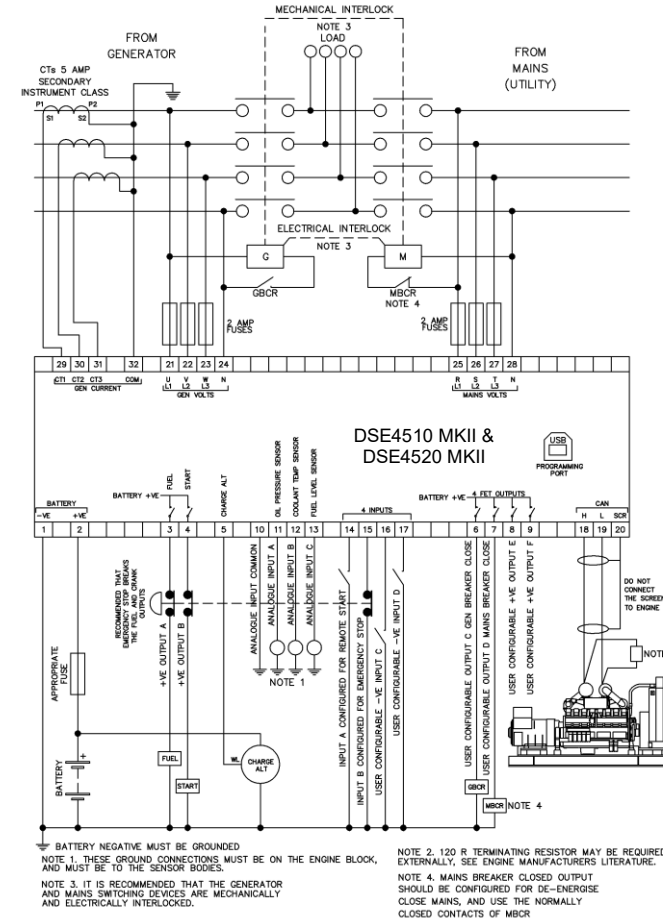


Input Sources			
0	User Configured	17	Mains Load Inhibit
1	Remote Start on Load	18	RESERVED
2	RESERVED	19	External Panel Lock
3	Auto Start Inhibit	20	Auxiliary Mains Fail
4	Lamp Test	21	Oil Pressure Switch
5	Alarm Mute	22	Coolant Temperature Switch
6	Alarm Reset	23	RESERVED
7	RESERVED	24	Simulate Mains Available
8	Simulate Start Button	25	Remote Start Off Load
9	Simulate Stop Button	26-30	RESERVED
10	RESERVED	31	Auto Restore Inhibit
11	Simulate Auto Button	32	RESERVED
12	RESERVED	33	Low Fuel Level Switch
13	Close Generator Open Mains	34	Smoke Limiting
14	Generator Load Inhibit	35-38	RESERVED
15	RESERVED	39	Main Configuration
16	Close Mains Open Generator	40	Alternative Configuration 1
41	Alternative Configuration 2	42	Alternative Configuration 3
43	Emergency Stop	44	RESERVED
45	Maintenance Reset Oil	46	Maintenance Reset Air
47	Maintenance Reset Fuel	48	RESERVED
49	RESERVED	50	DPF Auto Regen Inhibit
51	DPF Force Regeneration	52	DPF Regeneration Interlock
53	Water in Fuel	54	Fuel Bund Level High
55	Fan Speed Low	56	Low Coolant Level Switch
57	Wait To Start		

