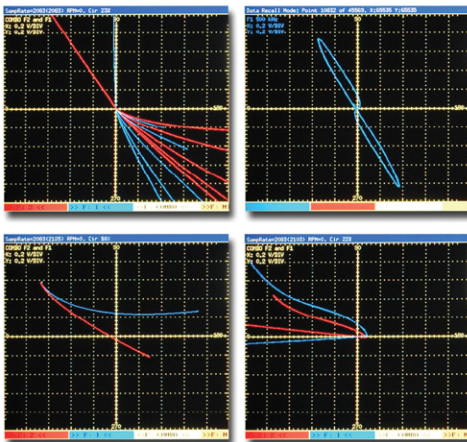


US-454A

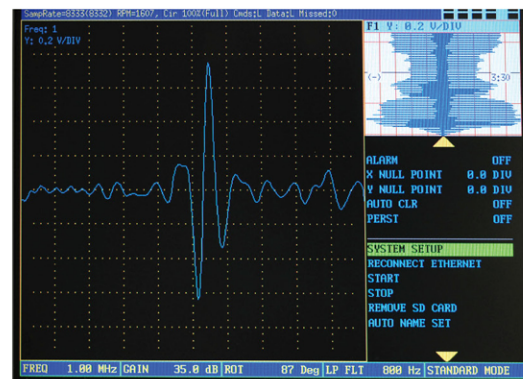
Multi-Frequency Eddy Current Instrument

The all new US-454A brings the best innovative multi-frequency eddy current technology to market. Built from the rugged US-454 architecture, UniWest's engineering team has transformed eddy current testing by offering single and multi frequency inspection, frequency mixing capabilities, enhanced signal to noise, USB, ethernet and data storage capability; along with unprecedented digital strip chart data collection.



The US-454A can be configured to 1,2,3,or 4 frequency's depending upon special application requirements. In addition, special mixing and filtering capabilities have redefined inspection capability and can solve numerous special application needs. The enhanced signal to noise has increased inspection capability in the field, the lab, or wherever high level, accurate, special eddy current testing is needed.

The US-454A is also uniquely suited for special conductivity and thickness measurement testing. The US-454A's unprecedented signal to noise and filtering capabilities allow for inspection in specialty applications typically outside the scope of portable eddy current inspection equipment.



Control Features

- Continuously variable control knob for selecting and changing instrument settings
- Scrolling menu
- Programmable push button function keys
- Display, Erase, Clear, Null, and Enter keys

Display

- 6.5" diagonal color LCD, flat panel
- Selectable X/Y impedance plane display, O-Scope (sweep), Waterfall
- Selectable display mode including strip chart, and impedance plane, shown individually or together
- Sensitivity scaling of 0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1.0, 2.0, 5.0 Volts per division
- O-Scope/Waterfall sweep speeds from 1msec/div to 10 sec/div
- Auto clear of 0 to 10 second in 1 second increments
- Variable persistence of 0-10 seconds
- Trace Dot to give precise location of null point
- Choice of size & configuration of null point
- Null point can be positioned for operator convenience
- Rotation (phase) 0-359 degrees in 1-degree increments

Frequency

- Range from 20 Hz to 15 MHz
- Frequency adjustable to 3 digits of precision

Number of Frequencies VS Sample Rate

- 1 Frequency enabled at up to 25 KHz sample rate
- 2 Frequencies enabled at up to 6 KHz sample rate
- 3 Frequencies enabled at up to 4 KHz sample rate
- 4 Frequencies enabled at up to 3 KHz sample rate

Probe Drives

- Standard probe drive adjust of LOW, MED, HIGH
- Continuous probe drive adjust of 0 to 100 percent
- 7.0 Vpp maximum

Gain

- 0 to 114.0 dB
- Adjustable to 3 digits of precision above 9.9 dB, adjustable in 0.1 dB increments below 10 dB.
- X/Y Spread increases gain in X or Y axis up to 42 dB (Total maximum gain in any one axis: 114.0 dB)

Filters

- Low and High pass selectable from 0 to 10 KHz
- Adjustable to 3 digits of precision

Probe Types

- Absolute, differential, reflection and differential reflection

Data Storage

- Programmable test setups: Store up to 1000 test setups
- Can store up to 250 individual four megabyte data files on a 1 Gig card
- File storage: BMP & text or Report *(Use with Optional Report Software Optional for quick and accurate documentation)*

Gate/Alarm

- Type: Rectangular, elliptical, high and low bar dual, and single alarm
- Outputs: TTL, Open Collector, Audio, Headphone

Input/output Ports

- RS-232 serial port for remote control
- Ethernet for remote control and data transfer
- Analog outputs @ +/-10 Volts
- Probe connection via an 8 pin Burndy
- Scanner connection via a 16 pin Fischer
- Auxiliary I/O port for encoders, pulse on position, etc.
- RGB output for external monitor
- Clear/Null input lines
- Alarm out and alarm audio
- USB for keyboard and data out
- SD card slot

Power

- Lithium ion rechargeable battery pack, 10.8 Volts, 5400 mAh
- Universal power supply and power cable for operation and battery recharge
- Battery level indicated by LED's on battery

General

- Case: Uniframe design, over molded grips, drip and dust proof
- Dimensions: 11.5" long x 7.5" high x 3" deep
- Weight: 5 lbs w/battery, 4 lbs w/o battery

Operational Features

- Video LCD display with external RGB output
- Eddy current impedance plane, with 1, 2, 3, or 4 frequencies, grid, background and signal color selectable
- Two frequency mixing capability
- Data recording of all frequencies (length of recording dependent on sample rate and number of frequencies)
- Zoom feature on recalled data
- Data storage to memory card (Amount of data dependent on memory card size)
- Two encoder inputs for position stamping of data
- Pulse on position input for motion control application
- Ethernet for instrument control along with time/position stamped data transfer to client computer
- 16 bit resolution digital data
- Rugged storage and shipping container
- Standard and special application probes and delivery mechanisms

Specifications subject to Change Without Notice

APRIL 6, 2009

122 South 4th Ave. • Pasco, Washington 99301

Phone: (509) 544-0720 • Fax: (509) 544-0868

website: www.uniwest.com

e-mail: info@uniwest.com

UniWest®