Eddysun EUT-204 Ultrasonic Flaw Detector

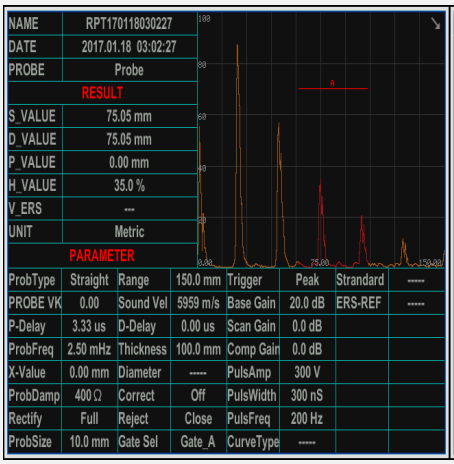
This instrument is a digital portable ultrasonic flaw detector for quickly, conveniently, damage-free and accurately to detect, locate, evaluate and diagnose various internal defects of the work piece (cracks, inclusions, pores, etc.). It can also be used for thickness detection and quality control for composite materials.The waveform can be saved in a standard file format, such as CSV or directly generate PDF report, BMP report. For the advanced model, provide dedicated weld menu which allows to set the shape, groove, and real-time to defect weld flaw location according to the plate thickness and welding method.

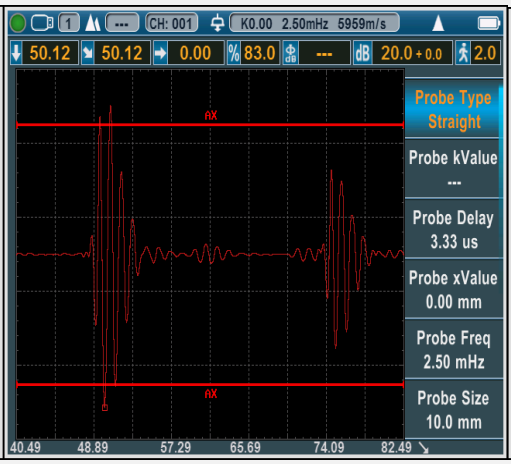
Shape :

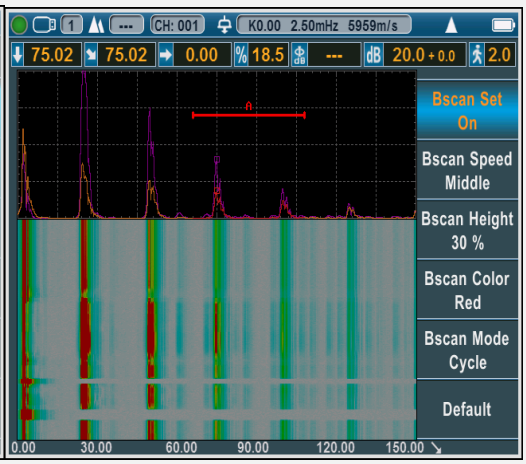
- Ergonomic structural design, waterproof and oil-proof.
- 360-degree rotating damping bracket and rubber sheath
- High transparent strong aperture glass panel

Display

- Full digital muti-color display, master-slave menu, clear guide
- IPS (In-Plane Switching) ,no viewing angle, 640X480 high resolution
- 60Hz display refresh rate, quickly displays small defect wave forms
- High brightness display can be used under strong light.
- 4 operating interface styles, and the LCD brightness can be set freely







Screenshot and PDF Report

- Real-time screenshot of all pages and flaw detection reports, and save them as BMP pictures to U disk, which can be set as color or grayscale pictures.
- Export the flaw detection report as a PDF file and save it to a U disk for easy archiving and printing
- All contents of the PDF file can be customized according to user needs.
- BMP pictures and PDF files can be viewed on a computer or mobile phone

Functions :

- Auto calibration: Automated 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: Live display Sound-path, Projection (surface distance), Depth, Amplitude
- Flaw sizing: Automatic flaw sizing using AVG or DAC, speeds reporting of defect acceptance or rejection.
- Curved Surface Correction feature
- 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
- Crack Height Measure function
- Gate Magnify ：spreading of the gate range over the entire screen width
- Video Recording and playback
- A Scan Freeze：Display freeze holds waveform and test distance data
- Echo coding: display 1~9 echo display area in different colors, used to analyze the defect position
- Peak mark: capture and mark the peak in real time
- B Scan display feature. Intuitively display the defect shape and the detection result is more intuitive
- Digital Readout and Trig. Function: Thickness/Depth can be displayed in digital readout when using a normal probe and Surface Distance and Depth are directly displayed when angle probe is in use
- FFT spectrum analysis by calculate the echo waveform, to detect the frequency characteristics and damage degree of the current probe in real time

Technical Parameters :

	Standard	Advanced
Range	0 to 15m, at steel velocity,transmit 30m	0 to 20m, at steel velocity,transmit 40m
Velocity	100~15000m/s	100~20000m/s
Pulse Repetition	20~2000Hz	
Dynamic range	≥36dB	
Vertical Linearity	≤2.5%	
Horizontal Linearity	≤0.2%	
Resolving Power	>40dB(5P14in steel)	
Sensitivity Leavings	>65dB(2.5MHzΦ20mm）for Deep 200mmΦ2 flat-bottomed hole，wave H50%)	
Noise	≤10%	
Channel files	500 files to store calibration setups and probe parameter	
Report files	1000 reports in PDF format	
Display	IPS display 60Hz 60Hz display refresh rate, resolution 640X480	
Reject (suppression)	0~80% of full screen height	
Probe Type	straight probe, angle probe, dual probe, penetrating etc.	
Gate Monitors	Two independent gates controllable over entire sweep range	
trigger	Peak trigger，Edge trigger	
Alarms	Threshold positive/negative with LED Flash	
Power supply	AC Mains 100-240 VAC, 50-60 Hz	
	Lithium-ion Battery（DC）9V, more than 12 H working hours	
Auxiliary function	Screen capture, video recording and playback, B-scan, DAC, AVG, AWS data analysis software	
Advanced function		Weld diagram, probe frequency detection
Video Recorder	10 video files, each video file can be up to 5 minutes long, 30 frames per second. save in U-disk for mass memory(no limit for duration)	
Dimension	230×157×52(mm)	
Weight	1.12kg	
Environment humidity	(-10~50)℃	
Relative humidity	(20~95)%RH	
Protection level	IP65	IP67
Pulse Energy	Pulse amplitude: 100V, 200V, 250V, 300V, 350V, 400V, 450V, 500V graded selection, suitable for a wide range of probes	
Pulse Width	from 0.1μs to 0.5 μs to match the probes with different frequency	
Probe Damping	50Ω, 150Ω, 300Ω and 400Ω are optional to meet different working requirements of sensitivity and resolution	
Scan speed	16 digit AD Converter at the sampling speed of 320 MHz	
Rectification	Positive Hal fwave, Negative Half wave, Full wave and RF	
Bandwidth	0.1-20MHz,amplifier bandpass and narrow bandpass	
Gain	110dB(0.1dB;1dB;2dB;6dB	
Communication Interface	USB/RS232	
Probe interface	BNC/LEMO