# Operator's manual

Document no.: 4189341218E

## Touch Display Unit

# TDU 107

DEIF A/S · Frisenborgvej 33 · DK-7800 Skive · Tel.: +45 9614 9614 · Fax: +45 9614 9615 · info@deif.com · www.deif.com

# 1. Introduction

## 1.1 About the Operator's manual

### 1.1.1 Intended users of the Operator's manual

This is the operator's manual for DEIF's Touch Display Unit, TDU 107 controlling the AGC-4 genset or mains controller.

The manual is for the operator who uses the TDU 107. The manual includes an introduction to the unit, basic operator tasks, alarms, logs, and more advanced operator tasks.

### 1.1.2 Software versions

The information in this document corresponds to the following software versions.

**Table 1.1** Software versions

| Software | Details | Version |
|---|---|---|
| AGC-4 | Controller application | 4.76.x or later |
| • TDU 107 Core<br>• TDU 107 Extended | Display unit application | 1.3.1.x or later |

### 1.1.3 List of technical documentation

| Document | Contents |
|---|---|
| Data sheet | • System description<br>• Technical specifications<br>• Ordering information |
| Product sheet | • Product features<br>• Technical specifications |
| Installation instructions | • Mounting<br>• Default wiring |
| Operator's manual | • Operating the unit<br>• Alarms and log |

**More information**
Visit https://www.deif.com/products/tdu-107#documentation for free access all the TDU 107 documentation or software updates.

### 1.1.4 Technical support

You can read about service and support options on the DEIF website, http://www.deif.com. You can also find contact details on the DEIF website.

You have the following options if you need technical support:

- Technical documentation: Download all the product technical documentation from the DEIF website: http://www.deif.com/documentation
- Support: DEIF offers 24-hour support. See http://www.deif.com/support for contact details. There may be a DEIF subsidiary located near you. See http://www.deif.com/support/local-office

### 1.1.5 Symbols for hazard statements

**DANGER!**

**This highlights dangerous situations.**

If the guidelines are not followed, these situations will result in death, serious personal injury, and equipment damage or destruction.

**WARNING**

**This highlights potentially dangerous situations.**

If the guidelines are not followed, these situations could result in death, serious personal injury, and equipment damage or destruction.

**CAUTION**

**This highlights low level risk situation.**

If the guidelines are not followed, these situations could result in minor or moderate injury.

### 1.1.6 Symbols for notes

**NOTICE**

**This highlights general information.**

**More information**
This highlights where to find more information.

**NOTE** * This highlights a referenced note.

**Example heading**

This highlights an example.

This highlights tapping or pressing the screen area.

This highlights pressing and holding the screen area for an amount of seconds.

This highlights swiping the screen area, up or down.

This highlights swiping the screen area, left or right.

## 1.2 Warnings and safety

**DANGER!**

**Hazardous live currents and voltages**

Risk of electrical shock

Switchboard access must only be carried out by authorised personnel who understand the risks involved in working with electrical equipment. Do not touch any terminals, especially the AGC-4 AC measurement inputs and the relay terminals. Touching the terminals could lead to injury or death.

**WARNING**

**Possible automatic genset starts**

Risk of personal injury

The power management system automatically starts gensets when more power is needed. It can be difficult for an inexperienced operator to predict which gensets will start. In addition, gensets can be started remotely (for example, by using an Ethernet connection, or a digital input). To avoid personal injury, the genset design, the layout, and maintenance procedures must take this into account.

**NOTICE**

**Manually overriding alarm actions**

Risk of damage to genset or equipment

Manually overriding alarm actions could cause damage to the genset or equipment. Do not use manual control to override the alarm action of an active alarm.

**NOTICE**

**Manual control**

Limited automatic protection actions

Under Manual control, the operator controls and operates the equipment from the switchboard. The controller does not; respond to blackouts, provide any power management, accept operator commands, and/or prevent any manual operator actions. The switchboard design must therefore ensure that the system is sufficiently protected when the controller is under Manual control.

## 1.3 Legal information

### 1.3.1 Trademarks

*DEIF* is a trademark of DEIF A/S.

All trademarks are the properties of their respective owners.

### 1.3.2 Third party equipment

DEIF takes no responsibility for the installation or operation of any third party equipment, including the **genset**. Contact the **genset company** if you have any doubt about how to install or operate the genset.

### 1.3.3 Disclaimer

DEIF A/S reserves the right to change any of the contents of this document without prior notice.

The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English version prevails.

### 1.3.4 Copyright

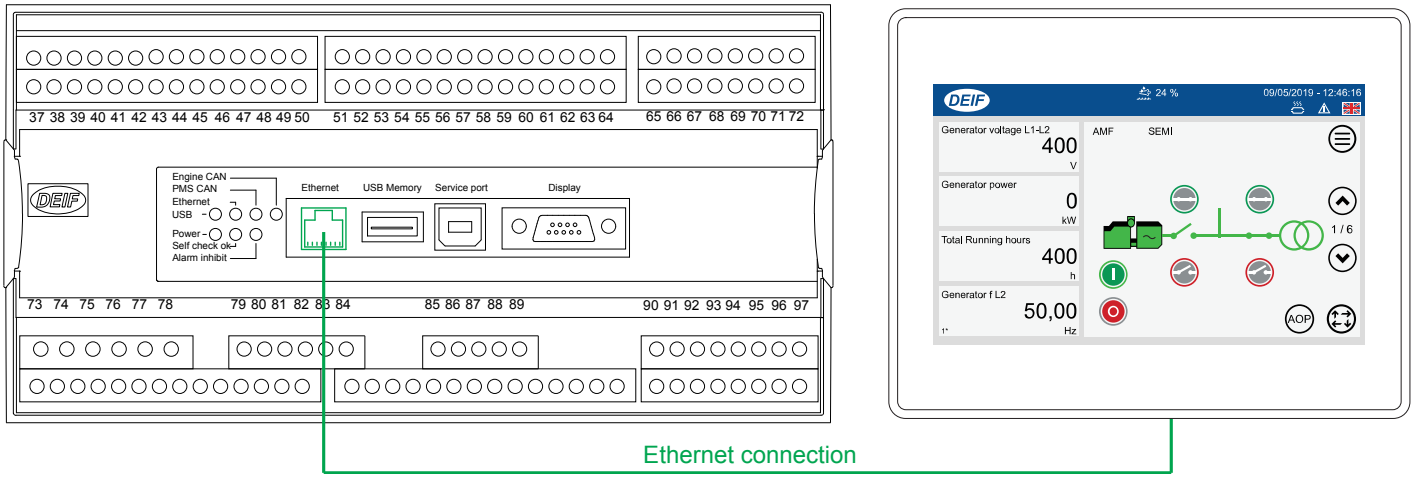
# 2. Overview of the unit

## 2.1 Introduction

| NOTICE |
| --- |
| **Software features described**<br>This manual applies to both **TDU 107 Core** and **TDU 107 Extended**. The software features are the same. |

The Touch Display Unit, TDU 107, is a touch screen solution for controlling either a DEIF AGC-4 genset or mains controller using the Ethernet port. *

**Figure 2.1** Example connection




**NOTE** * The AGC-4 requires the Ethernet option N for connection.

The display gives user-friendly touch screen control, visualisation, and graphic displays from the AGC-4 controller.

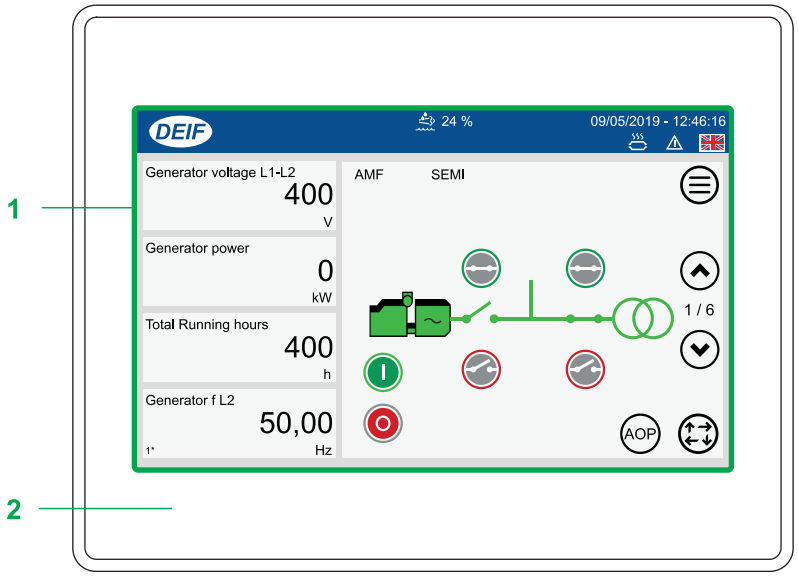
Simply operate the controller and access any feature by touching the screen.

| NOTICE |
| --- |
| **Bridged Ethernet ports**<br>The TDU 107 Extended has two Ethernet that are bridged, ETH0 and ETH1. |

# 2.2 Layout

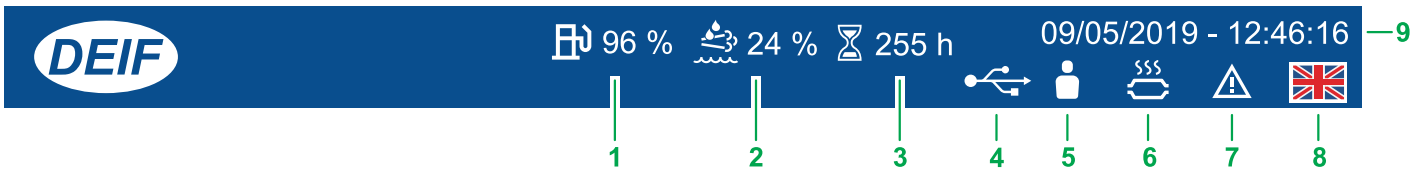
## 2.2.1 Unit

**Figure 2.2** TDU 107 layout




| No. | Item | Notes |
|---|---|---|
| 1 | Touch screen area | Operate the controller by touching the screen. |
| 2 | Frame | |

