• Tachometers
• Totalizers
• Timers
• Stroboscopes
• Vibration Meters
• Speed Sensors
• Fiberscopes
• Ultrasonic Leak Detectors
• Recording Tachometers
The rugged and versatile Pocket Laser Tach is ideally suited for non-contact, contact and linear speed measurements.

Pocket Laser Tach 200 (PLT200) is a digital, battery-powered portable optical tachometer, which operates up to 25 feet (8 meters) from a reflective target using a class 2 laser light source. The ergonomic design allows safe, direct line-of-sight viewing of both the target and the display at the same time, while providing a non-slip rubber surface for single hand operation.

Multi-Function For Pro-Active Maintenance
PLT200 is a 32 function Tachometer/Ratemeter, Totalizer/Counter and Timer (stopwatch), which is programmable in both Imperial and Metric rates. Includes two phono plug connectors for our optional Remote Contact Assembly (RCA) or remote sensors. The PLT200 also has a TTL compatible pulse output to trigger devices like vibration data collectors or stroboscopes. The KIT is supplied complete with a Remote Contact Assembly including concave and convex tips and a 10 cm linear speed wheel all in a latching carrying case.

Example Applications:
- Centrifuges
- Saw blades
- Grinders
- Elevators/escalators
- Engines
- Motors
- Conveyor belts
- Fans
- Propellers
- Vibration Studies

Pocket Laser Tach 200

Two Tachs in One ... the only portable laser tachometer available with both Remote Contact and Remote Sensors.

Remote Optical Sensor (ROS-P) Gap 36 inches
Remote Magnetic Sensor (MT-190-P) Gap 0.25 inches
Remote Infrared Sensor (IRS-P) Gap 0.50 inches
Remote Contact Assembly (RCA) with 6 foot (1.8m) cable, Contact Tips and 10 cm Linear Contact Wheel (Shows optional 12 inch circumference Linear Contact Wheel)

Optional RCA

Pocket Laser Tach 200 Kit includes: Tachometer, RCA, Contact Tips, 10cm Linear Contact Wheel, 5 feet of Reflective Tape and a Latching Carrying Case.

Specifications PLT200
- Display: 5 Digits, 5 Alphanumeric LCD
- Range(s) *Optical: 5 to 200,000 RPM **Contact:0.5 to 20,000 RPM
- Totalizer: 1-999,990 (events or length)
- Timer: 99:59.9 Min, sec, tenths
- Accuracy Optical: ±0.01% of reading Contact: ±0.05% of reading (rpm)
- Resolution: 0.001 to 10 RPM (range dependent)
- Operating Distance: 2’ to 25’ (5cm to 7.62m), ±70° from perpendicular
- Memory: Maximum, Minimum and Last
- Power: (2) “AA” 1.5 VDC batteries (30 hours)
- Environmental: 5° to 40°C (40° to 105°F) 80% RH up to 31°C (88°F)
- Dimensions: 6.92 "H x 2.4"W x 1.6"D (17.58 x 6.10 x 4.06cm)
- Weight: 7 oz. (210 g)

* performance subject to intensity of ambient light irradiation.
** also reads units per second and per hour.

Ordering Information
Pocket Laser Tach 200 Tachometer, N.I.S.T. traceable certificate of calibration, 12 inches of Reflective Tape.
Pocket Laser Tach 200 Kit Tachometer with Latching Carrying Case, RCA, Tips and Linear Speed Wheel, Battery, 5 foot roll Reflective Tape, N.I.S.T. traceable certificate of calibration.
ROS-P Remote Optical Sensor with Mounting Bracket and 8 foot cable for Pocket Laser Tach 200 only.
ROS-P-25 Same as above with 25 foot cable.
T-5 Reflective Tape, 5 foot roll, 1/2" wide.
TTL pulse output cable
Latching Carrying Case
Pocket Tach 99 (PT99) is a digital, battery-powered portable non-contact optical tachometer, which operates up to 36 inches from a reflective target using a bright red LED light source. The ergonomic design allows safe, direct line-of-sight viewing of both the rotating target and the display at the same time, while providing a non-slip rubber surface for single hand operation. Pocket Tach 99 is the value-leader of the world-class Pocket Tach Series from Monarch.

### Specifications PT99
- **Display**: 5 Digits, 5 Alphanumeric LCD
- **Range**: 5 to 99,999 RPM
- **Accuracy**: ±0.01% or ±1 Digit
- **Resolution**: Autoranging 0.001 to 1.0 RPM, Fixed: 1 Digit RPM
- **Operating Range**: 2 inches to 36 inches, ±45°
- **Memory**: Maximum, Minimum and Last
- **Power**: (2) “AA” 1.5 VDC batteries (60 hours)
- **Environmental**: 5°C to 40°C (40°F to 105°F), 80% RH up to 31°C (88°F)
- **Dimensions**: 6.92”H x 2.4”W x 1.6”D (17.58 x 6.10 x 0.06cm)
- **Weight**: 7 oz. (210 g)

---

Phasar-Laser combines the accuracy and safety of a non-contact optical tachometer with the convenience and ease of operation of a pistol grip instrument, housed in a rugged steel enclosure. The tachometer provides a convenient visible red laser for easy targeting along with a latching trigger for hand held operation and a mounting bushing for tripod mounted use.

Phasar-Laser-R provides for an optional remote sensor for difficult to reach locations in addition to the standard internal measurement optics.

