

Digital Ultrasonic Test Instrument
(Ultrasonic Flaw Detector)

UI-27

**Sophisticated Multi-use
ultrasonic flaw detector**



Fulfilling software

High brightness LED monitor

2ch extension (optional)

External output extension (optional)

IP66 water-proof Design

UI-27 will respond for the needs of all people.

We have aggregated the technology required for the portable flaw detector.

UI-27 is a multi-use flaw detector that can respond to B-scan, manual inspection, automated inspection and special applications.



B-scan

Time scroll Recording Functions.



SD card(accessory 2GB) SDHC32GB max available

Capacity: 2GB
Saved items: 600
Saved screens: Apr
90000

*SD,SDHC:TM



Free position handle

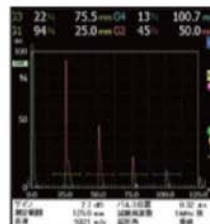


Enhanced operability by both side key operation



Camera function installed

Easy screen save



Abundant interface Water protection by cover

- 1: AC power
- 2: Head set
- 3: VGA, USBx3, LAN, SD
- 4: Encoder

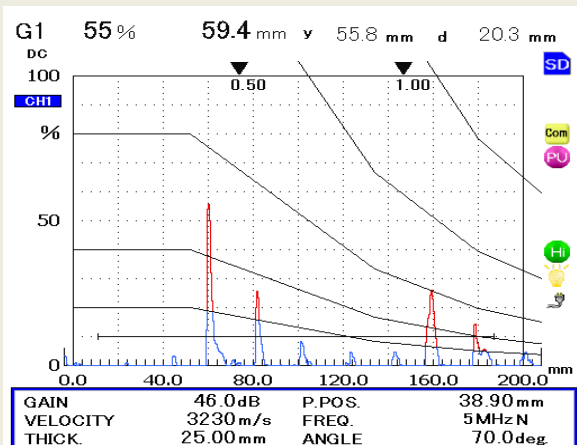


★ UI-27 provides perfect inspection conditions.

Built-in 12 frequency band filters deliver high-sensitivity testing by optimal receiving band.

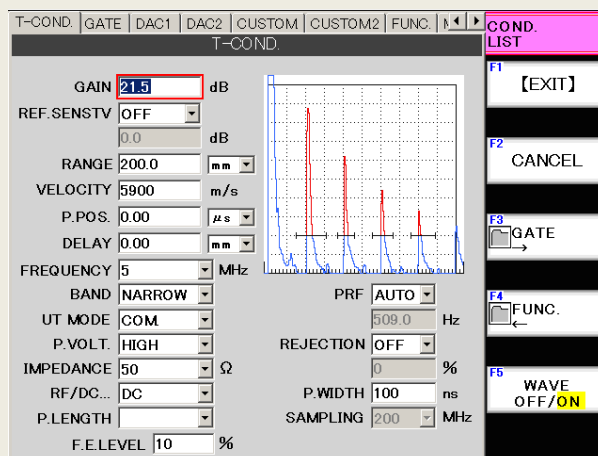
200 MHz sampling frequency will improve the distance measurement accuracy and the material thickness measurement accuracy.

DAC curve & Skip marker



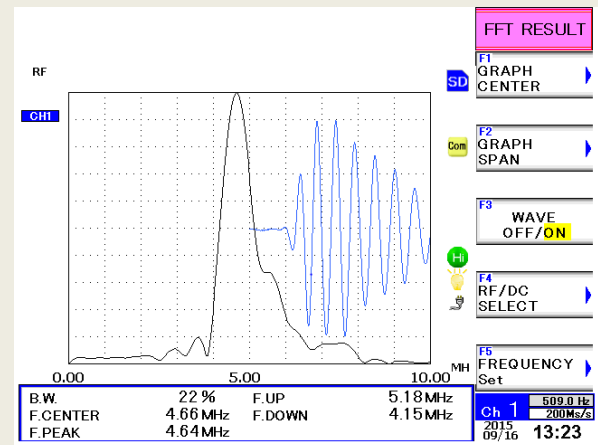
The simultaneous display function for distance value “y” and depth value “d” on the screen.

