



# DEEP SEA ELECTRONICS

## DSEAssistant PC Software Manual

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**DSEAssistant PC Software Manual**

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**Amendments Since Last Publication**

| Amd. No. | Comments                            |
|----------|-------------------------------------|
| 1        | Initial release                     |
| 2        | Updated minimum system requirements |

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 use of the *DSEAssistant PC Software* with the DSEGenSet®, DSEATS®, DSEPower® and DSEControl® ranges of products.

The manual forms part of the product and should be kept for the entire life of the product. If the product is passed or supplied to another party, ensure that this document is passed to them for reference purposes.

This is not a *controlled document*. DSE do not automatically inform on updates. Any future updates of this document are included on the DSE website at [www.deepseaelectronics.com](http://www.deepseaelectronics.com)




The *DSEAssistant PC Software* allows the compatible DSE module to be connected to a PC via USB A to USB B cable (USB printer cable) with the addition of the intermediate DSE815 interface for AVR modules. Once connected, the software allows configuration Files, language Files and engine Files to be easily, read from a module, written to a module, saved to a PC and loaded from a PC as required.

The *DSEAssistant PC Software* is designed to allow competent, qualified personnel to configure a module to the required specification, save the subsequent information and roll out the settings in a mass production scenario reducing the chance of configuration errors that cause safety implications.

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 are used. Separate manuals deal with the operation of the individual module and its ancillaries, refer to section entitled *Bibliography* elsewhere in this document for further information.

## 1.1 CLARIFICATION OF NOTATION

Clarification of notation used within this publication.

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

## 1.2 GLOSSARY OF TERMS

| <b>Term</b>              | <b>Description</b>  |
|--------------------------|---|
| DSEAssistant Backup File | A File used in the DSEAssistant PC Software that includes the configuration.  |
| DSEAssistant Flash File  | A File used in the DSEAssistant PC Software that includes the firmware File, configuration File (optional), and language File (optional). |
| AVR                      | Automatic Voltage Regulator<br>An electronic device designed to automatically maintain a constant voltage output level of a generator.    |

## 1.3 BIBLIOGRAPHY

This document refers to, and is referred by the following DSE publications which are obtained from the DSE website: [www.deepseaelectronics.com](http://www.deepseaelectronics.com) or by contacting DSE technical support: [support@deepseaelectronics.com](mailto:support@deepseaelectronics.com).

### 1.3.1 MANUALS

Product manuals are obtained from the DSE website: [www.deepseaelectronics.com](http://www.deepseaelectronics.com) or by contacting DSE technical support: [support@deepseaelectronics.com](mailto:support@deepseaelectronics.com).

| DSE Part | Description   |
|----------|---|
| 057-151  | DSE Configuration Suite PC Software Installation & Operation Manual |

### 1.3.2 TRAINING GUIDES


Training guides are provided as 'hand-out' sheets on specific subjects during training sessions and contain specific information regarding that subject.

| DSE Part | Description                   |
|----------|-------------------------------|
| 056-069  | Firmware Update               |
| 056-075  | Adding Language Files         |
| 056-097  | USB Earth Loops and Isolation |

## 2 INSTALLATION INSTRUCTIONS

### 2.1 SOFTWARE INSTALLATION

#### 2.1.1 MINIMUM SYSTEM REQUIREMENTS

 **NOTE:** The DSEAssistant PC software is a 32 bit and 64 bit application for Windows™ operating systems and requires Microsoft™ .Net® 4.5 framework. It is not supported on Windows 7 or earlier Windows™ operating systems.

 **NOTE:** Microsoft™ .Net® 4.5 framework is obtained from Microsoft's website. Alternatively, it is obtainable from the DSE website [www.deepseaelectronics.com](http://www.deepseaelectronics.com).

 **NOTE:** Exit all other programs before installing the software. It is recommended that any earlier releases of the software be uninstalled prior to installing this version.

