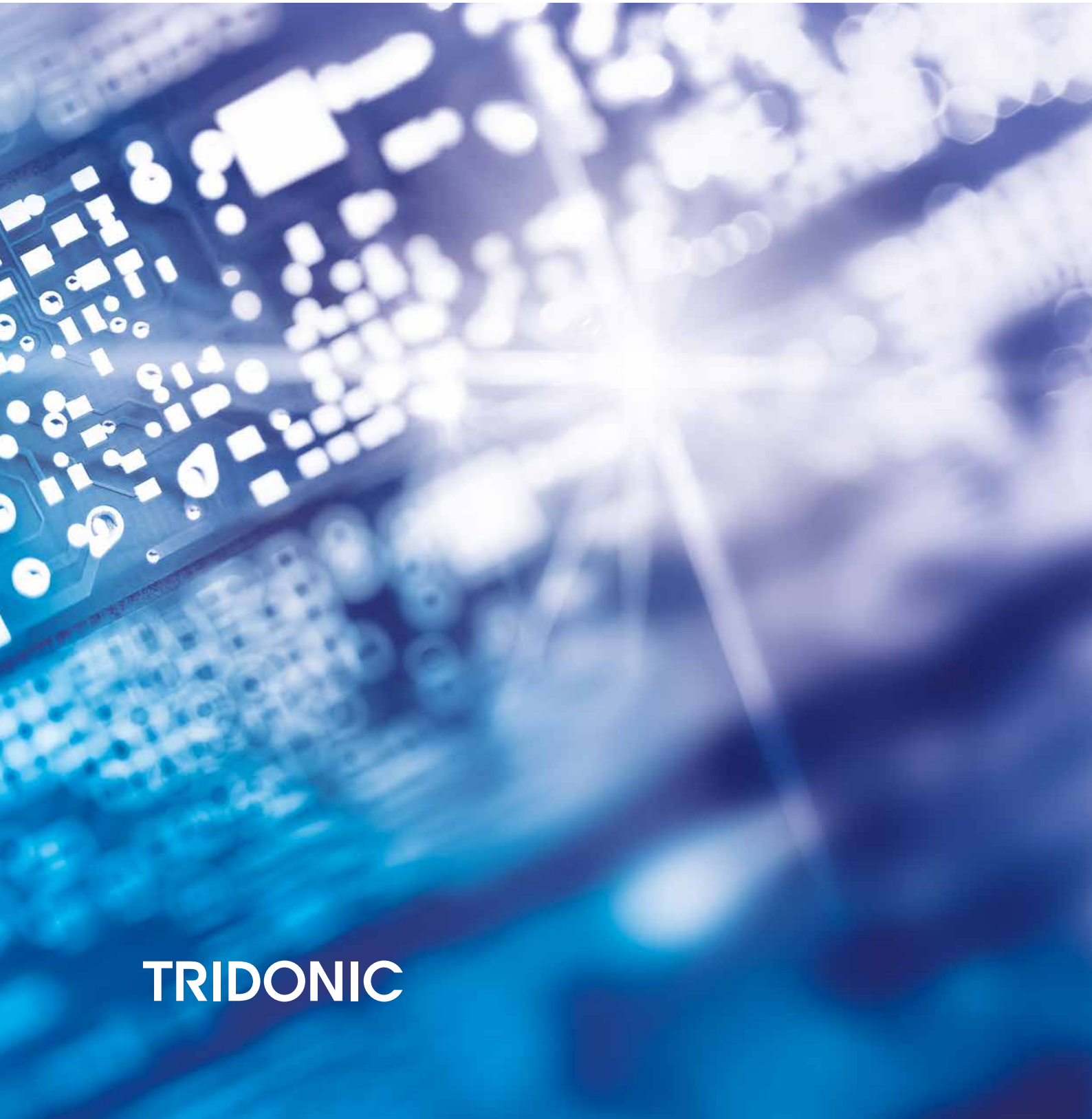
luxCONTROL

masterCONFIGURATOR

Product Manual



TRIDONIC

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1 Signs and symbols

The following characters and symbols are used in this manual:

1. Individual steps in the instructions are numbered.

▷ Single-step instructions are indicated by ▷ at the beginning of the line.

➲ After a step has been described, a description of the expected results will follow. These results are indicated by ➲ at the beginning of the line.

– Requirements which need to be checked before carrying out a step are indicated by –.

i Individual notes can be recognised by i. In addition, notes are identified by the word **Note**.

2 Introduction

The masterCONFIGURATOR software is a configuration and parameterisation program for DALI devices. This software can be used to set up a DALI control line and configure individual control gear and control units.

Basic functions

- Addressing
- Grouping
- Setting scenes
- Parameterising DALI devices
- Configuring DALI and DSI commands
- Creating command sequences
- Testing installation, addressing and functions

Note
The masterCONFIGURATOR software is designed for online operation. If DALI devices are configured offline, faults may occur.

3 Installation

This section covers the system requirements for the masterCONFIGURATOR software and how the software is installed.

System requirements

In order to make full use of the functionality of the masterCONFIGURATOR software, the following are required:

Operating system	• Windows 10 • Windows 7 • Windows XP **Note** The chapter Changing compatibility mode 8 will tell you how you can change the compatibility mode.
Screen resolution	Minimum XGA (1024 x 768 pixels)
Communication	USB or COM interface

Table 1: System requirements

Installing software as administrator

1. Run the file *masterCONFIGURATOR_Vxxx.exe* as administrator.
   a. Right-click on file.
   ➲ Submenu is displayed.
   b. Click on **Run as administrator**.
2. Click on **Next**.
   ➲ The setup wizard appears.
3. Follow the setup wizard steps.
   ➲ The masterCONFIGURATOR software is installed.
4. Follow the setup wizard steps.
   ➲ The DALI BusServer software is installed.

Note
The masterCONFIGURATOR software can be accessed by going to

Start > Programs > Tridonic > masterCONFIGURATOR or via the DALI shortcut on the desktop.

Installing software without administrative rights

1. Run the file *masterCONFIGURATOR_Vxxx.exe*.
2. Click on **Next**.
   ➲ The setup wizard appears.
3. Follow the setup wizard steps.
   ➲ The masterCONFIGURATOR software is installed.
4. Follow the setup wizard steps.
   ➲ The DALI BusServer software is installed.

3 Installation

Note
If the masterCONFIGURATOR software is installed without administration rights, an installation path with write permission must be selected. An installation to the default path is not possible because of missing write permission for non-administrators.

Note
The masterCONFIGURATOR software can be accessed by going to

Start > Programs > Tridonic > masterCONFIGURATOR or via the 

shortcut on the desktop.

3 Installation

Changing compatibility mode

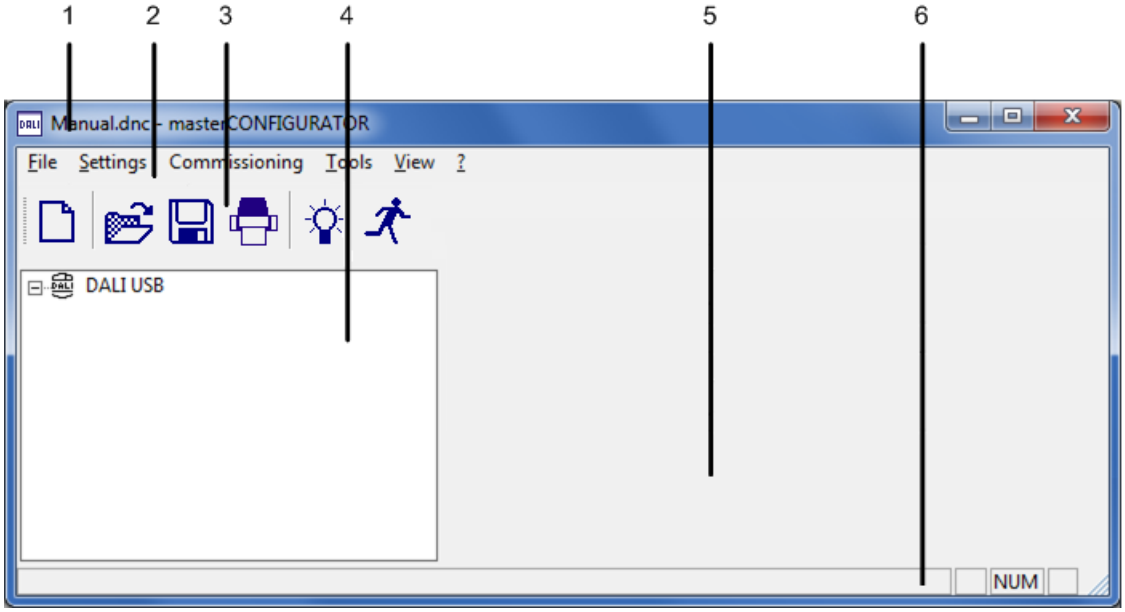
> **Note**
> The compatibility mode only has to be changed if Microsoft Windows 7 is used as the operating system.

1. On the desktop, right-click on the 

icon.
2. Select menu item **Properties**.
3. Click on the **Compatibility** tab.
4. Enable the Run program in compatibility mode checkbox.
5. In the dropdown list, select **Windows XP (Service Pack 3)**.
6. Click **OK**.
   ➲ Compatibility mode has been changed.

4 Active window

After starting up, the software displays the active window. The control gear and control units can be parameterised and configured here. Depending on the function, further sub-windows will be opened.



Name	Function
(1) Title bar	Displays the name of the project file currently open.
(2) Menu bar	Contains the **File**, **Settings**, **Commissioning**, **Tools** and **View** menus.
(3) Toolbar	Contains icons for quick access to various functions. **Note** You can show or hide the toolbar via menu item **View** > **Toolbar**.
(4) DALI device tree diagram	Displays the devices connected to the DALI control line in a tree diagram. It is also possible to see which group each device belongs to.
(5) Detail view	Displays the properties of a device or a group that has been selected in the DALI device tree diagram. The devices or groups can be configured and parametrised here.
(6) Status bar	Displays status information and help text. **Note** You can show or hide the status bar via menu item **View** > **Status bar**.

Table 2: Active w indow

4 Active window

Toolbar

The following icons are found in the toolbar:

Icon	Function
	Create a new project
	Open a project
	Save a project
	Print a project
	Locate
	Identify

Table 3: Toolbar

Note
A detailed description of the **Locate** and **Identify** functions can be found in Section Checking device assignment... 35

Changing the language

The software user interface can be displayed in German or English. The language is changed as follows:

1. Select **View**.
2. Select language.
   ➲ A message appears indicating that the language will only be changed after the program has been restarted.
3. Confirm the message by clicking on **OK**.
4. Restart the program.
   ➲ The software will be started in the desired language.

Showing/hiding advanced settings

Control gear and control units can be configured using the masterCONFIGURATOR. The advanced settings must be displayed in order to configure additional parameters as well as the general settings. The advanced settings can be shown or hidden as follows:

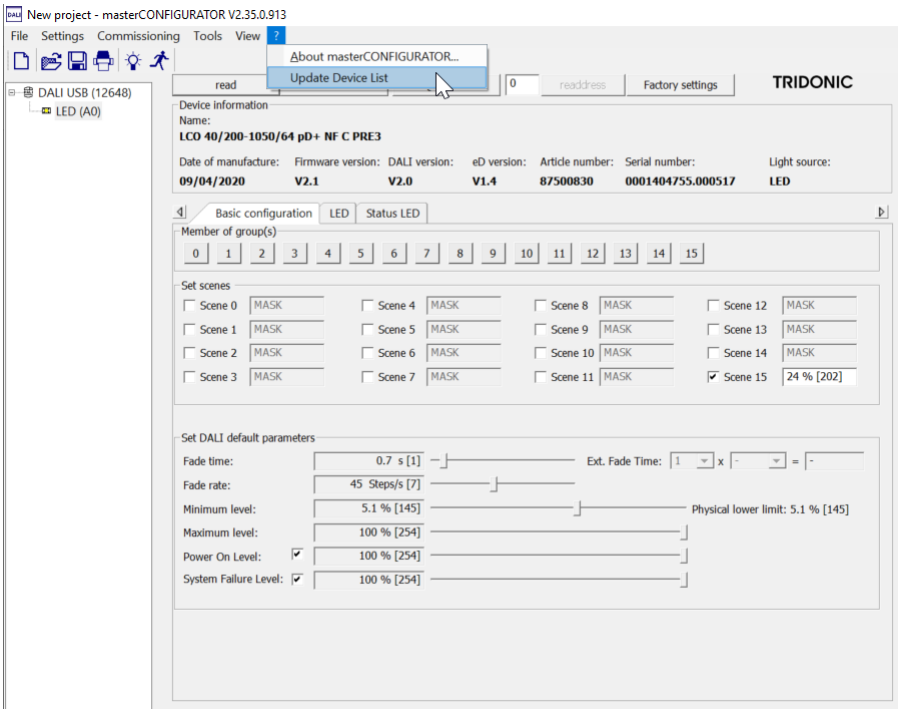
1. Select **View**.
2. Show (enable) or hide (disable) the **Advanced settings**.
   ➲ The advanced settings are shown/hidden in the detail view.

4 Active window

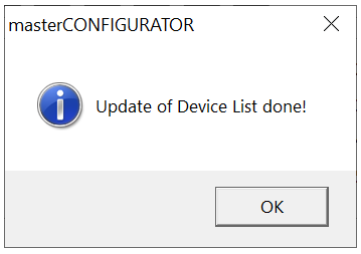
Note
The advanced settings must be enabled again each time the software is restarted.

Update device list

If the Device Information of a Tridonic driver is not displayed correctly, it might be necessary to update the device list. To do so, click on the question mark and select the option Update Device list.



A message will appear that the update was successful:



5 Commissioning

The masterCONFIGURATOR software allows the user to test the correct wiring of the DALI control line, address the devices and define group and scene settings in five easy steps. In order for these steps to be carried out, an interface must first be selected. Optionally, the device search and the addressing can be narrowed down.

5.1 Selecting an interface

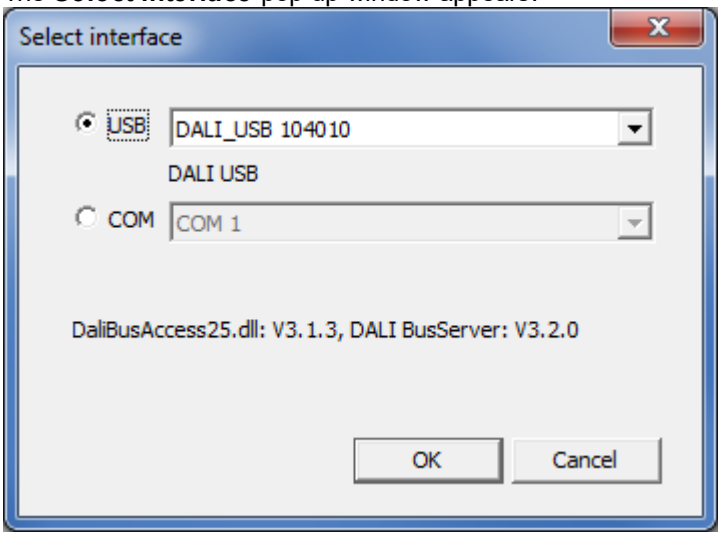
Use a DALI USB or the ready2mains Programmer for exchanging data between the computer and the devices on the DALI control line. For backward compatibility, DALI SCI2 can be used.

Note
DALI SCI is not supported.

If the computer is already connected to the DALI control line via an interface, the masterCONFIGURATOR software automatically detects the type of interface and selects it for communication. However, the interface may also be selected manually.

Selecting an interface manually

1. Connect the USB cable of the DALI USB or the ready2mains Programmer to the computer on which the masterCONFIGURATOR software is installed.
2. Connect the DALI USB or the ready2mains Programmer to the DALI control line.
3. Select **Settings** > **Select interface…**
   ➲ The **Select interface** pop-up window appears.



4. To use a USB interface, select the **USB** radio button and select the desired interface from the drop-down list.
5. To use a COM interface, select the **COM** radio button and select the desired interface from the drop-down list.
6. Confirm the selection by clicking on **OK**.
   ➲ The interface has been selected.
   ➲ DALI BusServer starts automatically.

5 Commissioning

> **Note**
> If the masterCONFIGURATOR software detects that a DALI USB is connected, it automatically checks the USB software version. If it is older than the version supplied with the masterCONFIGURATOR software, it will be updated automatically. This update takes approximately one minute.

5.2 Options

Under **Settings** > **Options** the following functions can be set:

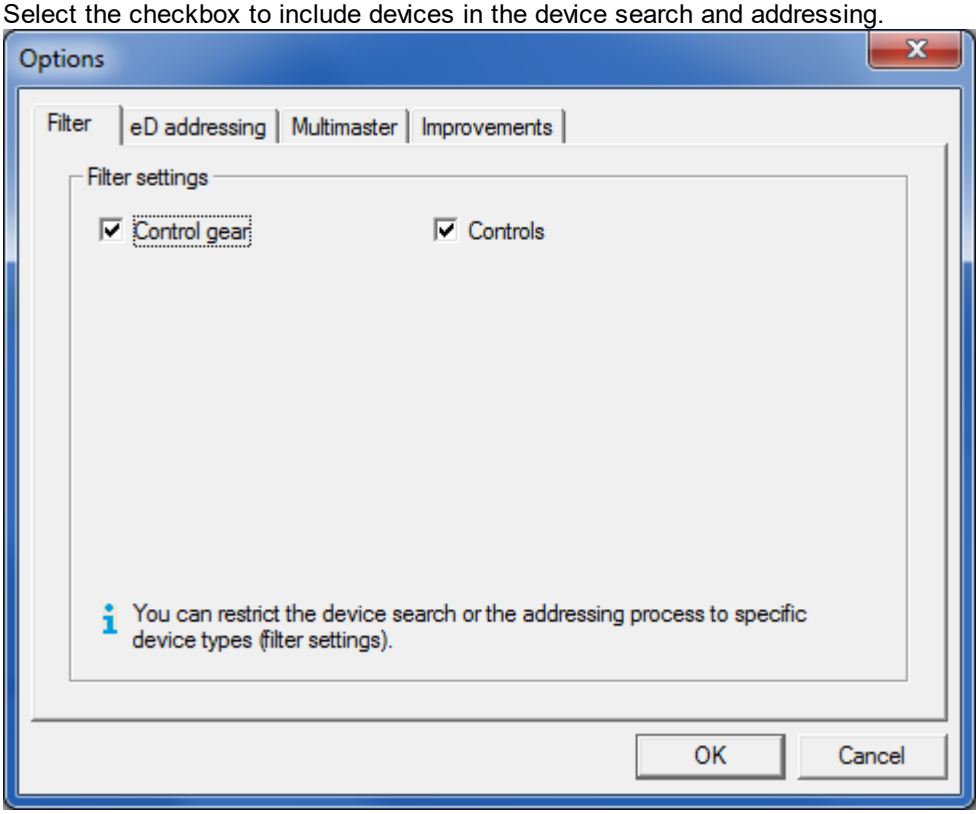
- Filter settings 13
- eD addressing 14
- Multimaster 17
- Improvements 18

5.2.1 Filter settings

This function allows the user to narrow the device search or addressing.

Enabling the filter

1. Select **Settings > Options**.
   ➲ The **Options** pop-up window appears.
2. Click on the **Filter** tab.
3. Select the checkbox to include devices in the device search and addressing.



4. Confirm the selection by clicking on **OK**.

5 Commissioning

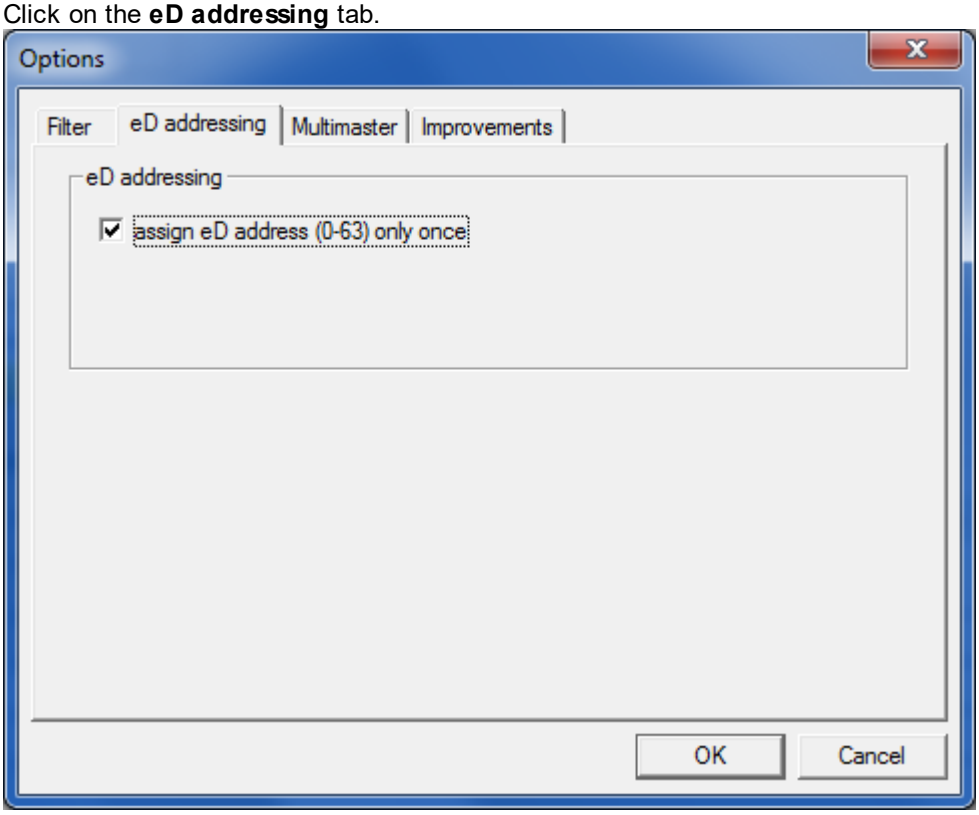
➲ Filter for the device search and the addressing is enabled.
➲ Only those devices with enabled checkboxes will be included in the device search and the addressing.

5.2.2 eDALI addressing

Up to 64 eD addresses can be assigned when addressing eD devices. The 64 eD addresses can be configured to be assigned once per DALI control line or once per device class.

Disabling the option

1. Select **Settings** > **Options**.
   ➲ The **Options** pop-up window appears.
2. Click on the **eD addressing** tab.



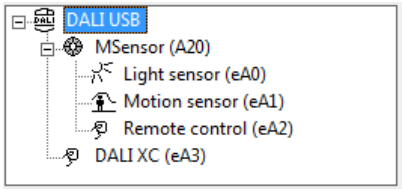
3. Disable the checkbox.
4. Confirm the selection by clicking on **OK**.
   ➲ The type of eD addressing has been changed. This change will be applied when the system is next re-initialised (New initialisation).

Both types of eD addressing are explained in the following examples.

- Example 1: **Assign eD address (0-63) only once** enabled:
  The eD addresses are assigned once per DALI control line.
- Example 2: **Assign eD address (0-63) only once** disabled:
  The eD addresses are assigned once per device class.

5 Commissioning

Example 1: eD addresses assigned once per DALI control line



Device class	eD address	Explanation
DALI MSensor: light sensor	eA 0	The first of 64 eD addresses has been assigned on this DALI control line.
DALI MSensor: motion sensor	eA 1	The second of 64 eD addresses has been assigned on this DALI control line.
DALI MSensor: remote control	eA 2	The third of 64 eD addresses has been assigned on this DALI control line.
DALI MC	eA 3	The fourth of 64 eD addresses has been assigned on this DALI control line.

Table 4: Example of eD addressing, option enabled

In this example a total of four out of 64 eD addresses have been assigned. Another 60 eD addresses can still be assigned on this DALI control line.

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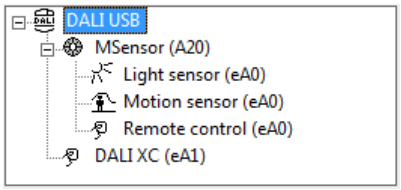
Example 2: eD addresses assigned once per device class



Device class	eD address	Explanation
DALI MSensor: light sensor	eA 0	The first of 64 eD addresses has been assigned to the "Light sensor" device class.
DALI MSensor: motion sensor	eA 0	The first of 64 eD addresses has been assigned to the "Motion sensor" device class.
DALI MSensor: remote control	eA 0	The first of 64 eD addresses has been assigned to the "Manual control units" device class.
DALI MC	eA 1	The second of 64 eD addresses has been assigned to the "Manual control units" device class.

Table 5: Example of eD addressing, option disabled

In this example only one of the 64 eD addresses has been assigned to each of the "Light sensor" and "Motion sensor" device classes. Another 63 eD addresses can still be assigned to each device class. Two of the 64 eD addresses have been assigned to the "Manual control units" device class. Another 62 eD addresses can still be assigned to this device class.

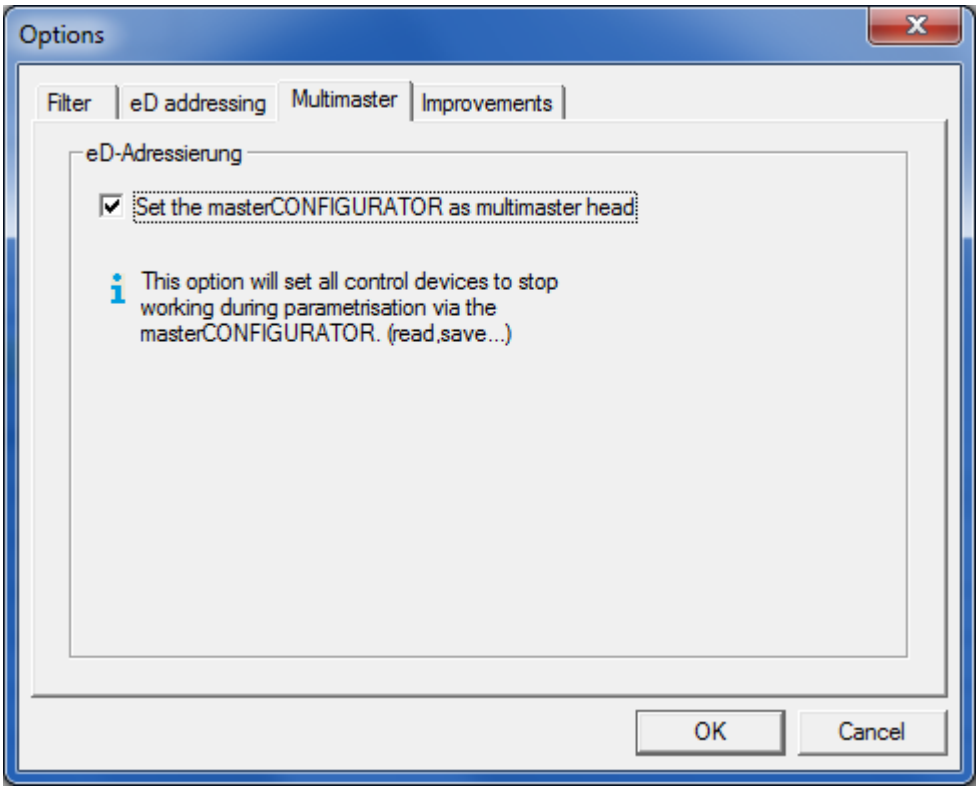
5 Commissioning

5.2.3 Multimaster

This function is enabled by default and prevents control devices from transmitting frames during firmware updates. With this, it is possible to avoid conflicting commands from the masterCONFIGURATOR and other control devices via the DALI line.

Disabling the option

1. Select **Settings** > **Options**.
   ➲ The **Options** pop-up window appears.
2. Click on the **Multimaster** tab.



3. Disable the checkbox.
4. Confirm the selection by clicking on **OK**.
   ➲ **Set the masterCONFIGURATOR as multimaster head** has been deactivated. This change will be applied when the system is next re-initialised (New initialisation).

Both types of Multimaster are explained in the following examples.

- Example 1: **Set the masterCONFIGURATOR as multimaster head** enabled:
  The masterCONFIGURATOR is set as multimaster head. Other control devices cannot transmit frames during a firmware update.
- Example 2: **Set the masterCONFIGURATOR as multimaster head** disabled:
  Other control devices can transmit frames during a firmware update.

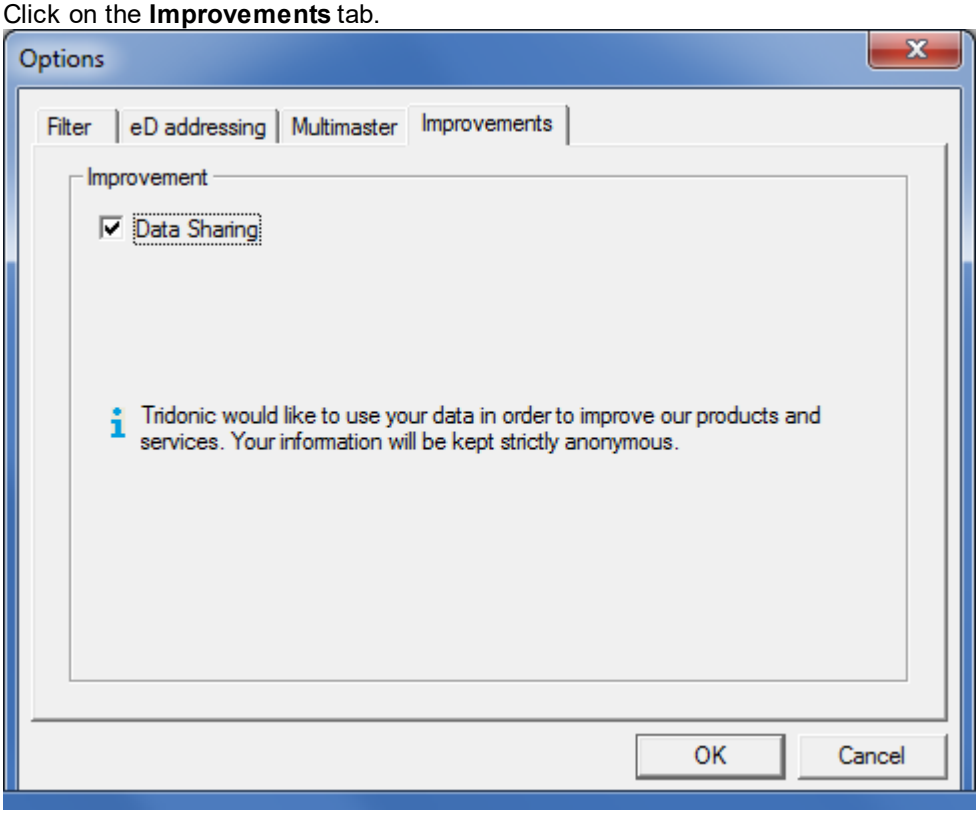
5 Commissioning

5.2.4 Improvements

This function is enabled by default and allows the application to track information about the functions used.

Disabling the option

1. Select **Settings** > **Options**.
   ➲ The **Options** pop-up window appears.
2. Click on the **Improvements** tab.



3. Disable the checkbox.
4. Confirm the selection by clicking on **OK**.
   ➲ **Allow data tracking to improve user experience** has been deactivated. This change will be applied when the system is next re-initialised (New initialisation).

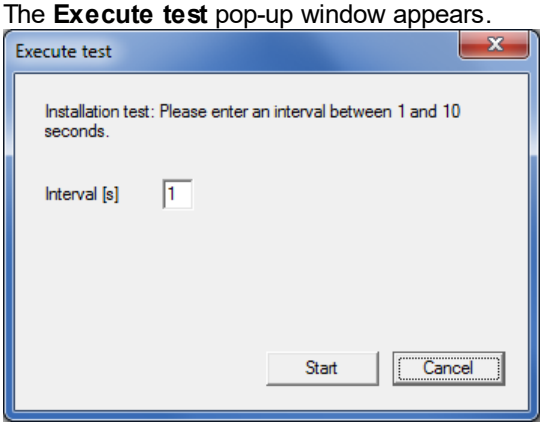
5 Commissioning

5.3 Testing the installation

This function allows the user to test the wiring of the installation.

Testing the installation

1. Select **Commissioning > 1. Test installation**.
   ➲ The **Execute test** pop-up window appears.



2. Enter an interval between 1 and 10 seconds.
3. Click on **Start**.
   ➲ The **Start** button changes into the **Stop** button.
   ➲ Once the test is started, the **minimum level** and **maximum level** commands are sent alternately to all luminaires on the DALI control line.
4. Click on **Stop** to stop the test.

5.4 Addressing

Addressing can be carried out using the addressing wizard. There are generally two ways to address devices:

- **New initialisation**: all addresses and group memberships are deleted in the devices. The devices are then re-addressed.
- **System extension (address previously unaddressed devices)**: a search is carried out for previously addressed and unaddressed devices. Addressing for previously addressed devices will remain unchanged. The next available address is then assigned to devices which have been recently added.

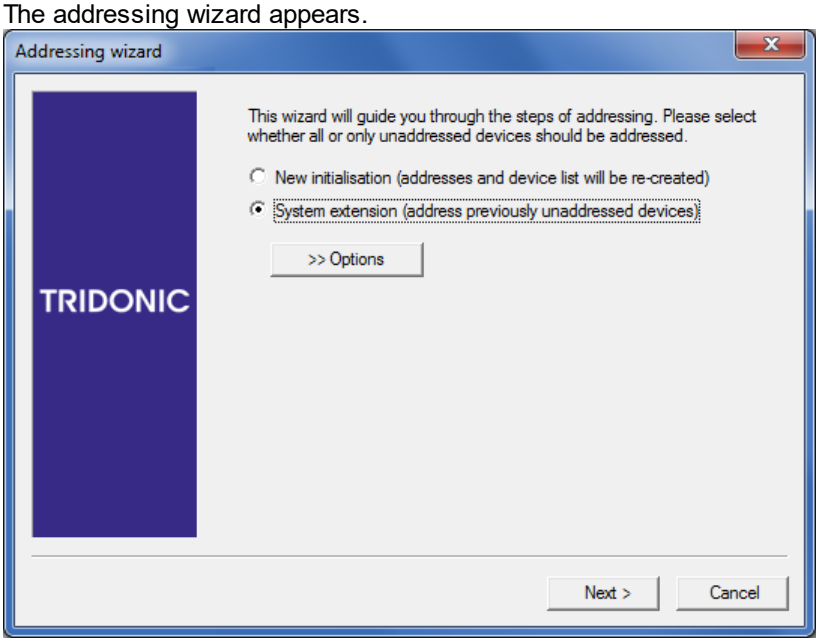
Note
In the event of system extension, recently added devices cannot already have an address. Otherwise, duplicate addresses could be assigned, which would lead to problems.

5 Commissioning

Addressing

Requirements:
– Installation test completed successfully.
– No lamp errors.
– Optional: filter enabled.

1. Select **Commissioning > 2. Address**.
   ➲ The addressing wizard appears.

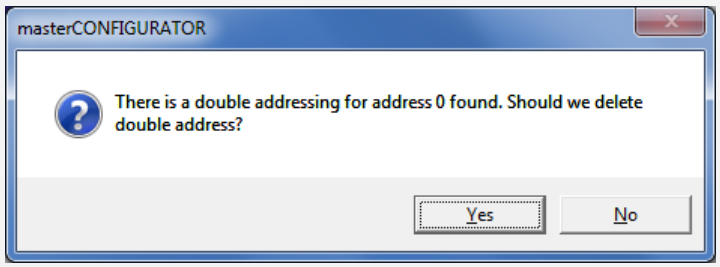


Note
The two options "New initialisation" and "System extension" differ as follows:

- During new initialisation, all existing addresses will be first deleted and then re-created.
- During system extension, existing addresses are retained and only new devices that have not yet been addressed get new addresses.

Any previously existing double addresses are deleted by a new initialisation. This is not the case with a system extension.

If a system extension is started and the device detects double addressing, the following error message appears:



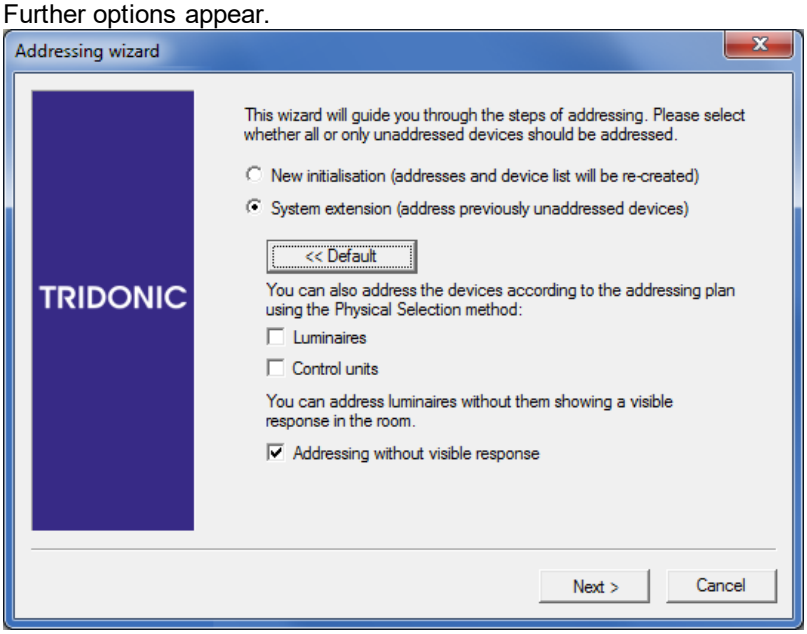
- By clicking **Yes**, the double addressing is deleted. This means, that all devices with double addressing have no address anymore and have to be re-addressed afterwards.

5 Commissioning

2. Select radio button **New initialisation** or **System extension (address previously unaddressed devices)**.

> **Note**
> If no other options are selected, the addresses are assigned at random.

3. To set other addressing options, click on **Options**.
   ➲ Further options appear.



4. To address luminaires specifically in accordance with the addressing plan using the physical selection method, select **Luminaires**.

> **Note**
> The way in which the physical selection method is carried out differs from device to device and should therefore be taken from the documentation specifically for the device in question. Not all DALI control gear supports this type of addressing. Before addressing, check whether the connected control gear supports the physical selection method.

5. To address control units specifically according to the addressing plan using the physical selection method, select **Control units**.

> **Note**
> Section Special notes on addressing control units 22 contains information on how control units are addressed using the physical selection method.

6. To address luminaires so that no reaction is visible in the room, select **Addressing without visible reaction**.

> **Note**
> If luminaires are addressed with the physical selection method, the **Addressing without visible reaction** function is ignored. Addressing without visible reaction is recommended if the rooms are already in use and the system is just being extended. In the case of addressing with a visible reaction, the luminaire being addressed goes to the maximum level.

7. Click on **Next**.
   ➲ Addressing is carried out in accordance with the selected options.

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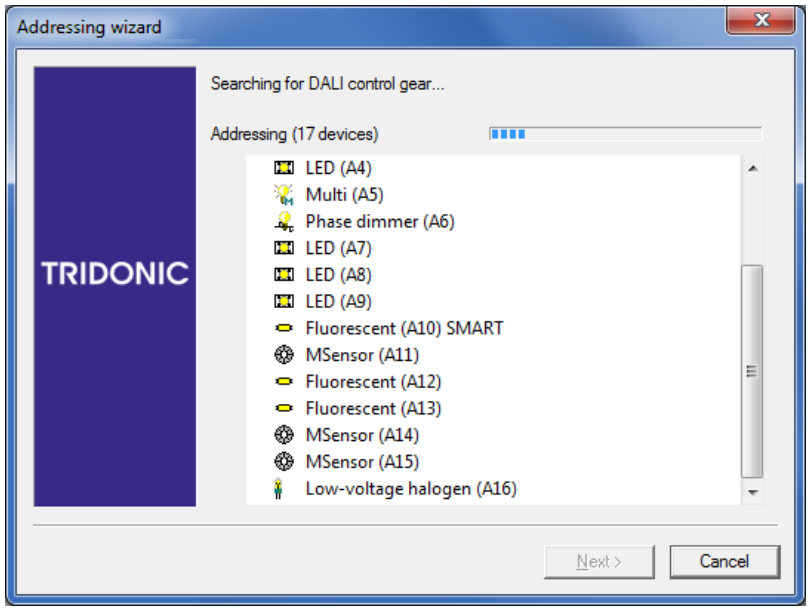
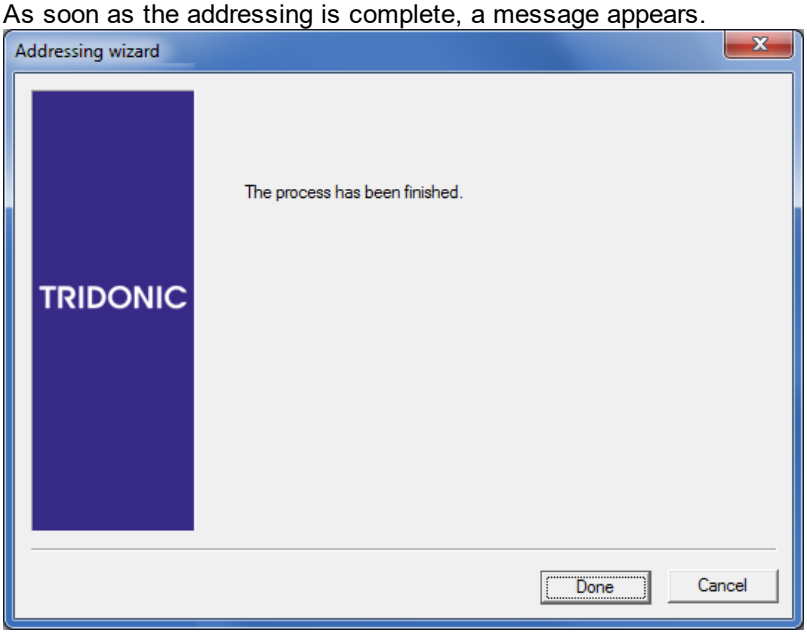
➲ Found devices are listed in the pop-up window. The assigned address is shown in brackets, with A standing for DALI address and eA for eD address.



