

## MODEL 258V VIBRATION ANALYZER

### A PORTABLE INSTRUMENT FOR ANALYSIS, MAINTENANCE AND INSPECTION APPLICATIONS



#### KEY FEATURES:

- Single FFT spectrum display with Phase vector provides a simplified interpretation of vibration data
- 2 Hz to 40 kHz , 100 – 12,800 lines of resolution
- 1 and 2 channel vibration analysis
- Modular design facilitates updating and adding new features
- Intuitive graphical user interface
- Easy data transfer for analysis and reporting using EXCEL or POLYMATE software
- Relative phase reading shown as a simple vector diagram
- Overall vibration reading
- Rugged design and construction
  - 2 meter multiple drop
  - IP 65 rated for dust and water resistance
  - Protective rubber case

The Model 258V is part of the IRD Balancing line of analysis and balancing products. The 258V is a flexible instrument platform designed to be a single tool for a range of maintenance, inspection, service, and diagnostic applications. The functionality of the Model 258V can be expanded by adding optional Balancing and Bump Test software modules.

The Model 258V is a simple, easy to use vibration analysis instrument with an intuitive user-friendly interface that displays spectrum and phase information in an easy to understand format. The Model 258V makes it quick and simple for an operator to assess the motion between two positions by providing the phase angle between the vibration signals.

The Model 258V's high level of performance, intuitive software and ruggedness make it the ideal vibration analysis tool operations where both on site and shop based analysis and maintenance will be performed.

#### **The Model 258V enables non-experts to carry out checks for common machine faults, including:**

- Unbalance – Increase machinery and bearing life and improve productivity by identifying system unbalance.
- Defective Bearings – Detect defective rolling element bearings.
- Bent shaft – Increase machinery efficiency by identifying problems causing high axial vibration.
- Misalignment – Identify coupling problems and associated axial vibration caused by shaft misalignment.



## MODEL 258V

## VIBRATION ANALYZER AND BALANCER KIT

### E00353-1: Model 258V Single Channel Vibration Analyzer Kit Includes:

Qty.	Description
1	258V Vibration Analyzer
1	Accelerometer, 9000A General Purpose
1	Accelerometer Cable, 25ft (7.7m)
1	Accelerometer Mounting Magnet
1	Polymate Demonstration Software
1	Power Cable, N. America
1	Power Cable, UK
1	Power Cable, Europe
1	Operation Manual

### E00353-2: Model 258V Dual Channel Vibration Analyzer Kit Includes:

Qty.	Description
1	258V Vibration Analyzer
2	Accelerometer, 9000A General Purpose
2	Accelerometer Cable, 25ft (7.7m)
2	Accelerometer Mounting Magnet
1	Polymate Demonstration Software
1	Power Cable, N. America
1	Power Cable, UK
1	Power Cable, Europe
1	Operation Manual

### GENERAL SPECIFICATIONS

- Frequency Range: 2Hz to 40kHz
- Vibration Input Channels: 2
- Vibration Input Type: ICP, AC, DC
- Amplitude readout: 0.01 to 1,000 mV/EU auto-ranging
- Detection: Peak, RMS, Peak to Peak
- Filter: Dual, narrow band digital tracking filters with averaging
- Vibration Readout: micrometers, mils, millimeters/second, inches/second, g's or ESP
- Handheld configuration:
  - 90mm x 134mm x 50mm (7.49in x 5.28in x 1.96in)
  - Weight: 0.72 kg (1.6 lb)
  - Battery Usage: up to 8 hours on full charge
  - Environmental: IP 65 (Dust and Water Proof)
  - Drop Test: 2 Meters (6.5 feet) to MIL-STD 810
  - Temperature: Operating -10 to +50°C, CSA approved to Class I, Division II, Group A, B, C and D
- Processor: 400 MHz X-scale
- Operating System: Windows CE
- Battery: Li-Ion smart battery pack (battery is recharged via main power adapter)
- Communication: Active Sync via USB, IrDA, or RS232
- Internal Storage: 64 Mb
- Additional storage PC Cards: PCMCIA type II or SD (not included)
- Display 1/4 VGA Color TFT screen
- Data Entry: Keypad and arrow keys
- Printer Output: PCL and IRDA
- On board language support: English, Spanish, French, German (Deutsch), Italian, Chinese, Portuguese, Dutch, Polish, Swedish, Russian, Romanian, Finnish (Suomi), Czech (Cestina)

### Accessories for the Model 258V

Part Number	Description
E48901	Bump test software module
E49025	Balancing software module
E48930	Polymate software analysis program. Allows users to download data from the Model 258V and perform spectral analysis
E39581	Strobe light kit, battery operated. Supplied with 120/240V AC charger
E45058	Spare battery for 258V instrument
E45073	External Battery Charger
E41626	AC Power Cable for battery charger, Australian plug
E41952	AC Power Cable for battery charger, S.Africa/India plug
E48800/S/006	BNC to 6 pin vibration input cable for use with patch panel outputs, 1.8m (6') long
E47309	Printer cable, serial to parallel interface. Connect Model 258V to any parallel port PCL printer

### Sensors for the Model 258V

Part Number	Description
E437811	Accelerometer, 9000A General Purpose
E41717	Accelerometer Mounting Magnet for use with E437811
E48617/S/025	Cable, 25ft (7.7m) for use with E437811

USA Headquarters: Telephone: (1) 502 366 0916 Fax: (1) 502 238 1001  
IRD LLC 4740 Allmond Ave. Louisville, KY 40209, USA

UK: Telephone: +44 1244 538170 Fax: +44 1244 528900  
IRD UK Ltd. International House, Aviation Park, Flint Road, Saltney Ferry, Chester UK CH4 0GZ

MEXICO: Telephone: +52.55.5689.8325 Fax: +52.55.5689.8160  
IRD Balancing México S. de R. L. de C.V.; Miguel G. Kramer #29, Col. Atlántida Del. Coyoacán, México, D. F.C.P. 04370

CANADA: Telephone: 1.450.724.4066 Fax: 1.450.724.4077  
IRD Canada Ltd. 755 Jean-Baptiste-Varin, La Prairie, QC J5R 6P3, Canada

Email: [sales@irdbalancing.com](mailto:sales@irdbalancing.com) [www.irdbalancing.com](http://www.irdbalancing.com)

Specifications are subject to change without prior notice.

Copyright © 2009 IRD® All rights reserved.

Publication No: E51280 rev I