



This instruction sheet is for DSE4410Mk2 controllers only. For DSE4410 Mk1 controllers use DSE publication 053-056

ACCESSING THE FRONT PANEL CONFIGURATION EDITOR

Ensure the engine is at rest and the module is in STOP mode by

pressing the Stop/Reset button.

Press the Stop/Reset and Down buttons simultaneously.

The configuration icon is displayed, along with the first configurable parameter.

EDITING A PARAMETER

Press to select the required 'page' as detailed in the configuration tables.

Press (+) to select the next parameter or (-) to select the previous parameter within the current page.

When viewing the parameter to be changed, press the button. The value begins to flash.

Press (+) or (-) to adjust the value to the required setting.

Press the save the current value, the value ceases flashing.

Press and hold the button to exit the editor, the configuration icon will be removed from the display.

NOTE: - Pressing and holding the + / - buttons will give auto-repeat functionality. Large values can be changed quicker by holding the buttons for a prolonged period. For instance large timers increment in 1 second steps to 1 minute, then in 30 second steps to 1 hour, then in 30 minute steps.

DIMENSIONS

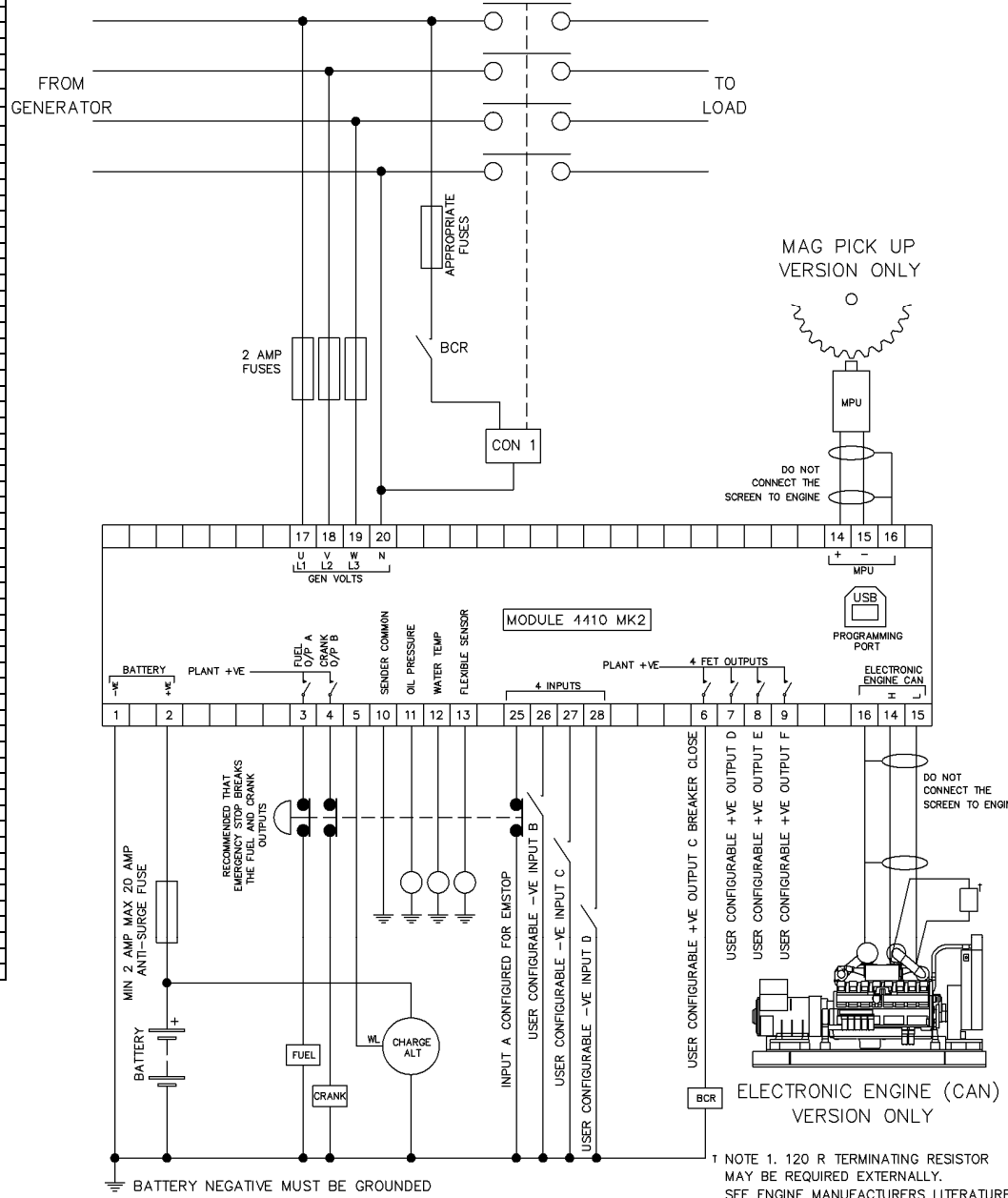
180mm x 116mm x 42mm (7.1" x 4.6" x 1.7")

