

| Configuration Parameters – Module (Page 1) | | | |
|--|---------------------------------|-------------------|--|
| 101 | Contrast | 0 (%) | |
| 102 | Fast Loading Enabled | On (1), Off (0) | |
| 103 | All Warnings Latched | On (1), Off (0) | |
| 104 | Lamp Test at Startup | On (1), Off (0) | |
| 105 | Power Save Mode Enable | On (1), Off (0) | |
| 106 | Deep Sleep Mode Enable | On (1), Off (0) | |
| 107 | Protected Start Enable | On (1), Off (0) | |
| 108 | Event Log Display Format | On (1), Off (0) | |
| 109 | Power Up Mode | 0 (Power Up Mode) | |
| 110 | DTC String Enable | On (1), Off (0) | |
| 111 | RESERVED | | |
| 112 | Pin Protected Maintenance Reset | On (1), Off (0) | |
| 113 | Stop Button Cooldown | On (1), Off (0) | |
| 114 | Use Module Oil Pressure | On (1), Off (0) | |
| 115 | Use Module Coolant Temp | On (1), Off (0) | |
| 116 | Use Module Engine Hours | On (1), Off (0) | |
| 117 | Use Module RPM | On (1), Off (0) | |
| 118 | Use Module Charge Alt | On (1), Off (0) | |
| 119 | Disable CAN Speed Control | On (1), Off (0) | |
| 120 | CT Position | Gen (0), Load (1) | |
| 121 | Generator Voltage Display | On (1), Off (0) | |
| 122 | Mains Voltage Display | On (1), Off (0) | |
| 123 | Generator Frequency Display | On (1), Off (0) | |
| 124 | Mains Frequency Display | On (1), Off (0) | |
| 125 | Current Display | On (1), Off (0) | |
| 126 | kW Display | On (1), Off (0) | |
| 127 | kvar Display | On (1), Off (0) | |
| 128 | kVA Display | On (1), Off (0) | |
| 129 | pF Display | On (1), Off (0) | |
| 130 | kWh Display | On (1), Off (0) | |
| 131 | kvarh Display | On (1), Off (0) | |
| 132 | kVAh Display | On (1), Off (0) | |
| 133 | RESERVED | | |
| 134 | Show Load Switching Icons | On (1), Off (0) | |
| 135 | Backlight Inactivity Timer | On (1), Off (0) | |
| 136 | ECU Periodic Wake Up | On (1), Off (0) | |
| 137 | Coolant Temp Persistence | On (1), Off (0) | |
| 138 | Limit Audible Alarm Duration | On (1), Off (0) | |
| 139 | Transducer Power Supply | On (1), Off (0) | |
| 140 | English Text Mode | On (1), Off (0) | |

| Configuration Parameters – CAN Application (Page 2) | | | |
|---|------------------------------|-----------------|---------------------------------|
| 201 | CAN Alternative Engine Speed | On (1), Off (0) | 0 (Action) |
| 202 | CAN ECU Data Fail Arming | 0 (Arming) | 204 CAN ECU Data Fail Delay 0 s |

| 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 | |

| 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 | Mains Transient Delay | 513 ETS Solenoid Hold | 525 Page Delay |
| 502 | Start Delay | 514 Failed to Stop Delay | 526 Cooling Time at Idle |
| 503 | Preheat Timer | 515 Generator Transient Delay | 527 Backlight Power Save Delay |
| 504 | Crank Time | 516 Transfer Delay | 528 Audible Alarm Timer |
| 505 | Crank Rest Time | 517 Breaker Trip Pulse | 529 Fuel Pull in Coil Duration |
| 506 | Smoke Limiting | 518 Breaker Close Pulse | 530 ECU Override Time |
| 507 | Smoke Limiting Off | 519 Delayed Load Output 1 | 531 ECU Periodic Wakeup Period |
| 508 | DPF Ramp | 520 Delayed Load Output 2 | 532 Post-Heat Timer |
| 509 | Safety On Delay | 521 Delayed Load Output 3 | 533 Delay Crank Timer |
| 510 | Warm Up Time | 522 Delayed Load Output 4 | 534 Max Star Pause Timer |
| 511 | Return Delay | 523 Power Save Mode Delay | |
| 512 | Cooling Time | 524 Deep Sleep Mode Delay | |