## 2.2.2 Status bar




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Fuel level * | - | Shows the fuel level. |
| 2 | Diesel Exhaust Fluid (DEF) percentage ** | - | Shows the DEF percentage. |
| 3 | Running hours *** | - | Shows the total of running hours. |
| 4 | USB drive | - | Shows a USB drive was detected. |
| | | | Prompts to remove the USB drive safely. |
| 5 | User logged on | | Shows a user is logged on. |
| | | | Displays prompt to logout. |
| 6 | Exhaust After-Treatment Dashboard | | Opens Exhaust After-Treatment Dashboard (Shortcut). * |
| 7 | Alarm(s) | | Opens Alarms (Shortcut). |
| 8 | Language | | Opens Language (Shortcut). |
| 9 | Date and Time | - | Shows the controller Date and Time. |

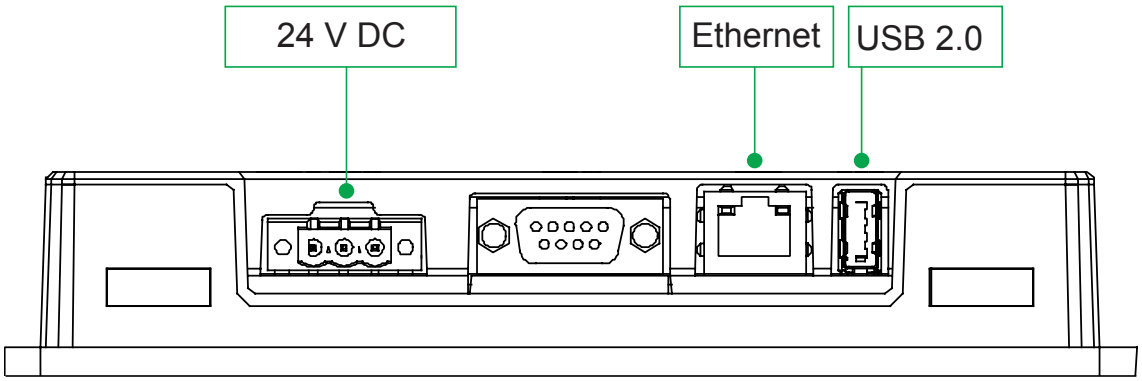
**NOTE** * Only shown if the fuel level is configured with a multi-input. Use either multi-input 102 parameter 10980, multi-input 105 parameter 10990, or multi-input 108 parameter 11000 with **RMI fuel level**.

**NOTE** ** Only shown if the Engine communication is configured.

**NOTE** *** Only shown for genset controllers and not on mains controllers.

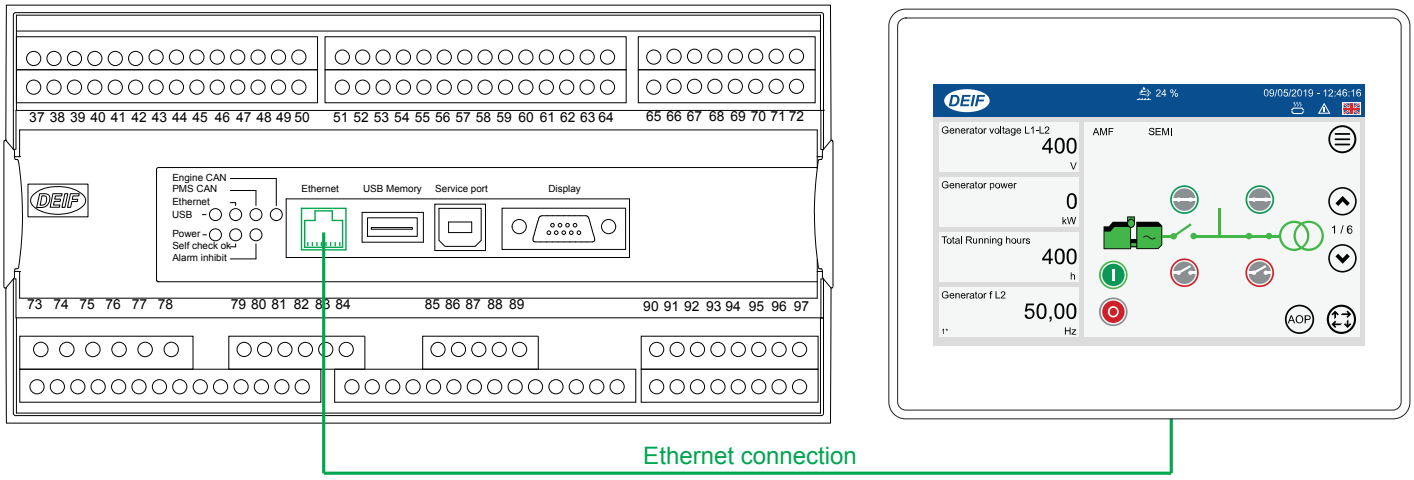
## 2.2.3 Core connections

**Figure 2.3** TDU 107 Core connections



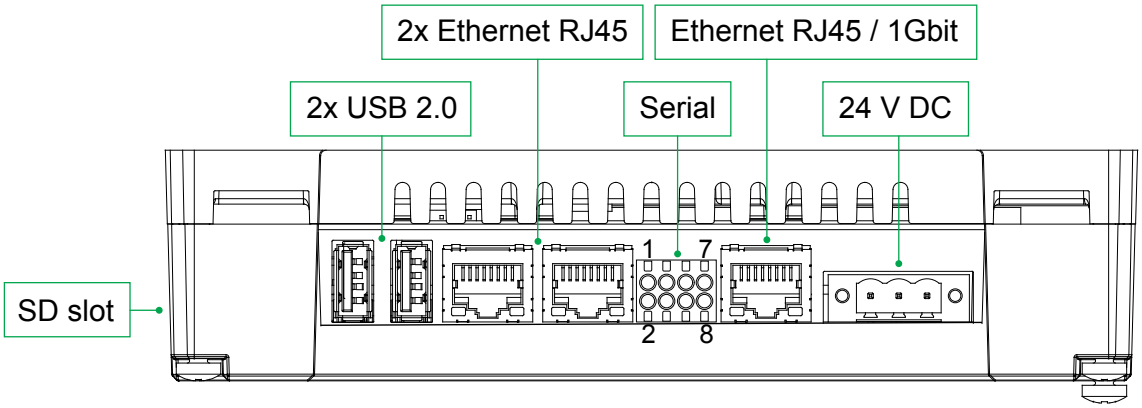

The TDU 107 Core can be connected to the controller directly or using a switch. Use a USB type A-B cable to connect a service computer to the AGC-4 controller if the TDU Core is connected directly to the controller.

