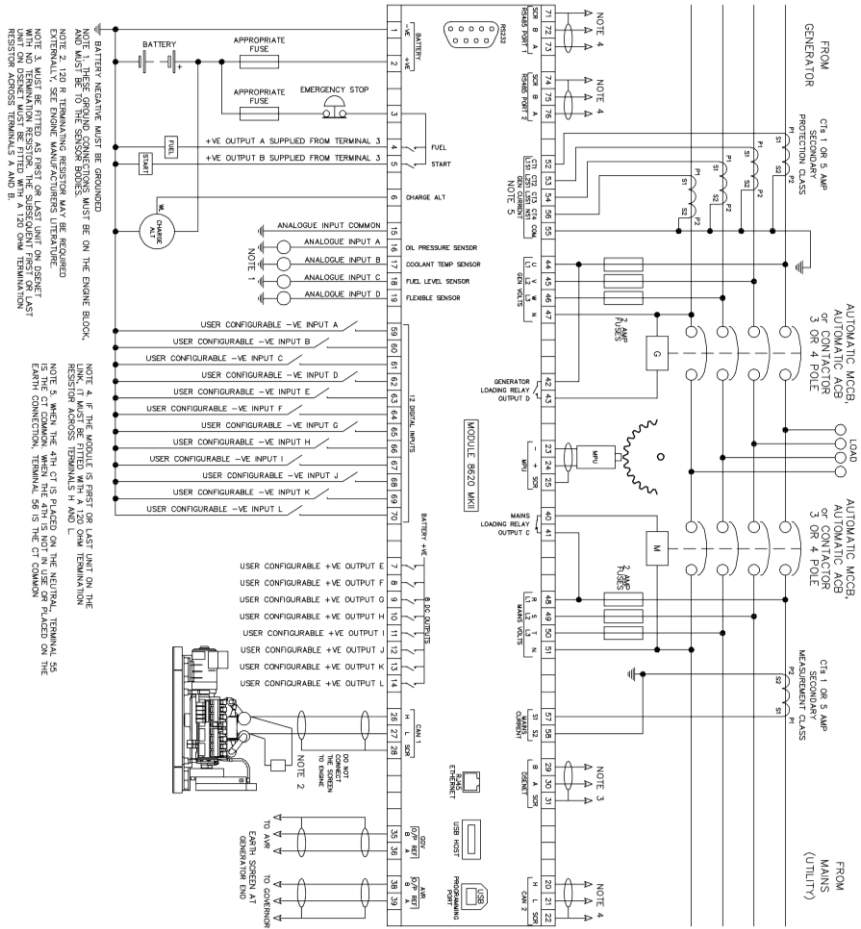


TYPICAL WIRING DIAGRAM

NOTE: A larger version of the Typical Wiring Diagram is available in the product's operator manual, refer to DSE Publication: 057-301 DSE8620 MKII Operator Manual available from www.deepseaelectronics.com for more information.



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 with Standard Display	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature with Heated Display	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +80 °C (-40 °F to +176 °F)

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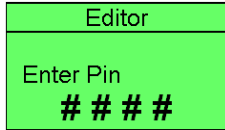


DSE8620 MKII Installation Instructions

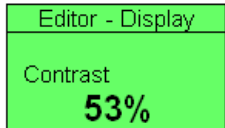
NOTE: For further information on converting the DSE8620 MKII to a DSE8610 MKII, refer to DSE Publication: 057-301 DSE8620 MKII Operator Manual available from www.deepseaelectronics.com for more information.

