



DEEP SEA ELECTRONICS

DSE2610 Configuration Suite

PC Software Manual

Document Number: 057-347

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DSE2610 Configuration Suite PC Software Manual

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Amendments Since Last Publication

Issue	Comments
1	Initial release

Typeface: The typeface used in this document is *Arial*. Care must be taken not to mistake the upper case letter I with the numeral 1. The numeral 1 has a top serif to avoid this confusion.

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1 INTRODUCTION

This document details the DSE2610 software configuration using DSE Configuration Suite PC Software. The DSE2610 remote display modules are converted from the DSE7410 MKII controller using a Firmware Update, for more details check the DSE Publication: **057-346 DSE2610 Operators Manual**.

The *DSE Configuration Suite PC Software* allows the DSE2610 module to be connected to a PC via USB A – USB B cable. Once connected the various operating parameters within the module are viewed or edited as required by the engineer. This software allows easy controlled access to these values.

The DSE Configuration Suite PC Software must only be used by competent, qualified personnel, as changes to the operation of the module may have safety implications on the panel / generating set to which it is fitted. Access to critical operational sequences and settings for use by qualified engineers, may be barred by a security code set by the generator provider.

The information contained in this manual must be read in conjunction with the information contained in the appropriate module documentation. This manual only details which settings are available and how they may be used. A separate manual deals with the operation of the individual module (See section entitled *Bibliography* elsewhere in this document).

1.1 CLARIFICATION OF NOTATION

This document refers to and is referred to by the following DSE publications which are obtained from the DSE website www.deepseaelectronics.com

1.1.1 INSTALLATION INSTRUCTIONS




DSE PART	DESCRIPTION
053-264	DSE2610 installation instructions sheet
053-191	DSE7410 MKII & DSE7420 MKII installation instructions sheet
053-182	DSE8610 MKII Installation Instructions

1.1.2 MANUALS

DSE PART	DESCRIPTION
057-151	DSE Configuration Suite PC Software Installation & Operation Manual
057-347	DSE2610 Operator Manual
057-263	DSE7410 MKII & DSE7420 MKII Operator Manual
057-262	DSE7410 MKII & DSE7420 MKII Software Manual
057-238	DSE8610 MKII Configuration Suite PC Software Manual
057-254	DSE8610 MKII Operators Manual

1.1.3 CLARIFICATION OF NOTATION

Clarification of notation used within this publication.

	NOTE:	Highlights an essential element of a procedure to ensure correctness.
	CAUTION!	Indicates a procedure or practice, which, if not strictly observed, could result in damage or destruction of equipment.
	WARNING!	Indicates a procedure or practice, which could result in injury to personnel or loss of life if not followed correctly.

1.1.4 GLOSSARY OF TERMS

Term	Description
DSE2610	DSE2610 module/controller converted from the DSE7410 MKII
DSE7xxx MKII	All modules in the DSE7xxx MKII range.
DSE7400 MKII, DSE74xx MKII	All modules in the DSE74xx MKII range.
DSE7410 MKII	DSE7410 MKII module/controller
DSE8610 MKII	DSE8610 MKII module/controller