### Features
- Convenient pistol grip design
- Rugged steel enclosure
- Safe non-contact operation to 10 feet (3 m) and 45 degrees from reflective tape
- On-target and low battery indicators
- Last measurement memory

---

### Specifications Phasar-Laser and Laser-R

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Range</strong></td>
<td>5-100,000 RPM</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>±1 RPM or 0.01% of reading</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>1 RPM</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>6 digit, 0.5” high Liquid Crystal Display</td>
</tr>
<tr>
<td><strong>Power On</strong></td>
<td>Pistol grip trigger with latching “on” Switch</td>
</tr>
<tr>
<td><strong>Operating Range</strong></td>
<td>10 feet (3m) and 45° from reflective tape</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>(4) “AA” (LR6) Alkaline batteries or optional NiCad batteries and AC recharger</td>
</tr>
</tbody>
</table>

---

### Ordering Information

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pocket-Tach 99 Tachometer, Battery &amp; 6 inches Reflective Tape. Carry Pouch T-5 Reflective Tape, 5 foot roll, 1/2” wide.</td>
<td></td>
</tr>
<tr>
<td>Phasar-Laser Tachometer, Recharger, 5 foot roll of Tape, NiCad Batteries in Latching Case</td>
<td></td>
</tr>
<tr>
<td>Phasar-Laser-R Kit Tachometer, Recharger, Remote Optical Sensor, 5 foot roll of Tape, NiCad Batteries in Latching Carrying Case</td>
<td></td>
</tr>
</tbody>
</table>
Nova-Strobe x - The standard for high intensity multi-function portable stroboscopes. Models are available with digital displays, battery or AC power, and a useful range of features which provide unmatched performance and value. Four models range from the Nova-Strobe dbx Deluxe, the most versatile battery powered digital stroboscope with internal phase shifting, down to the Nova-Strobe bax Basic, the most cost effective AC powered digital stroboscope.

Both the battery powered Nova-Strobe dbx and AC powered Nova-Strobe dax provide a range of 30 to 20,000 flashes per minute and an accuracy of ±0.002 of setting. Flash rates are easily adjusted to fractional RPM by a coarse/fine control knob. Individual TTL compatible input and output jacks are provided for ‘daisy chaining’ of multiple strobes, triggering from an external source, or providing a trigger signal to external equipment.

Both dbx and dax provide internal phase shifting to keep the target precisely in view. Both provide x2 and ÷2 capability for distinguishing actual RPM from harmonic frequencies. In addition, 9 user presetable memory flash rates for repetitive measurements and storage of the last flash rate measured are included.

Features All Nova-Strobes, Deluxe and Basic:
- Internal rechargeable batteries or AC powered models
- Weighs less than 2.0 Lbs. for easy handling
- More than 20% brighter Xenon light than competitors
- Electronic switching provides continuous cool operation
- Tripod mounting bushing in handle
- Low battery indicator (for battery powered models)

In addition, Nova-Strobe dbx and dax Plus models have:
- N.I.S.T. Traceable Certificate of Calibration included
- Internal phase shifting for easy reference target viewing
- Tachometer mode, speed measurement up to 250,000 RPM
- Power for optional sensors

Ordering Information
Nova-Strobe bax 115 Stroboscope, AC powered
Nova-Strobe bax 230 Stroboscope, AC powered
Nova-Strobe dax 115 Stroboscope, AC powered
Nova-Strobe dax 230 Stroboscope, AC powered
Nova-Strobe bbx 115/230 Stroboscope, battery Powered, universal PSC-2U (115/230 VAC) recharger (USA, UK, AUS, EURO plug)
Nova-Strobe dbx 115/230 Stroboscope, battery powered, universal PSC-2U (115/230 VAC) recharger (USA, UK, AUS, EURO plug).
Also available in Kit form including; Stroboscope Recharger, spare lamp and carrying case.

Select optional sensors for tachometer mode (see page 9)

TTL compatible input/output
1/8” (3.5mm) phone plugs

Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Nova-Strobe dbx Deluxe Battery Powered</th>
<th>Nova-Strobe dax Deluxe AC Powered</th>
<th>Nova-Strobe bbx Basic Battery Powered</th>
<th>Nova-Strobe bax Basic AC Powered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range Flashes/Minute</td>
<td>30-20,000 FPM (Flashes Per Minute)</td>
<td>30-10,000 FPM (Flashes Per Minute)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Display</td>
<td>6 Digit Numeric and 5 digit Alphanumeric LCD</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Accuracy/Resolution</td>
<td>0.002% of setting or +/- 1 lsd / 0.01 FPM</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Energy/Duration</td>
<td>230 mJoule up to 3450 FPM / 8-20 μsec</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Average Power-Watts</td>
<td>&gt;13W above 3450 FPM</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Tube &amp; Life</td>
<td>High Power Xenon - 100 million flashes typical</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>External Triggers - in/out</td>
<td>TTL (24Vdc Max) Input. Provides 3.3 Vdc TTL output</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1/8” (3.5mm) Phone Jacks</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Tachometer Mode</td>
<td>5-250,000 RPM - Use with Optional Remote Sensor</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Programmable Memory</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Internal Phase Shift</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Operating Time</td>
<td>2 hours typical @ 1800 FPM</td>
<td>Continuous</td>
<td>2 hours typical @ 1800 FPM</td>
<td>Continuous</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Internal NiMH rechargeable batteries</td>
<td>115 Vac, 50-400 Hz or 230 Vac, 50-400 Hz</td>
<td>Internal NiMH rechargeable batteries</td>
<td>115 Vac, 50-400 Hz or 230 Vac, 50-400 Hz</td>
</tr>
<tr>
<td>Weight</td>
<td>1.9 Lbs. (.86 kg)</td>
<td>1.5 Lbs. (.68 kg)</td>
<td>1.9 Lbs. (.86 kg)</td>
<td>1.5 Lbs. (.68 kg)</td>
</tr>
<tr>
<td>Size (L x W x H)</td>
<td>Body: 9” x 3.66” x 3.56” (229 x 93 x 90 mm); Reflector Housing: 4.8” (122 mm) diameter; Handle: 4.25” (108 mm) long</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nova-Strobe dbx Kit
The **Phaser-Strobe pbx** incorporates the unique design features of the Nova-Strobe dbx with an increased operating range of 30 to 50,000 flashes per minute, as well as external phase shifting. The unique digital adjustment knob can select the decade for adjustments, so coarse and fine adjustments of flash rates are made quickly and with significantly better resolution than competitive units. The memory feature of the **Phaser-Strobe pbx** allows nine flash rates to be stored - displayed in flashes per minute or flashes per second. **Phaser-Strobe pbx** operates with internal rechargeable batteries or continuously from AC line power with the power supply/recharger.

