

# MAL III



Cost-effective, go-anywhere weld monitoring



The Mini Arc Logger III (MAL III) from TVC is one of the world's most cost-effective welding monitors. Supplied in a rugged case, this go-anywhere unit weighs less than 9Kg and set-up takes minutes, minimising on-site downtime. The field-proven sensor probes and IP rated controls mean the MAL III can be used in harsh conditions with the minimum of daily maintenance.

With probes for monitoring welding current up to 2000 amps and voltage up to 100 volts, the unit handles all major arc welding processes including FCAW, GMAW, SMAW, SAW and AC/DC GTAW with protection against HF Arc Starting.

The 5.7-inch TFT screen provides a clear view of all monitored welding parameters and the sealed battery allows up to eight hours monitoring time between charge cycles.

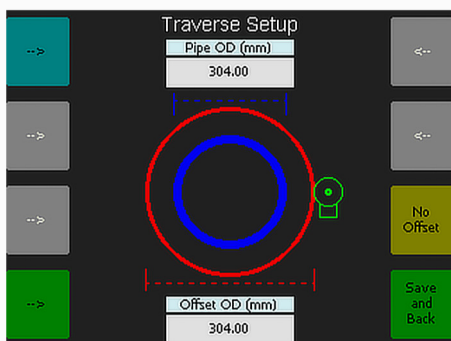
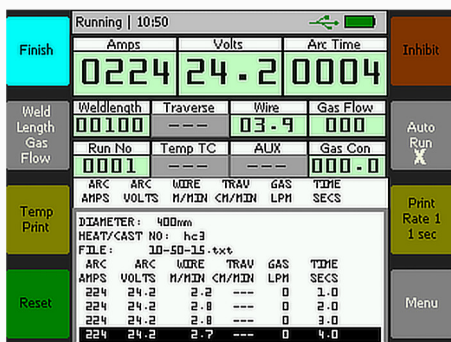
Welding data is recorded on a dedicated 4GB removable memory stick allowing integration of stored data into MS Excel spreadsheet reports on an external PC. The reporting software is supplied with each unit along with the manual in electronic format on the USB media. An optional compact keyboard is available for adjusting the MAL III settings and programming heading data.

As standard, that unit measures and records welding current, arc voltage and arc time as well as calculating and recording arc energy and heat input.

Additional options include transducers for the measurement of wire feed speed and total wire payoff calculation, welding travel speed for automated processes, gas flow and consumption as well as a Type 'K' thermocouple for measuring preheat and interpass temperatures.

The unit has an optional external hard copy printer for printing weld parameter data during or after the welding process, providing the MAL III with full onsite traceability.

A factory-configured auxiliary input is also available for use with other types of transducers such as Oxygen sensors for recording back purging during the weld. Please contact TVC for further details.



## GENERAL UNIT

Applications	MMA/MIG/TIG (AC/DC)/SMAW/FCAW/SAW
Techniques	Manual/Semi-Auto/Fully-Auto/Robotic
Memory	4GB Removable Flash Drive
Screen	5.7-inch Full Colour TFT
Operating Temp.	0 - 50°C
Printer & Print Rate	External Dot Matrix, 2 x 1-60 secs User Selected Print Rates
Max. Dimensions	355 x 255 x 188mm
Weight	9Kg (including Probes and Charger)
Battery Type	12V 7.2Ah Rechargeable Gel Filled Sealed Lead Acid Battery
Battery Charger	External 90-240V AC, Auto Selection, 3-4 Hour Charge Time

## STANDARD MONITORED PARAMETERS

Average Current	15 - 1999A +/- 2.5% of FSD
Average Voltage	0 - 99.9V +/- 2% of FSD

## MONITORED PARAMETERS WITH OPTIONAL TRANSDUCERS

Average Wire Speed	0 - 30.0m/min +/- 2.5% FSD
Average Travel Speed	0 - 999cm/min +/- 1% FSD
Average Gas Flow	0 - 120L/min +/- 5% FSD
Temperature	0 - 1000°C +/- 1% FSD
Arc Time	0.3 - 9999secs +/- 0.1%

## CALCULATED PARAMETERS

Arc Energy	1 - 9999kJ +/- 2% FSD
Heat Input	1 - 9999J/mm +/- 2% FSD
Wire Consumed	0 - 9999m +/- 2.5% FSD
Gas Consumed	0 - 9999L

## USER ENTERED DATA PARAMETERS

Gas Flow	1 - 99.9L/min
Weld Length	0 - 9999mm

## CALIBRATION & CERTIFICATION

Full calibration certification provided, traceable to The National Physical Laboratory (NPL), UK.

The Validation Centre (TVC) Limited reserves the right to alter or change product specifications without prior notice. Images are representative of full optional additions installed; delivered equipment and software may vary depending on options purchased.




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### THE VALIDATION CENTRE (TVC) LIMITED

Unit 15, Brinell Way  
 Harfreys Industrial Estate  
 Great Yarmouth  
 Norfolk, NR31 0LU  
 United Kingdom  
 + 44 (0) 1493 443800

sales@tvcalx.co.uk  
 www.tvcalx.co.uk

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