8. As soon as the addressing is complete, a message appears.



9. Click **Done** to exit the addressing wizard.
➲ Found devices are shown in the DALI device tree diagram.

Special notes on addressing control units

Control units such as the DALI MC or the DALI TOUCHPANEL must be addressed with the physical selection method.

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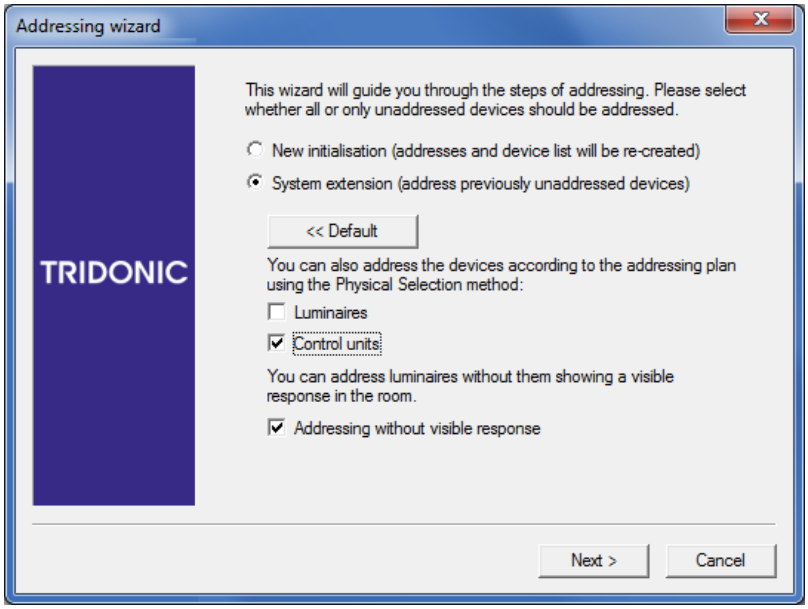
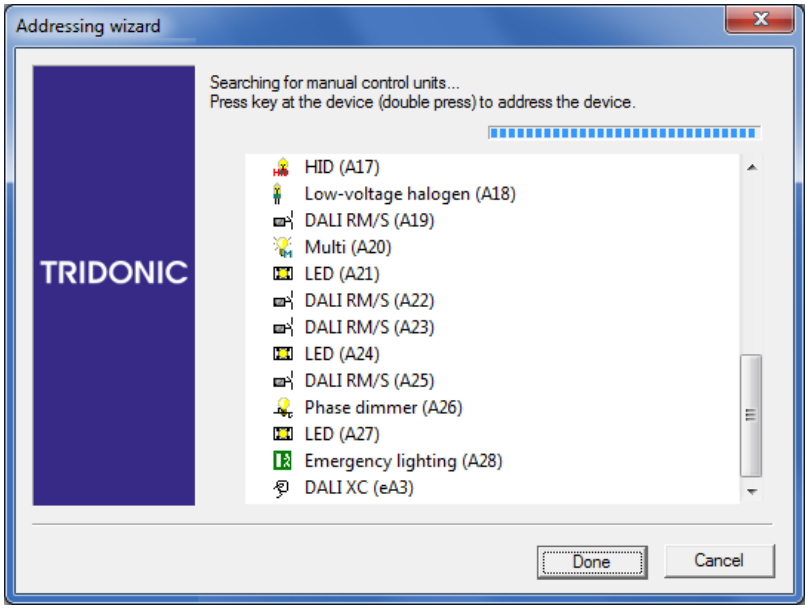


When addressing control units, the user is prompted to press a key on the control unit to address the device.



Addressing the DALI MC

1. Press the key on the DALI MC twice ("double-click").
   ➲ The masterCONFIGURATOR software recognises the input and assigns an eD address (eA) to it.
2. Repeat the process for all four DALI MC inputs.

Note
The eD addresses (eA) are assigned in the order in which the keys on the DALI MC are pressed.

Addressing the DALI TOUCHPANEL

▷ Press any key on the DALI TOUCHPANEL.
➲ The masterCONFIGURATOR software recognises the input and assigns an eD address (eA) to it.

5 Commissioning

Note
A total of 64 addresses can be assigned on the DALI control line. The eD addresses given to the DALI MC and the DALI TOUCHPANEL do not reduce this number.

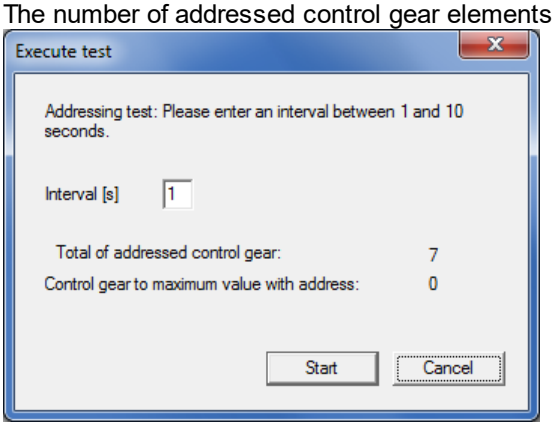
5 Commissioning

5.5 Testing addressing

This function allows the user to test the addressing.

Testing addressing

1. Select **Commissioning > 3. Check addressing**.
   ➲ The **Execute test** pop-up window appears.
   ➲ The number of addressed control gear elements is shown under **Total of addressed control gear**.



2. Enter an interval between 1 and 10 seconds.
3. Click on **Start**.
   ➲ The **Start** button changes into the **Stop** button.
   ➲ Once the test is started, the maximum level is sent to all luminaires in order. The corresponding address appears under **Control gear to maximum value with address**.
4. Click on **Stop** to stop the test.

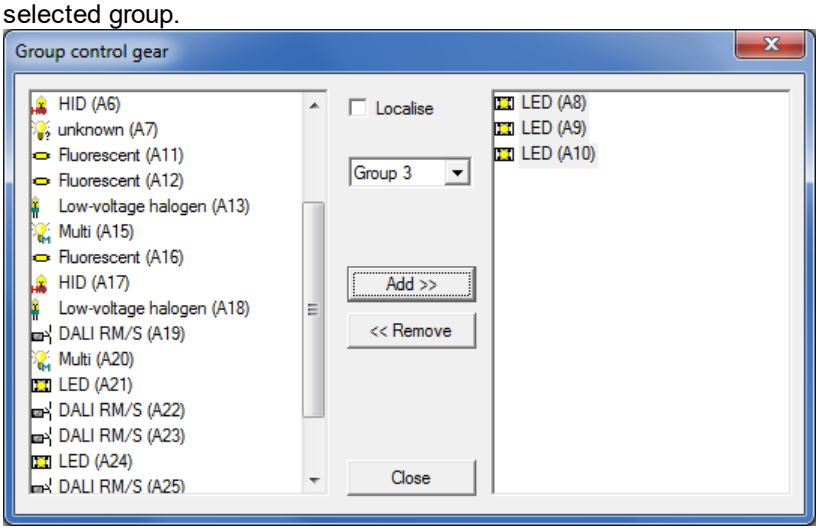
5 Commissioning

5.6 Grouping control gear

This function allows the user to group control gear. Up to 16 groups (0–15) are available.

Grouping control gear

1. Select **Commissioning > 4. Group control gear**.
   ➲ The **Group control gear** pop-up window appears.
   ➲ The left-hand column lists all the available control gear. The right-hand column shows all the devices that are in the selected group.



2. Select the desired group (0–15) from the **Group** drop-down list.
3. Optionally, select the **Localise** checkbox.
   ➲ The selected luminaire goes to the maximum level.
4. Select the control gear in the left-hand column.
5. To add control gear to the group, click on **Add**.
   ➲ The control gear is removed from the left-hand column. It is added to the selected group and appears in the right-hand column.

Removing control gear from a group

1. Select the control gear in the left-hand column.
2. Click on **Remove**.
   ➲ The control gear is removed from the group and appears in the left-hand column.

5 Commissioning

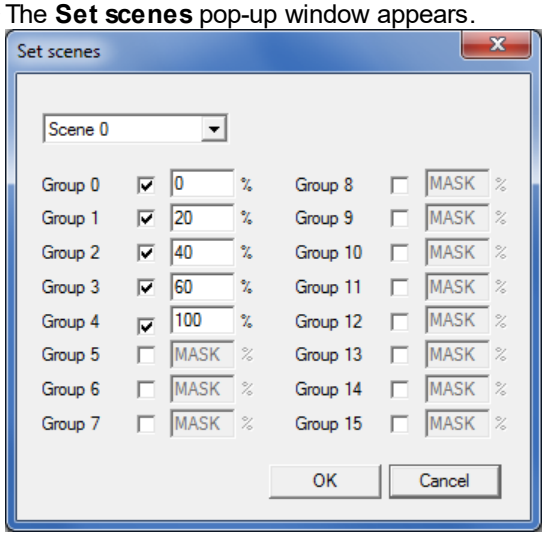
5.7 Setting scenes

This function allows the user to configure up to 16 scenes (0–15).

Setting scenes

Requirement:
– Devices assigned to the groups.

1. Select **Commissioning** > **5. Set scenes**.
   ➲ The **Set scenes** pop-up window appears.



2. Select the desired **scene** (0–15) from the drop-down list.
   ➲ All the following settings are defined for this scene.
3. Select the checkbox to assign an intensity to all the luminaires in the group.
4. Enter a value between 0% and 100%.
   ➲ All the control gear in this group immediately go to the entered level.
5. Confirm the entry by clicking on **OK**.
   ➲ Settings are saved for this group.
6. To define the settings for the other scenes, repeat steps 2 to 5 for each scene.

Note
MASK means that the luminaires in this group will retain their current intensity when the relevant scene is recalled.

5 Commissioning

5.8 Saving a project

This function allows the user to save the commissioning in a **.dnc* file.

1. Select **File > Save**.
   ➲ The **Save file** pop-up window appears.
2. Select a location for the file.
3. Enter the file name.
4. Click on **Save**.
   ➲ The project is saved.

-or-

1. In the toolbar, click on  .
   ➲ The **Save file** pop-up window appears.
2. Select a location for the file.
3. Enter the file name.
4. Click on **Save**.
   ➲ The project is saved.

6 General functions

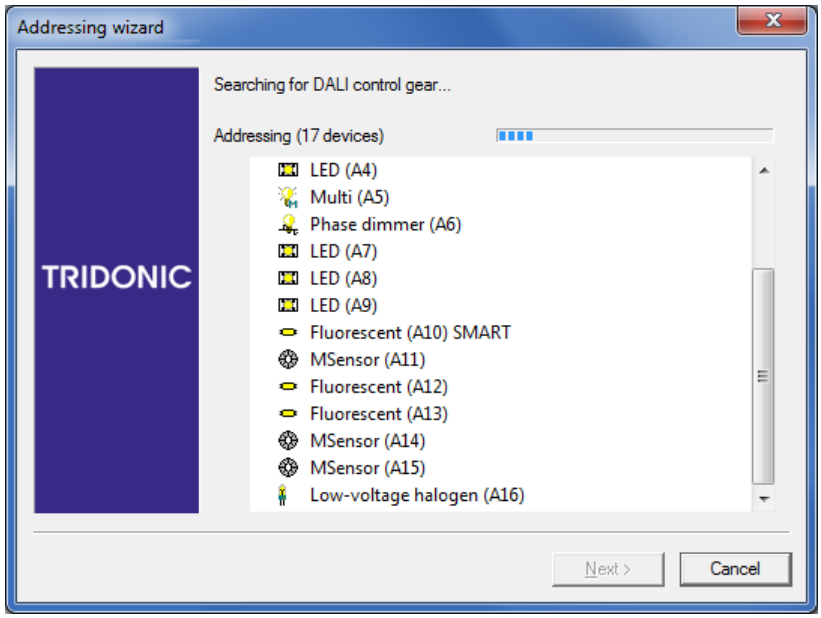
After addressing, the devices are displayed in the DALI device tree diagram. If devices have already been assigned to a group (see Section Grouping control gear 26), this group is created automatically and the devices are assigned to it.

Note
DALI devices can be assigned to more than one group at the same time. Group membership can be seen in the detail view.

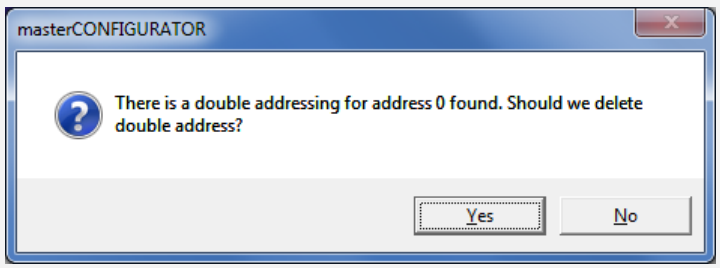
6.1 Searching for devices

Requirements:
– Installation test completed successfully.
– No lamp errors.
– Optional: filter enabled.

1. In the DALI device tree diagram, right-click on the DALI icon.
   ➲ The context menu appears.
2. Select **Search devices** in the context menu.
   ➲ The search is carried out with the addressing wizard.
   ➲ Found devices are listed in the pop-up window. The assigned address is shown in brackets, with A standing for DALI address and eA for eD address.



Note
If a system extension is started and the device detects double addressing, the following error message appears:



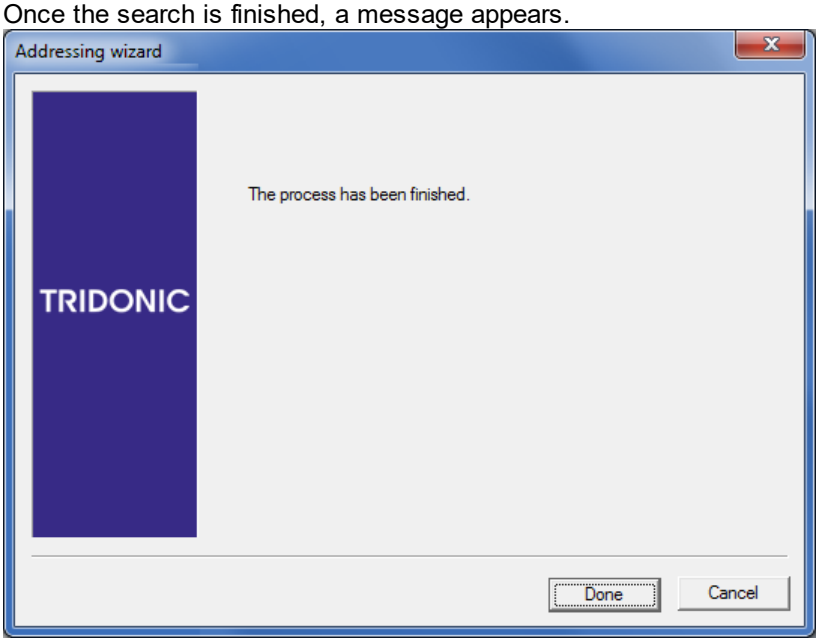
6 General functions

- By clicking **Yes**, the double addressing is deleted. This means, that all devices with double addressing have no address anymore and have to be re-addressed afterwards.

Section **Addressing** 19 contains more information on double addressing.

6 General functions

3. Once the search is finished, a message appears.



4. Click **Done** to exit the addressing wizard.
   ➲ Found devices are shown in the DALI device tree diagram.

Note
For more information on the setting options for the addressing wizard, please refer to Section Addressing 19.

6.2 Changing a device name

1. In the DALI device tree diagram, right-click on the device name to be changed.
   ➲ The context menu appears.
2. Select **Rename** in the context menu.
3. Change the device name directly in the DALI device tree diagram.
4. Confirm the entry by pressing **ENTER**.
   ➲ The device name is changed.

-or-

1. In the DALI device tree diagram, select the device name to be changed.
2. Press **F2**.
3. Change the device name directly in the DALI device tree diagram.
4. Confirm the entry by pressing **ENTER**.
   ➲ The device name is changed.

Note
When a device is renamed, the abbreviation in brackets disappears. Once the new name is confirmed, however, the abbreviation automatically reappears in the brackets.

6 General functions

6.3 Creating a new group

1. In the DALI device tree diagram, right-click on the DALI icon.
   ➲ The context menu appears.
2. Select **Create new group** in the context menu.
   ➲ The next free group is automatically added to the DALI device tree diagram.

6.4 Changing a group name

1. In the DALI device tree diagram, right-click on the group name to be changed.
   ➲ The context menu appears.
2. Select **Rename** in the context menu.
3. Change the group name directly in the DALI device tree diagram.
4. Confirm the entry by pressing **ENTER**.
   ➲ The group name is changed.

-or-

1. In the DALI device tree diagram, select the group name to be changed.
2. Press **F2**.
3. Change the group name directly in the DALI device tree diagram.
4. Confirm the entry by pressing **ENTER**.
   ➲ The group name is changed.

Note
When a group is renamed, the abbreviation in brackets disappears. Once the new name is confirmed, however, the abbreviation automatically reappears in the brackets.

6.5 Assigning a DALI device to a group

1. In the DALI device tree diagram, click on the device to be assigned to a group.
2. Hold down the left mouse button.
3. Drag the device to the appropriate group. (Drag & Drop)
   ➲ The device is removed from the group in which it was previously located and is added to the desired group.

-or-

1. In the DALI device tree diagram, right-click on the device to be assigned to a group.
2. Hold down the right mouse button.
3. Drag the device to the appropriate group.
4. Release the right-hand mouse button.
5. Select **Move**.
   ➲ The device is removed from the group in which it was previously located and is added to the desired group.

6 General functions

Note
Section **DALI MSensor 02 > Effective range** 224 contains information on how to assign a DALI MSensor 02 to a group.

Section **DALI MSensor (version 1.5) > Effective range** 240 contains information on how to assign a DALI MSensor (version 1.5 and lower) to a group.

6.6 Assigning a DALI device to more than one group

One DALI device can be assigned to multiple groups. To do this, the DALI device is first copied and then assigned to the desired groups.

1. In the DALI device tree diagram, click on the device to be copied and assigned to a group.
2. Hold down the left mouse button.
3. In addition, hold down the **CTRL** key.
4. Drag the device to the appropriate group.
   ➲ The device is copied. It is now in both groups.

-or-

1. In the DALI device tree diagram, right-click on the device to be copied and assigned to a group.
2. Hold down the right mouse button.
3. Drag the device to the appropriate group.
4. Release the right-hand mouse button.
5. Select **Copy.**
   ➲ The device is copied. It is now in both groups.

6.7 Removing a DALI device from a group

1. Click on the device to be removed from a group.
2. Hold down the left mouse button.
3. Drag the device to the DALI icon.
   ➲ The device is removed from the group and appears once again in the DALI device tree diagram without a group.

-or-

1. Right-click on the device to be removed from a group.
   ➲ The context menu appears.
2. Select **Remove device from group** in the context menu.
   ➲ The device is removed from the group and appears once again in the DALI device tree diagram without a group.

6 General functions

6.8 Deleting a DALI device

1. Right-click on the device to be deleted.
   ➲ The context menu appears.
2. Select **Delete** from the context menu.
   ➲ A message appears, prompting for confirmation that the selected device should be deleted.
3. Confirm the action by clicking on **Yes**.
   ➲ The device is deleted from the DALI device tree diagram.
   ➲ The device's address is deleted.

-or-

1. In the DALI device tree diagram, select the device to be deleted.
2. Press **DEL**.
   ➲ A message appears, prompting for confirmation that the selected device should be deleted.
3. Confirm the action by clicking on **Yes**.
   ➲ The device is deleted from the DALI device tree diagram.
   ➲ The device's address is deleted.

6 General functions

6.9 Checking device assignment

There are various ways to check the device assignment to the physically existing groups.

Icon	Description
	The **Locate** icon can be used to determine where bus subscribers are located or which address they have. A single device, a group or all the devices connected to the DALI control line can be located. The type of location method depends on the device. There are two types of method: visual and acoustic. • **Visual location**: type of location in which the address of a bus subscriber is used to visually locate this subscriber in the field. A visually located luminaire, for example, responds by switching to the maximum level. A visually located emergency luminaire, for example, responds by forwarding its address as a binary flashing pattern via the status LED. • **Acoustic location**: type of location in which the address of a bus subscriber is used to acoustically locate this subscriber in the field. An acoustically located sensor, for example, responds by beeping. The following devices can be located: • DALI control gear **Note** Special note for control gear for emergency lighting: Only ever one control gear element for emergency lighting can be located. Locating all of the devices connected to the DALI control line is only possible with the  **Identify** icon. • Input devices • Sensors
	The **Identify** icon can be used to determine where an emergency luminaire with a specific DALI short address is located. If the function is enabled, all of the emergency luminaires connected to the DALI control line respond by forwarding their address as a binary flashing pattern via the status LED. The following devices can be identified: • DALI control gear for emergency lighting

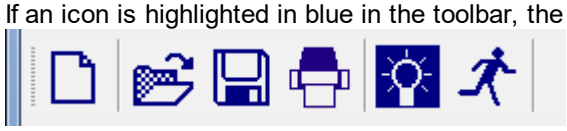
Table 6: Options for checking device assignment

Note
The two functions **Locate** und **Identify** are highlighted in different colour for better distinction.
- **Locate**: Background colour yellow.
- **Identify**: background colour green.

6 General functions

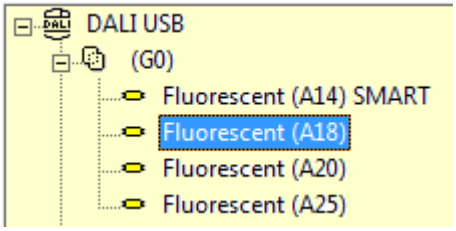
Tips & tricks

- If an icon is highlighted in blue in the toolbar, the function is enabled.

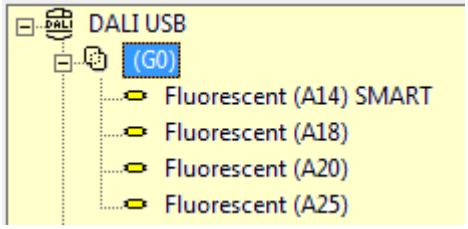


Note
After checking the device assignment, the function used must be disabled via the corresponding icon. Otherwise the devices will continue to respond according to the respective function.

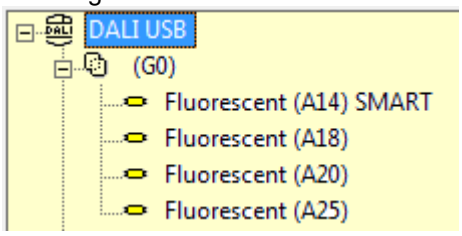
- To locate an individual device via the  icon, select the corresponding device in the DALI device tree diagram.



- To locate a group via the  icon, select the group in the DALI device tree diagram.



- To locate all of the devices connected to the DALI control line via the  icon, select the icon in the DALI device tree diagram.



6 General functions

- Emergency luminaires forward their address as a binary flashing pattern via the status LED. For this purpose, the address is converted into a six-digit binary number, which is represented as a flashing pattern. The red LED stands for binary number 0, the green LED for binary number 1.

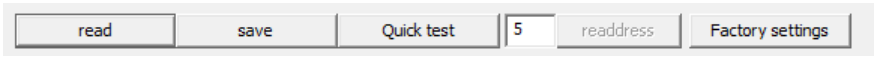
Note
The following options are available to users in order to convert a binary number to a decimal number:
- *EM PRO Ident.TOOL* software: You can download this software from Tridonic's homepage at: **Services** – **Software**.
- *EM PRO* addressing tool (Article number 89899836)

7 Configuration

The masterCONFIGURATOR software can be used to configure the following devices:

- DALI control gear 40
- DALI XC 169
- DALI MC 188
- DALI basicDIM DGC 194
- DALI MSensor 208
- DALI TOUCHPANEL 251
- DALI PS2 Standby 260
- DALI Somfy animeo interface 262

A device that has been selected in the DALI device tree diagram can be configured in the detail view. The following functions are available in the upper part of the detail view:



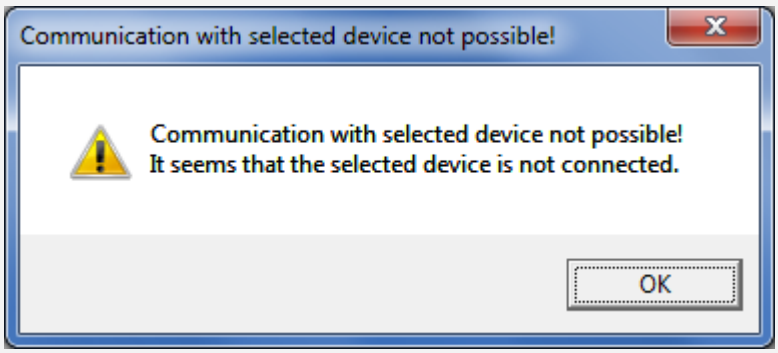
Function	Description
Read	The settings stored in the device are read and displayed in the detail view.
Save	Changes are stored in the device.
Quick test	The configuration of the control gear can be tested in the **Quick test** pop-up window. A detailed description of the quick test can be found in Section Quick test... 264
Readdress	The address of the device is changed. If the desired address has already been assigned to another device on the DALI control line, the addresses of the two devices are swapped. For the swap to take place, however, at least one address must be free.
Factory settings	The device is reset to its factory settings. Not every control gear element supports this function.

Table 7: General functions

Note
Not every device supports all functions. Functions which are not supported are greyed out.

Note
When configuring a device with the above-mentioned functions, the addressing is controlled. In case of failure (device no longer accessible, no supply, etc.) the following error message is displayed:

7 Configuration

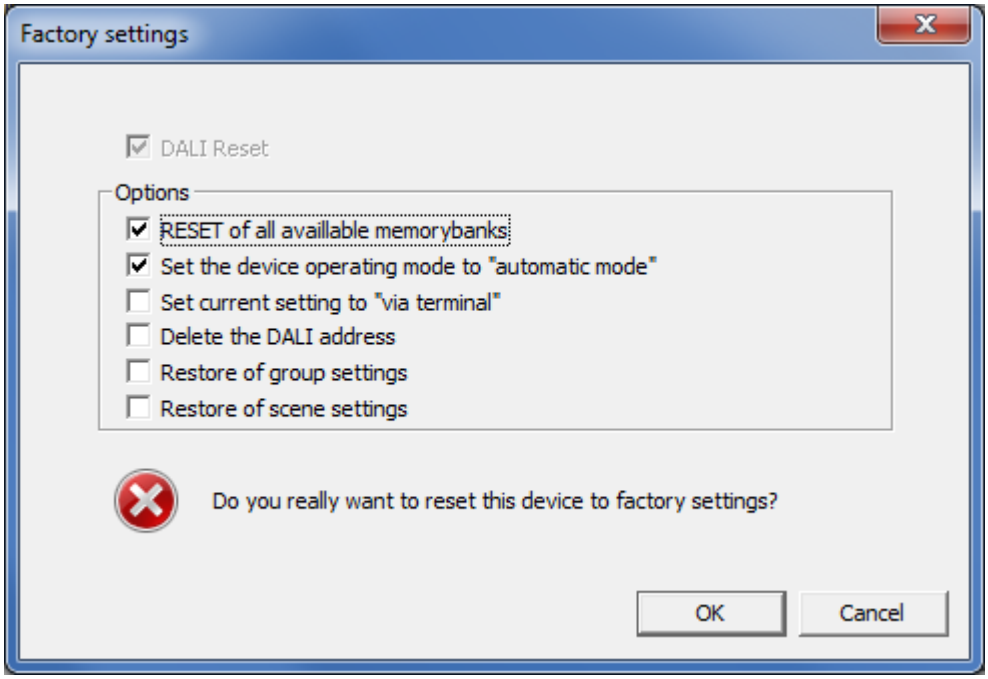


7 Configuration

The following table contains information about which devices support which functions:

Device	Read	Save	Quick test	Readdress	Factory settings
Control gear for DALI	✓	✓	✓	✓	×
Control gear for DALI 2	✓	✓	✓	✓	✓
DALI XC	✓	✓	×	✓	✓
DALI MC	✓	✓	×	×	×
DALI basicDIM DGC	✓	✓	✓	✓	✓
DALI MSensor	✓	✓	×	✓	✓
DALI TOUCHPANEL	✓	✓	×	×	✓
DALI PS2 Standby	✓	✓	×	×	×
DALI-Somfy animeo Interface	✓	✓	×	×	×

Table 8: Overview of function options



7.1 DALI control gear

The configuration of the DALI control gear is divided into:

- Basic configuration 44 in detail view
- Tridonic-specific configuration 50 in the context menu
- Device-specific configuration in detail view

The masterCONFIGURATOR software can be used to configure the following DALI control gear elements:

7 Configuration


Device Type 0 (DT 0): **control gear for fluorescent lamps** 102


Device Type 1 (DT 1): **control gear for emergency lighting** 117


Device Type 2 (DT 2): **control gear for high-pressure discharge lamps** 133


Device Type 3 (DT 3): **control gear for low-voltage halogen lamps** 137


Device Type 4 (DT 4): **control gear for phase dimmers** 140


Device Type 5 (DT 5): not supported


Device Type 6 (DT 6): **control gear for LEDs** 146


Device Type 7 (DT 7): **control gear for switching function** 152


Device Type 8 (DT 8): **control gear for colour converters** 154


Device Type 255 (DT 255): **multi-device type** 168


Device type unknown: The device operating mode is incorrectly set for control gear which is reported as **Device type unknown**.

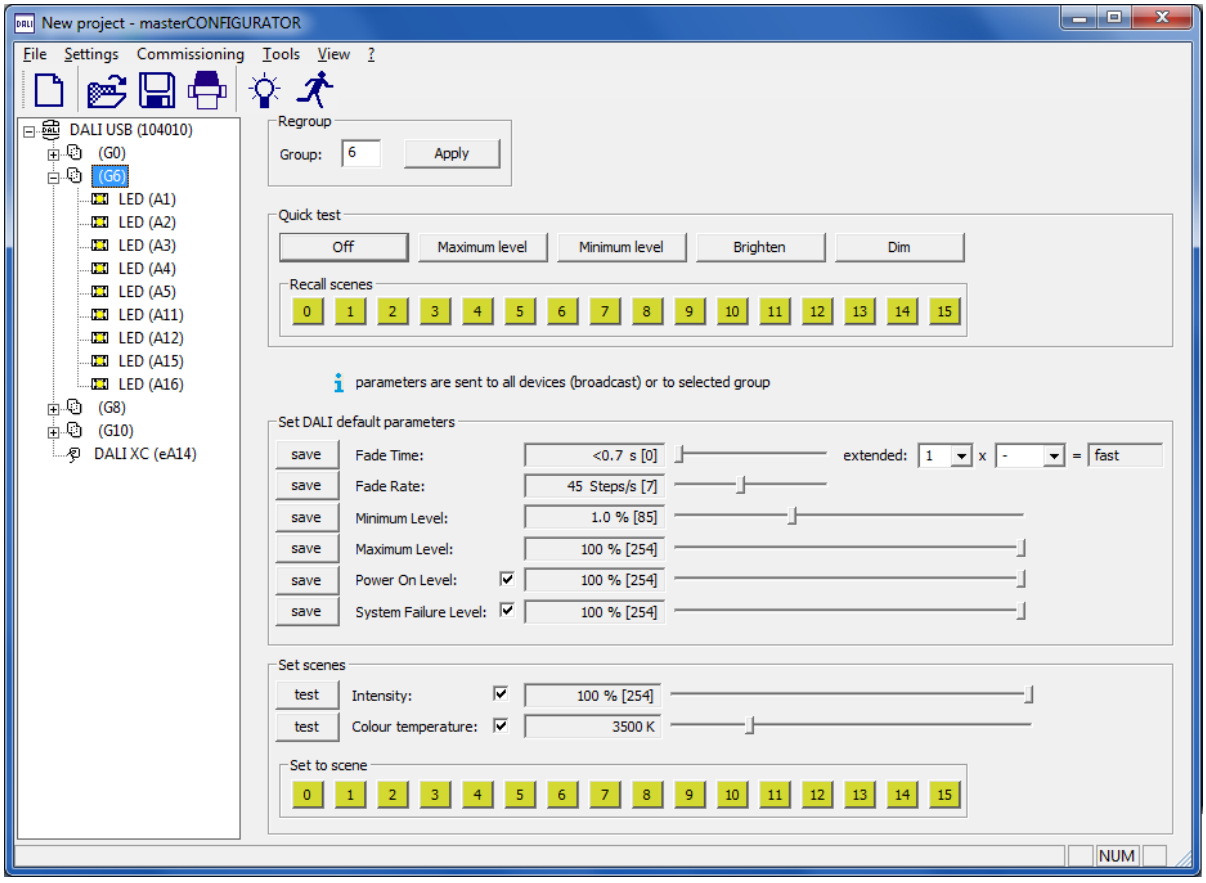
Note
Perform readdressing. The device operating mode of all devices connected to the DALI control line is automatically set to **automatic detection**.
-or-
Go to the **Tridonic-specific configuration** context menu in the **Device operating mode** tab and change the device operating mode to **automatic detection**.

Configuration using group commands

Requirement for all the following steps:
– Devices have been grouped.
– Desired group is selected.

Control gear can be configured in groups, if it has already been assigned to groups.

7 Configuration



Regroup control gear

1. Enter the desired number in input field **Group**.
2. Click **Apply**.
   ➲ All the control gear of the selected group are sent to the group.

Test configuration of group

At **Quick test** the configuration of the selected group can be tested.

1. Click desired term (**Off**, **Maximum level**, **Minimum level**, **Brighten**, **Dim**).

Set DALI default parameters

A group is defined by the values of the DALI default parameters **Fade Time**, **Fade Rate**, **Minimum Level**, **Maximum Level**, **Power On Level**, **System Failure Level**.

Note
More information about the DALI default parameters can be found at DALI default parameters 46.

1. Set the value for the individual parameter using the slider.
   ➲ The value is shown to the left of the slider.
   ➲ Die **save** key is highlighted in colour which indicates that the value hasn't been sent to the group yet.
2. Click **save** to send the set value to the group.
   ➲ The **save** key changes the colour back to normal.

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Set scenes

A scene is defined by the values of the parameters **Intensity** and **Colour temperature**.

Note
Setting the **Colour temperature** is only possible for Device Type 8: Control gear for colour converters 154.

1. Set the value for the individual parameter using the slider.
   ➲ The value is shown to the left of the slider.
   ➲ Die **test** key is highlighted in colour which indicates that the value hasn't been sent to the group yet.
2. Click **test** to send the set value to the group.
   ➲ The **test** key changes the colour back to normal.
   ➲ All the luminaires in this group adopt the set value.

Set to scenes

At **Set to scene** the scene settings can be set to scene number (0-15).

1. Click desired number to set settings to a scene number.
   ➲ The text "Scene xx is set" is displayed.

7 Configuration

7.1.1 Device information

Device information

The following device information is displayed in the header:

Device information	Description
Name	Displays the name of the control gear.
Light source	Displays the type of light source (LED, Fluorescent, HID…) connected to the control gear.
Article number	Displays the article number of the control gear.
Serial number	Displays the unique serial number of the control gear.
Date of manufacture	Displays the date of manufacture for the control gear.
Firmware version	Displays the firmware version of the control gear.
DALI version	Displays the version of the DALI specification supported by the control gear.
eD version	Displays the version of the eD specification supported by the control gear. **Note** eD is an enhanced protocol based on DALI connections.

Table 9: Device information

7.1.2 Basic configuration

The group assignment for control gear and scenes and default DALI parameters can be set for each control gear element in the **Basic configuration** tab.

Member of group(s)

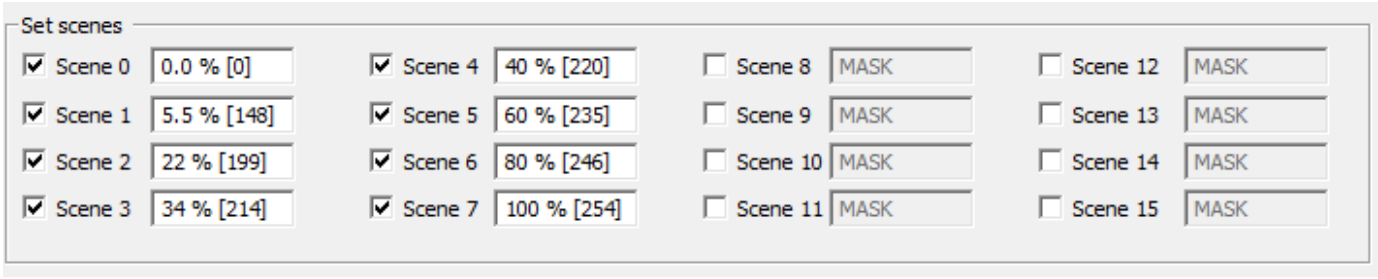
Member of group(s) specifies the group or groups to which the control gear belongs. These groups are indicated by the blue background.

With these 16 keys the group membership can be changed easily.

7 Configuration

Scenes

The intensity of the luminaire can be set for all 16 scenes (0–15) here.



Setting scenes

1. Enable the checkbox for a scene, in order to assign an intensity to the luminaire.
   ➲ The input field can be edited.
2. Enter a value between 0.0 % and 100 %
3. To define settings for additional scenes, repeat steps 1 and 2.
4. Click on **save**.
   ➲ Changes are stored in the device.

Note
MASK means that the luminaire in this group will retain its current intensity when the relevant scene is recalled.

Note
The minimum level and maximum level for setting scenes (default: 0.0 % and 100 %) can be changed in the basic DALI configuration of the device.

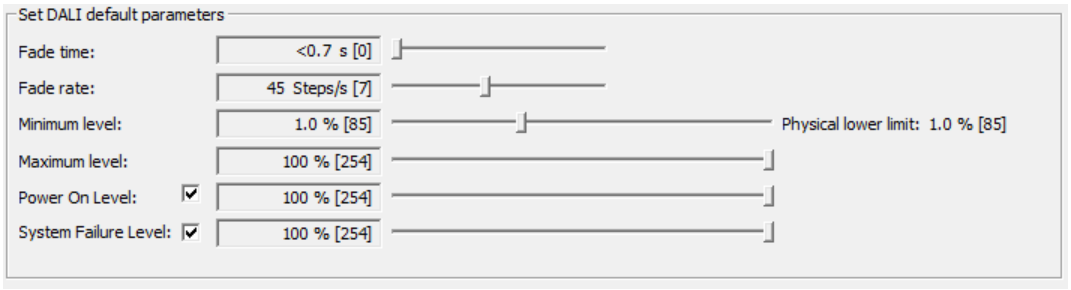
Note
When setting the scene value, the respective DALI value is additionally displayed in square brackets.
Example: 100% [254]

7 Configuration

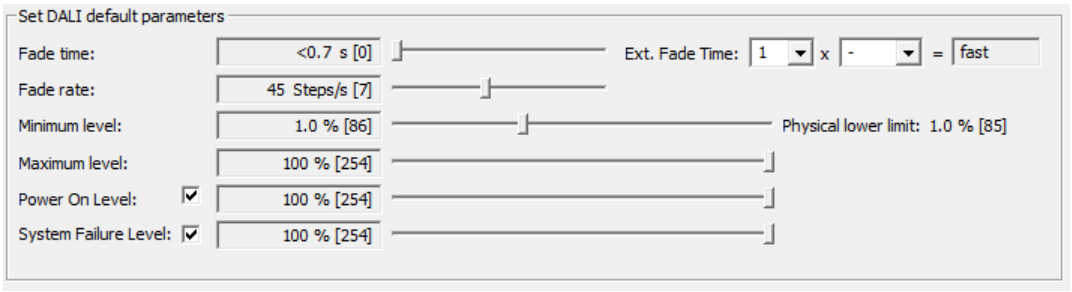
DALI default parameters

DALI default parameters can be set here.