**Features:**

- N.I.S.T. Traceable Certificate of Calibration included
- Phase Shift adjustable as phase angle or time with resolution to 0.01° and 0.01 msec
- Virtual RPM mode provides slow motion viewing for high speed events
- Backlit alphanumeric LCD shows flash rate, degrees, time
- Store and recall nine memory settings
- TTL compatible input/output jacks, power for optional sensors
- Tachometer mode from Remote Sensors (see page 9)

**Specifications Phaser-Strobe pbx**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Range</td>
<td>30-50,000 FPM (Flashes/Minute) 0.5-830 FPS (Flashes/Sec) (Hz)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.002% of Setting +/- least significant digit</td>
</tr>
<tr>
<td>Digital Adjustment Knob</td>
<td>36 detents per revolution and blinking decade selection</td>
</tr>
<tr>
<td>Flash Rate Resolution (Internal Triggering)</td>
<td>0.01 to 1.0 FPM (Menu Selectable)</td>
</tr>
<tr>
<td>Operating Time</td>
<td>2 hours typical @ 1800 FPM or continuous AC power</td>
</tr>
<tr>
<td>Phase Delay - Degrees</td>
<td>0.1 to 359.9 degrees</td>
</tr>
<tr>
<td>Time Delay - Seconds</td>
<td>0.01 to 1000 msec.</td>
</tr>
<tr>
<td>Virtual RPM (Slow Motion)</td>
<td>0-200 VRPM</td>
</tr>
<tr>
<td>Flash Energy (Typical)</td>
<td>230mJoule up to 3450 FPM</td>
</tr>
<tr>
<td>Flash Duration (Typical)</td>
<td>8-20 usec</td>
</tr>
<tr>
<td>Average Power - Watts</td>
<td>11W @ 3000 FPM; &gt;13W @ 3450 FPM</td>
</tr>
<tr>
<td>Tachometer Mode</td>
<td>5-250,000 RPM from external trigger</td>
</tr>
<tr>
<td>External Input</td>
<td>Input Pulse - 0.5 usec min, TTL to 24V max (1/8&quot; phone plug)</td>
</tr>
<tr>
<td>Trigger Output/Remote Sync</td>
<td>3.3V TTL Compatible 40 usec pulse-Positive/Negative</td>
</tr>
<tr>
<td>Power</td>
<td>Internal rechargeable batteries with AC power supply/recharger</td>
</tr>
<tr>
<td>Weight</td>
<td>1.9 Lbs. (0.85 kg) including batteries</td>
</tr>
</tbody>
</table>

**PORTABLE STROBOSCOPES (for use with Vibration Data Collectors)**

**Vibration-Strobe vbx**

The **vbx vibration strobe** is uniquely designed to provide precise, instantaneous synchronization to a number of data collectors and FFT Analyzers triggered by an accelerometer. Built for portable applications, the **vbx** is the perfect lightweight phase analysis tool. **vbx** allows for the measurement of phase without stopping the machinery to install reflective tape. Phase analysis is quick and accurate using the Filter Bandwidth Selector and the Relative Phase Adjustment. Unique “Tracking Filter” maintains phase lock to input pulse. **vbx** can power and be triggered by accelerometers with or without data collectors.

**Kit includes:** Strobe, interface cable, universal p.s./recharger, spare lamp in carry case.

**Specifications Vibration-Strobe vbx**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Range</td>
<td>30-50,000 FPM (Flashes/Minute) 0.5-830 FPS (Flashes/Sec) (Hz)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.002% of Setting +/- least significant digit</td>
</tr>
<tr>
<td>Digital Adjustment Knob</td>
<td>36 detents per revolution and blinking decade selection</td>
</tr>
<tr>
<td>Flash Rate Resolution (Internal Triggering)</td>
<td>0.01 to 1.0 FPM (Menu Selectable)</td>
</tr>
<tr>
<td>Indicators</td>
<td>Battery Level, On Target, Time, Auto, Alt, Tach, Lock, and EXT icons</td>
</tr>
<tr>
<td>Operating Time</td>
<td>2 hours typical @ 1800 FPM or continuous AC power</td>
</tr>
<tr>
<td>Phase Delay - Degrees</td>
<td>0.1 to 359.9 degrees</td>
</tr>
<tr>
<td>Tracking Filter</td>
<td>Selectable Wide and Narrow Bandwidths. Filter may not lock below 100 fpm</td>
</tr>
<tr>
<td>Time Delay - Seconds</td>
<td>0.01 to 1000 msec.</td>
</tr>
<tr>
<td>Virtual RPM (Slow Motion)</td>
<td>0-200 VRPM</td>
</tr>
<tr>
<td>Flash Energy (Typical)</td>
<td>230mJoule up to 3450 FPM</td>
</tr>
<tr>
<td>Flash Duration (Typical)</td>
<td>8-20 usec</td>
</tr>
<tr>
<td>Average Power - Watts</td>
<td>11W @ 3000 FPM; &gt;13W @ 3450 FPM</td>
</tr>
<tr>
<td>Tachometer Mode</td>
<td>5-250,000 RPM from external trigger</td>
</tr>
<tr>
<td>External Input</td>
<td>Input Pulse - 0.5 usec min, TTL to 24V max (1/8&quot; phone plug)</td>
</tr>
<tr>
<td>Trigger Output/Remote Sync</td>
<td>3.3V TTL Compatible 40 usec pulse-Positive/Negative</td>
</tr>
<tr>
<td>Power</td>
<td>Internal rechargeable batteries with AC power supply/recharger</td>
</tr>
<tr>
<td>Weight</td>
<td>1.9 Lbs. (0.85 kg) including batteries</td>
</tr>
</tbody>
</table>

**Common Applications:**

- Calibration of Tachometers
- Diagnostic Inspection
- Engine R&D
- Textiles
- Centrifuges
- Shaker Tables

**Ordering Information Phaser-Strobe pbx 115/230 - Stroboscope with PSC-pbxU (115/230 Vac) Power Supply/Recharger Phaser-Strobe pbx Kit 115/230 - Same as above with Spare Lamp and Latching Carrying Case**

**Vibration Strobe vbx**

**Ordering Information**

Contact Factory for available Models.
PORTABLE STROBOSCOPES

Palm Strobe x

PALM STROBE x Offers excellent brightness, exceptional features and extra long battery life. Unique one-touch joystick-type button allows single hand operation for fast fractional RPM tuning. Select mode of operation for internal tuning, external TTL input, tachometer display and x2 ÷2 functions. Eight memory positions provide rapid recall of user defined frequencies.

