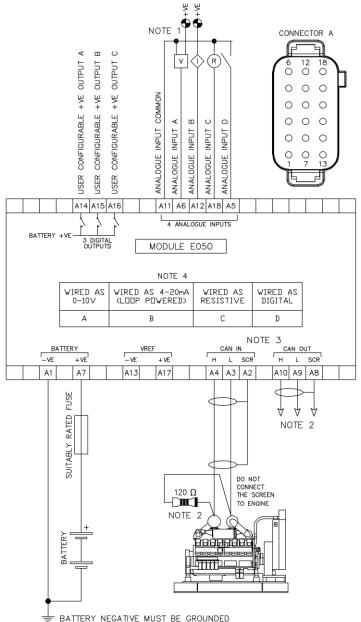
#### **TYPICAL CONNECTIONS**



- BATTERT NEGATIVE MOST BE GROUNDED

NOTE 1. ANALOGUE INPUT COMMON MUST NOT BE GROUNDED, IT IS LINKED INTERNALLY TO TERMINAL A1.

NOTE 2. 120  $\Omega$  TERMINATING RESISTOR MAY BE REQUIRED EXTERNALLY, SEE EXTERNAL EQUIPMENT MANUFACTURERS LITERATURE FOR FURTHER DETAILS.

NOTE 3. CAN IN AND CAN OUT ARE LINKED INTERNALLY.

NOTE 4. ANALOGUE INPUTS CAN BE CONFIGURED AS EITHER A DIGITAL INPUT, RESISTIVE INPUT, 0-10V INPUT, 4-20mA INPUT, OR ANY COMBINATION OF THE ABOVE.

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### DEEP SEA ELECTRONICS DSEE050 Installation Instructions

These instructions are intended as a quick guide only. For complete instructions and specifications, refer to DSE publication *057-300* DSEE050 Operator Manual available from www.deepseaelectronics.com.

**NOTE:** Cables / wires must be installed as indicated to prevent liquid (water) entering the device. Part number of suitable connectors / blanking plugs are given overleaf and detailed in DSE publication 057-300 DSEE050 Operator Manual available from www.deepseaelectronics.com.

### CONFIGURATION

**NOTE:** DSEE050 is supplied with Factory (Default) Settings to suit most J1939 compatible engine ECUs. Due to the configurable nature of the device this is subject to change as required by the supplier. Contact supplier or consult the device configuration source for full details of the configured instrumentation.

**NOTE:** For details of module configuration, refer to DSE Publication: 057-299 DSEE050 Configuration Suite PC Software Manual.

For configuration of the device, a PC USB to CAN Interface is required. Detailed below. The device driver is supplied with the interface and is further available at the website listed in the table below.

| Manufacturer                 | Part Number | Description            |
|------------------------------|-------------|------------------------|
| PEAK-System Technik GmbH     | IPEH-002021 | PCAN-USB               |
| https://www.peak-system.com/ |             |                        |
|                              | IPEH-002022 | PCAN-USB Opto-Isolated |

Deep Sea Electronics Ltd. Tel: +44 (0)1723 890099 sales@deepseaelectronics.com Web: www.deepseaelectronics.com Deep Sea Electronics Inc. Tel: +1 (815) 316-8706 Fax: +1 (815) 316-8708 sales@deepseaelectronics.com Web: www.deepseaelectronics.com

### DIMENSIONS

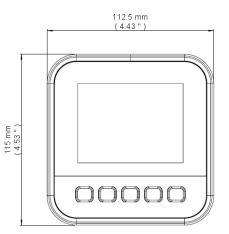
| Description  | Specification                 |
|--|-------------------------------|
| Overall Dimensions (Height x Width x Depth)                          | 112.5 mm x 115.0 mm x 49.0 mm |
|  | (4.43 " x 4.53 " x 1.93 ")    |
| Mounting Type  | Fascia Mount                  |
| Overall Weight   | <1 kg                         |
|  | (2.2 lb)                      |
| Panel Cut-Out diameter   | 82 mm                         |
|  | (3.23 ")                      |
| Panel Cut-Out Flat Side Dimension                                    | 76.0 mm                       |
|  | (2.99 ")                      |
| Fascia Tightening Torque to prevent distortion of the sealing gasket | 8 Nm Maximum                  |
| and subsequent seal failure / mechanical damage to the controller.   | (5.9 ft. lb Maximum)          |

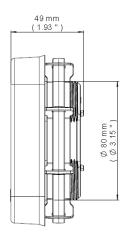
## CONNECTORS, HARNESSES AND SPARE PARTS

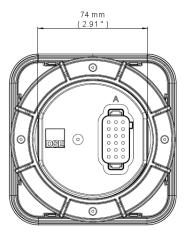
| Description  | DSE Part    | Manufacturer Part             | Manufacturer                |
|--|-------------|-------------------------------|-----------------------------|
| DSEE050 Connector A  | 007-850     | DT16-18SA-K004                | TE / Deutsch                |
| Connector Pin Crimp<br>(0.5 mm <sup>2</sup> to 1.0 mm <sup>2</sup> ) | N/A         | 0462-201-16                   | TE                          |
| Connector Pin Crimp<br>(2 mm <sup>2</sup> )                          |             | 0462-209-16                   | TE                          |
| DSEE050 Connector Harness Kit  | 016-176     | N/A                           | DSE                         |
| DSEE050 Connector Configuration Harness.                             | 016-177     | N/A                           | DSE                         |
| Pin Blank Inserts (Seals unused connector pins)                      | N/A         | 114017                        | TE                          |
| Belden 9841 (CAN Cable)  | 016-030     | 9841                          | Belden                      |
| PCAN-USB PC Configuration Interface                                  | N/A         | IPEH-002021 or<br>IPEH-002022 | PEAK-System<br>Technik GmbH |
| Rear Case Ring Nut   | 020-1058-01 | N/A                           | DSE                         |

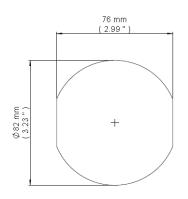
# **REQUIREMENTS FOR UL CERTIFICATION**

| Specification             | Description   |
|---------------------------|---|
| Conductors                | <ul> <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 ¼" (6 mm) separation from the generator and mains connected circuit conductors unless all conductors are rated 600 V or greater.</li> </ul> |
| Communication<br>Circuits | Must be connected to communication circuits of UL Listed equipment  |
| DC Output Pilot<br>Duty   | • 0.5 A   |
| Mounting                  | <ul> <li>Suitable for flat surface mounting in Type 1 Enclosure Type rating with surrounding air temperature -22 °F to +158 °F (-30 °C to +70 °C)</li> <li>Suitable for pollution degree 2 environments</li> </ul>  |
| Operating<br>Temperature  | • -22 °F to +158 °F (-30 °C to +70 °C)  |









### DIMENSIONS AND PANEL CUTOUT DIAGRAM