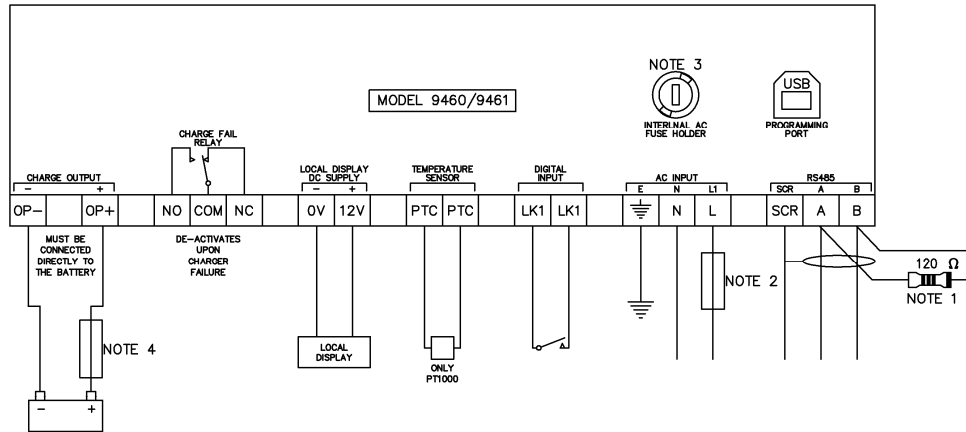


TYPICAL WIRING DIAGRAM



NOTE 1
A 120 OHM TERMINATION RESISTOR MUST BE FITTED IF IT IS THE FIRST OR LAST DEVICE ON AN RS485 LINK

NOTE 2

| AC INPUT | ANTI-SURGE FUSE RATING |
|----------|------------------------|
| 110V | 6.3A |
| 230V | 3.5A |

FUSE APPROPRIATELY WHEN CURRENT LIMIT IS CONFIGURED BELOW 10A AND AS CLOSE TO THE BATTERY CHARGER AS POSSIBLE TO PROTECT THE CABLES

NOTE 3
FACTORY FITTED WITH 6.3A ANTI-SURGE FUSE, FUSE APPROPRIATELY

NOTE 4
FUSE APPROPRIATELY AND AS CLOSE TO THE BATTERY AS POSSIBLE TO PROTECT THE CABLES AND BATTERY



DEEP SEA ELECTRONICS

053-147
ISSUE 4

DSE9460 & DSE9461 INSTALLATION INSTRUCTIONS

INSTALLATION

The battery chargers are wall mounted via four holes on the back of the enclosure. Dimension and mounting details are given overleaf.
The battery charger is *fit-and-forget*. It can be permanently connected to the supply and the load, with no requirement to disable the charger during times of heavy load (such as engine cranking) or when in parallel with a charging alternator.

BATTERY SUITABILITY

The battery charger is factory set by DSE to suit Lead Acid batteries but can be adjusted to suit other battery types using the Configuration Suite PC Software.
Care must be taken to ensure the batteries connected to the charger are of the correct 'technology' to suit the setting of the charger.

INDICATIONS

The Battery Charger features an LCD display and depending on the variant, additional voltage and current meters may be fitted.

BOOST MODE

Boost mode is operated automatically or by activation of the digital input (if configured to perform this function). This raises the battery charger voltage to the *boost voltage* setting.

ACCESSING THE FRONT PANEL EDITOR

- The Front Panel Editor (FPE) is accessed by pressing and holding the (✓) button.
- Press the (up) or (down) button to cycle through the *Adjustable Parameters* listed overleaf.
- Press the (✓) button to edit a parameter when it is being viewed on the screen. The value flashes to show edit mode is in progress.
- Press the (+) or (-) button to change the parameter to the required value.
- Press the (✓) button to save the currently selected value. The value ceases flashing to show editing is complete.
- Press and hold the (✓) button to exit the editor



DANGER OF DEATH: LIVE PARTS exist within the enclosure. The enclosure cover must not be removed when connected to an AC supply

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ADJUSTABLE PARAMETERS

NOTE: On later versions of the DSE2541 display, only parameters 100 to 108 are available for configuration.