Features:
• Removable Plug-in Battery Pack
• Easy One Hand Operation
• Light weight, Pocket Size
• Flash Rates to 12,500 FPM
• Tachometer Mode from Remote Sensors
• TTL Compatible Input/Output

Remote Trigger
Supports optional SPSR(self-powered sensor) trigger. See page 10.

Universal Power 115/230Vac
Universal Power Supply allows you to recharge anywhere in the world.

Specifications

<table>
<thead>
<tr>
<th>Palm Strobe x Series</th>
<th>Internal Mode Range</th>
<th>Light Power</th>
<th>Flash Lamp Life</th>
<th>Flash Duration</th>
<th>Display</th>
<th>Flash Rate Resolution</th>
<th>Flash Rate Accuracy</th>
<th>Tachometer Mode</th>
<th>External Input</th>
<th>Output Pulse</th>
<th>Run Time</th>
<th>Memory</th>
<th>Adjustment</th>
<th>Modes</th>
<th>Battery Power</th>
<th>Recharger(s)</th>
<th>Weight</th>
<th>Strobe Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100 - 12,500 FPM</td>
<td>7.9 watts @ 6000 FPM, 150 mJoules up to 3100 FPM</td>
<td>100 million flashes typical</td>
<td>10 - 30 microseconds typical</td>
<td>6-digit alphanumeric backlit LCD display</td>
<td>Greater than ±0.1% of reading or ±0.5 FPM</td>
<td>5 to 250,000 RPM</td>
<td>0 to 5 Vdc (12 Vdc max.) TTL compatible, positive edge triggered</td>
<td>0 to 5 Vdc typical - 350 μsec positive pulse</td>
<td>2 Hours typical @ 1800 FPM &gt;1 Hour typical @ 6000 FPM</td>
<td>8 programmable flash rates and last flash rate at power down</td>
<td>Four quadrant tuner button with blinking decade select for flash rate up and down, multiply by 2 and divide by 2</td>
<td>Internal, External, Tachometer, Preset, x or +1, Locked On</td>
<td>Removable 6Vac rechargeable battery pack</td>
<td>PSC-2U Recharger, 100-240Vac, 50/60Hz, includes 4 adapters</td>
<td>1.2 lbs. (0.55 kg) including battery</td>
<td>3.04 x 9.34&quot; (77 x 237 mm)</td>
<td></td>
</tr>
</tbody>
</table>
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. **N.I.S.T. 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

### Specifications: **EXAMINER 1000**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Examiner 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amplitude Ranges</strong></td>
<td>0.01 to 19.99g (RMS)</td>
</tr>
<tr>
<td></td>
<td>0.01 to 19.99 m/sec (RMS)</td>
</tr>
<tr>
<td><strong>Frequency Ranges</strong></td>
<td>Overall: 10 Hz to 10 kHz</td>
</tr>
<tr>
<td></td>
<td>Envelope: 0.5 Hz to 10 kHz</td>
</tr>
<tr>
<td><strong>Display Ranges</strong></td>
<td>LCD 3.5 digit with Measurement, Hold and Low Battery</td>
</tr>
<tr>
<td><strong>Vibration Sensor</strong></td>
<td>Piezoelectric Accelerometer 100 mV/g</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>Audio: (3.5 mm) mini plug</td>
</tr>
<tr>
<td></td>
<td>Sensor Power: 12 Vdc @ 2 mA</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>(2) &quot;AA&quot; cell batteries</td>
</tr>
<tr>
<td><strong>Operating Time</strong></td>
<td>20 hours continuous without phones</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>-14 to 122 °F (-10 to 50 °C)</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>6.3 x 3.3 x 1.25&quot; (152 x 83 x 32 mm)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>2.85 lbs (1.30 kg)</td>
</tr>
</tbody>
</table>

### OnTime Trending Software

**OnTime Trending Software** is a simple-to-use, graphical program designed for condition-based maintenance through the routine trending of vibration and process information. Trending is the best method to judge the dynamic operating conditions of your machinery. **OnTime** helps you to manage all key machinery operating conditions.

**Trend:**
- overall vibration readings
- temperature
- speed
- process measurements of any type

**OnTime** is easy to set-up. Building the user-defined database of collection points is simple and intuitive. Construct entire Plants with complex machines and data collection points in minutes. Cut, paste, copy and edit-all the familiar windows features are here.

**OnTime** graphically displays automatically built trends of the data entered. User defined alarms are set and if violated, an immediate visual alarm is displayed in the software. This allows for instant identification of machines which require corrective action. Compare any type of data.

<table>
<thead>
<tr>
<th>VIBRATION SEVERITY PER ISO 10816-1</th>
</tr>
</thead>
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<td>0.71 18.0</td>
</tr>
<tr>
<td>1.10 28.0</td>
</tr>
<tr>
<td>1.77 45.9</td>
</tr>
</tbody>
</table>

**Ordering Information**

**Examiner 1000 System** Vibration Meter, Sensor Pak, Headphones, Carrying Case, OnTime GP Software
**Examiner 1000 Kit** Vibration Meter, Sensor Pak, Headphones, Carrying Case and OnTime GP lite Software
**Examiner 1000** Vibration Meter with Sensor Pak, Headphones, Carrying Case, No OnTime Software included

OnTime software does not work with Windows 2000 OS.
The ACT Series consists of two models - one tachometer and one tachometer/ratemeter/totalizer. Both feature universal inputs for two and three wire sensors providing signals of 0-5V TTL or 0-1.1V ac to 0-50 V ac. Both models operate from all Monarch sensors (see Page 9) and display in fixed or floating decimal point format. The ACT-3X dual channel input provides the best feature set of any panel or bench top instrument available today.

