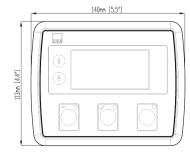
		tion Parameters – Mo		rage 1)							Engine	Houre (1)	
101	Con	ntrast	0 %		10	8	Event	Log [	Display Fo			Hours (1), id Date (0)	
102	Fast	t Loading Enabled	On (	1), Off (	0) 10	)9	Powe	r Up N	/lode			er Up Mode)	
103	All V	Warnings Latched	On (	1), Off (	0) 110-	-111	RESE						
104	Lam	np Test At Startup	On (	1), Off (	0) 11	12	Pin Pr Reset		ed Mainter	nance	On (1),	Off (0)	
105	Pow	ver Save Mode Enable	On (	1), Off (	0) 11	13	RESE		)				
106		ep Sleep Mode Enable					Displa	ay Ter	nperature	in 'C	'F (1), '	C (0)	
100	Dee	sp Gleep Wode Enable	OII (	1), Off (	0) 1	14	or 'F				1 (1),	C (0)	
107	Prot	tected Start Enable	On (	1), Off (	0) 11	15	Displa Bar, F	ay Oil	Pressure	ın	PSI (2),	kPa (1), Bar (0	
onfi	aurat	tion Parameters – Dig	ital In	nute (Pr	300 3)		Dai, i	OI, KI	a				
	01	Digital Input A Source		outs (F	age J/						0 (In	out Source)	
30	02	Digital Input A Polari									0 (Pc	olarity)	
	03	Digital Input A Action									0 (Ac		
	04 05	Digital Input A Armin Digital Input A Activa						ofica)			0 (Ar	ming)	
	06	Digital Input B Source		Citay (ii v	bource	- 03	CI COII	ilig)				out Source)	
30	07	Digital Input B Polari	ty									olarity)	
	80	Digital Input B Action									0 (Ac		
	09 10	Digital Input B Armin Digital Input B Activa						nfig)			0 (Ar	ming)	
31	_	Digital Input C Source		Sidy (II v	SOUI UE	- 031	JI JUII	9)				out Source)	
31	12	Digital Input C Polari	ty								0 (Pc	olarity)	
	13	Digital Input C Action	ı (If Sc				_				0 (Ac	tion)	
	14	Digital Input C Armin						ofice)			0 (Ar	ming)	
	15 16	Digital Input C Active Digital Input D Source		elay (If S	ource	- US	er con	ıııg)				out Source)	
	17	Digital Input D Polari										olarity)	
31	18	Digital Input D Action	ı (If So								0 (Ac	tion)	
	19	Digital Input D Armin										ming)	
	-330	Digital Input D Activa RESERVED	ition D	elay (If	Source	= Us	er Con	ntig)			0 s		
	31	Analogue Input A (Se	et As F	Digital) S	Source						0 (In	out Source)	
	32	Analogue Input A (Se										olarity)	
	33	Analogue Input A (Se									0 (Ac		
	34	Analogue Input A (Se								O C )		ming)	
	35 36	Analogue Input A (So Analogue Input B (So				n De	iay (II	Sourc	e = User (	Coning)	0 s	out Source)	
	37	Analogue Input B (Se							0 (Polarity)				
	38	Analogue Input B (Se				f Sou	irce = l	User (	Config)		0 (Ac		
	39				Digital) Arming (If Source = User Config)						0 (Arming)		
_	40 41	Analogue Input B (So Analogue Input C (So		Digital) Activation Delay (If Source = User Config)					0 s 0 (Input Source)				
	42	Analogue Input C (S								0 (Polarity)			
	43			Digital) Action (If Source = User Config)					0 (Ac				
_	44			Digital) Arming (If Source = User Config) Digital) Activation Delay (If Source = User Config)							0 (Ar	ming)	
	45					n De	lay (If	Sourc	e = User	Config)	0 s		
		tion Parameters – Out al Output A Source		(Page 4) tput Sou		407	Dinit	-10.4	tput D Sou		0.40	tput Source)	
				tput Pola		407			put D Sol			tput Polarity)	
				tput Sou		409			put E Sou			tput Source)	
				tput Pola		410			put E Pola			tput Polarity)	
				tput Sou		411 412			put F Sou			tput Source)	
				tput Pola	irity)	412	Digit	ai Ou	put F Pola	arity	U (OU	tput Polarity)	
0000 501		tion Parameters – Tim SERVED			Smoke	Limit	ina Of	f	513	FTS S	olenoid	Hold	
502		rt Delay			RESEF			_	514		To Stop		
503		heat Timer		509	Safety	On D	elay		515-522	RESE			
504		ink Time	_		Warmir				523			ode Delay	
505 506		nk Rest Time oke Limiting			Return RESEF				524 525	Deep S		ode Delay	
		tion Parameters – Eng			. YEOU'	. v L D			020	. uyc	IIINI		
80		Start Attempts	ille (r	0		8	119	Hiah	Battery Vo	oltage E	nable	On (1), Off (0	
80		Over Speed Oversho	ot	0 %			20	High Battery Voltage High Battery Voltage				0.0 V	
80	)3	Over Speed Delay		0 s		8	21		Battery Vo			0.0 V	
804-	-806	RESERVED				8	22	High Delay		Voltage Warnir		0 s	
		Crank Disconnect Or	Oil	<u> </u>		H						0 (1)	
_	)7	Pressure Enable		On (1),	Off (0)	8	23	Char	ge Alt Shu	ıtdown	Enable	On (1), Off (0	
80	08	Check Oil Pressure F	rior	On (1)	Off (0)	8	24	Chan	ge Alt Shu	ıtdown '	Trip	0.0 V	
	-	To Starting Crank Disconnect Or	Ωil	0.00 B	,		25		ge Alt Shu			0.0 V	
80	าด	RESERVED	Oil	0.00 0	ul		26		ge Alt Wa			On (1), Off (0	
80		Crank Disconnect On		O PDM			27					0.0 V	
80 80 81	10	Crank Disconnect Or	n 0 RPM						ge Alt Wa				
80 80 81 81	10 11	Crank Disconnect Or Engine Speed			C)ff (0)				ge Alt Wa			0 s	
80 81 81 81	10 11 12	Crank Disconnect Or Engine Speed Under Speed Enable		On (1),		829 Lo			Low Battery Start Arming				
80 81 81 81 81	10 11 12 13	Crank Disconnect Or Engine Speed Under Speed Enable Under Speed Trip		0 RPM		8							
80 81 81 81 81 81	10 11 12 13 14	Crank Disconnect Or Engine Speed Under Speed Enable Under Speed Trip Over Speed Trip		0 RPM 0 RPM		8	30	Low	Battery St	art Thre	shold	0.0 V	
80 81 81 81 81 81	10 11 12 13 14	Crank Disconnect Or Engine Speed Under Speed Enable Under Speed Trip Over Speed Trip Low Battery Voltage Enable		0 RPM 0 RPM On (1),		8	30 31	Low	Battery St Battery St	art Thre art Dela	eshold Iy	0.0 V 0 s	
80 81 81 81 81 81	10 11 12 13 14	Crank Disconnect Or Engine Speed Under Speed Enable Under Speed Trip Over Speed Trip Low Battery Voltage Enable Low Battery Voltage		0 RPM 0 RPM		8	30	Low Low	Battery St Battery St Battery St	art Thre art Dela art Run	eshold ly Time		
80 81 81 81 81 81	10 11 12 13 14 15	Crank Disconnect Or Engine Speed Under Speed Enable Under Speed Trip Over Speed Trip Low Battery Voltage Enable		0 RPM 0 RPM On (1),		8 8 8	30 31	Low Low	Battery St Battery St	art Thre art Dela art Run	eshold ly Time	0.0 V 0 s	

