

# US-454A EddyView<sup>®</sup>



*Widening the Gap Between  
Signal and Noise*

*UniWest<sup>®</sup>*

# High Resolution Versatile

The all new US-454A brings the best innovative multi-frequency eddy current technology to market. Built on the rugged US-454 architecture, Uniwest's engineering team has transformed eddy current testing by offering single and multi-frequency inspection, frequency mixing capabilities and enhanced signal to noise in this versatile and portable instrument.



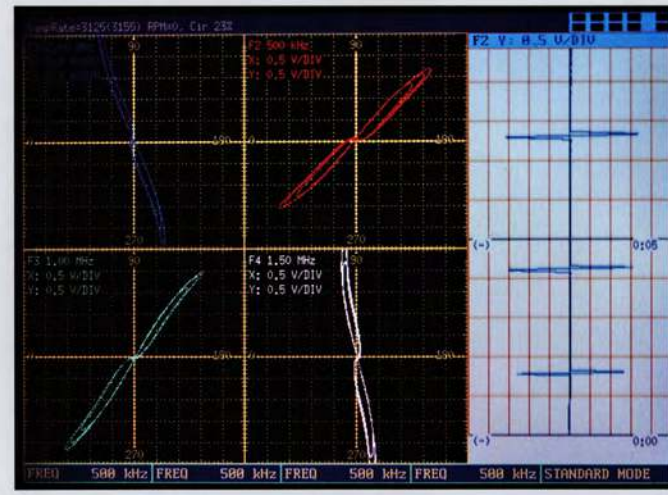
The US-454A's unprecedented signal to noise and filtering capabilities allow for inspection in applications typically outside the scope of portable eddy current equipment.

Eddy current test data, in combination with positional data, can be stored in the instrument and transferred by USB and Ethernet connections, or downloaded live via Ethernet to a computer.

# Communication

The US-454A can be configured to 1, 2, 3 or 4 frequencies depending upon individual application requirements. In addition, special mixing and filtering capabilities can solve numerous application challenges.

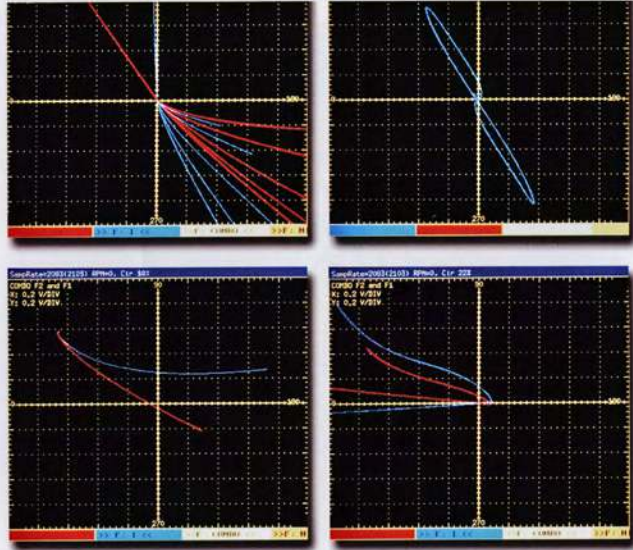
The US-454A's signal to noise redefines NDE inspection in the field, the lab, or wherever high level, accurate eddy current testing is needed.



# Rugged



# Expandable



# Dependable



# Adaptable

The ECS-1 is a low profile, high speed rotating probe scanner for hand held bolt hole inspection.



The JF-15 scanner is a high torque, high speed scanner for systems and special application bolt hole inspection.

Standard and special application probes and delivery mechanisms are available directly from Uniwest to meet your needs.

## Accessories

The remote Smart Battery charger holds two batteries, automatically recharging them in sequence.



## Documentation

Hewlett Packard USB printers are supported. Printouts include current screen display & selected settings. Operator's manual included.

### 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 1 msec/ 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 Generation Software" 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 for selected frequency
- 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, printer and data storage
- 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*

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APRIL 2009