RION

Easy-to-carry Pocket size
and light weight (250 g)

Vibration Meter

VM-63A

CE

Riovibro vm-63a

Easy and quick operation – simply press the accelerometer tip against the machinery measurement point.

Vibration Meter
VM-63A

The whole package is small enough to easily fit into a shirt pocket.
The unit is designed to be easy to operate and to provide all functions necessary for diagnostic vibration measurements in the field.
It is suitable not only for servicing and monitoring machinery installations, but also for use in product development and design, for quality assurance applications and many other tasks.

〈Absolute size〉

▶ Features

- Integrated accelerometer and digital display
- Newly designed shear type piezoelectric pickup measures a wide vibration range simply by being held against measurement object
- Wide measurement range, from low frequencies characteristic of unbalanced rotation and misalignment, to high frequencies resulting from bearing vibrations
- Measures acceleration (m/s² peak), velocity(mm/s rms), and displacement (mm p-p)
- Wide-range design eliminates the need for frequent measurement range switching
- Hold function makes measurement results easy to read
- Auto power off design without power switch conserves battery power by shutting the unit off automatically
- Pocket size dimensions (185 × 68 × 30 mm) and light weight (250 g including battery)

Accelerometer attachment
(shown with attachment S)
Hold this part against the measurement objects.
Vibrations are measured in the direction of the arrow.

Accelerometer
Shear-type Piezoelectric Accelerometer

MEAS (measurement) button

Vibration frequency range selector and indicator
(only for acceleration measurements)
- LO : 10 to 1 000 Hz general measurement
- HI : 1 000 to 15 000 Hz bearing measurement

Measurement mode selector and indicator
(acceleration, velocity, displacement)
acceleration : m/s^2 · Peak
velocity : mm/s · RMS
displacement : mm · P-P

Supplied

Example of putting up soft case

Option

Earphone **VP-37**

Accelerometer Attachments

The accelerometer detector of the VM-63A can be used without an attachment or with two kinds attachments (S and L), to fit the respective measurement requirements. (Attachment L is available as an option.)

With attachment S **PV58008**

Supplied

The unit is delivered in this condition. It provides good response and reproducibility over a wide range. Unless there are special requirements, the unit should be used in this condition.

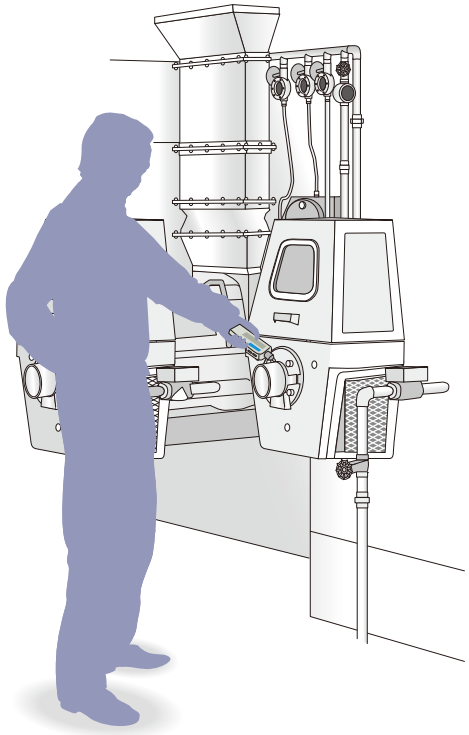
Without attachment

In this condition, best high-range response is achieved (10 Hz to 15 kHz), but planar contact with the measurement object is required.