**Features:**

**ACT-1B (5-99,999 RPM)**
- Economically priced
- Output options: 4-20 mA, 0-5 Vdc or TTL pulse

**ACT-3X (5-999,990 RPM)**
- N.I.S.T. Traceable Certificate of Calibration included
- Standard pulse repeater output
- Optional 4-20mA, 0-5Vdc, and 2 alarm outputs
- Optional Serial, USB or Ethernet communications
- Single event speed capture from start and stop pulses, in units such as MPH, cm/sec, etc. Using two sensors - for linear rate of travel on second input channel.

### Specifications

#### ACT-1B
- **Speed Range:** 5-99,999 RPM
- **Accuracy:** ±1 RPM or 0.005% of reading
- **Input Power:** 100-240Vac 50/60Hz
- **Sensor Power:** 12Vdc
- **Analog Output:** 0-5Vdc Non-iso.
- **Alarm Output:** 2 Form C relay contacts rated 1A at 230 Vac
- **Communications:** Optional (3.5mm phono plug)
- **Ordering Information:**
  - for use with ACT-1B and ACT-3X (with standard serial option).

#### ACT-3X
- **Speed Range:** 5-999,990 RPM (Speeds below 5 RPM possible with multiple pulses/revolution)
- **Accuracy:** ±0.001% of reading or ±1 of displayed value (standard gate) ±0.006% of reading or ±1 of displayed value (fast gate).
- **Input Power:** Isolated 12Vdc ±20%
- **Sensor Power:** 5Vdc or 12Vdc or optional 24Vdc to sensor
- **Analog Output:** 4-20mA isolated
- **Alarm Output:** Optional 4-20mA, 0-5Vdc, and 2 alarm outputs
- **Communications:** Optional RS232C, USB or Ethernet
- **Ordering Information:**
  - for use with ACT-3X (with RS232C, USB or Ethernet communication options).

### Order Information

**PM Remote Software and USB Programming Cable:** for use with ACT-1B and ACT-3X (with standard serial option).

**PM Remote Software:** for use with ACT-3X (with RS232C, USB or Ethernet communication options).
## Sensor Types

### Optical LED (1-250,000 RPM) Most popular.

Description: Threaded stainless steel remote optical sensors have a visible red LED light source and green LED ‘On Target’ indicator. Performs over a wide speed range and operating envelope. Modulated and High Temperature versions available (to 257°F).

**Common usage:** Wide range of general purpose applications in relatively clean environments.

### Optical Laser (1-250,000 RPM) Distances to 25 feet.

**Description:**

**ROLS (Remote Optical Laser Sensor):** Threaded stainless steel remote optical laser sensors have a visible red laser light source and green LED ‘On Target’ indicator. Performs over a wide speed range and operating envelope. **Common usage:** Wide range of applications where distance to target is large.

### Proximity (1-60,000 RPM) Rugged industrial sensor.

**Description:**

**PS-11:** A two wire probe style inductive sensor for use up to 0.2 inches (5 mm) from 0.5 inch (12 mm) metallic target such as bolt head or shaft locking key. **Common usage:** Permanent installation in harsh industrial environments.

### Magnetic (1-99,999 RPM) Self-powered gear sensor.

**Description:**

**M-190W or M-190P:** Most popular sensor for use with 60 tooth 20 pitch gears. Sensor mounts within 0.005 inches (0.127 mm) of a minimum 0.1 inch (2.5 mm) target. Requires no power from the display module and self-generates an AC signal. **Common usage:** Ferrous metals, primarily gear teeth.

### Magnetic with Amplifier Module (1-99,999 RPM) Enhances performance of M-190 magnetic sensor.

**Description:**

**MT-190W or MT-190P:** Amplifier extends operating gap to 0.25 inches (6.35 mm) from the target. Frequently used on gears as the M-190, but can also sense bolt heads or shaft keys and provides a 0-5V TTL output signal. **Common usage:** Ferrous metals including bolt heads or shaft keys in addition to gear teeth.

### Inductive (200-20,000 RPM) Gasoline Engine RPM.

**Description:**

**GE-200:** Ideal sensor for gasoline engine RPM, working 0.5 to 4.0 inches (12 to 100 mm) from ignition coil or magneto. **Common usage:** 2-cycle and 4-cycle gasoline engines.

### Infrared (1-999,990 RPM) High speed sensor.

**Description:**

**IRS-W or IRS-P:** Ideal sensor for working 0.5 to 1.0 inch (12 to 25 mm) from high speed equipment or other applications providing only contrasting light and dark surfaces or beam interruption by solid objects. **Common usage:** Dentist and other high speed drills, slots or gear teeth. Does not require reflective tape.

---

**NOTE:** W = tinned wire leads, P = 1/8" (3.5mm) phone plug connector. ROS is available with 8 or 25 foot cable.

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**Specifications**

**ROS (Remote Optical Sensor):**

- **Operating Distance:** 3 feet (1 m) and 45° from reflective tape
- **Speed Range:** 1-250,000 RPM
- **Operating Temperature:** -14°F to 18°F (-10°C to 70°C)
- **Power Required:** 3.3 to 15 Vdc @ 45 mA
- **Output Signal:** TTL Same as Source
- **Standard Cable:** 8 Feet (2.4 m)
- **Dimensions:** 2.9" (L) x 0.625" diameter (73 x 16mm)

