

Digital ultrasonic detector

General information about digital ultrasonic detector ADUD-501-502-503-504

Function:

- With high-precise positioning it meets requirements of close and distant detection.
- Small blind near-field allows the detection of small diameter, thin-walled tube.
- Automatic calibration: with one-button automatic calibration convenient operation, automatically testing the zero forwards of the probe and speed of sound of the materials.
- Auto-display the location of flaw echo (depth d, distance s, amplitude, equivalent dB, aper true value).
- Free switch to three kinds of standards (depth d, level p, distance s).
- Auto-gain, return envelope, peak memory function improves detection efficiency.
- Value calculation: forging straight probe testing, identifying the highest wave of defects, automatic conversing aperture value and calculating the large flat.
- 100 independent testing channels (expandable), you can freely enter and store any industrial testing standard, do field detection without test block.



Feature:

- Freely store and playback 500A-scan wave forms and data
- DAC and AVG are automatically formed, without restriction of subsampling points and can be corrected and compensated.
- 13 built-in testing standards can be used
- You can freely enter and industrial standards
- The width and intensity of launch pulse are adjustable
- It can connect to the computer , realizing data management and exporting inspection reports of Excel format with A4 paper
- With the durable shell, oil-proof , water-proof and dust-proof
- 26 million colors ultra- bright display, adjustable brightness, suitable for both intense and low light working environment
- Battery with a good performance of safety and environment-friendly can work for 10 hours
- Time records: track and store records of testing date, time
- With power outage protection, stored data will not be lost
- Testing parameters can be automatically tested or preset
- With digital suppression no effects for the gain and linearity
- Gain compensation: correcting dB attenuation caused by surface roughness, surface curvature, distant- testing of thick piece and other factors
- Two input methods: angle
- Echo frequency analysis
- Power indicator
- Strobe audible and visual alarm
- DAC audible and visual alarm
- Screen lock and unlock
- Clock display

Application fields

Widely used in boilers, pressure vessels ,aerospace, power, petroleum, chemical, marine, military, petroleum pipeline, ship manufacturing, automobile, machinery manufacturing, metallurgy, metal processing, steel structure.railway transportation ,nuclear power and relevant departments in colleges and universities.



model	ADUD-501	ADUD-502	ADUD-503	ADUD-504
Operating frequency	0/5 MHz ~15MHz		0/5 MHz ~20MHz	
Scan range (mm)	0-6000mm		0-10000mm	
Velocity range (m/s)	1000~1500 0	100~ 18000	100~20000	
Vertical linearity error	≤3%		≤2%	
Dynamic range	≥32dB		≥35 dB	
Horizontal linearity error	0/2 %		≤0/1 %	
Testing sensitivity	≥62 dB (depth 200mm, Φ2 flat bottom hole)		≥65 dB (depth 200mm, Φ2 flat bottom hole)	
Measuring channel	50	100		
Storage	500	980		
TCG curve	◦	◦	•	•
B scan	◦	◦	◦	•
PC connection	•			
Video	◦	◦	◦	•
Gain range (dB)	0~110	0~120	0~130	
Standard probes	Straight probe: 2/5 MHz , diameter 20mm , cable Q9-Q9 Angle probe: 4MHz , 60degree , 8*9mm, cable Q9-C5			
Dimension	240×160×40mm			
weight	1/2 kg			

Standard configuration

Standard delivery	Main unit, straight probe, angle probe , power adapter, BNC cables , PC software , manual certificate , warranty card
Optional accessories	Optional probes , cables , calibration blocks , coupling agent

