

# **801** Calibration Unit for 509

Issue 2 VH 14/02/03

## DESCRIPTION

The Deep Sea Electronics Model **801** has been designed to allow the operating parameters of the DSE 509 Automatic Mains Failure module to be adjusted.

All of the following are adjustable using the 801 calibration unit:

- Language: The 509 has up to 21 different language options installed. Refer to DSE for an up to date list.
- Plant battery voltage high and low trip levels: Adjustable between 0V and 40V.
- Start Delay/Pre-heat timer: Inhibits starting on mains failure to allow for voltage dips etc. Engine pre-heat also active (pre-heat mode selectable).
- Multiple attempts to start: Number of cranking attempts.
- Cranking and crank rest timers: Duration of each crank and rest period.
- Protection hold off/Safety on: Time delay observed by delayed alarms such as oil pressure during start-up. This enables the engine to establish normal running condition.
- Warm-up time: Stabilisation delay on generator start-up. Also to protect turbo charged engines allowing oil flow to be established prior to loading.
- Run on time: allows the turbo charger to slow down and cool prior to engine stop.
- Speed sensing: From either generator AC output or from a magnetic pick-up.
- Crank disconnect Speed: The minimum speed before the crank disengages.
- Load transfer speed: The minimum speed before the generator is available to be loaded.
- Underspeed: The speed at which the generator will shutdown if running too slow.
- Overspeed: The maximum allowable engine speed.

- Message Text: LCD display messages for Emergency Stop, the 3 configurable inputs and selected status display lines.
- Configurable Inputs: Selected from: Shutdown, Warning, Remote Start On/Off Load, Simulated Mains. Inputs can be NO or NC contacts. Warning and shutdown inputs can be immediate or delayed.
- Configurable output: Selected from: Pre-heat, Louvre, Air-flap, Energise to Stop, Engine Running or System in Auto.

Access to the critical operational sequences and timers is restricted by security code.

The 801 calibration unit is fitted with a simple six button keypad. This provides access to the following functions:

**Menu up and Menu down -** Used to navigate the 509 menu structure and select the appropriate setting to adjust.

**Cursor Left and Cursor Right** - Used to select the appropriate value to increase or decrease. Also used to select text position in messages.

Value increase and Value decrease -Used to increment or decrement displayed value. Also used to toggle round available selection on non numeric settings.

**Connection of the 801 calibration unit to the 509 AMF module** is performed by removing the 12-way connector from the rear of the 509 module.

The 801 through-connector should then be inserted into the 12-way socket on the rear of the 509. Then inserting the 12-way plug previously removed, into the rear of the 801 through connector.



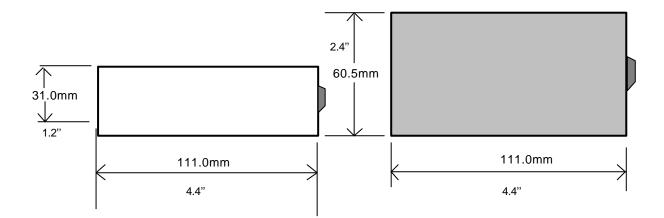


Ensure that the 509 AMF module is in the 'OFF' position before connecting the 801 calibration unit.

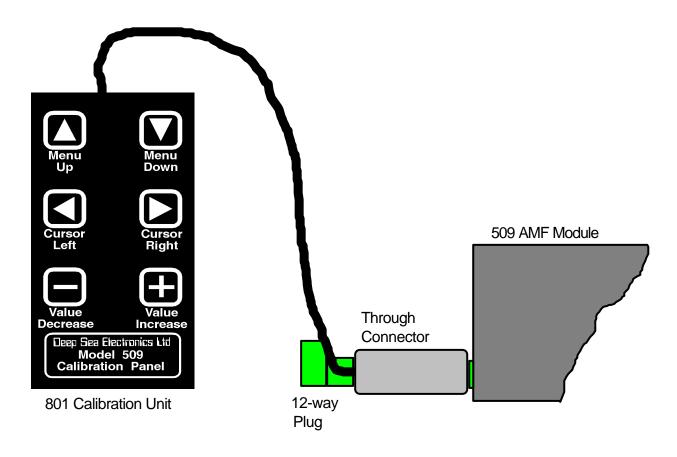


Connection of the 801 will not affect the supply to the mains contactor, therefore the supply to the load will not be lost under normal circumstances.

### CASE DIMENSIONS



#### **TYPICAL CONNECTIONS**



Deep Sea Electronics Plc. Highfield House, Hunmanby Industrial Estate, North Yorkshire. YO14 0PH. ENGLAND Tel:+44 (0)1723 890099. Fax: +44 (0)1723 893303. Email: sales@deepseaplc.com Web: www.deepseaplc.com

#### Deep Sea Electronics inc. 5301 E. State St. – Suite 202 Rockford, Illinois 61108 U.S.A. Phone: +1 (815) 316-8706 Fax: +1 (815) 316-8708 Email: dsesales@deepseausa.com

Web: www.deepseausa.com