| Digital Input Polarity | | | | Output Polarity | | Alarm Action | |
|------------------------|-------------------|-------|-----------|-----------------|-----------------|--------------|--------|
| Index | Polarity | Index | Polarity | Index | Action | Index | Action |
| 0 | Close to Activate | 0 | Enable | 0 | Electrical Trip | | |
| 1 | Open to Activate | 1 | De-Enable | 1 | Shutdown | | |
| | | | | 2 | Warning | | |

| AC System | | Digital Input Alarm Arming | | Power Up Mode | |
|-----------|------------------------|----------------------------|----------------|---------------|--------|
| Index | Type | Index | Arming | Index | Mode |
| 0 | 2 Phase 3 Wire (L1-L3) | 0 | Always | 0 | Stop |
| 1 | 2 Phase 3 Wire (L1-L2) | 1 | From Safety On | 1 | Manual |
| 2 | 3 Phase 3 Wire | 2 | From Starting | 2 | Auto |
| 3 | 3 Phase 4 Wire | 3 | Never | | |
| 4 | 3 Phase 4 Wire (Delta) | | | | |
| 5 | Single Phase 2 Wire | | | | |

Functionality in DSE4510 MKII & DSE4520 MKII
Functionality in DSE4520 MKII only.

| Configuration Parameters – Generator (Page 6) | | | |
|---|-----------------------------------|-----------------|--|
| 601 | Alternator Fitted | On (1), Off (0) | |
| 602 | Alternator Poles | 0 | |
| 603 | Under Voltage Shutdown Enable | On (1), Off (0) | |
| 604 | Under Voltage Trip Shutdown | 0 V | |
| 605 | Under Voltage Warning Enable | On (1), Off (0) | |
| 606 | Under Voltage Warning Trip | 0 V | |
| 607 | RESERVED | | |
| 608 | Loading Voltage | 0 V | |
| 609 | Over Voltage Warning Enable | On (1), Off (0) | |
| 610 | Over Voltage Warning Return | 0 V | |
| 611 | Over Voltage Warning Trip | 0 V | |
| 612 | Over Voltage Shutdown Trip | 0 V | |
| 613 | Under Frequency Shutdown Enable | On (1), Off (0) | |
| 614 | Under Frequency Shutdown Trip | 0.0 Hz | |
| 615 | Under Frequency Warning Enable | On (1), Off (0) | |
| 616 | Under Frequency Warning Trip | 0.0 Hz | |
| 617 | RESERVED | | |
| 618 | Loading Frequency | 0.0 Hz | |
| 619 | Nominal Frequency | 0.0 Hz | |
| 620 | Over Frequency Warning Enable | On (1), Off (0) | |
| 621 | Over Frequency Warning Return | 0.0 Hz | |
| 622 | Over Frequency Warning Trip | 0.0 Hz | |
| 623 | Over Frequency Shutdown Enable | On (1), Off (0) | |
| 624 | Over Frequency Shutdown Trip | 0.0 Hz | |
| 625 | Generator AC System | 0 (AC System) | |
| 626 | CT Primary | 0 A | |
| 627 | CT Secondary | 1 A, 5 A | |
| 628 | Full Load Rating | 0 A | |
| 629 | Immediate Over Current Enable | On (1), Off (0) | |
| 630 | Delayed Over Current Alarm Enable | On (1), Off (0) | |
| 631 | Delayed Over Current Alarm Action | 0 (Action) | |
| 632 | Over Current Delay Time | 0 s | |
| 633 | Over Current Trip | 0 % | |
| 634 | kW Rating | 0 kW | |
| 635 | Over kW Protection Enable | On (1), Off (0) | |
| 636 | Over kW Protection Action | 0 (Action) | |
| 637 | Over kW Protection Trip | 0 % | |
| 638 | Over kW Protection Trip Delay | 0 s | |
| 639 | Enable CT Support | On (1), Off (0) | |
| 640 | Over kW Protection Return | 0 % | |
| 641 | Nominal Voltage | 0 V | |