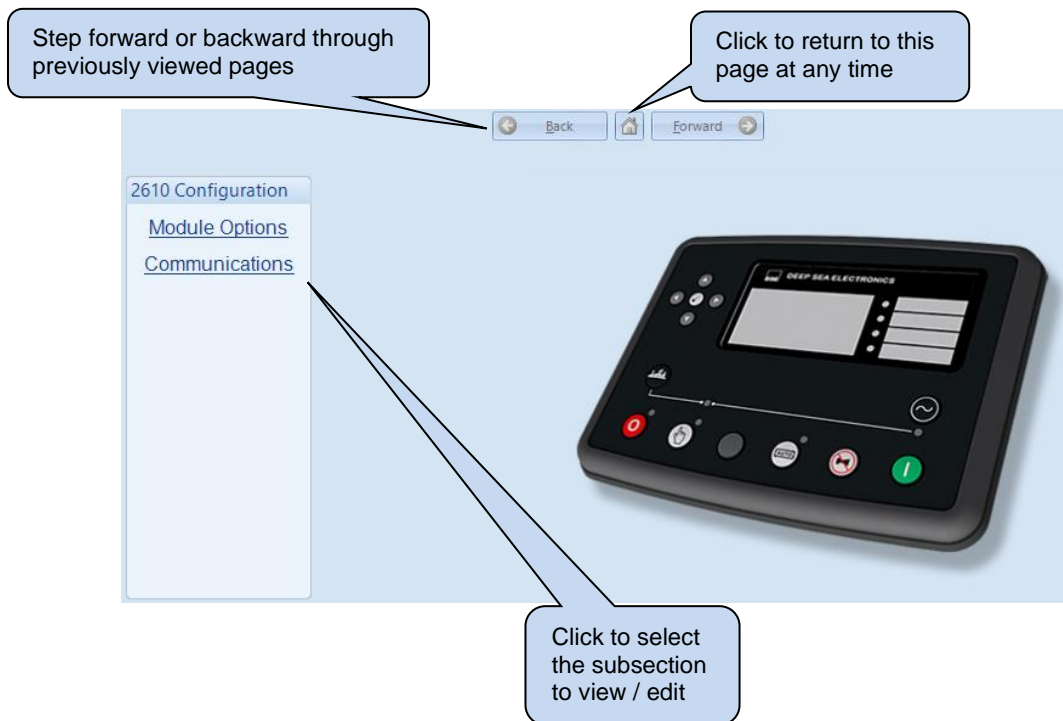
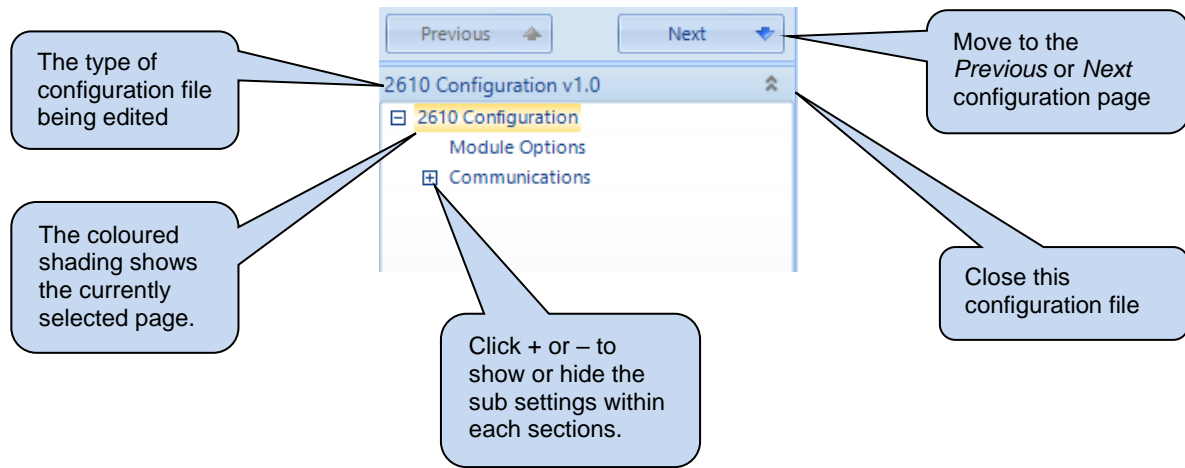
1.2 INSTALLATION AND USING THE DSE CONFIGURATION SUITE SOFTWARE

For information in regards to instating and using the DSE Configuration Suite Software please refer to DSE publication: **057-151 DSE Configuration Suite PC Software Installation & Operation Manual** which is found on our website: www.deepseaelectronics.com

2 EDITING THE CONFIGURATION

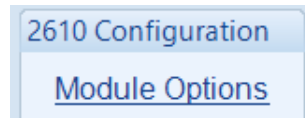
This menu allows module configuration, to change the Slave ID, enabling ports, system timers and options to suit a particular application.