**ROLS (Remote Optical Laser Sensor):**

- **Operating Distance:** Up to 25 feet (7.62 m) and 60° offset from target
- **Speed Range:** 1-250,000 RPM
- **Operating Temperature:** -4°F to 140°F (-20° to 60° C)
- **Power Required:** 7.7 to 9 Vdc, 3mA
- **Output Signal:** Namur (DIN 19 234)
- **Standard Cable:** 8 Feet (2.4 m)
- **Dimensions:** 3.12" (L) x 0.71" (73 x 16mm)

**PS-11:**

- **Operating Distance:** 0.2" (6mm) from 0.5" (12mm) metallic target
- **Speed Range:** 1-60,000 RPM
- **Operating Temperature:** -100° to 225°F
- **Power Required:** None (Self Generating)
- **Output Signal:** TTL Same as Source
- **Standard Cable:** 8 Feet (2.4 m)
- **Dimensions:** 2.0" (L) x 0.625" (50 x 16mm)

**M-190W or M-190P:**

- **Operating Distance:** 0.005" (0.127mm) gap with 0.1" target (2.5mm) min.
- **Speed Range:** 1-99,999 RPM
- **Operating Temperature:** -100° to 225°F
- **Power Required:** None
- **Input Signal:** TTL Same as Source
- **Standard Cable:** 8 Feet (2.4 m)
- **Dimensions:** 2.9" (L) x 0.625" (73 x 16mm)

**MT-190W or MT-190P:**

- **Operating Distance:** 0.25" (6.35mm) gap with 0.1" target (2.5mm) min.
- **Speed Range:** 1-99,999 RPM
- **Operating Temperature:** -100° to 225°F
- **Power Required:** None
- **Input Signal:** TTL Same as Source
- **Standard Cable:** 8 Feet (2.4 m)
- **Dimensions:** 2.0" (L) x 0.625" (50 x 16mm)

**GE-200:**

- **Operating Distance:** Up to 4 inches (100mm)
- **Speed Range:** 200-20,000 RPM
- **Operating Temperature:** 0° to 175°F (-18° to 80°C)
- **Power Required:** 3.3 to 24 Vdc, 4mA
- **Output Signal:** TTL Same as Source
- **Standard Cable:** 15 Feet (4.5 m)
- **Dimensions:** 2.16" (L) x 0.82" (55 x 21 mm)

**IRS-W or IRS-P:**

- **Operating Distance:** 0.5 to 1.0" (12 to 25 mm)
- **Speed Range:** 1-999,990 RPM
- **Operating Temperature:** -10° to 212°F (-23° to 100°C)
- **Power Required:** 3.3 to 15 Vdc
- **Output Signal:** TTL Same as Source
- **Standard Cable:** 8 Feet (2.4 m)
- **Dimensions:** 2.9" (L) x 0.625" diameter (73 x 16mm)

**NOTE:** Additional cable length for all sensors (up to 500 feet) can be purchased and added in the field.
The unique SPSR Series of Self-Powered Sensors provide a TTL compatible pulse output from any of four input sensors (see page 9 for details):

- A laser light source (ROLS-P)
- A visible optical red LED light source (ROS-P)
- An infrared light source (IRS-P)
- An amplified magnetic sensor (MT-190P)

See Page 9 for detailed sensor specifications

Self-powered sensors are a critical element for providing one TTL pulse per revolution for vibration analyzers, spectrum analyzers, stroboscopes, data acquisition equipment, tachometers, balancers, waveform analyzers and magnetic tape recorders.

Specifications SPSR Series
- Range (RPM) Same as sensor
- Output Signal TTL compatible pulse, 0-5V or 5-0V
- Pulse Width Determined by size of target and rotational speed
- Output Connector BNC
- Power Built in rechargeable battery pack (NiMH), 4.8Vdc

Ordering Information
- SPSR-115/230 includes: SPSR-IM, PSC-2U, ROS-P and 12 inches of reflective tape
- SPSR-IM includes: PSC-2U, 115/230 Vac power supply/re-charger (USA, AUS, UK and EURO plugs).
- CA-DCSPSR: Cigarette Lighter DC Power adapter with 6 foot cable

Smart Laser Sensor is an internal battery-powered optical speed sensor utilizing a visible Class 3R Laser for a TTL pulse output. Operating range up to 65 feet (19.8 m) with reflective tape and up to 3 feet* (1 m) from contrasting color targets, keyways, bolt heads or blades.

- “Smart” auto gain provides best performance in picking up target reflections.
- “On Target” indicator
- TTL pulse output signal inverter switch
- Manual sensitivity knob provides dynamic fine tuning of sensor response
- Signal/Pulse/RS232 Output DIN connector port
- External DC power or recharger port
- Tripod mounting bushing (¼ - 20 UNC)
- Optional RS232, DB9 Pin connector with tinned wire leads

Ordering Information
The DC1250 is a feature rich data acquisition system offering 2 universally configurable isolated inputs for measuring DC voltage, DC current, thermocouples and RTD’s as well as frequency and pulse inputs. 4 internal alarm setpoints, 2 alarm relay outputs and 1 digital control input are all standard. A maximum sample storage rate of 100 samples per second can be set for both channels allowing for capture of short duration process signal anomalies. CompactFlash™ cards up to 2 Gigabyte size can be used allowing many data points to be stored over long periods of time.

The DC1250 can be used in conjunction with many of Monarch’s speed measurement sensors. Power for sensors is provided from the DC1250 rear terminals. Measure, display and record periods of time.

DataChart DC1250 Specifications (abbreviated)

**Input Power:**
- **Standard:** 9 Vdc +/- 0.5Vdc @ 5VA (depends on external loads) provided by external AC wall transformer, non-isolated.100-240Vac50/60Hz
  - **Option:** Isolated 12-24 Vdc input power available (not compatible with internal battery pack option below).
- **Output:** Internal battery pack provides uninterrupted operation and controlled shutdown during blackout. 6Vdc, 2400mAH NiMH Backup Time; 6 HRS. typical (depends on external Load).
- **Outputs:** 2 outputs 5Vdc @ 50mA to power external sensors.
- **Isolation:** 300V AC/DC channel input to chassis ground.

