

Vibration Calibrator

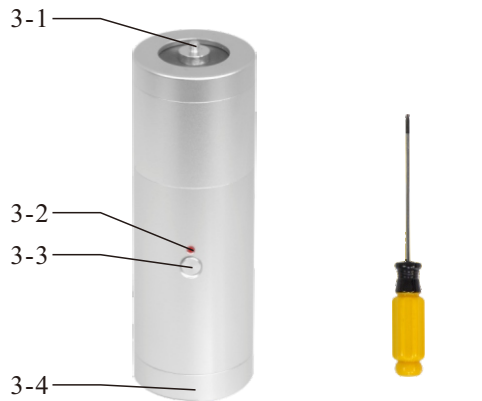
VMC-606

This Vibration Calibrator is small in size, light in weight, easy to carry. Its ruggedness will allow many years of use if proper operating techniques are followed. Please read the following instructions carefully and always keep this manual within easy reach.

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3. STRUCTURE DESCRIPTION

Whole Structure:



Vibration Calibrator Screwdriver

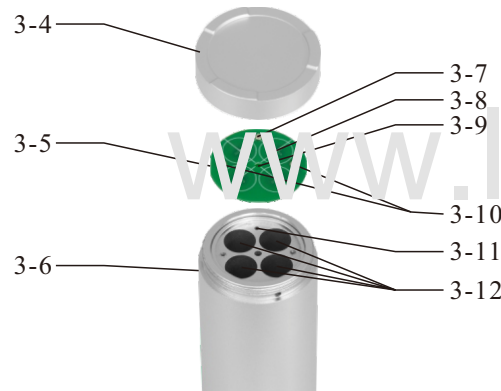
- 3-1 Sensor Connection Screw
- 3-2 Power Indicator
- 3-3 Power Button
- 3-4 Battery Cover

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NOTE: IF THE INSTRUMENT IS NOT USED FOR A PERIOD OF TIME, PLEASE REMOVE THE BATTERY, IN ORDER TO AVOID LEAKAGE OF BATTERIES, CORROSION CIRCUIT.

Structure Inside Battery Cover:



- 3-5 Battery Board
- 3-6 Main Unit
- 3-7 Alignment Screw
- 3-8 Positive And Negative Marks (4 Marks)
- 3-9 Adjustment Hole
- 3-10 Fixing Screws (2 Screws)
- 3-11 Alignment Screw Hole
- 3-12 Battery Containers

1. APPLICATIONS

The Vibration Calibrator is a small, self-contained handheld shaker designed for quick and easy checking of accelerometers, vibration monitoring systems and recording systems. Providing a known and controlled RMS vibration for verification of accelerometers weighing up to 150g.

2. PARAMETERS

- Operating Frequency: 159.2Hz±0.5%
- Acceleration Output: 14.14m/s²(Peak)±3%
- Velocity Output: 10mm/s(RMS)±3%
- Displacement Output: 28um(Peak-Peak)±4%
- Transverse Output: <5%
- Distortion: <3%
- Maximum Load: 150g

4. BATTERY INSTALLATION

The instrument is equipped with 4 AA(UM-3) batteries. Before using the instrument, install the batteries first.

4-1 Unscrew and remove the **Battery Cover** on the bottom of the unit.



Operating Temperature: -10°C~40°C
 Operating Humidity: 85% RH
 (non-condensing)

Ramp-Up Time: <3second

Power Supply: 4x1.5V AA
 (UM-3) battery

Size: 56mmx200mm
 (Diameter x Height)

Weight (including batteries): 960g

Accessories: Vibration Calibrator
 Screwdriver
 Instruction Manual

4-2 Unscrew the 2 **Fixing Screws** with a screwdriver and pick up the **Battery Board**.



4-3 Take the **Battery Board** for reference to the unit, and note that the **Alignment Screw** is in the same direction as the **Alignment Screw Hole**. Install 4 AA(UM-3) batteries into the **Battery Containers** according to the **Positive And Negative Marks** on the **Battery Board**.



4-4 Cover the **Battery Board** on it and screw up 2 **Fixing Screws** with a screwdriver.



4-5 Cover the **Battery Cover** on it and retighten it.

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6-3 Insert the configured screwdriver into the **Adjustment Hole**. Insert it into the end and rotate it, the reading of vibration meter will change accordingly. As you turn clockwise, the reading becomes smaller; when you turn counterclockwise, the reading becomes larger. Adjust the reading to the standard value, as mentioned in **2. PARAMETER**.



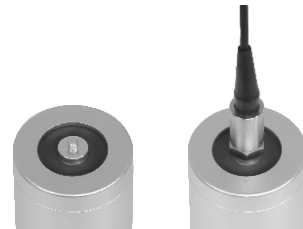
6-4 Pull out the screwdriver, cover and retighten the **Battery Cover**. Adjustment complete.

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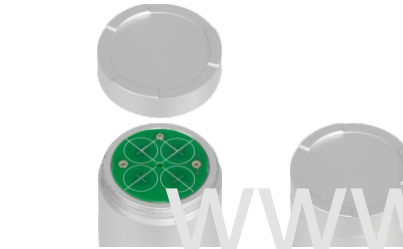


5. TO CALIBRATE A VIBROMETER

5-1 When a vibration meter needs to be calibrated, connect its sensor to the **Sensor Connection Screw** at the top of calibrator. Tighten it.



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7. BATTERY REPLACEMENT

7-1 When the power indicator does not light or flashes, it is necessary to replace batteries.

7-2 Follow the method mentioned in **4. BATTERY INSTALLATION**, to open the battery cover and the battery board, replace with new batteries, and retighten the battery board and battery cover.

7-3 If the instrument is not to be used for a period of time, please remove the

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5-2 Make sure the battery has been installed in the calibrator, press the **Power Button** to power on the calibrator. The **Power Indicator** lights. The calibrator emits a standard vibration.

5-3 Power on the vibration meter which is connected, adjust the vibration meter to the standard vibration values, as mentioned in **2. PARAMETER**. The calibration complete.

6. ADJUSTMENT OF CALIBRATOR

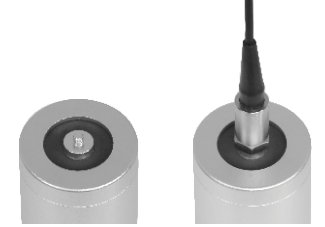
When the calibrator has deviation, with a standard vibration meter, the calibrator can adjusted.

6-1 Connect the sensor of a standard vibration meter to the **Sensor Connection Screw** at the top of calibrator. Power on the vibration meter, also power on the calibrator.

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batteries, in order to avoid leakage of batteries and corrosion circuit.

There is a reading displayed on the screen of vibration meter.



6-2 Unscrew and remove the **Battery Cover** at the bottom of calibrator.



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