

DIGITAL ULTRASONIC FLAW DETECTOR (EXCELLENT TYPE) CODE UFD-C870

- Small size, light weight, long battery standby time
- High sensitivity, accurate defect positioning, super anti-interference ability, stable and reliable performance
- Resistive touch screen, dust and oil resistant, sensitive touch
- The performance of instrument and probe combinations can be tested automatically
- Unique square wave excitation signal processing technology
- Launch voltage, probe damping, pulse width, filter band adjustable, suitable for different materials, different thickness of the workpiece accurate detection
- The background color and brightness can be freely adjusted to adapt to strong or low light environments to ensure a clear display
- Full course, continuous, dynamic high-capacity recording of test echoes and data, support for data playback, through the U disk export
- Built-in wifi, can realize the flaw detector and computer synchronization real-time display



single-element straight probe
(included)



single-element angle probe
(included)

FUNCTIONS

Flaw detection standard	Built-in common flaw detection standards, direct call, convenient and fast
Auto calibration	Automatic calibration of probe zero offset, probe angle (K value) and material velocity
Peak hold	Compare frozen peak waveforms to live A-Scans to easily interpret test results
Flaw locating	Real-time display of defect level, depth (vertical), sound range projection
Flaw discrimination	Automatic flaw sizing using AVG or DAC, speeds reporting of defect acceptance or rejection
Flaw sizing	The equivalent dB value of defects or equivalent size of defects are displayed in real time
Curved surface correction	Used for flaw detection of curved workpiece, it can display the circumferential position of defects in real time
DAC/AVG	The curve is automatically generated, and the sampling points can be compensated and corrected. The curve automatically floats with the gain, automatically expands with the detection distance, and automatically moves with the delay time. It can display the AVG curve of any aperture
AWS D1.1	Choosing this standard can reduce manual calculations and improve detection efficiency
Weld diagram	Support V type, T type, X type and other weld types, acoustic path navigation real-time display, weld and defect location real-time display, scaling, easy to locate defects
Automatic rating	Select different AWS standards, automatically calculate the rating of defects and display
Gate magnify	Spreading of the gate range over the entire screen width
Continuous record	Real-time waveform recording, storage and playback
Echo coding	Distinguish between odd/even wave colors only
Scan freeze	Display freeze holds waveform and test distance data
Peak mark	Capture and mark the peak in real time
B scan	Intuitively display the defect shape of the workpiece and the detection result is more intuitive

SPECIFICATION

Measuring range	0~20000mm
Working frequency	0.4~20MHz
Material velocity	20~20000m/s
Repetition frequency	60~1000Hz
Dynamic range	≥32dB
Gain range	0~110dB (steps: 0.1dB,1.0dB,2.0dB,6.0dB,12dB)
Vertical linearity	≤2.0%
Horizontal linearity	≤0.1%
Resolving power	>36dB
Sensitivity leavings	>62dB (200Ø2 flat bottom hole, narrow band)
Attenuator	20dB±1dB
Suppression	0~90%
Noise	≤10%
Disply screen	5.0"TFT color LCD touch screen, resolution 800x480
Pulse voltage	50V/100V/200V/400V four adjustable steps
Pulse width	50ns~1000ns adjustable
Rectification	positive, negstive, full-paiy, RF
Gates and alarms	two-way gate optional: into the wave alarm, lost wave alarm, DAV curve alarm, alarm signal for sound and light alarms measurement mode: peak, frontal
Interface	C5 (BNC), USB (Type C), VGA
Damping	50Ω/500Ω adjustable in two steps
Operating temperature	-20~50°C
Relative humidity	20~95%
Power	rechargeable lithium-ion battery, working time>8h
Size (LxWxH)	180×110×45mm
Weight	0.68kg

STANDARD DELIVERY

Main unit	1 pc
Single-element straight probe (UFD-C80)	1 pc
Single-element angle probe (UFD-C81)	1 pc
Probe connecting cable	2 pcs
USB cable	1 pc
USB disk	1 pc
Power adapter	1 pc

SPECIFICATION OF PROBE

Code	Frenquency	Size	Probe type	Probe sensor angle
UFD-C80 (included)	2.5MHz	Ø20mm	Single-element straight probe	90°
UFD-C81 (included)	2.5MHz	13x13mm	Single-element angle probe	63.4°
UFD-C82 (optional)	5.0MHz	Ø10mm	Dual-element straight probe	90°
UFD-C83 (optional)	5.0MHz	Ø10mm	Single-element straight probe	90°
UFD-C84 (optional)	2.5MHz	9x9mm	Single-element angle probe	45°
UFD-C85 (optional)	2.5MHz	9x9mm	Single-element angle probe	71.6°

Note: Other probes can be customized according to customer requirements