 **NOTE:** To download the software and ensure access is available to the latest updates and features, register online at [www.deepseaelectronics.com](http://www.deepseaelectronics.com).

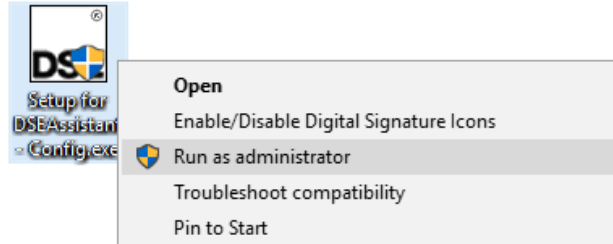
| Description      | Specification  |
|------------------|--|
| Operating System | Windows 10 or Windows 8.1 with Microsoft™ .Net® 4.5 framework  |
| Memory           | 4 GB RAM   |
| Free Space       | 50 MB  |
| Monitor          | 17 inch recommended (1024 X 768 resolution)  |
| Communications   | USB required for majority of DSE modules.<br>DSE815 configuration interface required for AVR products. |

## 2.1.2 INSTALLATION

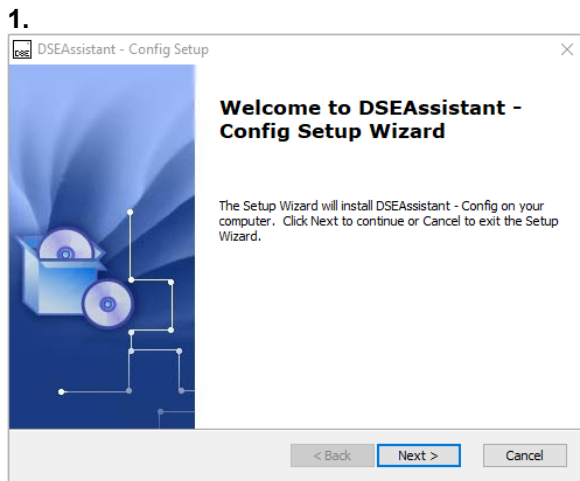
Some features of the DSEAssistant PC software require a File created in the DSE Configuration Suite PC Software, for information in regards to installing and using the *DSE Configuration Suite PC Software*, refer to DSE publication: **057-151 DSE Configuration Suite PC Software Installation & Operation Manual** which is found on the DSE website: [www.deepseaelectronics.com](http://www.deepseaelectronics.com)

The DSEAssistant Installation software installer is found on the DSE website: [www.deepseaelectronics.com](http://www.deepseaelectronics.com)

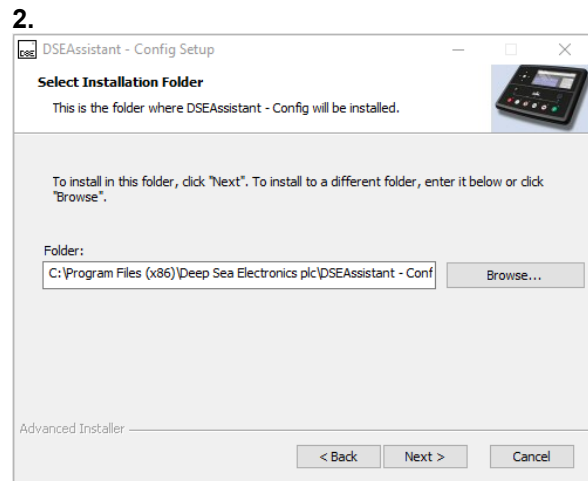
Once downloaded run the .exe installer software by right clicking the icon and *Run as administrator*.



