### **Examiner 1000 Vibration Meter**



The Examiner 1000 overall vibration meter and electronic stethoscope is the ideal tool for cost effective predictive maintenance. This meter is simple to operate with only one button and volume adjustment. Troubleshoot bearings and lubrication with the digital LCD and stethoscope features to enhance machinery reliability. Compare your vibration results by using the ISO 10816 Severity Chart right on the meter. NIST traceable calibration is available.

#### Features:

- Electronic stethoscope troubleshoot while listening to the bearing
- Measure vibration in:
  - Acceleration perfect for high-speed applications
  - Velocity in English or Metric per ISO 10816
  - Acceleration Envelope high pass filter method

## Facilities that establish a predictive maintenance program are able to:

- · Improve machinery reliability and reduce unplanned failures
- Reduce maintenance costs
- Optimize machinery performance to increase productivity
- Lower energy consumption less vibration usually means less friction
- Extend bearing service life



#### Why Measure Vibration?

Vibration is considered the best operating parameter to judge dynamic conditions such as balance (overall vibration), bearing defects (enveloping) and stress applied to components. Many machinery problems show themselves as excessive vibration. Rotor imbalance, misalignment, mechanical looseness, structural resonance, soft foundation, and gear mesh defects are some of the defects that can be measured by vibration. Measuring the "overall" vibration of a machine, a rotor in relation to a machine or the structure of a machine, and comparing the measurement to its normal value (norm) indicates the current health of the machine.

Specifications*	Examiner 100			
Amplitude Ranges:				
Acceleration	0.01 to 19.99 g (RMS)			
Velocity	0.01 to 19.99 in./sec (RMS) 0.1 to 199.99 mm/sec (RMS)			
Envelope	0.01 to 19.99 ge (PEAK)			
Frequency Ranges	Overall: 10Hz to 10kHz Envelope: 0.5kHz to 10kHz			
Display Indications	LCD 3.5-digit (with Measurement, Hold and Low Battery)			
Vibration Sensor	Piezoelectric accelerometer 100 mV/g			
Output	Audio: 3.5 mm mini plug Sensor power: 18VDC @ 2 mA (BNC)			
Power	2 AA cell batteries			
Operating Time	20 hours continuous without headphones			
Operating Temperature	-14 to 122°F (-10 to 50°C)			
Dimensions	6.3 x 3.3 x 1.25 in. (1.60 x 84 x 32 mm)			
Weight (full kit)	2.85 lbs. (1.30 kg)			
** **				

<sup>\*</sup>Specifications are subject to change without notice.

#### Vibration Severity Per ISO 10816-1

Machine		Class I Small	Class II	Class III	Class IV	
	ln/s	mm/s	Machines	Medium Machines	Large Rigid Foundation	Large Soft Foundation
	0.01	0.28				
	0.02	0.45				
	0.03	0.71		Good		
S	0.04	1.12				
Vibration Velocity Vrms	0.07	1.80				
elocity	0.11	2.80		Satisfactory		
ion Ve	0.18	4.50				
/ibrati	0.28	7.10		Unsatisfactory		
	0.44	11.2				
	0.71	18.0				
	1.10	28.0		Unacceptable		
	1.77	45.0				

#### Ordering Information

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Model	Description	Part No.			
Examiner 1000 Kit	Complete vibration meter and electronic stethoscope kit. Includes: Vibration meter, batteries, accelerometer and integrated cable, magnetic base, stinger probe, stereo headphones, field carrying case, and machinery data worksheet				
Examiner 1000 Kit with NIST	Same as above with NIST Calibration Certificate	6400-011-CAL			

Accessories available on website

For details, see Examiner webpage.

## The Professional's Choice for over 40 years!

Founded in 1977, Monarch Instrument started by distributing a diverse range of instrumentation and then transitioned to manufacturing products in the USA becoming known as the premier supplier of rotational speed measuring instruments and stroboscopic inspection equipment. Our comprehensive lines of precision products and calibration services make Monarch the professional's choice for tachometers, stroboscopes, speed sensors, data loggers, and data acquisition systems.

Monarch's multi-patented and trademarked technologies are precise, rugged and reliable:

- illumiNova® Fixed Mount Stroboscopes
- Nova-Pro® Stroboscope/Tachometers
- Nova-Strobe™ LED and Xenon Stroboscopes
- Palm Strobe x LED Stroboscope
- Track-It™ Data Loggers
- DataChart™ Paperless Recorders

Monarch's full-service sales force and worldwide distribution network stand ready to answer purchase and product application questions. Please feel free to contact us directly or visit our website to locate a distributor in your area. We take pride in our products and services and offer unsurpassed customer service. Monarch Instrument is an ISO 9001:2015 certified facility.

# Monarch Instrument is committed to excellence and quality in manufacturing, sales, and service.



Portable Tachometers



Panel Tachometers



Frequency Converters



Track-It<sup>□</sup> Data Loggers



Fixed Mounted Strobes



Portable Strobes



Speed Sensors



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