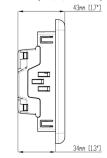
	ration Parameters – Analogue	Inputs (Pag	e 9						
901	Analogue Input A Sensor Type				or Type)				
902	Analogue Input A Sensor Selection				sure Sensor List)				
903	Low Oil Pressure Enable				Off (0)				
904	Low Oil Pressure Trip			0 Bar	0(( (0)				
905	Oil Pressure Sensor Open Circ	uit	_	On (1),					
906 907	Analogue Input B Sensor Type Analogue Input B Sensor Select	tion			or Type) perature Sensor List)				
908	High Engine Temperature Trip	лоп		0.00 °C					
909	Temperature Sensor Open Circ	suit	_	On (1),					
910	Analogue Input C Sensor Usag				Sensor (1), Fuel Level	Sensor (C	1)		
911	Analogue Input C Sensor Type				or Type)	0011001 (0	7		
912	Analogue Input C Sensor Select				sure / Temperature / Pe	rcentage	Sensor List)		
913	Flexible Sensor C Arming			0 (Armi					
914	Flexible Sensor C Low Shutdov	vn Enable		On (1),					
915	Flexible Sensor C Low Alarm T	rip		0 % / B	ar / °C				
916	RESERVED								
917	Flexible Sensor C Low Pre-Alar	rm Enable		On (1),	Off (0)				
918	Flexible Sensor C Low Pre-Alar			0 % / B					
919	Flexible Sensor C Low Pre-Alar	m Return		0 % / B	ar / °C				
920	RESERVED								
921	Flexible Sensor C High Pre-Ala			On (1),					
922	Flexible Sensor C High Pre-Ala			0 % / B					
923	Flexible Sensor C High Pre-Ala	rm Irip		0 % / B	ar/°C				
924-925 926	RESERVED	Faabla		0- (1)	Off (0)				
926	Flexible Sensor C High Shutdov Flexible Sensor C High Alarm T			On (1), 0 % / B					
	RESERVED	ПР		U 70 / B	al / C				
930	Fuel Sensor C Low Shutdown B	nahle		On (1), Off (0)					
931	Fuel Sensor C Low Shutdown		0 %						
932	Fuel Sensor C Low Shutdown I			0 s					
933	Fuel Sensor C Low Pre-Alarm B			On (1), Off (0)					
934	Fuel Sensor C Low Pre-Alarm	Ггір		0 %					
935	Fuel Sensor C Low Pre-Alarm F			0 %					
936	Fuel Sensor C Low Pre-Alarm I			0 s					
937	Fuel Sensor C High Pre-Alarm			On (1),	Off (0)				
938	Fuel Sensor C High Pre-Alarm			0 %					
939	Fuel Sensor C High Pre-Alarm			0 %					
940	Fuel Sensor C High Pre Alarm	Delay	_	0 s					
941 942	RESERVED Fuel Sensor C High Alarm Action	- n		0 (Actio	.n)				
943	Fuel Sensor C High Alarm Trip	711		0 (Actio	111)				
944	Fuel Sensor C High Alarm Dela	V		0 x					
	ration Parameters - Scheduler			0.3					
Configu	1001	(Page 10)	En	able Scl	neduler	On (1), C	eff (n)		
	1002			nable Scheduler On (1) ESERVED			11 (0)		
	1003						), Monthly(1)		
1004. 1	1008, 1012, 1016, 1020, 1024, 1	028, 1032			(Entry 1-8)	0:00:00	,, morning (1)		
	1009, 1013, 1017, 1021, 1025, 1			ay (Entry 1-8) 0 (1=M			ndav)		
	1010, 1014, 1018, 1022, 1026, 1			eek (Ent	4				
1007, 1	1011, 1015, 1019, 1023, 1027, 1	031, 1035	Dυ	Duration (Entry 1-8) 0 s					
	ration Parameters – Time (Pag								
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		
Configu	ration Parameters - Maintenar	nce Alarms	Pa	ge 12)					
1201	Oil Maintenance Alarm Enable	On (1), Off	(0)	1206	Air Maintananae Alarm Engine		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 Alar		Warning (1), Shutdown (0)		
1204	Air Maintenance Alarm Enable	On (1), Off		1209	Fuel Maintenance Alar Engine Hours	m	0 h		
1205	Air Maintenance Alarm Action	Warning (1) Shutdown (	0)						
DIME	NCIONE DAN	EL CUTA	<b>~</b> • •	-	TEDMINIALO				