DALI-Version:



DALI 2-Version:



Setting DALI default parameters

1. Set the value for the individual parameter using the slider.
   ➲ The value is shown to the left of the slider.
2. Click on **save**.
   ➲ Changes are stored in the device.

Note
When setting the DALI default parameters, the respective DALI value is additionally displayed in square brackets.
Example: 100% [254]

The following DALI default parameters can be set:

DALI default parameters	Description
Fade time	The selected value is set as the fade time in seconds. **Value range:** • **< 0.7–90.5 s** **Note:** < 0.7 s is the DALI default. < 0.7 s is the fastest fade time, and 90.5 s is the slowest.
Fade rate	The selected value is set as the dimming speed. It indicates by how many steps per second the intensity is changed. The **Fade Rate** is used with the DALI commands **Brighten** (Up) and **Dim**

7 Configuration

	(Down). **Value range:** • **2.8–358 steps per second** **Note:** 45 steps per second is the DALI default. 358 steps per second is the fastest fade rate, and 2.8 steps per second is the slowest.
Minimum level	The selected value is set as the minimum level for the control gear. This value cannot be fallen below during dimming/brightening. **Value range:** • **Physical lower limit – Maximum level** **Note:** The **physical lower limit** of the control gear is shown to the right of the **Minimum level** as a percentage. The **minimum level** must be above this value.
Maximum level	The selected value is set as the maximum level for the control gear. This value cannot be exceeded during dimming/brightening. **Value range:** • **Minimum Level – 100%**
Power On Level	The selected value is set as the value after power is restored. **Value range:** • **0–100%** • **MASK** **Note** By using the checkbox the **Power On Level** can be either fixed (checkbox activated) o to MASK (checkbox deactivated). When power is restored, the device reacts as follows: • If the checkbox is activated, the device switches to the fixed value. • If the checkbox is deactivated (setting **MASK**), the device switches to the last active intensity.
System Failure Level	The selected value is set as the value in the event of failure of the DALI power supply. **Value range:** • **0–100%** • **MASK** **Note** By using the checkbox the **System Failure Level** can be either fixed (checkbox activa set to MASK (checkbox deactivated). When there is a failure of the DALI power supply, the device reacts as follows: • If the checkbox is activated, the device switches to the fixed value. • If the checkbox is deactivated (setting **MASK**), the device switches to the last active intensity.
Extended Fade Time (only DALI 2)	The selected value is set as the fade time. **Value range:** • **fast** • **100 ms - 16 min**

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	The Extended Fade Time is only effective if the "old" Fade Time and the Fast Fade Time (DT6) is set to 0.

Table 10: DALI default parameters

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

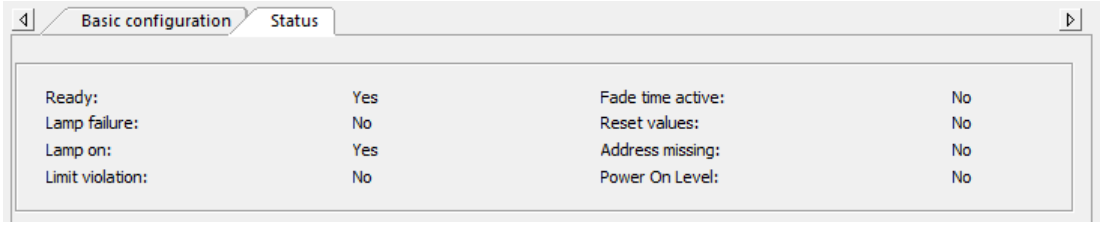
Note
When setting the DALI default parameters, the respective DALI value is additionally displayed in square brackets.
Example: 100% [254]

7 Configuration

7.1.3 Status

The **Status** tab shows all status information which can be queried by the control gear.

> **Note**
> An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On Level.

Table 11: DALI control gear status information

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7.1.4 Tridonic-specific configuration

Tridonic-specific configuration contains the following parameters:

All Tridonic-specific functions and status information can be found in the **Tridonic-specific configuration** pop-up window.

Note
Not every control gear element supports all functions. An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.

Open the Tridonic-specific configuration pop-up window

1. In the DALI device tree diagram, right-click on the DALI control gear to be configured.
   ➲ The context menu appears.

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2. Select **Tridonic-specific configuration** in the context menu.
   ➲ The **Tridonic-specific configuration** pop-up window opens.

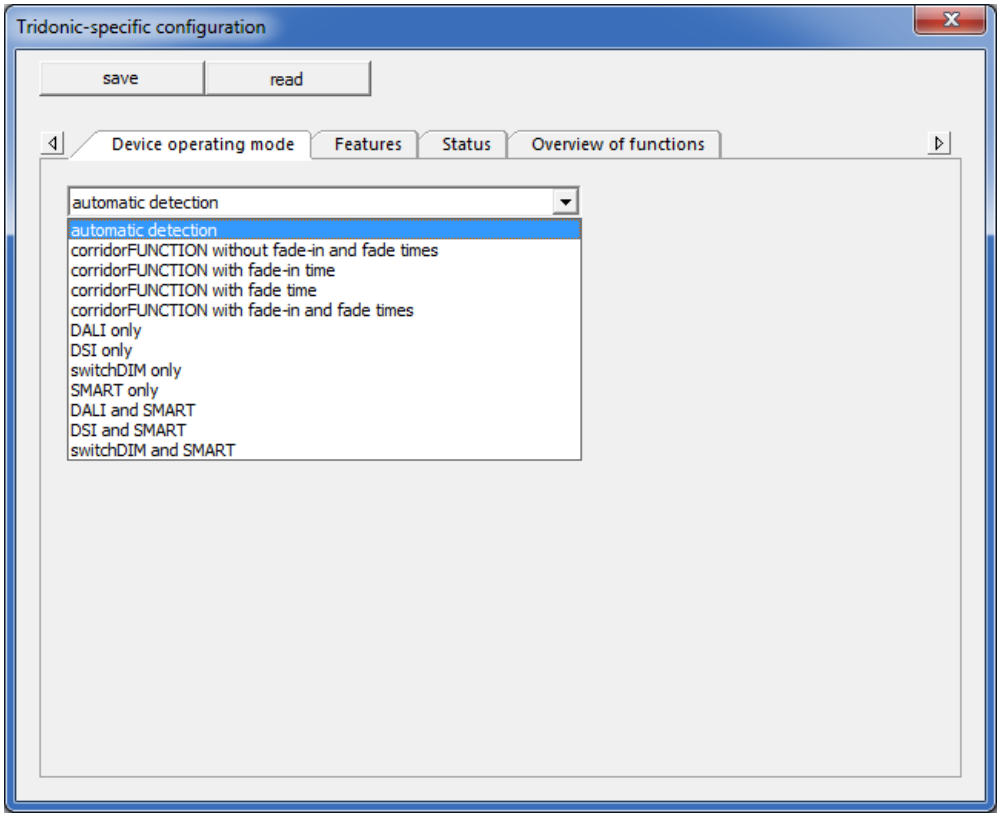
-or-

▷ Double-click the DALI control gear to be configured in the DALI device tree diagram.
   ➲ The **Tridonic-specific configuration** pop-up window opens.

7 Configuration

Device operating mode DALI

The device operating mode used by the control gear in order to carry out its functions can be set here.



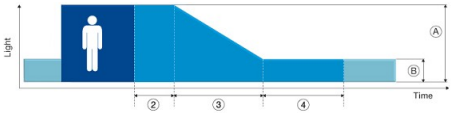
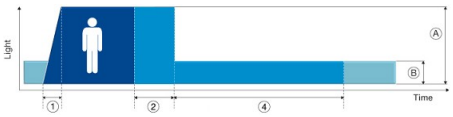
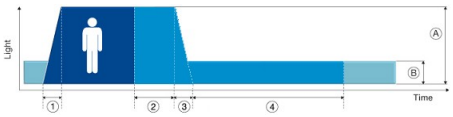
Configuring the Device operating mode

1. Select desired **Device operating mode** in the dropdown list.
2. Click on **save**.

Device operating mode	Description
Automatic detection	The control gear detects the incoming signal and switches automatically to the corresponding device operating mode. The following device operating modes are automatically detected: • **DALI only** • **DSI only** • **switchDIM only** • **DALI and SMART** • **DSI and SMART** • **switchDIM and SMART** • **corridorFUNCTION**
DALI only	The control gear detects only DALI commands.
DSI only	The control gear detects only DSI commands.
switchDIM only	The luminaires connected to the control gear can only be smoothly adjusted using manual momentary-action switches. The mains voltage is used as a control signal. The control gear interprets the signal as either a smooth adjustment or switch command depending on how long the manual momentary-action switch is pressed.

7 Configuration

<table>
<tr><td>SMART only</td><td colspan="2">The luminaires connected to the control gear can only be smoothly adjusted using a SMART interface.</td></tr>
<tr><td>DALI and SMART</td><td colspan="2">The control gear detects only DALI commands and the luminaires connected to the control gear can only be smoothly adjusted using a SMART interface.</td></tr>
<tr><td>DSI and SMART</td><td colspan="2">The control gear detects only DSI commands and the luminaires connected to the control gear can only be smoothly adjusted using a SMART interface.</td></tr>
<tr><td>switchDIM and SMART</td><td colspan="2">The luminaires connected to the control gear can only be smoothly adjusted using manual momentary-action switches or via the SMART interface.</td></tr>
<tr><td>corridorFUNCTION</td><td colspan="2">Function used to automatically adjust the illuminance in an area (e.g. underground car park, underground walkways for pedestrians). When a motion sensor detects movement, the lighting switches to the presence value. When absence is detected, the lighting switches to the absence value. Then the lighting is switched off or stays at the absence value (depending on requirements and settings).

There are four types of corridorFUNCTION:</td></tr>
<tr><td></td><td>corridorFUNCTION with fade time</td><td>Adjustable parameters:
• A) Presence value
• B) Absence value
• 2) Run-on time
• 3) Fade time
• 4) Switch-off delay
  </td></tr>
<tr><td></td><td>corridorFUNCTION with fade-in time</td><td>Adjustable parameters:
• A) Presence value
• B) Absence value
• 1) Fade-in time
• 2) Run-on time
• 4) Switch-off delay
  </td></tr>
<tr><td></td><td>corridorFUNCTION with fade-in time and fade time</td><td>Adjustable parameters:
• A) Presence value
• B) Absence value
• 1) Fade-in time
• 2) Run-on time
• 3) Fade time
• 4) Switch-off delay
  </td></tr>
</table>

7 Configuration

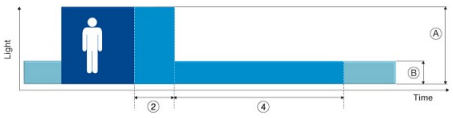
	corridorFUNCTION without fade-in time and fade time	**Adjustable parameters:** • **A) Presence value** • **B) Absence value** • **2) Run-on time** • **4) Switch-off delay** 

Table 12: Device operating modes DALI

Note
The **DALI and SMART**, **DSI and SMART** and **switchDIM and SMART** device operating modes are not supported by the control gear for fluorescent lamps belonging to the xitec II series.

7 Configuration

corridorFUNCTION parameters

The following table gives a description of the individual parameters for the corridorFUNCTION:

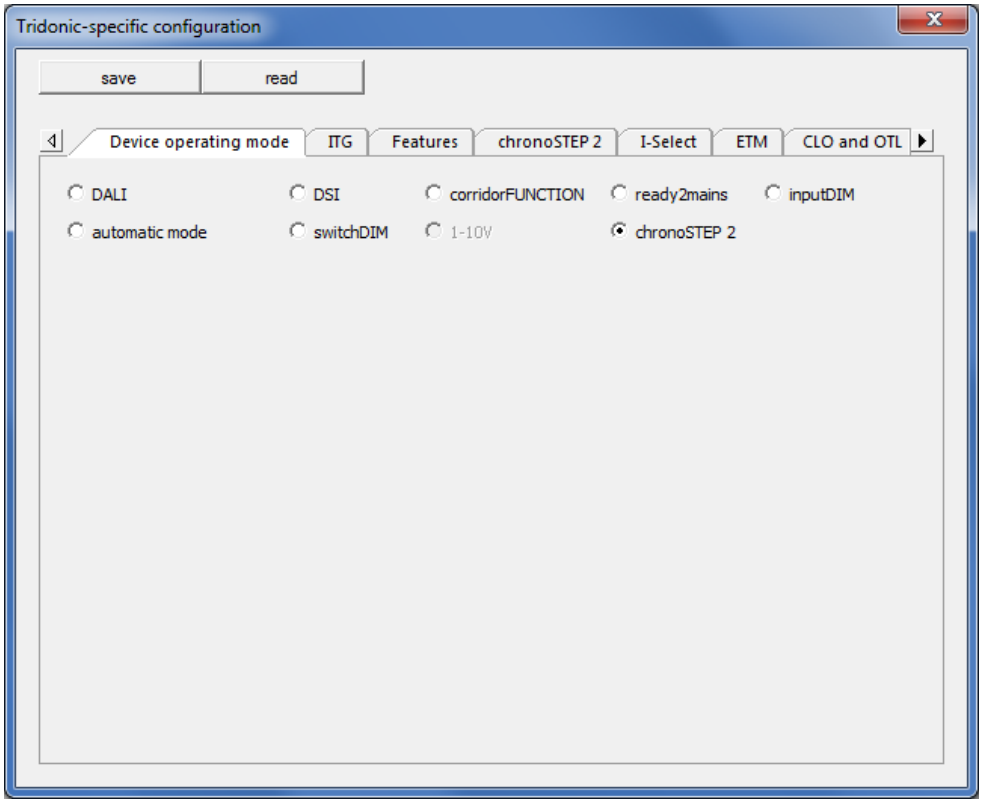
Configuration option	Description
Presence value	Value to which the luminaire group switches when presence is detected in the room. **Value range:** • **0–100%**
Absence value	Level to which the luminaire group switches during the **switch-off delay**. **Value range:** • **0–100%**
Fade-in time	Time required to reach the **presence value**. **Value range:** • **fast** • **0.7–90.5 s**
Run-on time	A time starting from the last detected movement in the room; when the run-on time expires, the **fade time** begins. If further movement is detected during the **run-on time**, it starts over again. The **run-on time** can be configured on the motion sensor.
Fade time	Time during which the lighting is smoothly adjusted to the **absence value**. **Value range:** • **fast** • **0.7 – 90.5 s**
Switch-off delay	Time for which the **absence value** is maintained if no movement is detected. **Value range:** • **0 s – 40 min 50 s** • **never OFF**: the lighting remains at the absence value until further movement is detected and the motion sensor switches to the **presence value**. The luminaire group is never switched off by the motion sensor.

Table 13: Overview of corridorFUNCTION parameters

7 Configuration

Device operating mode DALI 2

The device operating mode used by the control gear in order to carry out its functions can be set here.



Configuring the Device operating mode

1. Enable the desired radio button.
2. Click on **save**.

Device operating mode	Description
Automatic detection	The control gear detects the incoming signal and switches automatically to the corresponding device operating mode. The following device operating modes are automatically detected: • **DALI** • **DSI** • **switchDIM** • **ready2mains** • **1-10 V** • **corridorFUNCTION 2**
DALI	The control gear detects only DALI commands.
DSI	The control gear detects only DSI commands.
switchDIM	The luminaires connected to the control gear can only be smoothly adjusted using manual momentary-action switches. The mains voltage is used as a control signal. The control gear interprets the signal as either a smooth adjustment or switch command depending on how long the manual momentary-action switch is pressed.

7 Configuration

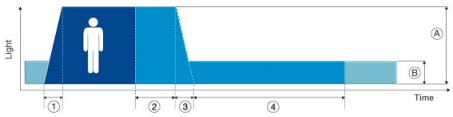
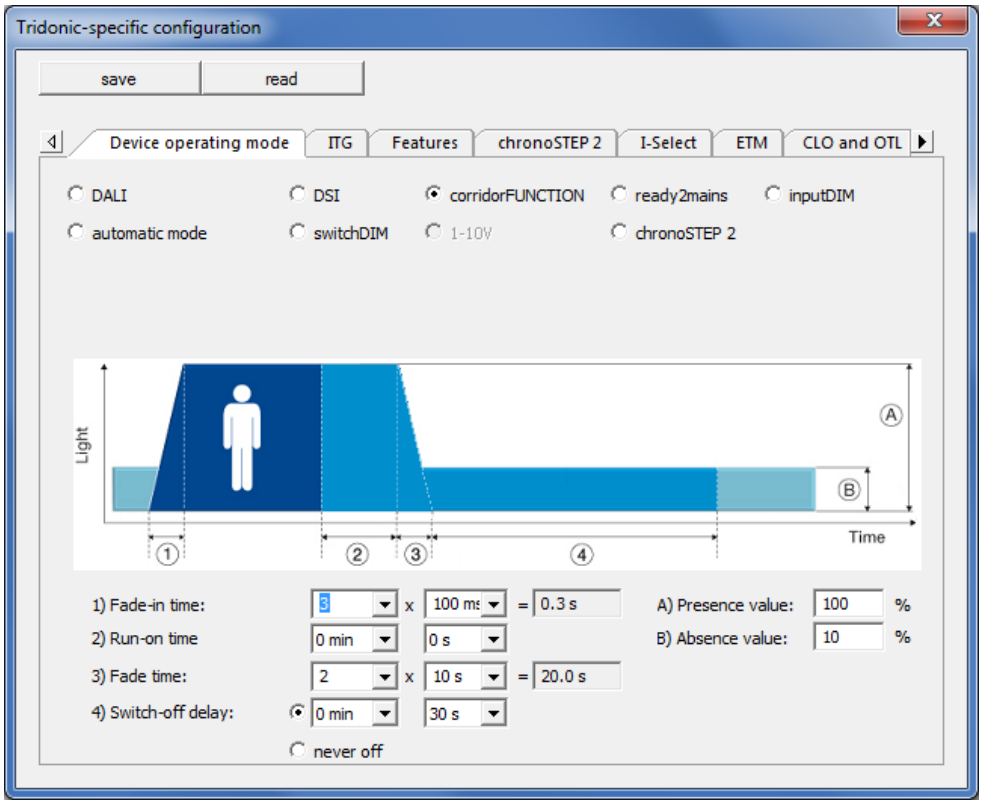
ready2mains	The control gear detects only ready2mains commands.
1-10 V	The control gear adjusts the brightness according to the applied voltage at the 1-10 V terminal.
corridorFUNCTION	Function used to automatically adjust the illuminance in an area (e.g. underground car park, underground walkways for pedestrians). When a motion sensor detects movement, the lighting switches to the presence value. When absence is detected, the lighting switches to the absence value. Then the lighting is switched off or stays at the absence value (depending on requirements and settings). corridorFUNCTION 2 has the following parameters: **Adjustable parameters:** • **A) Presence value** • **B) Absence value** • **1) Fade-in time** • **2) Run-on time** • **3) Fade time** • **4) Switch-off delay** 
chronoSTEP 2	This device operating mode can be parametrized in the **chronoSTEP 2** tab.
inputDIM	This device operating mode activates the inputDIM function.

Table 14: Device operating modes DALI 2

7 Configuration

Device operating mode corridorFUNCTION 2



corridorFUNCTION 2 parameters

The following table gives a description of the individual parameters for the corridorFUNCTION 2:

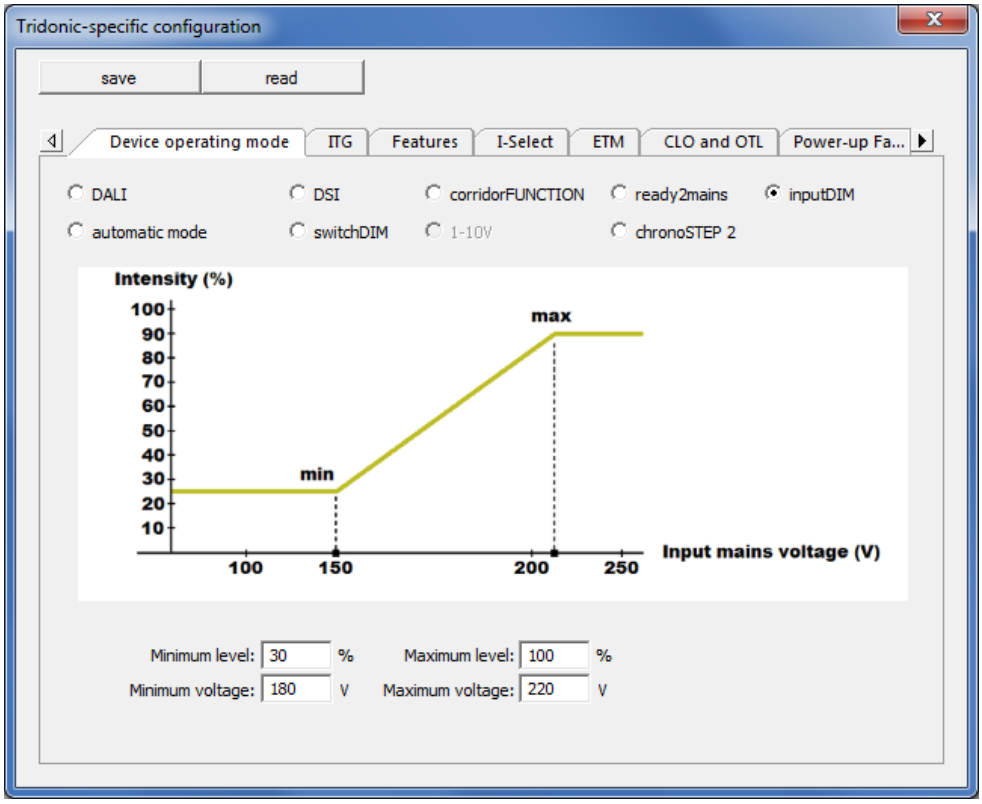
Configuration option	Description
Presence value	Value to which the luminaire group switches when presence is detected in the room. **Value range:** • **0–100%**
Absence value	Level to which the luminaire group switches during the **switch-off delay**. **Value range:** • **0–100%**
Fade-in time	Time required to reach the **presence value**. **Value range:** • **fast** • **0.1 s – 160 min**
Run-on time	A time starting from the last detected movement in the room; when the run-on time expires, the **fade time** begins. If further movement is detected during the **run-on time**, it starts over again. **Value range:** • **0 s – 40 min 50 s**

7 Configuration

Fade time	Time during which the lighting is smoothly adjusted to the **absence value**. **Value range:** • **fast** • **0.1 s – 160 min**
Switch-off delay	Time for which the **absence value** is maintained if no movement is detected. **Value range:** • **0 s – 40 min 50 s** • **never OFF**: the lighting remains at the absence value until further movement is detected and the motion sensor switches to the **presence value**. The luminaire group is never switched off by the motion sensor.

Table 15: Overview of corridorFUNCTION 2 parameters

Device operating mode inputDIM



Depending on the level of the input voltage, the intensity of the LED can be set with two adjustable interpolation points.

inputDIM parameters

The following table gives a description of the individual parameters for inputDIM:

Configuration option	Description
Minimum voltage (interpolation# point 1)	Defines the input voltage up to which the minimum level of the LED is set.

7 Configuration

	Value range: • **170 - 230 V**
Minimum level (interpolation# point 1)	Defines the value of the minimum level of the LED. **Value range:** • **10 - 85 %**
Maximum voltage (interpolation# point 2)	Defines the input voltage from which on the maximum intensity of the LED is set. **Value range:** • **196 - 250 V**
Maximum level (interpolation# point 2)	Defines the value of the maximum level of the LED. **Value range:** • **30 - 100 %**

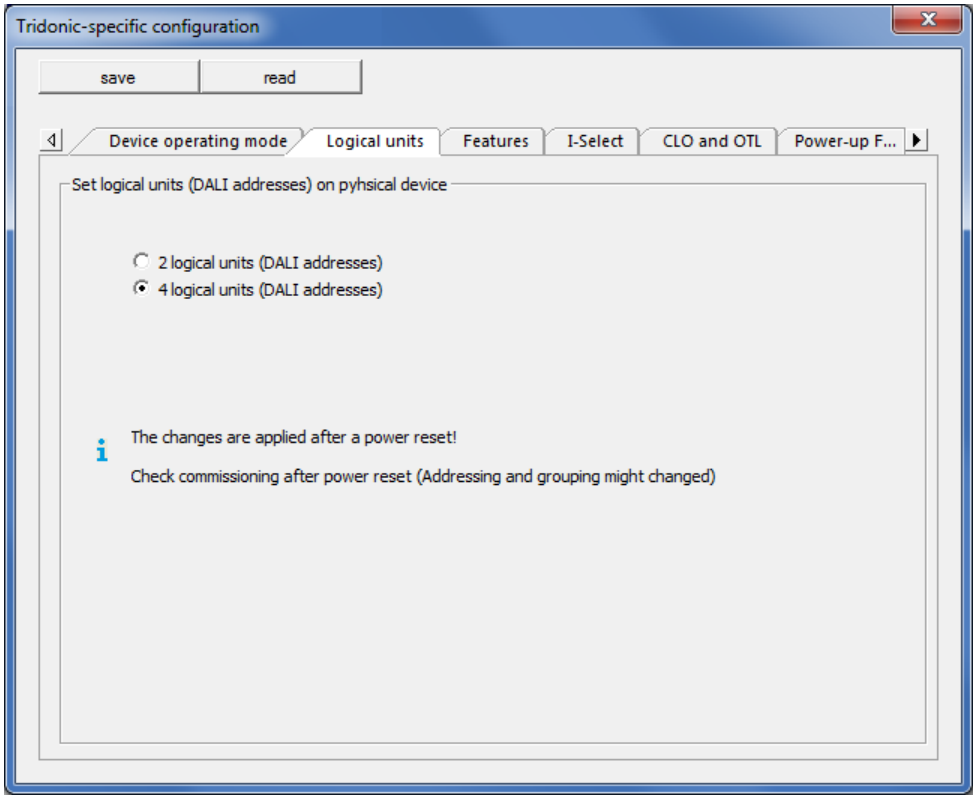
Table 16: Overview of inputDIM parameters

Logical Units

Here you can assign the physical LED outputs to different logical units (DALI addresses).

The setting options differ, depending on whether it is a control gear for LEDs or a control gear for colour converters.

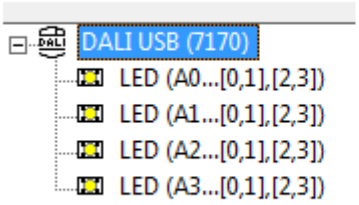
For a control gear for LEDs the following settings are available:

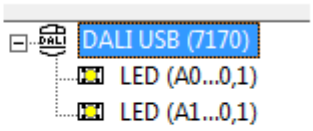


1. Select checkbox **2 logical units (DALI addresses)** to assign the LED outputs to two DALI address -or-
2. Select checkbox **4 logical units (DALI addresses)** to assign the LED outputs to four DALI addresses, which means that one LED outputs is assigned to one DALI address.

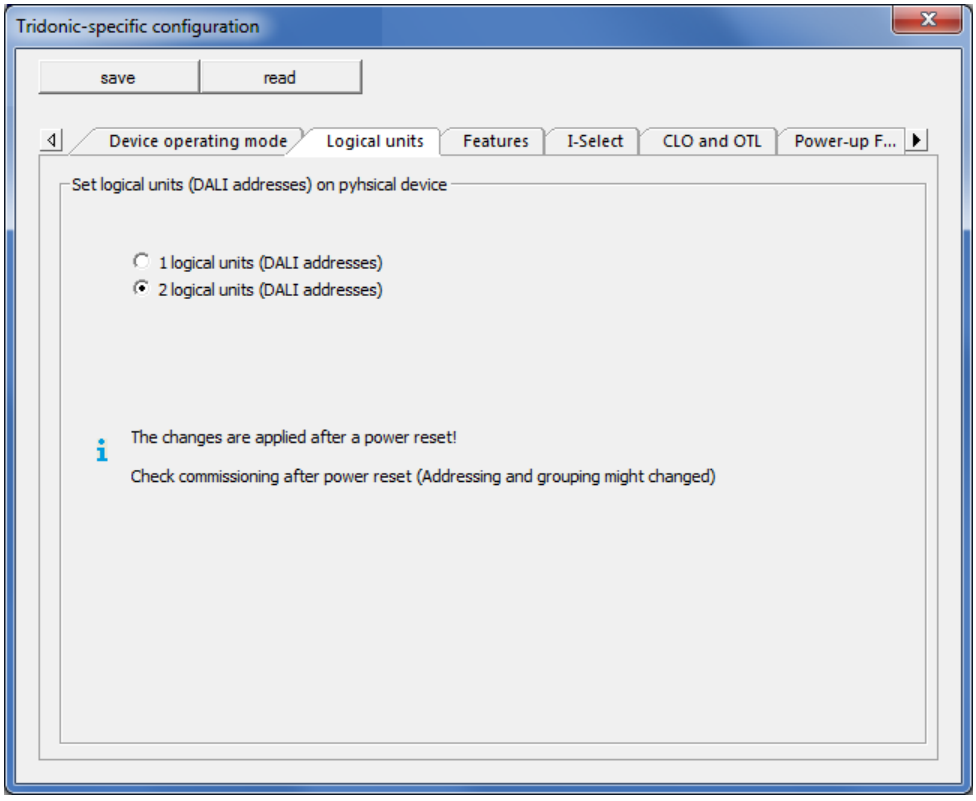
7 Configuration

The changed configuration of the device is displayed in the tree view as follows:



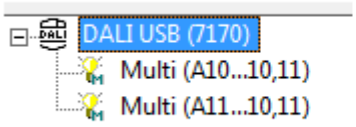


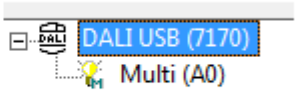
For a control gear for colour converters the following settings are available:



1. Select checkbox **1 logical units (DALI addresses)** to assign the outputs to one DALI address -or-
2. Select checkbox **2 logical units (DALI addresses)** to assign the outputs to two DALI addresses.

The changed configuration of the device is displayed in the tree view as follows:





Note
The **Logical Units** function is only available if it is supported by the device.

7 Configuration

ITG

Hier können Sie die Intelligent Temperature Guard (ITG) konfiguieren. Mit ITG soll das Gerät vor thermischen Schäden geschützt werden. Dazu nutzt das Gerät vier vorgegebene Parameter: Start Leistungsreduktion, Stopp Leistungsreduktion, Kritische Temperatur, Wiedereinschalttemperatur.

Der Parameter Offset reduziert diese vier Parameter um den gewählten Offset-Wert.

Here you can configure the Intelligent Temperature Guard (ITG). ITG is intended to protect the device from thermal damage. The device uses four predefined parameters: start reduction, stop reduction, critical temperature, restart temperature.

The Offset parameter reduces these four parameters by the selected value.

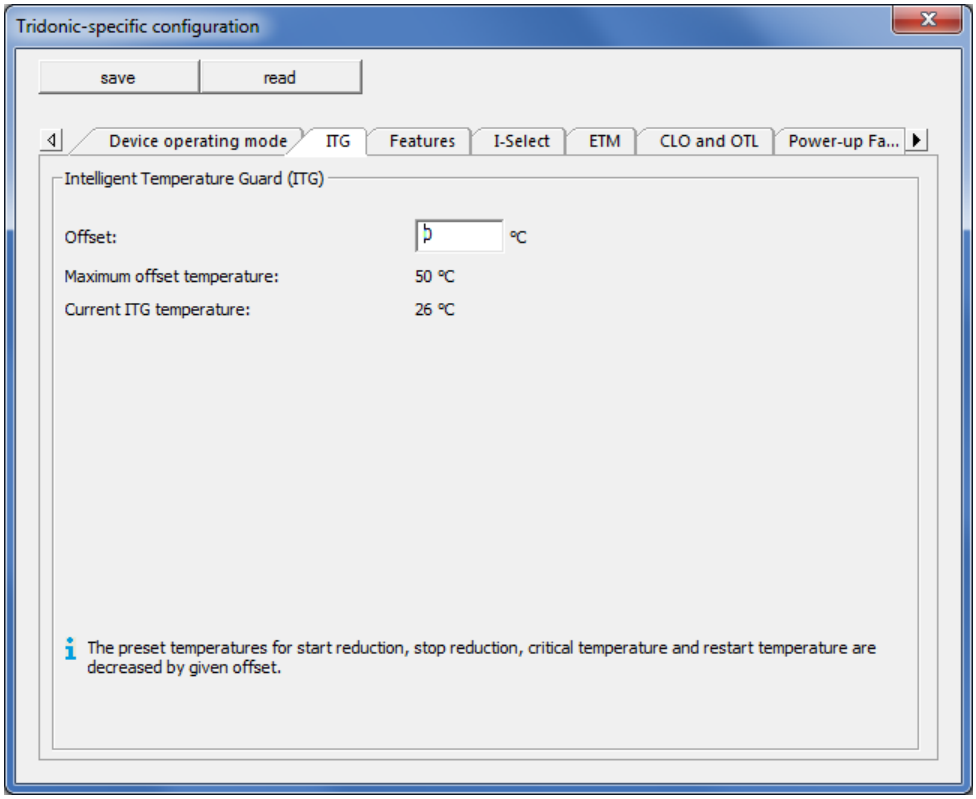


Table 17: Parameters of the ITG function

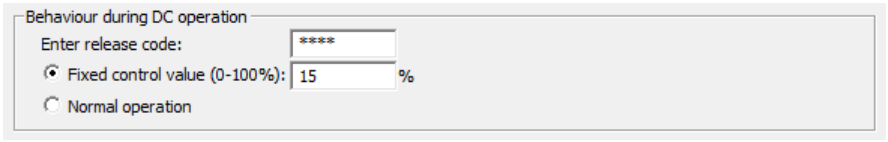
7 Configuration

Features

The behaviour in DC mode, ePower On Level and preheating time can be set for the individual control gear element in the **Features** tab.

Behaviour during DC operation

The control gear can be set to recall a fixed control value (0–100%) during DC operation or behave as if it is still in normal operation (i.e. can be smoothly adjusted or switched on/off) here.



Setting behaviour during DC operation

1. Enter the release code.
   ➲ The input fields can be edited.
2. Select **Fixed control value** and enter the desired control value.
   -or-
   Select **Normal operation**.
3. Click on **save**.
   ➲ Changes are stored in the device..

Note
The release code can be obtained from your sales partner.

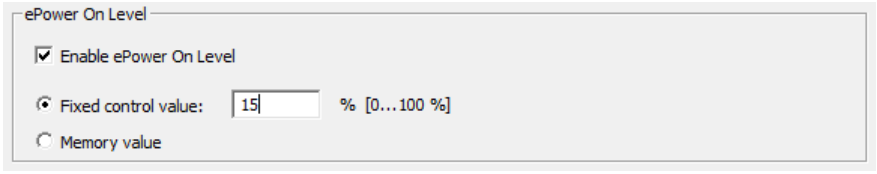
Note
The current status of this function can be seen in the **Tridonic-specific configuration** pop-up window in the **Status** tab.

ePower On Level

Here users can set whether the **Power On Level** (value after power has been restored) is overwritten by an eD command.

The **ePower On Level** can be set to switch the control gear to a **fixed control value** (0–100 %) or recall the **memory value** after power has been restored following a failure. The memory value is the last control value to which the control gear was set before the power failure.

Note
The value of the ePower On Level applies not only in DALI operation but also when using switchDIM.



7 Configuration

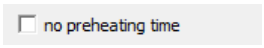
Setting ePower On Level

1. Enable the **Enable ePower On Level** checkbox.
   ➲ The input fields can be edited.
2. Select **Fixed control value** and enter the desired control value.
   -or-
   Select **Memory value**.
3. Click on **save**.
   ➲ Changes are stored in the device.

Preheating time

The control gear can be set to ignore the preheating time and immediately switch on.

Note
Ignoring the preheating time may shorten the lamp life.

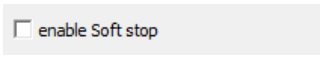


Disabling the preheating time

1. Enable the **no preheating time** checkbox.
2. Click on **save**.
   ➲ Changes are stored in the device.

Soft stop

The control gear can be set to use a fade time when the control gear is switched off.



Enable Soft stop

1. Enable the **enable Soft stop** checkbox.
2. Click on **save**.
   ➲ Changes are stored in the device.

Physical min level

The control gear can be set to use a physical min level (PHM). The physical min level is the lowest value the device can reach.

Note
If an attempt is made to set a minimum level that is lower than the physical min level, the physical min level is automatically adjusted to a higher value.

7 Configuration

Set physical min level

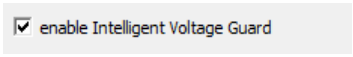
1. Enable the **set physical min level** checkbox.
2. Set the value for the individual parameter using the slider.
   ➲ The value is shown to the left of the slider.
3. Click on **save**.
   ➲ Changes are stored in the device.

Send physical min level broadcast

1. Enable the **send broadcast** checkbox.
2. Click on **save**.
   ➲ Changes are stored in all devices.

Intelligent Voltage Guard (IVG+)

The control gear can be set to use **Intelligent Voltage Guard** (IVG+).

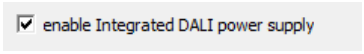


Enable Intelligent Voltage Guard

1. Enable the **enable Intelligent Voltage Guard** checkbox.
2. Click on **save**.
   ➲ Changes are stored in the device.

Integrated DALI power supply

The control gear can be set to **Integrated DALI power supply**.



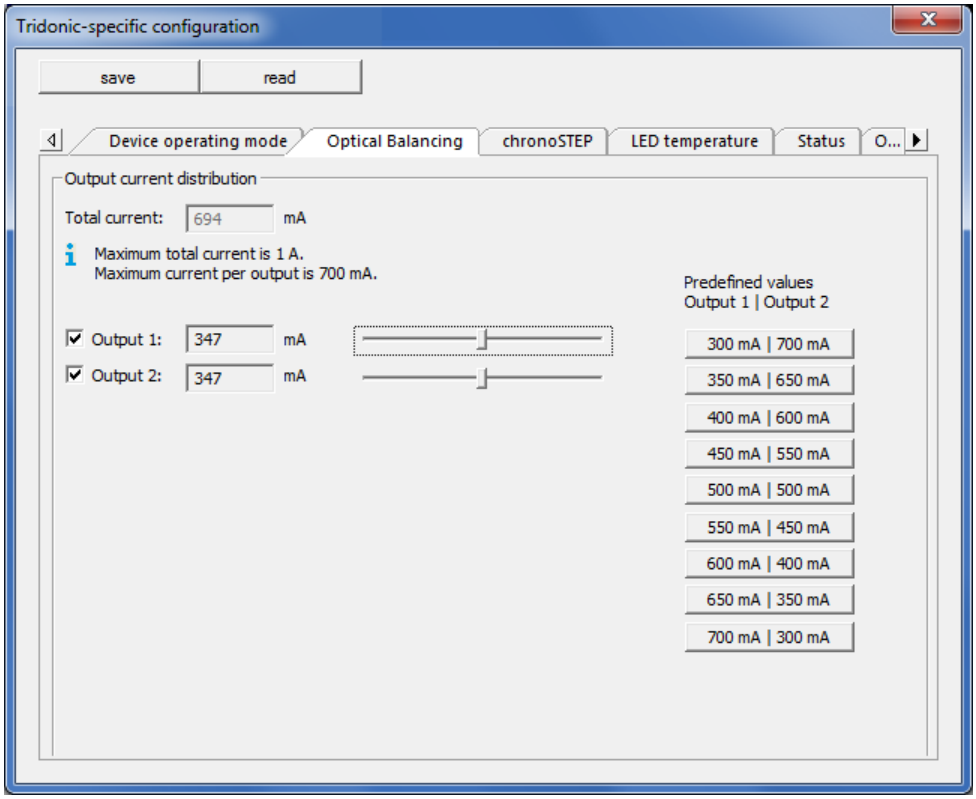
Enable Integrated DALI power supply

1. Enable **Integrated DALI power supply** checkbox.
2. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

Optical Balancing

Here you can divide the available output current between one or two outputs. The maximum total current is 1 A.



