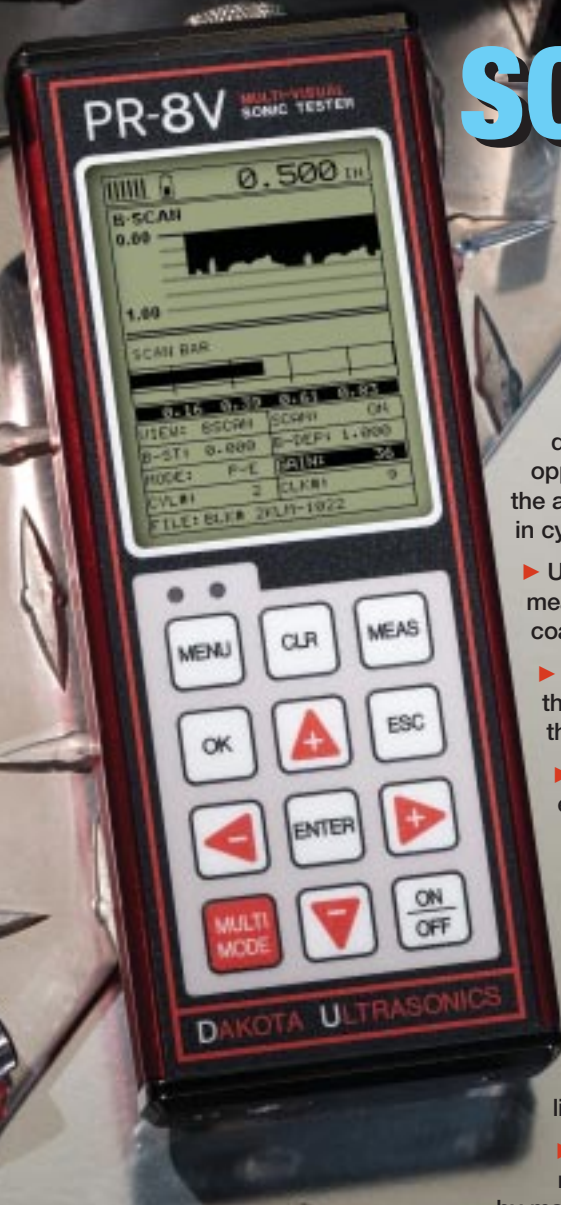## THE
PR-8V
SONIC TESTER

The physical size, weight, and display resolution are just a few of the benefits of the PR-8V

► The time-based B-Scan feature of the PR-8V displays a cross section of the opposite surface, allowing engine builders the ability to see the contour of the back surface in cylinders while scanning.

► Use the Multi-Mode (Echo-Echo mode) feature to measure chassis tubing with or without paint and coatings. Built-in automatic gain control.

► Selectable low, medium, and high gain settings offer the inspector the additional punch power for materials that are hard to penetrate.

► The variety of calibration options is just one more example of PR-8V's versatility.

► Store up to 64 custom setups. Factory setups available for common applications.

► The internal Data Logger of the PR-8V has been customized for both the engine builder and the chassis inspector. Selectable cylinder mapping or general alpha numeric file storage will satisfy your reporting needs.

► Built-in transducer types offer increased linearity between transducers.

► The Fast Scan feature provides a better representation during the scanning process, by making 32 measurements per second. Remove the transducer from the test material and display the thinnest measurement found.

► Use the visual and audible alarm to set Hi and Lo limits to signal the inspector when the measurements are out of tolerance.

► The PR-8V also comes complete with our Windows® PC software for transferring data to- and from a PC, and viewing B-Scans, Cylinder Maps, and general measurements.

► 2 year limited warranty.

Physical

Size:
Width (2.5in./63.5mm)
Height (6.5 in./165mm)
Depth (1.24 in./31.5mm)

Weight:
13.5 ounces (with batteries).

Keyboard:
Membrane switch pad with twelve tactile keys.

Operating Temperature:
14°F to 140°F (-10°C to 60°C)

Case:
Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).

Data Output:
Bi-directional RS232 serial port. Windows® PC interface software.

Display:
1/8in. VGA grayscale display (240 x 160 pixels). Viewable area 2.4in. x 1.8in. (62m. x 45.7mm). EL backlit (on/off/auto).

Ultrasonic Specifications

Measurement Modes:
Pulse-Echo (flaws, pits, corrosion).

Echo-Echo (thru-paint—chassis tubing).

Pulser:
Square wave pulser.

Receiver:
Selectable low, medium, or high gain in Pulse-Echo mode or AGC gain control in Echo-Echo mode.

Timing:
20 MHz with ultra low power 8 bit digitizer.

Warranty

2 year limited

Certification

Factory calibration traceable to national standards.

CE approved

Power Source

Three 1.5V alkaline or 1.2V NiCad AA cells.

Typically operates for 150 hours on alkaline and 100 hours on NiCad (charger not included.)

Auto power off if idle 5 min.

Battery status icon.

Measuring

Range:

Pulse-Echo Mode:
Standard operating mode for engines and automotive parts without painted surfaces (pits or flaws detection). Measures 0.025in. to 9.999in. (0.63mm to 254mm).

Echo-Echo Mode:
Thru-paint & coating—chassis and general body inspections. Measures from 0.050in. to 4in. (1.27mm to 102mm).

Resolution:
+/- .001 in. (0.01 mm)

Velocity Range:
.0492 to .3936 inches/µs
1250 to 9999 meters/sec

One and Two Point calibration option, or selection of basic material types.

Units:

English & Metric

Display

Display Views:

Large Digits—
Standard thickness view.
Digit Height: 0.400in. (10mm).

B-Scan—
Time based cross section view. Display speed of 15 secs per screen.

Scan Bar Thickness—
Viewable in Large Digit and B-Scan views.

Repeatability Bar Graph—
Bar graph indicates stability of reading.

Data Logger (Internal)

12,000 readings and B-Scans (alpha numeric storage).

Memory:
16 megabit non-volatile ram.

Transducer

Transducer Types:
Dual Element (1 to 10 MHz).

Locking quick disconnect "00" LEMO connector.

Standard 4 foot cable.

Custom transducers and cable lengths available for special applications.

Features:

Setups:
64 custom user-defined setups. Factory setups available for common applications.
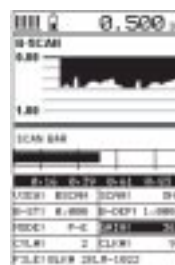
Selectable Transducers:
Selectable transducer types with built-in dual-path error correction for improved linearity.
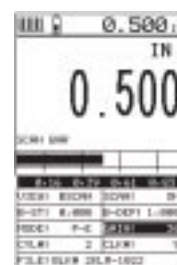
Alarm Mode:
Set Hi and Lo tolerances with audible beeper and visual LEDs.

Fast Scan Mode:
Takes 32 readings per second and displays the minimum reading found when the transducer is removed. Display continuously updates while scanning.

B-Scan
Display View

Large Digits
Display View

11/04 (04-107/2.5M)

Distributed by:

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