

# USER'S MANUAL For

# Spectrum Instruments Ltd's

Model SVM-130

# **Pen-Size Vibration meter**

# **English Unit version**

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## General

The **SVM-130** is a 3-Parameter vibration measurement tool capable of measuring vibration velocity, displacement and acceleration (caused by rotational and structural problems like imbalance, misalignment, looseness, etc.).

# Operation

- Press the meter's tip gently on the object being measured while keep the meter perpendicular to it (The pressure should be about 1 pound).
- Select the measure parameters by click the key quickly: Acc: Acceleration (unit: g): equivalent Peak Value VEL: Velocity (unit: inch/s): True RMS Value; DIS: Displacement (unit; mil): equivalent Peak-Peak
- Start the measurement by continuously pressing the key.
- You may use the remote switch instead of pressing the key. If at the same time use a magnet base to fix the meter on the object, it will give you a more reliable and consistent reading.
- After releasing the key, the result of the last measurement will be held for about 40 seconds, and then the meter will power off automatically.
- The 1st character displayed on LCD will be A/U/D, mean Acceleration/Velocity/Displacement. Measured value follows.
- The LCD will show 1 . if exceed this upper limit.

# **Specification**

1) Sensor type: Accelerometer

## 2) Measurement Parameter:

Acceleration (unit: g): equivalent Peak Value Velocity (unit: inch/s)]: True RMS Value; Displacement (unit: mil) equivalent Peak-Peak

#### 3) Measurement Range:

Acceleration: 0.02 to 5 g Velocity: 0.02 to 2 inch/s Displacement: 0.01 to 20 mil

4) Frequency Response & Accuracy:

Acceleration:  $20Hz \sim 1kHz$ ,  $\pm 5\% \pm 2$  digits Velocity:  $10Hz \sim 1000Hz$ ,  $\pm 10\% \pm 2$  digits Displacement:  $10 Hz \sim 500Hz$ ,  $\pm 10\% \pm 2$  digits 5) **Display:** 4 digits LCD 6) **Battery:** size 1/2 AA, 3.6V, operating current 4-7mA 7) **Battery capacity:** 100 hours continuously or 4000 times operation 8) **Operation Environment:** Temperature:  $0^{\circ}C \sim 50^{\circ}C$ , Relative humidity: <85% 9) **Dimensions:**  $160 \times 25 \times 17$  (mm)

10) Weight: 120g (including battery)

### Notes:

- Avoid intense impact, high temp. & immersion in water
- If the SVM-130 has been used for over one year, please contact Spectrum Instruments re performance check.

### Warranty:

1 year on material and workmanship (mishandling & batteries are not covered by this warranty)