

1. INTRODUCTION

The portable sound and vibration analyser SVAN 912AE has been dedicated for the signal measurement and analysis in the frequency band: 0.8 Hz - 22.6 kHz. The instrument is able to operate in the field using the internal battery. Depending on the selected operating mode, the instrument can be used as Type 1 Sound Level Meter, Type 1 Vibration Meter or Real-Time Signal Analyser (FFT, 1/1 and 1/3 octave). The front view of the instrument is presented in Fig. 1.1 and the rear view – in Fig. 1.2.

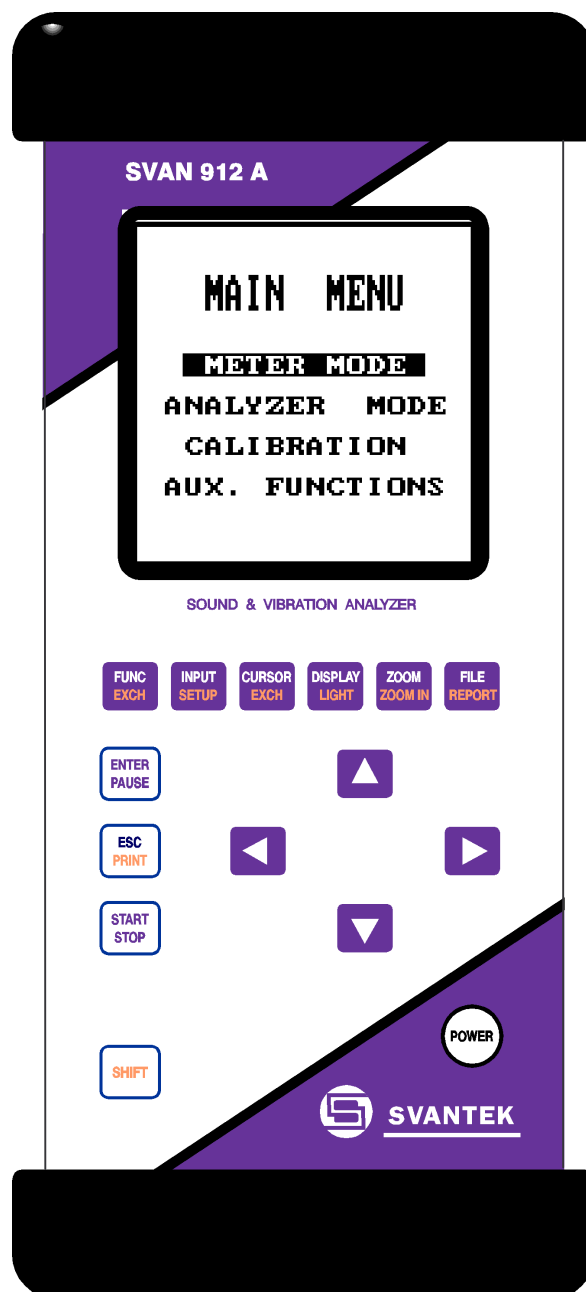


Fig. 1.1. The front view of the instrument

The condenser microphone preamplifier, the charge accelerometer or the IEPE accelerometer can be connected and powered via the 7-pin input socket (Lemo compatible type). The measurement of the voltage signal is also possible throughout that input. Using the SV 06A and the SV 08A modules four channel measurements are also possible with the SVAN 912AE instrument. Extension of the SVAN 912AE control program (four channel measurement functions) is supplied separately (as an option).



Fig. 1.2. The rear view of the instrument

The external interrupt input (EXT.INT.) enables one the synchronisation of the instrument with the external events. It will be used in the further expansions of the instrument's measurement capabilities, namely:

- the measurement of the sound pressure level (SPL) as a function of distance,
- the balancing of the rotating mass (machinery),
- the multichannel measurements e.t.a.

The RS 232 interface links the SVAN 912AE with practically all existing Personal Computers. Several additional measurement data collections and manipulation tasks are supported by the optional PC program - SVAN_PC.

The AES / EBU interface links the SVAN 912AE with four-channel modules (SV 06A and SV 08A), enables one to register (in the digital form) the measurement signals on DAT, to perform the post-processing of the registered signals and also – to establish the real time measurement system based on a PC.