RAPTOR IMAGING FLAW DETECTOR

NDT Systems, Inc., once again is pleased to introduce a new and novel concept in Ultrasonic Flaw Detectors. The Raptor ushers in a new category of Ultrasonic Flaw Detectors by offering full imaging capability in a standard hand held flaw detector. Not only is the RAPTOR a high performance flaw detector offering features usually found on premium flaw detectors but it adds functionality including C-Scan, Dual Axis B-Scan, 3D, Pan & Zoom, Spreadsheet review mode and more.

Notable features of the RAPTOR Imaging Flaw Detector:

Fully sunlight readable 640x480 Pixel display. This display is the absolute leading edge technology in commercial flat panel displays. The viewing angle is 160 degrees in all axis making easy to view from any angle. The intensity is also adjustable from 10%-100%

Simple Direct Access Keys to major menu items.

F1-F8 Context Sensitive Direct Access Keys

Sync: IP or IF - 1st, 1st-2nd, 2nd-3rd

(- to -), (- to +), (+ to -) and (+ to +) Gating , either IP-1st, 1st to 2nd or IF

Spike and Square Wave Pulsers are fully user adjustable. Spike voltage up to 350V and Square wave voltage to 400v, from 10 to 10,000ns in 5ns increments.

Rep Rate is automated or can be user adjustable from 1Hz (ONE Hertz) to 5KHz in

The RAPTOR also supports a growing list of available scanners from simple manual scanners to full production oriented scanners incorporating Stepper and Servo drives (via an optional external control unit). There are even lightweight battery powered scanners available providing controlled motion semi automated scanning capability. The picture to the left is demonstrating the RCA-10 battery powered Cantilever Arm Scanner. NO AC Power is required. The battery powered scanner is powered via an external battery pack incorporating the same battery as used in the RAPTOR instrument.

Flaw Detection Features included standard that are typically OPTIONAL in competitive units include:

- Manual PRF Control: Allows the operator to manually adjust the RAPTOR's pulse repetition frequency (PRF) from 1 Hz to 5KHz in 5 Hz increments.
- Extended Range: 0.080" to 800" (2 mm to 2000 mm)
- Gate 2 (Echo-to-Echo): A second Gate in the RAPTOR allowing Gate 2 measurements , Echo-to-Echo measurements and Gate 2 alarms.
- Tunable Square Wave Pulser: Allows the operator to tune the pulse width of the square wave pulser to optimize transducer performance.
- AWS D1.1 & D1.5 Calculations: Permits more efficient inspection by eliminating manual calculations.
- BB, 0.5, 1.0, 2.25. 5.0, 10MHz tuning incorporating HiQ, LowQ Digital Band Pass Filtering
- DAC & DAG
- More...

SPECIFICATIONS:

Display: Full 480 x 640 (VGA) Graphic (3.4"W x 4.55"H)
New Technology Display and FULLY Sunlight Viewable

SplitView: (Handheld Industry First)
Size as a Function of Main Trace Window Size

SplitScan: (Handheld Industry First)
Display A-Trace and B or C Scan Simultaneously

AutoTrack: (Handheld Industry First)
When in SplitView, Second Window Displays
a Zoom View of the Main A-Trace which Tracks
The Echo Being Measured

A, B and C-Scan imaging native

Screen Freeze Mode or Instant-Freeze Mode... Perfect for Spot Weld Applications

Physical:
5.75" Wide X 3" Deep X 9.5" Long - 5.6 lbs with Battery
All Aluminum with Sealed and Rubberized end caps

Range: 0.05" - 400" Delay: 0 - 165" @ Full Range!
Resolution - 0.0001"/0.001 • Inch/mm selectable

Velocity Range:
0.0490 to .9999 in/us • fully adjustable.

Calibration: Range, Delay, Velocity & Zero

Pulser / Receiver: Up to 10KHz Rep Rate, Spike and Square Wave Pulser (50v to 400v and 5 to 10,000ns)

Display Mode: RF, +HW, -HW, FW - Hollow and Filled

GAIN: 100dB, Damping - 8 levels

Frequency Range - 500Khz - 20MHz

Tuning: 0.5, 1.0, 2.5, 5 and 10MHz

Probe Select: Single / Dual Element

Probe ID Key (NDT Gaging Probes) or Probe Library Selection

Peak Echo Hold: Fixed or Unique Timed "Waterfall" reset

Alarm: LED Thickness High, Lo or High/Lo, Amp +/- Level

I/O: USB 2.0 Connectivity

SD Card: Up to 32GB user removable Flash Card

Memory: 75MB On Board Memory (system & storage)

Operational Modes:
Single/Dual/Angle/Contact/Delay

Gates:
Contact - IP-1st, 1st-2nd Permits Through Paint
Delay/Bubbler/Immersion
IP Blocking, IF Blocking, IF-1st, 1st-2nd Echo Blk
Amplitude: 3 Gates, Track IP, IF, previous gate. Alarm POS or NEG Gating

20 Point DAC

Imaging Features:
A-Scan, B-Scan - Time encoded 'B' Scan (Scrolling)
Encoded B-Scan, SpreadSheet View, Pan & Zoom, 3D, Histogram

Scanners: Manual, Semi-Automated and Fully automated scanners supported.

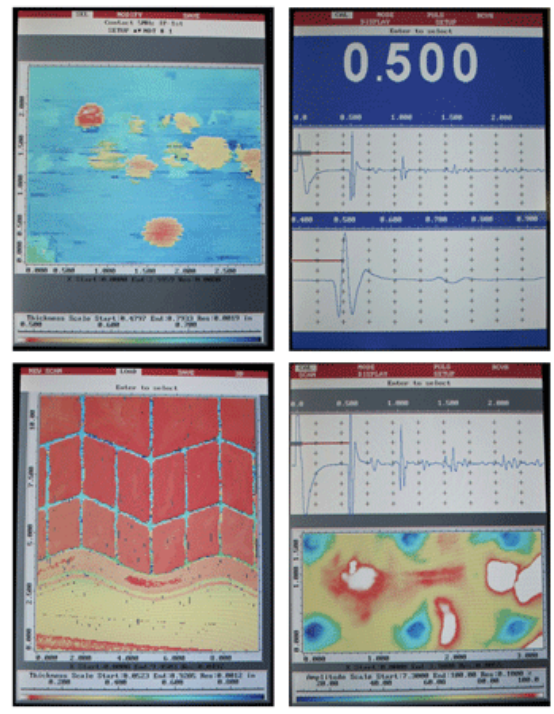
Power Requirements: Operates on one Li-ion Battery for up to 8 hours while imaging! • Charger included

Transducers, cables and accessories are available for almost any application

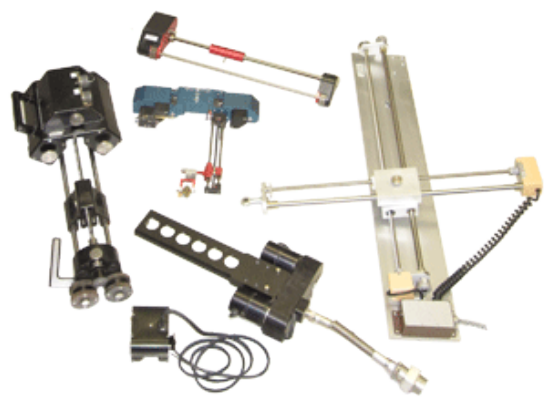
Plastic carry case included

CE Approved

Manufactured in facilities meeting ISO9001 manufacturing processes



Sample Screen Images



Available Scanners