

VANTAGE

HAND-HELD FULLY FEATURED EDDY CURRENT FLAW DETECTOR



ETHER NDE 

“ We are delighted to introduce the VANTAGE which now provides our clients with a comprehensive solution for their manual Eddy Current Flaw Detection demands. ”

John Hansen, MD



ETHER NDE, a UK-based manufacturer of Eddy Current products, introduces the VANTAGE Eddy Current Flaw Detector. The VANTAGE is *ETHER NDE*'s first hand-held and fully featured Eddy Current Flaw Detector, which allows true single hand operation, leaving the operator free to use their other hand to scan with a probe. The VANTAGE specification and

features are comprehensive and will appeal to users in Aerospace, Offshore oil, Petrochemical, Power Generation and Rail/ Axle Inspection industries. With a full colour display and a compact and robust enclosure, the VANTAGE is ideal for use in all on-site and factory environments.

This image shows the VANTAGE at its actual size.

10.7cm (4.2")

Day and night time screen modes. Full daylight visibility.

Bright 3.5" (320 x 240 pixels) Display ensures a clear and crisp view.

Easy to use function keys.

7.3cm (2.9")

18.8cm (7.4")

Designed to sit comfortably in the hand avoiding fatigue due to optimal weight distribution.

ADVANTAGES

- Perfectly balanced for comfortable single-handed operation.
- Lightweight 0.8kg (1.8lbs) with rugged housing.
- Automatic lift-off setting.
- Separate connector for Absolute and Reflection / Bridge Probes.
- 3.5" easy to read, bright, high-resolution (115 DPI / 0.22mm pixel) display.
- PC-based analysis and reporting utility software for easy analysis and reporting included with the Instrument.

APPLICATIONS

- Surface Crack Detection and Assessment
- Sub-surface Defect Detection of Non-ferrous Materials
- Hole Inspection
- Weld Inspection
- Training Schools
- Materials Sorting
- Dual Frequency Tube Inspection
- Corrosion Assessment



TRUE HAND-HELD WITH ROBUST OUTER-CASING

The VANTAGE is a true hand-held Flaw Detector, allowing comfortable operation over the duration of a shift. Sensitive designed to sit comfortably in the operators hand and housed in a robust ABS enclosure meeting IP64, the VANTAGE will withstand the harshest of site environments.

LIGHTWEIGHT

At just 0.8kg, the VANTAGE has earned its place as one of the lightest Eddy Current Flaw Detectors available. Compact and available with a specially sculpted, lightweight protective leather sleeve, the VANTAGE will comfortably fit in most tool boxes.

EASY TO READ SCREEN

The VANTAGE screen is clear and crisp and easily viewable in daylight. The bright colour display screen is 320 x 240 pixels providing excellent resolution aiding accurate and rapid defect interpretation. The ability to switch easily between a white or black menu screen allows the operator to tailor the VANTAGE to their own individual preference.



USER FRIENDLY INTERFACE AND MENU

The user interface incorporates a simple side-bar menu allowing direct access to key instrument parameters and yet can be instantly switched to “full-screen mode.” The menu system is intuitive and any experienced Eddy Current Operator will quickly be comfortable using the instrument. A time-based Strip Chart is available to assist with faster and more reliable defect detection.



EASY REPORTING AND ANALYSIS

A USB cable and reporting software are included free of charge for documentation of results on laptops or desktop PC's. The USB connector allows trouble free data transfer and software upgrades. Maximum data processing rate is up to 8kHz. VANTAGE can store 200+ recordings at a 1kHz data processing rate of up to 240 seconds each.



WIDE RANGE OF COMPATIBLE PROBES

The instrument has both a Lemo OO Connector for absolute probes and a Lemo 14-way Connector for Rotary, Bridge and Reflection Probes. Signal-to-noise ratio is excellent, allowing greater probability of detection and the VANTAGE performs equally well with Pencil, Rotating, Weldscan and other Probes.

