

INSTRUCTIONG MANUAL VIRBRTION METER
FUNCTION AND APPLICATION
SPECIFICATION

This vibration meter is a pocket-sized instrument for measuring mechanical vibration displacement and intensity. which is suitable for inspection of various mechanical vibration in power, petroleum, chemical, metal surgical and other industrial departments.

FUNCTION CHARACTER

1. Just need to connect to the sensor, it will finish a completely testing system.
2. Use P-P value to express the vibration displacement value.
3. Use RMS to express the vibration speed value.
4. 3 1/2 LCD display.
5. Use 9V battery, and have low battery indication function.

SPECIFICATION

- 1.Measurement range: vibration displacement: 0 ~1000 μ m (peak to peak)
velocity: 0~71mm/s (RMS)
- 2.Frequency response and error:
vibration displacement(P-P): 12~200Hz, $\leq \pm 10\%$
velocity(RMS): 12~500Hz, $\leq \pm 10\%$
- 3.Linearity and Accuracy
vibration displacement(P-P): 0~20 μ m, $\leq \pm 10\%$ >20 μ m, $\leq \pm 5\%$
Velocity: 0~2.0mm/s, $\leq \pm 10\%$ >2.0mm/s, $\leq \pm 5\%$
- 4.Low voltage indication: When the battery voltage is below 6.5V, the screen will prompt low voltage, then you should replace the battery with a new one.
- 5.Environmental: Environment temperature : 0 ~ 40 $^{\circ}$ C relative humidity: $\leq 80\%$
atmospheric pressure : 75 ~ 106kpa
6. overall dimensions: 185 (H) \times 68 (W) \times 30 (D) mm
- 7.Weight: 480g (including battery)

WORKING PRINCIPLE

Vibration signals collected by magnetolectricity speed sensor are processed by low frequency compensation, amplification, active integration, peak-peak detection, RMS operation and differential amplification circuit, then they are processed by analog-to-digital converter. Finally, the vibration values are displayed by LCD.

OPERATION

1. Loading battery
Open the battery cover, pay attention to the polarity of the battery, then put a 9V battery inside the battery box, and close the battery cover.

2. Checking Battery Voltage

Select the velocity or displacement function, if you can see the low battery symbol on the left of the LCD, then you need to change a new battery. If there's no such symbol on the LCD, it means the voltage is enough for testing.

3. Setting Measurement Mode

Select the velocity or displacement measurement mode with the mode selector. The selected mode is indicated by the arrow on the right of the display.

4. Measurement

Connect the signal line to the input sensor terminal, select the measuring mode to start your test. Hold the sensor by your hand in one direction (vertical or horizontal), do not move, and you can get the value when the sensor is synchronized with the vibration.

NOTICE

1. Sensors are important elastic sensitive devices, improper use and storage will affect the accuracy of measurement and strictly prevent collision.
2. Instruments may not be displayed due to damage or poor contact of sensor signal lines. Conductor condition should be checked frequently.
3. The sensor core is fully enclosed and can not be disassembled, but the components connected with the output wire can be disassembled and re-welded.
4. Instrument is not used for a long time. Please take out the battery to avoid instrument corrosion.

COMMON FAULTS

common faults	The most likely cause
Power on doesn't work	battery plate poor contact
no signal input	signal wire break
Show jumping or wrong	switch bad or toggle switches don't pull the place