

Configuration Parameters – Module (Page 1)					
101	Contrast	0 %	108	Event Log Display Format	Engine Hours (1), Time and Date (0)
102	Fast Loading Enabled	On (1), Off (0)	109	Power Up Mode	0 (Power Up Mode)
103	All Warnings Latched	On (1), Off (0)	110-111	RESERVED	
104	Lamp Test At Startup	On (1), Off (0)	112	Pin Protected Maintenance Reset	On (1), Off (0)
105	Power Save Mode Enable	On (1), Off (0)	113	RESERVED	
106	Deep Sleep Mode Enable	On (1), Off (0)	114	Display Temperature in °C or °F	°F (1), °C (0)
107	Protected Start Enable	On (1), Off (0)	115	Display Oil Pressure in Bar, PSI, kPa	PSI (2), kPa (1), Bar (0)

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			
321-330	RESERVED				

331	Analogue Input A (Set As Digital) Source	0 (Input Source)			
332	Analogue Input A (Set As Digital) Polarity	0 (Polarity)			
333	Analogue Input A (Set As Digital) Action (If Source = User Config)	0 (Action)			
334	Analogue Input A (Set As Digital) Arming (If Source = User Config)	0 (Arming)			
335	Analogue Input A (Set As Digital) Activation Delay (If Source = User Config)	0 s			
336	Analogue Input B (Set As Digital) Source	0 (Input Source)			
337	Analogue Input B (Set As Digital) Polarity	0 (Polarity)			
338	Analogue Input B (Set As Digital) Action (If Source = User Config)	0 (Action)			
339	Analogue Input B (Set As Digital) Arming (If Source = User Config)	0 (Arming)			
340	Analogue Input B (Set As Digital) Activation Delay (If Source = User Config)	0 s			
341	Analogue Input C (Set As Digital) Source	0 (Input Source)			
342	Analogue Input C (Set As Digital) Polarity	0 (Polarity)			
343	Analogue Input C (Set As Digital) Action (If Source = User Config)	0 (Action)			
344	Analogue Input C (Set As Digital) Arming (If Source = User Config)	0 (Arming)			
345	Analogue Input C (Set As Digital) 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	RESERVED	507	Smoke Limiting Off	513	ETS Solenoid Hold
502	Start Delay	508	RESERVED	514	Failed To Stop Delay
503	Preheat Timer	509	Safety On Delay	515-522	RESERVED
504	Crank Time	510	Warning Up Time	523	Power Save Mode Delay
505	Crank Rest Time	511	Return Delay	524	Deep Sleep Mode Delay
506	Smoke Limiting	512	RESERVED	525	Page Timer

Configuration Parameters – Engine (Page 8)					
801	Start Attempts	0	819	High Battery Voltage Enable	On (1), Off (0)
802	Over Speed Overshoot	0 %	820	High Battery Voltage Return	0.0 V
803	Over Speed Delay	0 s	821	High Battery Voltage Trip	0.0 V
804-806	RESERVED		822	High Battery Voltage Warning Delay	0 s
807	Crank Disconnect On Oil Pressure Enable	On (1), Off (0)	823	Charge Alt Shutdown Enable	On (1), Off (0)
808	Check Oil Pressure Prior To Starting	On (1), Off (0)	824	Charge Alt Shutdown Trip	0.0 V
809	Crank Disconnect On Oil	0.00 Bar	825	Charge Alt Shutdown Delay	0 s
810	RESERVED		826	Charge Alt Warning Enable	On (1), Off (0)
811	Crank Disconnect On Engine Speed	0 RPM	827	Charge Alt Warning Trip	0.0 V
812	Under Speed Enable	On (1), Off (0)	828	Charge Alt Warning Delay	0 s
813	Under Speed Trip	0 RPM	829	Low Battery Start Arming	On (1), Off (0)
814	Over Speed Trip	0 RPM	830	Low Battery Start Threshold	0.0 V
815	Low Battery Voltage Enable	On (1), Off (0)	831	Low Battery Start Delay	0 s
816	Low Battery Voltage Trip	0.0 V	832	Low Battery Start Run Time	0 s
817	Low Battery Voltage Return	0.0 V	833	Magnetic Pickup Fitted	On (1), Off (0)
818	Low Battery Voltage Delay	0:00:00	834	Pulses Per Revolution	0

