



Tru-Sonic

High Bright Hand-Held Digital Ultrasonic Flaw Detector





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INTRODUCTION.

Tru-Sonic hand held and light weight Digital Ultrasonic Flaw Detector offers you all the features of larger, heavier instruments, such as high resolution with the usual high gain reserve.

In addition to this, the instruments easy work by the inclusion of extras. For example in weld testing the exact flaw location is evaluated; all features are available for demanding thickness measurements.

User-friendly programs for display evaluation with Distance Amplitude Curves (DAC) and for AVG evaluation are available as options.

The weight 1.75kg, including batteries!

The ergonomic design and operational easy will amaze you.

Color TFT display. A bright, 500 cd/m² high contrast screen enables you to read your measurements data even under poor lighting conditions. The A-Scan, the instrument settings and the digital measurement readings are all displayed simultaneously. You can also have a selected measurement reading display in large numerals.

The instruments can withstand the toughest conditions because they are dustproof and splash-waterproof and are resistant against powerful impacts.

After testing, you will certainly wish to use the many documentation possibilities to record all calibration parameters and test results.

INSTRUMENTS MEET YOUR NEEDS

The high refresh rate (60HZ) of the bright and high-contrast TFT screen is reminiscent of the successful analog tubes.

You can read your measurement readings quickly and clearly. If a measurement is made when you are at some distance from your instrument, simply display the reading in large digits.

The pulse repetition frequency can be reduced. By doing this, phantom echoes can be reliably avoided which could occur when testing larger test objects.

The instrument can store data sets, including all instrument parameters, test results and A-Scans and can be recalled as well as printed at any time.

You soon feel at easy, because you operate them in accordance with your proven standards for digital instruments.

MEASUREMENT FEATURES

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- Hard Carry case
 - Batteries (inside)
 - AC mains adapter/battery charger
 - USB/RS232 Data transfer cable
 - Operating manual (English)
 - Software for documentation and data filing
 - Ultrasonic cables and probes
- ◆ High resolution TFT display
 - ◆ Large thickness reading display
 - ◆ DAC curve with DAC alarm
 - ◆ +6dB DAC setting can extend set DAC sound path up to 200 mm full screen
 - ◆ Positive, negative, and minimum depth alarms
 - ◆ Filled waveform trace display
 - ◆ Freeze and peak memory mode
 - ◆ Separately gate A and gate B setting
 - ◆ Echo-Echo for through coating thickness measurement
 - ◆ Peak or flank measurement
 - ◆ RF display
 - ◆ Time-B-scan
 - ◆ One point Auto probe zero calibration (including single contact and angle beam probe)
 - ◆ Pulse repetition frequency Control
 - ◆ Standard dual gate with alarm
 - ◆ Fast 60Hz display update rate
 - ◆ Displays sound path leg and its value, surface distance and depth to flaw for angle beam inspections



Basic Specifications	
Calibration range:	From 25 to 5000 mm (steel long).
Sound velocity	2 fixed values(3240m/s,5920m/s) and adjustable in the range 1000 to 9999m/s in steps of 1m/s.
Probe delay	0 to 365 μ s
Gain	100dB, adjustable in steps of 0.1/2/6/12/20 dB
Fine Gain	0.1dB
Frequency range	0.5-4 MHz narrow band, 5-15 MHz wide band
Pulse repetition frequency	10-1000Hz, depending on the set calibration range and the probe delay for adjustment.
Test methods	Pulse echo mode and Thru mode
Damping	100/200 Ω
Echo presentation	Full wave, RF wave
Suppression	Linear , 0 to 90% screen height adjustable in steps of 1%, status indication on the display
DAC	Recording of up to 8 reference echoes, 40dB dynamic range, display of the DAC curve. 3 or 4 DAC curve can be setting
Data storage	1000 A-scan race Data sets in the FLASH memory , with additional alphanumeric identification and directory function.
Units of measure	mm or inch
Direct documentation	Hardcopy (contents of display), active measurement reading, test report or thickness report, via the RS-232 interface to computer
Interface	RS-232 C (bidirectional) or USB adaptor for PC computer
Analog output	Proportional voltage for amplitude and sound path of the echo in the gate; TTL signal for gate alarm
Probe connector	Two LEMO 1 connectors
Power supply	Removable 8800mAh/7.2V Li-ion Battery or mains supply via an external mains power/charger unit JBD15-A2S
Operational period	Up to 7.5 hours with Battery (select LCD low bright)
Battery charge indication	On the display
Permitted operating temperature	-5 C TO +55 C
Storage temperature	-40 C TO +75 C (without batteries)
Display size	Screen: 130mmx90mm (WxH)
Dimensions	260mmx190mmx60mm (WxHxT)
Weight	1.75 Kg