2.1 SCREEN LAYOUT



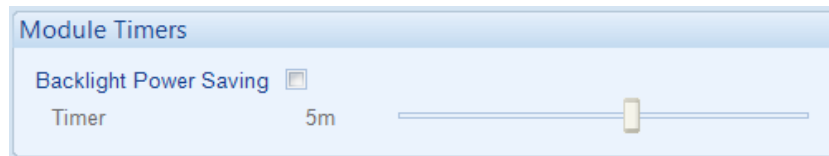
2.2 MODULE OPTIONS

Select this option to configure the options.



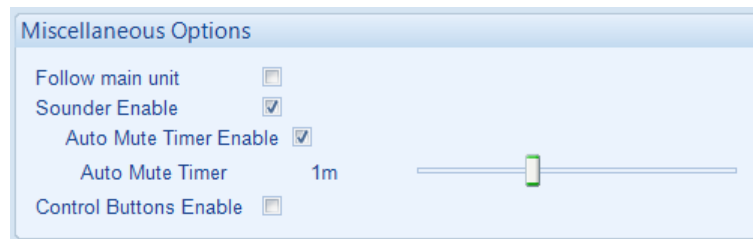
2.2.1 MODULE TIMERS

NOTE: *Sleep Mode* is disabled on the DSE8610 MKII when the DSE2610 remote display module is connected to the DSE8610 MKII controller. For more information refer to the DSE Publication: *057-238 DSE8610 MKII Operators Manual*



Parameter	Description
Backlight Power Saving	<input type="checkbox"/> = Normal operation <input checked="" type="checkbox"/> = If the module is left unattended for the duration of the <i>Backlight Power Saving Timer</i> , the LCD backlight turns off.

2.2.2 MISCELLANEOUS OPTIONS



Parameter	Description
Follow Main Unit	<input type="checkbox"/> = If any control button is pressed, the host module does not respond. <input checked="" type="checkbox"/> = If any control button (Stop, Manual, Auto, Mute / Lamp Test, Start) is pressed and Control Buttons are enabled, the host module follows the DSE2610 module.
Sounder Enable	<input type="checkbox"/> = Disable the DSE2610 module's internal sounder <input checked="" type="checkbox"/> = Enable the DSE2610 module's internal sounder.
Auto Mute Timer Enable	<input type="checkbox"/> = <i>Auto Mute</i> is disabled. <input checked="" type="checkbox"/> = The internal sounder activates for the duration of the <i>Auto Mute Timer</i> after which it automatically stops. Pressing the <i>MUTE</i> button during the timer also silences the sounder.
Control Buttons Enable	<input type="checkbox"/> = The display is for instrumentation only – the mode change buttons are disabled. <input checked="" type="checkbox"/> = The display acts as a complete mimic/control of the host module.

2.2.3 DIGITAL INPUTS

Digital Inputs		
	Function	Polarity
Digital Input A	Remote Panel Lock 2610	Close to Activate
Digital Input B	Not Used	Close to Activate

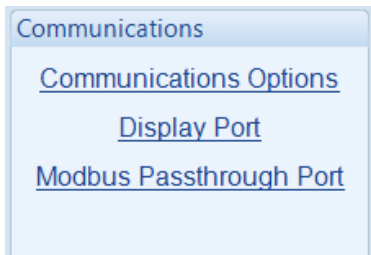
Parameter	Description
Function	Select the input function to activate when the relevant terminal is energised. See section entitled <i>Input Functions</i> for details of all available functions
Polarity	Select the digital input polarity: Close to Activate: the input function is activated when the relevant terminal is connected. Open to Activate: the input function is activated when the relevant terminal is disconnected.

