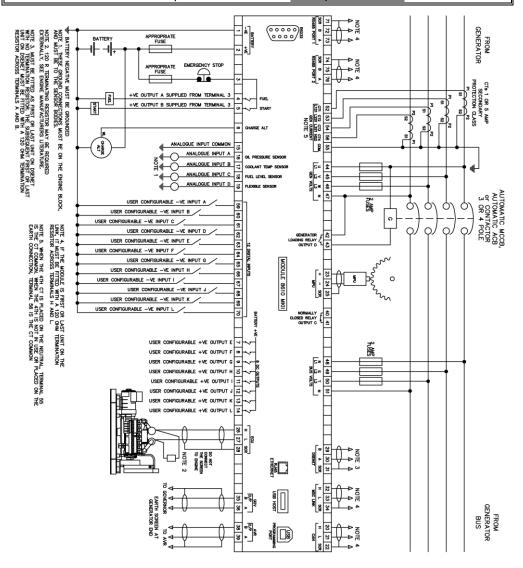
#### TYPICAL WIRING DIAGRAM

NOTE: A larger version of the Typical Wiring Diagram is available in the product's operator manual, refer to DSE Publication: 057-254 DSE8610 MKII Operator Manual available from www.deepseaelectronics.com for more information.



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# DEEP SEA ELECTRONICS

053-182 ISSUE 5

# DSE

#### **DSE8610 MKII Installation Instructions**

#### ACCESSING THE MAIN CONFIGURATION EDITOR

To exit the editor and not save the changes, press and hold the

Editor Ensure the engine is at rest and the module is in STOP mode by pressing the button. Enter Pin 000 (Stop/Reset) and 0 (Tick) buttons simultaneously. #### If a module security PIN has been set, the PIN number request is then shown 000 000 0 0 (Down) button to adjust it to the correct value. The first '#' changes to '0'. Press the (Up) or 00 0 (Right) button when the first digit is correctly entered. The digit previously entered now shows '#' for security. 000 0 Repeat this process for the other digits of the PIN number. Press the (Left) button to move back to adjust one of the previous digits. 000 0 When the (Tick) 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 Editor - Display displayed: Contrast **EDITING A PARAMETER** 53% Enter the editor as described above 0 00 000 0 0 Press the (Right) or (Left) buttons to cycle to the section to view/change. 0 0 0  $\odot$ 0 (Up) or 0 (Down) buttons to select the parameter to view/change within the currently selected section. Press the 000 0 (Tick) button to enter edit mode. The parameter begins to flash to indicate editing. To edit the parameter, press the 0 00 0 0 0 Press the (Up) or (Down) buttons to change the parameter to the required value. 000 0 (Tick) button to save the value. The parameter ceases flashing to indicate that it has been saved. 000 0 To exit the editor and save the changes, press and hold the

NOTE: If the editor is left inactive for the duration of the LCD Page Timer, it is automatically exited to ensure security.

ANOTE: The PIN number is automatically reset when the editor is exited (manually or automatically) to ensure security.

NOTE: Comprehensive module configuration is possible using the DSE Configuration Suite PC Software, refer to DSE publication 057-239 DSE8610 MKII Configuration Suite PC Software Manual available from <a href="https://www.deepseaelectronics.com">www.deepseaelectronics.com</a>.

ANOTE: Depending upon module configuration, some parameters in the Main and Running Editors may not be available. For more information refer to DSE publication 057-239 DSE8610 MKII Configuration Suite PC Software Manual available from www.deepseaelectronics.com