PANEL CUTOUT

154mm x 98mm (6" x 3.9")

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TYPICAL WIRING DIAGRAM



TERMINALS SUITABLE FOR 22-16 AWG (0.6mm - 1.3mm) FIELD WIRING
TIGHTENING TORQUE = 0.8Nm (7lb-in)

NOTE 1. 120 R TERMINATING RESISTOR MAY BE REQUIRED EXTERNALLY. SEE ENGINE MANUFACTURERS LITERATURE

OUTPUT SOURCE LIST		
0	Not used	
1	RESERVED	
2	RESERVED	
3	Audible Alarm	
4	Battery over volts warning	
5	Battery under volts warning	
6	CAN ECU data fail	CAN J48
7	CAN ECU error	CAN J48
8	CAN ECU fail	CAN J48
9	CAN ECU power	CAN J48
10	CAN ECU stop	CAN J48
11	Charge alternator shutdown	
12	Charge alternator warning	
13	Close Gen output	
14	Close Gen output pulse	
15	Close Mains output	
16	Close Mains output pulse	
17	Combined mains failure	
18	Common Alarm	
19	RESERVED	
20	Common Shutdown	
21	Common Warning	CAN J48
22	RESERVED	
23	RESERVED	
24	RESERVED	
25	RESERVED	
26	RESERVED	
27	RESERVED	
28	RESERVED	
29	Emergency stop	
30	Energise to stop	
31	RESERVED	
32	RESERVED	
33	Fuel relay	
34	Gas choke on	
35	Gas ignition	
36	Generator Available	
37	RESERVED	
38	RESERVED	
39	RESERVED	
40	RESERVED	
41	Low fuel level	
42	RESERVED	
43	RESERVED	
44	RESERVED	
45	RESERVED	
46	RESERVED	
47	Open Gen Output	
48	Open Gen Output pulse	
49	RESERVED	
50	RESERVED	
51	RESERVED	
52	RESERVED	
53	Preheat During Preheat Timer	
54	Preheat Until End of Crank	
55	Preheat Until End of Safety Timer	
56	Preheat Until End of Warming Timer	
57	Smoke limiting	
58	Start relay	
59	RESERVED	
60	RESERVED	
61	RESERVED	

44xx - 02 (CAN option) only
44xx - 01 (Magnetic pickup option) only



CONFIGURATION PARAMETERS – MODULE (PAGE 1)					
101	Contrast	000 (%)	106	Protected start enable	On (1), off (0)
102	Fast loading enabled	On (1), off (0)	107	RESERVED	
103	RESERVED		108	Event log display format	On (1), off (0)
104	Lamp test at startup	On (1), off (0)	109	Start in auto	On (1), off (0)
105	Power save mode enable	On (1), off (0)	110	Diagnostic Trouble Code string (english only) enable	On (1), off (0) CAN

CONFIGURATION PARAMETERS – APPLICATION (PAGE 2) (CAN VERSION MODULE ONLY)					
201	Alternate engine speed	On (1), off (0)	203	Can ECU data fail action	0 (action)
202	Can ECU data fail enable	On (1), off (0)	204	Can ECU data fail delay	0:00