Output Sources			
0	Not Used	46	Mains Low Frequency
1	Air Flap Relay	47	Mains Low Voltage
2	Audible Alarm	48	Oil Pressure Sensor Open Circuit
3	Battery High Volts Warning	49	Open Generator Output
4	Battery Low Volts Warning	50	Open Generator Output Pulse
5	CAN ECU Data Fail	51	Open Mains Output
6	ECU (ECM) Warning	52	Open Mains Output Pulse
7	ECU (ECM) Shutdown	53	Over Frequency Shutdown
8	CAN ECU Power	54	Over Speed Shutdown
9	CAN ECU Stop	55	Preheat During Preheat Timer
10	Charge Alternator Shutdown	56	Preheat Until End of Crank
11	Charge Alternator Warning	57	Preheat Until End of Safety Timer
12	Close Generator Output	58	Preheat Until End of Warming
13	Close Generator Output Pulse	59	Smoke Limiting
14	Close Mains Output	60	Start Relay
15	Close Mains Output Pulse	61	Temperature Sensor Open Circuit
16	Combined Mains Failure	62	Under Frequency Shutdown
17	Common Alarm	63	Under Speed Shutdown
18	Common Electrical Trip	64	Waiting for Manual Restore
19	Common Shutdown	65	Flexible Sensor C High Alarm
20	Common Warning	66	Flexible Sensor C High Pre-Alarm
21	Cooling Down	67	Flexible Sensor C Low Pre-Alarm
22	Digital Input A	68	Flexible Sensor C Low Alarm
23	Digital Input B	69	RESERVED
24	Digital Input C	70	RESERVED
25	Digital Input D	71	RESERVED
26	RESERVED	72	RESERVED
27	RESERVED	73	Fuel Sensor High Alarm
28	RESERVED	74	Fuel Sensor High Pre-Alarm
29	Emergency Stop	75	Fuel Sensor Low Pre-Alarm
30	Enginse to Stop	76	Fuel Sensor Low Alarm
31	Fail to Start	77	Delayed Load Output 1
32	Fail to Stop	78	Delayed Load Output 2
33	Fuel Relay	79	Delayed Load Output 3
34	Gas Choke On	80	Delayed Load Output 4
35	Gas Ignition	81	Air Filter Maintenance
36	Generator Available	82	Oil Filter Maintenance
37	Generator High Voltage Alarm	83	Fuel Filter Maintenance
38	Generator Low Voltage Alarm	84	System in Stop Mode
39	kW Overload Alarm	85	System in Auto Mode
40	Over Current Immediate Warning	86	System in Manual Mode
41	Delayed Over Current Alarm	87	RESERVED
42	High Coolant Temp Shutdown	88	Analogue Input A (Digital)
43	Low Oil Pressure Shutdown	89	Analogue Input B (Digital)
44	Mains High Frequency	90	Analogue Input C (Digital)
45	Mains High Voltage	91	RESERVED
92	RESERVED	93	RESERVED
94	RESERVED	95	Over Speed Overshoot Alarm
96	Over Frequency Overshoot Alarm	97	Display Heater Filled and Active
98	RESERVED	99	SCR Inducement
100	DEF Level Low	101	DPF Auto Regeneration Inhibit
102	DPF Forced Regeneration	103	DPF None Mission State
104	DPF Regeneration in Progress	105	DPF Regen Interlock Active
106	DPTC Filter	107	HEST Active
108	Water in Fuel	109	Fuel Pull in Coil
110	Generator at Rest	111	Fuel Tank Bund Level High
112	ECU Preheat	113	Water Heater
114	Water Cooler	115	Closed to Gen
116	Closed to Mains	117	Generator Under Frequency Warning
118	Generator Over Frequency Warning	119	Generator Low Voltage Warning
120	Generator High Voltage Warning	121	Main Config Selected
122	Alt Config 1 Selected	123	Alt Config 2 Selected
124	Alt Config 3 Selected	125	Flexible Sensor A High Alarm
126	Flexible Sensor A High Pre-Alarm	127	Flexible Sensor A Low Alarm
128	Flexible Sensor A Low Pre-Alarm	129	Flexible Sensor A Open Circuit
130	Fan Speed Low	131	Fuel Usage Alarm
132	Low Coolant Level	133	Low Coolant Level Open Circuit
134	Waiting To Start	135	High Coolant Temp Pre-Alarm

Functionality in DSE4510 MKII & DSE4520 MKII
 Functionality in DSE4520 MKII only

TYPICAL WIRING DIAGRAM



DIMENSIONS

140 mm x 113 mm x 43 mm
 (5.5" x 4.4" x 1.7")

PANEL CUTOUT

118 mm x 92 mm
 (4.6" x 3.6")

TERMINALS

Tightening Torque: 0.5 Nm (4.5 lb-in)
 Conductor Size: 0.5 mm² to 2.5 mm²
 (AWG 20 to AWG 13)

NOTE: A larger version of the typical wiring diagram is included in the product's operator manual. Refer to DSE Publication: **057-260 DSE4510 MKII & DSE4520 MKII Operator Manual**

NOTE: Terminals 25, 26, 27 & 28 are not fitted to the DSE4510 MKII

REQUIREMENTS FOR UL CERTIFICATION

Specification	Description
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 13 AWG to 20 AWG (0.5 mm² to 2.5 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 1/4" (6 mm) separation from the generator and mains connected circuit conductors unless all conductors are rated 600 V or greater.
Current Inputs	• Must be connected through UL Listed or Recognized isolating current transformers with the secondary rating of 5 A max.
Communication Circuits	• Must be connected to communication circuits of UL Listed equipment
DC Output Pilot Duty	• 0.5 A
Mounting	<ul style="list-style-type: none"> • Suitable for use in type 1 Enclosure Type rating with surrounding air temperature -22 °F to +158 °F (-30 °C to +70 °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 install in an unventilated or filtered ventilation enclosure to maintain a pollution degree 2 environment.
Operating Temperature	• -22 °F to +158 °F (-30 °C to +70 °C)
Storage Temperature	• -40 °F to +176 °F (-40 °C to +80 °C)

DSE
DEEP SEA ELECTRONICS
DSE4510 MKII & DSE4520 MKII Installation Instructions
 Applicable to module version 3.0.0 and upwards.

EDITING A PARAMETER

- Press the **Stop/Reset Mode** (O) (-) and **Auto Mode** (AUTO) (✓) buttons together to enter the editor mode.
- Press the **Up** (↑) or **Down** (↓) navigation buttons to cycle through the front panel editor in increments of 100.
- Press the **Manual/Start Mode** (L) (+) or **Stop/Reset Mode** (O) (-) buttons to cycle through the front panel editor in increments of 1.
- When viewing the parameter to be edited, press the **Auto Mode** (AUTO) (✓) button and the value begins to flash.
- Press the **Manual/Start Mode** (L) (+) or **Stop/Reset Mode** (O) (-) navigation buttons to adjust the value to the required setting.
- Press the **Auto Mode** (AUTO) (✓) button to save the current value, the value ceases flashing.
- Press and hold the **Auto Mode** (AUTO) (✓) button to save and exit the editor, the configuration icon is removed from the display.

NOTE: Pressing and holding the **Manual/Start Mode** (L) (+) or **Stop/Reset Mode** (O) (-) buttons will give auto-repeat functionality.

NOTE: More comprehensive module configuration is possible via PC configuration software. For further details of module configuration, refer to DSE Publication: **057-258 DSE4510 MKII & DSE4520 MKII Configuration Suite PC Software Manual**.

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