**Figure 2.4** Connecting controller to TDU 107 Core



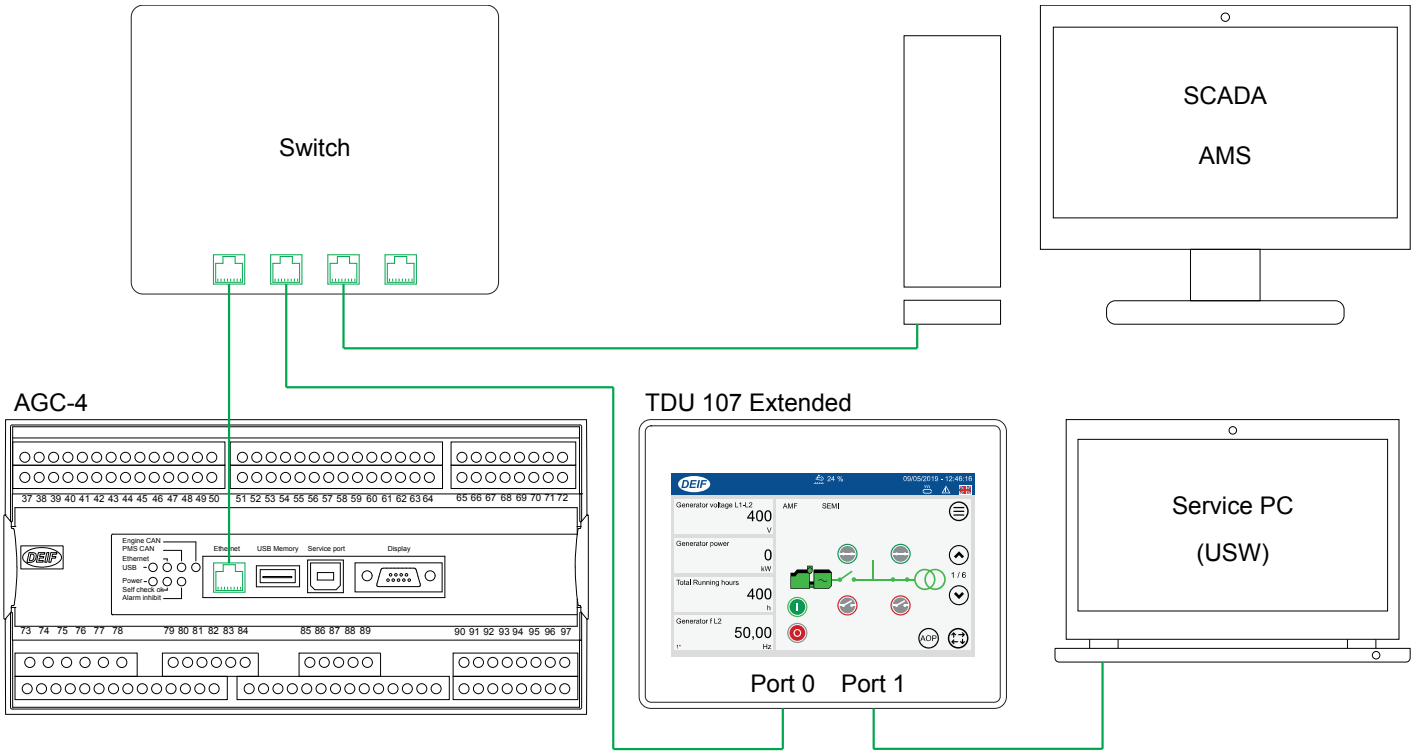

## 2.2.4 Extended connections

**Figure 2.5** TDU 107 Extended connections



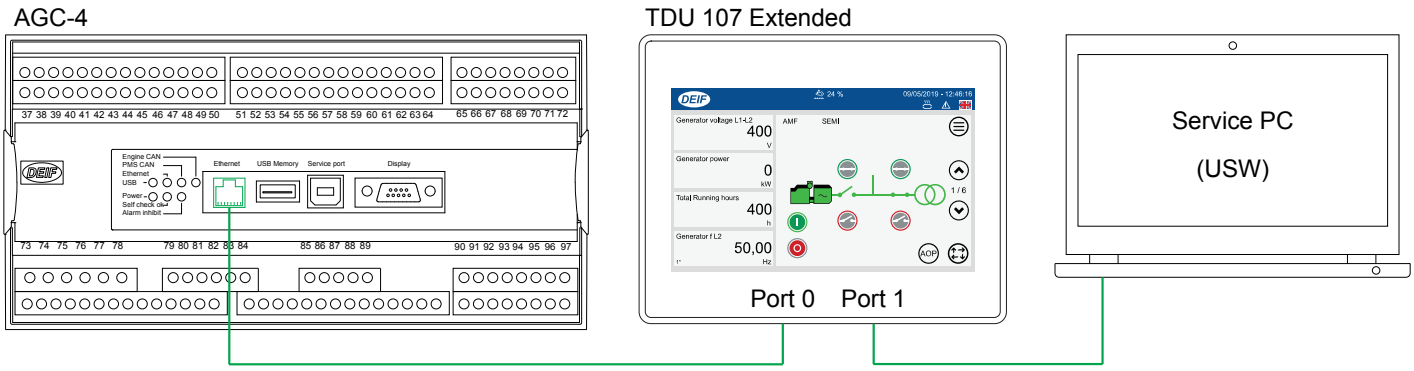

Connections that place a high data transfer load on the controller (for example, a SCADA system) should be connected to the controller through a switch.

**Figure 2.6** Recommended wiring to connect a SCADA system to the controller




In system configurations without a high data transfer connection it is possible to connect the TDU 107 Extended version directly to the controller and connect a service PC to the TDU 107.

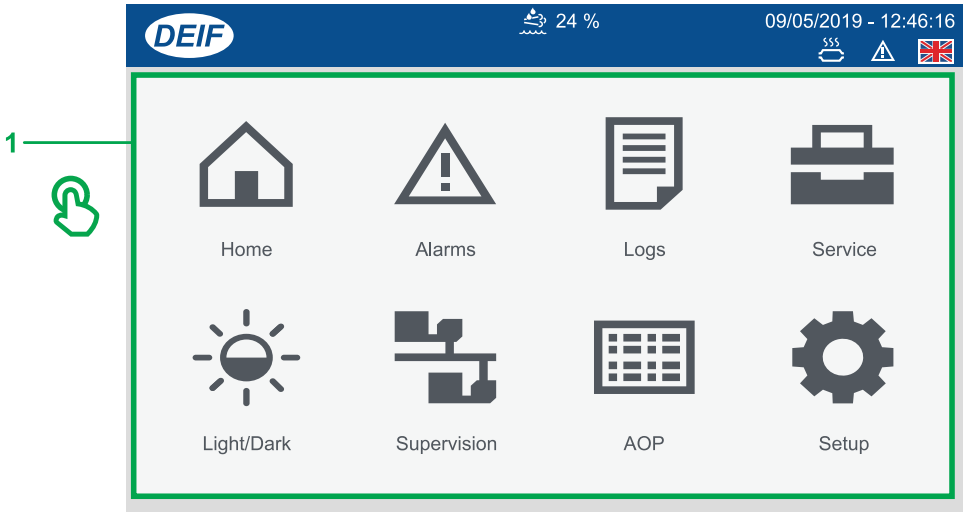
**Figure 2.7** Example wiring for a system configuration without a high data transfer connection



# 3. Operating the system

## 3.1 Menus

The menu pages give you access to the features and to other menus.




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Features | | Shows available features or other menus. |
| | | | Selects feature or menu. |

### 3.1.1 Return (back) navigation

Some displays allow you to go back to the previous feature or menu.

Use **Return** to return to a previous menu or display.

# 3.2 Keyboards

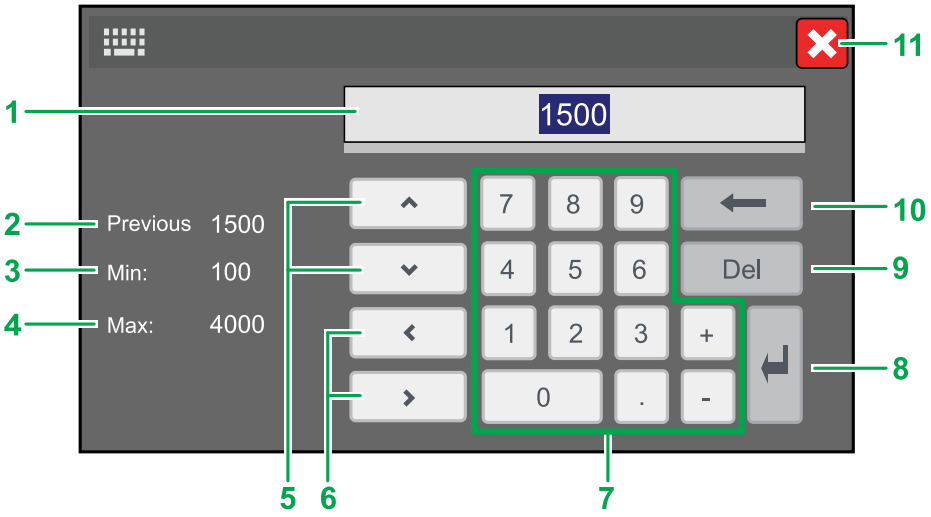
## 3.2.1 Text keyboard

You enter text information on the display by using the virtual text keyboard.


| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Text | - | Shows the text you are entering. |
| 2 | Keyboard | | Selects letters, numbers, or symbols. |
| 3 | Cursor | | Moves the cursor to the left. / Moves the cursor to the right. |
| 4 | Enter | | Confirms the text entered. |
| 5 | Backspace | | Deletes the last character. |
| 6 | Cancel | | Cancels the changes. |

## 3.2.2 Value keyboard

You enter number values on the display by using the virtual value keyboard.




| No. | Item | Use | Notes | |
|---|---|---|---|---|
| 1 | Value | - | Shows the value you are entering. | |
| 2 | Previous value | - | Shows the value before any changes. | |
| 3 | Minimum value | - | Shows the minimum value you can enter. | |
| 4 | Maximum value | - | Shows the maximum value you can enter. | |
| 5 | Increase / Decrease | | Allows you to increase or decrease the value. | |
| | | | Increase value. | Decrease value. |
| 6 | Cursor | | Moves the cursor to the left. | Moves the cursor to the right. |
| 7 | Keypad | | Selects number or symbol. | |
| 8 | Enter | | Confirms the value entered. | |
| 9 | Forward delete | | Deletes the next character. | |
| 10 | Backspace | | Deletes the last character. | |
| 11 | Cancel | | Cancels the changes. | |

# 3.3 Software update using USB

## 3.3.1 Before you begin

You can update your TDU 107 with the latest software version by using the USB port.

**More information**
See **Core connections** or **Extended connections** for more information about the location of the USB port on the display.

To update your TDU 107, you need the following:

### Required tools

- USB drive (FAT32)
  - To import/export the file(s) to your PC and TDU 107.
  - Must be formatted for FAT32 file system to be recognised by the TDU 107.
- PC
  - To download the software package file.
  - To copy the software package file to the USB drive.

## 3.3.2 Download and update software

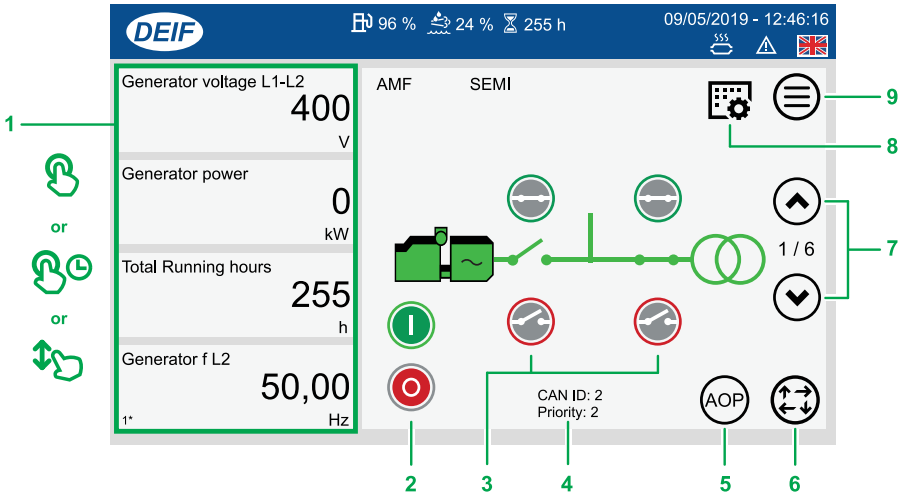
1. Visit the DEIF homepage https://www.deif.com/products/tdu-107#software to download the latest version.
   - Software is available for both **TDU 107 Core** and **TDU 107 Extended**.
   - Download the software for your version of the TDU 107.
2. Follow the instructions in the DEIF email to complete the software download.
3. Copy the update file across to your USB drive without renaming the file. *
4. Insert the USB drive in the USB port on your TDU 107.
5. You are then guided through the rest of the installation on the display.

**NOTE** * The software package is provided as a zipped archive (.zip) file. Do not rename or unzip this file. The file must be copied to your USB memory device with the same file name, and as a ZIP file (.zip) for the update to be recognised by the TDU 107.

