

Configuration Parameters – Module (Page 1)				
101	Contrast	0 (%)	124	Disable Mains Frequency Display On (1), Off (0)
102	Fast Loading Enabled	On (1), Off (0)	125	Disable Current Display On (1), Off (0)
103	All Warnings Latched	On (1), Off (0)	126	Disable kW Display On (1), Off (0)
104	Lamp Test at Startup	On (1), Off (0)	127	Disable kvar Display On (1), Off (0)
105	Power Save Mode Enable	On (1), Off (0)	128	Disable kVA Display On (1), Off (0)
106	Deep Sleep Mode Enable	On (1), Off (0)	129	Disable pf Display On (1), Off (0)
107	Protected Start Enable	On (1), Off (0)	130	Disable kWh Display On (1), Off (0)
108	Event Log Display Format	On (1), Off (0)	131	Disable kvarh Display On (1), Off (0)
109	Power Up Mode	0 (Power Up Mode)	132	Disable kVAh Display On (1), Off (0)
110	DTC String Enable	On (1), Off (0)	133	RESERVED
111	RESERVED		134	Show Load Switching Icons On (1), Off (0)
112	PIN Protected Maintenance Reset	On (1), Off (0)	135	Backlight Inactivity Timer On (1), Off (0)
113	Stop Button Cooldown	On (1), Off (0)	136	ECU Periodic Wake Up On (1), Off (0)
114	Use Module Oil Pressure	On (1), Off (0)	137	Coolant Temp Persistence On (1), Off (0)
115	Use Module Coolant Temp	On (1), Off (0)	138	Limit Audible Alarm Duration On (1), Off (0)
116	Use Module Engine Hours	On (1), Off (0)	139	Transducer Power Supply On (1), Off (0)
117	Use Module RPM	On (1), Off (0)	140	English Text Mode On (1), Off (0)
118	Use Module Charge Alt	On (1), Off (0)	141	Ignore Active Alarms in Backlight Power Save Mode On (1), Off (0)
119	Disable CAN Speed Control	On (1), Off (0)	142	Display Mode for Oil Pressure 0 (Display Mode)
120	CT Position	Gen (0), Load (1)	143	Display Mode for Coolant Temp 0 (Display Mode Temp)
121	Disable Generator Voltage Display	On (1), Off (0)	144	Display Mode for Fuel Level 0 (Display Mode)
122	Disable Mains Voltage Display	On (1), Off (0)	145	ECU Override During Protected Start On (1), Off (0)
123	Disable Generator Frequency Display	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	0 (Arming)	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	514	Failed to Stop Delay	527	Backlight Power Save Delay
502	Start Delay	515	Generator Transient Delay	528	Audible Alarm Timer
503	Preheat Timer	516	Transfer Delay	529	Fuel Pull in Coil Duration
504	Crank Time	517	Breaker Trip Pulse	530	ECU Override Time
505	Crank Rest Time	518	Breaker Close Pulse	531	ECU Periodic Wakeup Period
506	Smoke Limiting	519	Delayed Load Output 1	532	Post-Heat Timer
507	Smoke Limiting Off	520	Delayed Load Output 2	533	Delay Crank Timer
508	DPF Ramp	521	Delayed Load Output 3	534	Max Start Pause Timer
509	Safety On Delay	522	Delayed Load Output 4	535	Engage Attempt Time
510	Warm Up Time	523	Power Save Mode Delay	536	Engage Rest Time
511	Return Delay	524	Deep Sleep Mode Delay	537	Protected Start Timeout
512	Cooling Time	525	Page Delay	538	Exhaust Temp Based Cool Time
513	ETS Solenoid Hold	526	Cooling Time at Idle		

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

Display Mode		Display Mode Temp	
Index	Action	Index	Action
0	Numerical Value	0	Numerical Value
1	Bar Graph	1	Bar Graph (80 to 175 °C)
		2	Bar Graph (80 to 215 °C)