| Index | Parameter | Value |
|-------|---------------------------|-------------------------|
| 100 | Contrast | 0 % |
| 101 | Temperature Units | °C, °F |
| 102 | Slave ID | 1 to 255 |
| 103 | Baud Rate | 4800 to 115200 |
| 104 | Enable Alarm Popup Screen | Enable, Disable |
| 105 | Home Page Configuration | 0 to 8 (Home Page List) |
| 106 | Home Page Timeout | 0 s |
| 107 | Sleep Mode Timeout | 0 s |
| 108 | Enable Engineering Page | Enable, Disable |

Parameter 105 – Home Page Configuration has the following possible selections:

| Value | Home Page List |
|-------|--|
| 0 | Analogue Meters |
| 1 | Output Voltage And Current |
| 2 | Output Power And Battery Charger Temperature |
| 3 | Battery Sensed Voltage And Battery Temperature |
| 4 | Mains AC Voltage And Frequency |
| 5 | Battery Charger Model And Charger Software Version |
| 7 | Control Page |
| 8 | Alarms Page |

DISPLAY LED INDICATIONS



CHARGER STATUS

| Condition | LED State |
|-------------|-----------|
| Charger Off | Off |
| Charger On | On |

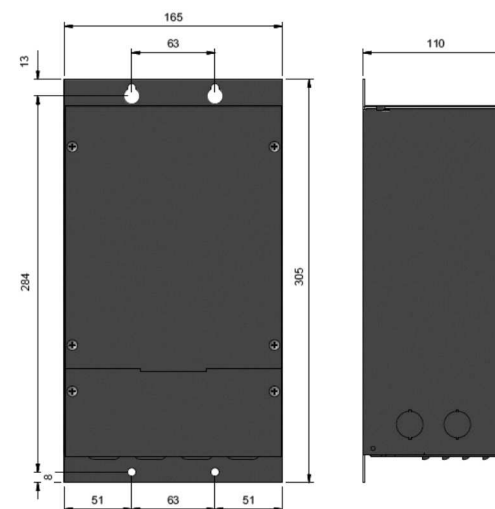
FAULT STATUS

| Condition | LED State |
|----------------|-----------|
| No Fault | Off |
| Warning Fault | On |
| Shutdown Fault | Flashing |

BOOST MODE

| Condition | LED State |
|-----------|-----------|
| Boost Off | Off |
| Boost On | On |

DIMENSIONS AND MOUNTING



Measurements in mm

| Parameter | Comment |
|--|--|
| Cabinet Type | Custom cabinet for indoor use only |
| Overall Size | 165 mm X 305 mm X 110 mm (6.5" X 12.0" X 4.3") |
| Material | Sheet steel enclosure of all-round solid construction |
| Surface Finish | Powder-coated black |
| Protection Category | IP20, NEMA 1 |
| Weight | 2.3 kg (5 lb 1 oz) |
| Mounting Type | Wall mounted with terminals to bottom. |
| Mounting Holes | Diameter 6 mm (0.2") 63 mm X 284 mm (3.4" x 11.2") centres |
| Operating Temperature (With Deratings) | -30 °C to +80 °C (-22 °F to +176 °F) |

REQUIREMENTS FOR UL CERTIFICATION

| Parameter | Comment |
|----------------------------------|--|
| Screw Terminal Tightening Torque | 4.5 lb-in (0.5 Nm) |
| Conductors | <ul style="list-style-type: none"> Terminals suitable for connection of conductor size 12 AWG – 26 AWG (0.5 mm² to 2.0 mm²). Conductor protection must be provided in accordance with NFPA 70, Article 240 Low voltage circuits (35 V or less) must be supplied from the engine starting battery or an isolated secondary circuit. 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. |
| Communication Circuits | Must be connected to communication circuits of UL Listed equipment |
| Mounting | <ul style="list-style-type: none"> Suitable for use in type 1 Enclosure Type rating with surrounding air temperature -22 °F to +131 °F (-30 °C to +55 °C) Suitable for pollution degree 3 environments when voltage sensing inputs do not exceed 300 V. When used to monitor voltages over 300 V device to be installed in an unventilated or filtered ventilation enclosure to maintain a pollution degree 2 environment. |
| Operating Temperature | -22 °F to +131 °F (-30 °C to +55 °C) |
| Storage Temperature | -40 °F to +176 °F (-40 °C to +80 °C) |