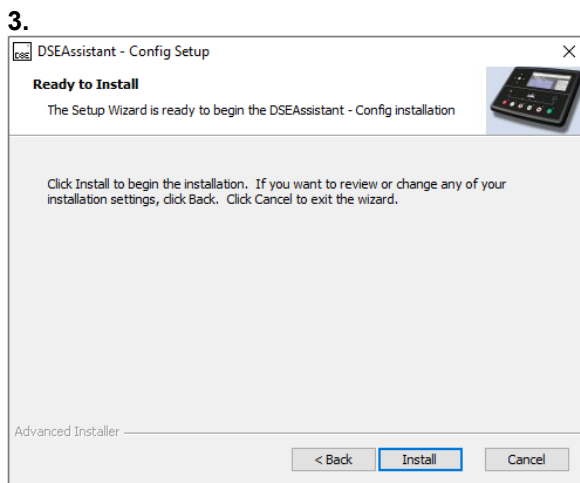
The Setup Wizard then guides the user through the installation procedure.



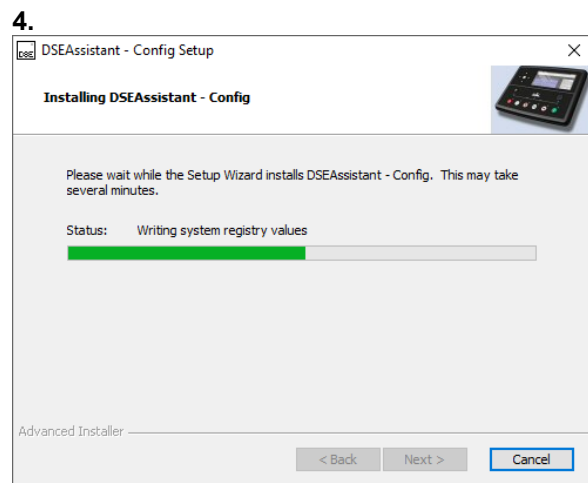
Click *Next* to begin.



Click *Next* to confirm the installation location.



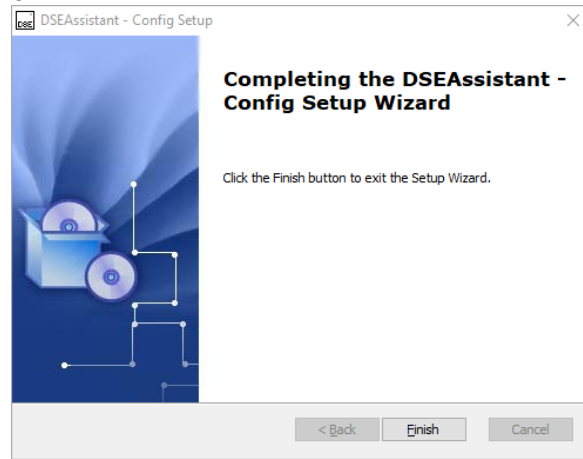
Click *Install*.



Wait for the process to complete.

## Installation Instructions

5.



Click *Finish* to complete the process.

## 2.1.3 TROUBLESHOOTING SOFTWARE INSTALLATION

It is very rare that problems are encountered when installing the system, however if problems arise, use the following checklist to troubleshoot your software installation

### 2.1.3.1 SUPPORTED OPERATING SYSTEMS

#### 32 bit and 64 bit Versions

- Ensure the operating system is logged onto using an *Administrator Account*. Failure to do this results in installation failure due to incorrect user permissions disallowing registration of some parts of the Configuration Suite Software.
- When installing the software, instead of clicking the icon with the left mouse button, click on the installation icon with the right mouse button, then select *Run as Administrator*.
- Ensure the operating system is fully up to date using the *Microsoft Windows Update* facility.
- Ensure that *Windows Installer* is fully up to date using the *Microsoft Windows Update* facility.
- Ensure the operating system has *Microsoft .Net 4.5 Framework redistributable (for x86)* installed and is fully up to date. This is available from Microsoft's website.

### 2.1.3.2 WINDOWS 7 AND EARLIER OPERATING SYSTEMS

- DSEAssistant PC Software is not supported on Windows 7 or earlier operating systems. It is recommended that the system is Windows 10 or Windows 8.1 with Microsoft™ .Net® 4.5 framework installed.