Distributing output current to one output

1. Enable checkbox of one output.
   ➲ Slider becomes adjustable.
2. Use the slider to set a value between 170 and 700 mA.
   ➲ The value is shown to the left of the slider.
3. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

Dividing output current between two outputs

1. Enable checkboxes of outputs 1 and 2.
   ➲ Sliders become adjustable.
2. Use the slider to set a value between 170 and 700 mA for output 1.
   ➲ The value is shown to the left of the slider.
3. Use the slider to set a value between 170 and 700 mA for output 2.
   ➲ The value is shown to the left of the slider.

> **Note**
> The maximum total current is 1 A. If the output current for one output is set such that the maximum total current is exceeded, the value at the other output will be automatically reduced.

4. Click on **save**.
   ➲ Changes are stored in the device.

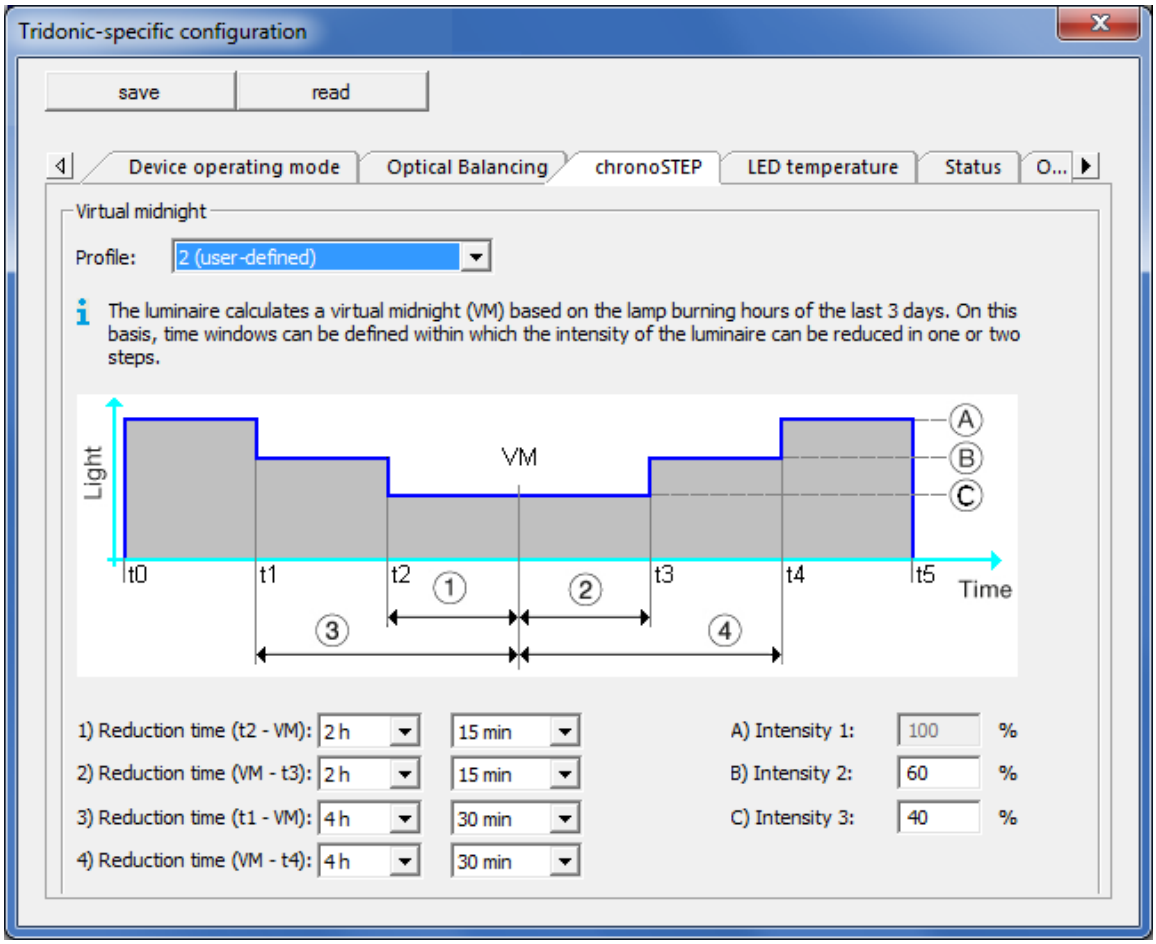
Using predefined values for the output current distribution

1. Click on the button for a predefined output current distribution.
   ➲ The values are shown to the left of the sliders.
2. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

chronoSTEP

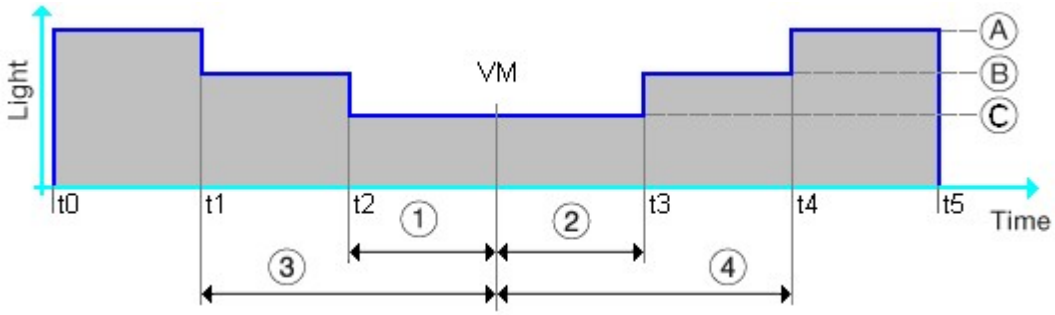
Here you can configure the **chronoSTEP** function. The luminaire calculates a virtual midnight (VM) based on the lamp burning hours of the last 3 days. On this basis, time windows can be defined within which the intensity of the luminaire can be reduced in one or two steps.



7 Configuration

Overview of chronoSTEP function

The following figure shows a summary of the individual parameters.



1) Reduction time (t2 – VM)
2) Reduction time (VM – t3)
3) Reduction time (t1 – VM) (only for profiles 2 – 5)
4) Reduction time (VM – t4) (only for profiles 2 – 5)

A) Intensity 1
B) Intensity 2 (only for profiles 2 – 5)
C) Intensity 3
t0 – Switch-on time
t5 – Switch-off time
VM – virtual midnight

The reduction times are described here:

Parameter	Description
1) Reduction time (t2 – VM)	Time window before virtual midnight, during which the luminaire assumes **intensity 3**.
2) Reduction time (VM – t3)	Time window after virtual midnight, during which the luminaire assumes **intensity 3**.
3) Reduction time (t1 – VM)	Time window before virtual midnight, during which the luminaire assumes **intensity 2**.
4) Reduction time (VM – t4)	Time window after virtual midnight, during which the luminaire assumes **intensity 2**.

Table 18: Overview of reduction times

Configuration

Selecting profile for virtual midnight

1. Select the desired P**rofile** in the **Virtual midnight** dropdown list.
2. Click on **save**.

Configuring reduction times

Underneath the chronoSTEP image there are eight dropdown lists to configure the four reduction times.

1. Select the desired **Reduction time**.

7 Configuration

2. Select hours from first dropdown list.
3. Select minutes from second dropdown list.
4. Click on **save**.

Configuring intensity

Underneath the chronoSTEP image there are three input fields to configure the intensity.

1. Enter the desired **Intensity**.
2. Click on **save**.

7 Configuration

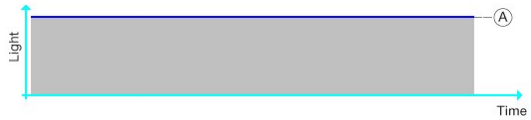
chronoSTEP profiles

You can choose between 6 profiles.

> **Note**
> If the **chronoSTEP** and **corridorFUNCTION** functions are enabled at the same time, this may cause problems. Therefore check the device operating mode (**Device operating mode** tab) and ensure that **corridorFUNCTION** is not selected.

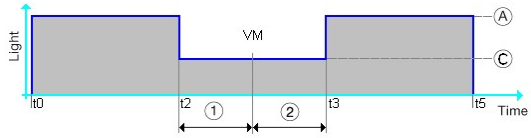
Profile 0 (disabled)

The chronoSTEP function is disabled. The intensity of the luminaire is not reduced.



Profile 1 (default)

The intensity of the luminaire is reduced in one step.



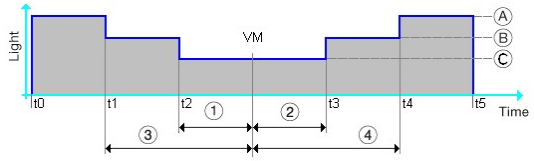
Parameter	Value range
1) Reduction time (t2 – VM)	• 0 – 10 h • **MASK**: **MASK** means that the **t2** time will be ignored.
2) Reduction time (VM – t3)	• 0 – 10 h • **MASK**: **MASK** means that the **t3** time will be ignored.
A) Intensity 1	100% (cannot be set)
C) Intensity 3	50% (cannot be set)

Table 19: Profile 1 parameter (default)

7 Configuration

Profiles 2 – 5 (user-defined)

These 4 profiles can be configured individually by each user. The intensity of the luminaire is reduced in two steps.



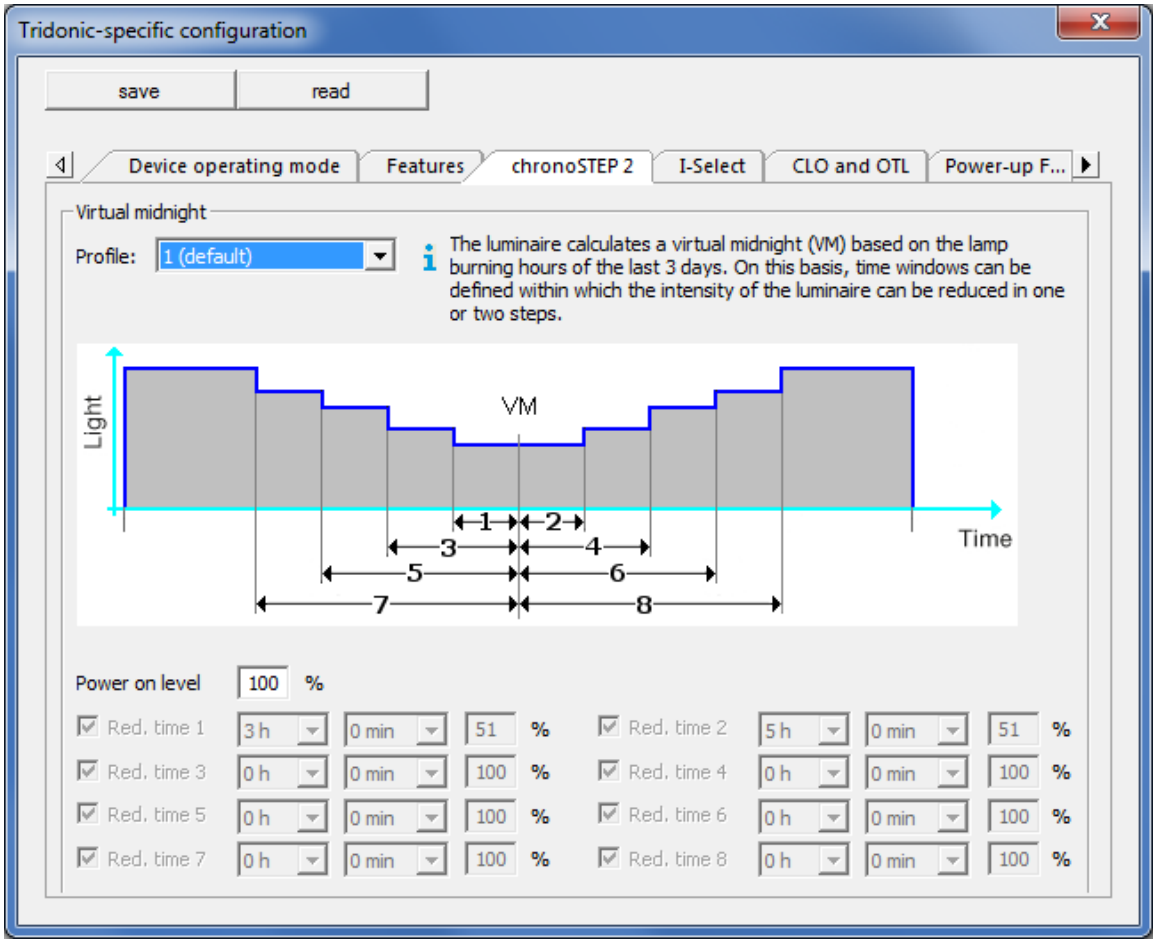
Parameter	Value range
1) Reduction time (t2 – VM)	• 0 – 10 h • **MASK**: **MASK** means that the **t2** time will be ignored. **Note** The value must be smaller than the **reduction time (t1 – VM)**.
2) Reduction time (VM – t3)	• 0 – 10 h • **MASK**: **MASK** means that the **t3** time will be ignored. **Note** The value must be smaller than the **reduction time (VM – t4)**.
3) Reduction time (t1 – VM)	• 0 – 10 h • **MASK**: **MASK** means that the **t1** time will be ignored.
4) Reduction time (VM – t4)	• 0 – 10 h • **MASK**: **MASK** means that the **t4** time will be ignored.
A) Intensity 1	100% (cannot be set)
B) Intensity 2	0%; 5 – 100% **Note** **Intensity 2** must be less than **Intensity 1**.
C) Intensity 3	0%; 5 – 100% **Note** **Intensity 3** must be less than **Intensity 2**.

Table 20: Profile parameters 2 – 5 (user-defined)

7 Configuration

chronoSTEP 2

Here you can configure the **chronoSTEP 2** function. chronoSTEP 2 is a further development of chronoSTEP 68 and offers more profiles and settings.



Note
The **chronoSTEP 2** tab is only displayed if the device operating mode (**Device operating mode** tab) is set to **chronoSTEP 2**.

7 Configuration

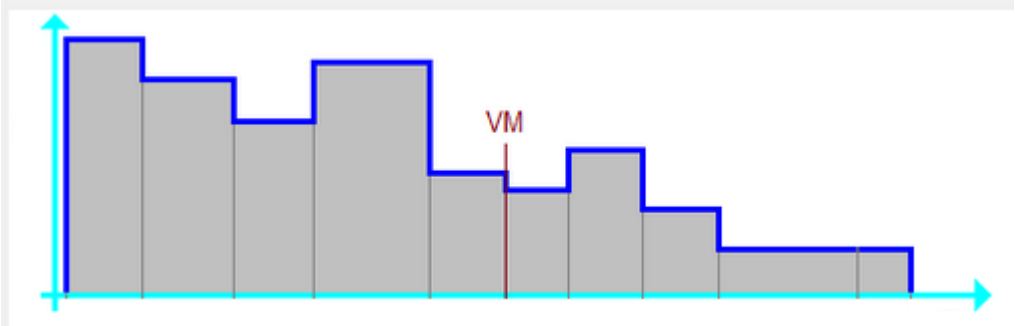
chronoSTEP 2 profiles

You can choose between 7 profiles. 4 profiles are pre-defined standard profiles. The other 3 profiles can be adjusted individually.

Note
If the **chronoSTEP 2** and **corridorFUNCTION** functions are enabled at the same time, this may cause problems. Therefore check the device operating mode (**Device operating mode** tab) and ensure that **corridorFUNCTION** is not selected.

Configuration

The profiles can be adjusted by setting the values for 8 different reduction times. The time can be set via two drop-down menus for hours and minutes. The intensity can be entered as a percentage value.



Selecting profile for virtual midnight

1. Select the desired **Profile** in the **Virtual midnight** dropdown list.
2. Click on **save**.

Configuring reduction time and intensity

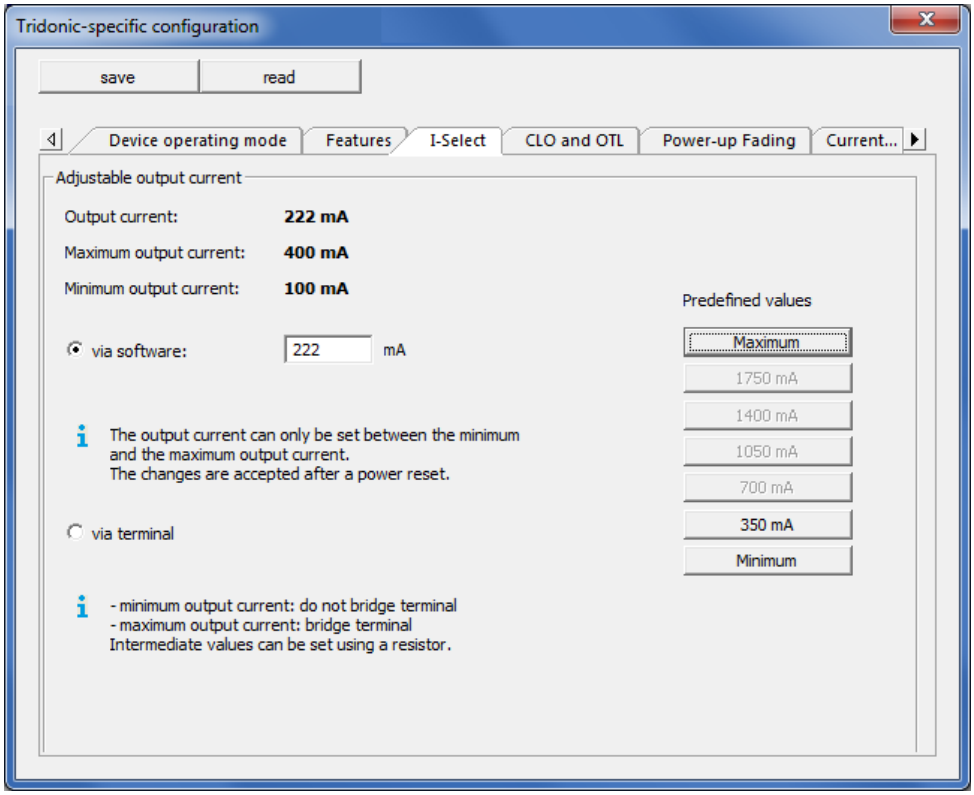
1. Enable the check box of the desired **Red. time** (reduction time).
2. Select hours from first dropdown list.
3. Select minutes from second dropdown list.
4. Enter the desired percentage.
5. Click on **save**.

I-Select

The electric current used by the control gear to supply the connected LEDs can be configured here.

Note
Not every control gear element supports this function. Whether this function is supported by the control gear can be found on the data sheet for the individual device. Data sheets are available to downloaded online at www.tridonic.com.

7 Configuration



Parameter	Description
Output current	Indicates the electric current used by the control gear to supply the connected LEDs.
Maximum output current	Indicates the maximum configurable electric current that can be used by the control gear to supply the connected LEDs.
Minimum output current	Indicates the minimum configurable electric current that can be used by the control gear to supply the connected LEDs.

Table 21: Parameters for adjustable output current

7 Configuration

Configuring the output current using the masterCONFIGURATOR software

1. Enable the **via software** radio button.
2. Enter a value between the **maximum** and **minimum output current** in the input field.
   -or-
   Click a button with a predefined value.
   ➲ The value is displayed in the input field.
3. Click on **save**.
   ➲ Changes are stored in the device.

Note
The control gear only regulates to the saved output current once the voltage supply to the control gear is disconnected and then reconnected again.

Configuring the output current via the terminal on the control gear

1. Disconnect the voltage supply to the control gear.
2. To set the minimum output current, do not bridge the terminal on the control gear.
   -or-
   To set the maximum output current, bridge the terminal on the control gear.
   -or-
   To set a value between the minimum and maximum output current, use a resistor.

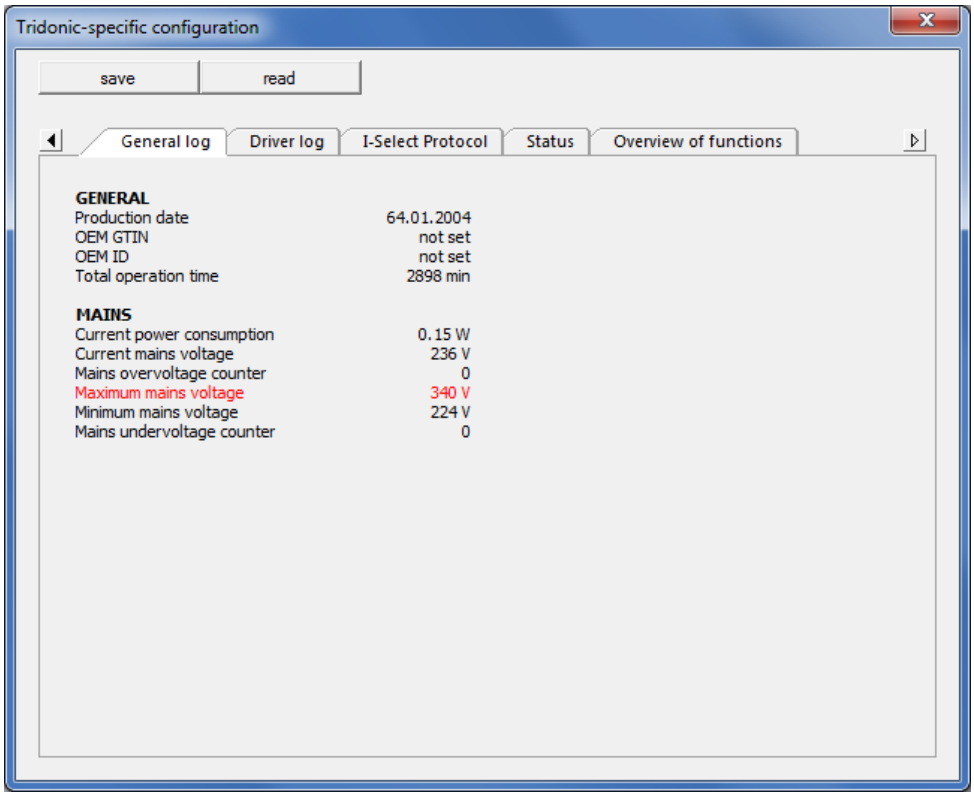
Note
The types of resistors which can be used can be found on the data sheet for the individual device. Data sheets are available to downloaded online at www.tridonic.com.

3. Reconnect the voltage supply to the control gear.
4. Enable the **via terminal** radio button.
5. Click on **save**.
   ➲ Changes are stored in the device.

Note
The control gear only regulates to the saved output current once the voltage supply to the control gear is disconnected and then reconnected again.

7 Configuration

General log



Note
The parameters can be displayed with different font colours. The colours have the following meaning:

- Black = normal operation
- Orange = warning
- Red = error

General

Parameter	Description
Production date	Date of manufacturing.
OEM GTIN	Global Trade Item Number
OEM ID	Indicates the device identification.
Total operation time	Indicates the time the device was operated either via mains or from battery.

Table 22: Parameters for General

Mains

Parameter	Description

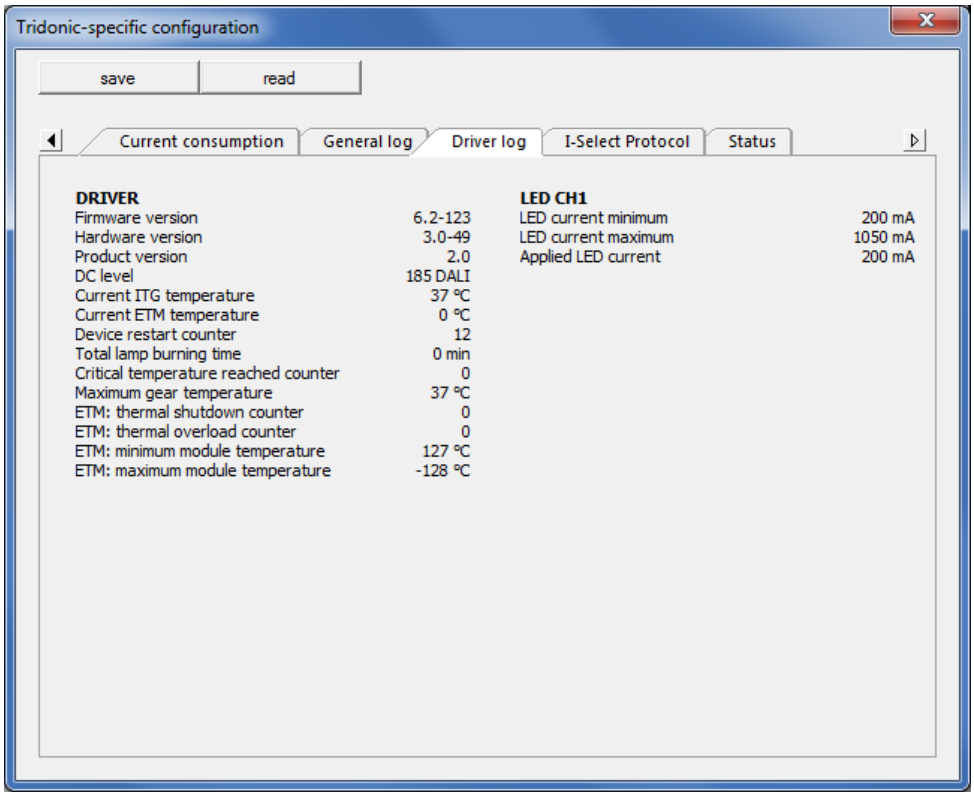
7 Configuration

Current consumption	The Current consumption tab shows the active current consumption. The value is updated every minute.
Current mains voltage	Indicated the voltage measured at the mains input.
Mains overvoltage counter	Indicates how often overvoltage was measured at the mains input.
Maximum mains voltage	Indicated the maximum voltage measured at the mains input.
Minimum mains voltage	Indicated the minimum voltage measured at the mains input.
Mains undervoltage counter	Indicates how often undervoltage was measured at the mains input.

Table 23: Parameters for Mains

7 Configuration

Driver log



Note
The parameters can be displayed with different font colours. The colours have the following meaning:

- Black = normal operation
- Orange = warning
- Red = error

Driver

Parameter	Description
Firmware version	Indicates the firmware version of the emergency driver.
Hardware version	Indicates the hardware version of the emergency driver.
Product version	Indicates the product version of the emergency driver.
DC Level	Indicates the DC level to which the control gear dims in DC mode.
Current ITG temperature	Indicates the ITG temperature that is currently measured in the control gear.
Current ETM temperature	Indicated the ETM temperature that is currently measured at the LED.

7 Configuration

Device restart counter	Indicates how often the device was restarted.
Total lamp burning time	Indicated for how the luminaire# has been burning.
Internal timing errors counter	Indicates how often the device had to restart itself due to a timing error.
Software restart via DALI counter	Indicates how often the device was restarted via DALI.
Critical temperature reached counter	Indicates how often the device reached a critical temperature and the Intelligent Temperature Guard function (ITG) turned off the device.
High temperature reached counter	Indicates how often the device reached a critical temperature and the Intelligent Temperature Guard function (ITG) started to dim it down.
Minimum gear temperature	Indicates the minimum temperature the device had reached.
Maximum gear temperature	Indicates the maximum temperature the device had reached.
ETM: thermal shutdown counter	Indicates how often the device had reached the shutdown temperature.
ETM: thermal overload counter	Indicates how often the device had reached the overload temperature.
ETM: minimum module temperature	Indicates the minimum temperature that the connected LED module had reached.
ETM: maximum module temperature	Indicates the maximum temperature that the connected LED module had reached.

Table 24: Parameters for Driver

LED

Parameter	Description
Minimum output current	Indicates the minimum configurable electric current that can be used by the control gear to supply the connected LEDs.
Maximum output current	Indicates the maximum configurable electric current that can be used by the control gear to supply the connected LEDs.
Used output current	Indicates the electric current used by the control gear to supply the connected LEDs.
LED switching cycle counter	Indicates how often the LED was switched on.
LED undervoltage counter	Indicates how often a LED with a too low forward voltage was connected.
LED overvoltage counter	Indicates how often a LED with a too high forward voltage was connected.

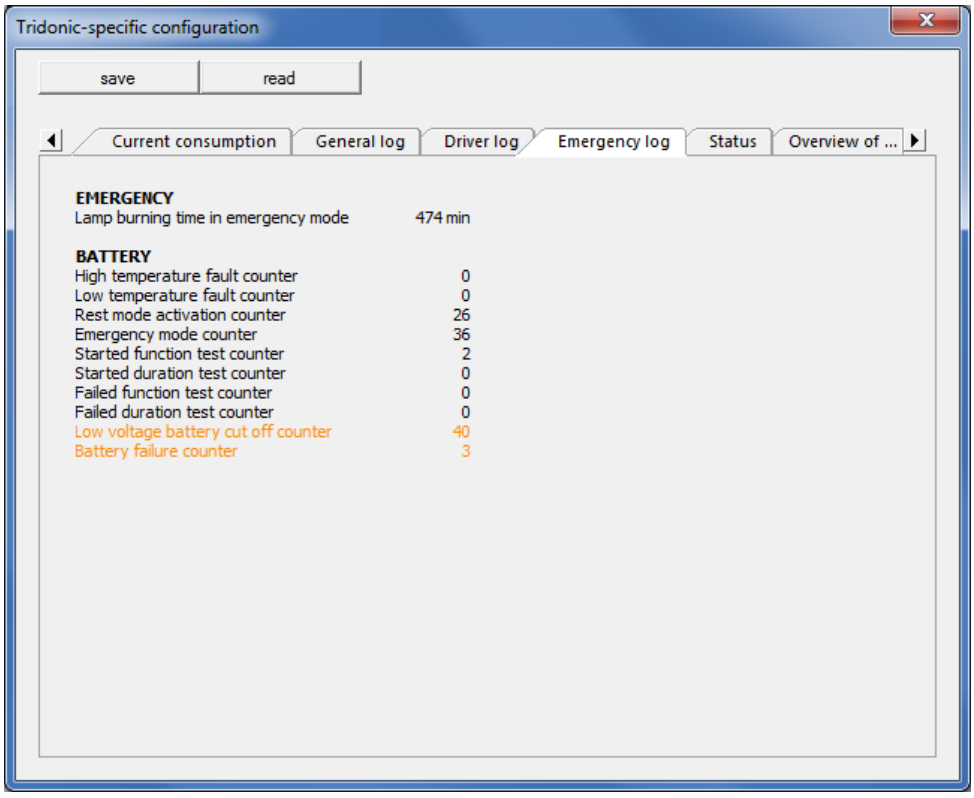
7 Configuration

LED overpower counter	Indicates how often a LED with a too high power was connected.
Open circuit at LED output counter	Indicates how often no LED was connected.
Short circuit at LED output counter	Indicates how often the LED output was short circuited.

Table 25: Parameters for LED

7 Configuration

Emergency log (BlackBox)



Note
The parameters can be displayed with different font colours. The colours have the following meaning:

- Black = normal operation
- Orange = warning
- Red = error

Emergency

Parameter	Description
System failures counter	Indicates how often the DALI interface was unpowered. The parameter is refreshed every time the fault is applied (in < 1 second).
Internal circuit failures counter	Indicates a critical internal error in the emergency lighting control gear.
Total lamp burning time	Indicates how long the lamp was on in emergency and mains mode. Lamp burning minutes are indicated in 1-minute increments.
Lamp burning time in emergency mode	Indicates how long the lamp was on in emergency mode. Lamp burning minutes in emergency mode are indicated in 1-minute increments.
Lamp burning time in emergency mode with current battery	Indicates how long the lamp was on in emergency mode with the currently connected battery. Lamp burning minutes in emergency mode

7 Configuration

	with current battery are indicated in 1-minute increments.
Total operation time	Indicates how long the device was powered either by mains or battery.

Table 26: Parameters for Emergency

Battery

Parameter	Description
High temperature fault counter	Indicates how often the battery temperature reached a critically high level.
High temperature warning counter	Indicates how often the battery temperature reached a high level.
Low temperature fault counter	Indicates how often the battery temperature reached a critically low level.
Low temperature warning counter	Indicates how often the battery temperature reached a low level.
Rest mode activation counter	Indicates how often the device entered rest mode.
Emergency mode counter	Indicates how often the device entered emergency mode.
Started function test counter	Indicates how often the device started a function test.
Started duration test counter	Indicates how often the device started a duration test.
Failed function test counter	Indicates how often a function test failed.
Failed duration test counter	Indicates how often a duration test failed.
Function test delay exceeded counter	Indicates how often a function test was requested and could not be carried out in the specified time.
Duration test delay exceeded counter	Indicates how often a duration test was requested and could not be carried out in the specified time.
Low voltage battery cut off counter	Indicated how often the battery was discharged to the low voltage battery cut off.
Battery failure counter	Indicates how often a battery failure was detected.
Average battery temperature	Indicates the average battery temperature.
Battery replacement counter	Indicates how often the battery was replaced according to the replacement process mentioned in the datasheet.

7 Configuration

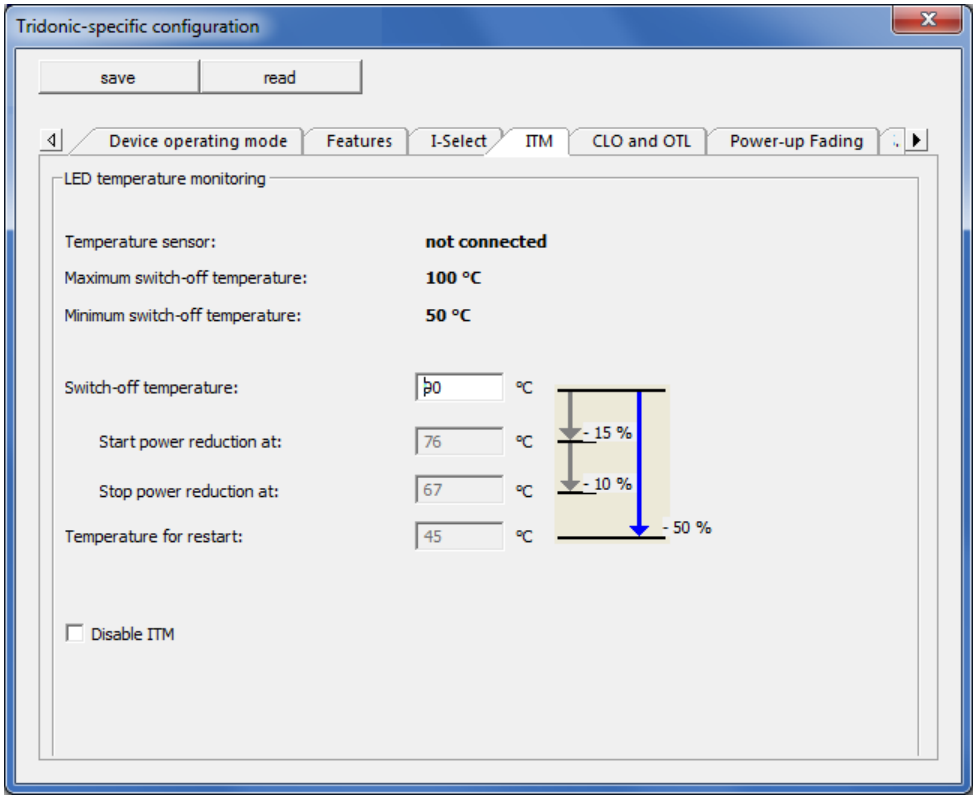
Operation time	Indicates how long the battery was connected to the device.
Minimum battery temperature	Indicates the minimum battery temperature.
Maximum battery temperature	Indicates the maximum battery temperature.

Table 27: Parameters for Battery

7 Configuration

ITM

LED temperature monitoring can be configured here. LED temperature monitoring is intended to protect the LED against thermal damage.



Parameter	Description
Temperature sensor	Indicates whether a temperature sensor is connected.
Maximum switch-off temperature	Indicates the maximum configurable switch-off temperature.
Minimum switch-off temperature	Indicates the minimum configurable switch-off temperature.
Switch-off temperature	Indicates the temperature at which the control gear for the LED is switched off to protect the LED against thermal damage. This allows the LED to cool. The control gear for the LED remains switched off until the **temperature for restart** is reached. **Value range:** • **minimum switch-off temperature – maximum switch-off temperature** **Configuring the switch-off temperature:** 1. Enter the desired switch-off temperature. 2. Click on save.

7 Configuration

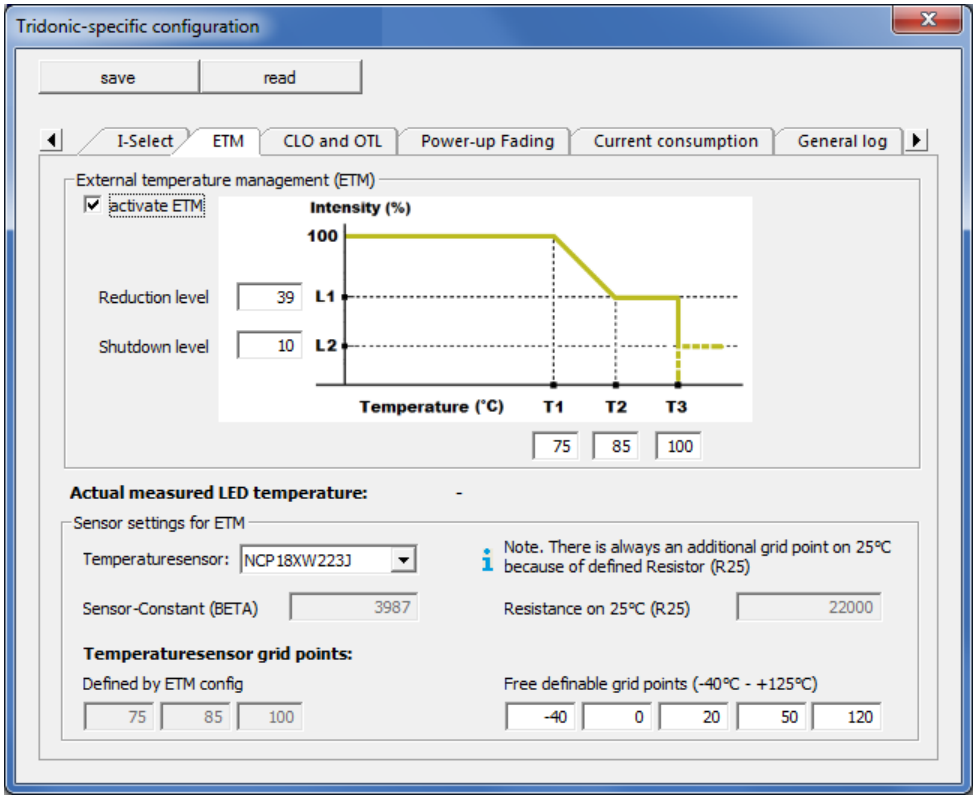
Start power reduction at	Indicates the temperature at which the LED output current is gradually reduced. The LED is dimmed. This allows the LED to cool. The LED is gradually dimmed until the temperature reduces by 10%, or 50% of the current intensity has been reached. **Value range:** • This temperature is calculated automatically. The value is 15% below the **switch-off temperature**. **Note** If the temperature continues to increase despite the power reduction, the control gear for the LED is switched off as soon as the **switch-off temperature** is reached.
Stop power reduction at	Temperature at which the reduction of the LED output current is stopped and the LED output current is gradually increased again. LED output current is gradually increased until the temperature reaches the **start power reduction at** parameter. **Value range:** • This temperature is calculated automatically. Value is 10% below the temperature at which the power reduction starts.
Temperature for restart	Indicates the temperature at which the LED output current is switched back on after a thermal shut down: The LED output current assumes the value before the Intelligent Temperature Management was activated. **Value range:** • This temperature is calculated automatically. The value is 50 % below the **switch-off temperature**.
Disable ITM	Via the checkbox **Disable ITM** the ITM function can be disabled. **Disable ITM** can be used to replace the temperature sensor with a new one or to deactivate the ITM function permanently. **Note** After the replacement of the temperature sensor the new sensor is automatically detected and 10 minutes later the ITM function is automatically re-enabled. In order to permanently deactivate the ITM function the temperature sensor must be removed. **Disabling ITM** 1. Enable the **Disable ITM** checkbox. 2. Click on **save**.

Table 28: Parameters for LED temperature monitoring

7 Configuration

ETM

LED temperature monitoring can be configured here. LED temperature monitoring is intended to protect the LED against thermal damage.



Parameters for External Temperature Management

Parameter	Description
activate ETM	Via this checkbox the ETM function can be activated and deactivated.
T1	Temperature at which the power reduction starts. **Value range:** • **50 °C - (T2 - 10 °C)**
T2	Temperature where the power reduction stops at the reduced level (L1). **Value range:** • **(T1 + 10 °C) - (T3 - 10°C)**
T3	Critical temperature at which the device switches to the Shutdown level (L2). **Value range:** • **T2 + 10 °C, maximum: 127 °C**
Reduction level (L1)	Value up to which the power is reduced. **Value range:** • **10 - 100 %**
Shutdown level (L2)	Value to be switched to when reaching the critical temperature (T3).

