

Configuration Parameters – Module (Page 1)					
101	Contrast	0 (%)	120	CT Position	Gen (0), Load (1)
102	Fast Loading Enabled	On (1), Off (0)	121	Generator Voltage Display	On (1), Off (0)
103	All Warnings Latched	On (1), Off (0)	122	Mains Voltage Display	On (1), Off (0)
104	Lamp Test at Startup	On (1), Off (0)	123	Generator Frequency Display	On (1), Off (0)
105	Power Save Mode Enable	On (1), Off (0)	124	Mains Frequency Display	On (1), Off (0)
106	Deep Sleep Mode Enable	On (1), Off (0)	125	Current Display	On (1), Off (0)
107	Protected Start Enable	On (1), Off (0)	126	kW Display	On (1), Off (0)
108	Event Log Display Format	On (1), Off (0)	127	kvar Display	On (1), Off (0)
109	Power Up Mode	0 (Power Up Mode)	128	kVA Display	On (1), Off (0)
110	DTC String Enable	On (1), Off (0)	129	pf Display	On (1), Off (0)
111	RESERVED		130	kWh Display	On (1), Off (0)
112	Pin Protected Maintenance Reset	On (1), Off (0)	131	kvarh Display	On (1), Off (0)
113	Stop Button Cooldown	On (1), Off (0)	132	kVAh Display	On (1), Off (0)
114	Use Module Oil Pressure	On (1), Off (0)	133	RESERVED	
115	Use Module Coolant Temp	On (1), Off (0)	134	Show Load Switching Icons	On (1), Off (0)
116	Use Module Engine Hours	On (1), Off (0)	135	Backlight Inactivity Timer	On (1), Off (0)
117	Use Module RPM	On (1), Off (0)	136	ECU Periodic Wake Up	On (1), Off (0)
118	Use Module Charge Alt	On (1), Off (0)	137	Coolant Temp Persistence	On (1), Off (0)
119	Disable CAN Speed Control	On (1), Off (0)	138	Limit Audible Alarm Duration	On (1), Off (0)

Configuration Parameters – CAN Application (Page 2)					
201	CAN Alternative Engine Speed	On (1), Off (0)	203	CAN ECU Data Fail Action	0 (Action)
202	CAN ECU Data Fail Arming	On (1), Off (0)	204	CAN ECU Data Fail Delay	0 s

Configuration Parameters – Digital Inputs (Page 3)					
301	Digital Input A Source	0 (Input Source)			
302	Digital Input A Polarity	0 (Polarity)			
303	Digital Input A Action (If Source = User Config)	0 (Action)			
304	Digital Input A Arming (If Source = User Config)	0 (Arming)			
305	Digital Input A Activation Delay (If Source = User Config)	0 s			
306	Digital Input B Source	0 (Input Source)			
307	Digital Input B Polarity	0 (Polarity)			
308	Digital Input B Action (If Source = User Config)	0 (Action)			
309	Digital Input B Arming (If Source = User Config)	0 (Arming)			
310	Digital Input B Activation Delay (If Source = User Config)	0 s			
311	Digital Input C Source	0 (Input Source)			
312	Digital Input C Polarity	0 (Polarity)			
313	Digital Input C Action (If Source = User Config)	0 (Action)			
314	Digital Input C Arming (If Source = User Config)	0 (Arming)			
315	Digital Input C Activation Delay (If Source = User Config)	0 s			
316	Digital Input D Source	0 (Input Source)			
317	Digital Input D Polarity	0 (Polarity)			
318	Digital Input D Action (If Source = User Config)	0 (Action)			
319	Digital Input D Arming (If Source = User Config)	0 (Arming)			
320	Digital Input D Activation Delay (If Source = User Config)	0 s			

Configuration Parameters – Outputs (Page 4)					
401	Digital Output A Source	0 (Output Source)	407	Digital Output D Source	0 (Output Source)
402	Digital Output A Polarity	0 (Output Polarity)	408	Digital Output D Polarity	0 (Output Polarity)
403	Digital Output B Source	0 (Output Source)	409	Digital Output E Source	0 (Output Source)
404	Digital Output B Polarity	0 (Output Polarity)	410	Digital Output E Polarity	0 (Output Polarity)
405	Digital Output C Source	0 (Output Source)	411	Digital Output F Source	0 (Output Source)
406	Digital Output C Polarity	0 (Output Polarity)	412	Digital Output F Polarity	0 (Output Polarity)