ACCESSING THE MAIN CONFIGURATION EDITOR

- Ensure the generator bus is dead and the module is in STOP mode by pressing the (Stop/Reset) button.
- Press the (Stop/Reset) and (Tick) buttons simultaneously.
- If a module security PIN has been set, the PIN number request is then shown:



- The first '#' changes to '0'. Press the (Up) or (Down) button to adjust it to the correct value.
- Press the (Right) button when the first digit is correctly entered. The digit previously entered now shows '#' for security.
- 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.
- 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 displayed:



EDITING A PARAMETER

- Enter the editor as described above.
- Press the (Right) or (Left) buttons to cycle to the section to view/change.
- Press the (Up) or (Down) buttons to select the parameter to view/change within the currently selected section.
- To edit the parameter, press the (Tick) button to enter edit mode. The parameter begins to flash to indicate editing.
- Press the (Up) or (Down) buttons to change the parameter to the required value.
- Press the (Tick) button to save the value. The parameter ceases flashing to indicate that it has been saved.
- To exit the editor and save the changes, press and hold the (Tick) button.
- To exit the editor and not save the changes, press and hold the (Stop/Reset) button.

NOTE: If the editor is left inactive for the duration of the LCD Page Timer, it is automatically exited to ensure security.
NOTE: The PIN 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 DSE8620 MKII Configuration Suite PC Software Manual available from www.deepseaelectronics.com.

MAIN CONFIGURATION EDITOR PARAMETERS

NOTE: 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 DSE8620 MKII Configuration Suite PC Software Manual available from www.deepseaelectronics.com

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	0.0 bar 0 psi 0 kPa
	Oil Pressure Low Pre Alarm	0.0 bar 0 psi 0 kPa
	Coolant Temp Low Warning	0 °C 0 °F
	Coolant Temp High Pre Alarm	0 °C 0 °F
	Coolant Temp High Trip	0 °C 0 °F
	Coolant Temp High Shutdown	0 °C 0 °F
	Start Delay Off Load	0 h 0 m 0 s
	Start Delay On Load	0 h 0 m 0 s
	Start Delay Mains Fail	0 h 0 m 0 s
	Start Delay Telemetry	0 h 0 m 0 s
	Pre Heat Temp	0 °C 0 °F
	Pre Heat Timer	0 h 0 m 0 s
	Post Heat Temp	0 °C 0 °F
	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 Failure 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 (CAN Engine Only)	Active / Inactive
	Droop (CAN Engine Only)	0.0 %
	Fuel Usage Running Rate	0 %
	Fuel Usage Stopped Rate	0 %
	DPF Auto Regen Inhibit	Active / Inactive
	Specific Gravity	0.00
	CAN Termination (CAN Engine Only)	Active / Inactive

Section	Parameter As Shown On Display	Values	
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	
	Under Frequency Shutdown	0.0 Hz	
	Under Frequency Pre-Alarm	0.0 Hz	
	Loading Frequency	0.0 Hz	
	Nominal frequency	0.0 Hz	
	Over Frequency Pre-Alarm	0.0 Hz	
	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	
	CT Secondary	0 A	
	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	0.0 s	
	Full kW Rating	0 kW	
	Full kvar Rating	0 kvar	
	Ramp Up Rate	0.0 %	
	Ramp Down Rate	0.0 %	
	Gen Reverse Power Trip	0 kW	
	Insufficient Capacity Delay	0 m 0 s	
	Insufficient Capacity Action	None / Indication / Warning / Shutdown / Electrical Trip	
	Reactive Load Control Mode	None / var Fixed Export	
	Load Parallel Power	0 % 0 kW	
	Load Power Factor	0.00 PF 0 kvar 0 %	
	Gen Over Zero Seq Volt	Active / Inactive	
	Gen Over Zero Seq Volt	0.0 V	
	Gen Under Pos Seq Volt	Active / Inactive	
	Gen Under Pos Seq Volt	0.0 V	
	Gen Over Neg Seq Volt	Active / Inactive	
	Gen Over Neg Seq Volt	0.0 V	
	Gen Asymmetry High	Active / Inactive	
	Gen Asymmetry High	0.0 V	
	Mains	Under Voltage Trip	0 V
		Over Voltage Trip	0 V
		Under Frequency Trip	0.0 Hz
		Over Frequency Trip	0.0 Hz
		Transient Delay	0.0 s
		CT Primary	0 A
		CT Secondary	0 A
Full kW Rating		0 kW	
Full kvar Rating		0 kvar	
Mains Over Zero Seq Volt		Active / Inactive	
Mains Over Zero Seq Volt	0.0 V		
Mains Under Pos Seq Volt	Active / Inactive		
Mains Under Pos Seq Volt	0.0 V		
Mains Over Neg Seq Volt	Active / Inactive		
Mains Over Neg Seq Volt	0.0 V		
Mains Asymmetry High	Active / Inactive		
Mains Asymmetry High	0.0 V		
Timers	LCD Page Delay	0 h 0 m 0 s	
	LCD 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	