| Configuration Parameters – Mains (Page 7) | | | |
|---|-------------------------|-----------------|--|
| 701 | Mains AC System | 0 (AC System) | |
| 702 | Mains Failure Detection | On (1), Off (0) | |
| 703 | Immediate Mains Dropout | On (1), Off (0) | |
| 704 | Under Voltage Enable | On (1), Off (0) | |
| 705 | Under Voltage Level | 0 V | |
| 706 | Under Voltage Return | 0 V | |
| 707 | Over Voltage Enable | On (1), Off (0) | |
| 708 | Over Voltage Return | 0 V | |
| 709 | Over Voltage Level Trip | 0 V | |
| 710 | Under Frequency Enable | On (1), Off (0) | |
| 711 | Under Frequency Trip | 0.0 Hz | |
| 712 | Under Frequency Return | 0.0 Hz | |
| 713 | Over Frequency Enable | On (1), Off (0) | |
| 714 | Over Frequency Return | 0.0 Hz | |
| 715 | Over Frequency Trip | 0.0 Hz | |

| Configuration Parameters – Engine (Page 8) | | | |
|--|--|-----------------|---|
| 801 | Start Attempts | 0 | 832 Start on Low Battery Engine Run Duration 0 s |
| 802 | Over Speed Overshoot | 0 % | 833 RESERVED |
| 803 | Over Speed Delay | 0 s | 834 RESERVED |
| 804 | Gas Choke Timer (Gas Engine Only) | 0 s | 835 J1939-75 Instruments Enable On (1), Off (0) |
| 805 | Gas On Delay (Gas Engine Only) | 0 s | 836 J1939-75 Alarms Enable On (1), Off (0) |
| 806 | Gas Ignition Off Delay (Gas Engine Only) | 0 s | 837 Engine CAN Source Address 0 |
| 807 | Crank Disconnect On Oil Pressure Enable | On (1), Off (0) | 838 Instrumentation CAN Source Address 0 |
| 808 | Check Oil Pressure Prior to Starting | On (1), Off (0) | 839 RESERVED |
| 809 | Crank Disconnect On Oil | 0.00 Bar | 840 Tier 4 Home Screen Enable On (1), Off (0) |
| 810 | Crank Disconnect On Frequency | 0.0 Hz | 841 Start Pause Time 0 s |
| 811 | Crank Disconnect On Engine Speed | 0 RPM | 842 Preheat Enable On (1), Off (0) |
| 812 | Under Speed Enable | On (1), Off (0) | 843 Preheat Temperature 0 °C |
| 813 | Under Speed Trip | 0 RPM | 844 Post-heat Enabled On (1), Off (0) |
| 814 | Over Speed Trip | 0 RPM | 845 Post-heat Temperature 0 °C |
| 815 | Low Battery Voltage Enable | On (1), Off (0) | 846 Coolant Heater Enabled On (1), Off (0) |
| 816 | Low Battery Voltage Warning | 0.0 V | 847 Coolant Heater On Temp 0 °C |
| 817 | Low Battery Voltage Return | 0.0 V | 848 Coolant Heater Off Temp 0 °C |
| 818 | Low Battery Voltage Delay | 0:00:00 | 849 Coolant Cooler Enabled On (1), Off (0) |
| 819 | High Battery Voltage Enable | On (1), Off (0) | 850 Coolant Cooler On Temp 0 °C |
| 820 | High Battery Voltage Return | 0.0 V | 851 Coolant Cooler Off Temp 0 °C |
| 821 | High Battery Voltage Warning | 0.0 V | 852 RESERVED |
| 822 | High Battery Voltage Warning Delay | 0 s | 853 Tank Bund Level High Alarm 0 (Action) |
| 823 | Charge Alt Shutdown Enable | On (1), Off (0) | 854 Fan Speed Low Arming 0 (Arming) |
| 824 | Charge Alt Shutdown Trip | 0.0 V | 855 Fan Speed Low Action 0 (Action) |
| 825 | Charge Alt Shutdown Delay | 0 s | 856 Fan Speed Low Delay 0 s |
| 826 | Charge Alt Warning Enable | On (1), Off (0) | 857 Fuel Low Switch Arming 0 (Arming) |
| 827 | Charge Alt Warning Trip | 0.0 V | 858 Fuel Low Switch Action 0 (Action) |
| 828 | Charge Alt Warning Delay | 0 s | 859 Fuel Low Switch Activation Delay 0 s |
| 829 | Start on Low Battery Enable | On (1), Off (0) | 860 Crank Disconnect on Charge Alt Enable On (1), Off (0) |
| 830 | Start on Low Battery Threshold | 0.0 V | 861 Crank Disconnect on Charge Alt Voltage 0.0 V |
| 831 | Start on Low Battery Start Delay | 0 s | |