Configuration Parameters – Timers (Page 5)					
501	Mains Transient Delay	512	Cooling Time	523	Power Save Mode Delay
502	Start Delay	513	ETS Solenoid Hold	524	Deep Sleep Mode Delay
503	Preheat Timer	514	Failed to Stop Delay	525	Page Delay
504	Crank Time	515	Generator Transient Delay	526	Cooling Time at Idle
505	Crank Rest Time	516	Transfer Delay	527	Backlight Power Save Delay
506	Smoke Limiting	517	Breaker Trip Pulse	528	Audible Alarm Timer
507	Smoke Limiting Off	518	Breaker Close Pulse	529	Fuel Pull in Coil Duration
508	DPF Ramp	519	Delayed Load Output 1	530	ECU Override Time
509	Safety On Delay	520	Delayed Load Output 2	531	ECU Periodic Wakeup Period
510	Warm Up Time	521	Delayed Load Output 3	532	Post-Heat Timer
511	Return Delay	522	Delayed Load Output 4	533	Delay Crank Timer

Digital Input Polarity						
Index	Polarity	Output Polarity	Index	Polarity	Action	
0	Close to Activate	0	0	Energise	0	Electrical Trip
1	Open to Activate	1	1	De-Energise	1	Shutdown
					2	Warning

AC System					
Index	Type	Digital Input Alarm Arming	Index	Arming	Power Up Mode
0	2 Phase 3 Wire (L1-L3)	0	Always	0	Stop
1	2 Phase 3 Wire (L1-L2)	1	From Safety On	1	Manual
2	3 Phase 3 Wire	2	From Starting	2	Auto
3	3 Phase 4 Wire	3	Never		
4	3 Phase 4 Wire (Delta)				
5	Single Phase 2 Wire				

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

Configuration Parameters – Generator (Page 6)					
601	Alternator Fitted	On (1), Off (0)	622	Over Frequency Warning Trip	0.0 Hz
602	Alternator Poles	0	623	Over Frequency Shutdown Enable	On (1), Off (0)
603	Under Voltage Shutdown Enable	On (1), Off (0)	624	Over Frequency Shutdown Trip	0.0 Hz
604	Under Voltage Trip Shutdown	0 V	625	Generator AC System	0 (AC System)
605	Under Voltage Warning Enable	On (1), Off (0)	626	CT Primary	0 A
606	Under Voltage Warning Trip	0 V	627	CT Secondary	1 A, 5 A
607	RESERVED		628	Full Load Rating	0 A, 5 A
608	Loading Voltage	0 V	629	Immediate Over Current Enable	On (1), Off (0)
609	Over Voltage Warning Enable	On (1), Off (0)	630	Delayed Over Current Alarm Enable	On (1), Off (0)
610	Over Voltage Warning Return	0 V	631	Delayed Over Current Alarm Action	0 (Action)
611	Over Voltage Warning Trip	0 V	632	Over Current Delay Time	0 s
612	Over Voltage Shutdown Trip	0 V	633	Over Current Trip	0 %
613	Under Frequency Shutdown Enable	On (1), Off (0)	634	kW Rating	0 kW
614	Under Frequency Shutdown Trip	0.0 Hz	635	Over kW Protection Enable	On (1), Off (0)
615	Under Frequency Warning Enable	On (1), Off (0)	636	Over kW Protection Action	0 (Action)
616	Under Frequency Warning Trip	0.0 Hz	637	Over kW Protection Trip	0 %
617	RESERVED		638	Over kW Protection Trip Delay	0 s
618	Loading Frequency	0.0 Hz	639	Enable CT Support	On (1), Off (0)
619	Nominal Frequency	0.0 Hz	640	Over kW Protection Return	0 %
620	Over Frequency Warning Enable	On (1), Off (0)	641	Nominal Voltage	0 V
621	Over Frequency Warning Return	0.0 Hz			