**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)



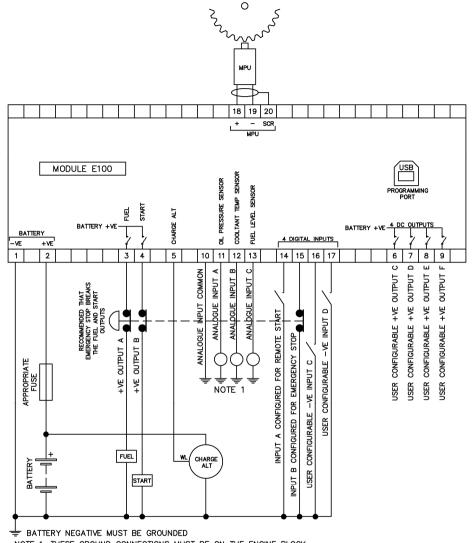
Sensor Type		Digital Inp	ut Alarm Arming	Power Up M	Power Up Mode	
Index	Type	Index	Index Arming		Mode	
0	None	0	Always	0	Stop	
1	Digital Input	1	From Safety On	1	Manual	
2	Percentage Sensor	2	From Starting	2	Auto	
3	Pressure Sensor	3	Never			
4	Temperature Sensor					

Digital Input Polarity		Output Polarity		Alarm A	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	Temperatu	re Sensor List	Percentage Sensor List		
Index	Type	Index	Туре	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			

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

IU R	SERVED	33 Low Fue	i Level Switch	n 54 Protections Disable
Output Sou	ırces			
0	Not Used		58	Preheat Until End of Warming
1	Air Flap Relay		59	Smoke Limiting
2	Audible Alarm		60	Start Relay
3	Battery Over Volts Warn	ing	61	Temperature Sensor Open Circuit
4	Battery Under Volts War	ning	62	RESERVED
5-9	RESERVED		63	Under Speed Shutdown
10	Charge Alternator Shutd		64	RESERVED
11	Charge Alternator Warni	ng	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 Temperatu		89	Analogue Input B (Digital)
43	Low Oil Pressure Shutdo	own	90	Analogue Input C (Digital)
44-47	RESERVED		91-92	RESERVED
48	Oil Pressure Sensor Ope	en Circuit	93	Loss of MPU Signal
49-53	RESERVED		94	MPU Open Circuit
54	Over Speed Shutdown		95	Over Speed Overshoot
55	Preheat During Preheat		96-108	RESERVED
56	Preheat Until End of Cra	nk	109	Protections Disabled*
57	Preheat Until End of Saf	ety Timer	*Read Only	- Adjusted via DSE Configuration Suite.



NOTE 1. THESE GROUND CONNECTIONS MUST BE ON THE ENGINE BLOCK, AND MUST BE TO THE SENSOR BODIES.

## 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 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)



## **DEEP SEA ELECTRONICS PLC**

053-225 Issue 2

**DSEE100 Installation Instructions** 

## **EDITING A PARAMETER**

• Press the Stop/Reset Mode (-) and Auto Mode ( ) buttor 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

wn 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 "f 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 reentered.

• 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 Auto Mode ( v ) 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.

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