### 2.1.3.3 APPLE MAC (OSX), APPLE DEVICE (IOS) AND ANDROID

- DSEAssistant PC Software does not support the Windows 7 or earlier operating systems. It is recommended that the system is Windows 10 or Windows 8.1 with Microsoft™ .Net® 4.5 framework

## **2.2 HARDWARE INSTALLATION**

Ensure the DSEAssistant PC Software is installed on the PC as described above. The installation of the PC software also installs the DSE Module USB and DSE815 Driver automatically.

Connect the USB cable to the PC as shown below and to the module. Connection details for the DSE815 are found in the products software manual.



Windows detects the module when power is applied to it. You are now ready to configure or monitor the module using the DSEAssistant PC Software.

## **2.3 TROUBLESHOOTING INSTALLATION**

Occasionally USB devices are disabled by the Windows operating system, the following procedure will re-enable the device in these instances.

- Disconnect the Deep Sea Electronics Module from the USB port. Wait a moment, then reconnect and try again. If you still encounter problems then :
- Try another USB cable. If you don't have one, it's the same type of cable as usually used between a PC and a USB printer (Type A to Type B). If you still encounter problems then :
- Disconnect the Deep Sea Electronics Module. Shutdown, then restart the PC. Reconnect the interface, and then try again. If you continue to experience problems then :
- Check the USB port with another device (for instance a mouse, printer or digital camera).

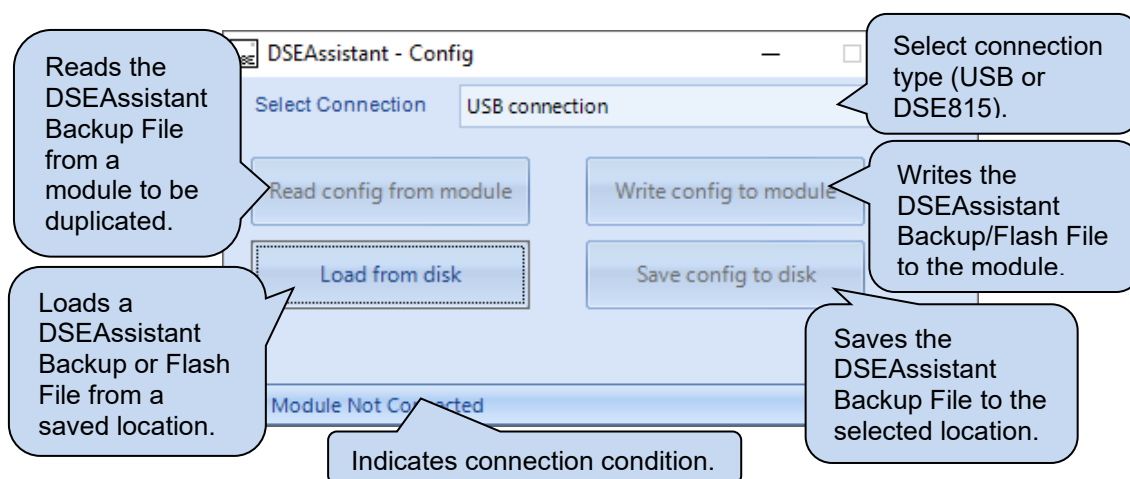
### 3 USING THE DSEASSISTANT SOFTWARE

When the installation is complete the DSEAssistant PC Software is launched by double clicking the icon.



**NOTE:** DSEAssistant *Backup Files* do not support modules that require a DSE815 configuration interface.

The software is broken down into separate sections to provide simple navigation enabling the user to write the required information to the module whilst removing the risk of configuration errors.



#### Read Config from Module

Select the interface used to connect the module to the PC from the *Select Module* dropdown menu. Clicking the *Read config from module* reads the modules configuration and holds the information ready to write it to multiple modules. It must be noted that this information is not automatically saved to the PC and is lost if not saved before the DSEAssistant software is closed.

