

# Portable Vibration Shakers

## HI 803/813 Shakers



HI 803

HI 813

HI 803/813 portable vibration shakers are designed to be used in the field or shop to verify the performance of vibration transducers, connectors, cabling, instruments or permanently installed condition monitoring systems. Both models are battery-powered, portable and feature a built-in reference accelerometer and indicator with calibration traceable to the National Institute of Standards and Technology (NIST).

These shakers can easily check velocity transducers, accelerometers and non-contacting Eddy Probe displacement measurement systems. Simply attach the transducer to the shaker head (displacement probes require a mounting fixture and target), set the shaker to a known vibration reference level, and verify readings. The reference test level can be set in acceleration, velocity, or displacement, English or Metric.

### Specifications

	Model HI 803	Model HI 813
Battery Type	Sealed, rechargeable	Sealed, rechargeable
Charger	Internal Specify 120 or 240 Vac	Internal 120 or 240 Vac
Frequency Range	10 to 10,000 Hz	25 to 10,000 Hz
Acceleration Readout (± 1 digit)	10 to 2,000 Hz, ±.3 dB 2,000 to 10,000 Hz, +1 dB	30 to 1,000 Hz, ±.3 dB 1,000 to 10,000 Hz, +1 dB
Velocity Readout	10 to 500 Hz, +.3 dB	30 to 500 Hz, +.3 dB
Displacement Readout	25 to 200 Hz, +.3 dB	30 to 100 Hz, +.3 dB
Maximum Output	10g at 100 Hz, 100 gram load (3g above 1,000 Hz) 1g at 100 Hz, 750 gram load	10g at 100 Hz, 100 gram load (3g above 1,000 Hz) 1g at 100 Hz, 750 gram load
Calibration	NIST traceable standard	NIST traceable standard
Waveform Distortion	<5% THD, 30 to 2,000 Hz	<5% THD, 30 to 2,000 Hz
Reference Output	50 mV/g	50 mV/g
Maximum Unsupported Load	750 grams, vertical or 500 grams, horizontal	750 grams vertical or horizontal
Physical Size & Weight	11"W x 7"D x 10"H, 21 lbs.	11"W x 7"D x 10"H, 19 lbs.
Sensor Mounting Thread	1/4-28 thd hole, 1/4" deep	1/4-28 thd hole, 3/8" deep
English & Metric Readout	Yes	Yes
Indicates Test Sensor Output	Yes, normalized sensitivity mass loading compensation, phase	No
Internal Memory	Yes, stores test data	No
Built-In Printer	Yes, thermal type, prints current or stored test data	No
RS-232 Output	Yes, stored data transfer	No

### Features

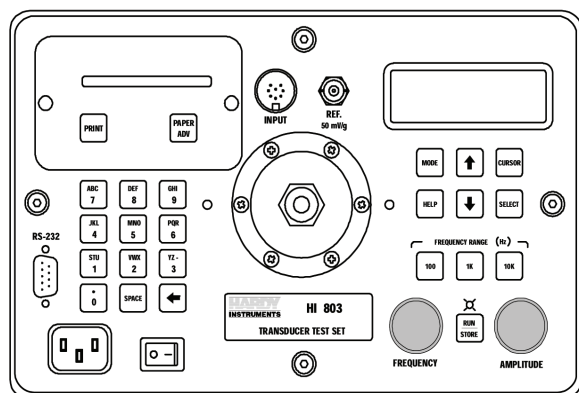
- **Actual precision vibration testers**  
True and accurate testing of vibration sensors
- **NIST traceable calibration reference**  
High-level vibration accuracy
- **Variable frequency and adjustable vibration amplitudes**  
Rapid set-up for all vibration conditions
- **Battery operated**  
Ability to "take the calibration lab to the field"

### Applications

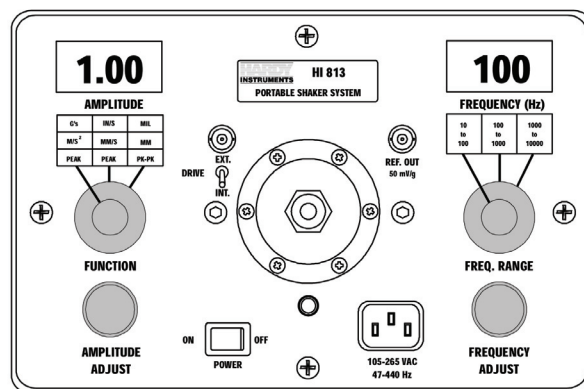
- Loop checks of vibration monitoring systems
- Verification and testing of velocity transducers, accelerometers, eddy current probes, etc.
- Troubleshooting of issues in vibration monitoring loops
- Calibration of portable vibration analyzers
- Confirmation of vibration alarms

### How to Select

Model	Description
HI 803-120V	Portable Shaker, variable frequency and amplitude control, manual and sensitivity modes (sensitivity mode tests the transducer and provides a mV/unit output to compare with the sensor manufacturer's specifications), built-in self-test program, built-in printer with paper, data storage, RS-232 port and data transfer software, 120V, standard accessories, CE Approved.
HI 803-240V	Same as the HI 803-120V, except the voltage requirement is 240 volts.
HI 813-CE	Portable Shaker, variable frequency and amplitude control, 115/220V, standard accessories, CE Approved.



HI 803 Panel



HI 813 Panel

PORTABLE SHAKERS

### Accessories

6006-0008	Power Cord, AC
2824-0135	Screw, 1/4-28X
0228-0071-01	Mounting Fixture, Accelerometer
5407-0001	Screwdriver, Flat Blade
0202-0072-01	Diskette, Communication Software
0205-0049	Mounting Spacer*
2112-0007	Cable Connector Kit, HI 803 input from TUT
0215-0129-01	Cable, Portable Shaker to 2-pin HI 113 Accel
0215-0131-01	Cable, Portable Shaker to BNC Accel*
1901-0057	Paper, Thermal Printer (Seiko p/n 201-211-25C)
0251-0009-01	HI 803 Calibration Kit*
6006-0008	Power Cord, AC
0228-0071-02	Velocity/Universal Transducer Adapter, w/screw
HI 223-E	Mounting Fixture/Dial Micrometer, Kit, Eddy Probe Test, English*

HI 223-M	Mounting Fixture/Dial Micrometer, Kit, Eddy Probe Test, Metric*
HI 224	Mounting Bar Fixture, Kit, Eddy Probe Test*
0228-0136-01	Mounting Plate, Magnetic 2" Dia, 1/4" thick*
0228-0070-01	Stud, 1/4-28 to 1/4-28 UNF
0228-0070-02	Stud, 1/4-28 to 10-32 UNF*
0228-0141-01	Stud, 1/4-28 to M8 (Metric)*
0228-0137-01	Adapter stud. 1/4-28 UNF to 3/8-24 (HI 5701VT)*
0228-0070-03	Bushing, 1/4-28 to 2-56 UNC
0228-0070-04	Bushing, 1/4-28 to 6-32 UNC
0228-0070-05	Bushing, 1/4-28 to 10-32 UNC
0228-0075-01	4140 Steel Target (incl w/ 223/224 kits)*
0228-0071-02	Velocity/Universal Transducer Adapter, w/screw*
0228-0072-01	Wrench, Shaker Head
0215-0183-01	Charge Cable

\*Indicates a non-standard accessory.