7 Configuration

	Value range: • **physical minimum value - L1 (max. 30 %)**

Table 29: Parameters of the ETM function

Parameters for Sensors

Parameter	Description
Temperature sensor	Here, three predefined NTC types can be selected or a user-defined value can be entered. The sensor constant and the resistance can be precisely defined at 25 °C.
Sensor-Constant (BETA)	This constant is needed to convert the resistance value to a temperature in an NTC resistor.
Resistance at 25 °C (R25)	Widerstandswert des NTC-Sensors bei 25 °C.
Temperature sensor grid points	The temperature profile is determined by a total of 8 grid points. 3 points are given with T1, T2 and T3. 5 additional grid points can be freely selected between -40 °C and +125 °C. The temperature profile between the grid points is automatically linearized. The resistance values for the entered temperatures is automatically calculated, but the calculation limited by the lowest and highest temperature. Below the lowest and above the largest value, no measurement is possible. The selected position of the grid points can be used to optimize the accuracy of the temperature profile in certain areas.

Table 30: Parameters for Sensors

CLO and OTL

The **CLO** and **OTL** functions can be configured here.

CLO

The **CLO** function is a control to ensure that the required intensity remains constant over the entire LED lamp life.

CLO disabled	CLO enabled

7 Configuration

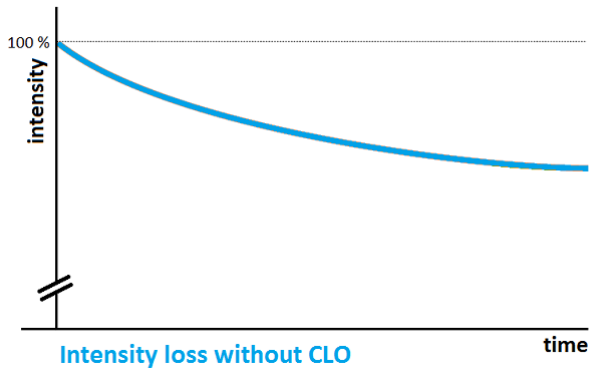
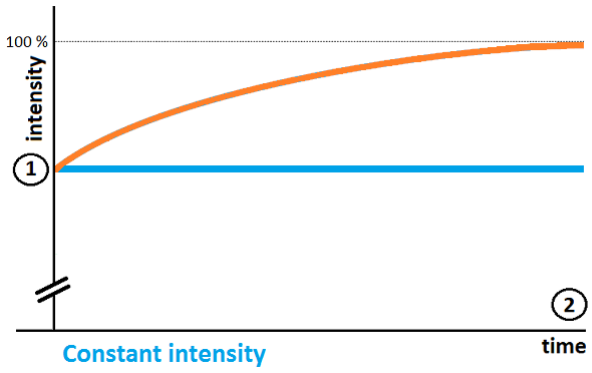
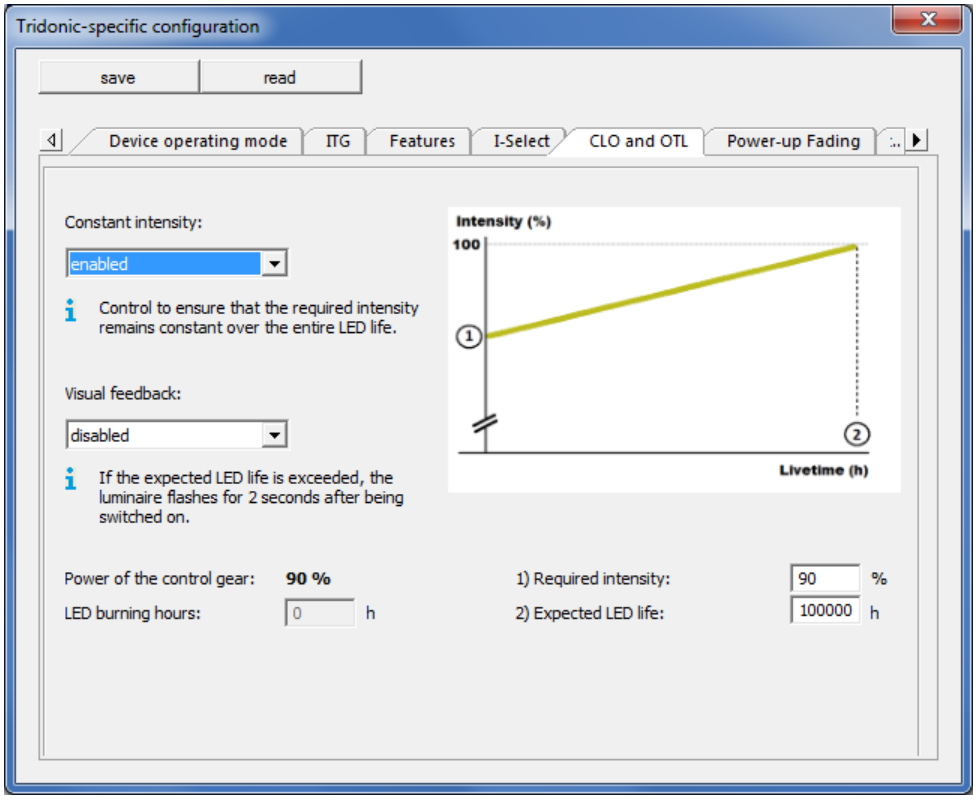
 Intensity loss without CLO	 Constant intensity
• Required intensity: 100% • Expected LED life: 50,000 h The intensity of an LED continuously decreases over the LED lamp life. The control gear does not compensate for this decrease. For this reason the required intensity can no longer be ensured over the entirety of the LED's lamp life.	• Required intensity: 80% • Expected LED life: 50,000 h A required intensity must be defined in order to ensure a constant intensity over the LED lamp life. This intensity is based on the natural reduction of intensity defined by the LED manufacturer. The control gear compensated for this natural reduction by adjusting its own output accordingly.

Table 31: Difference betw een enabled and disabled CLO function

OTL

If the **OTL** function is enabled, visual feedback is given as soon as the LED exceeds the expected LED lamp life. If the expected LED lamp life is exceeded, the luminaire flashes for 2 seconds after being switched on.



7 Configuration

Parameter	Description
Constant intensity (CLO)	The **CLO** function can be **enabled** or **disabled**. **Enabling or disabling CLO:** 1. Select **enabled** or **disabled** in the **Constant intensity** dropdown list. 2. Click on **save**.
Visual feedback (OTL)	The **OTL** function can be **enabled** or **disabled**. **Enabling or disabling OTL:** 1. Select **enabled** or **disabled** in the **Visual feedback** dropdown list. 2. Click on **save**.
Power of the control gear	Indicates the current control gear output required for reaching the **required intensity**.
Required intensity	Indicates the intensity which should remain constant over the entirety of the LED lamp life. **Value range:** • **70–100%** **Note** If only the **OTL** function is enabled, the **Required intensity** cannot be configured. It will be set at 100%. **Configuring required intensity** 1. Enter the desired **Required intensity**. 2. Click on **save**.
LED burning hours	Indicates the duration for which the LED has been on. **Note** If the **Advanced settings** are enabled, the **LED burning hours** can be configured. Information on how to enable the **Advanced settings** can be found in Section Active window 10. **Configuring LED burning hours** 1. Enter the desired **LED burning hours**. 2. Click on **save**.

7 Configuration

Expected LED life	Indicates the duration for which the LED can be operated before it becomes unusable or no longer meets the criteria given in applicable standards. **Value range:** • **0–127,500 h** **Note** The **Expected LED life** is configured in 500-hour increments.

Table 32: Parameters for CLO and OTL functions

If faulty control gear for LEDs must be replaced, we recommend applying the settings from another control gear element for LEDs to the new control gear element for LEDs.

Applying settings from another control gear element for LEDs

Requirements:
– **Advanced settings** are enabled.
– Old control gear for LEDs has been replaced by new control gear for LEDs.

1. Display the information for a control gear element for LEDs located in the same room as the new control gear element for LEDs.
2. Open the **Tridonic-specific configuration** pop-up window.
3. Click the **CLO and OTL** tab.
4. Make a note of the values for the following parameters: **Required intensity**, **LED burning hours** and **Expected LED life**.
5. Close the **Tridonic-specific configuration** pop-up window.
6. Display the information for the new control gear element for LEDs.
7. Open the **Tridonic-specific configuration** pop-up window.
8. Click the **CLO and OTL** tab.
9. Enter the values previously noted from the other control gear element for the following parameters: **Required intensity**, **LED burning hours** and **Expected LED life**.
10. Click on **save**.
    ➲ Changes are stored in the device.

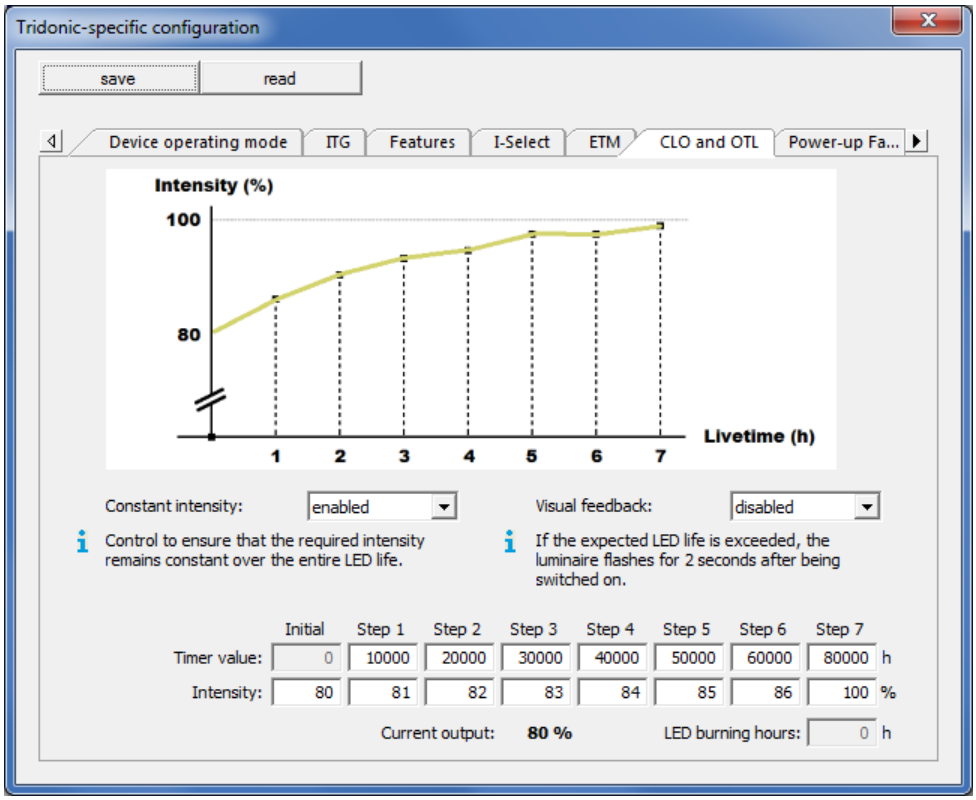
7 Configuration

CLO and OTL 2

CLO und OTL 2

CLO and OTL 2 is similar to the previous version CLO and OTL 88.

The difference is that in CLO and OTL 2 it is possible to set the **Timer value** and **Intensity** in 8 steps.



Power-up Fading

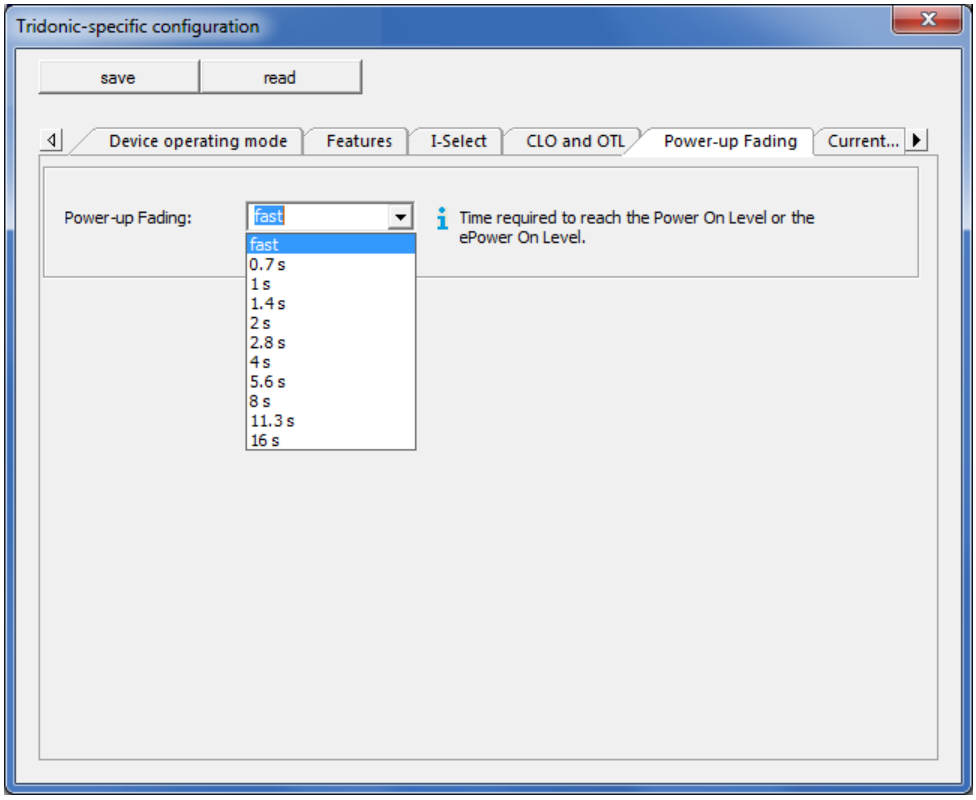
The time it takes after lighting is switched on for it to reach the value set for when power is restored (**Power On Level** or **ePower On Level**) can be configured here. The **Power-up Fading** function is only available when the lighting is switched on via the supply voltage or switchDIM.

Value range:

- **0–16 s**, where 0 s is the fastest time and 16 s the longest.

Note
The **Power-up Fading** function does not affect the **fade time**, as these are two different functions. For a detailed description of the **fade time**, see Section Device type 6: control gear for LEDs > Basic configuration 46.

7 Configuration



Configuring Power-up Fading for the Power On Level

Requirement:
– **ePower On Level** function is disabled.

1. Select the time for **Power-up Fading** in the dropdown list.
2. Click on **save**.
   ➲ Changes are stored in the device.

Note
The value for the **Power On Level** can be changed in the **Basic configuration** detail view in the **DALI default parameters** group box. For a detailed description of the **Power On Level**, see Section Device type 6: control gear for LEDs > Basic configuration 46.

7 Configuration

Configuring Power-up Fading for the ePower On Level

Requirements:
– Control gear supports the **ePower On Level** function.
– **ePower On Level** function is enabled.

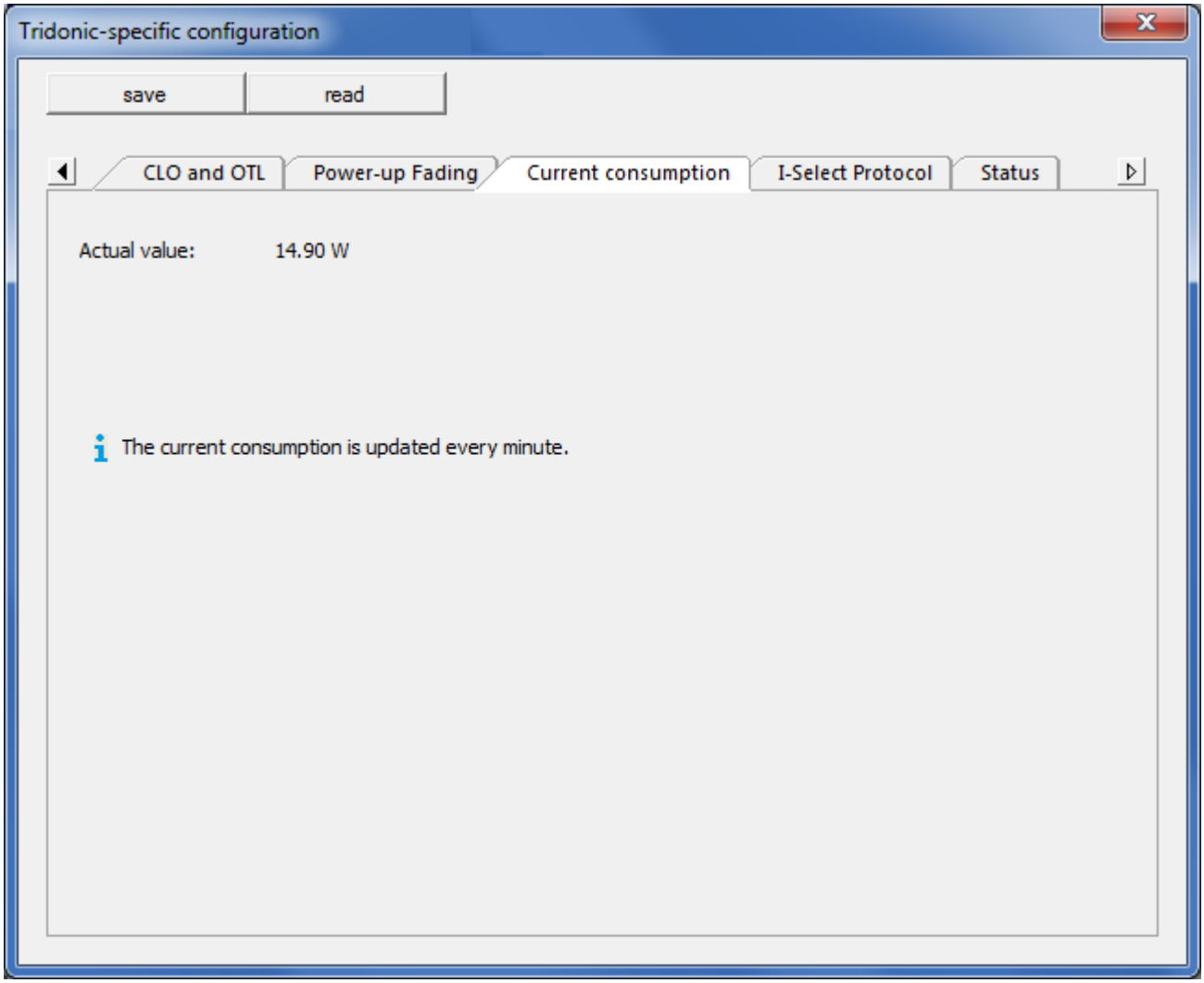
1. Select the time for **Power-up Fading** in the dropdown list.
2. Click on **save**.
   ➲ Changes are stored in the device.

Note
The value for the **ePower On Level** can be changed in the **Tridonic-specific configuration** pop-up window in the **Features** tab. For a detailed description of the **ePower On Level**, see Section **Features** 63.

7 Configuration

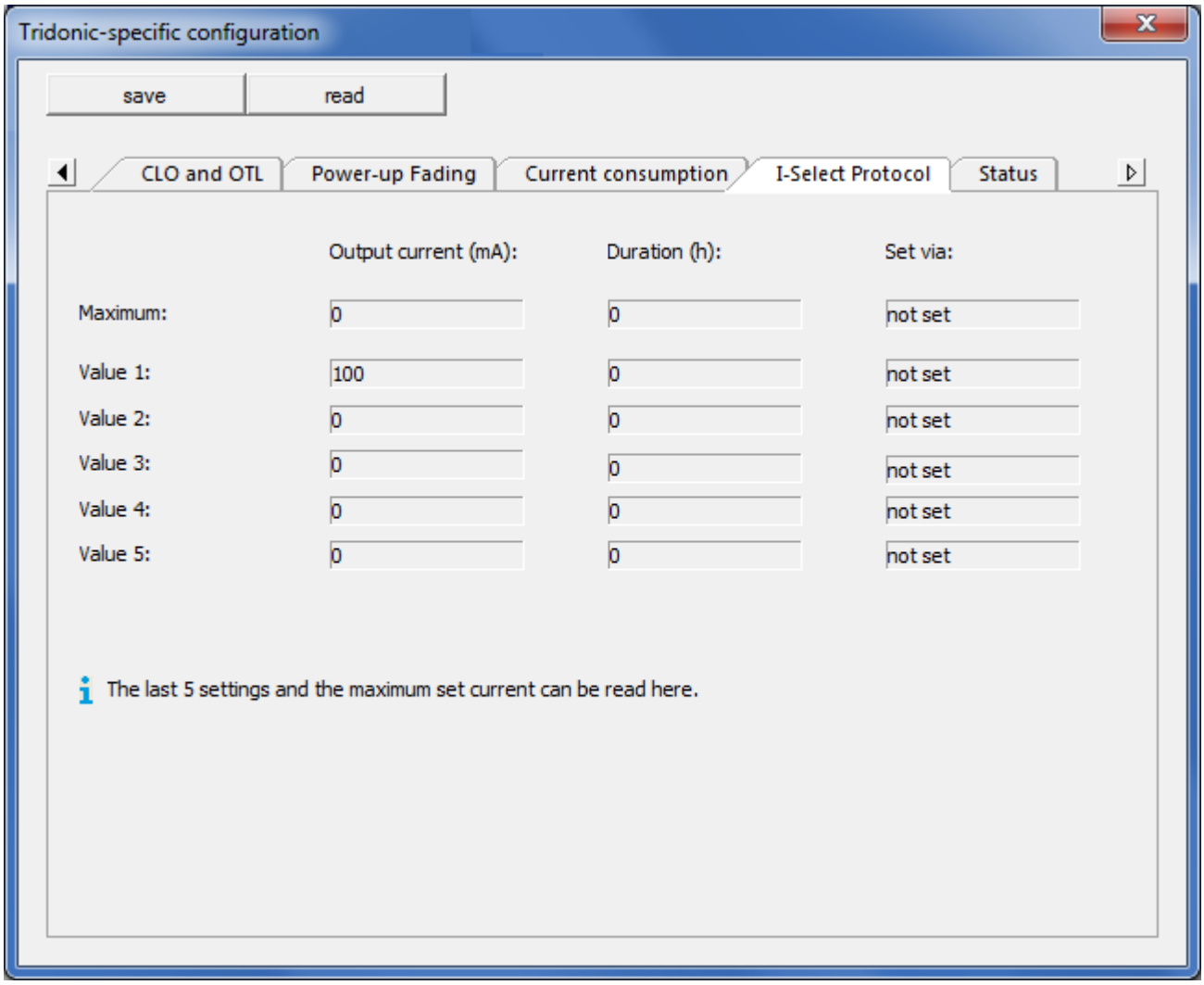
Current consumption

The **Current consumption** tab shows the active current consumption. The value is updated every minute.



7 Configuration

I-Select protokoll



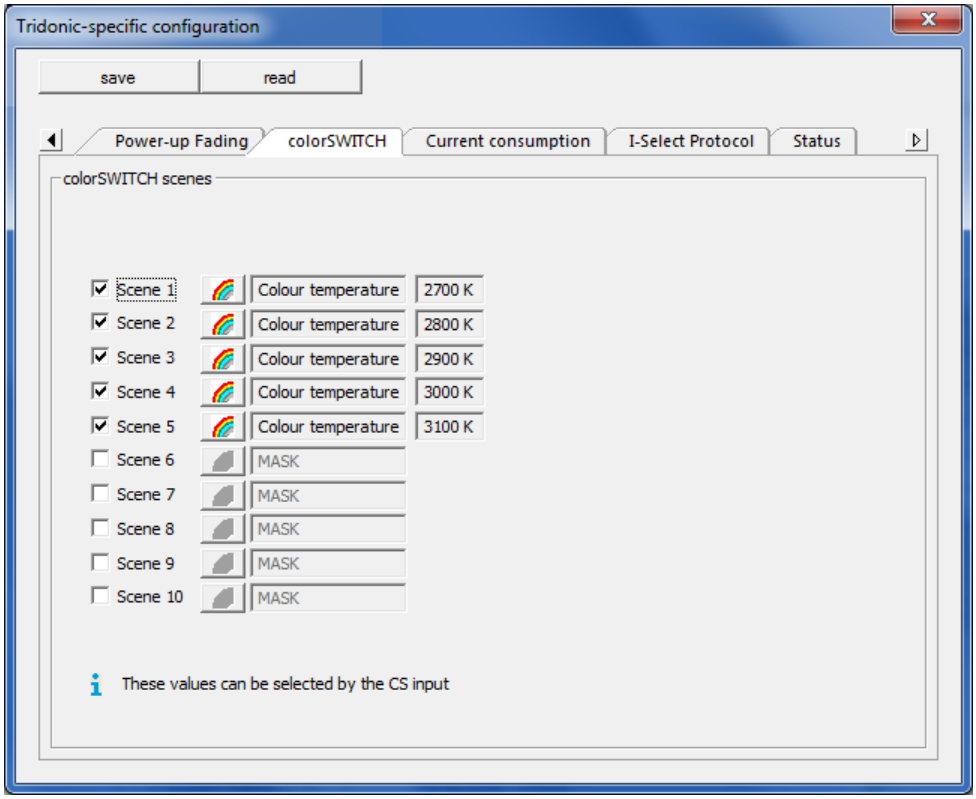
The **I-Select Protocol** tab shows the last 5 values and the maximum of I-Select.

The tab displays the output current, the duration and how the current was set (via Memory Bank, ready2mains or a resistor).

7 Configuration

colourSWITCH

Here you can set different colour temperatures for ten scenes.



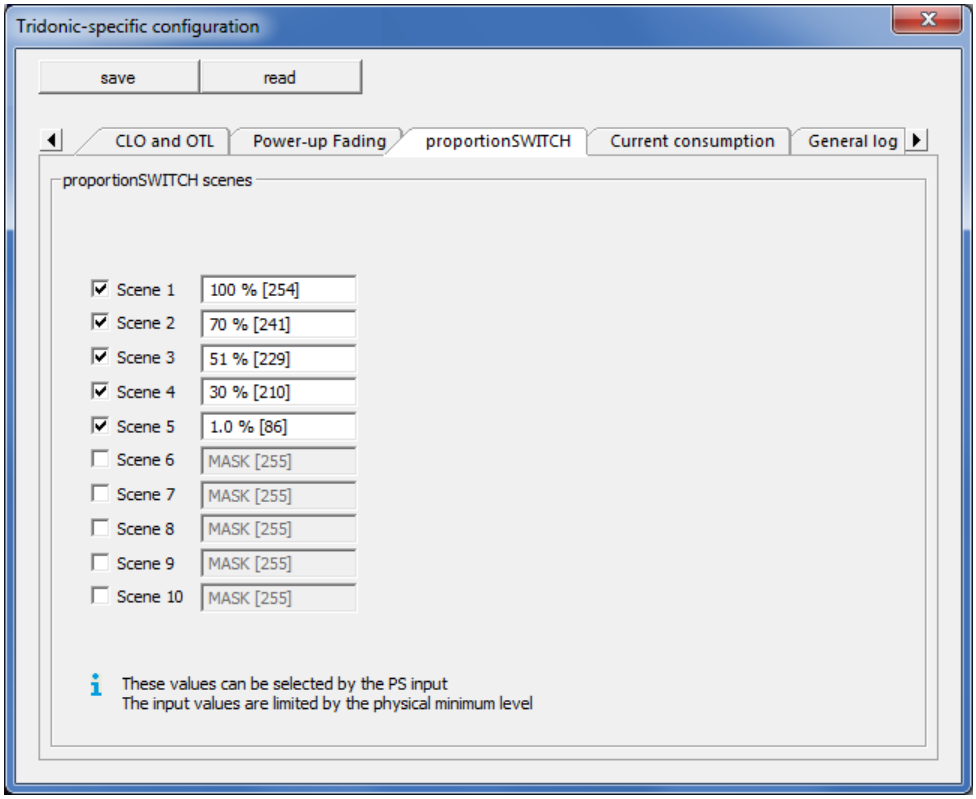
Define Colour temperature for a scene

1. Enable the checkbox for a scene, in order to assign a colour temperature to the luminaire.
   ➲ The input field can be edited.
2. Click the  button.
   ➲ The **Set scene** pop-up window appears.
3. Set the value for the **colour temperature** using the slider.
   -or-
   Click a button with a predefined value.
4. Click **Okay**.
   ➲ The view is updated.
5. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

proportionSWITCH

Here you can set different intensities for ten scenes.



Define intensity for a scene

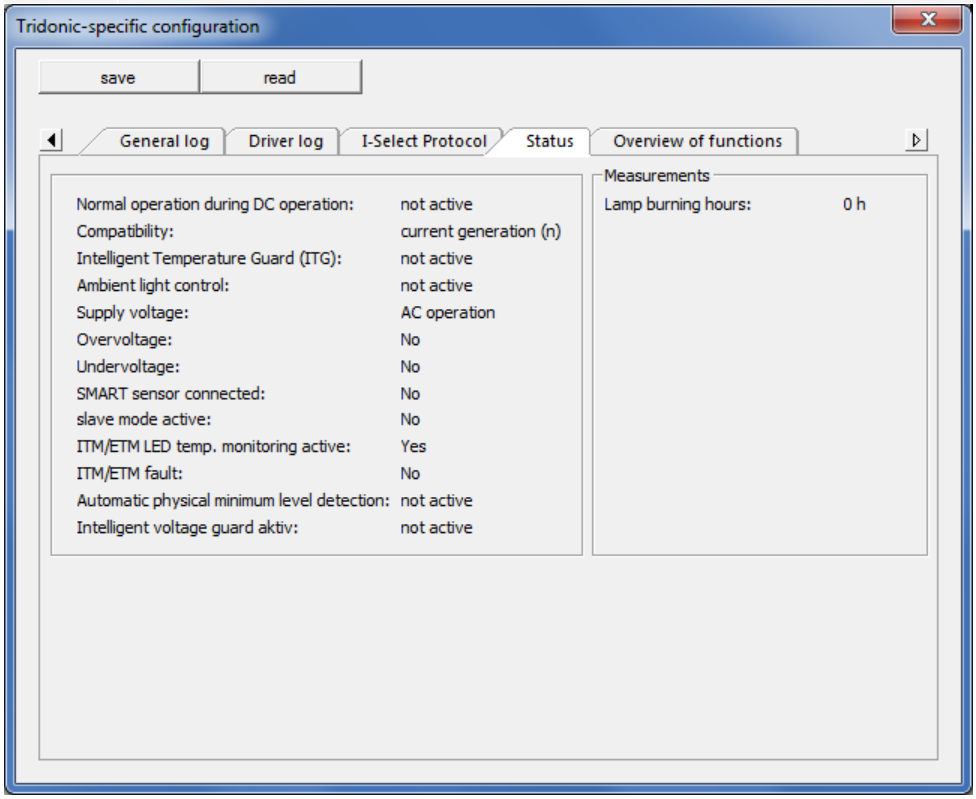
1. Enable the checkbox for a scene, in order to assign an intensity to the luminaire.
   ➲ The input field can be edited.
2. Enter a value between 0% and 100%.
3. To define the settings for the other scenes, repeat steps 2 to 5 for each scene.
4. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

Status

The **Status** tab shows all status information which can be queried by the control gear.

Note
An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.



Status	Description
Normal operation during DC operation	Indicates whether the control gear continues in normal operation during DC operation, i.e. can be smoothly adjusted and switched on/off.
Compatibility	Indicates the compatibility setting used by the control gear.
Intelligent Temperature Guard (ITG)	Indicates whether the Intelligent Temperature Guard is enabled or disabled.
Ambient light control	Indicates whether the ambient light control is enabled or disabled.
Supply voltage	Indicates the supply voltage with which the control gear is operating.
Overvoltage	Indicates whether the Intelligent Voltage Guard (IVG) has detected an overvoltage. When overvoltage is detected, the lamps connected to the control gear flash in alternating succession.
Undervoltage	Indicates whether the Intelligent Voltage Guard (IVG) has detected an undervoltage. When voltage under 70 V is detected, the lamps connected to the control gear switch off. When voltage between 70 and 140 V is detected, the lamps connected to the control gear switch on and off at irregular intervals.

7 Configuration

SMART sensor connected	Indicates whether a SMART sensor is connected and that no error has occurred. • **Yes**: SMART sensor connected and no error • **No**: no SMART sensor connected, or SMART sensor connected but error has occurred
Slave mode active	Indicates whether the slave mode is enabled. In slave mode the sensor is connected to two devices simultaneously and cannot be configured. The sensor only responds to commands from the master device.
ITM/ETM LED temp. monitoring active	Indicates whether the LED temperature monitoring (ITM/ETM) is activated.
ITM/ETM fault	Indicates whether the a short circuit has occurred for LED temperature monitoring (ITM/ETM).
Automatic physical minimum level detection	Indicates whether the automatic physical minimum level detection is enabled (default). The automatic physical minimum level is enabled for as long as no physical minimum level has been set (see Section Features)
Intelligent voltage guard active	Indicates whether the Intelligent voltage guard is activated.
Lamp burning hours	Indicates the duration for which the lamp has been on.

Table 33: Status information

7 Configuration

Overview of functions

The **Overview of functions** tab shows all functions supported by control gear of this device type. The **Overview of functions** tab is only visible if **advanced settings** have been enabled.

Not every control gear element supports all functions. For this reason the functions are shown with the following symbols:

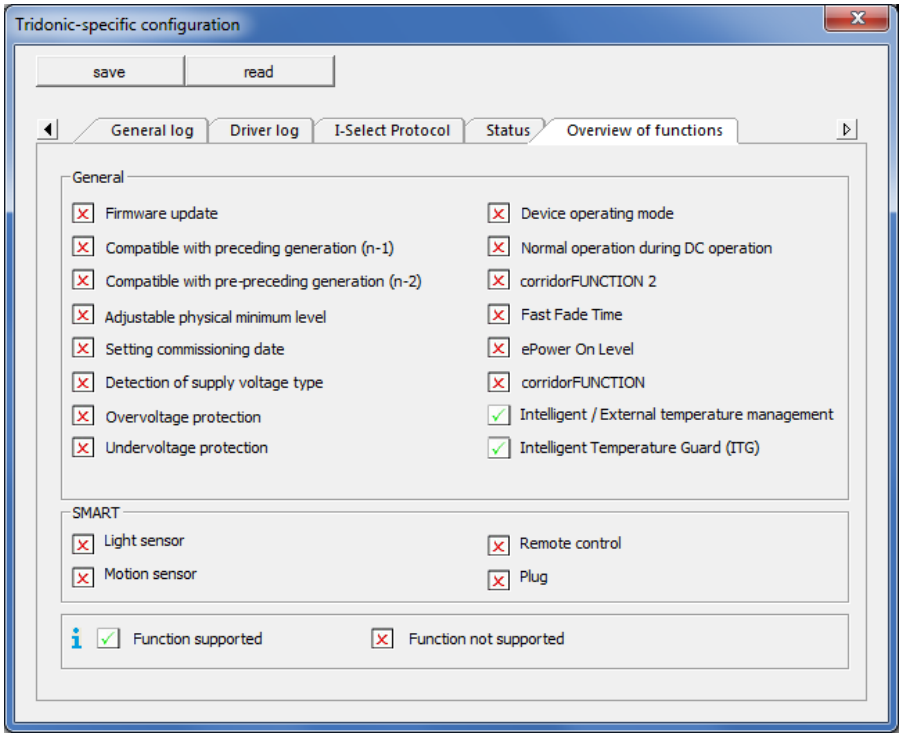
☑ This function is supported by the control gear.

☒ This function is not supported by the control gear.

Types of functions

The following types of functions are available:

- Configurable functions
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab.
- Functions with displayed statuses
  This functions cannot be configured. Statuses are shown in the **Status** tab.
- Configurable functions with displayed statuses
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab. Statuses are shown in the **Status** tab.



7 Configuration

7.1.5 Device Type 0: Control gear for fluorescent lamps

Control gear for fluorescent lamps are shown in the DALI device tree diagram with the  symbol and the short description **fluorescent**.

Special features: xitec II

Various SMART sensors and SMART plugs can be connected to control gear for fluorescent lamps from series xitec II via a SMART interface.

Note
More information on possible combinations of individual xitec II control gear elements and SMART sensors/plugs can be found in the device documentation.

Different tabs (and thus different combination options) are displayed in the masterCONFIGURATOR depending on which SMART sensor/plug is connected. The tabs shown for specific sensors or plugs are given in the following table:

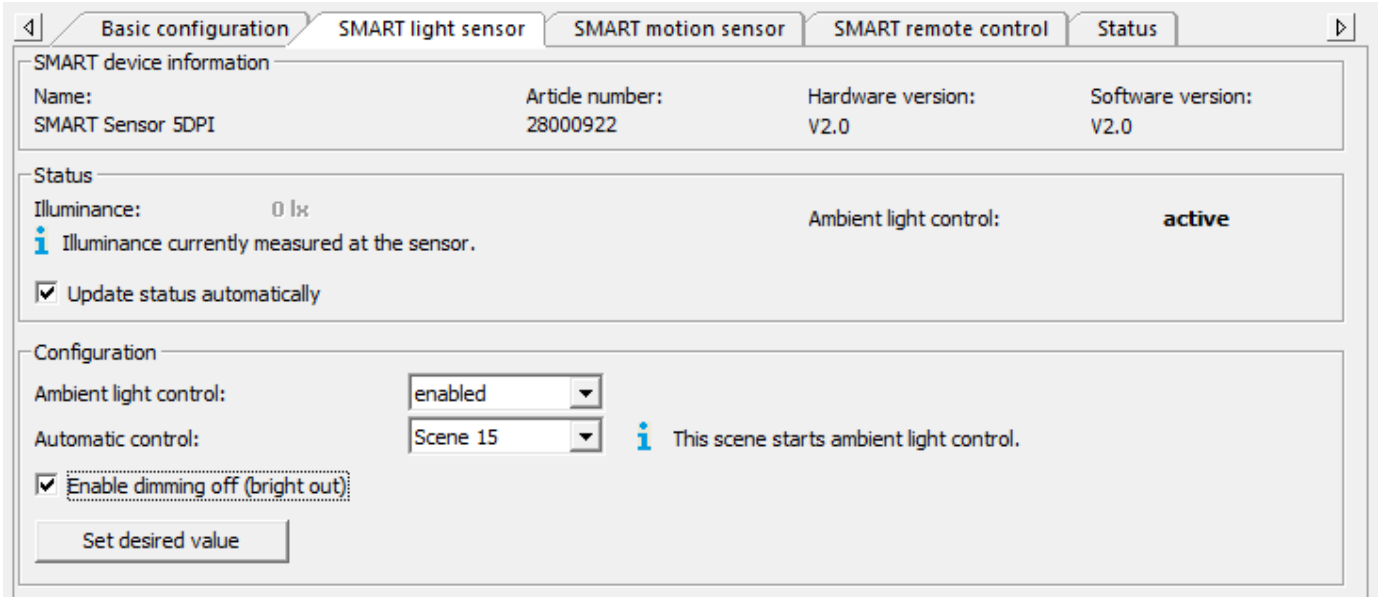
Device name	Light sensor	Motion sensor	Remote control	Plug
SMART Sensor 5D	x			
SMART Sensor 5DP	x	x		
SMART Sensor 5DPI	x	x	x	
SMART Sensor 5DPI cF NO	x	x	x	x
SMART Sensor 5DPI cF 01	x	x	x	x
SMART Sensor 5DPI cF 30	x	x	x	x
SMART Sensor 10DPI	x	x	x	
SMART Sensor 10DPI cF NO	x	x	x	x
SMART Sensor 10DPI cF 01	x	x	x	x
SMART Sensor 10DPI cF 30	x	x	x	x
SMART Plug MA				x
SMART Plug cF NO				x
SMART Plug cF 01				x
SMART Plug cF 30				x
SMART Plug GrA				x
SMART Plug GrB				x
SMART Plug GrC				x
SMART Plug GrD				x

7 Configuration

Table 34: Overview of SMART sensors and SMART plugs

Note
For further details on individual SMART sensors and SMART plugs, please refer to the relevant device documentation.

Light sensor



SMART device information

The following device information is displayed:

Device information	Description
Name	Displays the name of the SMART sensor.
Article number	Displays the article number of the SMART sensor.
Hardware version	Displays the hardware version of the SMART sensor.
Software version	Displays the software version of the SMART sensor.