| Configuration Parameters – Analogue Inputs (Page 9) | | | |
|---|---------------------------------------|---|--|
| 901-902 | RESERVED | | |
| 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) | |
| 906-907 | RESERVED | | |
| 908 | High Engine Temperature Trip | 0.00 °C | |
| 909 | Temperature Sensor Open Circuit | On (1), Off (0) | |
| 910-929 | RESERVED | | |
| 930 | Fuel Sensor C Low Alarm Action | Shutdown (2), Electrical Trip (1), Disabled (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 | Shutdown (2), Electrical Trip (1), Disabled (0) | |
| 943 | Fuel Sensor C High Alarm Trip | 0 % | |
| 944 | Fuel Sensor C High Alarm Delay | 0 s | |
| 945-967 | RESERVED | | |
| 968 | Fuel Usage Alarm (Run) Arming | On (1), Off (0) | |
| 969 | Fuel Usage Alarm (Run) Action | 0 (Action) | |
| 970 | Fuel Usage Alarm (Run) Trip | 0 % | |
| 971 | Fuel Usage Alarm (Run) Return | 0 % | |
| 972 | Fuel Usage Alarm (Stopped) Arming | 0 (Arming) | |
| 973 | Fuel Usage Alarm (Stopped) Action | 0 (Action) | |
| 974 | Fuel Usage Alarm (Stopped) Trip | 0 % | |
| 975 | Fuel Usage Alarm (Stopped) Return | 0 % | |
| 976 | Low Coolant Level Arming | 0 (Arming) | |
| 977 | Low Coolant Level Action | 0 (Action) | |
| 978 | Low Coolant Level Trip | 0 % | |
| 979 | Low Coolant Level Return | 0 % | |
| 980 | Low Coolant Level Delay | 00:00:00 | |
| 981 | Low Coolant Level Open Circuit Arming | On (1), Off (0) | |
| 982 | Low Coolant Level Switch Arming | 0 (Arming) | |
| 983 | Low Coolant Level Switch Action | 0 (Action) | |
| 984 | Low Coolant Level Switch Delay | 00:00:00 | |
| 985 | High Engine Temp Pre-Alarm Enable | On (1), Off (0) | |
| 986 | High Engine Temp Pre-Alarm Return | 0.00 °C | |
| 987 | High Engine Temp Pre-Alarm Trip | 0.00 °C | |

| Configuration Parameters – Scheduler (Page 10) | | | |
|--|-----------------------------|-------------------------|--|
| 1001 | Enable Scheduler | On (1), Off (0) | |
| 1002 | Schedule Run On or Off Load | On (1), Off (0) | |
| 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 | 0 (Action) | 1207 Fuel Maintenance Alarm Enable On (1), Off (0) |
| 1203 | Oil Maintenance Alarm Engine Hours | 0 h | 1208 Fuel Maintenance Alarm Action 0 (Action) |
| 1204 | Air Maintenance Alarm Enable | On (1), Off (0) | 1209 Fuel Maintenance Alarm Engine Hours 0 h |
| 1205 | Air Maintenance Alarm Action | 0 (Action) | |

| Configuration Parameters – Alternate Configuration 1 (Page 20) | |
|--|--|
| 2001-2057 | Refer to the DSE Publication 057-260 DSE4510 MKII & DSE4520MKII Operators Manual for configuration parameters. |

| Configuration Parameters – Alternate Configuration 2 (Page 30) | |
|--|--|
| 3002-3057 | Refer to the DSE Publication 057-260 DSE4510 MKII & DSE4520MKII Operators Manual for configuration parameters. |

