

FACTORY CALIBRATION DATA OF THE SV 971A No. 001001

with preamplifier SVANTEK type SV18A. No. 002002 and
with microphone ACO PACIFIC type 7152 No. 003003

1. CALIBRATION* (acoustical)

LEVEL METER function; Range: Normal; Reference frequency: 1000Hz; Sound Pressure Level: **114.06** dB.

Calibration measured with the microphone ACO PACIFIC type 7152 No. 003003. Calibration factor: **0.38** dB.

2. LINEARITY TEST* (electrical)

LEVEL METER function; Range: Low; Characteristic: A; $f_{sin} = 8000$ Hz

Nominal result LEQ [dB]	24.0	25.0	26.0	34.0	114.0	124.0
Error [dB]	0.1	-0.1	0.1	-0.0	-0.0	-0.0

LEVEL METER function; Range: Normal; Characteristic: A; $f_{sin} = 31.5$ Hz

Nominal result LEQ [dB]	27.0	28.0	29.0	37.0	89.0	99.0
Error [dB]	0.1	0.1	0.1	0.0	-0.0	0.0

LEVEL METER function; Range: Normal; Characteristic: A; $f_{sin} = 1000$ Hz

Nominal result LEQ [dB]	27.0	28.0	29.0	37.0	129.0	139.0
Error [dB]	0.1	0.1	0.1	-0.0	-0.0	-0.0

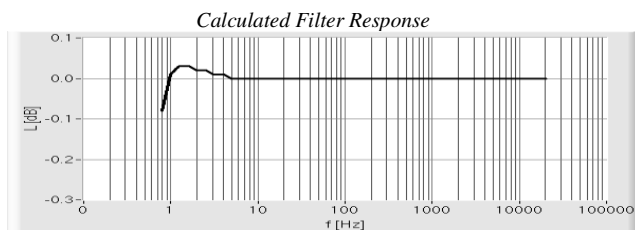
3. OVERLOAD INDICATION* (electrical)

LEVEL METER; Characteristic: A; Range: Normal; $f_{sin} = 4000$ Hz;

Positive half cycle	Negative half cycle	
Indication PEAK [dB]	Indication PEAK [dB]	Error [dB]
140.7	140.9	-0.2

4. FREQUENCY RESPONSE* (electrical)

LEVEL METER function; Characteristic: Z; Range: Normal; Input signal =120 dB;



Measured Filter Response with Preamplifier SV18A
(*f*-frequency, *L*-level)

f [Hz]	L [dB]	f [Hz]	L [dB]	f [Hz]	L [dB]
10	-0.0	63	0.0	4000	0.0
12.5	0.0	125	0.0	8000	0.0
16	0.0	250	0.0	16000	0.1
20	0.0	500	0.0	20000	0.1
25	0.0	1000	0.0		
31.5	0.0	2000	0.0		

All frequencies are nominal center values for the 1/3 octave bands

* measured with preamplifier SVANTEK type SV18A. No. 002002.

5. INTERNAL NOISE LEVEL (acoustical - compensated)

LEVEL METER function; Characteristic: A;

Range	Low	Normal
Indication [dB]	≤17	≤20

Noise measured in special chamber, with reference microphone G.R.A.S type 40AN No. 73421

ENVIRONMENTAL CONDITIONS

Temperature	Relative humidity	Ambient pressure
24 °C	32%	989 hPa

TEST EQUIPMENT

Item	Manufacturer	Model	Serial no.	Description
1.	SVANTEK	SVAN 401	65	Signal generator
2.	SVANTEK	SVAN 979	69475	Sound & Vibration Analyser
3.	RIGOL	DM3068	DM30155100773	Digital multimeter
4.	SVANTEK	SV30A	7449	Acoustic calibrator
5.	SVANTEK	ST03	-	Microphone equivalent electrical impedance (18pF, 100kOhm)

CONFORMITY & TEST DECLARATION

1. Herewith Svantek company declares that this instrument has been calibrated and tested in compliance with the internal ISO9001 procedures and meets all specification given in the Manual(s) or respectively surpass them.
2. The acoustic calibration was performed using the Sound Calibrator and is traceable to the GUM (Central Office of Measures) reference standard - sound level calibrator type 4231 No 2292773.
3. The information appearing on this sheet has been compiled specifically for this instrument. This form is produced with advanced equipment & procedures which permit comprehensive quality assurance verification of all data supplied herein.
4. This calibration sheet shall not be reproduced except in full, without written permission of the SVANTEK Ltd.

Calibration specialist: Tymoteusz Żelobowski

Test date: 2024-11-18