Table 35: SMART device information

Status

The following status information is displayed for the light sensor:

Status	Description
Illuminance	Illuminance currently measured at the light sensor. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher.

7 Configuration

Update status automatically	Indicates whether the light sensor status is updated automatically.
Ambient light control	Indicates the status of ambient light control for the light sensor. • **enabled**: ambient light control is enabled. • **disabled**: ambient light control is disabled. • **started**: ambient light control has been started. The light sensor regulates the control gear to match the desired value.

Table 36: Status information

Configuration options

The following configuration options are displayed for the light sensor:

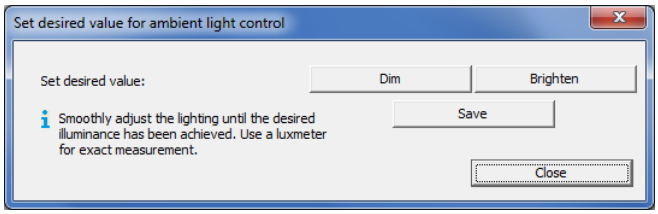
Configuration option	Description
Ambient light control	Ambient light control can be **enabled** or **disabled**.
Automatic control	Indicates the scene with which the ambient light control is enabled. When this scene is recalled, the sensor is enabled, the luminaires are switched on and ambient light control regulates the luminaires. **Note:** The scene selected here is identified in the **Basic configuration** as **automatic**.
Enable dimming off (bright out)	Checkbox enabled: if the measured illuminance exceeds the **desired value** by 150% for longer than 8.5 minutes, the luminaire group will be switched off by the light sensor even if movement is detected in the room. As soon as the measured illuminance falls below the **desired value**, the luminaire group is switched on again.
Set desired value	Set the desired value for ambient light control. The desired value is the value to which the light sensor regulates the control gear. The default setting is 500 lx. This value can be smoothly adjusted using the **Dim** and **Brighten** commands until the desired illuminance is achieved. Use a luxmeter to achieve an accurate measurement of the illuminance. 

Table 37: Light sensor configuration options

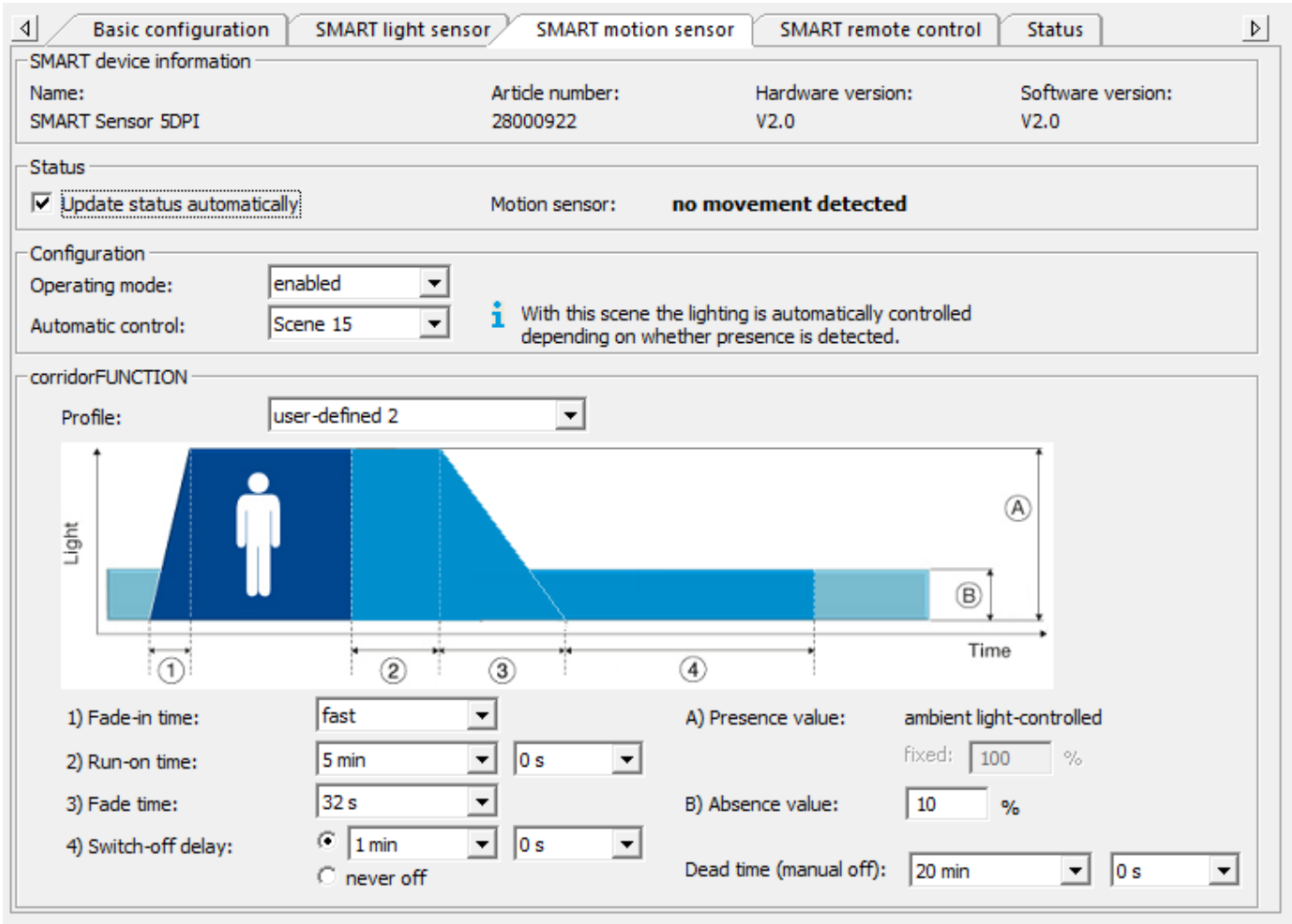
7 Configuration

Automatic control for different SMART sensors and SMART plugs

The automatic control for the SMART Sensor 5D refers only to ambient light control. In contrast, the automatic control for sensors SMART Sensor 5DP, SMART Sensor 5DPI and SMART Sensor 10DPI refers to a type of ambient light control that depends on the presence of people. More information can be found in Section Motion sensor... 105

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

Motion sensor



SMART device information

The following device information is displayed:

Device information	Description
Name	Displays the name of the SMART sensor.

7 Configuration

Article number	Displays the article number of the SMART sensor.
Hardware version	Displays the hardware version of the SMART sensor.
Software version	Displays the software version of the SMART sensor.

Table 38: SMART device information

Status

The following status information is displayed for the motion sensor:

Status	Description
Update status automatically	Indicates whether the motion sensor status is updated automatically.
Motion sensor	Indicates the status of the motion sensor: • **Movement detected** • **No movement detected**

Table 39: Status information

Configuration options

The following configuration options are displayed for the motion sensor:

Configuration option	Description
Operating mode	Motion sensor operating mode: • **enabled**: the lighting is automatically switched on and off depending on whether presence is detected. (factory setting) • **enabled (only OFF)**: the motion sensor switches the lighting off only. It must be switched on manually. • **disabled**: the motion sensor is disabled. The lighting must be switched on and off manually. **Note:** The **never OFF** function is implemented as follows: 1. Select the **enabled** operating mode. 2. Select switch-off delay **never OFF**.
Automatic control	Indicates the scene used to control the lighting based on whether presence is detected. If this scene is recalled the motion sensor is enabled and the luminaires are controlled based on whether presence is detected. **Note:** The scene selected here is identified in the **Basic configuration** as **automatic**.

Table 40: Motion sensor configuration options

7 Configuration

Automatic control for different SMART sensors and SMART plugs

The automatic control for sensors SMART Sensor 5DP, SMART Sensor 5DPI and SMART Sensor 10DPI refers to a type of ambient light control that depends on the presence of people. Ambient light control can be disabled as follows:

1. Click on the **SMART light sensor** tab.
2. Select **disabled** for ambient light control.
3. Click on **save**.
   ➲ Changes are stored in the device.
   ➲ The motion sensor controls the lighting based on the presence of people.

corridorFUNCTION profiles

The corridorFUNCTION is a function used to automatically adjust the illuminance in an area (e.g. underground car park, underground walkways for pedestrians). When a motion sensor detects presence, the lighting switches to the presence value. When absence is detected, the lighting switches to the absence value. Then the lighting is switched off or stays at the absence value (depending on requirements and settings).

If the **Operating mode** for the motion sensor is **enabled**, the user has five profiles from which to choose.

Profile	Description
never off	The corridorFUNCTION parameters cannot be configured, with the exception of the dead time. The following values are saved in the profile: • **A) Presence value**: 100% • **B) Absence value**: 10% • **1) Fade-in time**: < 0.7 s • **2) Run-on time**: 20 min • **3) Fade time**: 32 s • **4) Switch-off delay**: No switch-off delay is defined for this profile. Once the fade time has expired, the absence value of 10% is maintained until the motion sensor once again detects presence. • **Dead time**
Switch-off delay: 1 min	The corridorFUNCTION parameters cannot be configured, with the exception of the dead time. The following values are saved in the profile: • **A) Presence value**: 100% • **B) Absence value**: 10% • **1) Fade-in time**: < 0.7 s • **2) Run-on time**: 20 min • **3) Fade time**: 32 s • **4) Switch-off delay**: 1 min • **Dead time**
Switch-off delay: 30 min	The corridorFUNCTION parameters cannot be configured, with the exception of the dead time. The following values are saved in the profile: • **A) Presence value**: 100% • **B) Absence value**: 10% • **1) Fade-in time**: < 0.7 s • **2) Run-on time**: 20 min • **3) Fade time**: 32 s • **4) Switch-off delay**: 30 min • **Dead time**
user-defined 1	The corridorFUNCTION parameters can be freely configured, with the exception of the fade-in time.

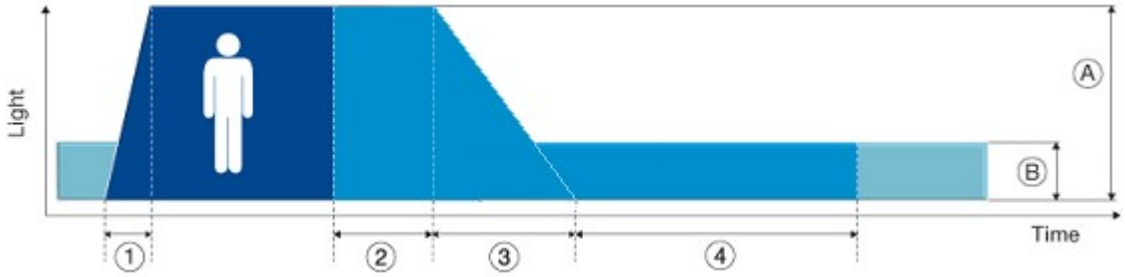
7 Configuration

	• **A) Presence value** • **B) Absence value** • **1) Fade-in time**: < 0.7 s (not configurable) • **2) Run-on time** • **3) Fade time** • **4) Switch-off delay** • **Dead time**
user-defined 2	The corridorFUNCTION parameters can be freely configured, with the exception of the fade-in time. • **A) Presence value** • **B) Absence value** • **1) Fade-in time**: < 0.7 s (not configurable) • **2) Run-on time** • **3) Fade time** • **4) Switch-off delay** • **Dead time**

Table 41: corridorFUNCTION configuration options

Overview of configuration options

The following figure shows a summary of the individual parameters.



1) Fade-in time
2) Run-on time
3) Fade time
4) Switch-off delay

A) Presence value
B) Absence value

7 Configuration

corridorFUNCTION parameters

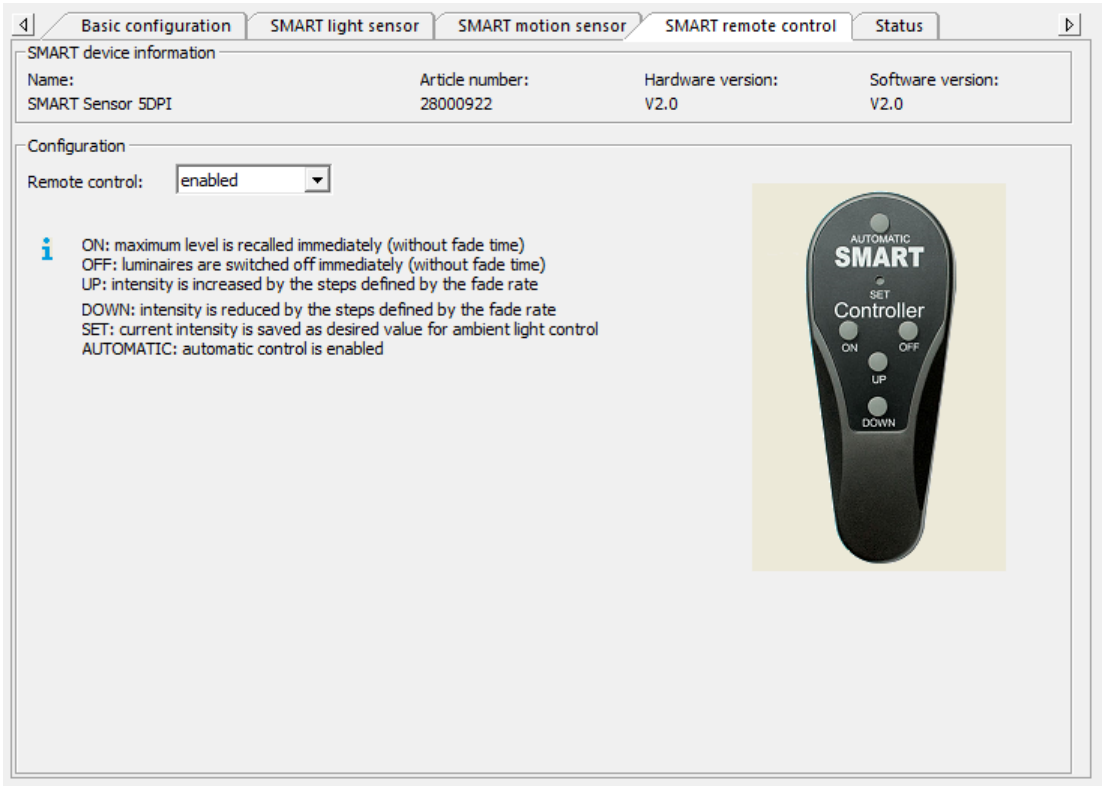
The following table gives a description of the individual parameters for the corridorFUNCTION:

Configuration option	Description
Presence value	Value to which the luminaire group switches when presence is detected in the room.
Absence value	Level to which the luminaire group switches during the **switch-off delay**.
Fade-in time	Time required to reach the **presence value**.
Run-on time	A time starting from the last detected movement in the room; when the run-on time expires, the **fade time** begins. If further movement is detected during the **run-on time**, it starts over again.
Fade time	Time during which the lighting is smoothly adjusted to the **absence value**.
Switch-off delay	Time for which the **absence value** is maintained if no movement is detected.
Dead time	Time started by manually switching off the lighting via the momentary-action switch or the remote control and during which the motion sensor is disabled. If movement is detected in the room during this time, the dead time starts over again. If at the end of the dead time no more movement is detected in the room, the motion sensor is enabled again.

Table 42: Overview of corridorFUNCTION parameters

7 Configuration

Remote control



7 Configuration

SMART device information

The following device information is displayed:

Device information	Description
Name	Displays the name of the SMART sensor.
Article number	Displays the article number of the SMART sensor.
Hardware version	Displays the hardware version of the SMART sensor.
Software version	Displays the software version of the SMART sensor.

Table 43: SMART device information

Configuration options

The following configuration options are displayed for the remote control:

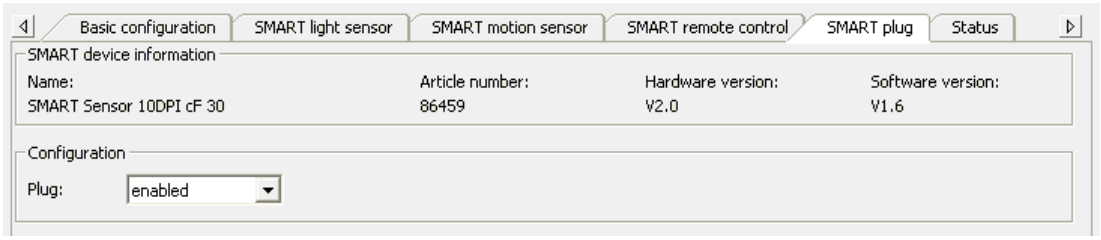
Configuration option	Description
Remote control	Remote control can be **enabled** or **disabled**. **Note:** Only the SMART remote control can be used with control gear from series xitec II. The key assignment has already been parameterised. • **ON**: the maximum level is recalled immediately without any fade time. • **OFF**: the luminaires are switched off immediately without any fade time. • **UP**: the intensity is increased by the steps defined in the fade rate. • **DOWN**: the intensity is reduced by the steps defined in the fade rate. • **SET**: the current intensity is saved as the desired value for ambient light control. • **AUTOMATIC**: automatic control is enabled.

Table 44: Remote control configuration options

Note
To apply the changed values, click on **save**.

7 Configuration

Plug



SMART device information

The following device information is displayed:

Device information	Description
Name	Displays the name of the SMART plug.
Article number	Displays the article number of the SMART plug.
Hardware version	Displays the hardware version of the SMART plug.
Software version	Displays the software version of the SMART plug.

Table 45: SMART device information

Configuration options

The following configuration options are displayed for the plug:

Configuration option	Description
Plug	Plug can be **enabled** or **disabled**.

Table 46: Plug configuration options

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

Special feature: group plugs

Group plugs automatically assign the DALI control gear element, into which they are plugged, to a group.

Plug	Effective range
SMART Plug GrA	Group 0
SMART Plug GrB	Group 1
SMART Plug GrC	Group 2
SMART Plug GrD	Group 3

Table 47: Group plugs and their corresponding effective ranges

A group plug that has been plugged in can be reconfigured individually. It can be assigned to another group or to more than one group.

Note
If a reconfigured group plug is plugged into another DALI control gear element, this element takes on the configuration of the group plug the next time the power is reset.

Changing the group to which a group plug belongs

Requirement:
– Group plug is plugged into a DALI control gear element.

1. In the DALI device tree diagram, click on the device into which the group plug has been plugged.
2. Hold down the left mouse button.
3. Drag the device to the desired group. (Drag & Drop)
   ➲ The device is removed from the group in which it was previously located and is added to the desired group.
   ➲ The group has now been changed on the group plug.

Assigning a group plug to more than one group

Requirement:
– Group plug is plugged into a DALI control gear element.

1. In the DALI device tree diagram, click on the device into which the group plug has been plugged.
2. Hold down the left mouse button.
3. In addition, hold down the **CTRL** key.
4. Drag the device to the desired group.
   ➲ The device is copied. It is now in both groups.
   ➲ The group has been saved additionally on the group plug. The group plug is now assigned to both groups.

Deleting a group from a group plug

Requirement:
– Group plug is plugged into a DALI control gear element.

1. Right-click on the device into which the group plug has been plugged.
   ➲ The context menu appears.
2. Select **Remove device from group** in the context menu.

7 Configuration

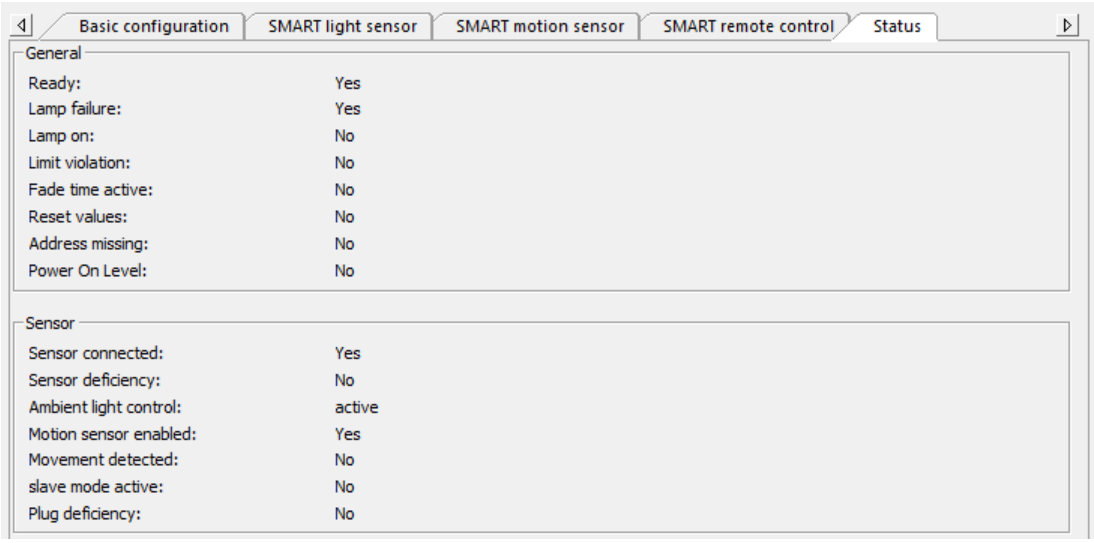
➲ The device is removed from the group and appears once again in the DALI device tree diagram without a group.
➲ The group has now been deleted on the group plug.

7 Configuration

Status

The **Status** tab shows all status information which can be queried by the control gear.

> **Note**
> An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On Level.

Table 48: DALI control gear status information

7 Configuration

SMART sensor status

Status	Description
Sensor connected	Indicates whether a sensor is connected.
Sensor deficiency	Indicates whether the sensor is experiencing a deficiency.
Ambient light control	Indicates the status of ambient light control for the light sensor. • **enabled**: ambient light control is enabled. • **disabled**: ambient light control is disabled. • **started**: ambient light control has been started. The light sensor regulates the control gear to match the desired value.
Motion sensor enabled	Indicates whether the motion sensor is enabled.
Movement detected	Indicates whether the motion sensor has detected movement.
Slave mode active	Indicates whether the slave mode is enabled. The sensor cannot be configured in slave mode. The sensor only responds to commands from the master device.
Plug deficiency	Indicates whether there is a fault with the plug or the wrong plug is connected. This status information is only displayed when a SMART plug is plugged in.

Table 49: Sensor status information

7 Configuration

7.1.6 Device Type 1: Control gear for emergency lighting

Control gear for emergency lighting are shown in the DALI device tree diagram with the  icon and the short description **Emergency lighting**.

A distinction is made between three types of switching modes in the case of emergency lighting:

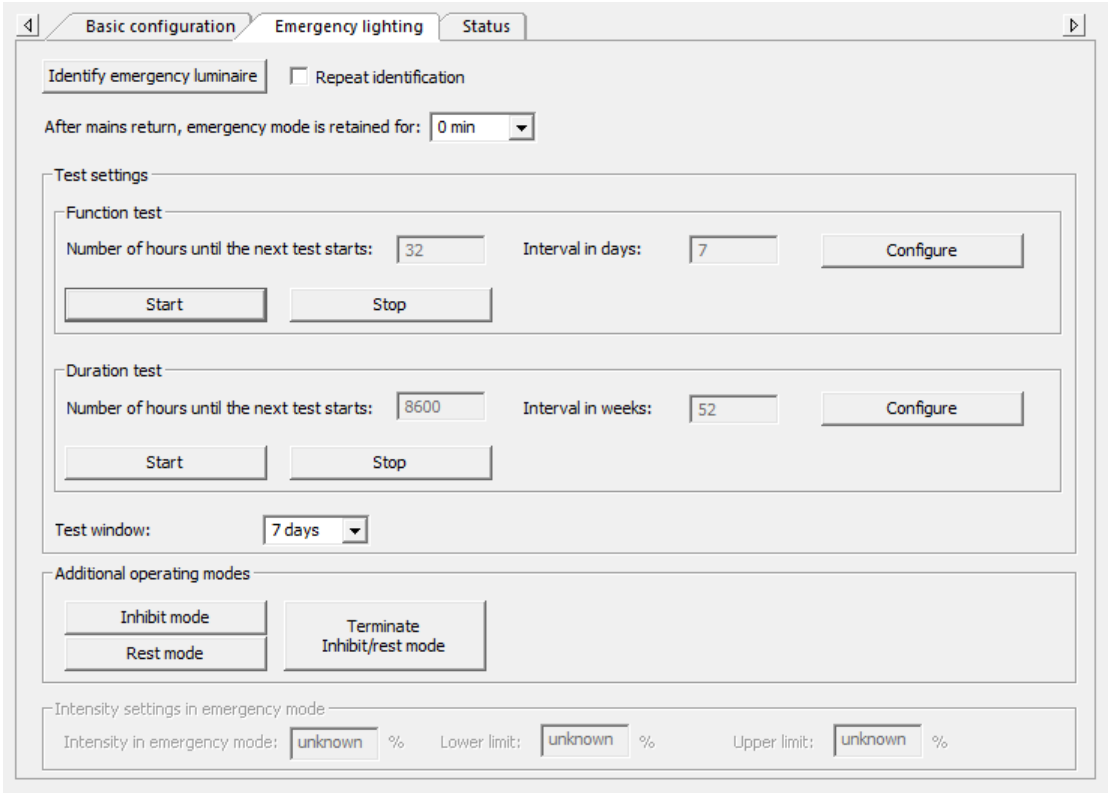
- **Non-maintained light**
  The emergency lighting is switched off in mains operation, the emergency lighting is switched on in emergency mode (if there is a power failure or during emergency lighting testing).
- **Maintained light**
  The lighting is permanently switched on during both mains operation and emergency mode (e.g. escape sign luminaires). In mains operation the lighting is supplied from the mains, in emergency mode the lighting is supplied by the battery.
- **Switched maintained light**
  The lighting is permanently switched on during both mains operation and emergency mode (e.g. escape sign luminaires). In mains operation the lighting is supplied from the mains, in emergency mode the lighting is supplied by the battery. In mains operations the lighting can be switched on and off and can be dimmed.

7 Configuration

Device-specific configuration

On the **Emergency lighting** tab, you can make the following settings for device-specific configurations:

- Identify emergency luminaire
  For a detailed description, see Section Identification 119.
- Set the time for emergency mode after mains power is restored
  For a detailed description, see Section Emergency mode after mains power is restored 120.
- Configure test settings
  For a detailed description, see Section Test settings 121.
- Disable emergency luminaire through additional operating modes
  For a detailed description, see Section Disabling emergency luminaires 126.
- Define intensity settings in emergency mode
  For a detailed description, see Section Intensity settings in emergency mode 127.



7 Configuration

Identification

Here you can directly display the address of the emergency luminaire via the status LED on the device. For this purpose, the address is converted into a six-digit binary number, which is represented as a flashing pattern. The red LED stands for binary number 0, the green LED for binary number 1.

Note
The following options are available to users in order to convert a binary number to a decimal number:
- *EM PRO Ident.TOOL* software: You can download this software from Tridonic's homepage at: **Services** – **Software**.
- *EM PRO* addressing tool (Article number 89899836)

In the masterCONFIGURATOR software there are 3 ways in which emergency luminaires can be identified.

Function	Description
Identify emergency luminaire button	• The address of an emergency luminaire that is highlighted in the device tree diagram is displayed once or in an endless loop • Enabled in the detail view by clicking the **Identify emergency luminaire** button **Note** For a detailed description of this function, see this section.
Locate icon 	• The address of an emergency luminaire that is highlighted in the device tree diagram is displayed in an endless loop • Is enabled by clicking the **Locate**  icon **Note** For a detailed description of this function, see Section Checking device assignment... 35
Identify icon 	• The addresses of all the emergency luminaires connected to the DALI control line are displayed in an endless loop • is enabled by clicking the **Identify**  icon **Note** For a detailed description of this function, see Section Checking device assignment... 35

Table 50: Summary of identifying emergency luminaires

7 Configuration

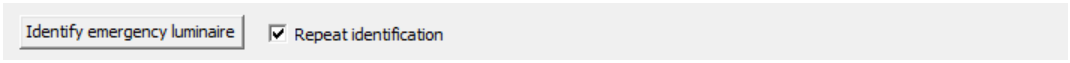
Identify emergency luminaire once

▷ Click the **Identify emergency luminaire** button.

▷ 

➲ The emergency luminaire's status LED sends the address of the emergency luminaire once as a binary flashing pattern.

Identify emergency luminaire again

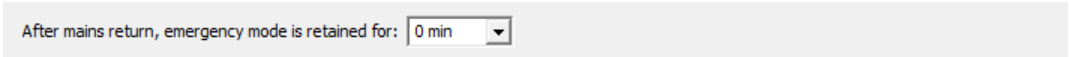
1. Enable the **Repeat identification** checkbox.
2. 

3. Click the **Identify emergency luminaire** button.
   ➲ The emergency luminaire's status LED sends the address of the emergency luminaire in an endless loop as a binary flashing pattern.
4. To quit identification, disable the **Repeat identification** checkbox.

Note
The current status of this function can be seen in the **Status** tab.

Emergency mode after mains power is restored

Here you can set how long emergency mode is maintained after mains power is restored. This function is used, for example, to compensate for voltage fluctuations after a power outage or to bridge the restrike times of high-pressure discharge lamps.



Note
The battery must be sufficiently charged in order to maintain emergency mode after mains power is restored.

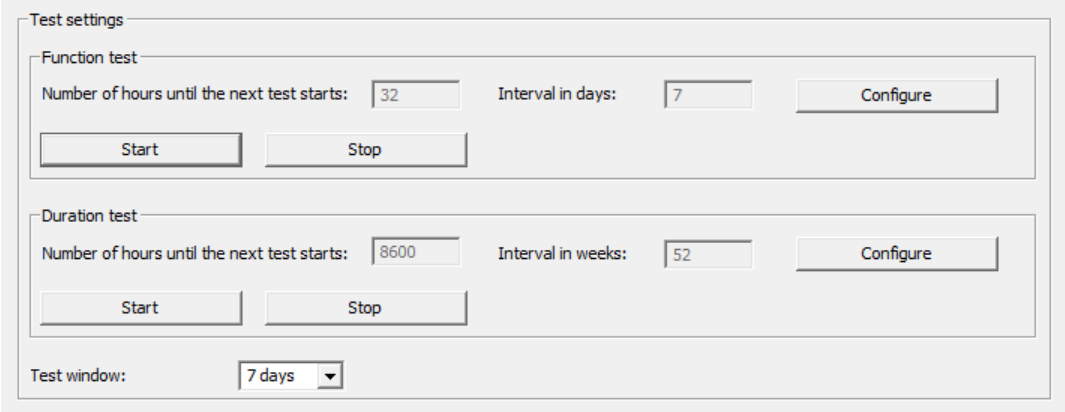
Set the time for emergency mode after mains power is restored

1. Select a value in the dropdown list.
2. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

Test settings

Here you can view the current configuration of the function and duration tests, configure the function and duration tests and define a test window within which the control gear is to perform a test.



Function test

During a function test, a power failure is simulated in order to test whether the emergency luminaire is functioning properly.

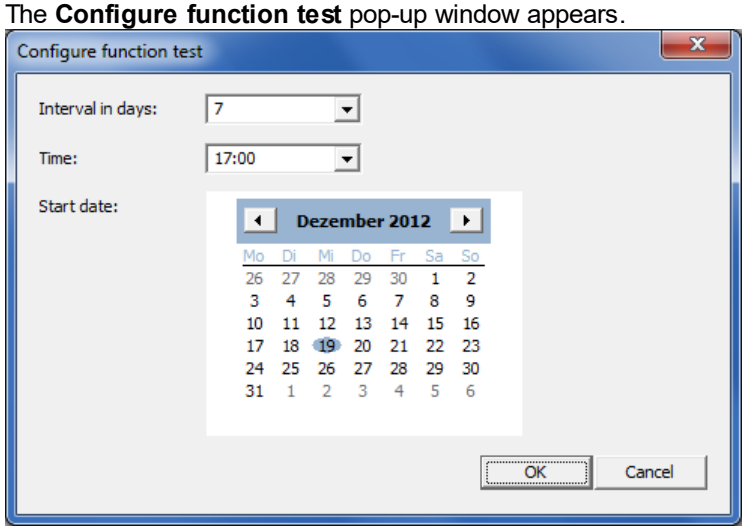
Configuration option	Description
Number of hours until the next test starts	Indicates in how many hours the next function test will be performed.
Interval	Indicates at what intervals the function test is performed. The interval for the function test is specified in days.
Configure	Button used to configure function test.
Start	Button used to start function test manually. A manual function test must be performed after installing and addressing the emergency luminaire. **Note** The control gear usually performs a function test immediately. It is only delayed if the emergency luminaire is in emergency mode or if the battery is not sufficiently charged. • To see whether the function test has been started, view the **Status** – **Operating mode** – **Function test in progress** tab. • To see whether the function test has been delayed, view the **Status** – **Emergency lighting status** – **Function test on hold** tab.
Stop	Button used to terminate a function test that is in progress prematurely.

Table 51: Function test configuration options

7 Configuration

Configure function test

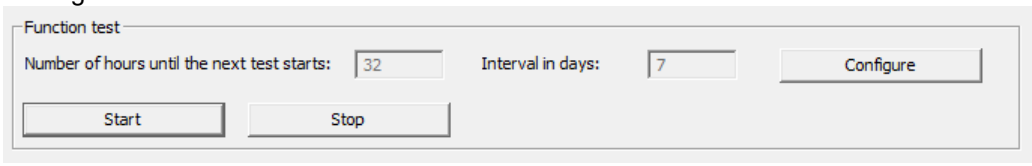
1. In the **Function test** group field, click the **Configure** button.
   ➲ The **Configure function test** pop-up window appears.



2. In the dropdown list, select an **Interval** within which the test is to be performed.
3. In the dropdown list, select a **Time** at which the test is to be performed.
4. Choose a start date for the function test in the calendar.

> **Note**
> The current day is marked in blue on the calendar.

5. Click **OK**.
   ➲ Function test has been configured.
   ➲ Settings are transferred to the detail view.



6. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

Duration test

During a duration test, a power failure is simulated in order to test whether the emergency luminaire is functioning properly and whether the battery achieves its nominal operating duration.

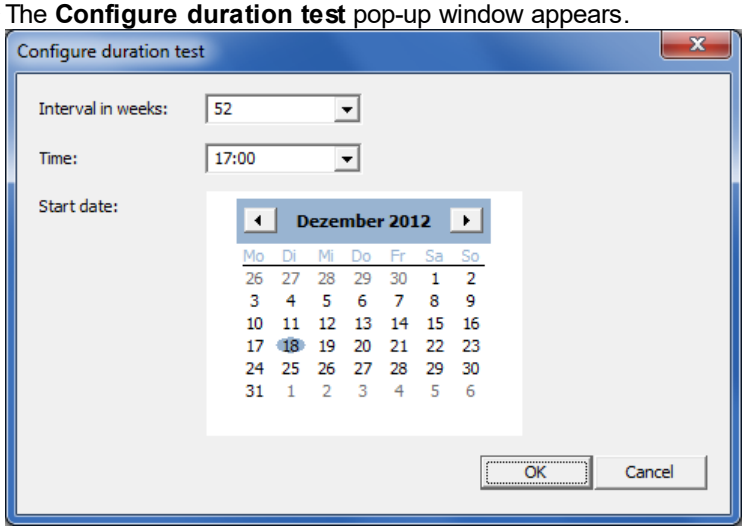
Configuration option	Description
Number of hours until the next test starts	Indicates in how many hours the next duration test will be performed.
Interval	Indicates at what intervals the duration test is performed. The interval for the duration test is specified in weeks.
Configure	This button is used to configure the duration test.
Start	Button used to start duration test manually. A manual duration test must be performed after installing and addressing the emergency luminaire. **Note** The control gear usually performs a duration test immediately. It is only delayed if the emergency luminaire is in emergency mode or if the battery is not fully charged. • To see whether the duration test has been started, view the **Status** – **Operating mode** – **Duration test in progress** tab. • To see whether the function test has been delayed, view the **Status** – **Emergency lighting status** – **Function test on hold** tab.
Stop	Button used to terminate a duration test that is in progress prematurely.

Table 52: Duration test configuration options

7 Configuration

Configure duration test

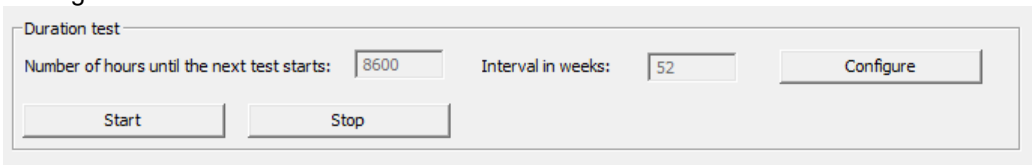
1. In the **Duration test** group field, click the **Configure** button.
   ➲ The **Configure duration test** pop-up window appears.



2. In the dropdown list, select an **Interval** within which the test is to be performed.
3. In the dropdown list, select a **Time** at which the test is to be performed.
4. Choose a **start date** for the duration test in the calendar.

> **Note**
> The current day is marked in blue on the calendar.

5. Click **OK**.
   ➲ Duration test has been configured.
   ➲ Settings are transferred to the detail view.



6. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

Test window

The test window defines the maximum time that may elapse between the scheduled start time and the time the test is actually performed.

Note

The test window must be at least 24 hours because the batteries can take up to 24 hours to fully charge when they are first charged.

Different requirements apply in order to start a function test and a duration test.

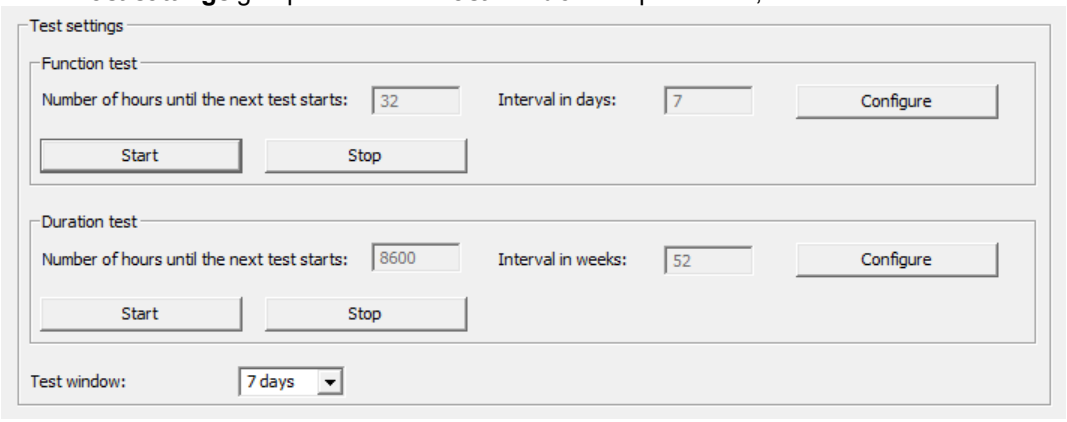
Test	Requirement
Function test	• The emergency luminaire must be operating under mains operation. • The battery must be sufficiently charged to perform the test.
Duration test	• The emergency luminaire must be operating under mains operation. • The battery must be fully charged to perform the test.

Table 53: Test requirements

If these requirements are not met, the test is delayed within the limits of the test window. On the **Status** tab, the status of the emergency lighting **Function test on hold** or **Duration test on hold** is set to **yes**.

Set the time for the test window

1. In the **Test settings** group field in the **Test window** dropdown list, select a value for the test window.



2. Click on **save**.
   ➲ Changes are stored in the device.

Note

If the test is not performed within the time defined in the test window, on the **Status** tab, the **Test window for function test exceeded** or **Test window for duration test exceeded** status is set to **yes**.

7 Configuration

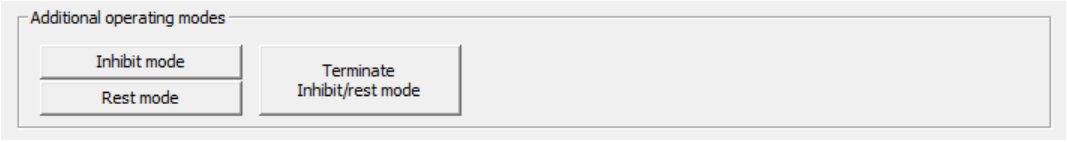
Disabling emergency luminaires

Warning
Suppression of safety device!
These operating modes suppress a safety device. The emergency luminaires are not switched on in an emergency and this can lead to fatalities or serious physical injuries.
Make sure that there is not an emergency and emergency mode is not required.

To interrupt the voltage supply without the emergency luminaire being switched on, it is possible to use the operating modes **inhibit mode** and **rest mode**.