Configuration Parameters – Generator (Page 6)				
601	Alternator Fitted	On (1), Off (0)	625	Generator AC System 0 (AC System)
602	Alternator Poles	0	626	CT Primary 0 A
603	Under Voltage Shutdown Enable	On (1), Off (0)	627	CT Secondary 1 A, 5 A
604	Under Voltage Trip Shutdown	0 V	628	Full Load Rating 0 A
605	Under Voltage Warning Enable	On (1), Off (0)	629	Immediate Over Current Enable On (1), Off (0)
606	Under Voltage Warning Trip	0 V	630	Delayed Over Current Alarm Enable On (1), Off (0)
607	RESERVED		631	Delayed Over Current Alarm Action 0 (Action)
608	Loading Voltage	0 V	632	Over Current Delay Time 0 s
609	Over Voltage Warning Enable	On (1), Off (0)	633	Over Current Trip 0 %
610	Over Voltage Warning Return	0 V	634	kW Rating 0 kW
611	Over Voltage Warning Trip	0 V	635	Over kW Protection Enable On (1), Off (0)
612	Over Voltage Shutdown Trip	0 V	636	Over kW Protection Action 0 (Action)
613	Under Frequency Shutdown Enable	On (1), Off (0)	637	Over kW Protection Trip 0 %
614	Under Frequency Shutdown Trip	0.0 Hz	638	Over kW Protection Trip Delay 0 s
615	Under Frequency Warning Enable	On (1), Off (0)	639	Enable CT Support On (1), Off (0)
616	Under Frequency Warning Trip	0.0 Hz	640	Over kW Protection Return 0 %
617	RESERVED		641	Nominal Voltage 0 V
618	Loading Frequency	0.0 Hz	642-655	RESERVED
619	Nominal Frequency	0.0 Hz	656	Load Unbalance Alarm On (1), Off (0)
620	Over Frequency Warning Enable	On (1), Off (0)	657	Load Unbalance Alarm Action 0 (Action)
621	Over Frequency Warning Return	0.0 Hz	658	Load Unbalance Trip 0 %
622	Over Frequency Warning Trip	0.0 Hz	659	Load Unbalance Warning Return 0 %
623	Over Frequency Shutdown Enable	On (1), Off (0)	660	Load Unbalance Delay Time 0 s
624	Over Frequency Shutdown Trip	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	Over Frequency Enable On (1), Off (0)
706	Under Voltage Return	0 V	714	Over Frequency Return 0 Hz
707	Under 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	833	RESERVED
802	Over Speed Overshoot	0 %	834	RESERVED
803	Over Speed Delay	0 s	835	J1939-75 Instruments Enable On (1), Off (0)
804	Gas Choke Timer (Gas Engine Only)	0 s	836	J1939-75 Alarms Enable On (1), Off (0)
805	Gas On Delay (Gas Engine Only)	0 s	837	Engine CAN Source Address 0
806	Gas Ignition Off Delay (Gas Engine Only)	0 s	838	Instrumentation CAN Source Address 0
807	Crank Disconnect On Oil Pressure Enable	On (1), Off (0)	839	RESERVED
808	Check Oil Pressure Prior to Starting	On (1), Off (0)	840	Tier 4 Home Screen Enable On (1), Off (0)
809	Crank Disconnect On Oil	0.00 Bar	841	Start Pause Time 0 s
810	Crank Disconnect On Frequency	0.0 Hz	842	Preheat Enable On (1), Off (0)
811	Crank Disconnect On Engine Speed	0 RPM	843	Preheat Temperature 0 °C
812	Under Speed Enable	On (1), Off (0)	844	Post-heat Enabled On (1), Off (0)
813	Under Speed Trip	0 RPM	845	Post-heat Temperature 0 °C
814	Over Speed Trip	0 RPM	846	Coolant Heater Enabled On (1), Off (0)
815	Low Battery Voltage Enable	On (1), Off (0)	847	Coolant Heater On Temp 0 °C
816	Low Battery Voltage Warning	0.0 V	848	Coolant Heater Off Temp 0 °C
817	Low Battery Voltage Return	0.0 V	849	Coolant Cooler Enabled On (1), Off (0)
818	Low Battery Voltage Delay	0:00:00	850	Coolant Cooler On Temp 0 °C
819	High Battery Voltage Enable	On (1), Off (0)	851	Coolant Cooler Off Temp 0 °C
820	High Battery Voltage Return	0.0 V	852	RESERVED
821	High Battery Voltage Warning	0.0 V	853	Funk Bund Level High Alarm 0 (Action)
822	High Battery Voltage Warning Delay	0 s	854	Fan Speed Low Arming 0 (Arming)
823	Charge Alt Shutdown Enable	On (1), Off (0)	855	Fan Speed Low Action 0 (Action)
824	Charge Alt Shutdown Trip	0.0 V	856	Fan Speed Low Delay 0 s
825	Charge Alt Shutdown Delay	0 s	857	Fuel Low Switch Arming 0 (Arming)
826	Charge Alt Warning Enable	On (1), Off (0)	858	Fuel Low Switch Action 0 (Action)
827	Charge Alt Warning Trip	0.0 V	859	Fuel Low Switch Activation Delay 0 s
828	Charge Alt Warning Delay	0 s	860	Crank Disconnect on Charge Alt Enable On (1), Off (0)
829	Start on Low Battery Enable	On (1), Off (0)	861	Crank Disconnect on Charge Alt Voltage 0.0 V
830	Start on Low Battery Threshold	0.0 V	862	Enable Multiple Engage Attempts On (1), Off (0)
831	Start on Low Battery Start Delay	0 s	863	Engage Attempts 0
832	Start on Low Battery Engine Run Duration	0 s	864	Exhaust Temperature Based Cooling On Temperature 0 °C