2.2.3.1 INPUT FUNCTIONS

Function	Description
Not Used	No action by activating the input.
Remote Panel Lock 2610	The DSE2610 module is locked, control is not possible through the DSE2610 module, but the DSE8610 MKII module is not locked.
Remote Panel Lock 8610 MKII	The DSE8610 MKII module is locked, control is not possible through the DSE8610 MKII module, but the DSE2610 module is not locked and the operator can control from the DSE2610 remote display module.
Remote Panel Lock 8610 MKII And 2610	Both the DSE8610 MKII and DSE2610 modules are locked.
Remote Stop And Panel Lock	Combined function input that instructs the module to enter <i>STOP</i> mode and also perform the <i>Panel Lock</i> function. Once the input is active, the module does not respond to operation of the mode select or start buttons. The operator is still able to view the various instrumentation pages etc. (<i>Front panel configuration access is still possible while the system lock is active</i>).

2.3 COMMUNICATIONS

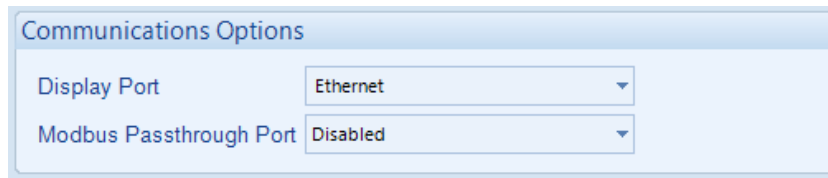
The *Communications* section is subdivided into smaller sections. Select the required section with the mouse.



2.3.1 COMMUNICATIONS OPTIONS

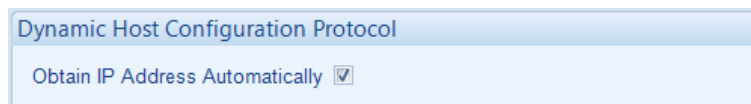
NOTE: When using the *Ethernet Display Port* option consult the network administrator of the host network before changing the network settings. Incorrect settings cause network errors in the existing local area network. These settings must only be changed by qualified network administrators.

Dynamic Host Configuration Protocol



Parameter	Description
Display Port	RS232: The DSE2610 module is connected to the host controller through the RS232 port for remote display. Ethernet: The DSE2610 module is connected to the host controller through the Ethernet port for remote display.
Modbus Passthrough Port	Used to pass Modbus Requests from a Modbus Master to the connected host controller through the DSE2610 Remote Display. Disabled: MODBUS communication with the host controller through the Remote Display is disabled. Enabled: The DSE2610 module allows MODBUS communication with its host controller through the DSE2610's RS485 or RS232 port.

Dynamic Host Configuration Protocol



Parameter	Description
Obtain IP Address Automatically	<input type="checkbox"/> = The Dynamic Host Configuration Protocol (DHCP) is disable and the unit has a fixed IP address as configured in the <i>IP Address</i> section. <input checked="" type="checkbox"/> = The Dynamic Host Configuration Protocol (DHCP) is enable and the unit automatically attains an IP address from the network it is connected to if it has DHCP enabled.

Names

Names	
Domain Name	DSE Module
Host Name	Company
Vendor Name	Deep Sea Electronics

Parameter	Description
Domain Name	The hostname of the device which is used for DHCP requests and acknowledgements. Consult the network IT manager for suitable naming
Host Name	Additional description string for DHCP
Vendor Name	Additional description string for DHCP

IP Address

IP Addresses				
IP address	0	0	0	0
Subnet Mask	255	255	255	0
Gateway Address	0	0	0	0
DNS Address	0	0	0	0

Parameter	Description
IP Address	The static IP address of the module.
Subnet Mask	The subnet mask is to determine whether the module is on the local subnet or on a remote network.
Gateway Address	IP address of the internet router that module is connected to.
DNS Address	IP address of the Domain Name Service (DNS). Usually this is the same as the module's IP address.

