# Honeywell



# Models VM110 and VM120

# Vibration Meter Kit

#### DESCRIPTION

The Model VM110 Vibration Meter is a battery powered, portable instrument designed to accept any MA Series accelerometer, to enable vibration measurements to be taken. The meter is capable of providing RMS and peak measurements of acceleration, velocity and displacement. A switch for filtering high frequencies is provided. dc and ac output via a D-type socket is available for logging or for further signal analysis.

#### **FEATURES**

- Hand held
- LCD display
- Battery powered
- Velocity and displacement output
- ac or dc output
- Designed to work with constant current accelerometers
- Low pass filter reduces wide-band noises

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#### PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Acceleration	2 G, 20 G, 200 G
Velocity range	2 in/s, 20 in/s, 200 in/s
Displacement	2 thou, 20 thou, 200 thou
Upper frequency	Selectable low pass filters of 5 kHz, 10 kHz and 20 kHz
Lower frequency	Fixed, acceleration: 5 Hz,
	velocity: 10 Hz, displacement: 15 Hz
Detector	RMS or peak switch selectable
Display	0.5 in, 3.5 digit LCD (3 readings/s)

#### **ELECTRICAL SPECIFICATIONS**

Characteristic	Measure
Accuracy acceleration	1.5 % RMS, 3 % peak
Velocity	2.5 % RMS, 4 % peak
Displacement	3.5 % RMS, 5 % peak
Noise acceleration	2 mG RMS; 6 mG peak
Velocity	0.01 in/s RMS; 0.03 in/s peak
Displacement	0.02 in RMS; 0.06 in peak
Input	10 mV/G from hand held accelerometer or other MA Series via cal hood
Output	ac 200 mV, full range as selected;
	dc 200 mV, full range as selected
Power	Two PP3 9 V battery, low battery indica- tor on display. Battery life 15 hours approximately
Kit contents	One vibration meter; one hand held probe; one magnet; one 4 in spike; one carrying case

#### ACCESSORIES

Part No.	
AG902	Model MA11, 100 mV/G accelerometer, 5 m integral PTFE cable
AG901	Model MA11, 100 mV/G, two-pin MS connector
CA42	Coiled cable assembly two- pin MS to IA110 for use with AG901
CA43	Coiled cable assembly TNC to IA110 for use with MTN/1020
2100	Hand held probe
CA61	IA110 adapter for use with AG902
MM1	Magnet, 1/4 in UNF mounting, 35 mm, strength 20 kg
PS1	Hand held spike, 25 mm, 1/4 in UNF mounting
PS2	Hand held spike, 100 mm, 1/4 in UNF mounting
PS3	Hand held spike, 150 mm, 1/4 in UNF mounting
PS4	Hand held spike, 300 mm, 1/4 in UNF mounting
HE1	Carrying case with foam cut outs

#### TYPICAL SYSTEM DIAGRAM



Built-in Accelerometer

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Warranty. Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847 Email inquiries to info.sc@honeywell.com

#### A WARNING PERSONAL INJURY

• DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

#### A WARNING MISUSE OF DOCUMENTATION

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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