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 %		
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		
945-967	RESERVED			
968	Fuel Usage Alarm (Run) Arming	On (1), Off (0)		
969	Fuel Usage Alarm (Run) Action	0 (Action)		
970	Fuel Usage Alarm (Run) Trip	0 %		
971	Fuel Usage Alarm (Run) Return	0 %		
972	Fuel Usage Alarm (Stopped) Arming	0 (Arming)		
973	Fuel Usage Alarm (Stopped) Action	0 (Action)		
974	Fuel Usage Alarm (Stopped) Trip	0 %		
975	Fuel Usage Alarm (Stopped) Return	0 %		
976	Low Coolant Level Arming	0 (Arming)		
977	Low Coolant Level Action	0 (Action)		
978	Low Coolant Level Trip	0 %		
979	Low Coolant Level Return	0 %		
980	Low Coolant Level Delay	00:00:00		
981	Low Coolant Level Open Circuit Arming	On (1), Off (0)		
982	Low Coolant Level Switch Arming	0 (Arming)		
983	Low Coolant Level Switch Action	0 (Action)		
984	Low Coolant Level Switch Delay	00:00:00		
985	High Engine Temp Pre-Alarm Enable	On (1), Off (0)		
986	High Engine Temp Pre-Alarm Return	0.00 °C		
987	High Engine Temp Pre-Alarm Trip	0.00 °C		

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 to 8)	0:00:00		
1005, 1009, 1013, 1017, 1021, 1025, 1029, 1033	Day (Entry 1 to 8)	0 (1=Monday)		
1006, 1010, 1014, 1018, 1022, 1026, 1030, 1034	Week (Entry 1 to 8)	1, 2, 3 or 4		
1007, 1011, 1015, 1019, 1023, 1027, 1031, 1035	Duration (Entry 1 to 8)	0 s		

Configuration Parameters – Time (Page 11)				
1101	Time of Day	0:00:00	1104	Day of Month 1 to 31
1102	RESERVED		1105	Month of Year 1 to 12
1103	RESERVED		1106	Year 0 to 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)				
2001-2076	Refer to the DSE Publication 057-260 DSE4510 MKII & DSE4520MKII Operators Manual for configuration parameters.			

Configuration Parameters – Alternate Configuration 2 (Page 30)				
3002-3076	Refer to the DSE Publication 057-260 DSE4510 MKII & DSE4520MKII Operators Manual for configuration parameters.			

Configuration Parameters – Alternate Configuration 3 (Page 40)				
4002-4076	Refer to the DSE Publication 057-260 DSE4510 MKII & DSE4520MKII Operators Manual for configuration parameters.			