Inhibit mode	Rest mode
The emergency luminaire is powered by the mains supply. Inhibit mode lasts no longer than 15 minutes. • Rest mode is enabled instead of emergency mode if the voltage supply is interrupted during these 15 minutes. This prevents the emergency luminaire from being switched on in emergency mode. • If there is no power outage during these 15 minutes, inhibit mode is terminated and mains operation is restored.	The emergency luminaire remains deliberately switched off while the voltage supply is interrupted. This function is used to ensure that the battery is not discharged in cases where the voltage supply is deliberately interrupted.
Application example: Maintenance of emergency luminaires	Application example: Plant holidays

Table 54: The difference betw een inhibit mode and rest mode



Enable/terminate inhibit mode

Requirement:
– Voltage supply to emergency luminaire is present.

1. Make sure that emergency mode is not required.
2. Click on **Inhibit mode**.
   ➲ The operating mode is enabled.
3. Interrupt the voltage supply within 15 minutes.
   ➲ The emergency luminaire remains switched off.
   ➲ Rest mode is enabled.

Note
As soon as the emergency luminaire's voltage supply is restored, mains operation is enabled.

4. To enable emergency mode without restoring the voltage supply, click **Terminate inhibit/rest mode**.
   ➲ Emergency mode is enabled.

Note
Not all control gear for emergency lighting supports the **Terminate inhibit/rest mode**

7 Configuration

function.
- You can see whether the control gear for emergency lighting supports this status by looking on the **Overview of functions** tab.
- If the control gear for emergency lighting does not support this function, inhibit or rest mode can only be terminated by restoring the voltage supply.

Note
The current status of this function can be seen in the **Status** tab.

Enable/terminate rest mode

Requirements:
– Voltage supply to emergency luminaire is interrupted without there being an emergency.
– DALI voltage supply is present.

1. Make sure that emergency mode is not required.
2. Click on **Rest mode**.
   ➲ The operating mode is enabled.
   ➲ The emergency luminaire is switched off.

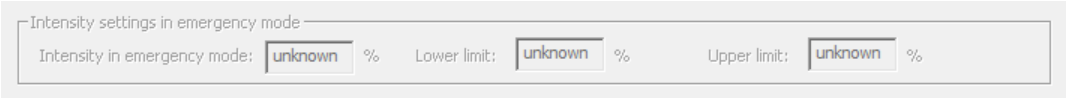
Note
As soon as the emergency luminaire's voltage supply is restored, mains operation is enabled.

3. To enable emergency mode when the voltage supply is interrupted, click **Terminate inhibit/rest mode**.
   ➲ Emergency mode is enabled.

Note
Not all control gear for emergency lighting supports the **Terminate inhibit/rest mode** function.
- You can see whether the control gear for emergency lighting supports this status by looking on the **Overview of functions** tab.
- If the control gear for emergency lighting does not support this function, inhibit or rest mode can only be terminated by restoring the voltage supply.

Intensity settings in emergency mode

Here you can set the intensity with which the lamp is illuminated in emergency mode. The adjustable intensity is limited by a lower limit and an upper limit.



Setting intensity in emergency mode

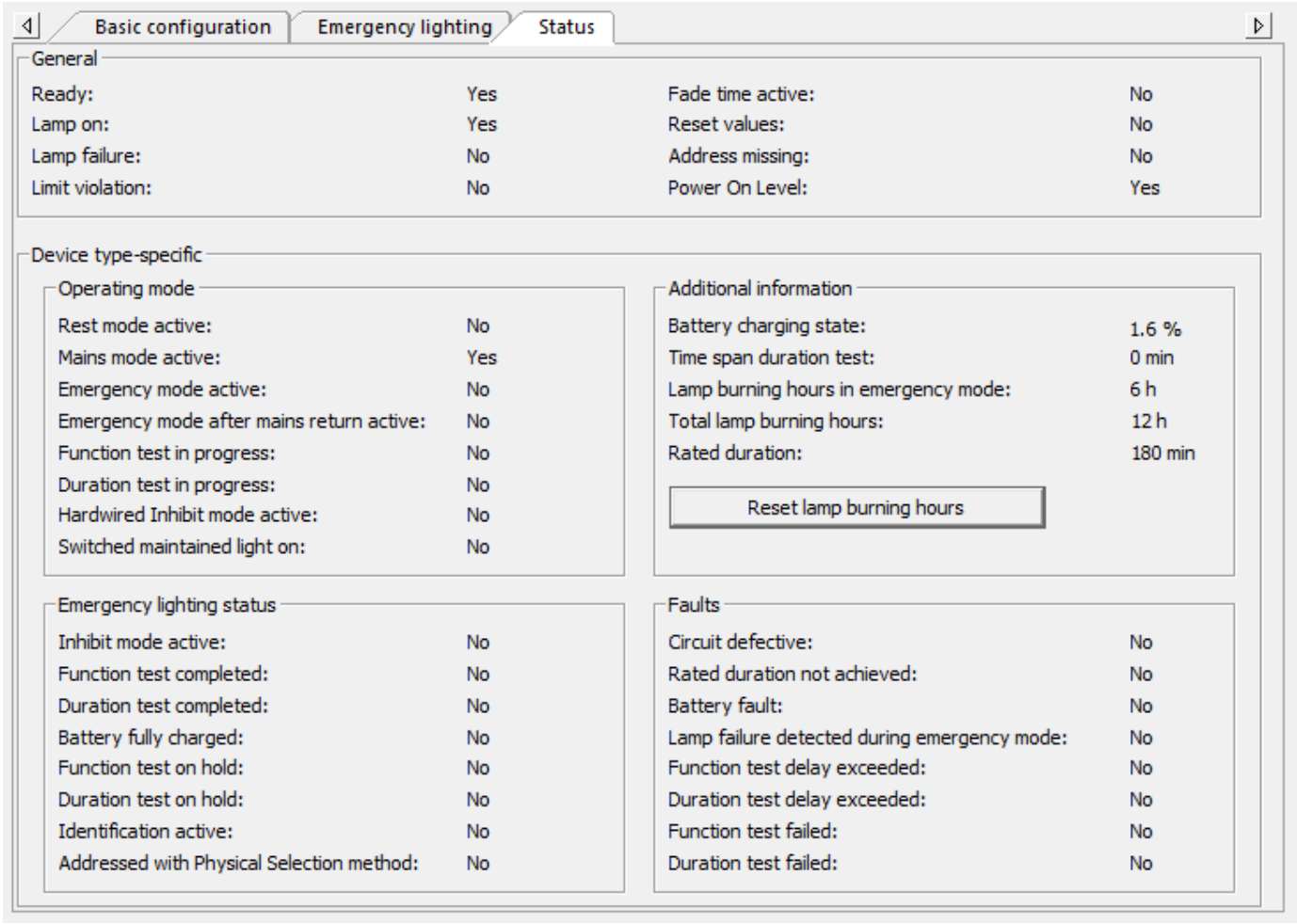
1. Enter a percentage value that lies between the **lower limit** and the **upper limit** for the **intensity in emergency mode** .
2. Click on **save**.
   ➲ Changes are stored in the device.

7 Configuration

Status

The **Status** tab shows all status information which can be queried by the control gear.

> **Note**
> An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.

7 Configuration

Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On Level.

Table 55: DALI control gear status information

Device-specific status: Operating mode

Status	Description
Rest mode active	Indicates whether the emergency luminaire is in rest mode. In rest mode the emergency luminaire remains deliberately switched off while the voltage supply is interrupted.
Mains operation active	Indicates whether the emergency luminaire is in mains operation. The DALI control gear is powered by the mains supply.
Emergency mode active	Indicates whether the emergency luminaire is in emergency mode. The DALI control gear is powered by the battery.
Emergency mode after mains return active	Indicates whether the emergency luminaire is in emergency mode after mains power is restored.
Function test in progress	Indicates whether a function test is in progress.
Duration test in progress	Indicates whether a duration test is in progress.
Hardwired inhibit mode active	Indicates whether the emergency luminaire is in inhibit mode. Inhibit mode is enabled by a switch. If there is a power failure when inhibit mode is active, rest mode is enabled instead of emergency operation. This prevents the emergency luminaire being switched on.
Switched maintained light on	Indicates that, in the case of **switched maintained light**, the emergency luminaire is switched on in mains mode.

Table 56: DALI control gear for emergency lighting – Device-specific status: Operating mode

7 Configuration

Device-specific status: Emergency lighting status

Status	Description
Inhibit mode active	Indicates whether the emergency luminaire is in inhibit mode. Inhibit mode was enabled by the DALI command *Inhibit*. Rest mode is enabled instead of emergency mode if the voltage supply is interrupted while inhibit mode is active. This prevents the emergency luminaire being switched on in emergency mode.
Function test completed	Indicates whether the latest function test was completed. **Note** This status does not provide any information as to whether errors were found during the function test. Faults are listed in the **Faults** group section.
Duration test completed	Indicates whether the latest duration test was completed. **Note** This status does not provide any information as to whether faults were found during the duration test. Faults are listed in the **Faults** group section.
Battery fully charged	Indicates whether the battery is fully charged.
Function test on hold	Indicates whether a function test is on hold. The function test is delayed within the limits of the test window. Possible causes: • Emergency luminaire is in operation mode • Battery not sufficiently charged
Duration test on hold	Indicates whether a duration test is on hold. The duration test is delayed within the limits of the test window. Possible causes: • Emergency luminaire is in operation mode • Battery not fully charged
Identification active	Indicates whether the emergency luminaire is being identified.
Addressed with Physical Selection method	Indicates whether the emergency luminaire was addressed with Physical Selection method.

Table 57: DALI control gear for emergency lighting – Device-specific status: Emergency lighting status

7 Configuration

Device-specific status: Additional information

Status	Description
Battery charging state	Indicates battery state of charge (%)
Time span duration test	Indicates hours of service reached at time of latest duration test.
Lamp burning hours in emergency mode	Indicates how long the lamp was in emergency mode. Lamp burning hours in emergency mode are indicated in 1-hour increments.
Total lamp burning hours	Indicates how long the lamp has been in operation in total (mains operation and emergency mode). Total lamp burning hours are indicated in 4-hour increments.
Rated duration	Indicates the time for which the battery delivers the required energy in emergency mode (usually 1 hour or 3 hours).
Reset lamp burning hours	Button used to reset **Lamp burning hours in emergency mode** and **Total lamp burning hours**.

Table 58: DALI control gear for emergency lighting – Device-specific status: Additional information

Device-specific status: Faults

Status	Description
Circuit defective	Indicates whether a circuit on the printed circuit board (PCB) of the device is defective.
Nominal operating time not achieved	Indicates whether, during a duration test, the nominal operating time was not achieved.
Battery fault	Indicates whether there is a battery fault (e.g. open circuit, insufficient battery capacity, battery incorrectly connected).
Lamp failure detected during emergency mode	Indicates whether a lamp failure was detected in emergency mode or during an emergency lighting test.
Test window for function test exceeded	Indicates whether the test window for the function test was exceeded.
Test window for duration test exceeded	Indicates whether the test window for the duration test was exceeded.
Function test failed	Indicates whether the latest function test failed.
Duration test failed	Indicates whether the latest duration test failed.

Table 59: DALI control gear for emergency lighting – Device-specific status: Faults

7 Configuration

Overview of functions

The **Overview of functions** tab shows all functions supported by control gear of this device type. The **Overview of functions** tab is only visible if **advanced settings** have been enabled.

Not every control gear element supports all functions. For this reason the functions are shown with the following symbols:

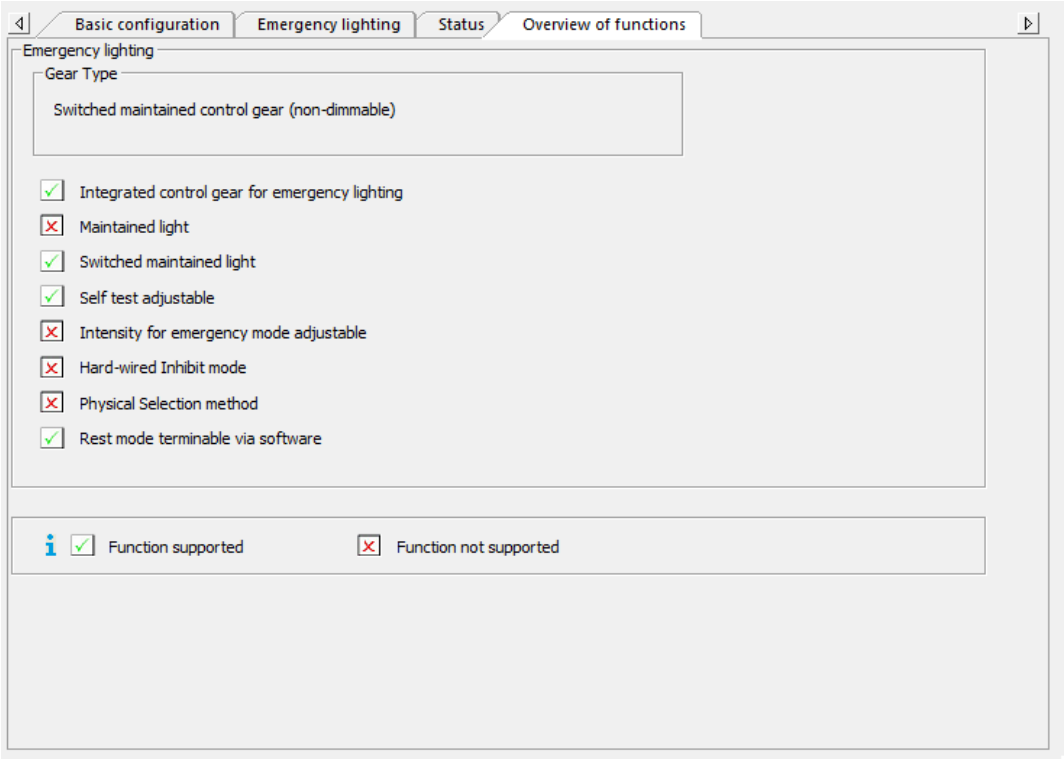
☑ This function is supported by the control gear.

☒ This function is not supported by the control gear.

Types of functions

The following types of functions are available:

- Configurable functions
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab.
- Functions with displayed statuses
  This functions cannot be configured. Statuses are shown in the **Status** tab.
- Configurable functions with displayed statuses
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab. Statuses are shown in the **Status** tab.



Special feature

- **Physical Selection method**: If the **Physical Selection method** is supported, it can be configured under Commissioning – 2. Address 19. The control gear is addressed specifically in accordance with the addressing plan using the **Physical Selection method**.

7 Configuration

7.1.7 Device Type 2: Control gear for high-pressure discharge lamps

Control gear for high-pressure discharge lamps are shown in the DALI device tree diagram with the  symbol and the short description **HID**.

Device-specific configuration

Here you can directly display the address of the high-pressure discharge lamps via the status LED on the device. For this purpose, the address is converted into a six-digit binary number, which is represented as a flashing pattern. The red LED stands for binary number 0, the green LED for binary number 1.

Note
The following options are available to users in order to convert a binary number to a decimal number:
- *EM PRO Ident.TOOL* software: You can download this software from Tridonic's homepage at: **Services** – **Software**.
- *EM PRO* addressing tool (Article number 89899836)

In the masterCONFIGURATOR software high-pressure discharge lamps can be identified as follows.

Function	Description
Locate icon 	• The address of a high-pressure discharge lamps that is highlighted in the device tree diagram is displayed in an endless loop • Is enabled by clicking the **Locate**  icon **Note** For a detailed description of this function, see Section Checking device assignment... 35 **Note** After shutdown high-pressure discharge lamps require some time to cool down before they can be reignited. • Ideally, perform identification process when lamps are cold! • If lamps were previously ignited: Make sure that they could cool sufficiently!

Table 60: Summary of identifying high-pressure discharge lamps

7 Configuration

Identify high-pressure discharge lamp once

▷ Click the **Identify** button.

➲ The high-pressure discharge lamp's status LED sends the address of the high-pressure discharge lamp once as a binary flashing pattern.

Identify high-pressure discharge lamp again

1. Enable the **Repeat identification** checkbox.

2. Click the **Identify** button.
   ➲ The high-pressure discharge lamp's status LED sends the address of the high-pressure discharge lamp in an endless loop as a binary flashing pattern.
3. To quit identification, disable the **Repeat identification** checkbox.

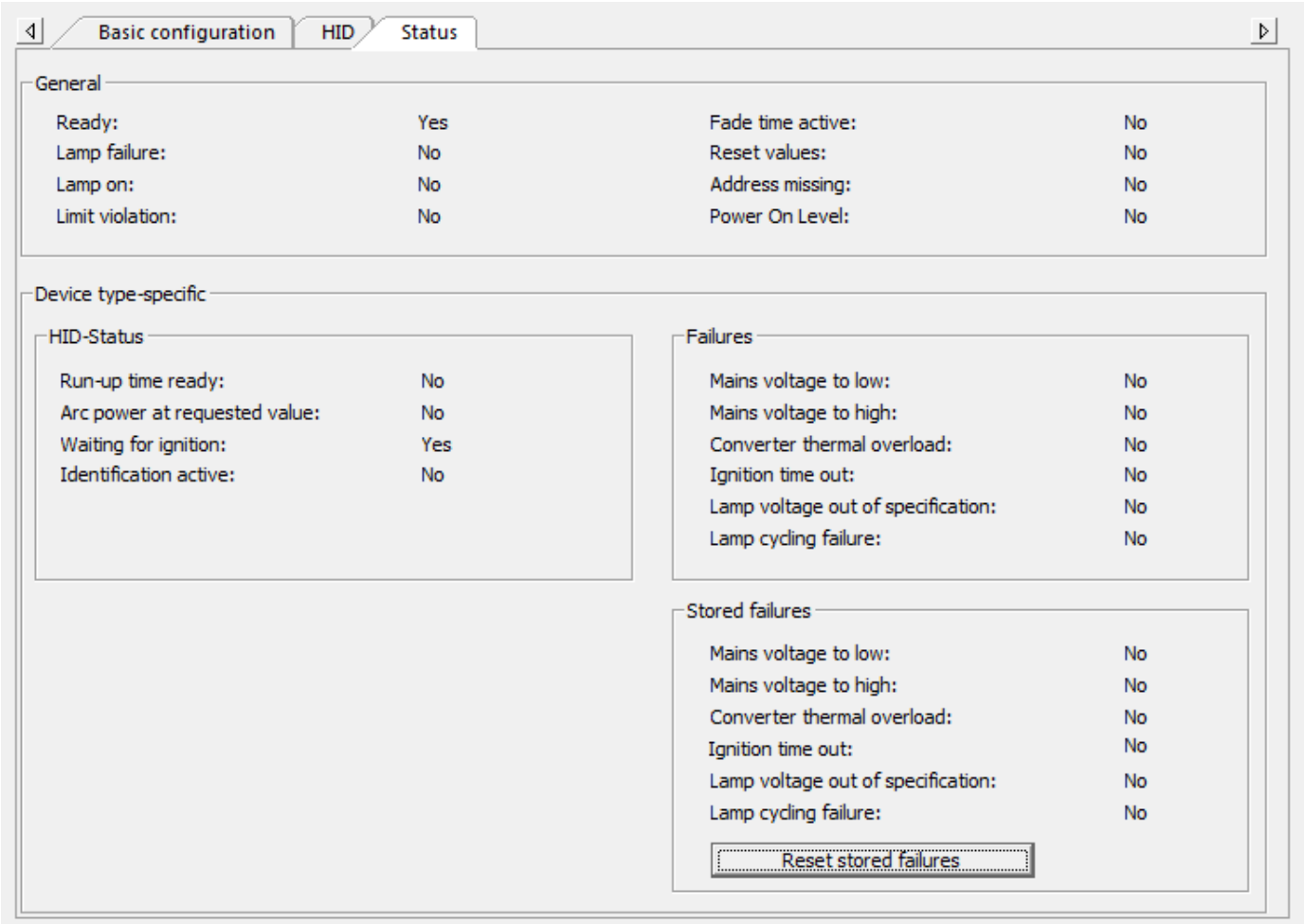
> **Note**
> The current status of this function can be seen in the **Status** tab.

Status

The **Status** tab shows all status information which can be queried by the control gear.

> **Note**
> An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.

7 Configuration



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On Level.

Table 61: DALI control gear status information

7 Configuration

Device type-specific Status: HID-Status

Status	Description
Run-up time ready	Indicates whether the run-up time is ready.
Arc power at requested value	Indicates whether the requested value of arc power has been reached after ignition.
Waiting for ignition	Indicates whether a lamp could not be ignited.
Identification active	Indicates whether identification is active.

Table 62: DALI control gear status information

Device type-specific Status: Failures

Status	Description
Mains voltage too low	Indicates whether mains voltage is too low.
Mains voltage too high	Indicates whether mains voltage is too high.
Converter thermal overload	Indicates whether the converter has been thermally overloaded.
Ignition time out	Indicates whether ignition has been timed out, that is, the lamp could not be ignited.
Lamp voltage out of specification	Indicates whether lamp voltage is out of specification.
Lamp cycling failure	Indicates whether a lamp cycling failure occurred. "Lamp cycling failure" means that the lamp is in a cycle of constantly igniting and going off again.

Table 63: DALI control gear status information

Device type-specific Status: Stored Failures

Status	Description
Mains voltage too low	Indicates whether mains voltage is too low.
Mains voltage too high	Indicates whether mains voltage is too high.
Converter thermal overload	Indicates whether the converter has been thermally overloaded.
Ignition time out	Indicates whether ignition has been timed out, that is, the lamp could not be ignited.
Lamp voltage out of specification	Indicates whether lamp voltage is out of specification.
Lamp cycling failure	Indicates whether a lamp cycling failure occurred. "Lamp cycling failure" means that the lamp is in a cycle of constantly igniting and going off again.

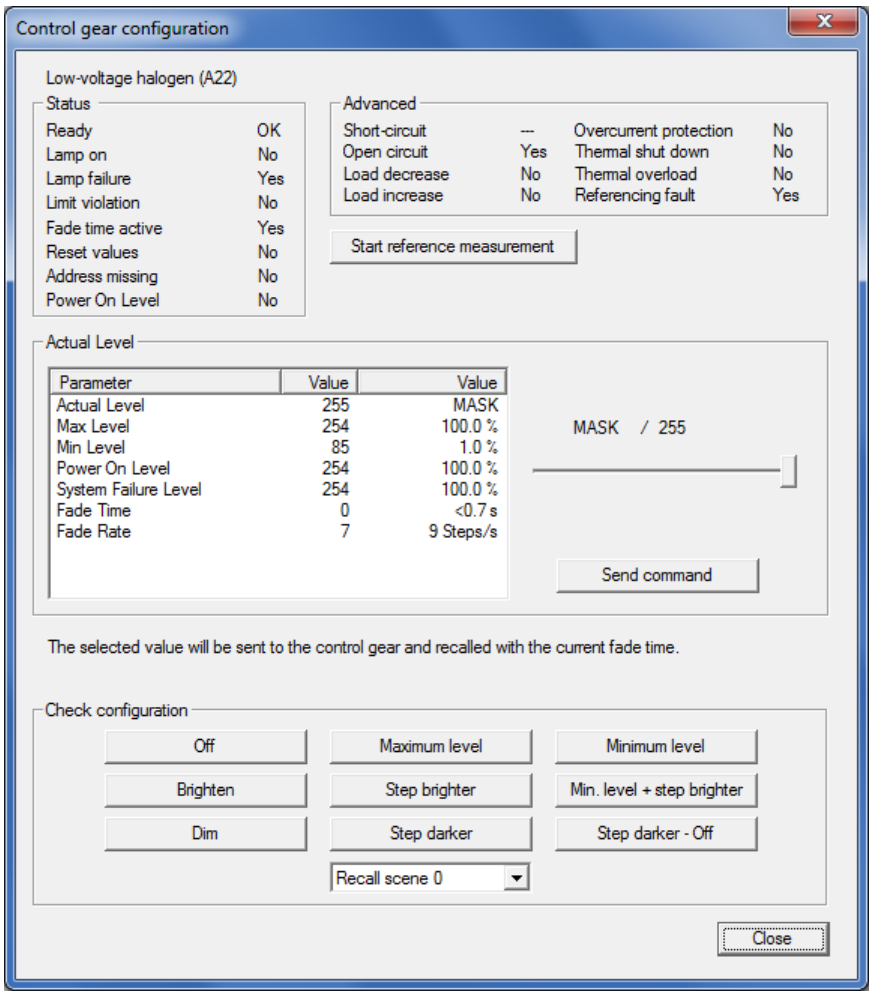
Table 64: DALI control gear status information

7 Configuration

7.1.8 Device Type 3: Control gear for low-voltage halogen lamps

Control gear for low-voltage halogen lamps are shown in the DALI device tree diagram with the  symbol and the short description **low-voltage halogen**.

Control gear configuration



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).

7 Configuration

Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On Level.

Table 65: DALI control gear status information

Advanced

Status	Description
Short circuit	Indicates whether a short circuit has occurred.
Open circuit	Indicates whether there is an open circuit.
Load decrease	Indicates whether a load decrease is present.
Load increase	Indicates whether a load increase is present.
Overcurrent protection	Indicates whether the overcurrent protection has been triggered. The overcurrent protection is triggered when the level exceeds or falls below the value of the reference measurement.
Thermal shut down	Indicates whether the permissible temperature of the low-voltage transformer has been exceeded.
Thermal overload	Not yet supported.
Referencing fault	Indicates whether the reference measurement has failed.

Table 66: Advanced status display of DALI control gear for low-voltage halogen lamps

Reference measurement

Here you can perform a reference measurement. This determines the current lamp load using internal processes and measurements. This can only be done if the control gear supports this function.

Performing a reference measurement

▷ Click on **Start reference measurement.**
➲ Reference measurement is performed. This lasts approximately 5 minutes.

Note
If the reference measurement fails, the status **Referencing error** will be set to **Yes**.

7 Configuration

Setting parameters

Requirement:
– **Control gear configuration** pop-up window open.

1. Click on the desired parameter.
2. Set the value using the slider.
   ➲ The  icon appears. This indicates that the command has not yet been sent to the DALI control gear.

> **Note**
> Above the slider, the set value is displayed on the left in the relevant unit of measurement and on the right as a DALI value (decimal).

3. Click on **Send command**.
   ➲ The change is implemented in the DALI control gear.
   ➲ The  icon appears. This indicates that the command has not yet been sent to the DALI control gear.

> **Note**
> If the command is inconsistent with another parameter and therefore cannot be applied to the DALI control gear, the  icon continues to be displayed. Repeat steps 2 and 3.

4. Optionally, test the configuration.

> **Note**
> Information on how to check the configuration appears in the pop-up window in the help text above the **Test configuration** field.

> **Note**
> A detailed description of the configuration and control commands can be found in Section Configuration commands for DALI control gear 280.

7 Configuration

7.1.9 Device Type 4: Control gear for phase dimmers

Control gear for phase dimmers are shown in the DALI device tree diagram with the  symbol and the short description **phase dimmer**.

Device-specific configuration

The dimming curve can be selected, fast fade time can be enabled and a reference measurement can be carried out in the **phase dimmers** tab.

Dimming curve

The course of the luminous flux of the luminaire during smooth adjustment can be set here.

- **linear**: the luminous flux is changed linearly during smooth adjustment. This does not match the sensitivity of the human eye and might not be perceived as smooth.
- **logarithmic**: the luminous flux of the luminaire is changed logarithmically during smooth adjustment as per the DALI specification. This matches the sensitivity of the human eye and is therefore perceived as smooth.

Setting the dimming curve

1. Click **linear** or **logarithmic**.
2. Click on **save**.
   ➲ Changes are stored in the device.

Note
The **detail view** shows in the **Status** tab whether a linear dimming curve has been selected.

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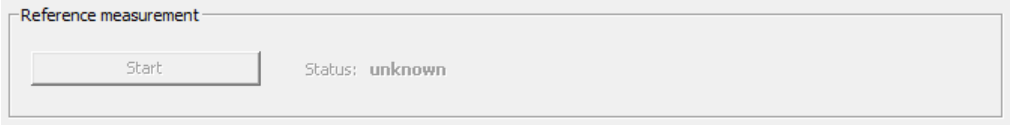
Reference measurement

Here you can perform a reference measurement. This determines the current lamp load using internal processes and measurements. This can only be done if the control gear supports this function.



Performing a reference measurement

▷ Click on **Start**.
➲ Reference measurement is performed. This lasts approximately 5 minutes.

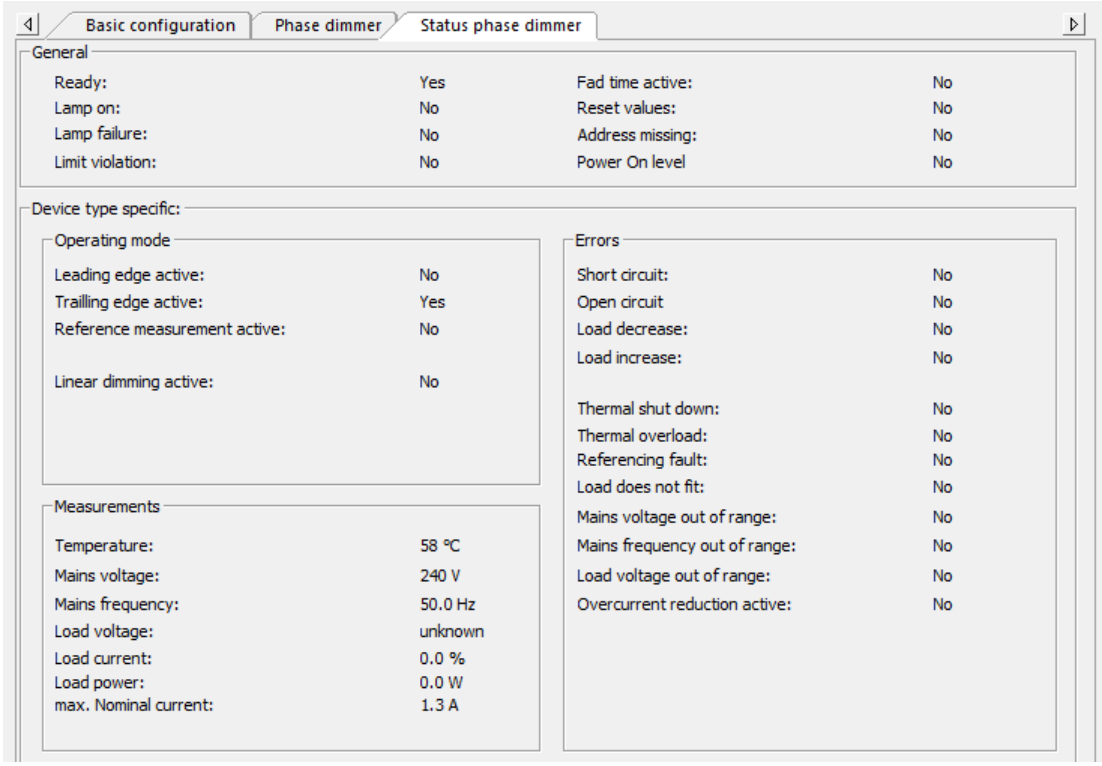
Note
If the reference measurement fails, the status **Referencing error** will be set to **Yes**.

7 Configuration

Status

The **Status** tab shows all status information which can be queried by the control gear.

> **Note**
> An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On

7 Configuration

	Level.

Table 67: DALI control gear status information

Device type specific status: Operating mode of the control gear (DT4)

Status	Description
Leading edge active	Indicated whether the leading edge is active
Trailing edge active	Indicated whether the trailing edge is active
Reference measurement active	Indicated whether the reference measurement is active
Linear dimming active	Indicated whether the linear dimming is active

Table 68: Device type specific status: Operating mode of the control gear

Device type specific status: Measurements of the control gear (DT4)

Status	Description
Temperature	Displays the temperature
Mains voltage	Displays the mains voltage
Mains frequency	Displays the mains frequency
Load voltage	Displays the load voltage
Load current	Displays the load current
Load power	Displays the load power
max. Nominal current	Displays the max. nominal current

Table 69: Device type specific status: Measurements of the control gear

Device type specific status: Errors of the control gear (DT4)

Status	Description
Short circuit	Indicates a short circuit
Open circuit	Indicates a open circuit
Load decrease	Indicates a load decrease
Load increase	Indicates a load increase
Thermal shut down	Indicates a thermal shut down
Thermal overload	Indicates a thermal overload
Referencing fault	Indicates a referencing fault
Load does not fit	Indicates a load does not fit
Mains voltage out of range	Indicates a mains voltage out of range

7 Configuration

Mains frequency out of range	Indicates a mains frequency out of range
Load voltage out of range	Indicates a load voltage out of range
Overcurrent reduction active	Indicates a overcurrent reduction active

Table 70: Device type specific status: Errors of the control gear

7 Configuration

Overview of functions

The **Overview of functions** tab shows all functions supported by control gear of this device type. The **Overview of functions** tab is only visible if **advanced settings** have been enabled.

Not every control gear element supports all functions. For this reason the functions are shown with the following symbols:

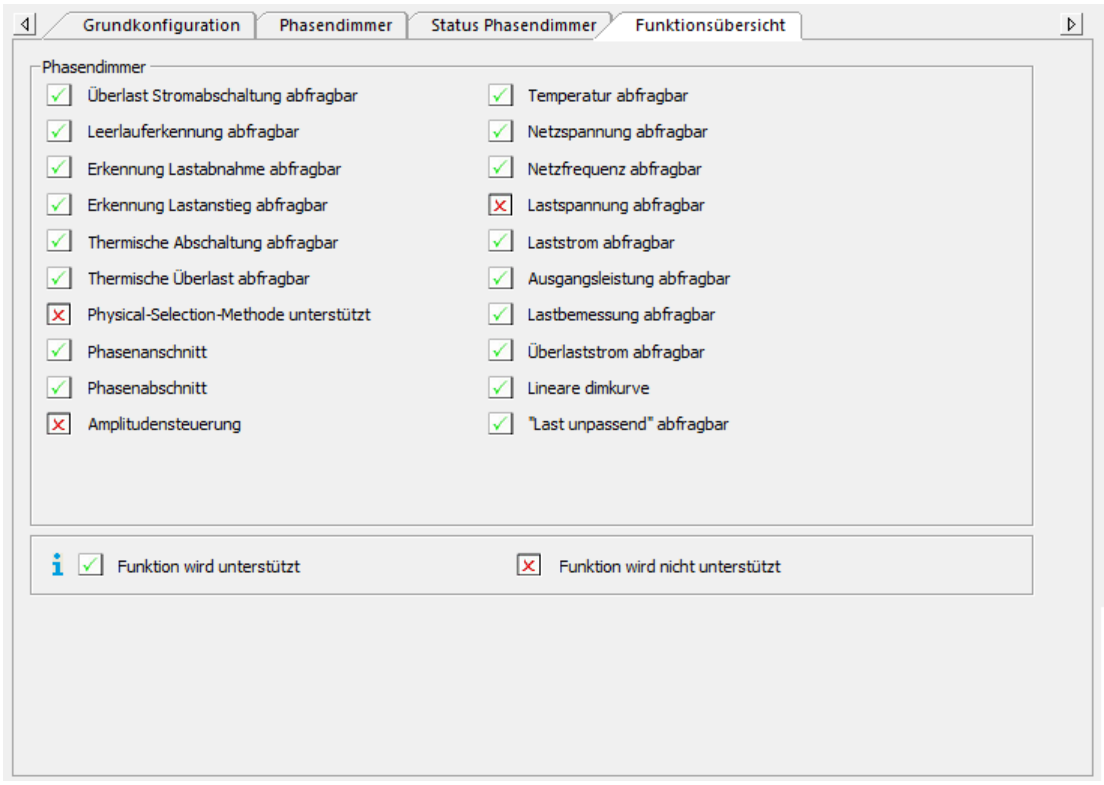
☑ This function is supported by the control gear.

☒ This function is not supported by the control gear.

Types of functions

The following types of functions are available:

- Configurable functions
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab.
- Functions with displayed statuses
  This functions cannot be configured. Statuses are shown in the **Status** tab.
- Configurable functions with displayed statuses
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab. Statuses are shown in the **Status** tab.



7 Configuration

7.1.10 Device Type 6: Control gear for LEDs

Control gear for LEDs are shown in the DALI device tree diagram with the  symbol and the short description **LED**.

Device-specific configuration

The dimming curve can be selected, fast fade time can be enabled and a reference measurement can be carried out in the **LED** tab.

Dimming curve

The course of the luminous flux of the luminaire during smooth adjustment can be set here.

- **linear**: the luminous flux is changed linearly during smooth adjustment. This does not match the sensitivity of the human eye and might not be perceived as smooth.
- **logarithmic**: the luminous flux of the luminaire is changed logarithmically during smooth adjustment as per the DALI specification. This matches the sensitivity of the human eye and is therefore perceived as smooth.

Setting the dimming curve

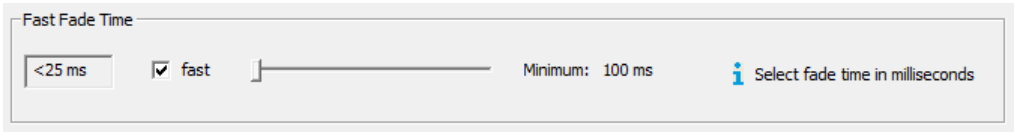
1. Click **linear** or **logarithmic**.
2. Click on **save**.
   ➲ Changes are stored in the device.

Note
The **detail view** shows in the **Status** tab whether a linear dimming curve has been selected.

Fast Fade Time

The Fast Fade Time can be selected instead of the fade time here.

The **Fade Time** is given in seconds. This setting can be defined in the **Basic configuration** tab. The **Fast Fade Time** is given in milliseconds (< 25 ms – 675 ms).



Setting the Fast Fade Time

Requirement:
– In the **Basic configuration** tab, set the **Fade Time** to 0.
– In the **Basic configuration** tab, set the **Extended Fade Time** to 0.

1. Deactivate the checkbox left of **fast.**
   ➲ Slider turns active.
2. Set the value using the slider.

7 Configuration

3. Click on **save**.
   ➲ Changes are stored in the device.

Note
The lower limit of the control gear is shown to the right of **Minimum**. The value chosen with the slider must be above the lower limit.

Note
Fade Time, Fast Fade Time and **Extended Fade Time** have different priorities. These priority settings determine how the device acts if values have been assigned to more than one of the parameters.

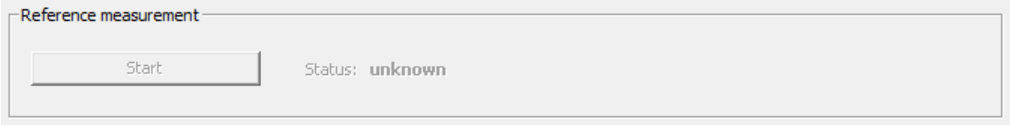
This is how the priorities work:

- Priority 1 = **Fade Time:**
  If **Fade Time** > 0 the **Fade Time** is used.
  If this is not the case, priority 2 becomes active.
- Priority 2 = **Fast Fade Time:**
  If **Fast Fade Time** > 0 the **Fast Fade Time** is used.
  If this is not the case, priority 3 becomes active.
- Priority 3 = **Extended Fade Time:**
  If **Extended Fade Time** > 0 the **Extended Fade Time** is used.
  If this is not the case, the device is run with no Fade Time at all.

7 Configuration

Reference measurement

Here you can perform a reference measurement. This determines the current lamp load using internal processes and measurements. This can only be done if the control gear supports this function.



Performing a reference measurement

▷ Click on **Start**.
➲ Reference measurement is performed. This lasts approximately 5 minutes.

