

**EDDY CURRENT FLAW DETECTOR**

# **WELDCHECK**

**THE RIGHT TOOL FOR THE JOB**



- Large, Crisp Daylight Readable Display
- Easy to Use
- 8.5 Hrs + Battery Life
- Industry Standard Probe Connectors
- Great Eddy Current Performance

**ETHER NDE** 

# WELDCHECK

## WORKS THE WAY YOU DO!

The WELDCHECK has been created with User convenience and efficiency in mind at all stages of the design and manufacturing process. One Key Benefit of the WELDCHECK is the ability to work identically in left-handed and right-handed mode; thanks to the incredible "Flip" function.



## 21<sup>ST</sup> CENTURY CONNECTORS



Under the flap there is a USB Connection for fast data transfer, SD Card Slot and VGA output for classroom and head-up display use.

## LIGHTWEIGHT, COMPACT & RUGGED

We have built the WELDCHECK with these points in mind. The WELDCHECK weighs just 1.2kg and has a robust hardwearing metal casing with the internal design optimised to resist moist, tropical or salt-laden atmospheres.

## ROBUST CASE

Tough aluminium alloy Mg Si 0.5 powder-coated outer case.

## EASY TO USE WITH "ALL-IN-ONE" MAIN MENU

The WELDCHECK features a simple "single-level" menu system. In addition, any menu item can be added to the "Quick Menu" sidebar with its own easily recognisable Icon enabling faster adjustments during the inspection process.

As with mobile phone or keyboard usage, our fingers become accustomed to repeating patterns of key presses. The WELDCHECK keypad has been cleverly designed to exploit this trait, with all critical keys being in the same position regardless of whether the Instrument is being operated in "right-handed" or "left-handed" mode.

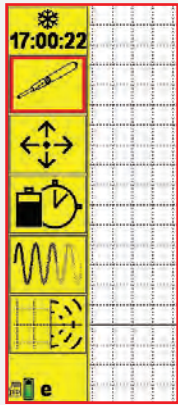


## EXTRAORDINARY BATTERY LIFE

With more than 8.5 hours battery life with a 100kHz Weld Probe and maximum backlighting, the WELDCHECK is an obvious choice when faced with a long day of Eddy Current NDT. With the internal memory able to store over 500 saved readings, the WELDCHECK can easily be in the field for an entire shift without needing to be returned to base for charging.

Even better, the AA battery power pack can extend the battery running time for a further 4 hours.

## EASY ICON SYSTEM



In order to allow the operator to configure the instrument for ease of use there is a system of operator-selectable soft keys. Every menu item has its own easily recognisable icon. There are four soft key positions for operator selectable icons for frequently used functions and a fifth position for the last menu function used. Each saved instrument setting can be associated with a unique, one

press set of quick access functions. There are also two front panel hard keys that can also be easily programmed for rapid one press access to instrument functions.

## DAYLIGHT VISIBLE LARGE COLOUR SCREEN

We understand that the operator will use the WELDCHECK in all types of weather and light conditions and being able to see the screen clearly is a top priority.

The WELDCHECK has a fully daylight readable 14.5cm LCD Colour Screen of 640 x 480 pixels ensuring the Operator has excellent signal resolution and presentation no matter what the working conditions are.

The operator has the choice of configuring their own colour schemes and display types. This will optimise their viewing ability of the screen in any light conditions. It is possible to view the readings in a choice of spot, time-base, waterfall or meter display types.



