



# DEEP SEA ELECTRONICS

## DSE2152 Installation Instructions

### INTRODUCTION

The DSE2152 analogue output expansion module is used in conjunction with compatible DSE controllers to provide an additional six 0 V to 10 V or 4 mA outputs. The analogue outputs are configured in the 'host DSE controller'. The only configuration for the DSE2152 is the 'ID switch' detailed below.

For further details on configuring the 'host DSE controller', refer to the relevant DSE Configuration Suite PC Software Manual.

### CONTROLS AND INDICATIONS



### LED INDICATIONS

LED	Colour	Action
Power On / Link Lost	Red	Flashing when the DC supply is connected and the data connection to the host DSE controller is not operating. Steady when DC supply is connected and data is being received from the host DSE controller.

### DSENET ID SWITCH

The rotary ID switch is used to select the DSENet 'identification' of the DSE2152 expansion module as the host DSE controller is capable of giving instructions to multiple DSE2152 expansion modules at the same time.

The switch must be operated using a small screwdriver and set to match the required ID set in the host DSE module's configuration.

**NOTE:** The ID MUST be a unique number that is different from the ID of any other DSE2152 module connected to the host DSE controller. If two or more DSE2152 expansion modules are required to 'mimic' each other they must be configured with different IDs, and both IDs configured the same way the host DSE controller.

**NOTE:** The selection of the ID of other types of expansion modules DO NOT interfere/clash with the ID of the DSE2152. For instance, if the DSE2152 is set to ID 4, it is acceptable to have a different type of expansion module (for instance DSE2130) set to ID 4 also.

### DIMENSIONS AND MOUNTING

Parameter	Specification
Dimensions	165 mm X 76 mm X 49 mm (6.5 " X 3.0 " X 1.9 ")
Mounting Type	DIN rail or chassis mounting
DIN Rail Width	EN 50022: 35 mm (1.4 ")
Mounting Holes	M4 (0.25 ")
Mounting Hole Centres	152 mm X 65 mm (6.0 " X 2.5 ")
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +80 °C (-40 °F to +176 °F)

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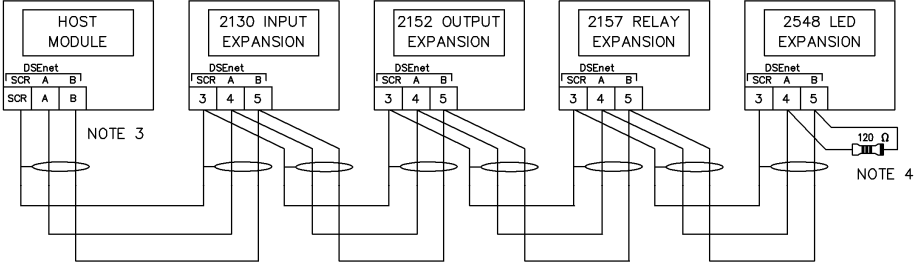
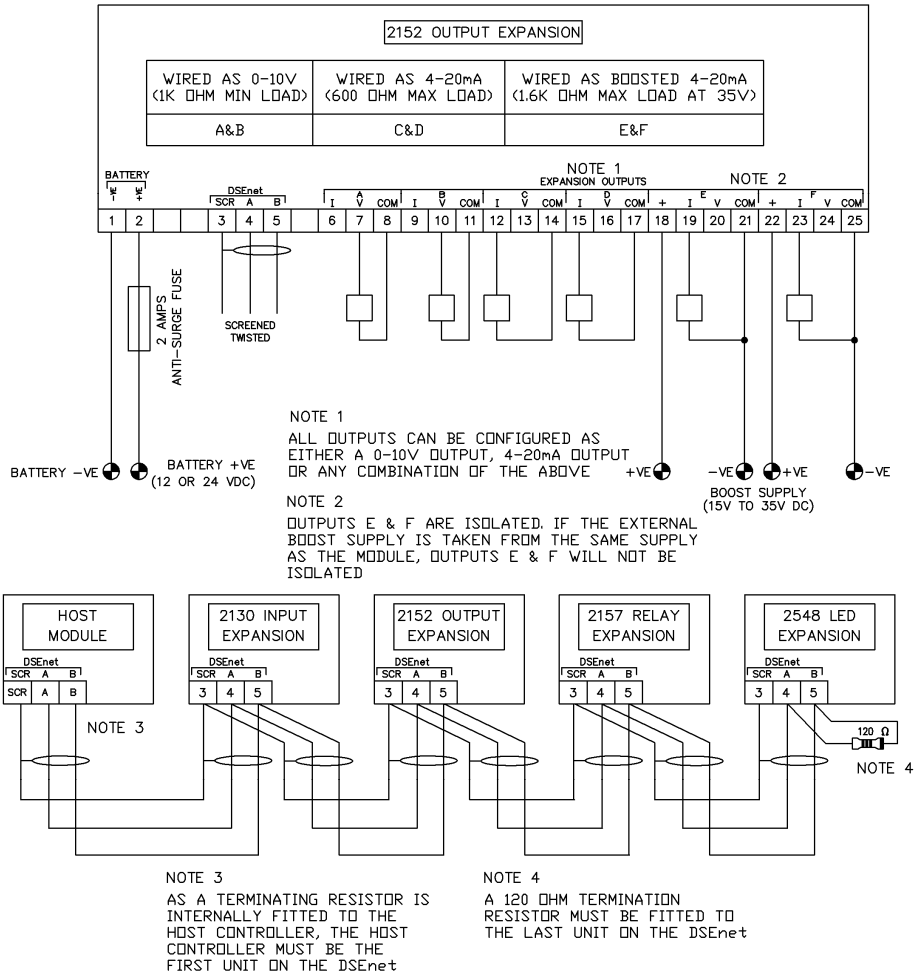
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# REQUIREMENTS FOR UL CERTIFICATION

Specification	Description
Screw Terminal Tightening Torque	• 4.5 lb-in (0.5 Nm)
Conductors	<ul style="list-style-type: none"> <li>• Terminals suitable for connection of conductor size 13 AWG to 20 AWG (0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup>).</li> <li>• Conductor protection must be provided in accordance with NFPA 70, Article 240</li> <li>• Low voltage circuits (35 V or less) must be supplied from the engine starting battery or an isolated secondary circuit.</li> <li>• The communication, sensor, and/or battery derived circuit conductors shall be separated and secured to maintain at least 1/4" (6 mm) separation from the generator and mains connected circuit conductors unless all conductors are rated 600 V or greater.</li> </ul>
Communication Circuits	• Must be connected to communication circuits of UL Listed equipment
Mounting	• Suitable for flat surface mounting in Type 1 Enclosure Type rating with surrounding air temperature -22 °F to +122 °F (-30 °C to +50 °C)
Operating Temperature	• -22 °F to +122 °F (-30 °C to +50 °C)

## TYPICAL WIRING DIAGRAM



**NOTE 3**  
AS A TERMINATING RESISTOR IS INTERNALLY FITTED TO THE HOST CONTROLLER, THE HOST CONTROLLER MUST BE THE FIRST UNIT ON THE DSEnet

**NOTE 4**  
A 120 OHM TERMINATION RESISTOR MUST BE FITTED TO THE LAST UNIT ON THE DSEnet