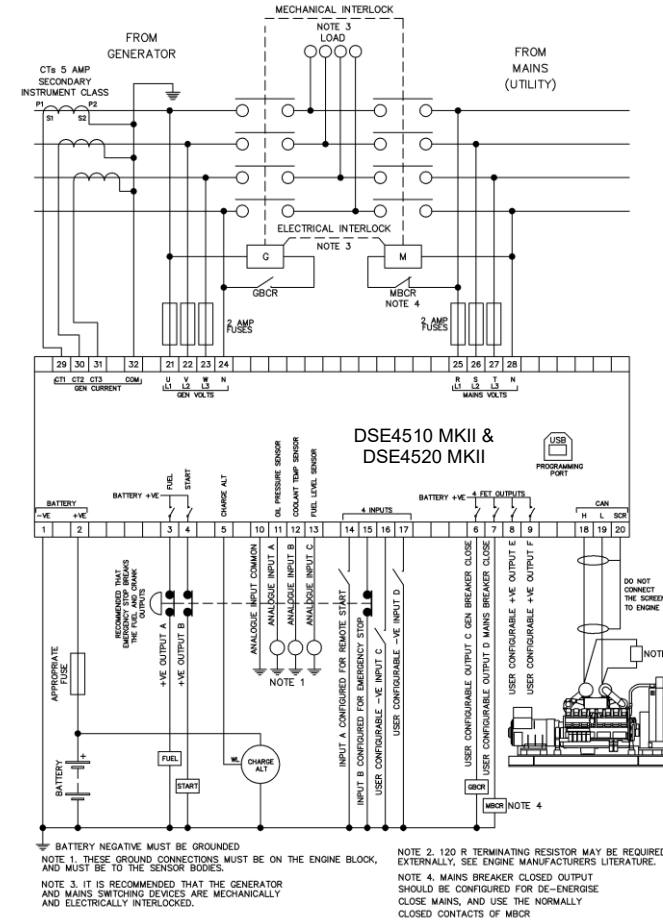
| Configuration Parameters – Alternate Configuration 3 (Page 40) | |
|--|--|
| 4002-4057 | Refer to the DSE Publication 057-260 DSE4510 MKII & DSE4520MKII Operators Manual for configuration parameters. |

| Input Sources | | | |
|---------------|------------------------------|-------|-----------------------------|
| 0 | User Configured | 17 | Mains Load Inhibit |
| 1 | Remote Start on Load | 18 | RESERVED |
| 2 | RESERVED | 19 | External Panel Lock |
| 3 | Auto Start Inhibit | 20 | Auxiliary Mains Fail |
| 4 | Lamp Test | 21 | Oil Pressure Switch |
| 5 | Alarm Mute | 22 | Coolant Temperature Switch |
| 6 | Alarm Reset | 23 | RESERVED |
| 7 | RESERVED | 24 | Simulate Mains Available |
| 8 | Simulate Start Button | 25 | Remote Start Off Load |
| 9 | Simulate Stop Button | 26-30 | RESERVED |
| 10 | RESERVED | 31 | Auto Restore Inhibit |
| 11 | Simulate Auto Button | 32 | RESERVED |
| 12 | RESERVED | 33 | Low Fuel Level Switch |
| 13 | Close Generator Open Mains | 34 | Smoke Limiting |
| 14 | Generator Load Inhibit | 35-38 | RESERVED |
| 15 | RESERVED | 39 | Main Configuration |
| 16 | Close Mains Open Generator | 40 | Alternative Configuration 1 |
| 41 | Alternative Configuration 2 | 42 | Alternative Configuration 3 |
| 43 | Emergency Stop | 44 | RESERVED |
| 45 | Maintenance Reset Oil | 46 | Maintenance Reset Air |
| 47 | Maintenance Reset Fuel | 48 | RESERVED |
| 49 | RESERVED | 50 | DPF Auto Regen Inhibit |
| 51 | DPF Force Regeneration | 52 | DPF Regeneration Interlock |
| 53 | Water in Fuel | 54 | Fuel Bund Level High |
| 55 | Fan Speed Low | 56 | Low Coolant Level Switch |
| 57 | Wait To Start | | |