# 4. Features

## 4.1 ⌂ Home : Control panel

Operates the system: mode change, open or close breakers, and start or stop of GENSET. It shows instrument values selected by the operator.

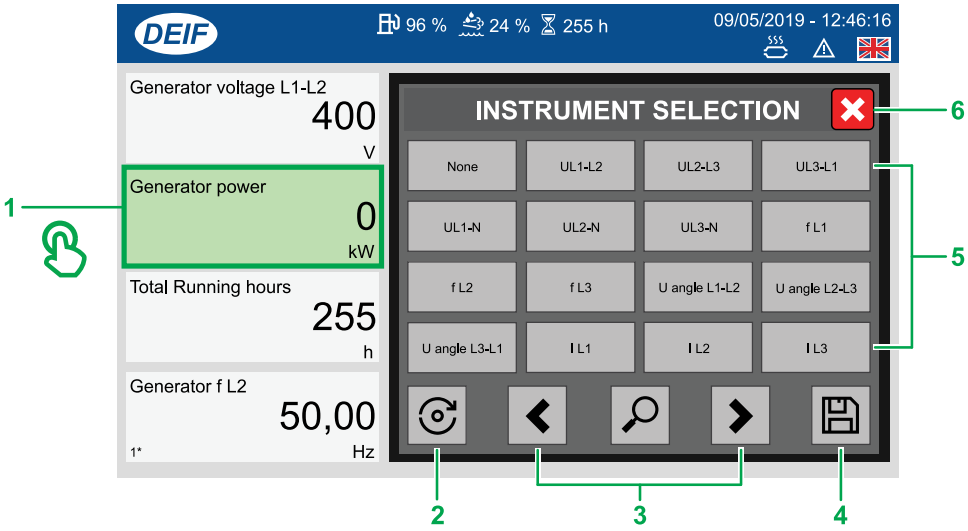



| No. | Item | Use | Notes | |
|---|---|---|---|---|
| 1 | Instrument values | | Changes instrument shown. | Hold for > 3 seconds to configure instrument properties. |
| | | | Scrolls up or down instrument pages. | |
| 2 | Generator control | | Starts generator. | Stops generator. |
| 3 | Breaker control | | Closes breaker. | Opens breaker. |
| 4 | CAN ID / Priority | - | Shows the CAN ID and the priority number in power management applications.<br>Only shown in power management applications and not in a single genset operation. | |
| 5 | AOP * | | Opens Additional Operator Panel (Shortcut *). | |
| 6 | Mode change | | Manual mode. | SEMI mode. |
| | | | AUTO mode. | TEST mode. |
| 7 | Scroll page | | Scrolls up. | Scrolls down. |
| 8 | Parameters * | | Opens Controller settings (Shortcut *). | |
| 9 | Menu | | Opens the menu page. | |

**More information**
* See **Display config** for how to add shortcuts for Parameters or AOP.

## 4.1.1 Change instrument

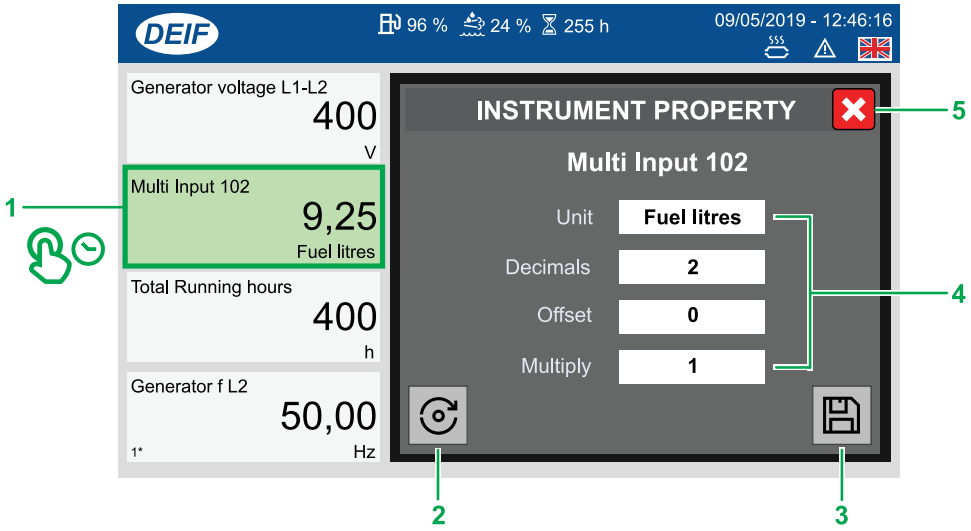
Changes the displayed instrument value shown on the Control panel page.




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Instrument value to change | | Selects instrument to change. |
| 2 | Refresh | | Refreshes the list of values. |
| 3 | Scroll and search | | Scrolls page left. Scrolls page right. Searches for values. |
| 4 | Save | | Saves the change. |
| 5 | Instrument values | | Selects the value. |
| 6 | Cancel | | Cancels the change. |

## 4.1.2 Instrument property

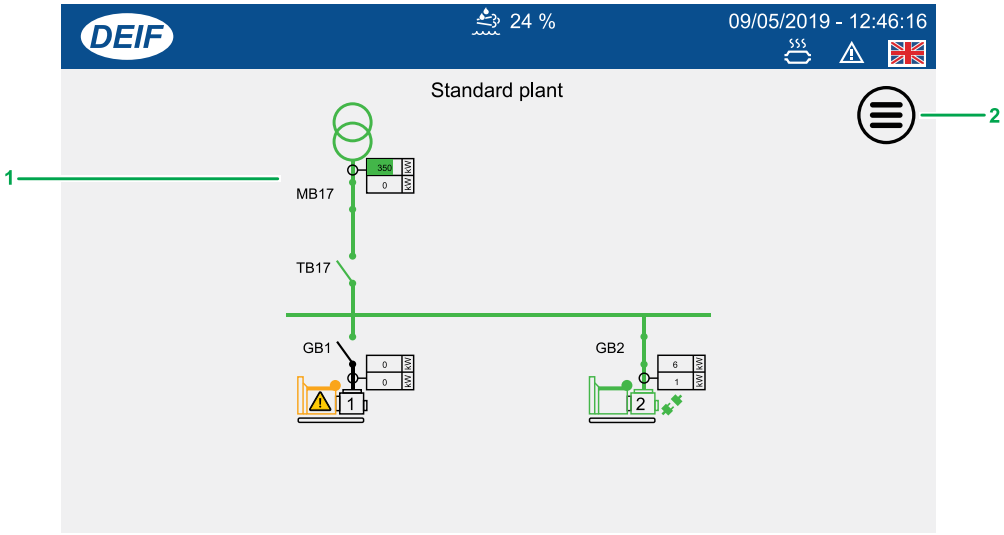
Configures the displayed instrument properties: unit, decimals, offset, and multiply.




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Instrument value to change | | Selects instrument to change. |
| 2 | Factory setting | | Returns the properties back to the factory default values. |
| 3 | Save | | Saves the change. |
| 4 | Instrument properties | | Configures the different instrument properties. |
| 5 | Cancel | | Cancels the change. |

# 4.2 Supervision

Views the state of the system in real-time. *

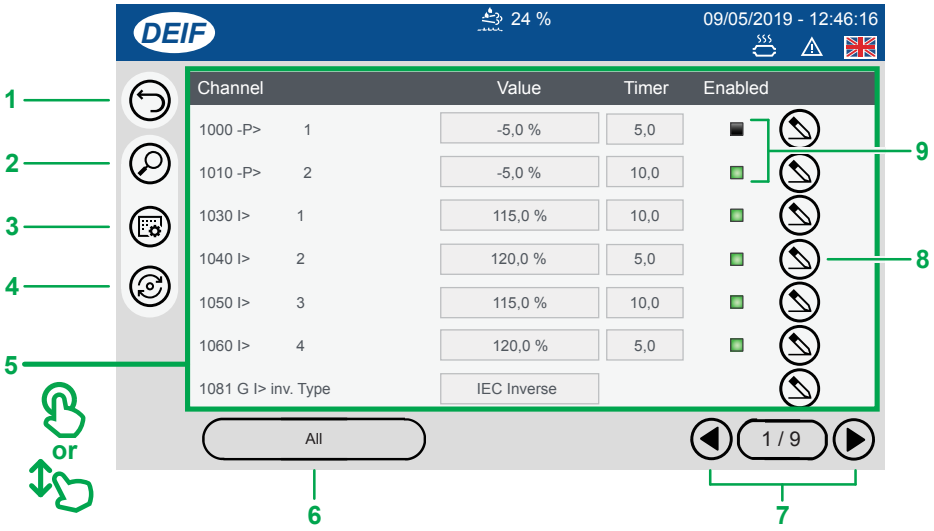



| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Live system overview | - | Shows the system state. * |
| 2 | Menu | | Opens the menu page. |

**NOTE** * Actual system shown depends upon your plant configuration.

# 4.3 Controller settings

Views or configures the controller parameter settings.



