



YUT Series
Ultrasonic Flaw Detector

YUT Series Technical Specifications

Product Introduction	YUT2600	YUT2620	YUT2800	YUT2820
True Color TFT LCD	√	√	√	√
DAC Curve	√	√	√	√
AVG Curve	×	√	×	√
Φ Value Calculation	×	√	×	√
Distance	×	√	×	√
Changeable Squared	×	×	√	√
Variable Transmit	×	×	√	√
Impedance Matching	×	×	√	√
Data Logger	√	√	√	√
UtView Software	√	√	√	√
Characteristics and performance				
Full Screen Display Function	The echo display area covers the entire screen , the operator will have the maximal view.			
Bulk Storage	Up to 1000 data sets can be stored, including waveforms, curves and parameters etc. (including the traditional 1000 channels).			
Measuring Point	Peak Mode or Front Mode			
Echo-echo Thickness Measurement	No need of zero calibration , the net thickness of the base material can be directly measured through the coating.			
Wave Crest Memory	Real time envelopes show the highest wave of the flaws and record the maximum value of the flaws, it is helpful to exact positioning and fast testing of the flaws.			
Automatic Gain	Automatically adjust the gain to the pre-set amplitude height.			
Alarming Function	Afferent echo /echo loss alarming			
Solid Waveform Display	Enhancing the waveform visual contrast so the omission will hardly happen during the fast testing.			
Real-time Clock	Automatically record the date and time of the stored waveform.			
Display Freezing	Catching the waveform and the sound path data at any moment and removing the gate after freezing to measure the echo wave parameters.			
Flaw Positioning	Real -time display the sound path S, horizontal X, depth Y, and wave height H.			
Flaw Quantify	Real-time display the dB difference & SL quantitative values.			
Digital Inhibition	0-80%, increasing by 1%, not affecting the linearity and gain.			
A、B Gate	Two independent measurement gates, monitoring the echo amplitude and the sound path distance.			
DAC、AVG Curve	Perfect DAC、AVG curve functions, enable the curves to change along with the changes of the gain, sound path, and displacement.			
Distance Compensation	According to the time-varying gain method, the flaw detection echo is compensated in real time to avoid missing small defects (2620 and 2820 only).			
Φ Value Calculation	Automatically convert flaw echo height into flaw equivalent size (Only YUT2620 &YUT2820)			
Variable Transmit Pulse Generator	The pulse voltage can be adjusted from 50V to 400V continuously, the pulse width can be adjusted from 25ns to 1000ns continuously (Only YUT2800 & YUT2820)			
Impedance Matching	Adjustable among 4 levels: 33/50/100/500Ω (Only YUT2800 &YUT2820)			
Receiver Filter	Adjustable between 2 levels: 1-4MHz/0.5-15MHz (Only YUT2800 &YUT2820)			
Repeating Frequency many Levels Adjustable	Avoid reverberation (phantom) signals when detecting large workpieces (Only YUT2800&YUT2820)			
Languages	Chinese and English			
Data Communication	Communicating with the computer through the RS232 interface to transfer the waveform and data to realize the management of the detection results and the generation and printout of the detection report on the computer.			

Technical parameter			
Item	Index	Item	Index
Working Frequency	(0.5-15)MHz	Sensitivity Allowance	≥55dB (deep 200mm Φ2 Flat-bottom hole)
Detection Range	(0-4500)mm	Inhibition Range	0-80% Adjustable
Material Sound Vecocity	(1000-9999) m/s	Resolution	≥40dB (5P14)
Operation Mode	Pulse echo, double crystal	Dynamic Range	≥32dB
Pulse Shift	(0-2000)mm	Average Noise Level	≤10%
Probe Zero	(0-99.99)us	Battery Working Time	9 hours
Gain Adjustment	(0-110)dB,(0.1,1,2,6)dB stepping	Power	12V DC, 220V AC
Vertical Linearity Error	≤3%	Dimensions	270mm x190mm x 60mm
Horizontal Linearity Error	≤0.3%	Weight	2kg (Including batteries)