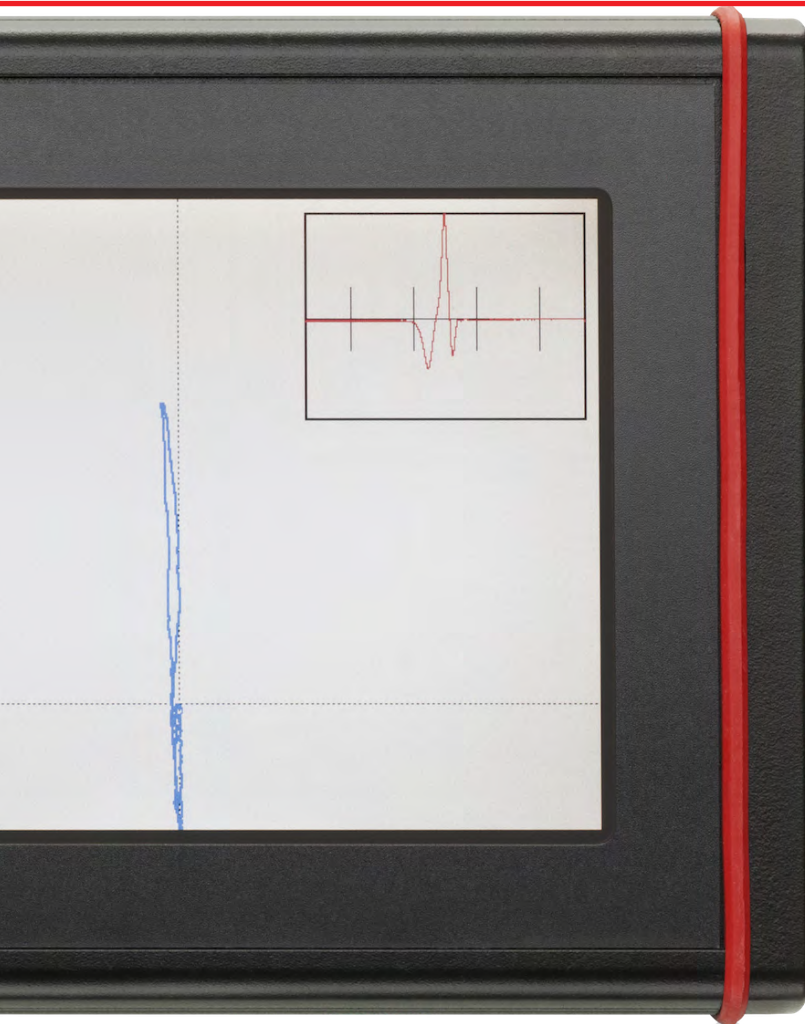
## INDUSTRY STANDARD PROBE CONNECTOR

The WELDCHECK is able to use absolute, bridge, reflection and connected probes and is fitted with the industry standard 12 Way LEMO Connector and a LEMO 00 for absolute probes.



## ACTUAL SIZE

Length 22cm / 8.7 inches



Height 14cm / 5.5 inches

## EQUIPPED FOR ALL ENVIRONMENTS

We know that in an oilfield environment the WELDCHECK is going to come up against some of the harshest working conditions in the NDT industry, not to mention being lifted and lowered on ropes, dropped and bumped.

With a rear foot stand and four harness attachment points, the WELDCHECK is designed to be used in all environments from the desktop in the office to the rigours of the job site.



