

# RX8-DL

## Sonic Tester

### HIGHLIGHTS:

- ▶ The time-based B-Scan feature of the RX8-DL 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.
- ▶ Five position gain switch in 3dB increments (40-52dB), offering fine adjustment for noisy or hard to penetrate materials.
- ▶ The variety of calibration options is just one more example of RX8-DL's versatility.
- ▶ Store up to 64 custom setups. Factory setups available for common applications.
- ▶ The internal Data Logger of the RX8-DL 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.
- ▶ The high speed scan feature provides a better representation during the scanning process, by making up to 200 measurements per second. Captures the live minimum and maximum thickness while scanning.
- ▶ Use the visual and audible alarm to set Hi and Lo limits to signal the inspector when the measurements are out of tolerance.

# DAKOTA RX8-DL SONIC TESTER

## SPECIFICATIONS

### PHYSICAL

**Weight:**

13.5 ounces (with batteries).

**Size:**

2.5 W x 6.5 H x 1.24 D inches  
(63.5 W x 165 H x 31.5 D mm).

**Operating Temperature:**

-14° to 140°F (-10° to 60°C).

**Keyboard:**

Membrane switch with twelve tactile keys.

**Case:**

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

**Display:**

1/8in VGA grayscale display (240 x 160 pixels); viewable area 2.4 x 1.8in (62 x 5.7mm); EL backlit (on/off/auto/invert).

### ULTRASONIC SPECIFICATIONS

**Measurement Modes:**

Pulse-Echo (flaws, pits, corrosion).

Echo-Echo (thru-paint-chasis).

**Pulser:**

150 volt square wave pulser.

**Receiver:**

Manual or AGC gain control with 50dB range, depending on mode selected.

**Timing:**

Precision TCXO timing with single shot 100MHz 8 bit ultra low power digitizer.

### DISPLAY

**Display Views:**

**Large Digits:** Standard thickness view; Digit Height: 0.700 in (17.78mm).

**B-Scan:** Time based cross section view.

Display speed variable (10 to 200 readings per second).

**Scan Bar:** Speed 10Hz. Viewable in B-Scan and Large Digit views.

**Bar Graph:** Indicates stability of measurement. Viewable in B-Scan and Large Digit views.

### POWER SOURCE

**Line Power:** USB-C to PC or power outlet.

**Batteries:**

Three AA cells. Alkaline - 35 hrs, Nicad - 10 hrs and NI-MH - 35hrs.

Auto power off if idle 5 minutes.

Battery status icon.

### MEASURING

**Range:**

**Pulse-Echo Mode (P-E)** - (Pit & Flaw Detection) measures from 0.025 to 36 inches. (0.63 to 914.4mm). Range dependent on material and transducer type.

**Echo-Echo Mode (E-E)** - (Thru Paint & Coatings) measures from 0.100 to 4.0 inches (2.54 to 101.6mm). Range will vary depending on the coating thickness and material type.

**Resolution:** +/- .001 inches (0.01mm).

**Velocity Range:**

0.0122 to 0.7300 inches/ $\mu$ s

309.88 to 18542 meters/sec

Single and Two point calibration option, or selection of basic material types.

**Units:** English & Metric

### MEMORY

**Data Structure:**

Grid (alpha numeric)

Engine Map (cylinder scans)

**Screen Capture:**

Bitmap graphic capture for quick documentation (.tif).

**OBSTRUCT** to indicate inaccessible locations.

**Capacity:**

4Gb internal memory.

**Data Output:**

USB-C 1.1 PC & OSX connectivity.

### TRANSDUCER

**Transducer Types:**

Dual Element (1 to 10MHz).

Locking quick disconnect "00" LEMO connectors.

Standard 4 foot cable.

Custom transducers and cable lengths available.

### CERTIFICATION

Factory calibration traceable to NIST & MILSTD- 45662A.

### WARRANTY

2 year limited

### REPLACEMENT

RX8-DL replaces PR-8V

### FEATURES

**Setups:**

64 custom user-definable setups; Factory setups can be edited.

**Selectable Transducers:**

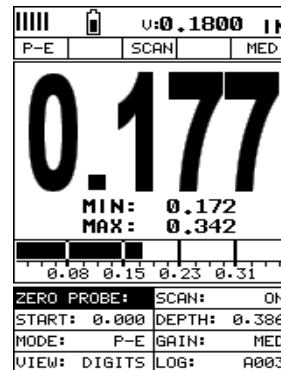
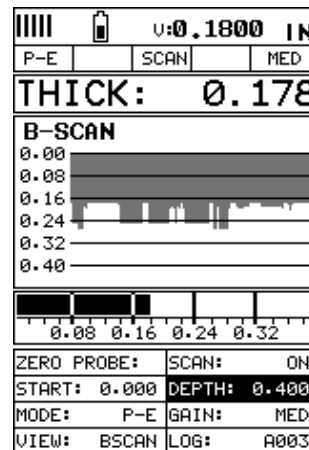
Selectable transducer types with built-in dual path error correction for improved linearity.

**Alarm Mode:**

Set Hi and Lo tolerances with audible beeper and visual LEDs.

**Scan Mode:**

Takes 250 readings per second and displays the minimum & maximum readings found when the transducer is removed.

**Digits View****B-Scan View**

MADE IN THE USA

Dakota NDT  
an Elcometer company