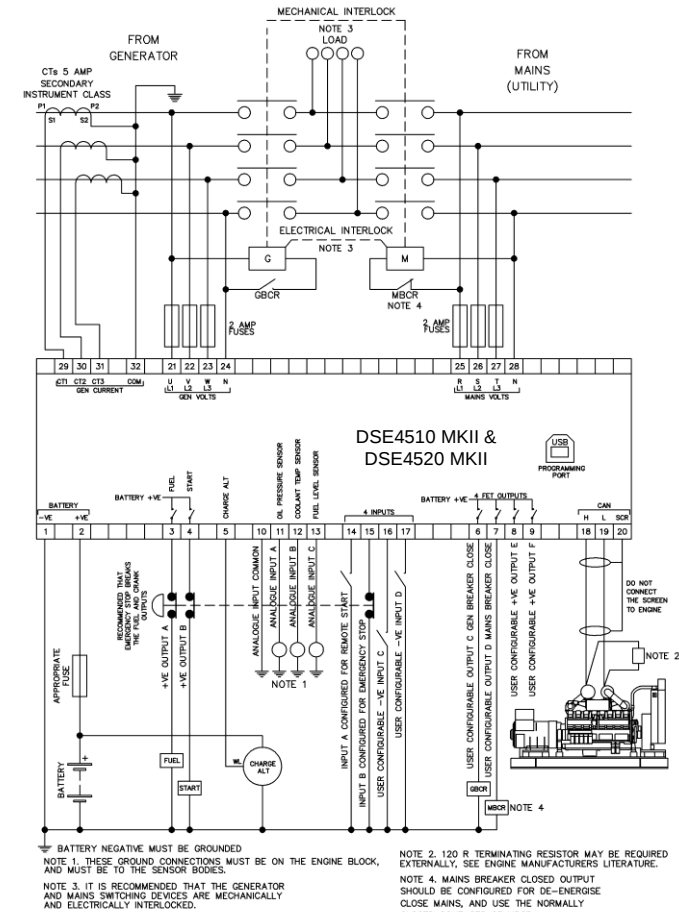
AC System		Digital Input Alarm Arming		Power Up Mode	
Index	Type	Index	Arming	Index	Mode
0	2 Phase 3 Wire (L1 to L3)	0	Always	0	Stop
1	2 Phase 3 Wire (L1 to L2)	1	From Safety On	1	Manual
2	3 Phase 3 Wire	2	From Starting	2	Auto
3	3 Phase 4 Wire	3	Never		
4	3 Phase 4 Wire (Delta)				
5	Single Phase 2 Wire				
	Functionality in DSE4510 MKII & DSE4520 MKII				
	Functionality in DSE4520 MKII Auto Start and AMF				
	Functionality in DSE4520 MKII AMF Only				