Configuration Parameters – Mains (Page 7)					
701	Mains AC System	0 (AC System)	709	Over Voltage Level Trip	0 V
702	Mains Failure Detection	On (1), Off (0)	710	Under Frequency Enable	On (1), Off (0)
703	Immediate Mains Dropout	On (1), Off (0)	711	Under Frequency Trip	0.0 Hz
704	Under Voltage Enable	On (1), Off (0)	712	Under Frequency Return	0.0 Hz
705	Under Voltage Level	0 V	713	Under Frequency Enable	On (1), Off (0)
706	Under Voltage Return	0 V	714	Under Frequency Return	0 Hz
707	Over Voltage Enable	On (1), Off (0)	715	Over Frequency Trip	0.0 Hz
708	Over Voltage Return	0 V			

Configuration Parameters – Engine (Page 8)					
801	Start Attempts	0	829	Start on Low Battery Enable	On (1), Off (0)
802	Over Speed Overshoot	0 %	830	Start on Low Battery Threshold	0.0 V
803	Over Speed Delay	0 s	831	Start on Low Battery Start Delay	0 s
804	Gas Choke Timer (Gas Engine Only)	0 s	832	Start on Low Battery Engine Run Duration	0 s
805	Gas On Delay (Gas Engine Only)	0 s	833	RESERVED	
806	Gas Ignition Off Delay (Gas Engine Only)	0 s	834	RESERVED	
807	Crank Disconnect On Oil Pressure Enable	On (1), Off (0)	835	J1939-75 Instruments Enable	On (1), Off (0)
808	Check Oil Pressure Prior to Starting	On (1), Off (0)	836	J1939-75 Alarms Enable	On (1), Off (0)
809	Crank Disconnect On Oil	0.00 Bar	837	Engine CAN Source Address	0
810	Crank Disconnect On Frequency	0.0 Hz	838	Instrumentation CAN Source Address	0
811	Crank Disconnect On Engine Speed	0 RPM	839	RESERVED	
812	Under Speed Enable	On (1), Off (0)	840	Tier 4 Home Screen Enable	On (1), Off (0)
813	Under Speed Trip	0 RPM	841	Start Pause Time	0 s
814	Over Speed Trip	0 RPM	842	Preheat Enable	On (1), Off (0)
815	Low Battery Voltage Enable	On (1), Off (0)	843	Preheat Temperature	0 °C
816	Low Battery Voltage Warning	0.0 V	844	Post-heat Enabled	On (1), Off (0)
817	Low Battery Voltage Return	0.0 V	845	Post-heat Temperature	0 °C
818	Low Battery Voltage Delay	0:00:00	846	Coolant Heater Enabled	On (1), Off (0)
819	High Battery Voltage Enable	On (1), Off (0)	847	Coolant Heater On Temp	0 °C
820	High Battery Voltage Return	0.0 V	848	Coolant Heater Off Temp	0 °C
821	High Battery Voltage Warning	0.0 V	849	Coolant Cooler Enabled	On (1), Off (0)
822	High Battery Voltage Warning Delay	0 s	850	Coolant Cooler On Temp	0 °C
823	Charge Alt Shutdown Enable	On (1), Off (0)	851	Coolant Cooler Off Temp	0 °C
824	Charge Alt Shutdown Trip	0.0 V	852	RESERVED	
825	Charge Alt Shutdown Delay	0 s	853	Tank Bund Level High Alarm	0 (Action)
826	Charge Alt Warning Enable	On (1), Off (0)	854	Fan Speed Low Arming	0 (Arming)
827	Charge Alt Warning Trip	0.0 V	855	Fan Speed Low Action	0 (Action)
828	Charge Alt Warning Delay	0 s	856	Fan Speed Low Delay	0 s