#### Writing Config to Module

After a configuration has been read or a previously saved DSEAssistant Backup/Flash File has been loaded, the *Write config to module* is clicked to write the information to the module.

#### Load from Disk

Clicking *Load from disk* opens the explorer window required to find and select the DSEAssistant Backup/Flash File to be written to a module.

#### Save Config to Disk

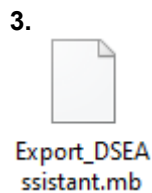
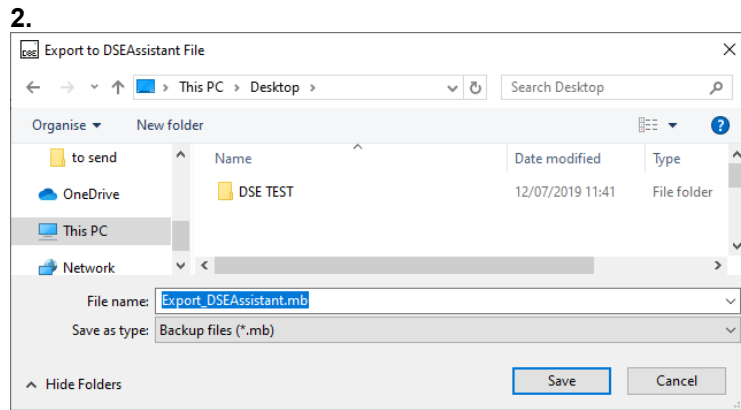
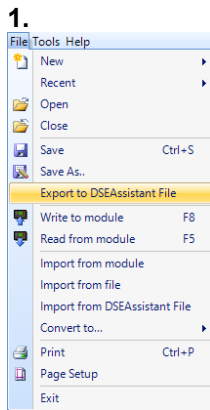
After a configuration is read, *Save config to disk* is used to save the DSEAssistant Backup File to a location chosen by the user.

## 4 DSEASSISTANT BACKUP FILE

**NOTE:** The DSEAssistant *Backup File* is created in the DSE Configuration Suite Software or by reading and saving a configuration in the DSEAssistant PC Software.

### 4.1 CREATING A DSEASSISTANT BACKUP FILE

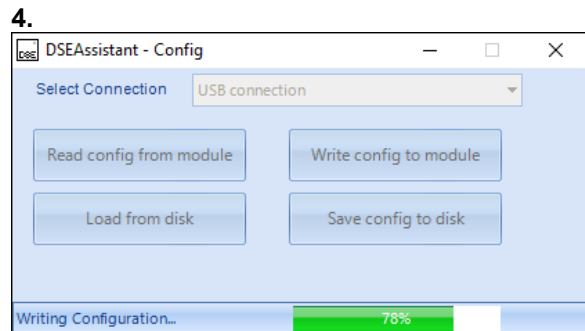
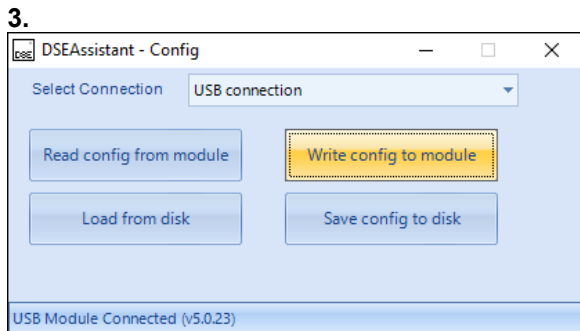
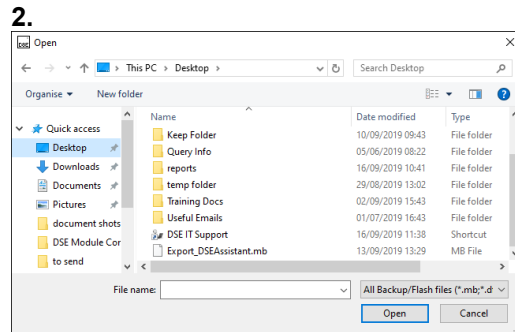
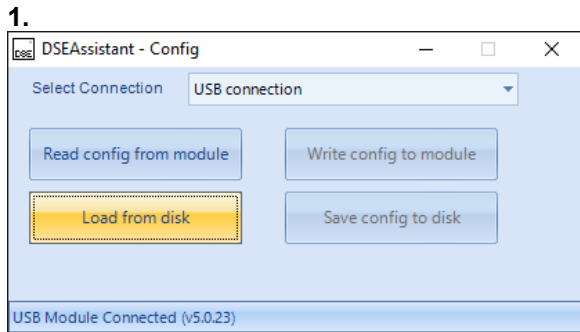
The DSEAssistant Backup File is compiled within the DSE Configuration Suite PC Software or read from an already configured module. *Export to DSEAssistant File* is then clicked from the *File* menu in the DSE Configuration Suite Software and is then saved in a location of the user's choice ready for future use.