Section	Parameter As Shown On Display	Values
Timers Continued	Engine Smoke Limiting	0 m 0 s
	Engine Smoke Limiting Off	0 m 0 s
	Engine Warming	0 h 0 m 0 s
	Engine Cooling	0 h 0 m 0 s
	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	0.0 s
	Mains Transient Delay	0.0 s
	Mains Transfer Time	0 m 0.0 s
	Mains Over Zero Seq Volt Delay	0.0 s
	Mains Under Pos Seq Volt Delay	0.0 s
	Mains Over Neg Seq Volts Delay	0.0 s
Schedule	Gen Over Zero Seq Volt Delay	0.0 s
	Gen Under Pos Seq Volt Delay	0.0 s
	Gen Over Neg Seq Volts Delay	0.0 s
	Gen Asymmetry High Delay	0.0 s
	Schedule	Active / Inactive
	Schedule Bank 1 Period	Weekly / Monthly,
	Island / Parallel / Off Load / Auto Start Inhibit, Week, Start Time, Run Time and Day. Selection (1 to 8)	Press to begin editing then up or down when selecting the different parameters.
	Schedule Bank 2 Period	Weekly / Monthly,
	Island / Parallel / Off Load / Auto Start Inhibit, Week, Start Time, Run Time and Day. Selection (1 to 8)	Press to begin editing then up or down when selecting the different parameters.

ACCESSING THE 'RUNNING' CONFIGURATION EDITOR

- The 'Running' Configuration Editor is accessible when the engine is running. All protections remain active whilst using the 'Running' Configuration Editor.



- Press and hold the (Tick) button to enter and exit the Running Editor.

'RUNNING' CONFIGURATION EDITOR PARAMETERS

Section	Parameter As Shown On Display	Values
Display	Contrast	0 %
	Language	English, Other
Generator	Commissioning Screens	Active / Inactive
	Override Starting Alarms	Active / Inactive
	Voltage Adjust (Manual Mode Only With Gen Open)	0 L-N / 0 L-L 0 %
	Frequency Adjust (Manual Mode Only With Gen Open)	0.0 Hz 0 %
Mains	Auxiliary Mains Fail Out of Sync Reset	Active / Inactive
	Mains Decoupling Test Mode	Active / Inactive
	Mains Stability Timer	0.0 s
Engine	Auxiliary Mains Fail Sequence Alarms Reset	Active / Inactive
	Governor Gain (CAN Engine Only)	0.0
	Frequency Adjust Offset (CAN Engine Only)	0.0 Hz 0.0 %
	DPF Auto Regen Inhibit (CAN Engine Only)	Active / Inactive
Power Levels	DPF Manual Regen (CAN Engine Only)	Active / Inactive
	Power Control Mode	Constant Power / Frequency-Power / Voltage-Power
	kvar Control Mode	Constant Power Factor / Voltage-Reactive Power / Power-Power Factor / Constant Reactive Power
	Load Parallel Power	0 % 0 kW
	Load Parallel kvar	0 % 0 kvar
Load Parallel PF	0.00 PF	

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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.
Maximum Operating Temperature	• 122 °F (50 °C).