**Input Types:**
- **DC Voltage**
  - **Ranges:** 0-250mV; 0-1.25V; 0-5V; 0-12.5V; 0-25V
  - **Accuracy:** 0.1% of reading
  - **Resolution:** 0.025% of full scale

- **DC Current**
  - **Ranges:** 0-20mA; 4-20mA; 0-50mA; 10-50mA
  - **Accuracy:** 0.1% of reading excluding 250 ohm external shunt (required).
  - **Resolution:** 0.025% of full scale

**Frequency Input:**
- **Range:** 0 - 10,000 Hz / 0 - 600,000 RPM
- **Accuracy:** Freq±1 Hz; RPM ± 1 RPM below 9,999 RPM; ±10 RPM above 9,999RPM
- **Input:** Low <1.0Vdc; High >3.0 <12.0Vdc
- **Pulse width:** 10 microsecond minimum.
- **Input Impedance:** >100k ohms
- **Measure Rate:** Up to 100 samples/sec per channel.
- **Math Function:** Y = mx + b; average, hi peak, low peak and totalization.
- **Media:** CompactFlash™ to 2 GB.
- **Display:** LCD Graphics, 160 x 80 pixels, black FSTN with white LED backlight. User controlled backlight level and contrast adjust.
- **User Interface:** 5 button keypad (dual function buttons).
- **Clock:** Auto leap year and daylight savings adjustment. Internal battery back-up.

**Relay Output:** Two alarm outputs: 30V 0.25A Form A relays

**Isolated Input:** One input, 5 to 12Vdc activation @ 10mA typical.

**Audible:** Internal beeper (multiple tones).

**Dimensions:** Front panel: 96mm x 96mm (1/4 DIN) x 152mm (3.78 x 3.78 x 6 inches).

---

**Temperature Inputs**

<table>
<thead>
<tr>
<th>Thermocouple</th>
<th>Accuracy: 0.3% of full scale (typical).</th>
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</thead>
<tbody>
<tr>
<td>Ambient Temperature Sensor Accuracy: ±1.5°C</td>
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<table>
<thead>
<tr>
<th>Type</th>
<th>Range</th>
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<tbody>
<tr>
<td>J</td>
<td>-100 to 760°C ±2°C (-148 to 1400°F ±3°)</td>
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<tr>
<td>K1</td>
<td>-100 to 1000°C ±2°C (-148 to 1832°F ±3°)</td>
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<tr>
<td>K2</td>
<td>0 to 1370°C ±2°C (32 to 2498°F ±3°)</td>
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<tr>
<td>T</td>
<td>-240 to 400°C ±2°C (-400 to 750°F ±3°)</td>
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<tr>
<td>E</td>
<td>-80 to 400°C ±2°C (-112 to 750°F ±3°)</td>
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</table>

**RTD:**
- **Accuracy:** 0.3% of full scale (typical).
- **Resolution:** 0.1°C

<table>
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<tr>
<th>Type</th>
<th>Range</th>
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</thead>
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<td>100 Ohm Pt 385</td>
<td>-100 to 760°C ±2°C (-148 to 1400°F ±3°)</td>
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<tr>
<td>100 Ohm Pt 392</td>
<td>-100 to 1000°C ±2°C (-148 to 1832°F ±3°)</td>
</tr>
<tr>
<td>100 Ohm Pt 392</td>
<td>0 to 1370°C ±2°C (32 to 2498°F ±3°)</td>
</tr>
</tbody>
</table>

**Ordering Information**

**DC1250**

1 Choose Input Power
- **U** Universal AC Adapter 100-240Vac wall adapter with interchangeable Plug Set
- **D** DC Input Power 12-24Vdc input power isolated

2 Choose Backup
- 0 None
- 1 Battery Backup* (Rechargeable NiMH battery pack will operate recorder up to 6 hours in the event of power loss. Not Available with Option “D” DC Input Power)

3 Choose Communications
- 0 None USB Comms.
- 1 Mini-USB port for downloading data directly to PC. Front access.
- 2 Ethernet 10/100BaseT Ethernet, rear access RJ45 connector. Allows network access to recorder.

**Accessories**

<table>
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<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Navigator</td>
<td>Windows Compatible Software for graphic analysis, printing transfer and exporting CompactFlash™ Card Reader USB 2.0 compatible</td>
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<tr>
<td>CFR</td>
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<table>
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<tr>
<th>Model No.</th>
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<tbody>
<tr>
<td>MAS250R</td>
<td>250 ohm Precision Resistor for current inputs. 0.1% 0.5 watt N.I.S.T. Calibration with data</td>
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<tr>
<td>NIST-1250</td>
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<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>THS-W</td>
<td>Temperature/Humidity Probe with 8 foot cable</td>
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</table>

**CompactFlash™ Memory Cards**

<table>
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<th>Model No.</th>
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<tr>
<td>MC1024MBCF</td>
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</tr>
<tr>
<td>MC2048MBCF</td>
<td>2 Gigabyte</td>
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</tbody>
</table>

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**Data Chart 1250**

**Remote Optical Sensor**

**Remote Magnetic Sensor**

**Remote Infrared Sensor**

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**Remote Optical Sensor**

**Remote Magnetic Sensor**

**Remote Infrared Sensor**

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**Remote Optical Sensor**

**Remote Magnetic Sensor**

**Remote Infrared Sensor**

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**Remote Optical Sensor**

**Remote Magnetic Sensor**

**Remote Infrared Sensor**
The **UltraPro AG500** is a powerful ultrasonic leak detector and electronic stethoscope for use in construction, maintenance and manufacturing wherever precision gaseous leak detection or diagnostics are required.

Ultrasound is composed of high-frequency sound waves above the range of human hearing. **UltraPro** uses this technology to sense frequencies ranging from 18 to 42 kilohertz, which are electronically translated down into the audible range. Predictive Maintenance uses airborne/structure-borne ultrasound technology to locate leaks in any gaseous systems and to troubleshoot bearings, injectors, solenoid or valve operations. **UltraPro** features a unique Automatic Gain Control which automatically filters the signal to provide the best signal-to-noise ratio, suppressing background noise and pinpointing leaks. The AG circuit simplifies operation, removing complicated adjustment knobs and filter switches. **UltraPro** offers superior electronics with rugged industrial packaging and a protective rubberized case in a simple-to-use ultrasonic meter.