## 4.2 USING DSEASSISTANT BACKUP FILE

**NOTE:** The DSEAssistant *Backup File* is used in conjunction with the DSEAssistant PC Software.

The module is connected to the PC and the connection type is selected from the dropdown menu. Click *Load from disk*, click to highlight the DSEAssistant Backup File to be used and open to select it. Click *Write config to module* to complete the process.



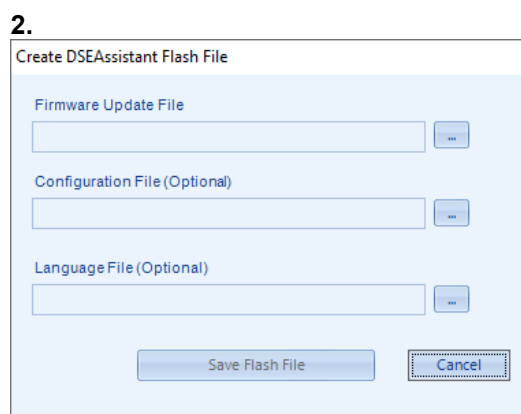
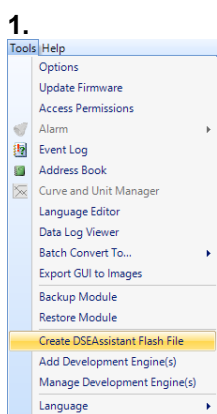
## 5 DSEASSISTANT FLASH FILE

**NOTE: The DSEAssistant *Flash File* is created in the DSE Configuration Suite Software.**

The DSEAssistant PC Software is used during mass production or when restriction to configuration adjustments are required, in conjunction with a Flash File containing the firmware File, configuration File (optional), and language File (optional).

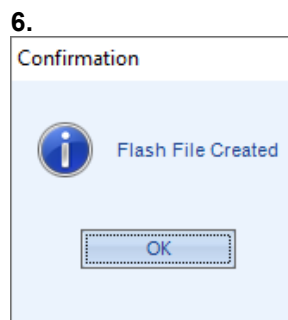
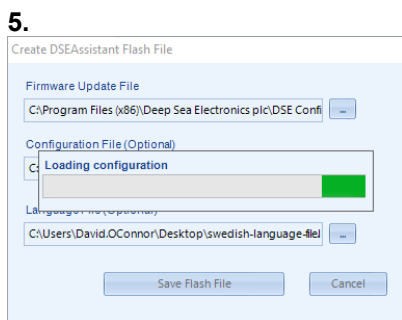
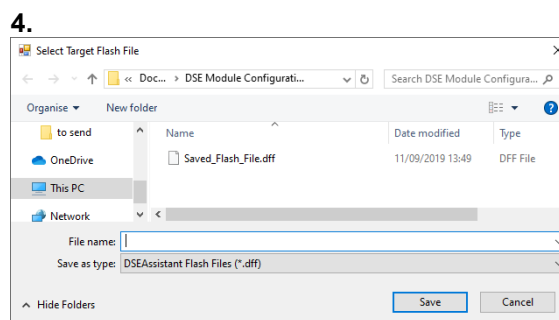
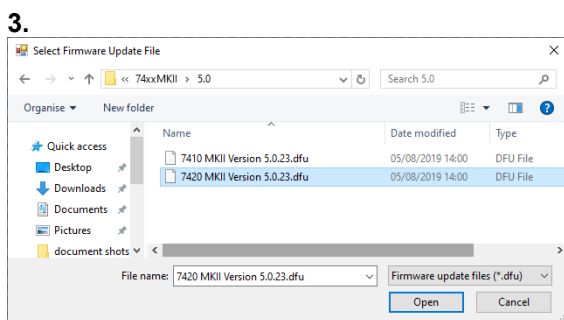
### 5.1 CREATING A DSEASSISTANT FLASH FILE