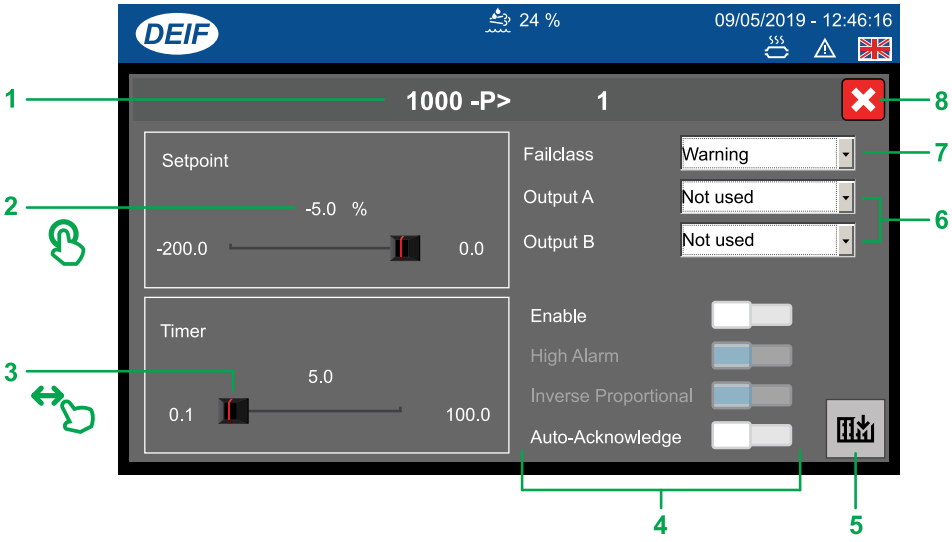

| No. | Item | Use | Notes | |
|---|---|---|---|---|
| 1 | Return | | Returns to previous display. | |
| 2 | Search | | Opens search keyboard. | |
| 3 | Filter groups | | Opens groups of parameters. | |
| 4 | Refresh | | Reloads the list. | |
| 5 | Controller Settings List | | Scrolls settings up or down on this page. | |
| 6 | Clear filter group | | Clears the filter group (if used). | |
| 7 | Scroll page | | Scrolls the page left. | Scrolls the page right. |
| 8 | Edit | | Edits the setting. | |
| 9 | Enabled status | - | Shows the status of the setting. | |
| | | | Not enabled. | Enabled. |

**More information**

* See **Password levels** in the chapter **User Permissions** for more information about the different password levels.

## 4.3.1 Edit settings

Edits the controller setting that was selected. *

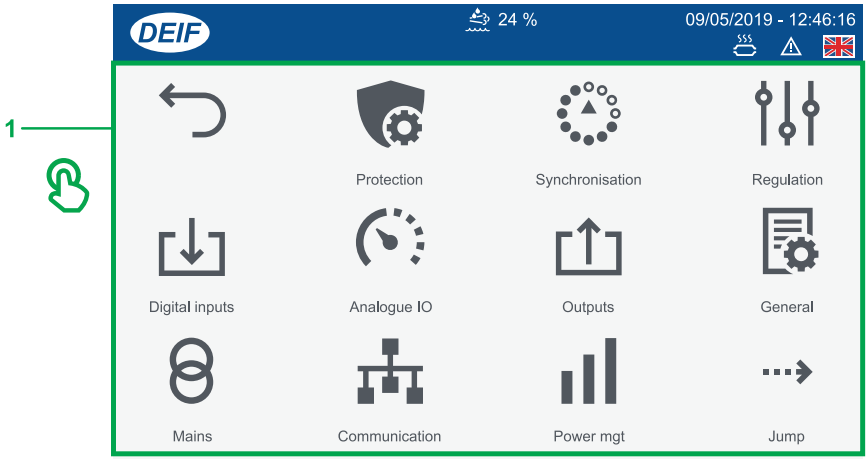



| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Setting | - | Shows the name of the setting. |
| 2 | Value | | Shows the value of the setting. |
| | | | Opens the Value keyboard to edit value. * |
| 3 | Value (Scroll) | | Scrolls left or right to increase or decrease the value. |
| 4 | Settings | | Toggles on or off additional settings. |
| | | or | Setting enabled. |
| | | or | Setting disabled. |
| | | - | Cannot be changed. |
| 5 | Write | | Writes the settings to the controller. |
| 6 | Output | | Selects an output terminal. |
| 7 | Failclass | | Selects a Failclass. |
| 8 | Cancel | | Cancels the changes. |

**NOTE** * The actual controller settings shown depend upon the type of setting that you are configuring.

## 4.3.2 Filter groups

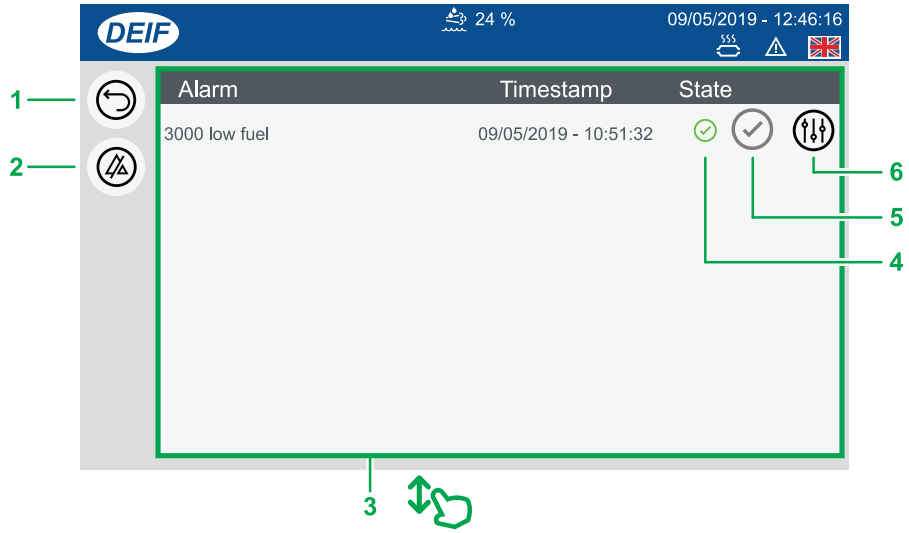
Lists the filter groups you can use to filter the controller settings page.




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Filter groups | | Shows the list of filter groups. |
| | | Selects a filter group. | |
| | | Returns to previous display. | |

# 4.4 ⚠ Alarms

Views or acknowledges any alarms created in the system.




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Back | | Returns to previous display. |
| 2 | Acknowledge all alarms | | Acknowledges all unacknowledged alarms. |
| 3 | Alarms list | | Scrolls the alarm list up or down. |
| 4 | Alarm state | - | Shows the state of the alarm.<br>Acknowledged alarm. Unacknowledged alarm. |
| 5 | Acknowledge | | Acknowledges alarm. |
| 6 | Alarm settings | | Opens the alarm configuration. |

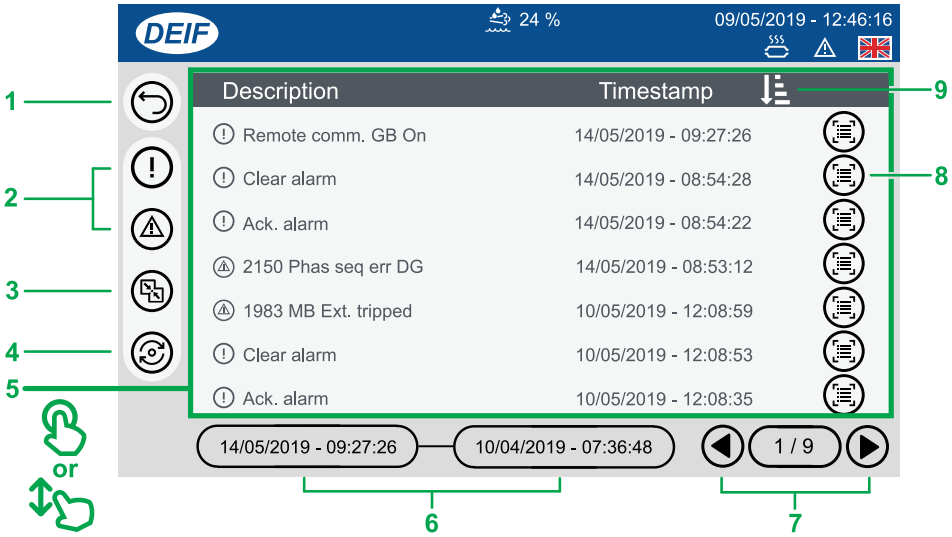
### 4.4.1 Alarms popup

New alarms activated in the system are shown on the alarms popup at the top of the display.


| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Alarm | - | Shows the activated alarm. |
| 2 | Alarms list | | Opens the Alarms list (shortcut). |
| 3 | Alarm settings | | Opens the Alarm settings (shortcut). |
| 4 | Acknowledge | | Acknowledges the alarm (Shortcut). |
| 5 | Cancel | | Cancels the pop up message. |

# 4.5 Logs

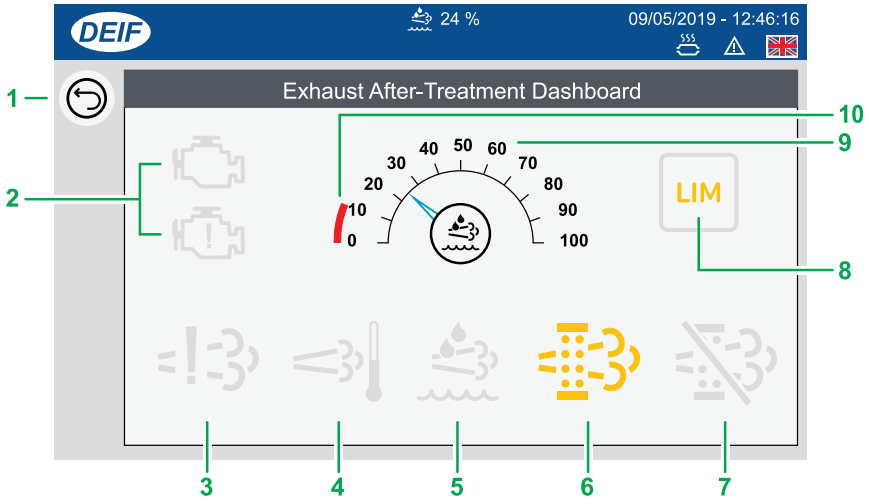
Shows the list of all recorded events or alarms created in the system. You can also filter, merge, or view further details on the events.