2.3.1.1 FIREWALL CONFIGURATION FOR INTERNET ACCESS

As modem/routers differ enormously in their configuration, it is not possible for DSE to give a complete guide to their use with the DSE module. However it is possible to give a description of the requirements in generic terms. For details of how to achieve the connection to your modem/router you are referred to the supplier of your modem/router equipment.

The DSE module makes its data available to a configurable TCP port number. You must configure your modem/router to allow inbound traffic on this port. For more information you are referred to your WAN interface device (modem/router) manufacturer.

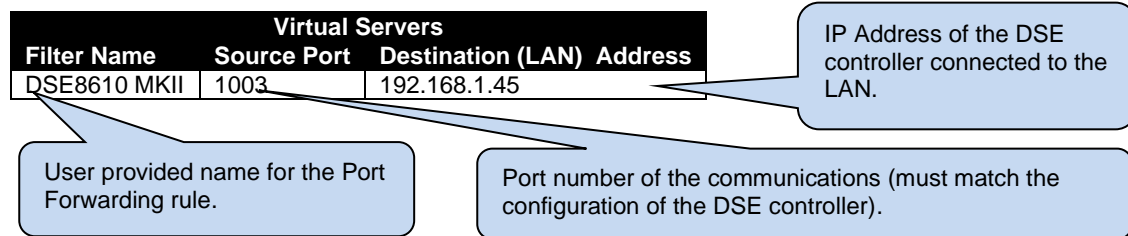
2.3.1.2 INCOMING TRAFFIC (VIRTUAL SERVER)

Network Address and Port Translation (NAPT) allows a single device, such as the modem/router gateway, to act as an agent between the Internet (or "public external network") and a local (or "internal private") network. This means that only a single, unique IP address is required to represent an entire group of computers.

For our DSE module application, this means that the WAN IP address of the modem/router is the IP address we need to access the site from an external (internet) location.

When requests reach the modem/router, we want this passed to a 'virtual server' for handling, in our case this is the DSE module.

Example:



Result : Traffic arriving from the WAN (internet) on port 1003 is automatically sent to IP address 192.168.1.45 on the LAN (DSE module) for handling.

2.3.2 DISPLAY PORT

Serial Port Configuration

 **NOTE:** This section is only available when *Display Port* is selected as *RS232*.

Display Port

Serial Port Configuration

Slave ID

Baud Rate

Parameter	Description
Slave ID	The Slave ID of the DSE2610's RS232 port used for the remote display.
Baud Rate	The remote display Baud Rate is fixed to 115200 cannot be changed.

TCP/IP Port Configuration

 **NOTE:** This section is only available when *Display Port* is selected as *Ethernet*.


TCP/IP Port Configuration

IP Address of Host Controller . . .

Ethernet Port

Parameter	Description
IP Address of Host Controller	The IP address of the DSE8610 MKII module.
Ethernet Port	The MODBUS port number of the DSE8610 MKII module.

2.3.3 MODBUS PASSTHROUGH PORT

 **NOTE:** *Modbus Passthrough Port* is disabled when the *Display Port* is configured as *Disabled*.

Modbus Passthrough Port



Basic

Slave ID

Baud Rate

Modbus

Inter-frame delay 0 ms

Parameter	Description
Slave ID	Factory Setting: 10 The Modbus Slave ID of the DSE2610 module's RS232 or RS485 port for <i>Modbus Passthrough</i> . This is the RS485/RS232 Slave ID that is used by the Modbus Master device used to query the host controller connected to the DSE2610. Modbus Requests sent to this address are relayed (Passthrough) to the DSE host controller connected to the DSE2610.
Baud Rate	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">  NOTE: When the <i>Modbus Passthrough Port</i> is configured for <i>RS232</i> its baud rate is fixed to 115200. </div> Factory Setting: 115200 Baud rate of the RS485 port.
Inter-frame delay	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">  NOTE: This parameter is disabled when the <i>Modbus Passthrough Port</i> is configured to <i>RS232</i>. </div> Set the time delay between a MODBUS RTU request and the receipt of a response.

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