SVANTEK
health and safety

SV 971A

Class 1 Sound Level Meter & Sound Exposure Meter

The SV 971A is the newest class 1 sound level meter in the 971 series, our bestselling sound level meters for professionals. The appearance of the 971 series on the market changed the perception of class 1 sound level meters. The small size and weight are now appreciated by professionals who carry out measurements with a hand-held instrument.

The new model has been fitted with a new microphone with a large dynamic range of 120 dB and a low-power Bluetooth® for connection with mobile applications.

SV 971A

Sound Level Meter

Updated hardware

Large measurement range with a new microphone

The SV 971A is fitted with a new measuring microphone offering the LAeq linear measurement range from 27 to 137 dB (140 dB Peak) in a single range. The improved design of the microphone ensures even better long-term stability of the microphone sensitivity.

H&S Assistant

Application for mobile devices

The SV 971A uses the new low-power Bluetooth® interface enabling 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.

New Options

RT 60 and STIPA measurements

Along with the new hardware additions, the SV 971A has been equipped with a new internal program that supports the measurements of the reverberation time RT 60 and STIPA speech intelligibility, both supported by a dedicated mobile application.

Key Features

Class 1 accuracy in a wide measurement range

With the new microphone, the SV 971A can measure from 27 dBA Leq up to 140 dBA Peak in a single range with the class 1 precision in accordance with the IEC 61672-1.
For measurements of extremely low noise level, the additional LOW range is also available.

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 allows the determination of the influence of high or low frequencies on overall values. Functions can be activated at any time by ordering the activation code.

Triggered audio recording

Audio recording is synchronized with a noise time-history and it can be opened and played back in PC software enabling noise source recognition. Audio recording can be triggered on threshold or time. It can be activated at any time by ordering the 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 on a 32 GB microSD card (upgradeable to 128 GB).

Low power consumption

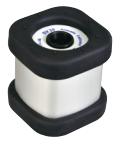
One of the biggest advantages of using SV 971A is its power efficiency. It can run up to 24 hours on one set of small AAA batteries.

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

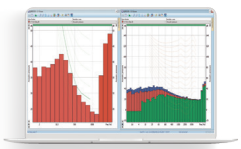


SV 36
Class 1 Acoustic Calibrator
94 dB / 114 dB at 1 kHz

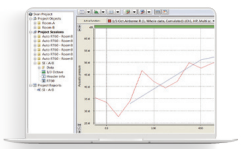
SA 72
Waterproof carrying case

SA 271A
Microphone
Outdoor Protection Kit

SC 91A
Microphone
Extension Cable



SF 971A_P1
Package 1/1 & 1/3 octave and audio recording



SF 971A_P2
Package RT 60 and STIPA

Technical Specifications

Standards	Class 1: IEC 61672-1:2013, Class 1: IEC 61260-1:2014
Weighting Filters	A, B, C, Z, LF
Time Constants	Slow, Fast, Impulse
RMS Detector	Digital True RMS detector with Peak detection, resolution 0.1 dB
Microphone	ACO SV 7152, 32 mV/Pa, prepolarised 1/2" condenser microphone
Preamplifier	SV 18A detachable (60 UNS thread)
NORMAL Linear Operating Range Dynamic Range	 27 dBA RMS ÷ 140 dBA Peak (in accordance to IEC 61672) 20 dBA RMS ÷ 140 dBA Peak (typical from noise floor to the maximum level)
LOW Linear Operating Range Dynamic Range	 24 dBA RMS ÷ 126 dBA Peak (in accordance to IEC 61672) in a single range 17 dBA RMS ÷ 126 dBA Peak (typical from noise floor to the maximum level)
Internal Noise Level (acoustical compensated)	20 dBA RMS in the range NORMAL 17 dBA RMS in the range LOW
Dynamic Range	120 dB
Frequency Range	5 Hz ÷ 20 kHz (+/- 3 dB)
Sound Level Meter Results	Elapsed time, Lxy (SPL), Lxeq (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), where x - weighting filter A/ B/ C/ Z; y - time constant Fast/ Slow/ Impulse LR (ROLLING LEQ OPTION), Ovl (OVERLOAD), Lxye (SEL), LN (LEQ STATISTICS), Lden, LEPd, Ltm3, Ltm5
Sound Exposure Meter Results	Lxy (SPL), Lxeq (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), DOSE, (optional) DOSE_8h, PrDOSE, LAV, Lxye (optional) (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), complete histogram in meter mode
Data Logger	Time-history logging of summary results, spectra with two adjustable logging steps down to 100 ms and down to 2 ms in the RT 60 mode
1/1 Octave Analysis (option)	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 16 Hz to 16 kHz
1/3 Octave Analysis (option)	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 8 Hz to 20 kHz
Audio Recording (option)	Audio recording on trigger or continuous mode, 12 / 24 / 48 kHz sampling rate, wav format
Voice Comments	Audio records on demand, created before or after measurement, added to measurement file
Memory	MicroSD card 32 GB (removable & upgradeable up to 128 GB)
Display	Colour 96 x 96 pixels OLED type
Keyboard	8 push buttons
Communication Interfaces	USB 2.0, Bluetooth® 5.2 SP 76 - RS 232 cable with external power supply connector (optional)
Power Supply	Four AAA alkaline or rechargeable NiMH batteries (not included) Operation time 16 h ÷ 24 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	232.5 mm x 56 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.

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