Configuration Parameters – Analogue Inputs (Page 9)					
901-902	RESERVED				
903	Low Oil Pressure Enable	On (1), Off (0)			
904	Low Oil Pressure Trip	0 Bar			
905	Oil Pressure Sensor Open Circuit	On (1), Off (0)			
906-907	RESERVED				
908	High Engine Temperature Trip	0.00 °C			
909	Temperature Sensor Open Circuit	On (1), Off (0)			
910-929	RESERVED				
930	Fuel Sensor C Low Alarm Action	Shutdown (2), Electrical Trip (1), Disabled (0)			
931	Fuel Sensor C Low Shutdown Trip	0 %			
932	Fuel Sensor C Low Shutdown Delay	0 s			
933	Fuel Sensor C Low Pre-Alarm Enable	On (1), Off (0)			
934	Fuel Sensor C Low Pre-Alarm Trip	0 %			
935	Fuel Sensor C Low Pre-Alarm Return	0 s			
936	Fuel Sensor C Low Pre-Alarm Delay	0 s			
937	Fuel Sensor C High Pre-Alarm Enable	On (1), Off (0)			
938	Fuel Sensor C High Pre-Alarm Return	0 %			
939	Fuel Sensor C High Pre-Alarm Trip	0 %			
940	Fuel Sensor C High Pre-Alarm Delay	0 s			
941	RESERVED				
942	Fuel Sensor C High Alarm Action	Shutdown (2), Electrical Trip (1), Disabled (0)			
943	Fuel Sensor C High Alarm Trip	0 %			
944	Fuel Sensor C High Alarm Delay	0 s			

Configuration Parameters – Scheduler (Page 10)					
1001	Enable Scheduler	On (1), Off (0)			
1002	Schedule Run On or Off Load	On (1), Off (0)			
1003	Scheduler Period	Weekly (0), Monthly (1)			
1004, 1008, 1012, 1016, 1020, 1024, 1028, 1032	Start Time (Entry 1-8)	0:00:00			
1005, 1009, 1013, 1017, 1021, 1025, 1029, 1033	Day (Entry 1-8)	0 (1=Monday)			
1006, 1010, 1014, 1018, 1022, 1026, 1030, 1034	Week (Entry 1-8)	1, 2, 3 or 4			
1007, 1011, 1015, 1019, 1023, 1027, 1031, 1035	Duration (Entry 1-8)	0 s			

Configuration Parameters – Time (Page 11)					
1101	Time of Day	0:00:00	1104	Day of Month	1-31
1102	RESERVED		1105	Month of Year	1-12
1103	RESERVED		1106	Year	0-99

Configuration Parameters – Maintenance Alarms (Page 12)					
1201	Oil Maintenance Alarm Enable	On (1), Off (0)	1206	Air Maintenance Alarm Engine Hours	0 h
1202	Oil Maintenance Alarm Action	0 (Action)	1207	Fuel Maintenance Alarm Enable	On (1), Off (0)
1203	Oil Maintenance Alarm Engine Hours	0 h	1208	Fuel Maintenance Alarm Action	0 (Action)
1204	Air Maintenance Alarm Enable	On (1), Off (0)	1209	Fuel Maintenance Alarm Engine Hours	0 h
1205	Air Maintenance Alarm Action	0 (Action)			

Configuration Parameters – Alternate Configuration 1 (Page 20)					
2001-2057	Refer to the Alternate Configuration List table for configuration parameters.				

Configuration Parameters – Alternate Configuration 2 (Page 30)					
3002-3057	Refer to the Alternate Configuration List table for configuration parameters.				

Configuration Parameters – Alternate Configuration 3 (Page 40)					
4002-4057	Refer to the Alternate Configuration List table for configuration parameters.				