ETHER NDE also supply Probe kits for all our instruments and are able to design a kit specific to your individual application needs. Please feel free to contact us for further details about this.

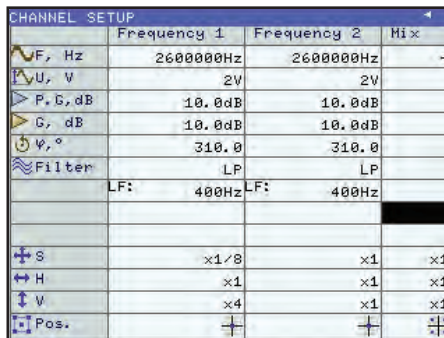


VANTAGE

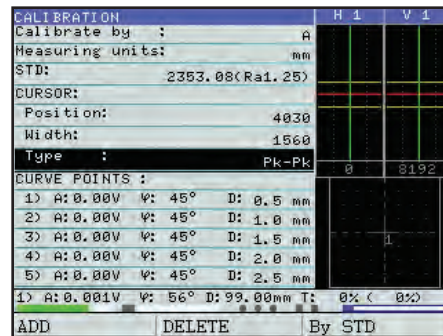
As explained previously the VANTAGE boasts a high brightness screen with excellent resolution and the choice of white screen for daytime viewing or black screen for night viewing.

At *ETHER NDE* we believe that ease of operation is key to the success of our products.

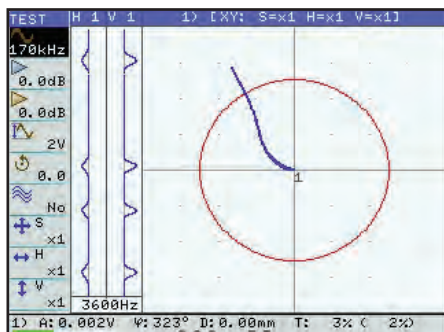
Below is a sequence of screens from 'testing' to 'reviewing the results' to demonstrate the quality of the VANTAGE's screens and the simplicity of its menus.



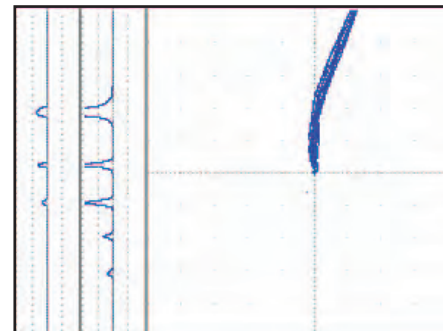
1. Channel Setup.



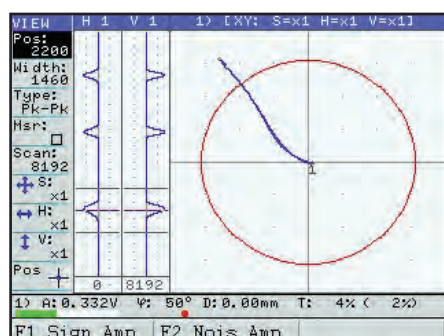
2. Calibration Setup.



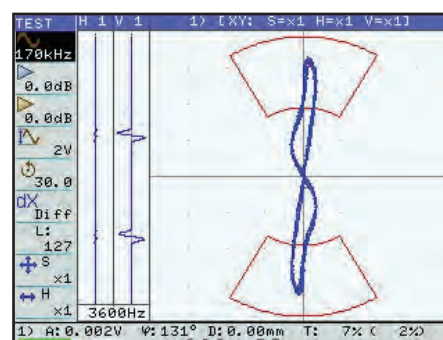
3. Testing screen with the most commonly used settings in menu on right with circular alarm.