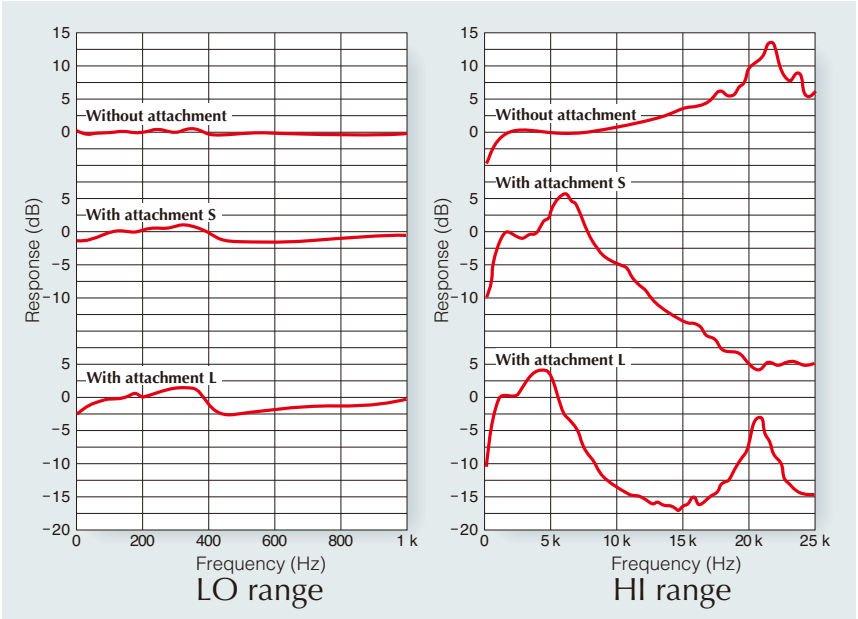
With attachment L **VP-53Y**

Option

Suitable for measurement in cases where access space to the measurement object is limited.



Contact resonance in acceleration measurement



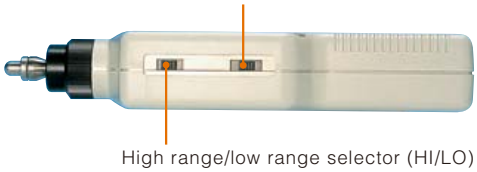
Operation

1 Open battery compartment cover and insert battery with correct + – polavity.

Close the battery compartment cover.

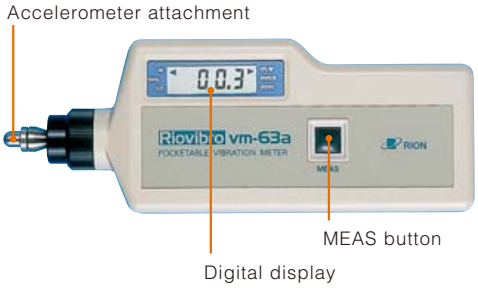
2 Select measurement mode

Use selector to select measurement mode.
Arrow at right of digital display shows which mode is selected.
For acceleration measurement, the vibration frequency range can be selected. For regular measurements, select LO. For bearing vibration measurements, select HI.



3 Measurement

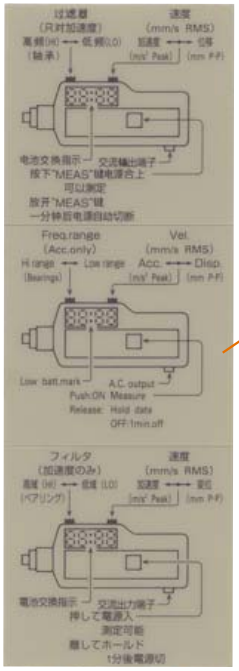
❶While keeping MEAS button depressed, hold vibration detector against measurement object. Use a pressure of about 500 g to 1 kg.
❷When MEAS button is released, current measurement value is held on display.
❸To cancel hold value, press MEAS button again. Value is canceled and next measurement is performed.
❹Unit turns itself off automatically about 1 minute after MEAS button is released.



Check! Battery voltage check before measurement

Press MEAS button. If symbol shown below appears on display, replace battery.

Battery replacement symbol



Battery compartment

● Instruction labels in English, Chinese, and Japanese are available.

Specifications

Accelerometer		
Type		Piezoelectric accelerometer (shear-type)
Measurement range		∗Velocity and displacement range is limited by acceleration 199.9 m/s².
	Acceleration	0.1 to 199.9 m/s² Peak (RMS × √2)
	Velocity	0.1 to 199.9 mm/s RMS
	Displacement	0.001 to 1.999 mm P-P (RMS × 2√2)
Measurement accuracy		±5 % ±2 digits
Measurement frequency range		
	Acceleration	10 Hz to 1 kHz (LO)　1 kHz to 15 kHz (HI)
	Velocity	10 Hz to 1 kHz
	Displacement	10 Hz to 1 kHz
Display		3-1/2 digit digital display ∗Value updated while MEAS button is pressed and held when button is released.
	Display update cycle	1 s
Signal output		
	AC output	2 V Peak (display full scale)
	Earphone	VP-37 can be connected
	Load impedance	10 kΩ or more
Power supply		6F22, 9 V battery × 1
	Current consumption	Approx. 7 mA at 9 V
	Battery life	About 25 h continuous use (at 25 ℃, with manganese battery)
	Auto power-off function	Operates when no control is operated for 1 minute
Ambient conditions		−10 to +50 ℃　30 to 90 %RH (no condensation)
Dimensions·Weight		185 (H)×68 (W)×30 (D)mm· Approx.250 g (including battery)
Supplied accessories		Soft case × 1, Battery 6F22 × 1, Attachment S × 1, Instruction label × 1

Optional accessories

Name	Model
Attachment L	VP-53Y
Earphone	VP-37

∗ Specifications subject to change without notice.

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