Configuration Parameters – Analogue Inputs (Page 9)					
901	Analogue Input A Sensor Type	0 (Sensor Type)			
902	Analogue Input A Sensor Selection	0 (Pressure Sensor List)			
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	Analogue Input B Sensor Type	0 (Sensor Type)			
907	Analogue Input B Sensor Selection	0 (Temperature Sensor List)			
908	High Engine Temperature Trip	0.00 °C			
909	Temperature Sensor Open Circuit	On (1), Off (0)			
910	Analogue Input C Sensor Usage	Flexible Sensor (1), Fuel Level Sensor (0)			
911	Analogue Input C Sensor Type	0 (Sensor Type)			
912	Analogue Input C Sensor Selection	0 (Pressure / Temperature / Percentage Sensor List)			
913	Flexible Sensor C Arming	0 (Arming)			
914	Flexible Sensor C Low Shutdown Enable	On (1), Off (0)			
915	Flexible Sensor C Low Alarm Trip	0 % / Bar / °C			
916	RESERVED				
917	Flexible Sensor C Low Pre-Alarm Enable	On (1), Off (0)			
918	Flexible Sensor C Low Pre-Alarm Trip	0 % / Bar / °C			
919	Flexible Sensor C Low Pre-Alarm Return	0 % / Bar / °C			
920	RESERVED				
921	Flexible Sensor C High Pre-Alarm Enable	On (1), Off (0)			
922	Flexible Sensor C High Pre-Alarm Return	0 % / Bar / °C			
923	Flexible Sensor C High Pre-Alarm Trip	0 % / Bar / °C			
924-925	RESERVED				
926	Flexible Sensor C High Shutdown Enable	On (1), Off (0)			
927	Flexible Sensor C High Alarm Trip	0 % / Bar / °C			
928-929	RESERVED				
930	Fuel Sensor C Low Shutdown Enable	On (1), Off (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	0 (Action)			
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	RESERVED		
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

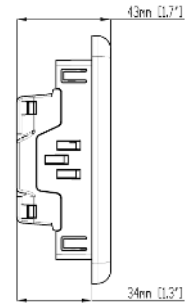
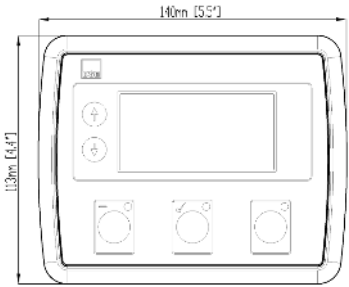
Configuration Parameters – Time (Page 11)					
1101	Time of Day	0:00:00	1104	Day of Month	1-31
1102	RESERVED		1105	Month of Year	1-12
1103	RESERVED		1106	Year	0-99

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	Warning (1), Shutdown (0)	1207	Fuel Maintenance Alarm Enable	On (1), Off (0)
1203	Oil Maintenance Alarm Engine Hours	0 h	1208	Fuel Maintenance Alarm Action	Warning (1), Shutdown (0)
1204	Air Maintenance Alarm Enable	On (1), Off (0)	1209	Fuel Maintenance Alarm Engine Hours	0 h
1205	Air Maintenance Alarm Action	Warning (1), Shutdown (0)			

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)