**Features:**
- Automatic Gain Control
- Simple Operation
- 10 Element LED Bargraph Display
- Industrial Rubber Holster
- Air and Contact Probes
- Audio Out with volume Control

**Common Applications:**
- Steam Traps
- Vacuum/Air Leaks
- Bearings/Valves
- Pressure Leaks
- Water Leaks

**Ordering Information**
- **UltraPro AG500 System**
  - Detector, Headset, Air and Contact Probes, Tone Generator, 9v Batteries and Latching Carrying Case.

- **UltraPro AG500 Kit**
  - Same as above but without Tone Generator.

- **Tone Generator Generator and Battery**

**UltraPro AG500 System includes:**
- Detector, Headset, Air and Contact Probes, Tone Generator, Batteries and Latching Carrying Case.

**Monarch Ultrasonic Tone Generator** is a battery-powered continuous tone source of 40 kHz. It effectively allows you to "pressurize with noise". It is capable of 155 dB and transmits up to 40 feet. Ideal for enclosed vessels, tanks and buildings.

**Locate Pin-Hole Leaks**
- Using the air probe you can locate pin-hole leaks up to 10 feet away. Find pressurized or vacuum leaks on all types of gases such as air, freon, nitrogen, propane, etc.

**Listen to Bearings, Gear Boxes and Steam Traps**
- Use the contact probe to listen to bearings, gearboxes, valves, steam traps etc. Easily compare noise levels between like objects.

**Water/Air Leaks in Vehicles and Vessels**
- Place the tone generator inside a vehicle, closed vessel, container or building and search for leaking seals and gaskets around doors and windows.
Monarch Flexible Fiberscopes are perfect for inspecting interior areas which are difficult to view. Optical inspection can save thousands of dollars in preventing unnecessary disassembly of complex machines. With the **FSI** or **FSX Fiberscopes**, visual inspection can confirm your diagnosis, ensure proper assembly and welded joints or even locate a dropped component.

**FSI and FSX Features:**
- Superior Resolution 7400 Pixels
- Water/Chemical Resistant
- 40° Field of View
- 10mm and 6mm Diameters Available
- Bending Radius down to 3 inches

**Monarch FSI Series Flexible Fiberscopes** are self-illuminating with either LED or Halogen lamps. Both 10mm and 6mm diameters are available in lengths of 24, 36 and 48 inches.

**Monarch FSX Series Flexible Fiberscopes** require an optional external light source. (Order the Scorpion Xenon flashlight). Only 6mm diameters are available in lengths of 24, 36, 48, 60, 72, 84 and 96 inches.

**FIBERSCOPE VISUAL INSPECTION TOOLS**

**Ordering Information**
- FSI-24-6-H Self-Illuminating, 24” length, 6mm diameter, Halogen lamp.
- FSI-36-6-H Same as above in 36” length.
- FSI-36-6-L Same as above with LED lamp.
- FSI-24-10-L Self-Illuminating, 24” length, 10mm diameter, LED lamp.
- FSI-36-10-L Same as above in 36” length.
- FSI-48-10-L Same as above in 48” length.
- FSX-24-6 External illumination, 24” length and 6mm diameter.
- FSX-36-6 Same as above in 36” length.
- FSX-48-6 Same as above in 48” length.
- FSX-60-6 Same as above in 60” length.
- FSX-72-6 Same as above in 72” length.
- FSX-84-6 Same as above in 84” length.
- FSX-96-6 same as above in 96” length.

**Scorpion Halogen Flashlight for FSX series fiberscopes**

**Common Applications:**
- Automotive/Marine
- Security
- Manufacturing
- Construction
- Maintenance
- HVAC
- Electrical
- Engines
- Gear Boxes

Monarch FSI and FSX flexible fiberscopes include padded latching carry case with operation manual (optional clip on mirror shown).

**Plumbing and Construction**
Inspect drains for blockages and lost items. Inspect behind walls for water or insect damage. Watertight tips eliminate worry of damage.

**Electrical and HVAC**
Inspect electrical wire routing and condition or HVAC ducts for leaks and dust buildup.

**Gas and Diesel Engines**
Inspect pistons, cylinder walls and T-belts. Look inside A/C ducts for mold and mildew buildup. Find oil and water leaks in hidden areas.
Monarch International, Inc. was founded in 1977 as a sales and service organization for a diverse range of instrumentation. In 1982, the Monarch Instrument Division was established to manufacture and market the first microprocessor based portable tachometers.

“Innovation in Instrumentation” is the Monarch design philosophy and in recent years we have introduced state-of-the-art products:

- Pocket Laser Tachometer
- PALM STROBE x
- Nova-Strobe dbx Stroboscope
- Examiner 1000 Vibration Meter
- DataChart™ 1250 Paperless Recorder

Monarch Instrument remains committed to innovations and quality in sales, customer service and manufacturing.

With the addition of new models of tachometers and the introduction of the Nova-Strobe Series of portable stroboscopes in 1990, Monarch rapidly became the world’s largest supplier of rotational speed measuring instrumentation and stroboscopic inspection equipment.

In 1992, Monarch introduced the DataChart™ Paperless Recorder. Today, we offer a wide range of technical capabilities and competitive pricing throughout the DataChart™ product line to include color touchscreens and multi-channel recorders.

Our full service sales force and world-wide distribution force stands ready to answer purchase and product application questions. Please feel free to contact us via our toll free telephone line, website, e-mail, fax or surface mail. We offer a comprehensive line of precision products and calibration services, all with the convenience of the Internet.

ISO9001:2000 Certified

Monarch Instrument also manufactures a full line of paperless recorders and compact data loggers please visit www.monarchinstrument.com for more information.

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