CONFIGURATION PARAMETERS – INPUTS (PAGE 3)					
301	Low oil pressure enable			On (1), off (0)	
302	Low oil pressure trip			0.00 bar	
303	High engine temperature trip			00 deg c	
304	Digital input A source			0 (input source)	
305	Digital input A polarity			0 (polarity)	
306	Digital input A action (if source = user config)			0 (action)	
307	Digital input A arming (if source = user config)			0 (arming)	
308	Digital input A activation delay (if source = user config)			0:00	
309	Digital input B source			0 (input source)	
310	Digital input B polarity			0 (polarity)	
311	Digital input B action (if source = user config)			0 (action)	
312	Digital input B arming (if source = user config)			0 (arming)	
313	Digital input B activation delay (if source = user config)			0:00	
314	Digital input C source			0 (input source)	
315	Digital input C polarity			0 (polarity)	
316	Digital input C action (if source = user config)			0 (action)	
317	Digital input C arming (if source = user config)			0 (arming)	
318	Digital input C activation delay (if source = user config)			0:00	
319	Digital input D source			0 (input source)	
320	Digital input D polarity			0 (polarity)	
321	Digital input D action (if source = user config)			0 (action)	
322	Digital input D arming (if source = user config)			0 (arming)	
323	Digital input D activation delay (if source = user config)			0:00	
324	Analogue input A sensor type			0 (sensor type)	
325	Analogue input A sensor selection (pressure sensor list)			0 (pressure sensor)	
326	Analogue input A (set as digital) source (oil pressure sender)			0 (input source)	
327	Analogue input A (set as digital) polarity			0 (polarity)	
328	Analogue input A (set as digital) action (if source = user config)			0 (action)	
329	Analogue input A (set as digital) arming (if source = user config)			0 (arming)	
330	Analogue input A (set as digital) activation delay (if source = user config)			0:00	
331	Analogue input B sensor type			0 (sensor type)	
332	Analogue input B sensor selection (temperature sensor list)			0 (temp sensor)	
333	Analogue input B (set as digital) source (temperature sender)			0 (input source)	
334	Analogue input B polarity (set as digital)			0 (polarity)	
335	Analogue input B (set as digital) action (if source = user config)			0 (action)	
336	Analogue input B (set as digital) arming (if source = user config)			0 (arming)	
337	Analogue input B (set as digital) activation delay (if source = user config)			0:00	
338	Analogue input C sensor type			0 (sensor type)	
339	Analogue input C sensor selection (pressure / temp / percentage)			0 (sensor)	
340	Analogue input C (set as digital) source (flexible sender)			0 (input source)	
341	Analogue input C (set as digital) polarity			0 (polarity)	
342	Analogue input C (set as digital) action (if source = user config)			0 (action)	
343	Analogue input C (set as digital) arming (if source = user config)			0 (arming)	
344	Analogue input C (set as digital) activation delay (if source = user config)			0:00	
345	Oil pressure sender open circuit alarm			On (1), off (0)	
346	Temperature sender open circuit alarm			On (1), off (0)	

CONFIGURATION PARAMETERS – OUTPUTS (PAGE 4)					
401	Digital output A source			0 (output source)	CAN
402	Digital output A polarity			0 (output source polarity)	CAN
403	Digital output B source			0 (output source)	CAN
404	Digital output B polarity			0 (output source polarity)	CAN
405	Digital output C source			0 (output source)	CAN
406	Digital output C polarity			0 (output source polarity)	CAN
407	Digital output D source			0 (output source)	
408	Digital output D polarity			0 (output source polarity)	
409	Digital output E source			0 (output source)	
410	Digital output E polarity			0 (output source polarity)	
411	Digital output F source			0 (output source)	
412	Digital output F polarity			0 (output source polarity)	