### MAIN CONFIGURATION EDITOR PARAMETERS Section Parameter As Shown On Display Values

Section	Parameter As Shown On Display	values
Display	Contrast	0%
	Language	English, Other.
	Current Date and Time	DD:MM:YY, hh:mm:ss
Alt Config	Default Config	Default Config / Alternative Config
Engine	Oil Pressure Low Shutdown	0.00 bar
Liigiile	Oil Pressure Low Pre Alarm	0.00 bar
	Coolant Temperature Low Warning	0 °C
	Coolant Temp High Pre Alarm	0 °C
	Coolant Temp High Shutdown	0 ℃
	Start Delay Off Load	0 h 0 m 0 s
	Start Delay On Load	0 h 0 m 0 s
	Start Delay Telemetry	0 h 0 m 0 s
	Pre Heat Temp	0 °C
	Pre Heat Timer	0 h 0 m 0 s
	Post Heat Temp	0 °C
	Post Heat Timer	
		0 h 0 m 0 s
	Cranking	0 m 0 s
	Cranking Rest	0 m 0 s
	Safety On Delay	0 m 0 s
	Smoke Limiting	0 m 0 s
	Smoke Limiting Off	0 m 0 s
	Warming	0 h 0 m 0 s
	Cooling	0 h 0 m 0 s
	Under Speed Shutdown	Active / Inactive
	Under Speed Shutdown	0 RPM
	Under Speed Warning	Active / Inactive
	Under Speed Warning	0 RPM
	Over Speed Warning	Active / Inactive
	Over Speed Warning	0 RPM
	Over Speed Shutdown	0 RPM
	Overspeed Overshoot	0 m 0 s
	Overspeed Overshoot	0%
	Fail To Stop Delay	0 m 0 s
	Battery Under Voltage Warning	Active / Inactive
	Battery Under Voltage Warning Delay	0 h 0 m 0 s
	Battery Under Voltage Warning	0.0 V
	Battery Over Voltage Warning	Active / Inactive
	Battery Over Voltage Warning Delay	0 h 0 m 0 s
	Battery Over Voltage Warning	0.0 V
	Charge Alternator Failure Warning	Active / Inactive
	Charge Alternator Failure Warning	0.0 V
	Charge Alternator Warning Delay	0 h 0 m 0 s
	Charge Alternator Failure Shutdown	Active / Inactive
	Charge Alternator Failure Shutdown	0.0 V
	Charge Alternator Shutdown Delay	0 h 0 m 0 s
	Droop	Active / Inactive
	Droop	0 %
	Fuel Usage Running Rate	0 %
	Fuel Usage Stopped Rate	0 %
	DPF Auto Regen Inhibit	Active / Inactive
	Specific Gravity	0.80 to 1.00
	CAN Termination	Active / Inactive
Generator	Under Voltage Shutdown	0 V
	Under Voltage Pre-Alarm	0 V
	Loading Voltage	0 V
	Nominal Voltage	0 V
	Over Voltage Pre-Alarm	0 V
	Over Voltage Shutdown	0 V
		0.0 Hz
	Under Frequency Shutdown	
	Under Frequency Pre-Alarm	0.0 Hz
	Loading Frequency	0.0 Hz
	Nominal frequency	0.0 Hz
	Over Frequency Pre-Alarm	0.0 Hz

