



Features

- Large, 640x480 VGA color TFT display with 60Hz update.
- Precise and stable horizontal and vertical linearity with horizontal linearity 0.1% and vertical linearity 2%
- High performance square wave pulser with tuning option.
- DAC, AVG, DGS curves and defect echo help to evaluate defect equivalent calculation
- Two high resolution scanning mode: A and B
- 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
- Display of echo envelope
- Two individual gates setting and alarming function.
- Gate measurement includes echo amplitude, beam path, depth, projection and so on.
- Waveform freeze available in full, peak, comparative and envelope ways
- 50 detecting channels are available with separate detecting parameters and DAC (Distance Amplitude Correction) curves in every channel.
- 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.
- Super large memory, 1000 waveform diagrams can be stored.
- EPSON ink-jet printers can be connected with TUD 500
- Real-time waveform display and review

TUD500

ULTRASONIC FLAW DETECTOR

Standard delivery:

• Main unit	1
• Li battery	2sets
• Power adapter (3A/9V)	1
• LEMO-Q9 probe connecting cable	1
• LEMO-Q6 Probe connecting cable	1
• Neck strap	1
• Wrist strap	1
• Hood	1
• Straight beam probe	1
• Angle beam probe	1
• Couplant	1
• TIME certificate	1
• Warranty card	1
• Instruction manual	1

Optional Accessory

• RS232 communication cable	1
• USB communication cable	1
• Flash disk	1
• Printer	1

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	0.000~750.000
Sound speed	600 m/s~16000m/s
Bandwidth	0.1MHz~15MHz
Vertical linearity accuracy	≤2%
Horizontal linearity accuracy	≤0.1%
Dynamic range	100dB
Rectification	Positive half wave, negative wave, full wave, and RF
Sensitivity leavings	≥62dB
Test mode	Pulse-echo, dual and through transmission
Pulser	Square pulse
Damping	50ohms, 100ohms, 200ohms, 500 ohms
Reject	Linear, 0~80% of full screen
Unit	Metric/inch
Interface	RS232 / USB
Printer	EPSON ink-jet printers
AC requirements	Input: 100~240~50/60Hz Output: 9V DC/3 A~4A
Temperature	-10° ~40°
Humidity	20%~90%RH
Power	2×3.7V 5000mAh
Charging time	8h
Dimension (mm)	300×180×57
Weight (g)	2000