| Output Sources | | | |
|----------------|----------------------------------|-----|-----------------------------------|
| 0 | Not Used | 46 | Mains Low Frequency |
| 1 | Air Flap Relay | 47 | Mains Low Voltage |
| 2 | Audible Alarm | 48 | Oil Pressure Sensor Open Circuit |
| 3 | Battery High Volts Warning | 49 | Open Generator Output |
| 4 | Battery Low Volts Warning | 50 | Open Generator Output Pulse |
| 5 | CAN ECU Data Fail | 51 | Open Mains Output |
| 6 | ECU (ECM) Warning | 52 | Open Mains Output Pulse |
| 7 | ECU (ECM) Shutdown | 53 | Over Frequency Shutdown |
| 8 | CAN ECU Power | 54 | Over Speed Shutdown |
| 9 | CAN ECU Stop | 55 | Preheat During Preheat Timer |
| 10 | Charge Alternator Shutdown | 56 | Preheat Until End of Crank |
| 11 | Charge Alternator Warning | 57 | Preheat Until End of Safety Timer |
| 12 | Close Generator Output | 58 | Preheat Until End of Warming |
| 13 | Close Generator Output Pulse | 59 | Smoke Limiting |
| 14 | Close Mains Output | 60 | Start Relay |
| 15 | Close Mains Output Pulse | 61 | Temperature Sensor Open Circuit |
| 16 | Combined Mains Failure | 62 | Under Frequency Shutdown |
| 17 | Common Alarm | 63 | Under Speed Shutdown |
| 18 | Common Electrical Trip | 64 | Waiting for Manual Restore |
| 19 | Common Shutdown | 65 | Flexible Sensor C High Alarm |
| 20 | Common Warning | 66 | Flexible Sensor C High Pre-Alarm |
| 21 | Cooling Down | 67 | Flexible Sensor C Low Pre-Alarm |
| 22 | Digital Input A | 68 | Flexible Sensor C Low Alarm |
| 23 | Digital Input B | 69 | RESERVED |
| 24 | Digital Input C | 70 | RESERVED |
| 25 | Digital Input D | 71 | RESERVED |
| 26 | RESERVED | 72 | RESERVED |
| 27 | RESERVED | 73 | Fuel Sensor High Alarm |
| 28 | RESERVED | 74 | Fuel Sensor High Pre-Alarm |
| 29 | Emergency Stop | 75 | Fuel Sensor Low Pre-Alarm |
| 30 | Enginse to Stop | 76 | Fuel Sensor Low Alarm |
| 31 | Fail to Start | 77 | Delayed Load Output 1 |
| 32 | Fail to Stop | 78 | Delayed Load Output 2 |
| 33 | Fuel Relay | 79 | Delayed Load Output 3 |
| 34 | Gas Choke On | 80 | Delayed Load Output 4 |
| 35 | Gas Ignition | 81 | Air Filter Maintenance |
| 36 | Generator Available | 82 | Oil Filter Maintenance |
| 37 | Generator High Voltage Alarm | 83 | Fuel Filter Maintenance |
| 38 | Generator Low Voltage Alarm | 84 | System in Stop Mode |
| 39 | kW Overload Alarm | 85 | System in Auto Mode |
| 40 | Over Current Immediate Warning | 86 | System in Manual Mode |
| 41 | Delayed Over Current Alarm | 87 | RESERVED |
| 42 | High Coolant Temp Shutdown | 88 | Analogue Input A (Digital) |
| 43 | Low Oil Pressure Shutdown | 89 | Analogue Input B (Digital) |
| 44 | Mains High Frequency | 90 | Analogue Input C (Digital) |
| 45 | Mains High Voltage | 91 | RESERVED |
| 92 | RESERVED | 93 | RESERVED |
| 94 | RESERVED | 95 | Over Speed Overshoot Alarm |
| 96 | Over Frequency Overshoot Alarm | 97 | Display Heater Filled and Active |
| 98 | RESERVED | 99 | SCR Inducement |
| 100 | DEF Level Low | 101 | DPF Auto Regeneration Inhibit |
| 102 | DPF Forced Regeneration | 103 | DPF None Mission State |
| 104 | DPF Regeneration in Progress | 105 | DPF Regen Interlock Active |
| 106 | DPTC Filter | 107 | HEST Active |
| 108 | Water in Fuel | 109 | Fuel Pull in Coil |
| 110 | Generator at Rest | 111 | Fuel Tank Bund Level High |
| 112 | ECU Preheat | 113 | Water Heater |
| 114 | Water Cooler | 115 | Closed to Gen |
| 116 | Closed to Mains | 117 | Generator Under Frequency Warning |
| 118 | Generator Over Frequency Warning | 119 | Generator Low Voltage Warning |
| 120 | Generator High Voltage Warning | 121 | Main Config Selected |
| 122 | Alt Config 1 Selected | 123 | Alt Config 2 Selected |
| 124 | Alt Config 3 Selected | 125 | Flexible Sensor A High Alarm |
| 126 | Flexible Sensor A High Pre-Alarm | 127 | Flexible Sensor A Low Alarm |
| 128 | Flexible Sensor A Low Pre-Alarm | 129 | Flexible Sensor A Open Circuit |
| 130 | Fan Speed Low | 131 | Fuel Usage Alarm |
| 132 | Low Coolant Level | 133 | Low Coolant Level Open Circuit |
| 134 | Waiting To Start | 135 | High Coolant Temp Pre-Alarm |

