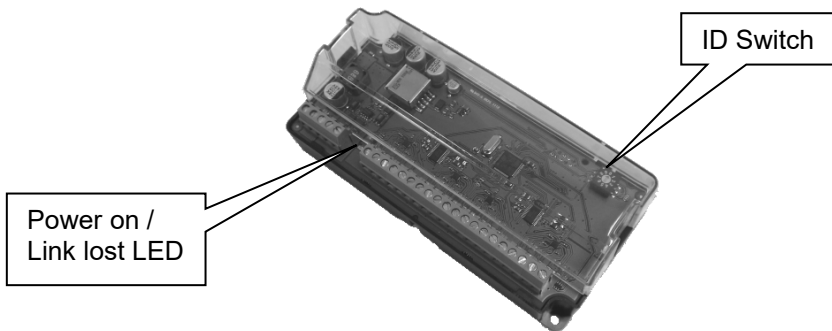DEEP SEA ELECTRONICS

## DSE2133 Input Expansion Installation Instructions

**DSE**®

## Introduction

DSE2133 input expansion module is used in conjunction with supported DSE controllers to provide additional input functionality (8 x thermocouple inputs or 8 x RTD inputs). The inputs are configured in the 'host controller', the DSE2133 module is not itself configured apart from the 'ID switch' detailed below.

For further details on configuring the 'host controller' you are referred to the relevant configuration software manual.

## Controls and indications



ID Switch

Power on / Link lost LED

## LED Indications

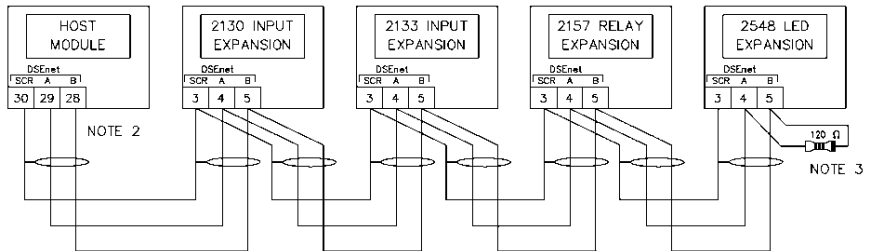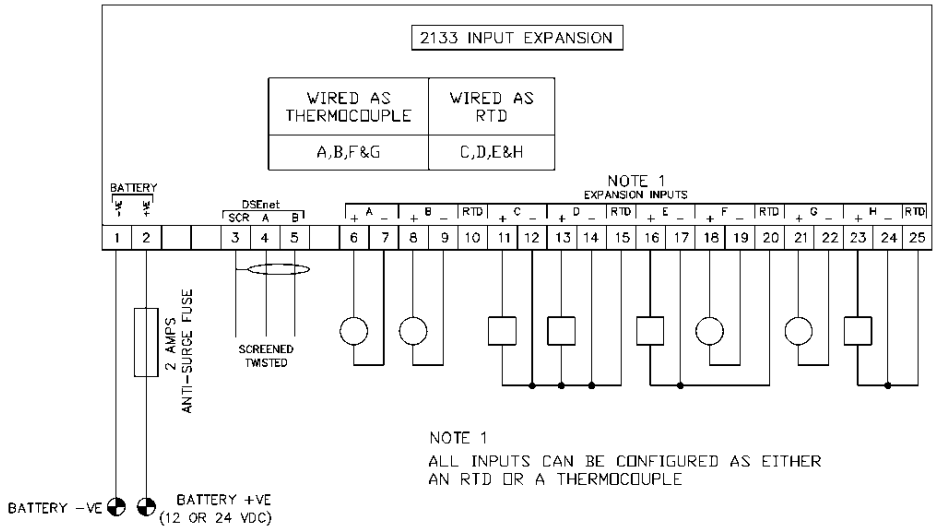| Function | Colour | Action |
|---|---|---|
| Power on / Link lost | RED | Steady when DC supply is connected and data is being received from the host controller. Flashing when the DC supply is connected and the data connection to the host controller is not operating. |

## ID switch

The rotary ID switch is used to select the 'Identification' of the DSE2133 expansion module as the host controller is capable of giving instructions to a number of DSE2133 expansion modules at the same time (consult relevant modules instructions for further details on number of supported expansion units).

The enclosure cover must be unclipped and removed to gain access to the switch. The switch should be operated using a small screwdriver and set to match the required address.

⚠ **NOTE : The ID must be set to be a unique number, different from the ID of any other DSE2133 input expansion module connected on the DSEnet.**

⚠ **NOTE : The selection of the ID of other types of expansion modules WILL NOT interfere/clash with the ID of the DSE2133. For instance if the DSE2133 is set to ID 4, it is acceptable to have a different type of expansion module (for instance DSE2157) set to ID 4 also.**

# Typical wiring diagrams

2133 INPUT EXPANSION

| WIRED AS THERMOCOUPLE | WIRED AS RTD |
|---|---|
| A,B,F&G | C,D,E&H |

NOTE 1
EXPANSION INPUTS

BATTERY
DSEnet
SCR A B

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

+ A −   + B −   RTD   + C −   + D −   RTD   + E −   + F −   RTD   + G −   + H −   RTD

2 AMPS ANTI-SURGE FUSE

SCREENED TWISTED

BATTERY −VE
BATTERY +VE (12 OR 24 VDC)

NOTE 1
ALL INPUTS CAN BE CONFIGURED AS EITHER
AN RTD OR A THERMOCOUPLE

| HOST MODULE | 2130 INPUT EXPANSION | 2133 INPUT EXPANSION | 2157 RELAY EXPANSION | 2548 LED EXPANSION |
|---|---|---|---|---|
| DSEnet SCR A B | DSEnet SCR A B | DSEnet SCR A B | DSEnet SCR A B | DSEnet SCR A B |
| 30 29 28 | 3 4 5 | 3 4 5 | 3 4 5 | 3 4 5 |

NOTE 2

120 Ω
NOTE 3

NOTE 2
AS A TERMINATING RESISTOR IS
INTERNALLY FITTED TO THE
HOST CONTROLLER, THE HOST
CONTROLLER MUST BE THE
FIRST UNIT ON THE DSEnet

NOTE 3
A 120 OHM TERMINATION
RESISTOR MUST BE FITTED TO
THE LAST UNIT ON THE DSEnet

# Dimensions

| | |
|---|---|
| Overall size | 164.6mm x 76.4mm x 48.9mm (6.48" x 3.01" x 1.93") |
| Mounting type | DIN rail or chassis mounting |
| Din rail type | EN 50022 35mm type only |
| Mounting holes | M4 clearance |
| Mounting hole centres | 152.37mm x 64.50mm (6.00" x 2.54") |