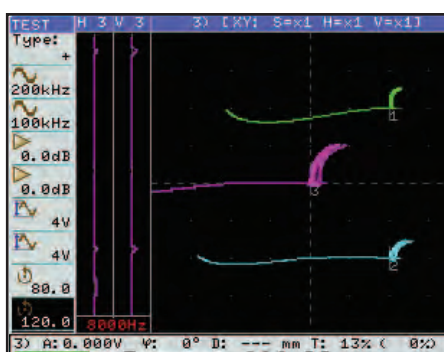
4. Testing in full screen mode.



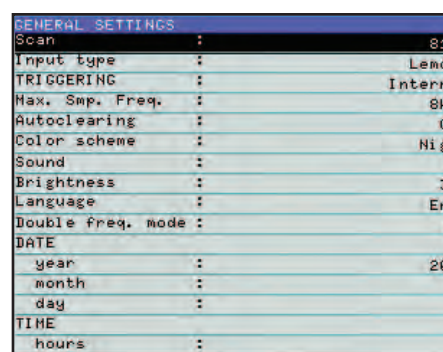
5. Review of recorded test results.



6. Rotary Display showing symmetrical sector alarm gate.



7. Dual Frequency Display with three spots in Night Mode.



8. General Settings Menu.



Probe	Modes	Single Lemo 00 for absolute probes and 14 way Lemo for Reflection, Bridge and Rotary
	Test Frequency	Single & Dual Frequency (F1 and F2) and Mix
	Drive	50Hz- 12MHz
		0.5, 1, 2, 4, 6 v pk-pk
Signal	Phase	0-359.9° in 0.1° increments
	Pre-Gain	-6.0 to 40.0 dB in 0.1, 1, 6, 10 dB steps
	Main-Gain	0-30 dB in 0.1, 1, 6, 10 dB steps
	Processing Rate	1 to 8kHz or 1/4 min Test Frequency
	Filter	5 types of filter: High, Low, Band Pass, Differential, Average, 0-4000Hz range 1Hz increments
	Null	Separate balance and instantaneous zero
	Load	Automatic load selection
Display	Screen	3.5", 320 by 240 pixels, 115 DPI/ 0.22mm square pixel.
	Mode	Impedance (phase) plane & display with strip chart, optional full screen modes with & without strip chart. Optional day and night modes.
	Channels	3 preset display pages F1, F2 and Mix (all)
	Mixing	5 different mix algorithms
	Grid	8 by 8
	Spot Position	9 pre-set spot positions
	Calibration	Multi point calibration (6 points) curve may be set and then used to read out measured values based on signal parameters
Alarm	Type	Box, Sector, Circle, Level, Trapezoidal
	Number	A different alarm may be set for each of the three channels (F1, F2 and Mix)
	Output	Audio, visual and external
Storage	Settings	100 settings
	Recording	Sample data may be saved to internal memory. 200+ result files maximum at 1kHz processing rate= 4 minutes; at 8kHz= 30 seconds.
Computer Interface	Type	Windows™, XP™, Vista™ and Windows 7™
	Interface	USB 2.0
	Software	Allows results files to be reviewed and analysed.
Casing	Dimensions	20.0cm (7.9") Long x 11.0cm (4.4") Wide x 9.5cm (3.8") thick
	Weight	0.8kg (1.8 lbs)
	Environmental	IP64 (Total Dust Ingress Protection; protection against water spray from any direction)
Temperature	Range	-20°C to +40°C
Power	Internal Battery	NiMH 5.5 hours max life
	Charge Time	3 hours
	External AC	100-240v ac 50-60 Hz 50 watts

Accompanying the VANTAGE as standard:

USB Cable (PC / electronic unit), Charger, User Manual, Carrying Case

Recommended Extras for the VANTAGE:

Environmental case with sun screen / viewing hood, Probe cable Lemo 00 to microdot, Probe cable Lemo 14 to 4 way Bridge and Probe cable Lemo 14 to 4 way Reflection.

Optional Extras for the VANTAGE:

Eddy current rotary scanner, Cable for eddy current rotary scanner, Adapter to Hocking Lemo 12 way Bridge, Adapter to Hocking Lemo 12 way Reflection and Headphones.