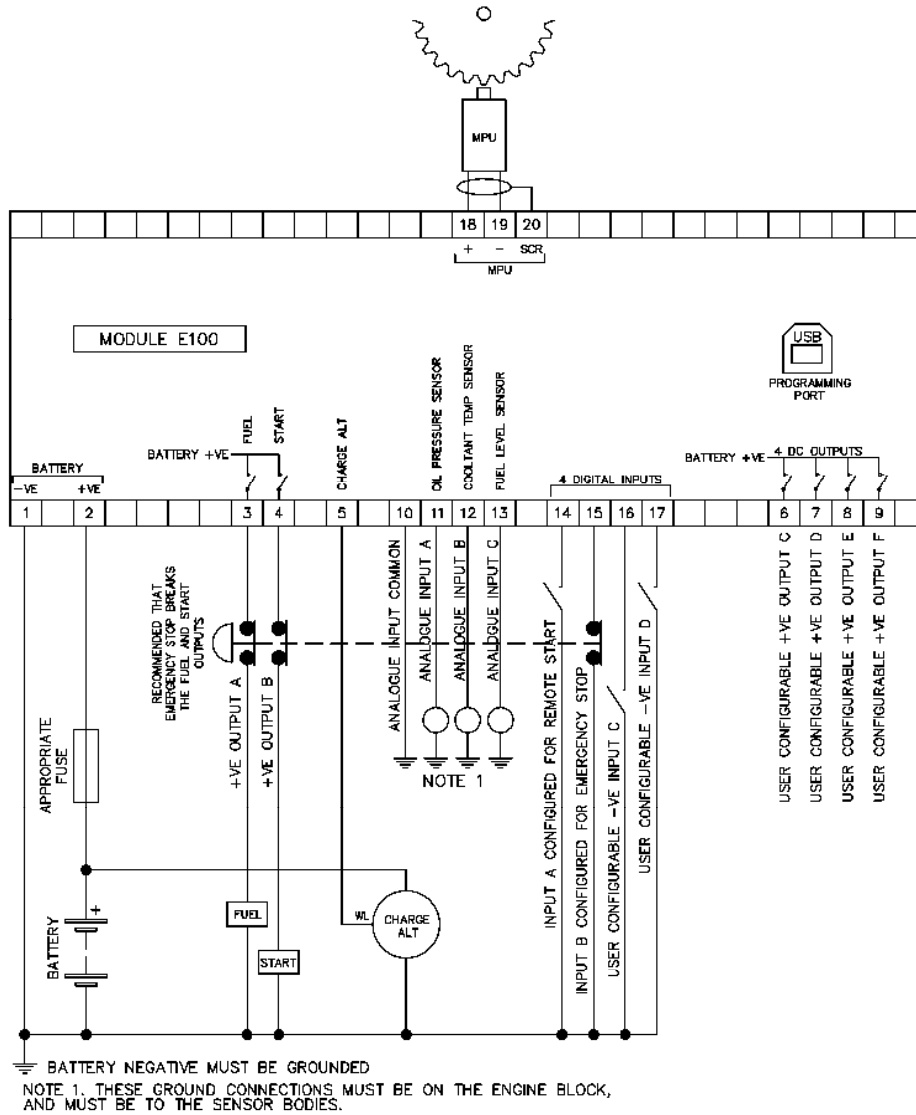
Sensor Type		Digital Input Alarm Arming		Power Up Mode	
Index	Type	Index	Arming	Index	Mode
0	None	0	Always	0	Stop
1	Digital Input	1	From Safety On	1	Manual
2	Percentage Sensor	2	From Starting	2	Auto
3	Pressure Sensor	3	Never		
4	Temperature Sensor				

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

Pressure Sensor List		Temperature Sensor List		Percentage Sensor List	
Index	Type	Index	Type	Index	Type
0	Not used	0	Not Used	0	Not Used
1	Dig Closed for Alarm	1	Dig Closed for Alarm	1	Dig Closed for Alarm
2	Dig Open for Alarm	2	Dig Open for Alarm	2	Dig Open for Alarm
3	VDO 5 Bar	3	VDO 120 °C	3	VDO Ohm (10-180)
4	VDO 10 Bar	4	Datcon High	4	VDO Tube (90-0)
5	Datcon 5 Bar	5	Datcon Low	5	US Ohm (240-33)
6	Datcon 10 Bar	6	Murphy	6	GM Ohm (0-90)
7	Datcon 7 Bar	7	Cummins	7	GM Ohm (0-30)
8	Murphy 7 Bar	8	PT100	8	Ford (73-10)
9	CMB812	9	Veglia	9	User Defined
10	Veglia	10	Beru		
11	User Defined	11	User Defined		

