



# SV 973A

## Class 2 Sound Level Meter & Sound Exposure Meter

The SV 973A 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 129 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 973A 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 973A

## Sound Level Meter Class 2



### Updated hardware

New microphone with a lifetime warranty



### Assistant PRO

Mobile App for iOS and Android devices



### Building Acoustics

RT 60 and STIPA measurements

The SV 973A 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 973A 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 PRO 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 973A is a Class 2 sound level meter with a wide frequency range up to 10 kHz. A unique feature of the SV 973A 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 new 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 PRO is a smartphone application dedicated to Svantek's sound and vibration instruments. The application uses the Bluetooth® interface to preview current results on a smartphone or tablet, as well as control measurement start/stop and markers. The Assistant PRO also sounds an alarm when preset sound or vibration limits are exceeded. The application is available for both Android and iOS devices.

## Optional accessories



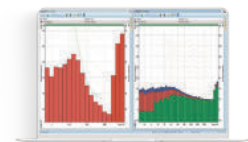
SV 34  
Class 2 Sound Calibrator  
114 dB at 1 kHz



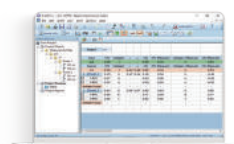
SA 72  
Waterproof  
carrying case



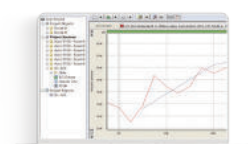
SA 21  
Tripod



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



SF 973A\_20  
STIPA  
measurement



SF 973A\_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 973A microphone in 1/2" casing	
Preamplifier	Integrated	
<b>SOUND LEVEL METER</b>		
Linear Operating Range	30 dBA RMS ÷ 129 dBA Peak (in accordance to IEC 61672)	
Dynamic Range	25 dBA RMS ÷ 129 dBA Peak (typical from noise floor to the maximum level)	
<b>SOUND EXPOSURE METER</b>		
Linear Operating Range	45 dBA RMS ÷ 141 dBA Peak (in accordance to IEC 61672)	
Dynamic Range	40 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 <sub>eq</sub> (LEQ), Lx <sub>peak</sub> (PEAK), Lx <sub>ymax</sub> (MAX), Lx <sub>ymin</sub> (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 <sub>eq</sub> (LEQ), Lx <sub>peak</sub> (PEAK), Lx <sub>ymax</sub> (MAX), Lx <sub>ymin</sub> (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	225 mm x 52 x 20 mm (including microphone)	
Weight	Approx. 225 grams with batteries	

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.