Functionality in DSE4510 MKII & DSE4520 MKII
 Functionality in DSE4520 MKII only

TYPICAL WIRING DIAGRAM



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)

NOTE: A larger version of the typical wiring diagram is included in the product's operator manual. Refer to DSE Publication: **057-260 DSE4510 MKII & DSE4520 MKII Operator Manual**

NOTE: Terminals 25, 26, 27 & 28 are not fitted to the DSE4510 MKII

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 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 use in type 1 Enclosure Type rating with surrounding air temperature -22 °F to +158 °F (-30 °C to +70 °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 install in an unventilated or filtered ventilation enclosure to maintain a pollution degree 2 environment. |
| Operating Temperature | • -22 °F to +158 °F (-30 °C to +70 °C) |
| Storage Temperature | • -40 °F to +176 °F (-40 °C to +80 °C) |

DSE
DEEP SEA ELECTRONICS
DSE4510 MKII & DSE4520 MKII Installation Instructions
 Applicable to module version 3.0.0 and upwards.

EDITING A PARAMETER

- Press the **Stop/Reset Mode** (O (-)) and **Auto Mode** (AUTO (✓)) buttons together to enter the editor mode.
- Press the **Up** (↑) or **Down** (↓) navigation buttons to cycle through the front panel editor in increments of 100.
- Press the **Manual/Start Mode** (I (+)) or **Stop/Reset Mode** (O (-)) buttons to cycle through the front panel editor in increments of 1.
- When viewing the parameter to be edited, press the **Auto Mode** (AUTO (✓)) button and the value begins to flash.
- Press the **Manual/Start Mode** (I (+)) or **Stop/Reset Mode** (O (-)) navigation buttons to adjust the value to the required setting.
- Press the **Auto Mode** (AUTO (✓)) button to save the current value, the value ceases flashing.
- Press and hold the **Auto Mode** (AUTO (✓)) button to save and exit the editor, the configuration icon (⚙) is removed from the display.

NOTE: Pressing and holding the **Manual/Start Mode** (I (+)) or **Stop/Reset Mode** (O (-)) 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: **057-258 DSE4510 MKII & DSE4520 MKII Configuration Suite PC Software Manual**.

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| <p>Deep Sea Electronics Ltd Tel: +44 (0)1723 890099 Email: sales@deepseaelectronics.com Web: www.deepseaelectronics.com</p> | <p>Deep Sea Electronics Inc Tel: +1 (815) 316-8706 Fax: +1 (815) 316-8708 Email: USAsales@deepseaelectronics.com Web: www.deepseaelectronics.com</p> |
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