuring the speech transmission and reverberation time. These functions can be activated at any time by ordering an activation code.



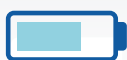
Triggered
audio recording

Audio recording is synchronised with a noise time-history which can be opened and played back in PC software to enable noise source recognition. Audio recording can be triggered based on a threshold or time. It can be activated at any time by ordering an activation code.



Time-history
logging

The time history logging of results such as Leq, Max, Min and Peak with two simultaneous logging steps is saved to 8 GB internal memory.



Low power
consumption

Using MEMS technology, the ST 973 microphone is resistant to mechanical shocks and consumes less energy, which translates into an extremely long battery life, of up to 38 hours!

Software



Supervisor is a software package for health and safety specialists. The package supports all Svantek instruments for the health and safety market. Supervisor software supports data download, instrument configuration and provides a complete set of tools for determination of occupational noise exposure from noise level measurements in accordance with all standards using TWA and DOSE such as OSHA, ACGIH, MSHA, ISO 9612.



Assistant is a smartphone application dedicated for the Svantek Health and Safety instrumentation. The application uses the Bluetooth® interface enabling current results to be previewed on a smartphone or tablet as well as controlling the measurement Start / Stop and Markers. The Assistant also sounds an alarm when pre-set noise or vibration limits are exceeded.

Optional accessories



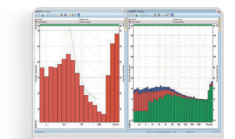
SV 34
Class 2 Sound Calibrator
114 dB at 1 kHz



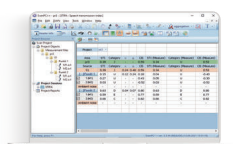
SA 72
Waterproof
carrying case



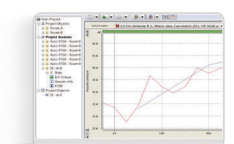
SA 21
Tripod



SF 973_P1
Package 1/1 & 1/3 octave
and audio recording



SF 973_20
STIPA
measurement



SF 973.5
RT 60
reverberation time

Technical Specifications

Standards	Class 2: IEC 61672-1:2013
Weighting Filters	A, C, Z
Time Constants	Slow, Fast, Impulse
RMS Detector	Digital True RMS detector with Peak detection, resolution 0.1 dB
Microphone	MEMS ST 973 microphone in 1/2" casing
Preamplifier	Integrated
SOUND LEVEL METER	
Linear Operating Range	32 dBA RMS ÷ 128 dBA Peak (in accordance to IEC 61672)
Dynamic Range	25 dBA RMS ÷ 128 dBA Peak (typical from noise floor to the maximum level)
SOUND EXPOSURE METER	
Linear Operating Range	50 dBA RMS ÷ 141 dBA Peak (in accordance to IEC 61672)
Dynamic Range	43 dBA RMS ÷ 141 dBA Peak (typical from noise floor to the maximum level)
Frequency Range	20 Hz ÷ 10 kHz
SOUND LEVEL METER Results	Elapsed time, Lxy (SPL), Lx _{eq} (LEQ), Lx _{peak} (PEAK), Lx _{ymax} (MAX), Lx _{ymin} (MIN), where x - weighting filter A/ B/ C/ Z; y - time constant Fast/ Slow/ Impulse Ovl (OVERLOAD), Lxye (SEL), LN (LEQ STATISTICS), Lden, LEPd, Ltm3, Ltm5
SOUND EXPOSURE METER Results	Lxy (SPL), Lx _{eq} (LEQ), Lx _{peak} (PEAK), Lx _{ymax} (MAX), Lx _{ymin} (MIN), DOSE, DOSE_8h, PrDOSE, LAV, Lxye (SEL), Lxye8 (SEL8), PLxye (PSEL), E, E_8h, LEPd, PTC (PEAK COUNTER), PTP (PEAK THRESHOLD %), ULT (UPPER LIMIT TIME), TWA, PrTWA, Lc-a Exchange Rate 2, 3, 4, 5, 6
Measurement Profiles	Simultaneous measurement in three profiles with independent set of filters (x) and detectors (y)
Statistics	Ln (L1-L99)
Data Logger	Time-history logging of summary results, spectra with two adjustable logging steps down to 100 ms
1/1 Octave Analysis (option)	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 31.5 Hz to 8 kHz
1/3 Octave Analysis (option)	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 20 Hz to 10 kHz
Audio Recording (option)	Audio recording on trigger or continuous mode, 12 kHz sampling rate, wav format
Voice Comments	Audio records on demand, created before or after measurement, added to measurement file
Memory	8 GB internal memory
Display	Colour 96 x 96 pixels OLED type
Keyboard	8 push buttons
Communication Interfaces	USB-C, Bluetooth® 5.2
Power Supply	Four AAA alkaline or rechargeable NiMH batteries (not included) Operation time 20 h ÷ 38 h (depending on configuration and environmental conditions) USB interface 100 mA HUB
Environmental Conditions	Temperature from -10 °C to 50 °C (14 °F to 122 °F) Humidity up to 95 % RH, non-condensed
Dimensions	205 mm x 52 x 20 mm (including microphone and preamplifier)
Weight	Approx. 225 grams with batteries (Approx. 8.20 oz)

The policy of our company is to continually innovate and develop our products.
Therefore, we reserve the right to change the specifications without prior notice.