| No. | Item | Use | Notes | |
|---|---|---|---|---|
| 1 | Return | | Returns to previous display. | |
| 2 | Filter | | Filters the list by either Alarms or Events only. | |
| | | | Shows only Alarms. | Shows only Events. |
| 3 | Merge list | | Merges the list to show both Alarms and Events. | |
| 4 | Refresh | | Refreshes the log list. | |
| 5 | Log list | | Scrolls the log list up or down. | |
| 6 | Page range | - | Shows the date range of the list page shown. | |
| 7 | Scroll page | | Scrolls the page left. | Scrolls the page right. |
| 8 | Event details | | Shows the event details. | |
| 9 | Sort page | | Sorts the page Ascending order. | Sorts the page Descending order. |

# 4.6 Exhaust After-Treatment Dashboard (Tier4)

Shows information about the Exhaust After-Treatment system. *




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Return | | Returns to previous display. |
| 2 | Engine interface status | | Shows the engine status. |
| | | - | Shows an engine warning. |
| | | - | Shows an engine shutdown. |
| 3 | Engine emission system failure | - | Shows an emission failure or malfunction. |
| 4 | High temperature - Regeneration | - | Shows a high temperature and regeneration is in process. |
| 5 | Diesel Exhaust Fluid (DEF) | - | Shows the level is too low. |
| 6 | Diesel Particle Filter (DPF) | - | Shows that a regeneration is needed. |
| 7 | Diesel Particle Filter (DPF) Inhibit | - | Shows that regeneration is inhibited. |
| 8 | LIM *** | - | LIMIT lamp |
| 9 | Diesel Exhaust Fluid (DEF) % level | - | Shows the level (%) of the Diesel Exhaust Fluid. |
| 10 | Minimum DEF % level | | Shows the minimum low level for the Diesel Exhaust Fluid. |

**NOTE** * This page is only available if engine communication is configured on the system.

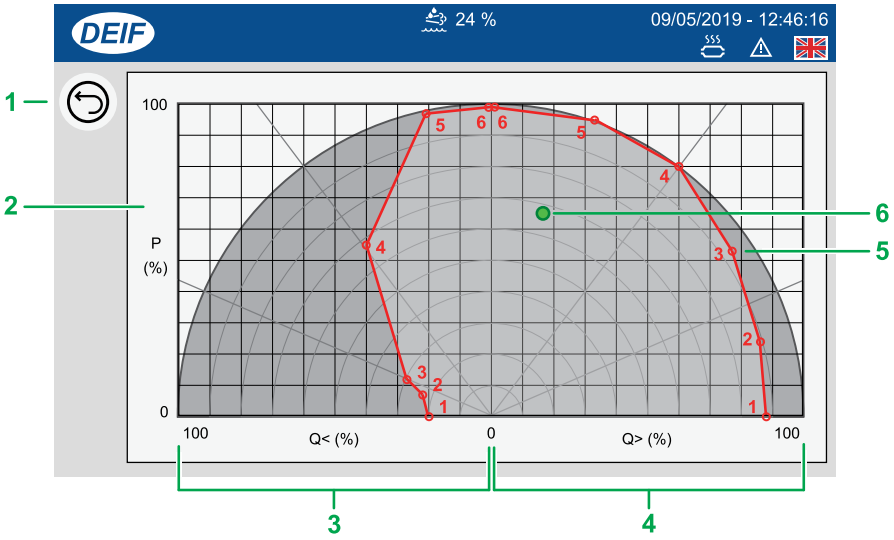
**NOTE** ** Grey symbols (Example: ) show that communication for the item is available. Not all types of engines support all items shown.

**NOTE** *** Only for MTU engines.

**More information**
See **Display Config > More Settings** for more information about automatically displaying this page if an alarm becomes active.

# 4.7 Alternator curve

Views or configures the safe operation limits for the alternator. *

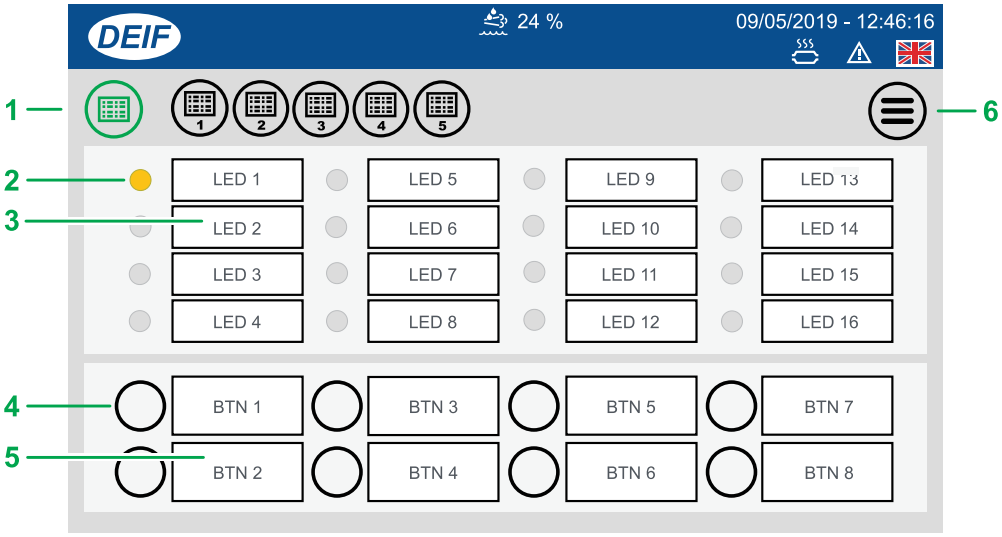



| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Return | | Returns to previous display. |
| 2 | Alternator curve | - | Shows the safe operation limits for the alternator. |
| 3 | Import (Leading) | | Opens the capacitive Q< configuration. |
| 4 | Export (Lagging) | | Opens the inductive Q> configuration. |
| 5 | Setting point | - | Shows the numbered setting points. |
| 6 | Actual working point | - | Shows the GENSETs actual working point. |

**NOTE** * The AGC-4 requires the option C2 to see the operation limits.

# 4.8 Additional Operator Panel (AOP)

Additional Operator Panels (AOPs) provide you with LED indication and button actions. You can configure the LED or button labels directly on the display, but the functionality behind them must be configured in your M-logic project on the utility software. *




| No. | Item | Use | Notes | |
|---|---|---|---|---|
| 1 | Panel selection | | Tap to select the panel to display. | |
| 2 | LED status | | Shows the LED status from the M-Logic project condition(s). * | |
| | | | Green. | Green + blink. |
| | | | Yellow. | Yellow + blink. |
| | | | Red. | Red + blink. |
| 3 | LED name | | Edits the LED name. ** | |
| 4 | Button | | Operates the button (if configured). | |
| 5 | Button name | | Edits the button name. ** | |
| 6 | Menu | | Opens the menu page. | |

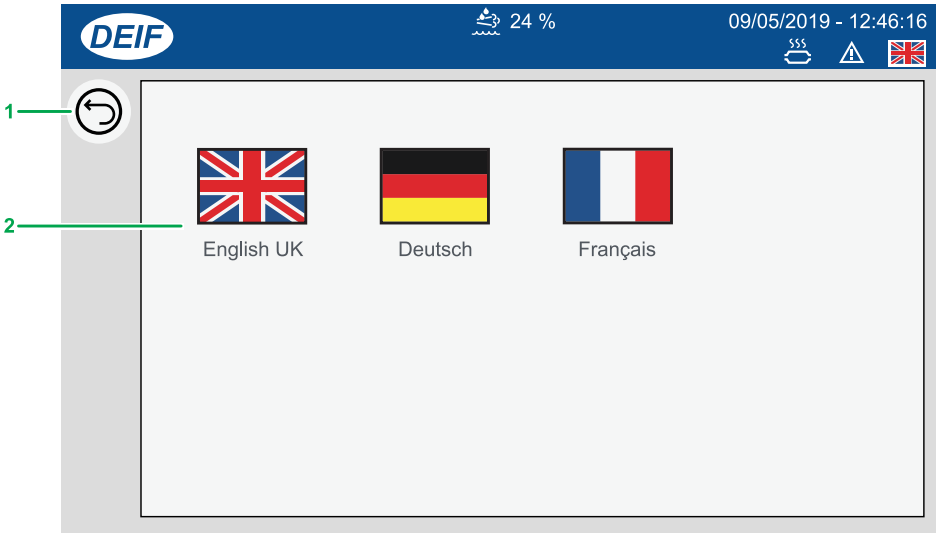
**NOTE** * The logic condition(s) must be configured in your M-logic project for the LED status and buttons to work.

**NOTE** ** LED name and button name are saved locally on the TDU 107.

**More information**
See the document **ML-2 application notes M-Logic** at https://www.deif.com/products/agc4#documentation for more information about how to create and configure your M-Logic projects.

# 4.9 Language

Selects an active language for the display. *




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Return | | Returns to previous display. |
| 2 | Languages * | - | Shows the available active languages. |
| | | | Selects the language for the display. |

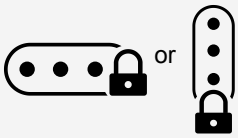
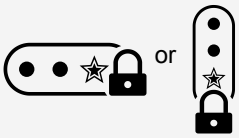
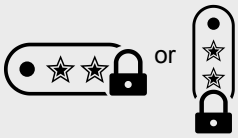
**NOTE** * The actual languages shown must be both installed and active to be listed for selection.