Input Sources			
0	User Configured	11	Simulate Auto Button
1-2	RESERVED	12-18	RESERVED
3	Auto Start Inhibit	19	External Panel Lock
4	Lamp Test	20	RESERVED
5	Alarm Mute	21	Oil Pressure Switch
6	Alarm Reset	22	Coolant Temperature Switch
7	RESERVED	23-24	RESERVED
8	Simulate Start Button	25	Remote Start Off Load
9	Simulate Stop Button	26-32	RESERVED
10	RESERVED	33	Low Fuel Level Switch
34	Smoke Limiting	35-42	RESERVED
43	Emergency Stop	44	RESERVED
44	RESERVED	45	Maintenance Reset Oil
45	Maintenance Reset Oil	46	Maintenance Reset Air
46	Maintenance Reset Air	47	Maintenance Reset Fuel
47	Maintenance Reset Fuel	48-52	RESERVED
48	RESERVED	53	Remote Stop
49	RESERVED	54	Protections Disable

Output Sources			
0	Not Used	58	Preheat Until End of Warning
1	Air Flap Relay	59	Smoke Limiting
2	Audible Alarm	60	Start Relay
3	Battery Over Volts Warning	61	Temperature Sensor Open Circuit
4	Battery Under Volts Warning	62	RESERVED
5-9	RESERVED	63	Under Speed Shutdown
10	Charge Alternator Shutdown	64	RESERVED
11	Charge Alternator Warning	65	Flexible Sensor C High Alarm
12-16	RESERVED	66	Flexible Sensor C High Pre-Alarm
17	Common Alarm	67	Flexible Sensor C Low Pre-Alarm
18	RESERVED	68	Flexible Sensor C Low Alarm
19	Common Shutdown	69-72	RESERVED
20	Common Warning	73	Fuel Sensor High Alarm
21	RESERVED	74	Fuel Sensor High Pre-Alarm
22	Digital Input A	75	Fuel Sensor Low Pre-Alarm
23	Digital Input B	76	Fuel Sensor Low Alarm
24	Digital Input C	77-80	RESERVED
25	Digital Input D	81	Air Filter Maintenance Output
26-28	RESERVED	82	Oil Filter Maintenance Output
29	Emergency Stop	83	Fuel Filter Maintenance Output
30	Energise To Stop	84	System in Stop Mode
31	Fail To Start	85	System in Auto Mode
32	Fail To Stop	86	System in Manual Mode
33	Fuel Relay	87	RESERVED
34-41	RESERVED	88	Analogue Input A (Digital)
42	High Coolant Temperature Shutdown	89	Analogue Input B (Digital)
43	Low Oil Pressure Shutdown	90	Analogue Input C (Digital)
44-47	RESERVED	91-92	RESERVED
48	Oil Pressure Sensor Open Circuit	93	Loss of MPU Signal
49-53	RESERVED	94	MPU Open Circuit



DEEP SEA ELECTRONICS PLC
DSEE100 Installation Instructions



EDITING A PARAMETER

- Press the *Stop/Reset Mode* (-) and *Auto Mode* (✓) buttons together to enter the editor mode.
- If a module security PIN has been set, the PIN request is then shown.
- Press the *Auto Mode* (✓), the first '#' changes to '0'. Press the *Up* (↑) or *Down* (↓) buttons to adjust it to the correct value.
- Press the *Manual/Start Mode* (+) buttons to move to the next digit. The digit previously entered now shows as '#' for security.
- Repeat this process for the other digits of the PIN number. Press the *Stop/Reset Mode* (-) button to move back to adjust one of the previous digits.
- When the *Auto Mode* (✓) button is pressed after editing the final PIN digit, the PIN is checked for validity. If the number is not correct, the PIN must be re-entered.
- If the PIN has been successfully entered (or the module PIN has not been enabled), the editor is displayed.
- 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 the 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: 057-267 DSEE100 Configuration Suite PC Software Manual.

<p>Deep Sea Electronics PLC Tel: +44 (0)1723 890099 Fax: +44 (0)1723 893303 Email: sales@deepseapl.com Web: www.deepseapl.com</p>	<p>Deep Sea Electronics Inc. Tel: +1 (815) 316-8706 Fax: +1 (815) 316-8708 Email: sales@deepseausa.com Web: www.deepseausa.com</p>
--	---

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 AWG 20 to AWG 13 (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 AC circuit conductors unless all conductors are rated 600 V or greater.
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)
Operating Temperature	• -22 °F to +158 °F (-30 °C to +70 °C)
Storage Temperature	• -40 °F to +176 °F (-40 °C to +80 °C)