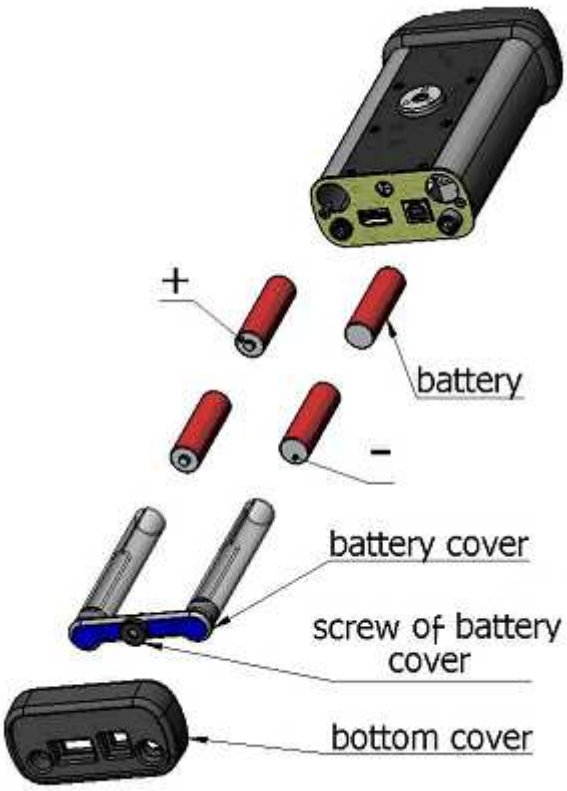
SVAN 958
Sound & Vibration Analyser

1. BATTERIES INSTALLATION

- Remove the black bottom cover of the instrument.
- Unscrew battery cover.
- Load the batteries (follow polarity as illustrated on the back side of the instrument).
- Reassemble the instrument.



2. SETTING UP THE INSTRUMENT

- Switch the instrument on (press Alt + Start Stop for a moment). Press Cal. ESC Pause to skip warm up time.

Press (Shift + Menu ENTER Save) to open the MENU. Use ◀ ▶ ▲ ▼ push buttons for selecting options in the MENU. Use Menu ENTER Save for the confirmation of chosen option. Use Cal. ESC Pause to go back to the previous MENU level.

- Start work with the instrument from setting date and time (Real Time Clock). Go to MENU (Shift + Menu ENTER Save) / SETUP / RTC.

- Set up proper DATE and TIME using ◀ / ▶ to select the field to be changed and Shift + ◀ or Shift + ▶ to change the setting.
- Press Menu ENTER Save to confirm entered settings. Press Cal. ESC Pause to go back to the main menu.

- Go to MENU > FUNCTION > MEASUREMENT FUNCTION and select required function.
- Go to MENU > INPUT > MEASUREMENT SETUP and configure following parameters:
  - START DELAY - period between pressing START and the beginning of the measurement
  - INT. PERIOD - integration period of the measurement
  - CYCLES NUMBER - number of the measurement cycles
  - LOGGER STEP - logging time-step
- Press Menu ENTER Save for confirmation.
- Go to MENU > INPUT > CHANNELS SETUP > CHANNEL 1/2/3/4 and set up required mode, range, filter, and detector time-constant for each channel. Press Menu ENTER Save for confirmation.
- Go to LOGGER SETUP and select logger results to be recorded in the logger files for channels. Press Menu ENTER Save for confirmation. Press Cal. ESC Pause to go back to the main menu.
- Go to FILE > SAVE OPTIONS and switch on AUTO SAVE option (select NUMBER option in AUTO SAVE position) to save measurement results automatically (see part: MAKING A BASIC MEASUREMENT). Press Menu ENTER Save for confirmation (if following message "INTEGRATION TIME TOO SHORT AUTO SAVE NOT AVAILABLE" will appear on the display, go back to the MEASUREMENT SETUP window and set integration period greater than 25 seconds). Edit the name of the auto-save file using ◀ / ▶ to select the field to be changed and ▲ or ▼ to change the setting. Press Menu ENTER Save for confirmation.
- You can save selected settings in SETUP file - Go to FILE > SAVE SETUP, edit a name of the file and press Menu ENTER Save for confirmation. In order to load previously saved setup file go to FILE/ LOAD SETUP, select setup to be loaded and press Menu ENTER Save for confirmation.
- Calibrate the instrument if it is required (see section below).
- Start the measurement (see section MAKING A BASIC MEASUREMENT).

3. CALIBRATION

- **In the case of vibration measurements**
  - Go to MENU > FUNCTION > CALIBRATION, choose the channel to be calibrated and go to BY SENSITIVITY window.
  - Enter the SENSITIVITY according to the transducer you use (e.g. 10 mV/ms^2, 100 mV/ms^2). In the case when non-metric units are required go to SETUP / VIBRATION UNITS and select NON–METRIC UNITS option. Press Menu ENTER Save for confirmation.
  - Press Menu ENTER Save to accept the calibration factor.
  - Repeat all steps for other "vibration" channels.

- **In the case of sound measurements**
  - Go to MENU > FUNCTION > CALIBRATION, choose the channel to be calibrated and go to BY MEASUREMENT window.
  - Enter the CAL. LEVEL according to the calibrator you use (e.g. 113.9 dB, 93.9 dB).

- Put the calibrator on the microphone you calibrate and switch the calibrator on (SV 30A calibrator switches on automatically).
- Press Start Stop to start the calibration measurement.
- When the calibration measurement is done, it shows CAL. RESULT e.g. LEQ=114.22 dB.
- If you need to restart the calibration, press Start Stop again.
- Press Menu ENTER Save to accept the calibration factor.

Repeat all steps for the other "sound" channels.

4. MAKING A BASIC MEASUREMENT

Press Start Stop to start and to stop a measurement. During the measurement you cannot change the settings. The loudspeaker icon indicates the measurement in progress, the envelope icon indicates the results are saved in the logger files, the battery icon indicates the voltage level. When the AUTO SAVE option is switched on the measurement result will be saved automatically after the end of the integration period, otherwise press Alt + Menu ENTER Save push-buttons (or go to MENU > FILE > SAVE) after the measurement.

- You can edit the name of the file (press ▲ to edit name) and press Menu ENTER Save. You can use AUTO NAME option - the last digit of the file's name will be automatically incremented any time you save the file (e.g. 7JAN0, 7JAN1, 7JAN2). Press Menu ENTER Save to save data.
- There are two types of files for storing measurement results – result files with the main results and logger files with time-history of measured signal.

5. DISPLAY OPTIONS

Press ▲ or ▼ push-button in order to view the result from 1-PROFILE mode, 4-CHANNEL mode or logger. In 1-PROFILE mode use Shift + ▲ to select channel/profile to be viewed.

6. LOADING MEASUREMENT RESULTS

To view saved measurement results, go to MENU (Shift + Menu ENTER Save) > FILE > LOAD, select file you wish to load and press Menu ENTER Save.

7 . DELETING MEASUREMENT RESULTS

- To delete result or setup file one by one, go to MENU > FILE > DELETE, select file you wish to delete and press Menu ENTER Save.
- To delete all RESULT FILES, all LOGGER FILES or all SETUP FILES, go to FILE > DELETE ALL, tick required fields and press Menu ENTER Save to delete selected files.