Probe Connection		12 Way Lemo 2b (Absolute, Bridge and Reflection) and Lemo 00 (for single element absolute probes).
Frequency	Single Frequency	20Hz – 20.00 MHz with range variable resolution.
Gain	Overall	-18 to + 100 dB, 0.1, 1 and 6dB steps
	Input Drive	0dB or 12dB
	Max X/Y Ratio	0dB to 6dB steps (0dB reference 1mW into 50 ohm)
Phase	Range	+/-100.0 dB
	Auto Phase	0-359°, 0.1° steps
Filters	Normal High Pass	Allows phase angle to be automatically set to a pre set angle
	Normal Low Pass	DC to 2kHz or test frequency, which ever is the lower in 1 Hz steps. Plus variable adaptive balance drift compensation (0.01 - 0.5 Hz)
Balance	Manual	5 to 2kHz or ¼ test frequency, which ever is the lower in 1 Hz steps.
		14 internal balance loads; 2.2µH, 5.0µH, 6.0µH, 6.5µH, 7.0µH, 7.5µH, 8.2µH, 12µH, 15µH, 18µH, 22µH, 30µH, 47µH, 82µH
Alarms	Box	Fully configurable, Freeze, Tone or visual.
	Sector Output	Fully configurable, Freeze, Tone or visual. Open collector transistor (50v dc at 10mA max) available on 12 way lemo.
Display	Type	18 bit Colour, daylight readable, 5.7" screen.
	Viewable Area (Horizontal x Vertical)	115.2mm x 86.4mm
	Resolution (pixels)	640 x 480
	Colour Schemes	User configurable including High Contrast
	Configurable screen	Full Screen, Single or Dual screen with variable size and location and function e.g. Screen – Spot and Timebase
	Display Modes	Spot, Time base (0.1-20 seconds x 1-200 sweeps), Waterfall and Meter
	Graticules	None, Grid (4 sizes 5, 10, 15 and 20% FSH), Polar (4 sizes 5, 10, 15 and 20% FSH)
	Offset	Trace Position: +/-50%
Internal Data Storage	Setup Storage	Display in X,Y or R,θ
	Stored Traces	microSD up to 2GB, holding over 500 saves.
Outputs	PC Connectivity	microSD up to 2GB, holding over 500 saves.
	Digital volt free alarm	USB (Full PC remote control plus Real Time data)
Languages	VGA	On Lemo 12 way
		Full 15 way VGA output
Power	External	Initially English, French, German, Spanish, Italian, Portuguese, Czech, Polish. Others to follow
	Battery	100-240 v 50-60Hz 30 Watts
	Running Time	Internal 7.2v @ 2900 mAh 20.88Wh
	Charging Time	Weld Probe plus 100% backlight over 8.5 hrs. Up to 10.5 hrs. with 50% backlight. 2.5 hrs. charge time, simultaneous charge and operation.
Physical	Weight including internal battery	1.2 kg, 2.6 lbs.
	Size (width x height x depth)	223 x 141 x 50 mm / 8.8 x 5.6 x 2.0 inches
	Material	Aluminium alloy Mg Si 0.5 powder-coated
	Operating Temperature	0 - 50 °C
	Storage Temperature	-10 - 70 °C
	IP Rating	54

## STANDARD WELDCHECK KIT

- IWEL001 - Instrument, WELDCHECK, Single Frequency (20Hz-20MHz), Hand Held Portable Flaw Detector, Software + Manual on USB Stick
- AWEL002 – Accessory, WELDCHECK, Power Adapter + Input Plugs (UK, EU, US & Australia)
- AWEL003 – Accessory, Adjustable Shoulder Strap, Padded with Quick-Release
- AC006 - Accessory, Instrument Soft Carry Case
- A090 – USB Cable, A to MIN B, 1 meter
- 40449 - Quick Reference Card – WELDCHECK

## OPTIONAL ACCESSORIES

- AWEL004 – Accessory, Hard Transit Case (WELDCHECK)
- AWEL005 – Accessory, Protective Splash Proof Cover / Rope Access
- AWEL006 – Accessory, External, 8 x AA Battery Holder and On/Off Switch
- AWEL007 – Accessory, Wrist Strap
- AWEL008 – Accessory, In car Power Adapter
- ALL12-L04-015R – Accessory, Lead, Lemo 12-Way - Lemo 4-Way, 1.5m (Reflection)
- ALL12-L04-015B - Accessory, Lead, Lemo 12-Way - Lemo 4-Way, 1.5m (Bridge)
- ALLCX-M02-015A - Accessory, Lead, Lemo 00 to Micro-dot, 1.5m (Absolute)
- ALLCX-B02-015A - Accessory, Lead. Lemo 00 to BNC, 1.5m (Absolute)

## STANDARD WELD INSPECTION PACKAGE

- PWM100S000 - Probe, Weld, Medium, Dia 16.00, 100kHz, Straight, Disconnect
- PUB100K - Probe, Unshielded, Broad Band (Paint), 100k (35kHz-250kHz), BNC
- ATBW - Accessory, Test Block, Weld Probe, Ferrous (Steel EN1A) + x4 0.5mm Shims, 0.5, 1.0, 2.0mm slots
- ALL12-L04-015B - Accessory, Lead, Lemo 12-Way - Lemo 4-Way, 1.5m (Bridge)
- ALLCX-B02-015A - Accessory, Lead. Lemo 00 to BNC, 1.5m (Absolute)
- AW003 - Accessory, Butterfly PTFE Tape (Pack of 30)
- AC002 - Probe Carry Bag