**More information**
See **Language Mgt** for more information about how to make languages active or hidden.

# 4.10 User permissions

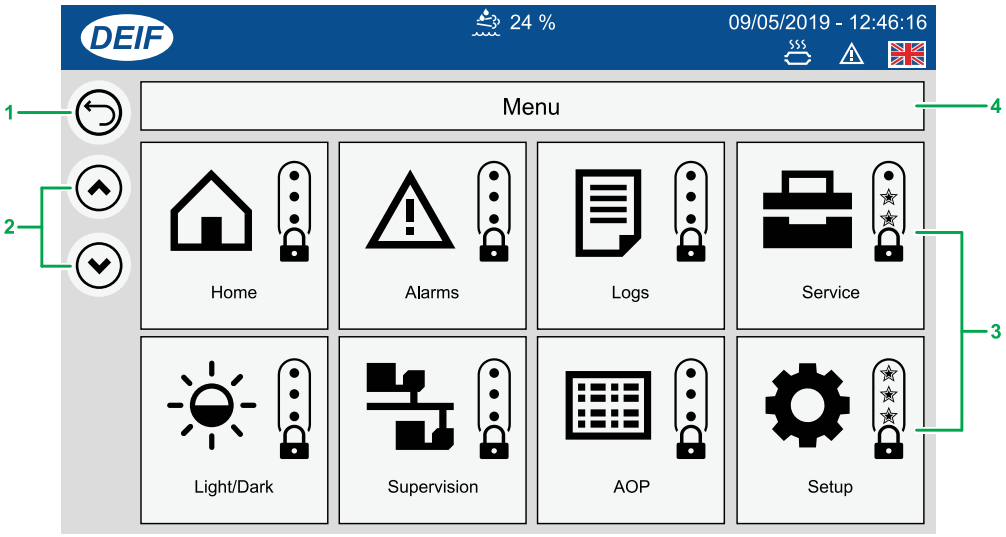
## 4.10.1 Password levels

**Table 4.1** Password level symbols

| Symbol | Password level | Symbol | Password level |
|---|---|---|---|
|  | No login required |  | Level 1 - Customer |
|  | Level 2 - Service |  | Level 3 - Master |

## 4.10.2 User permissions

Features of the display can be restricted to the AGC-4 password levels.

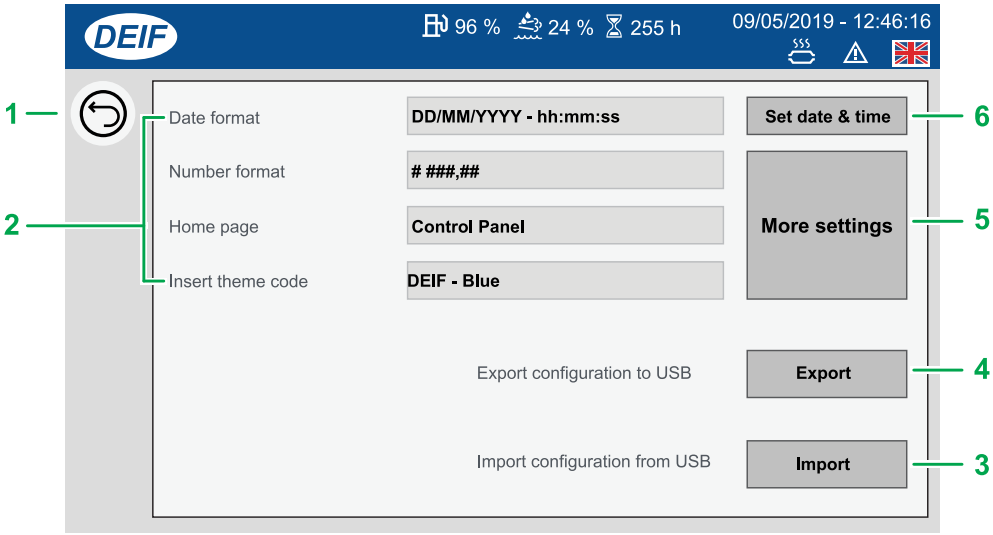



| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Return | | Returns to previous display. |
| 2 | Scroll page | | Scrolls page up. Scrolls page down. |
| 3 | Feature permissions | | Toggles through the password levels. |
| 4 | Page | - | Shows the page group name. |

**More information**
See **Display settings** for more information about how to change the default Home page.

# 4.11 Display Config

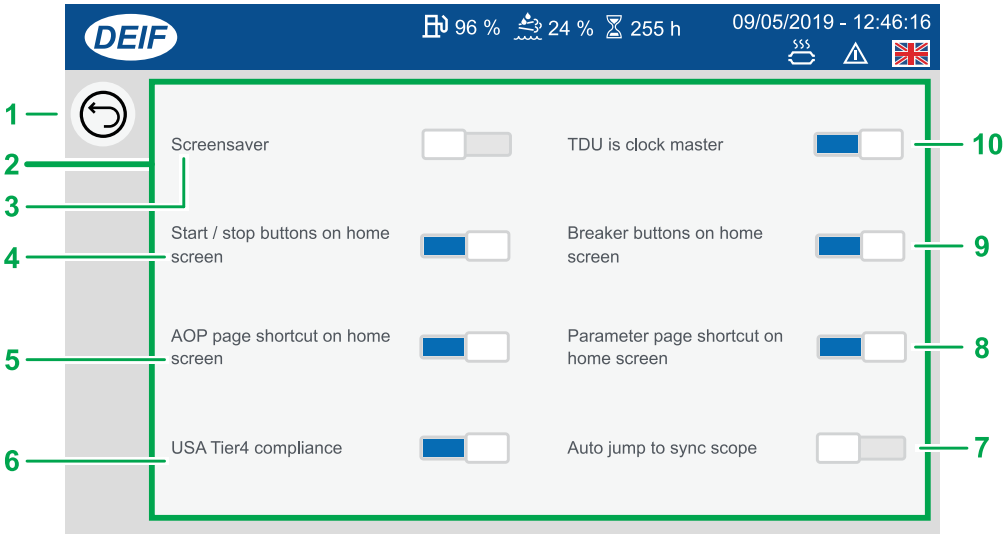
Views or configures the display settings.




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Return | | Returns to previous display. |
| 2 | Display settings | | Edits the display settings:<br>• Data and time format<br>• Number format<br>• Default Home page<br>• Theme code name |
| | | | Edits the date and time format for the display. |
| 3 | Import configuration | | Imports a configuration from a USB drive. |
| 4 | Export configuration | | Exports the configuration to a USB drive. |
| 5 | More settings | | Opens the more settings page. |
| 6 | Set data and time | | Sets the date and time from the entered value. |

## 4.11.1 More settings

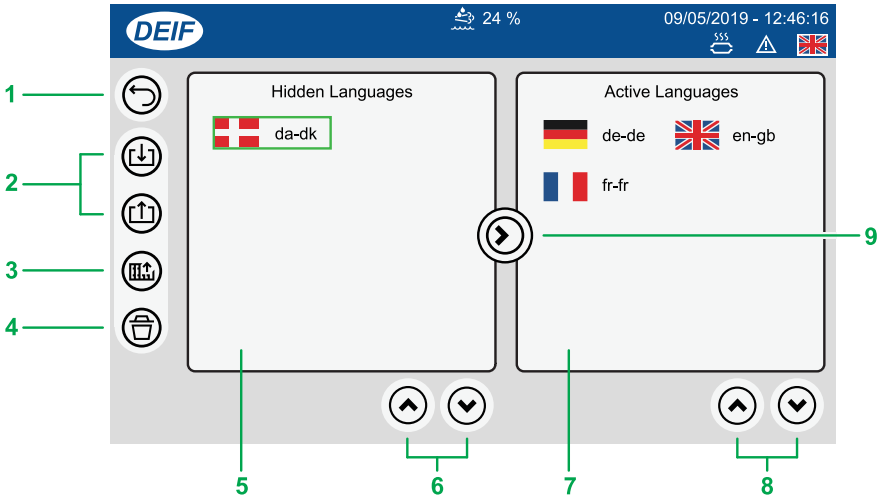
Views or configures the additional settings for the display.




| No. | Item | Use | Notes |
|---|---|---|---|
| 1 | Return | | Returns to previous display. |
| 2 | Settings | - | Toggles on or off additional settings. |
| | | or | Setting enabled. |
| | | or | Setting disabled. |
| 3 | Screensaver | or | Enables or disables the screensaver. |
| 4 | Start / Stop buttons | or | Shows or hides the start / stop buttons on the home page. |
| 5 | AOP shortcut | or | Shows or hides the AOP button on the home page. |
| 6 | Tier 4 compliance | or | Enables or disables the Tier 4 compliance.<br>Enable this to automatically display the Exhaust After-treatment Dashboard if an alarm becomes active. |
| 7 | Auto jump to sync scope | or | Enables an automatic jump to the synchronisation scope when a breaker is synchronising.<br>After synchronisation the page automatically returns to the control panel. |
| 8 | Parameter shortcut | or | Shows or hides the Parameter button on the home page. |
| 9 | Breaker buttons | or | Shows or hides the breaker buttons on the home page. |
| 10 | TDU 107 clock master | or | Enables or disables the TDU as the master clock for the system. |

# 4.12 Language Mgt

Manages the language translations available on the display. Only Active languages can be used on the display.




| No. | Item | Use | Notes | |
|---|---|---|---|---|
| 1 | Return | | Returns to previous display. | |
| 2 | Import | | Imports all language files present on the USB device. | |
| | Export | | Exports the selected language to the USB device. | |
| 3 | Create language | | Creates a new language file to the USB device. | |
| 4 | Delete | | Deletes the selected language file. | |
| 5 | Hidden language(s) list | - | Shows languages that are hidden from use. | |
| | | | Selects a language. ** | |
| 6 | Hidden language(s) scroll page | | Scrolls page up. | Scrolls page down. |
| 7 | Active language(s) list | - | Shows languages that are active for use. | |
| | | | Selects a language. ** | |
| 8 | Active language(s) scroll page | | Scrolls page up. | Scrolls page down. |
| 9 | Move selected language | - | Moves the selected language file. | |
| | | | Move to Hidden. *** | Move to Active |

**NOTE** * Grey symbols (Example: ) show that an option is not possible. For example, you can only delete a language if you have selected a language first.

**NOTE** ** Selected languages are marked with a green outline box.

**NOTE** *** It is not possible to hide the currently active language.

# 4.13 Language translations

## 4.13.1 Introduction

You can create your own language translation files for use with your TDU 107 and AGC-4 controller.

**NOTE** If you have already edited your own translated language(s) files on your AGC-4, these are included in the create function. You will then only need to edit the TDU 107 specific texts. All previously translated texts for your AGC-4 are included in the extracted language file.

## 4.13.2 Before you begin

DEIF recommends that you read the following notes before attempting to create or edit language files.