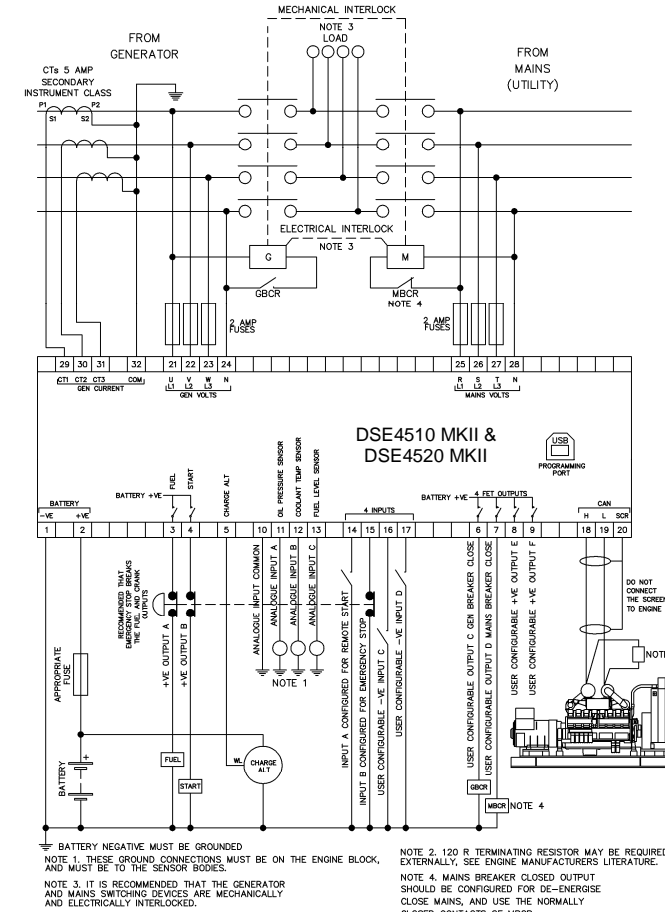
Alternate Configuration List					
#001	Default Configuration	Config Select (0 to 3)	#030	Over Current Delay	00:00:00
#002	Enable Configuration	On (1), Off (0)	#031	Over Current Trip	0 %
#003	CAN Alternative Engine Speed	On (1), Off (0)	#032	Generator kW Rating	0 kW
#004	Under Voltage Shutdown Enable	On (1), Off (0)	#033	Overload Protection Enable	On (1), Off (0)
#005	Under Voltage Shutdown Trip	0 V	#034	Overload Protection Action	0 (Action)
#006	Under Voltage Warning Enable	On (1), Off (0)	#035	Overload Protection Trip	0 %
#007	Under Voltage Warning Trip	0 V	#036	Overload Protection Trip Delay	0 s
#008	Loading Voltage	0 V	#037	Generator AC System	0 (AC system)
#009	Over Voltage Warning Enable	On (1), Off (0)	#038	Mains Failure Detection	On (1), Off (0)
#010	Over Voltage Warning Return	0 V	#039	Immediate Mains Dropout	On (1), Off (0)
#011	Over Voltage Warning Trip	0 V	#040	Mains Under Voltage Enable	On (1), Off (0)
#012	Over Voltage Trip	0 V	#041	Mains Under Voltage Trip	0 V
#013	Under Frequency Shutdown Enable	On (1), Off (0)	#042	Mains Under Voltage Return	0 V
#014	Under Frequency Shutdown Trip	0.0 Hz	#043	Mains Over Voltage Enable	On (1), Off (0)
#015	Under Frequency Warning Enable	On (1), Off (0)	#044	Mains Over Voltage Return	0 V
#016	Under Frequency Warning Trip	0.0 Hz	#045	Mains Over Voltage Trip	0 V
#017	Loading Frequency	0.0 Hz	#046	Mains Under Frequency Enable	On (1), Off (0)
#018	Nominal Frequency	0.0 Hz	#047	Mains Under Frequency Trip	0.0 Hz
#019	Over Frequency Warning Enable	On (1), Off (0)	#048	Mains Under Frequency Return	0.0 Hz
#020	Over Frequency Warning Return	0.0 Hz	#049	Mains Over Frequency Enable	On (1), Off (0)
#021	Over Frequency Warning Trip	0.0 Hz	#050	Mains Over Frequency Return	0.0 Hz
#022	Over Frequency Shutdown Enable	On (1), Off (0)	#051	Mains Over Frequency Trip	0.0 Hz
#023	Over Frequency Shutdown Trip	0.0 Hz	#052	Under Speed Shutdown Enable	On (1), Off (0)
#024	CT Primary	0 A	#053	Under Speed Shutdown Trip	0 RPM
#025	CT Secondary	1 A, 5 A	#054	Over Speed Shutdown Trip	0 RPM
#026	Full Load Rating	0 A	#055	Mains AC System	0 (AC system)
#027	Immediate Over Current	On (1), Off (0)	#056	Overload Protection Return	0 %
#028	Delayed Over Current Alarm	On (1), Off (0)	#057	Generator Nominal Voltage	0 V
#029	Delayed Over Current Alarm Action	0 (Action)			