CONFIGURATION PARAMETERS – TIMERS (PAGE 5)						
501	RESERVED		507	Smoke limiting off	513	Failed to stop delay
502	Start delay		508	Safety on delay	514	Generator transient delay
503	Preheat timer		509	Warm up time	515	Power save mode delay
504	Crank time		510	Return delay	516	Transfer time
505	Crank rest time		511	Cooling time	517	Breaker trip pulse
506	Smoke limiting		512	Ets solenoid hold	518	Breaker close pulse

CONFIGURATION PARAMETERS – GENERATOR (PAGE 6)					
601	Alternator fitted			On (1), off (0)	
602	Alternator poles			0	
603	Reserved				
604	Reserved				
605	Under voltage enabled			On (1), off (0)	
606	Under voltage level			0 V	
607	Loading voltage			0 V	
608	Over voltage level			0 V	
609	Under frequency enable			On (1), off (0)	
610	Under frequency level			0.0 Hz	
611	Loading frequency			0.0 Hz	
612	Nominal frequency			0.0 Hz	
613	Over frequency enable			On (1), off (0)	
614	Over frequency trip			0.0 Hz	
615	AC system			AC system (see table below)	

MAINS (PAGE 7) is not available on DSE4410 controllers.

CONFIGURATION PARAMETERS – ENGINE (Page 8)					
801	Magnetic pickup fitted			On (1), off (0)	
802	Flywheel teeth			000	
803	Start Attempts			0	
804	RESERVED				
805	RESERVED				
806	Gas choke timer (Gas engine only)			0:00	
807	Gas on delay (Gas engine only)			0:00	
808	Gas ignition off delay (Gas engine only)			0:00	
809	Crank disconnect on Oil pressure enable			On (1), off (0)	
810	Check oil pressure prior to starting			On (1), off (0)	
811	Crank disconnect on Oil threshold			0.00 Bar	
812	Crank disconnect on frequency			0.0Hz	
813	Crank disconnect on Engine Speed			000 rpm	
814	Under speed enable			On (1), off (0)	
815	Under speed trip			0000 rpm	
816	Over speed trip			0000 rpm	
817	Low battery volts enable			On (1), off (0)	
818	Low battery volts trip			00.0 V	
819	Low battery volts return			00.0 V	
820	Low battery volts delay			0:00:00	
821	High battery volts enable			On (1), off (0)	
822	High battery volts return			00.0 V	
823	High battery volts warning			00.0 V	
824	High battery volts warning delay			00.0 V	
825	Charge alt shutdown enable			On (1), off (0)	
826	Charge alt shutdown trip			00.0 V	
827	Charge alt shutdown trip delay			0:00:00	
828	Charge alt warning trip enable			On (1), off (0)	
829	Charge alt warning trip			00.0 V	
830	Charge alt warning trip delay			0:00:00	
831	Low battery start Arming			On (1), off (0)	
832	Low battery start Threshold			00.0 V	
833	Low battery start Delay			0:00:00	
834	Low battery start Run time			0:00:00	

CONFIGURATION PARAMETERS – ALTERNATIVE CONFIGURATION (Page 9)					
901	Alt config – Default configuration			Main (0), Alternative (1)	
902	Alt config – Enable configuration			On (1), Off (0)	
903	Alt config - Alternative Engine Speed			On (1), Off (0)	
904	Alt config - Under Voltage Shutdown Enable			On (1), Off (0)	
905	Alt config - Under Voltage trip level			0 V	
906	Alt config - Loading Voltage			0 V	
907	Alt config - Over Voltage trip level			0 V	
908	Alt config - Under frequency enabled			On (1), Off (0)	
909	Alt config - Under frequency trip level			0.0 Hz	
910	Alt config - Loading Frequency			0.0 Hz	
911	Alt config - Nominal Frequency			0.0 Hz	
912	Alt config - Over Frequency enabled			On (1), Off (0)	
913	Alt config - Over Frequency trip level			0.0 Hz	
914	Alt config - AC System			AC system (see table)	
915-928	RESERVED				
929	Alt config – Alternative under speed shutdown enable			On (1), Off (0)	
930	Alt config – Alternative under speed shutdown trip			0000 rpm	
931	Alt config – Alternative over speed shutdown trip			0000 rpm	

CAN = 44xx – 02 (CAN) option only = 44xx – 01 (Magnetic pickup) option only
 Output source list overleaf...