To create a DSEAssistant Flash File in the DSE Configuration Suite PC Software that includes all optional content, click *Create DSEAssistant Flash File* in the *Tools* menu, this launches the Flash File compiler.



Click the icon on to open the windows File explorer, navigate to the required firmware File and click open to select. Repeat this process for the configuration File (optional) and language File (optional).

Click save Flash File to compile and save the Flash File to a chosen location.

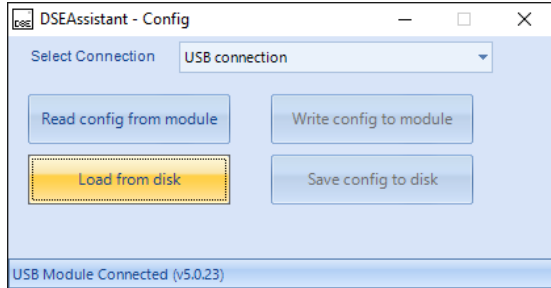


## 5.2 USING DSEASSISTANT FLASH FILE

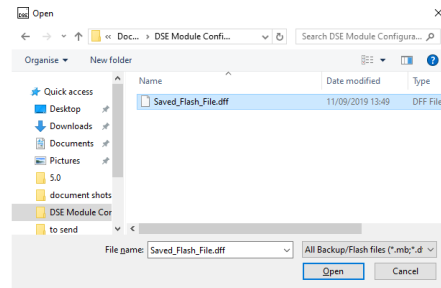
**NOTE:** The DSEAssistant *Flash File* is used in conjunction with the DSEAssistant PC Software.

The module is connected to the PC and the connection type is selected from the dropdown menu. Click *Load from disk*, click to highlight the Flash File to be used and *Open* to select it. The *Write config to module* changes to *Write Flash File to module*, click this to begin the write process. When finished the confirmation popup appears, click *Ok* to complete the process.

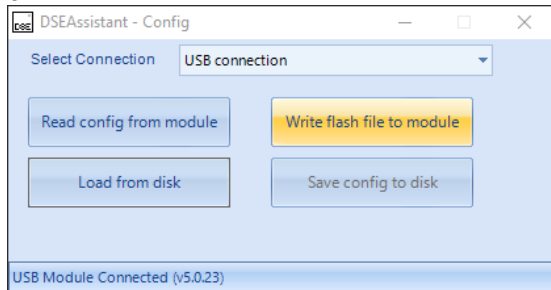
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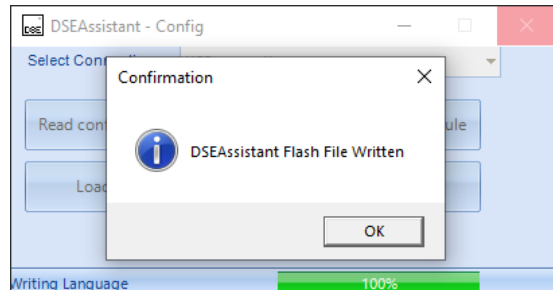
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3.



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