DEEP SEA ELECTRONICS PLC

540

Protection Expansion/ Annunciator

Issue 2
VH 28/3/02

DESCRIPTION

The Model **540** is designed to be used as:

- Protection Expansion module
- Annunciator
- a combination of both the above.

Able to be used as a stand-alone module or as part of a complex control system, the 540 is particularly suited to providing **input expansion** to the DSE 500 Series control modules.

The S**afety On Timer** can be selected to be either internal from the Fuel On input being active, or externally fed from another device such as the 520 Automatic Start module.

An **alarm reset input** is provided to enable alarms to be cleared. It can be configured to be fed from either plant negative or plant positive DC. This gives maximum flexibility to the module, and allows for interfacing with an output relay on a 520, to enable the 520 control switch to be the master alarm clear control.

The module also features **plant DC supply monitoring** alarms and can provide indication of a high or low supply voltage. This feature can be disabled if not required.

Alterations to the system are made by using a PC and the 808 interface. This also provides the operator with **real time diagnostic facilities** to monitor the operation of the system.

Relay outputs are provided by way of two configurable outputs. Normally the relays are configured as Warning and Shutdown alarm outputs. However, relays are configurable to activate on a range of functions, conditions or alarms. The relay outputs are at negative plant supply to give compatibility with the inputs to other 500 series modules. Additionally each module can be fitted to a 157 relay expansion module to provide a further eight fully configurable volt free relay outputs.

Configurable inputs are available for Fuel, Safety On, Reset and Lamp Test. This allows the module to function with N/O or N/C switches.

Five fully configurable auxiliary inputs are provided to give protection expansion or annunciation. These can be selected to be indication, warning, shutdown or electrical trip either immediate or on start-up or held off during safety on delay.

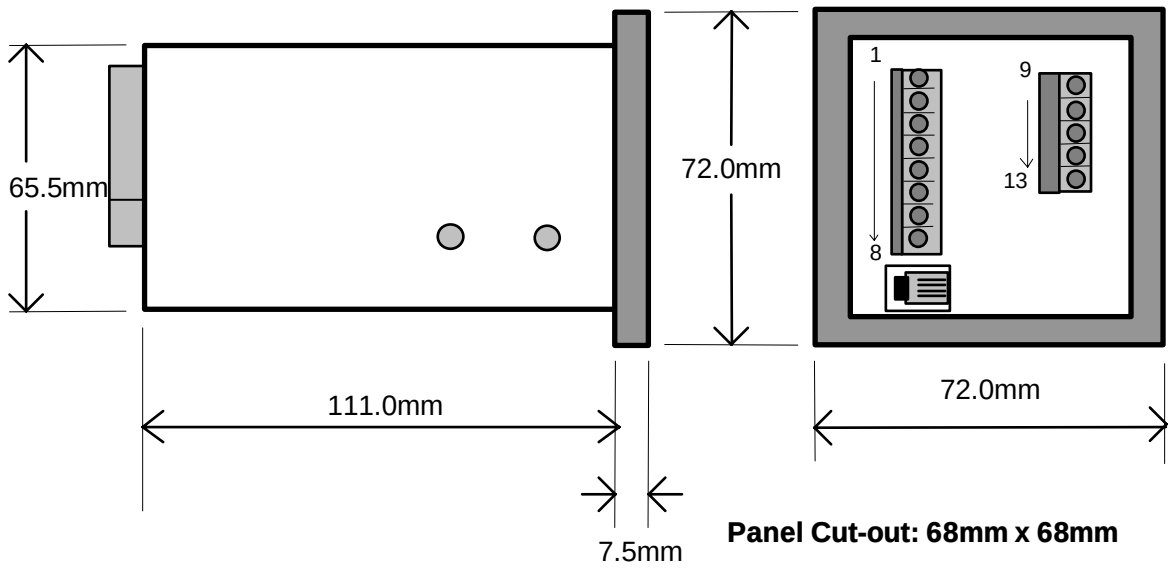
Uncommitted LED's allow configurable annunciation in a choice of colours:
Red, Green or Amber.
Indication or warnings -STEADY
Shutdown or Electrical Trip - FLASHING.

The 500 series modules have been designed for **front panel mounting**. The module is fitted into the cut-out with the fixing clips removed. These are then fitted from the rear. Connection is via locking plug and socket connectors.