#### MAIN CONFIGURATION EDITOR PARAMETERS (CONTINUED)

	NEIGURATION EDITOR PAR	
Section	Parameter As Shown On Display	Values
Generator	Over Frequency Pre-Alarm	0.0 Hz
(Continued)	Over Frequency Shutdown	0.0 Hz
	Full Load Rating	0 A
	kW Overload Trip	0 %
	Delayed Over Current	Active / Inactive
	Gen Over Current Trip	0 %
	AC System	3 Phase, 4 Wire
	CT Primary	0 A Power Cycle After Exit
	CT Secondary	0 A Power Cycle After Exit
	Short Circuit Trip	0 %
	Earth CT Primary	0 A
	Earth Fault Trip	Active / Inactive
	Earth Fault Trip	0 %
	Transient Delay	0.0 s
	Gen Reverse Power Delay Full kW Rating	0.0 s 0 kW
	Full kVAr Rating	0 kvar
	Ramp Up Rate	0 %
	Ramp Down Rate	0 %
	Load Level For More Sets	0 %
	Load Level For More Sets  Load Level For Less Sets	0 %
	Load Demand Priority	1
	Gen Reverse Power Trip	0 kW
	Insufficient Capacity Delay	0 m 0 s
		None / Indication / Warning /
	Insufficient Capacity Action	Shutdown / Electrical Trip
		None / VAr Share / VAr Fixed
	Reactive Load CTL Mode	Export
	Load Parallel Power	0 kW In Mains Parallel Mode
	Load Power Factor	0 % In Mains Parallel Mode
	Enable MSC Compatibility	Active / Inactive
Timers	LCD Page Timer	0 h 0 m 0 s
	Scroll Delay	0 h 0 m 0 s
	Engine Pre Heat Timer	0 h 0 m 0 s
	Engine Post Heat Timer	0 h 0 m 0 s
	Engine Cranking	0 m 0 s
	Engine Cranking Rest	0 m 0 s
	Engine Safety On Delay	0 m 0 s
	Engine Smoke Limiting	0 m 0 s
	Engine Smoke Limiting Off	0 h 0 m 0 s
	Engine Warming	0 h 0 m 0 s
	Engine Cooling Engine Overspeed Overshoot	0 m 0 s
	Engine Fail To Stop Delay	0 m 0 s
	Battery Under Voltage Warning Delay	0 h 0 m 0 s
	Battery Over Voltage Warning Delay	0 h 0 m 0 s
	Return Delay	0 h 0 m 0 s
	Generator Transient Delay	0 s
Schedule	Schedule	Active / Inactive
	Schedule Bank 1 Period	Weekly / Monthly,
	On Load / Off Load / Auto Start	Press to begin editing then up
	Inhibit, Week, Start Time, Run Time	or down when selecting the
	and Day. Selection (1 to 8)	different parameters.
	Schedule Bank 2 Period	Weekly / Monthly,
	On Load / Off Load / Auto Start	Press to begin editing then up

# **DIMENSIONS AND MOUNTING**

Parameter	Specification
Dimensions	245 mm X 184 mm X 51 mm (9.6" X 7.2" X 2.0")
Panel Cutout	220 mm X 160 mm (8.7" X 6.3")
Weight	0.98 kg (2.16 lb)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +80 °C (-40 °F to +176 °F)

#### ACCESSING THE 'RUNNING' CONFIGURATION EDITOR

• The 'Running' Configuration Editor is enterable without stopping the engine. All protections remain active whilst using the 'Running' Configuration Editor.

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## **RUNNING CONFIGURATION EDITOR PARAMETERS**

Section	Parameter As Shown On Display	Values
Display	Contrast	0 %
	Language	English, Other
	Load Demand Priority	1
	Commissioning Screens	Active / Inactive
	Override Starting Alarms	Active / Inactive
	Voltage Adjust (manual mode only, breaker open)	0 %
	Frequency Adjust (manual mode only, breaker open)	0 %
	Mains Decoupling Test Mode	Active / Inactive
Engine	Governor Gain	0.0
	Frequency Adjust Offset	0.0 Hz
	DPF Auto Regen Inhibit	Active / Inactive
	DPF Manual Regen	Active / Inactive
Power Levels	Power Control Mode	Const Power / Frequency-Power / Voltage-Power
	kVAr Control Mode	Const Power Factor / Voltage- Reactive Power / Power-Power Factor / Const Reactive Power
	Load Parallel Power	0 %
	Load Parallel kVAr	0 %
	Load Parallel PF	0.00 pf
	Frequency Droop Offset	0.00 % (0.00 Hz)
	Freq. Droop Ramp Rate	0.0 %
	Voltage Droop Offset	0.00 % (0.0 V)
	Voltage Droop Ramp Rate	0.0 %

#### REQUIREMENTS FOR UL CERTIFICATION

WARNING!: More than one live circuit exists, see diagram overleaf for further information.

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 ¼" (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 flat surface mounting in Type 1 Enclosure Type rating with surrounding air temperature -22 °F to +122 °F (-30 °C to +50 °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 installed in an unventilated or filtered ventilation enclosure to maintain a pollution degree 2 environment.
Operating Temperature	• -22 °F to +122 °F (-30 °C to +50 °C)