CONFIGURATION PARAMETERS – FLEXIBLE SENSOR (PAGE 10)					
1001	Flexible sensor alarm arming			0 (Arming)	
1002	Flexible sensor - Low alarm enable			0 (Action)	
1003	Flexible sensor - Low alarm trip (units depend upon sensor type)			0 % / 0.00 bar / 0 °C	
1004	Flexible sensor - High alarm enable			0 (Action)	
1005	Flexible sensor - High alarm trip (units depend upon sensor type)			0 % / 0.00 bar / 0 °C	
1006	Flexible sensor - Low warning enable			On (1), Off (0)	
1007	Flexible sensor - Low warning trip (units depend upon sensor type)			0 % / 0.00 bar / 0 °C	
1008	Flexible sensor – High warning enable			On (1), Off (0)	
1009	Flexible sensor – High warning trip (units depend upon sensor type)			0 % / 0.00 bar / 0 °C	

CONFIGURATION PARAMETERS – SCHEDULER (Page 11)							
1101	Enable scheduler			On (1), off (0)	1104	Day	0 (Day, 1=Monday)
1102	On or off load			On (1), off (0)	1105	Duration	0:00:00
1103	Start time			0:00:00			

CONFIGURATION PARAMETERS – TIME AND DAY (Page 12)							
1201	Time of day			0:00	1202	Day of week	0 (Day, 1=Monday)

Parameters with multiple choices use the following identification tables for the parameter values :

INPUT SOURCE LIST			
0	User Configured	8	Emergency Stop
1	Alarm Mute	9	External Panel Lock
2	Alarm Reset	10	RESERVED
3	Alternative Configuration	11	Generator load inhibit
4	RESERVED	12	Lamp Test
5	Auto start inhibit	13	Low Fuel Level Switch
6	RESERVED	14	RESERVED
7	Coolant Temperature Switch	15	RESERVED
16	Oil Pressure Switch		
17	Remote Start Off Load		
18	Remote Start On Load		
19	RESERVED		
20	Smoke Limiting		
21	Close Generator		
22	Open Generator		

INPUT ACTION LIST	
Index	Action
0	Electrical Trip
1	Shutdown
2	Warning

INPUT ARMING LIST	
Index	Arming
0	Always
1	From Safety On
2	From Starting
3	Never

INPUT POLARITY LIST	
Index	Action
0	Close to Activate
1	Open to Activate

OUTPUT POLARITY LIST	
Index	Arming
0	De-energise
1	De-energise

CAN DATA FAIL ACTION	
Index	Action
0	None
1	Shutdown
2	Warning always latched

CAN DATA FAIL ARMING	
Index	Arming
0	From Safety On
1	From Starting

FLEXIBLE SENSOR ALARM ACTION LIST	
Index	Action
0	None
1	Shutdown
2	Electrical Trip

AC SYSTEM	
Index	Type
0	2 phase 3 wire (L1-L2)
1	2 phase 3 wire (L1-L3)
2	3 phase 3 wire
3	3 phase 4 wire
4	3 phase 4 wire (Delta)
5	Single phase 2 wire

FLEXIBLE SENSOR TYPE	
Index	Type
0	None
1	Digital Input
2	Percentage sensor
3	Pressure sensor
4	Temperature sensor

SENSOR SELECTIONS FOR PERCENTAGE	
Index	Type
0	Not used
1	Dig closed for alarm
2	Dig open for alarm
3	VDO ohm (10-180)
4	VDO tube (90-0)
5	Us ohm (240-33)
6	GM ohm (0-90)
7	GM ohm (0-30)
8	Ford (73-10)
9	User defined

SENSOR SELECTIONS FOR OIL PRESSURE	
Index	Type
0	Not used
1	Dig closed for alarm
2	Dig open for alarm
3	VDO 5 bar
4	VDO 10 bar
5	Datacon 5 bar
6	Datacon 10 bar
7	Datacon 7 bar
8	Murphy 7 bar