### Required tools

- USB drive (FAT32)
  - To import/export the file(s) to your PC.
  - Must be formatted for FAT32 file system to be recognised by the TDU 107.
- Notepad++
  - To edit the language file(s).

### Language files

The language files have a required structure for them to work correctly with your TDU 107.

- Each language file is a comma-separated file (.csv) using the semi-colon (;) as the delimiter.
  - Make sure all entries keep the delimiter (;).
  - It is important that the format and structure of the file entries remain the same.
- TDU 107 specific entries, that is to say, for the display screen, all start with a hash (#).
- The default master filename is **_master.csv**.
  - You should rename this file to your required language name.
    - For example: **English.csv**.
- The file is formatted using UTF-8, in UNIX format.
  - DEIF recommend using Notepad++ to edit your translation files.
  - Do not use a typical windows spreadsheet application, such as Excel, to edit or save the file. This will change the formatting in the file and it will no longer be recognised correctly by the TDU 107.
- The language and country is configured by using the standard ISO codes.
  - **Language:** ISO639-1
    - See: https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes (Provided in English)
  - **Country:** ISO3166-1 (Alpha-2)
    - See: https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2 (Provided in English)

**NOTE** The TDU 107 only reads the AGC-4 texts at start-up. If you edit the AGC-4 texts in the Utility software, while the TDU is already running, you must restart the TDU 107 to read the new texts.

## 4.13.3 Create or edit language translation

1. Access the language translation feature from:

```
Home > Setup > Display settings > Language Mgt
```

2. Select the **Create language** option .
3. You are prompted to insert your USB drive into the USB port.
4. Insert your USB drive into the USB port.
   - It takes a few moments to recognise the USB drive.
   - When recognised a USB icon is displayed on the status bar.
5. Wait for the USB icon to be displayed on the status bar.
6. Select confirm to create the language file on the USB drive.
7. Once complete, you can remove the USB drive.
8. Insert your USB drive into your computer.
9. Copy the language file over to your local drive.
10. Rename your file to the language name you wish to create.
11. Open the file for editing with Notepad++.
12. Edit the texts that you wish to change.
13. Save the updated translation file to your USB memory device.
14. Safely remove your USB drive from your PC by using the Eject or similar option.
15. Insert the USB drive into your TDU 107.
    - When recognised the TDU displays the USB icon on the status bar.
16. Open again the **Language Mgt** page.
    - `Home > Setup > Display Settings > Language Mgt`
17. Select **Import** .
18. Follow the on-screen guide to import your language.
19. Your language now appears in the **Hidden Languages** section.
20. To active your new language, select the language in the **Hidden Languages** page.
    - The selected language is marked with a green outline.
21. Move the language file to the active list by using the **Move to active** option.
22. Open the **Language** page.
    - `Home > Setup > Language`
    - or use the language flag directly shown on the status bar.
      - Example:
23. Your new language file is shown for selection.
24. Select your new language for your TDU 107 display.
    - The TDU 107 now reloads all the texts after confirmation.

# 4.14 Export or import settings

## 4.14.1 Introduction

You can export or import your TDU 107 configuration to a USB drive. This can be useful for backing up your configuration or transferring the configuration to another TDU 107.

The configuration includes:

- Instrument settings
- Password levels
- Addition Operator Panel (AOP) texts
- All TDU 107 configuration settings

**NOTE** This is not an export or import of the AGC-4 configuration.

## 4.14.2 Before you begin

You will need a USB drive formatted with FAT32 file system to be recognised by the TDU 107.

## 4.14.3 Export or import configuration file

### Export configuration

1. Access the export feature from:

```
Home > Setup > Display settings > Display config
```

2. Select **Export** option.
   - You are prompted to insert your USB drive into the USB port.
3. Insert your USB drive into the USB port.
   - It takes a few moments to recognise the USB drive.
   - When recognised the USB icon is displayed on the status bar.
4. Wait for the USB icon to be displayed on the status bar.
5. Select confirm to start exporting the configuration.
   - During the export a message is displayed.
6. When the export has completed a confirmation message is shown.
7. Select **Confirm** to complete the export.

### Import configuration

1. Access the import feature from:

```
Home > Setup > Display settings > Display config
```

2. Select **Import** option.
   - You are prompted to insert your USB drive into the USB port.
3. Insert your USB drive into the USB port.
   - It takes a few moments to recognise the USB drive.
   - When recognised the USB icon is displayed on the status bar.
4. Wait for the USB icon to be displayed on the status bar.
5. Select confirm to start importing the configuration.
   - During the import a message displayed.
6. When the import has completed a confirmation message is shown.

- The TDU 107 must be restarted for the new configuration to be applied.

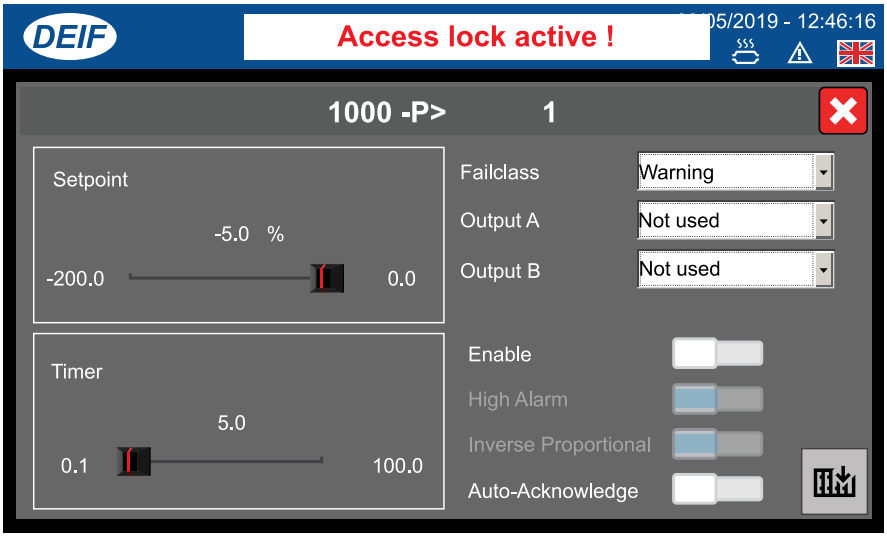
7. Select **Confirm** to restart.

# 4.15 Access lock

The TDU 107 supports the Access lock function from the AGC-4.

When a digital input is configured for this function and is active (high), attempting to operate the TDU 107 displays the Access lock message in the status bar. Configuration and operation can no longer be saved or changed.

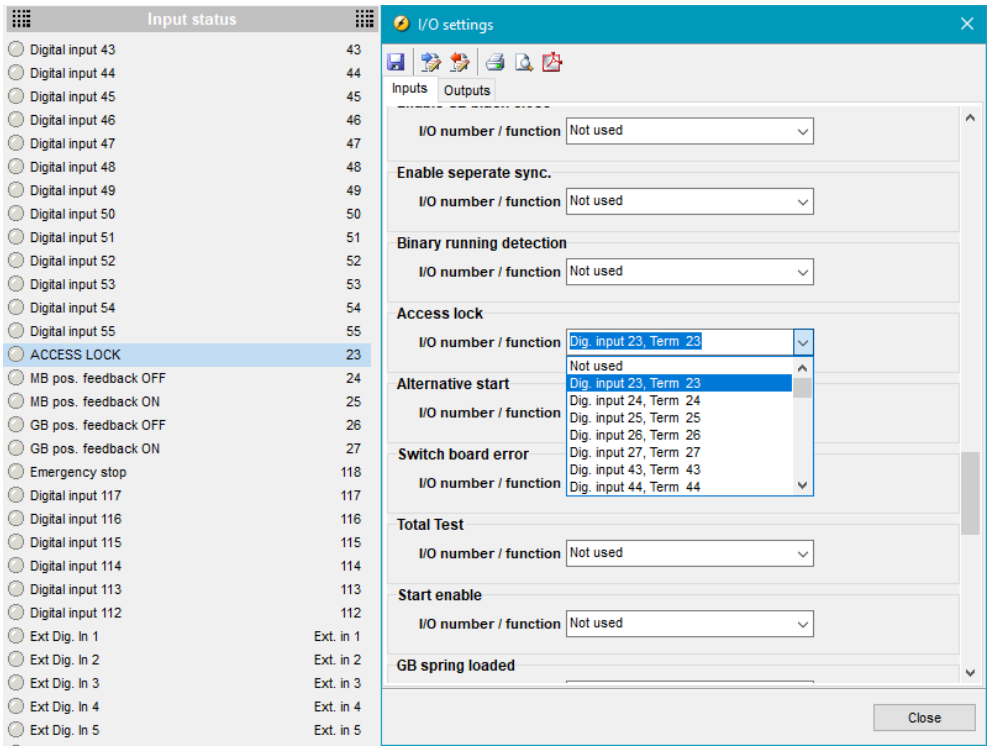
Example page with Access lock shown:




### AGC-4 Access lock

Access lock is configured with the AGC-4 utility software on any digital input.

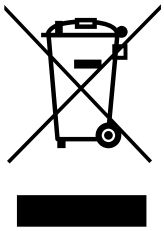
Example digital input configured with Access lock:



# 5. End-of-life

## 5.1 Disposal of waste electrical and electronic equipment

WEEE symbol



All products that are marked with the crossed-out wheeled bin (the WEEE symbol) are electrical and electronic equipment (EEE). EEE contains materials, components and substances that can be dangerous and harmful to people's health and to the environment. Waste electrical and electronic equipment (WEEE) must therefore be disposed of properly. In Europe, the disposal of WEEE is governed by the WEEE directive issued by the European Parliament. DEIF complies with this directive.

You must not dispose of WEEE as unsorted municipal waste. Instead, WEEE must be collected separately, to minimise the load on the environment, and to improve the opportunities to recycle, reuse and/or recover the WEEE. In Europe, local governments are responsible for facilities to receive WEEE. If you need more information on how to dispose of DEIF WEEE, please contact DEIF.