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		

Output Sources			
0	Not Used	44	Mains High Frequency
1	Air Flap Relay	45	Mains High Voltage
2	Audible Alarm	46	Mains Low Frequency
3	Battery High Volts Warning	47	Mains Low Voltage
4	Battery Low Volts Warning	48	Oil Pressure Sensor Open Circuit
5	CAN ECU Data Fail	49	Open Generator Output
6	ECU (ECM) Warning	50	Open Generator Output Pulse
7	ECU (ECM) Shutdown	51	Open Mains Output
8	CAN ECU Power	52	Open Mains Output Pulse
9	CAN ECU Stop	53	Over Frequency Shutdown
10	Charge Alternator Shutdown	54	Over Speed Shutdown
11	Charge Alternator Warning	55	Preheat During Preheat Timer
12	Close Generator Output	56	Preheat Until End of Crank
13	Close Generator Output Pulse	57	Preheat Until End of Safety Timer
14	Close Mains Output	58	Preheat Until End of Warming
15	Close Mains Output Pulse	59	Smoke Limiting
16	Combined Mains Failure	60	Start Relay
17	Common Alarm	61	Temperature Sensor Open Circuit
18	Common Electrical Trip	62	Under Frequency Shutdown
19	Common Shutdown	63	Under Speed Shutdown
20	Common Warning	64	Waiting for Manual Restore
21	Cooling Down	65	Flexible Sensor C High Alarm
22	Digital Input A	66	Flexible Sensor C High Pre-Alarm
23	Digital Input B	67	Flexible Sensor C Low Pre-Alarm
24	Digital Input C	68	Flexible Sensor C Low Alarm
25	Digital Input D	69	RESERVED
26	RESERVED	70	RESERVED
27	RESERVED	71	RESERVED
28	RESERVED	72	RESERVED
29	Emergency Stop	73	Fuel Sensor High Alarm
30	Energise to Stop	74	Fuel Sensor High Pre-Alarm
31	Fail to Start	75	Fuel Sensor Low Pre-Alarm
32	Fail to Stop	76	Fuel Sensor Low Alarm
33	Fuel Relay	77	Delayed Load Output 1
34	Gas Choke On	78	Delayed Load Output 2
35	Gas Ignition	79	Delayed Load Output 3
36	Generator Available	80	Delayed Load Output 4
37	Generator High Voltage Alarm	81	Air Filter Maintenance
38	Generator Low Voltage Alarm	82	Oil Filter Maintenance
39	kW Overload Alarm	83	Fuel Filter Maintenance
40	Over Current Immediate Warning	84	System in Stop Mode
41	Delayed Over Current Alarm	85	System in Auto Mode
42	High Coolant Temp Shutdown	86	System in Manual Mode
43	Low Oil Pressure Shutdown	87	RESERVED
88	Analogue Input A (Digital)		
89	Analogue Input B (Digital)		
90	Analogue Input C (Digital)		
91	RESERVED		
92	RESERVED		
93	RESERVED		
94	RESERVED		
95	Over Speed Overshoot Alarm		
96	Over Frequency Overshoot Alarm		
97	Display Heater Fitted 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		

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

## TYPICAL WIRING DIAGRAM



DIMENSIONS	PANEL CUTOUT	TERMINALS
140 mm x 113 mm x 43 mm (5.5" x 4.4" x 1.7")	118 mm x 92 mm (4.6" x 3.6")	Tightening Torque: 0.5 Nm (4.5 lb-in) Conductor Size: 0.5 mm <sup>2</sup> to 2.5 mm <sup>2</sup> (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

**DSE**  
**DEEP SEA ELECTRONICS PLC**  
**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** (I) (+) 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** (I) (+) or **Stop/Reset Mode** (O) (-) navigation buttons to adjust the value to the required setting.
- Press the **Auto Mode** (AUTO) (✓) button the 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** (I) (+) 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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### REQUIREMENTS FOR UL CERTIFICATION

Specification	Description
Screw Terminal Tightening Torque	• 4.5 lb-in (0.5 Nm)
Conductors	• 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> ). • 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	• 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)