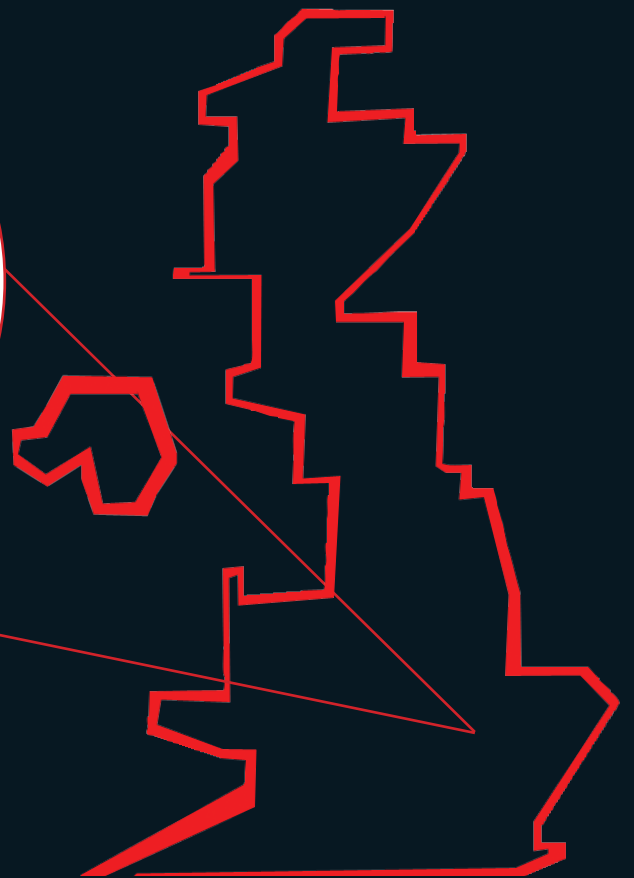
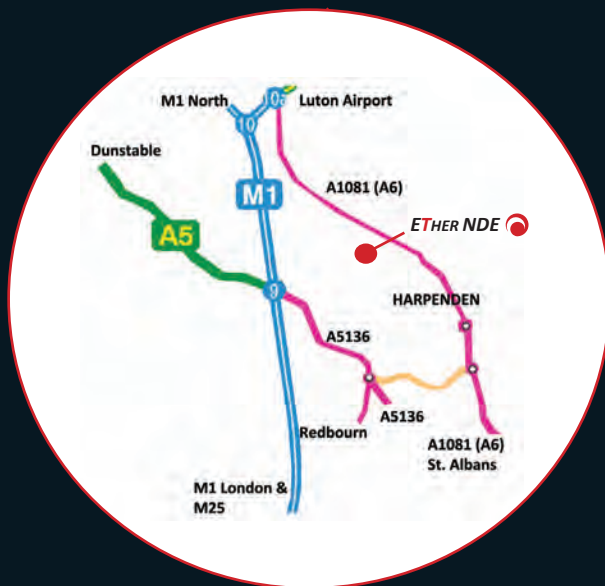
ETHER NDE continually strives to provide innovative solutions to eddy current testing in all possible inspection conditions.

Offering a range of innovative eddy current testing instruments and probes, **ETHER NDE** will endeavour to find the solution that best fits our clients specific needs.

At **ETHER NDE** we pride ourselves on our ability to remain client focussed, conducting our business with three simple promises to you:

1. The ability to speak to someone who understands our products and your application.
2. Industry leading delivery on goods and the ability to respond to your challenges.
3. That our products are second to none in both performance and quality.

Founded by John Hansen and Mike Reilly and supported by a skilled team, **ETHER NDE** boasts over 125 years of collective experience in non-destructive testing. Forward thinking and client responsive, **ETHER NDE** is the wise choice for all your eddy current testing needs.



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