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

Output Sources			
0 Not Used	50 Open Generator Output Pulse	100 DEF Level Low	
1 Air Flap Relay	51 Open Mains Output	101 DPF Auto Regeneration Inhibit	
2 Audible Alarm	52 Open Mains Output Pulse	102 DPF Forced Regeneration	
3 Battery High Volts Warning	53 Over Frequency Shutdown	103 DPF None Mission State	
4 Battery Low Volts Warning	54 Over Speed Shutdown	104 DPF Regeneration in Progress	
5 CAN ECU Data Fail	55 Preheat During Preheat Timer	105 DPF Regen Interlock Active	
6 ECU (ECM) Warning	56 Preheat Until End of Crank	106 DPTC Filter	
7 ECU (ECM) Shutdown	57 Preheat Until End of Safety Timer	107 HEST Active	
8 CAN ECU Power	58 Preheat Until End of Warming	108 Water in Fuel	
9 CAN ECU Stop	59 Smoke Limiting	109 Fuel Pull in Coil	
10 Charge Alternator Shutdown	60 Start Relay	110 Generator at Rest	
11 Charge Alternator Warning	61 Temperature Sensor Open Circuit	111 Fuel Tank Bund Level High	
12 Close Generator Output	62 Under Frequency Shutdown	112 ECU Preheat	
13 Close Generator Output Pulse	63 Under Speed Shutdown	113 Water Heater	
14 Close Mains Output	64 Waiting for Manual Restore	114 Water Cooler	
15 Close Mains Output Pulse	65 Flexible Sensor C High Alarm	115 Closed to Gen	
16 Combined Mains Failure	66 Flexible Sensor C High Pre-Alarm	116 Closed to Mains	
17 Common Alarm	67 Flexible Sensor C Low Pre-Alarm	117 Generator Under Frequency Warning	
18 Common Electrical Trip	68 Flexible Sensor C Low Alarm	118 Generator Over Frequency Warning	
19 Common Shutdown	69 RESERVED	119 Generator Low Voltage Warning	
20 Common Warning	70 RESERVED	120 Generator High Voltage Warning	
21 Cooling Down	71 RESERVED	121 Main Config Selected	
22 Digital Input A	72 RESERVED	122 Alt Config 1 Selected	
23 Digital Input B	73 Fuel Sensor High Alarm	123 Alt Config 2 Selected	
24 Digital Input C	74 Fuel Sensor High Pre-Alarm	124 Alt Config 3 Selected	
25 Digital Input D	75 Fuel Sensor Low Pre-Alarm	125 Flexible Sensor A High Alarm	
26 RESERVED	76 Fuel Sensor Low Alarm	126 Flexible Sensor A High Pre-Alarm	
27 RESERVED	77 Delayed Load Output 1	127 Flexible Sensor A Low Alarm	
28 RESERVED	78 Delayed Load Output 2	128 Flexible Sensor A Low Pre-Alarm	
29 Emergency Stop	79 Delayed Load Output 3	129 Flexible Sensor A Open Circuit	
30 Energise to Stop	80 Delayed Load Output 4	130 Fan Speed Low	
31 Fail to Start	81 Air Filter Maintenance	131 Fuel Usage Alarm	
32 Fail to Stop	82 Oil Filter Maintenance	132 Low Coolant Level	
33 Fuel Relay	83 Fuel Filter Maintenance	133 Low Coolant Level Open Circuit	
34 Gas Choke On	84 System in Stop Mode	134 Waiting To Start	
35 Gas Ignition	85 System in Auto Mode	135 High Coolant Temp Pre-Alarm	
36 Generator Available	86 System in Manual Mode	136 Gen Over Frequency Delayed Alarm	
37 Generator High Voltage Alarm	87 RESERVED	137 Load Unbalance Alarm	
38 Generator Low Voltage Alarm	88 Analogue Input A (Digital)	138 Configurable CAN 1 Instrument Active	
39 kW Overload Alarm	89 Analogue Input B (Digital)	139 Configurable CAN 2 Instrument Active	
40 Over Current Immediate Warning	90 Analogue Input C (Digital)	140 Configurable CAN 3 Instrument Active	
41 Delayed Over Current Alarm	91 RESERVED	141 Configurable CAN 4 Instrument Active	
42 High Coolant Temp Shutdown	92 RESERVED	142 Configurable CAN 5 Instrument Active	
43 Low Oil Pressure Shutdown	93 RESERVED	143 Configurable CAN 6 Instrument Active	
44 Mains High Frequency	94 RESERVED	144 Configurable CAN 7 Instrument Active	
45 Mains High Voltage	95 Over Speed Overshoot Alarm	145 Configurable CAN 8 Instrument Active	
46 Mains Low Frequency	96 Over Frequency Overshoot Alarm	146 Configurable CAN 9 Instrument Active	
47 Mains Low Voltage	97 Display Heater Fitted and Active	147 Configurable CAN 10 Instrument Active	
48 Oil Pressure Sensor Open Circuit	98 RESERVED		
49 Open Generator Output	99 SCR Inducement		

	Functionality in DSE4510 MKII & DSE4520 MKII
	Functionality in DSE4520 MKII Auto Start and AMF
	Functionality in DSE4520 MKII AMF 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	- 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	- 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)



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

NOTE: Pressing and holding the *Manual/Start Mode* (+) or *Stop/Reset Mode* (-) 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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