



Features

- Four ways to present waveform: positive half-wave, negative half-wave, full wave and radio frequency.
- Automatic gain adjustment, defect equivalent calculation and peak memory function
- Two high resolution scanning mode: A and B
- Display of echo envelope
- Two individual gates setting and alarming function.
- 32 detecting channels are available with separate detecting parameters and DAC (Distance Amplitude Correction) curves in every channel.
- Automatic formation of DAC curves, and 30 points 'data can be recorded infinitely, adjustable offset curves and gain correction functions are available.
- Three detecting modes (single-probe, dual crystal probe and transmission) with automatic calibration function
- Connected to PC via USB interface with advanced software for data analysis and management.
- Data and documents are managed with file allocation table (FAT) system, making the management of inspection data more convenient, reliable and faster
- Super large memory up to 32M, 1000 echo data can be stored.
- EL Highlight matrix display (no drift with angle, temperature or sunlight)
- Brand new digital signal circuit is designed for TUD310
- Digital signal processor (DSP) is used for signals analyzing, making circuit noise reduced properly and waveform more stable.
- EPSON ink-jet printers can be connected with TUD
- Real-time waveform display and review

TUD310

ULTRASONIC FLAW DETECTOR

Standard Delivery

• Main unit	1	• Warranty card	1
• Power adaptor	1	• Instruction manual	1
• Neck strap	1		
• Cable for probe	2		
• Straight probe (2.5MHz, Ø20)	1		
• Angle probe (5MHz, 8×9K2)	1		
• Couplant	1		
• Flash disk	1		
• Screw driver	1		
• TIME certificate	1		

Optional Accessory

- Connecting cable
- Software for TUD310
- Various probes
- EPSON ink-jet printer

Technical Specification

Items	Description
Scanning range	2.5 mm ~9999 mm
Scanning resolution	0.1mm (2.5mm ~100mm) 1mm (100 mm ~5000mm)
Gain range	0dB ~110 dB
D-delay	-20µs~+3400µs
P-delay	0µs~99.99µs, resolution 0.01µs
Sound speed	1000 m/s~9999m/s
Bandwidth	0.2MHz~15MHz (Low 0.2~1 Mid 0.5~4 High 3~15)
Vertical linearity accuracy	≤3%
Horizontal linearity accuracy	≤0.2%
Dynamic range	≥32dB
Rectification	Positive half wave, negative wave, full wave, and RF
Sensitivity leavings	≥60dB
Test mode	Pulse-echo, dual and through transmission
Pulser	Spike excitation pulser
Damping	50ohms, 150ohms and 400ohms
Reject	Linear, 0-80% of full screen, variable in steps of 1%
Unit	Metric/inch
Interface	RS232 / USB
Printer	EPSON ink-jet printers
AC requirements	85-264V AC/1.0A, 47-63Hz
Temperature	-10°C~40°C
Humidity	20%~90%RH
Power supply	Li battery 4×3.6V 4000mAh
Charging time	4~5hours
Dimension (mm)	243×173×70
Weight (g)	1470