



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

Vibration Meter  
**VM-63A**



## Riovibro vm-63a

Easy and quick operation just by  
Pressing a tip of accelerometer  
the machinery measurement  
Point against



### 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.

#### ► 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 ( $m/s^2$  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)



<Absolute size>



### ► 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

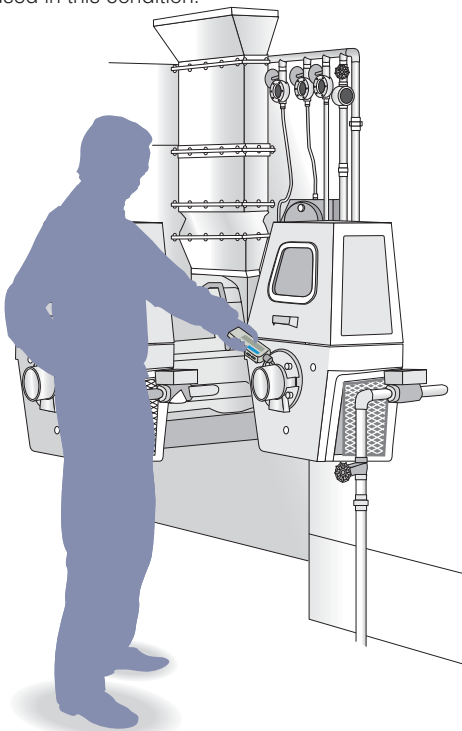
In this condition, best high-range response is achieved (10 Hz to 15 kHz), but planar contact with the measurement object is required.



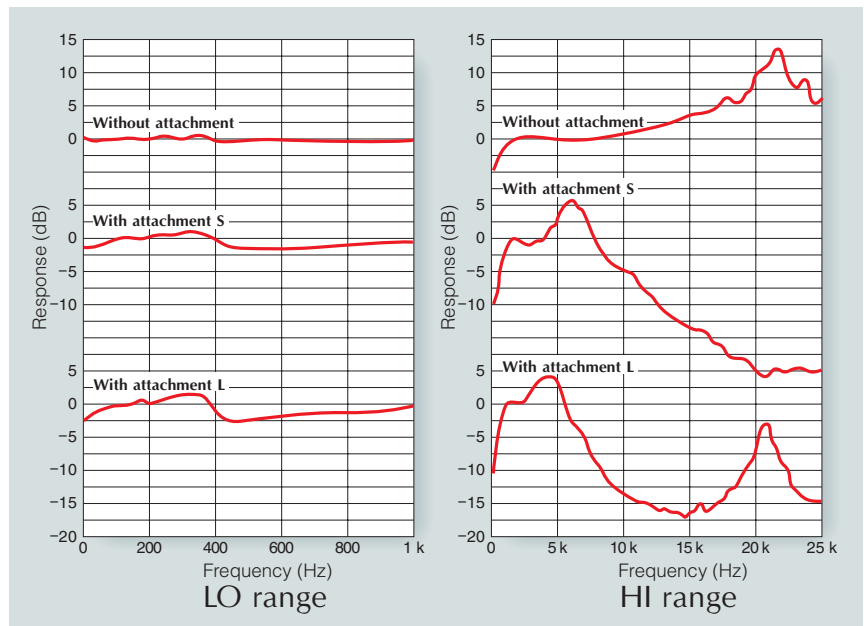
#### With attachment L **VP-53Y**

##### Option

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



### ► Contact resonance in acceleration measurement



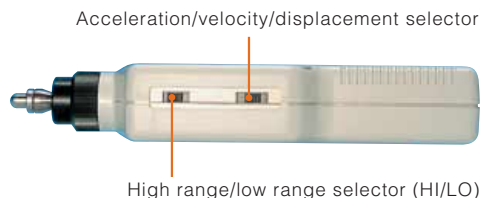
## Operation

- 1 Open battery compartment cover and insert battery with correct + - polarity. Close the battery compartment cover.



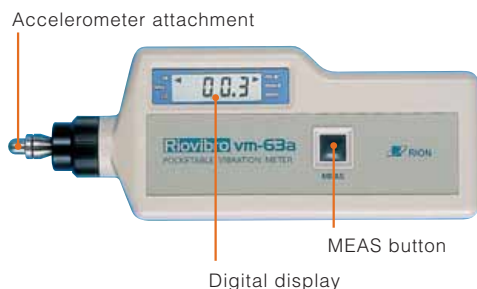
- 2 Select measurement mode

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

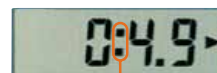
- 1 While keeping MEAS button depressed, hold vibration detector against measurement object. Use a pressure of about 500 g to 1 kg.
- 2 When MEAS button is released, current measurement value is held on display.
- 3 To cancel hold value, press MEAS button again. Value is canceled and next measurement is performed.
- 4 Unit 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

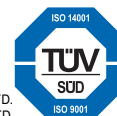
- Instruction labels in English, Chinese, and Japanese are available.

## Specifications

Accelerometer	
Type	Piezoelectric accelerometer (shear-type)
Measurement range	*Velocity and displacement range is limited by acceleration 199.9 m/s <sup>2</sup> .
Acceleration	0.1 to 199.9 m/s <sup>2</sup> 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 °C, with manganese battery)
Auto power-off function	Operates when no control is operated for 1 minute
Ambient conditions	-10 to +50 °C 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



ISO 14001 RION CO., LTD.  
ISO 9001 RION CO., LTD.

\* Specification subject to change without notice.

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