C Supply:
8 to 35 V Continuous.
Cranking Dropouts:
Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5V. *This is achieved without the need for internal batteries.*
Max. Operating Current:
200 mA at 12 V. 130 mA at 24 V.
Max. Standby Current:
15 mA at 12 V. 15 mA at 24 V.
DC alarm voltage Range:
Minimum Low Volts trip:- 0V
Maximum High Volts trip:- 40V
Time delay :- 0sec – 60minutes
Auxiliary Relay Outputs:
5 Amp DC at supply voltage.
Dimensions:
72 X 72X 118.5
Weight:
0.3Kg
Operating Temperature Range:
-15 to +55°C

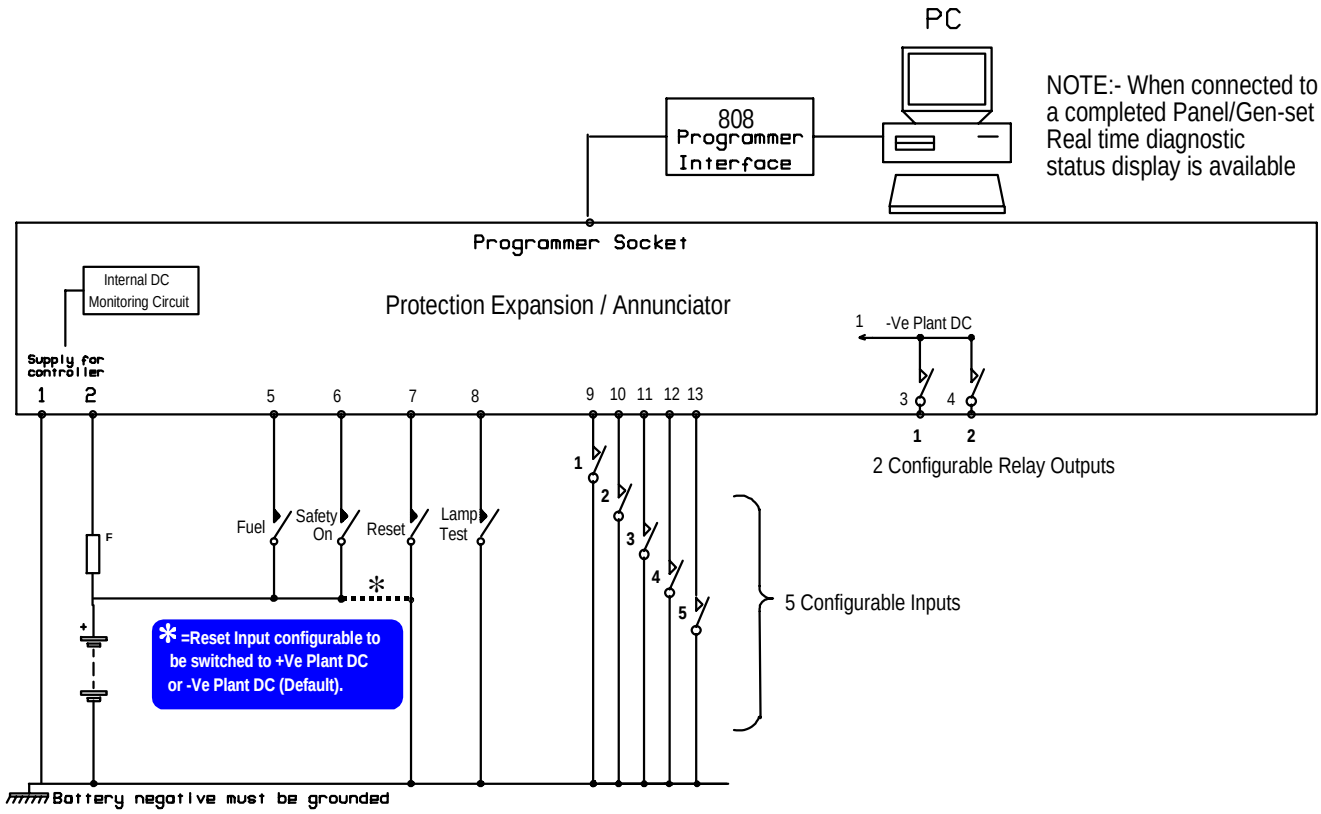
NOTE: For applications requiring more than 5 input channels it is possible to use multiple modules to achieve the number of input channels. Alternatively the DSE model 541 provides 10 input channels as standard and also features additional relay outputs.

CASE DIMENSIONS



Panel Cut-out: 68mm x 68mm

TYPICAL CONNECTIONS



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