Inspection conditions setting screen



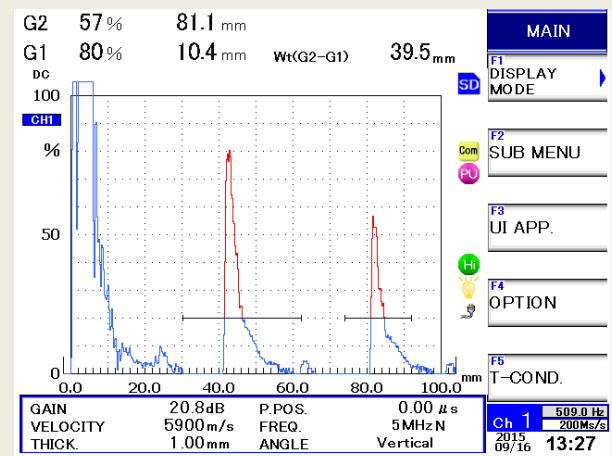
Batch setting of inspection conditions is possible.

FFT result screen



FFT function of the received waveform.

Independent sound velocity setting function for each gate.



The simultaneous distance display function of in the water sound velocity and in the steel sound velocity .

Options:

External output function: Recorder signals, Control signals.

2ch expansion: 2ch simultaneous synchronization inspection is possible.

UI-27 DIGITAL ULTRASONIC INSTRUMENT

● Display

Screen size: 6.5"VGA a-Si TFT active-matrix
Display area: 132.5 X 99.5
Pixels : 640(W) X 480(H)
A scan pixels: 424(W) X 316(H)
Max 530(W) X 421(H)

● Size (mm) • Weight (kg)

286(W) X180(H) X110(D) Approx3.6kg

● Case (IP66water-proof standard)

Reinforced ABS resin (front and rear)
Aluminum alloy (body)

● Transmitter section

Output impedance: 50Ω or less
P.R.F.: Link with test range
Pulse rise up time: Less than 10ns
Wave form: Square wave pulse
Voltage: Low / Medium / High
Damping: 50 / 300Ω

● Receiver section

Gain: 110dB (in steps of 0.1dB)
Sensitivity: 80dB or better at 5MHz narrow band
Receiver amplification center frequency:
0.25/ 0.5/ 1/ 2/ 3/ 4/ 5/ 10/ 15/ 25MHz
Amplifier linearity: ±3% Max

● Time-base section

Test range:
1 to 14,556 mm in sound velocity 5900 m/s
Sound velocity measurement range:
100 to 15,000 m/s
Adjustable delay: full scale to 3,000 μs ±5%
Display time-base linearity: ±1% Max

● Gate section

Delay range:
0 to full scale time range on the display
Gate marker width:
0 to full scale time range on the display
Number of gate: 4

● Standard accessories

1, Li-Ion battery: 1
2, AC adapter: 1
3, SD memory card: 1
4, Manual, Test certificate, Warranty: 1set

● Frequency analysis function

Center frequency: 0.25 to 25MHz adjustable
Display range: 50MHz max

● Temperature

Ambient temperature: 0 to 40°C (operation)
-20 to 60°C (storage)

● Standard functionality

Measurement methods:
single probe / dual probe / transmission technique
Wave form selections: DC / DC+ / DC- / RF
Beam path measurement methods:
Peak / Up / First echo / Zero crossing / Peak up
Angle beam technique support function:
12 DAC max, refraction angle measurement
Data storage capacity: In attached 2GB SD card,
600 Conditions and 90,000 Images are stored.
Max SDHC32GB.

● Power section

AC adapter: 100 to 240V±10% 50/60Hz 20W
Battery: Li-Ion cell 1. Max 2 in parallel operation.
Battery operation time: approx. 8 Hour / 1 cell
Charging time: approx. 2.5Hr 80%, 5Hr 100%

● Interfaces

Card slot: SD memory card
Connectors: USB (master / slave)
LAN / VGA / Encoder (2Axis)
DC inlet
Earphone and microphone (Headset)
(JEITA RC-5240)

● Optional extras and Soft Ware

2 Ch. Extension: Set of T/R card, connectors, S/W
Output extension: Set of I/O card, Ext-terminal, S/W
Expansion Battery: Li-Ion cell for parallel operation
Dedicated carrying case: For body and parts storage
TOFDO method: S/W. Scanner supply on request.
ABC-scan display: S/W. Scanner supply on request.
EDAC function: Electrical DAC compensation S/W
Tracking function: S echo tracking function S/W

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