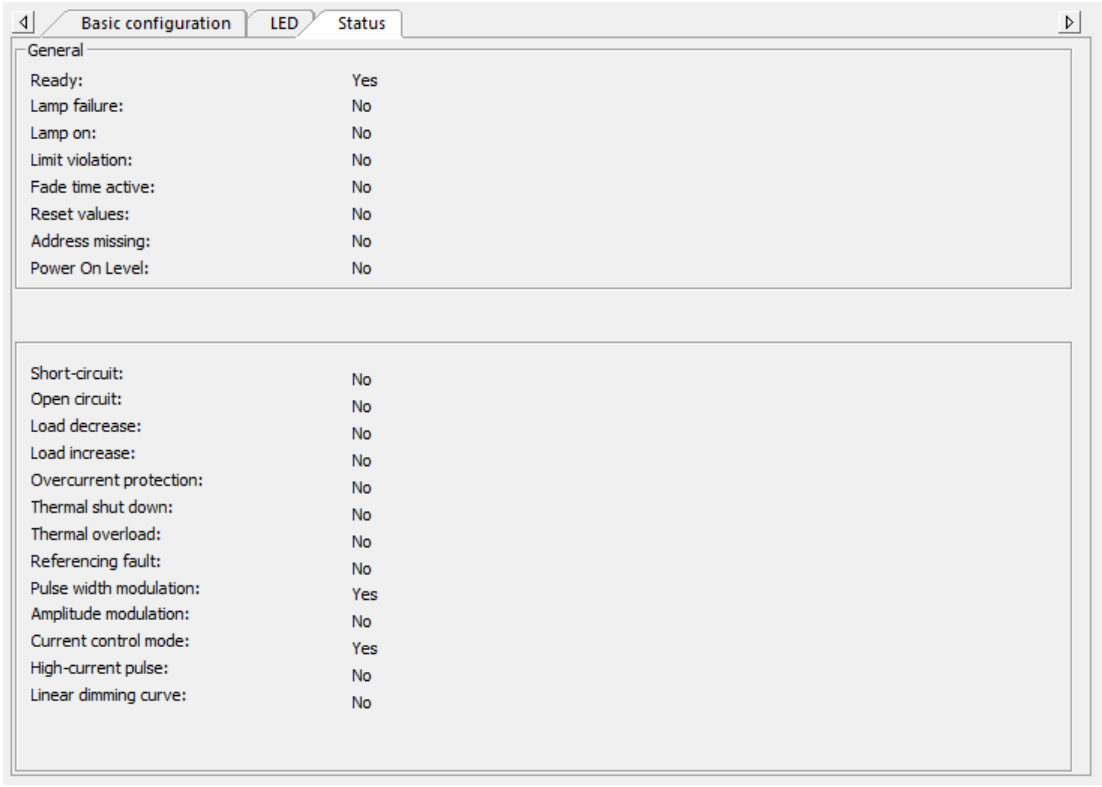
Note
If the reference measurement fails, the status **Referencing error** will be set to **Yes**.

7 Configuration

Status

The **Status** tab shows all status information which can be queried by the control gear.

Note
An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On

7 Configuration

	Level.

Table 71: DALI control gear status information

Status of control gear for LEDs (DT6)

Status	Description
Short circuit	Indicates whether a short circuit has occurred.
Open circuit	Indicates whether there is an open circuit.
Load decrease	Indicates whether a load decrease is present.
Load increase	Indicates whether a load increase is present.
Overcurrent protection	Indicates whether the overcurrent protection has been triggered. The overcurrent protection is triggered when the level exceeds or falls below the value of the reference measurement.
Thermal shut down	Indicates whether the permissible temperature of the control gear for LEDs has been exceeded.
Thermal overload	Not yet supported.
Referencing fault	Indicates whether the reference measurement has failed.
Pulse width modulation	Indicates whether the lamps connected to the control gear are operated with **pulse width modulation**.
Amplitude modulation	Indicates whether the lamps connected to the control gear are operated with **amplitude modulation**.
Current control mode	Indicates whether the lamps connected to the control gear are operated with **current control**.
High-current pulse	Indicates whether the lamps connected to the control gear are operated with **high-current pulse**.
Linear dimming curves	Indicates whether a non-logarithmic dimming curve (e.g. linear dimming curve) is enabled.

Table 72: Device-specific status information for DALI control gear for LEDs

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Overview of functions

The **Overview of functions** tab shows all functions supported by control gear of this device type. The **Overview of functions** tab is only visible if **advanced settings** have been enabled.

Not every control gear element supports all functions. For this reason the functions are shown with the following symbols:

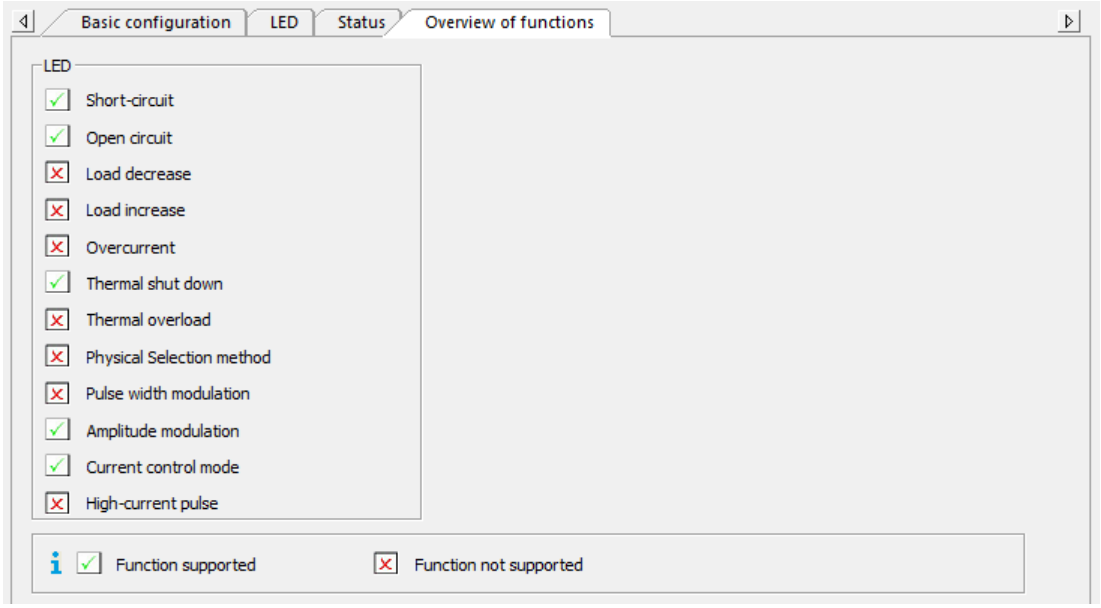
☑ This function is supported by the control gear.

☒ This function is not supported by the control gear.

Types of functions

The following types of functions are available:

- Configurable functions
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab.
- Functions with displayed statuses
  This functions cannot be configured. Statuses are shown in the **Status** tab.
- Configurable functions with displayed statuses
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab. Statuses are shown in the **Status** tab.



Special feature

- **Physical Selection method**: If the **Physical Selection method** is supported, it can be configured under Commissioning – 2. Address 19. The control gear is addressed specifically in accordance with the addressing plan using the **Physical Selection method**.

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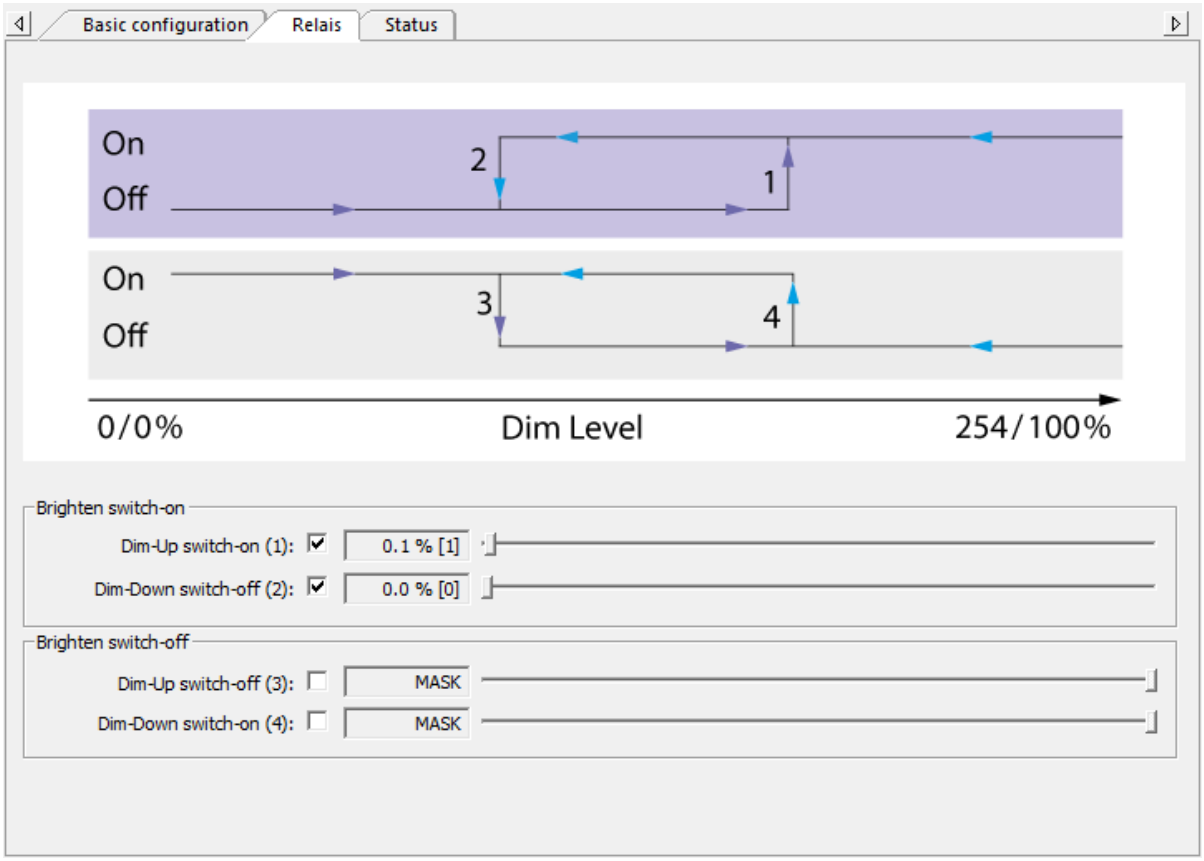
7.1.11 Device Type 7: Control gear for switching function

Control gear for switch contact are shown in the DALI device tree diagram with the symbol and the short description **Relay**.



Relays

The switching points for dimming up/down can be set here.

Attention!
If a DALI RM CDM 30 10A 1CH (28003311) is used please make sure that the minimum level is changed to something different than the factory setting (100%) otherwise these settings won't work.

Brighten switch-on:

This is the standard use case, the relay switches on when during dimming up the dim level gets higher than the selected **Dim-Up switch-on** value and switches off when the dim level falls below the **Dim-Down switch-off** value while dimming down.

Dim-Up switch-on (1): The switching on point for dimming up.

Dim-Down switch-off (2): The switching off point for dimming down.

Brighten switch-off:

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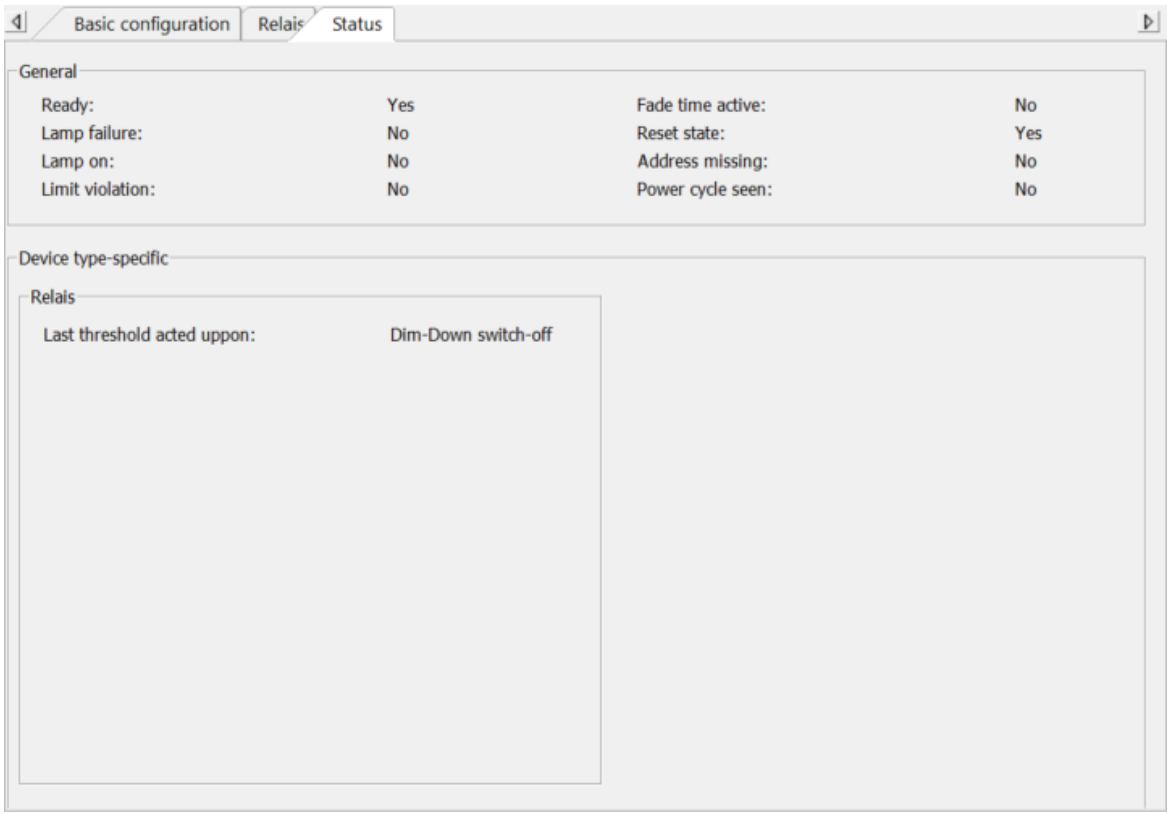
the relay switches off when during dimming up the dim level gets higher than the selected **Dim-Up switch-off** value and switches on when the dim level falls below the **Dim-Down switch-on** value while dimming down.

Dim-Up switch-off (3): The switching off point for dimming up.

Dim-Down switch-on (4): The switching on point for dimming down.

Status



Status	Description
Ready	Indicates whether the switch contact control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit Violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another

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Reset state	Indicates whether the switch contact control gear has been reset to the reset values.
Address missing	Indicates whether the switch contact control gear is unaddressed.
Power cycle seen	Indicates whether the DALI control gear has gone to the Power On Level.
Last threshold acted upon	Indicate the last threshold the switch contact control gear acted upon

7.1.12 Device Type 8: Control gear for colour converters

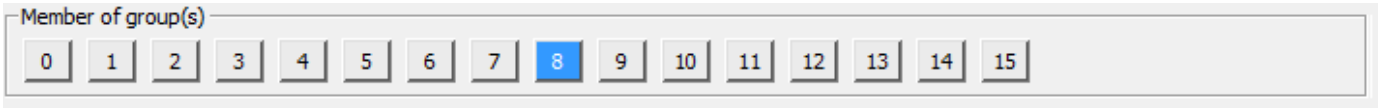
Control gear for colour converters are shown in the DALI device tree diagram with the  symbol and the short description **colour**.

Basic configuration

The group assignment for control gear and scenes and default DALI parameters can be set for each control gear element in the **Basic configuration** tab.

Member of group(s)

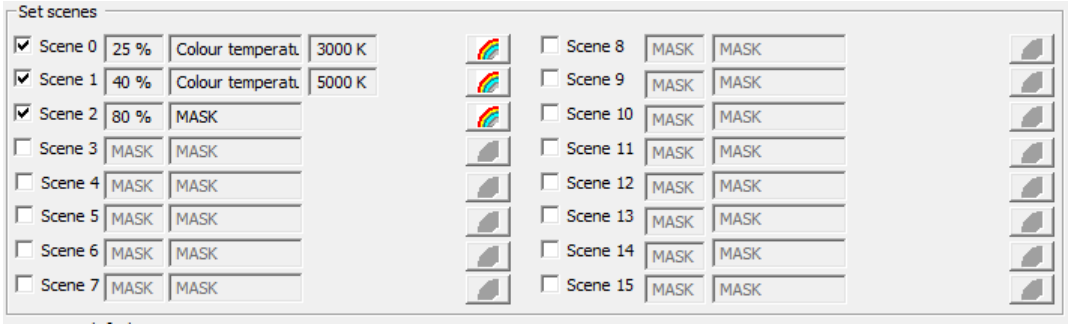
Member of group(s) specifies the group or groups to which the control gear belongs. These groups are indicated by the blue background.



With these 16 keys the group membership can be changed easily.

Setting scenes

The intensity of the luminaire and its colour temperature or xy-coordinates can be set for all 16 scenes (0–15) here. The detail view shows an overview of the set scenes. The settings can be defined in the **Set scene** pop-up window.



Setting scenes

1. Enable the checkbox for a scene, in order to assign an intensity to the luminaire.
   ➲ The input field can be edited.

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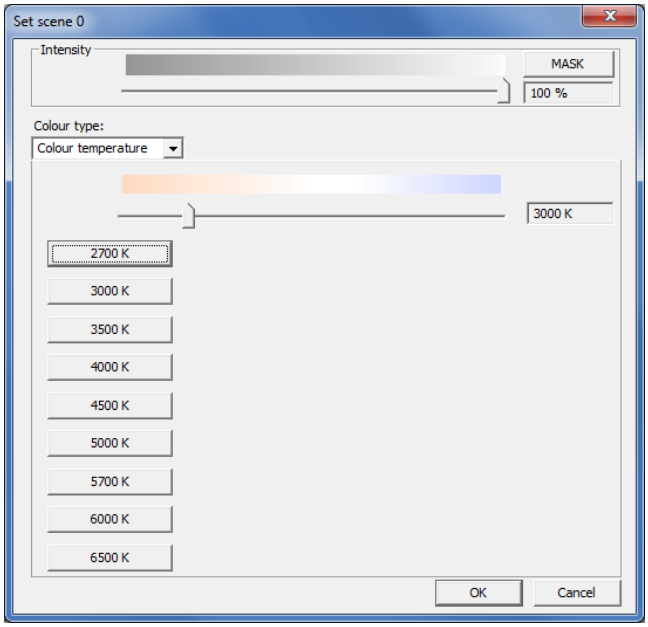
2. Click the  button.
   ➲ The **Set scene** pop-up window appears.
3. Set the value for the **intensity** using the slider.
   -or-
   Click **MASK**.
4. Select colour type **colour temperature**, **xy-coordinates** or **MASK**.
   ➲ The view is updated.
5. Set the **colour temperature** or **xy-coordinates**.

Adjusting the colour temperature

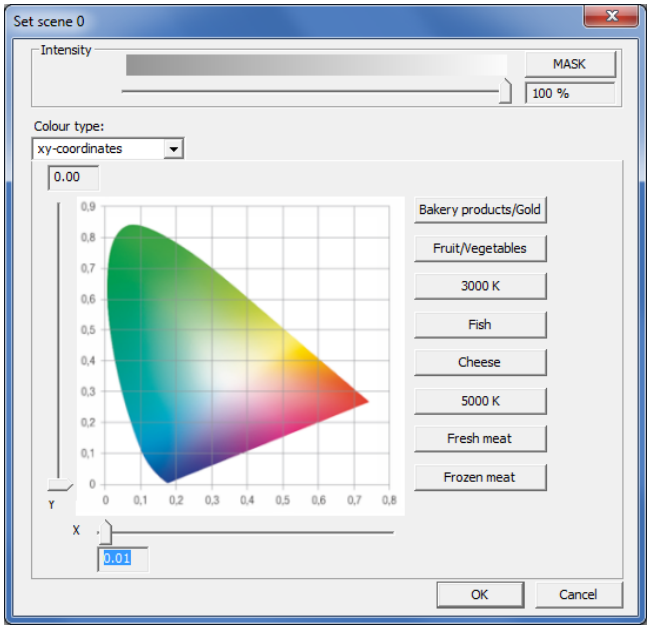


▷ Set the value using the slider.

-or-

▷ Click the button for a pre-defined colour temperature, e.g. **2700 K**.

Setting the xy-coordinates



▷ Set the value using the sliders.

-or-

▷ Click the button for pre-defined xy-coordinates, e.g. **Bakery products/Gold**.

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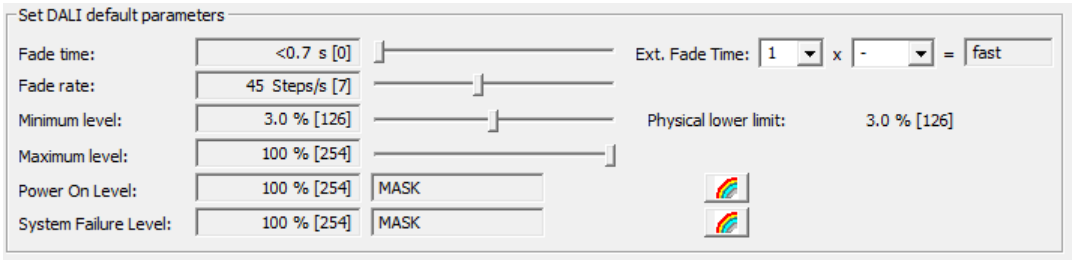
6. Click **OK**.
   ➲ The settings are applied.
   ➲ The pop-up window is closed.
7. Click on **save**.
   ➲ Changes are stored in the device.

Setting DALI default parameters

DALI default parameters can be set here.



Setting DALI default parameters

1. Set the value for the individual parameter using the slider.
2. Click on **save**.
   ➲ Changes are stored in the device.

The following DALI default parameters can be set:

DALI default parameters	Description
Fade time	The selected value is set as the fade time in seconds. **Value range:** • **< 0.7–90.5 s** **Note:** < 0.7 s is the DALI default. < 0.7 s is the fastest fade time, and 90.5 s is the slowest.
Fade rate	The selected value is set as the dimming speed. It indicates by how many steps per second the intensity is changed. The **Fade Rate** is used with the DALI commands **Brighten** (Up) and **Dim** (Down). **Value range:** • **2.8–358 steps per second** **Note:** 45 steps per second is the DALI default. 358 steps per second is the fastest fade rate, and 2.8 steps per second is the slowest.
Minimum Level	The selected value is set as the minimum level for the control gear. This value cannot be fallen below during dimming/brightening. **Value range:** • **Physical lower limit – Maximum level** **Note:** The **physical lower limit** of the control gear is shown to the right of the **Minimum level** as a percentage. The **minimum level** must be above this value.
Maximum Level	The selected value is set as the maximum level for the control gear. This value cannot be exceeded during dimming/brightening.

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	Value range: • **Minimum Level – 100%**
Power On Level	The selected value is set as the value after power is restored. There are two values for the **Power On Level**: one for intensity and one for the colour temperature or xy-coordinates.
System Failure Level	The selected value is set as the value in the event of failure of the DALI power supply. There are two values for the **System Failure Level**: one for intensity and one for the colour temperature or xy-coordinates.

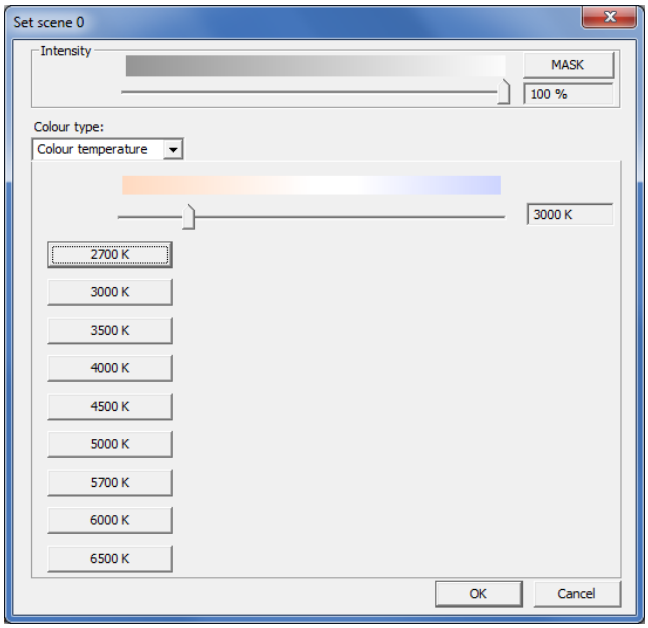
Table 73: DALI default parameters

Special feature: Setting the Power On Level and System Failure Level

The Power On Level and the System Failure Level are set via a separate pop-up window.

1. Click the  button.
   ➲ The **Set Power On Level** or **Set System Failure Level** pop-up window appears.
2. Set the value for the **intensity** using the slider.
   -or-
   Click **MASK**.
3. Select colour type **colour temperature**, **xy-coordinates** or **MASK**.
   ➲ The view is updated.
4. Set the **colour temperature** or **xy-coordinates**.

Adjusting the colour temperature

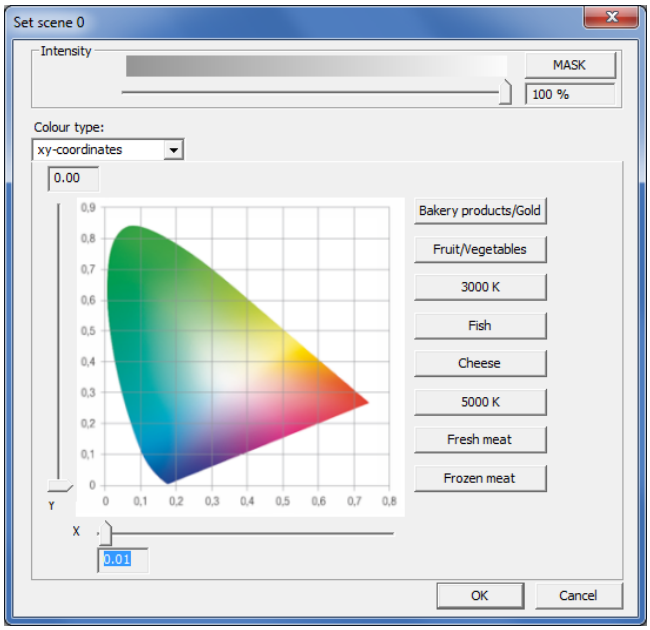


▷ Set the value using the slider.

-or-

▷ Click the button for a pre-defined colour temperature, e.g. **2700 K**.

Setting the xy-coordinates



▷ Set the value using the sliders.

-or-

▷ Click the button for pre-defined xy-coordinates, e.g. **Bakery products/Gold**.

5. Click **OK**.
   ➲ The settings are applied.

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6. Click on **save**.
   ➲ Changes are stored in the device.

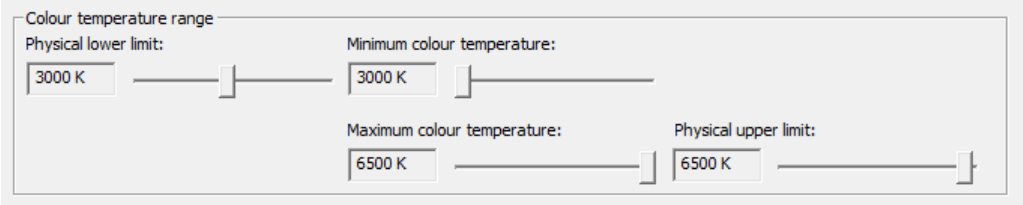
Device-specific configuration

The colour temperature range can be set, automatic calibration can be carried out and colours can be directly changed in the **Colour** tab.

Colour temperature range

The range in which the colour temperature of the lamps can be changed can be set here. The colour temperature range is restricted to the physical upper and lower limits.

- **Minimum colour temperature**: the warmest colour temperature that a lamp can have. This temperature is either the physical lower limit or is cooler than this limit.
- **Maximum colour temperature**: the coolest colour temperature that a lamp can have. This temperature is either the physical upper limit or is warmer than this limit.
- **Physical lower limit**: Allows the LED driver to be adjusted to the colour temperature limits of the connected LED module.
- **Physical upper limit**: Allows the LED driver to be adjusted to the colour temperature limits of the connected LED module.



Note
The physical lower limit and the physical upper limit can only be adjusted if an LED module is connected to the device and switched on.

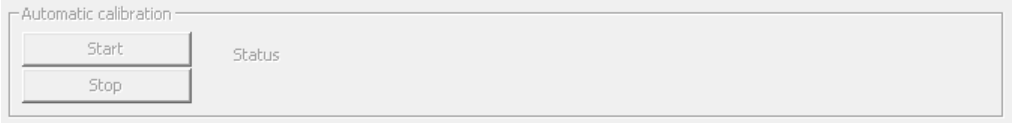
Setting the minimum or maximum colour temperature

1. Set the value for the individual parameter using the slider.
2. Click on **save**.
   ➲ Changes are stored in the device.

Note
The **minimum colour temperature** cannot be lower than the **physical lower limit**.
The **maximum colour temperature** cannot be higher than the **physical upper limit**.

Automatic calibration

The xy-coordinates for all supported primaries can be calibrated here.



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Carrying out automatic calibration

▷ Click on **Start**.
➲ Automatic calibration begins. It lasts approximately 15 minutes.
➲ If calibration is completed successfully, the status of the automatic calibration is displayed in the **Status** tab as **successful**.
➲ If calibration was not successful, the values from the last successful calibration are automatically loaded.

Note
If **Stop** is clicked during automatic calibration, calibration is cancelled and the values of the last successful calibration are loaded.

Note
The current status of this function can be seen in the **Status** tab.

Immediate colour change

Users can set whether the colour can be immediately changed or only using an **Activate** command here. These commands include **Intensity (DAP)**, **Brighten**, **Dim** and **Recall scene X**. The **fade time** for the individual command is used.

Disabling immediate colour change

1. Disable the **Colour only changes with the "Activate" command** checkbox.
2. Click on **save**.
➲ Changes are stored in the device.

Note
The current status of this function can be seen in the **Status** tab.

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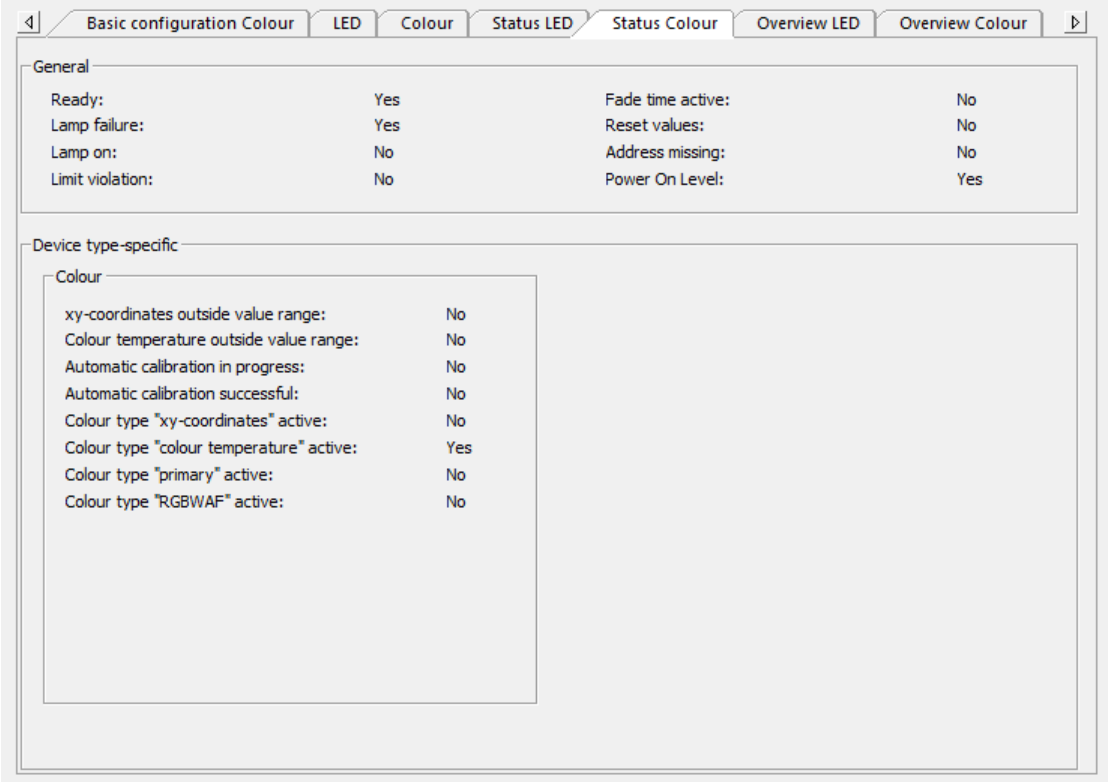
Status

The **Status** tab shows all status information which can be queried by the control gear.

Note
An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.



General status of control gear

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On

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	Level.

Table 74: DALI control gear status information

Status of control gear for colour converters (DT 8)

Status	Description
xy-coordinates outside value range	Indicates whether values were chosen for the xy-coordinates which are outside of the value range. The configurable value range depends on the LED module connected to the colour converter.
Colour temperature outside value range	Indicates whether a value was chosen for the colour temperature which is outside of the value range. The configurable value range depends on the LED module connected to the colour converter.
Automatic calibration in progress	Indicates whether the automatic calibration is still ongoing.
Automatic calibration successful	Indicates whether the automatic calibration was successful. If it was not successful, the values from the last successful calibration are automatically loaded.
Colour type "xy-coordinates" active	Indicates whether the "xy-coordinates" colour type is enabled.
Colour type "Colour temperature" active	Indicates whether the "colour temperature" colour type is enabled.
Colour type "Primary" active	Indicates whether the "primary" colour type is enabled.
Colour type "RGBWAF" active	Indicates whether the "RGBWAF" colour type is enabled.

Table 75: Device-specific status information for DALI control gear for colour converters

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Overview of functions

The **Overview of functions** tab shows all functions supported by control gear of this device type. The **Overview of functions** tab is only visible if **advanced settings** have been enabled.

Not every control gear element supports all functions. For this reason the functions are shown with the following symbols:

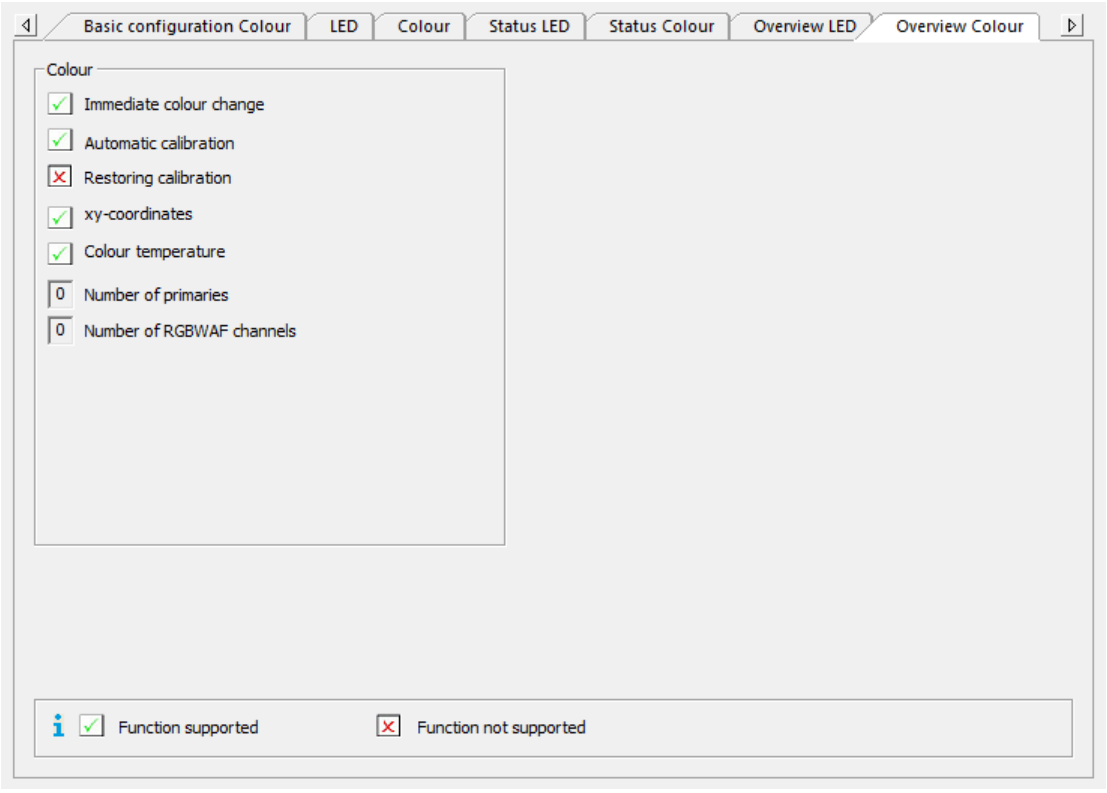
☑ This function is supported by the control gear.

☒ This function is not supported by the control gear.

Types of functions

The following types of functions are available:

- Configurable functions
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab.
- Functions with displayed statuses
  This functions cannot be configured. Statuses are shown in the **Status** tab.
- Configurable functions with displayed statuses
  Functions are configured in the detail view, either in the **Basic configuration** tab or in a device-specific tab. Statuses are shown in the **Status** tab.

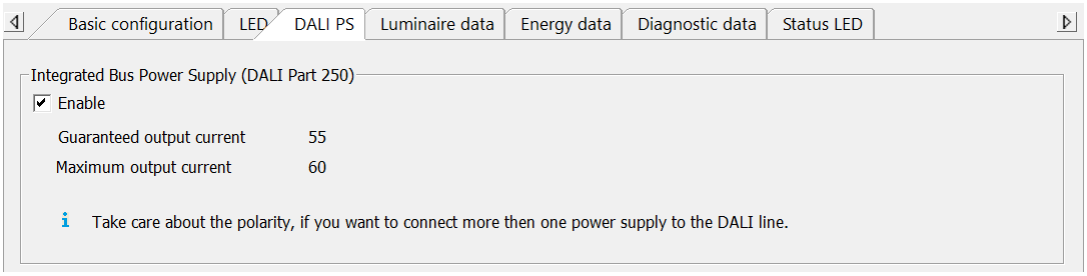


Special features

- **Number of primaries**: If the **primaries** colour type is supported, the number of primaries is displayed.
- **Number of RGBWAF channels**: If the **RGBWAF** colour type is supported, the number of RGBWAF channels is displayed.

7 Configuration

7.1.13 Device Type 49: Integrated Bus Power Supply (DALI Part 250)



Parameter	Description
Guaranteed supply current	Indicates the guaranteed supply current of the internal power supply.
Maximum supply current	Indicates the maximum supply current of the internal power supply.
DALI bus power supply status	Indicates if the internal DALI power supply is turned on or off.

If the integrated DALI power supply is activated, a small local DALI network can be set up via the DALI terminals.

Note

For the changes to apply, a power reset is necessary.

Caution!

For the DALI network, please:

- The DALI load of the connected devices must not exceed the power of the integrated DALI power supply.
- Only one of the connected operating devices is allowed to have activated the integrated DALI power supply.

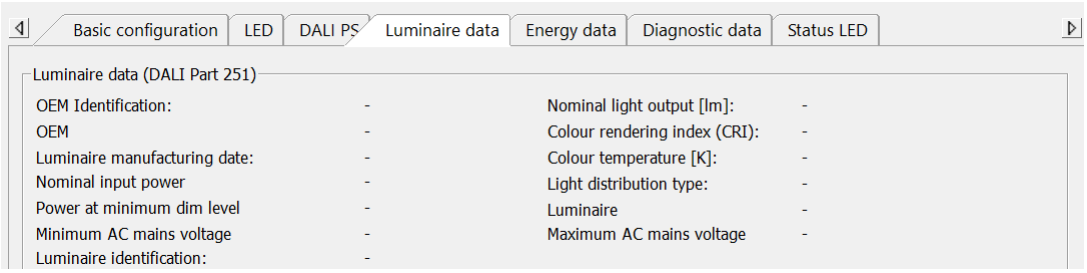
7 Configuration

7.1.14 Device Type 50: Luminaire data (DALI Part 251)

This function provides the asset management with accurate data about the luminaire.

DALI Part 251

Memory bank 1 extension (Device Type 50)



Parameter	Information
Luminaire manufacturing date	Entry of year and calendar week is possible
Nominal input power	Watt
Power at minimum dim level	Watt
Minimum AC mains voltage	Volt
Maximum AC mains voltage	Volt
Nominal light output	Lumen
Colour rendering index (CRI)	This value is a quality feature of artificial light over natural light.
Colour temperature	Kelvin
Light distribution type	Type I - V (The different types are described in the IES 901.11 standard)
Luminaire colour	ASCII character string
Luminaire identification	ASCII character string

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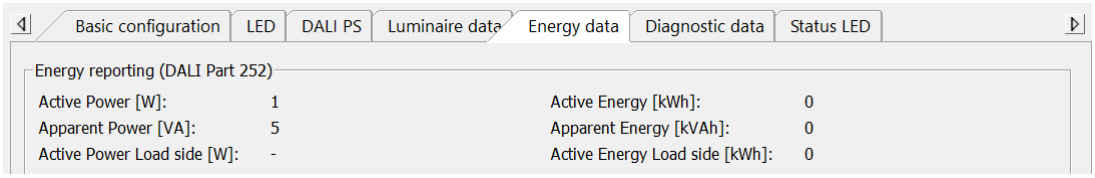
7.1.15 Device Type 51: Energy Reporting (DALI Part 252)

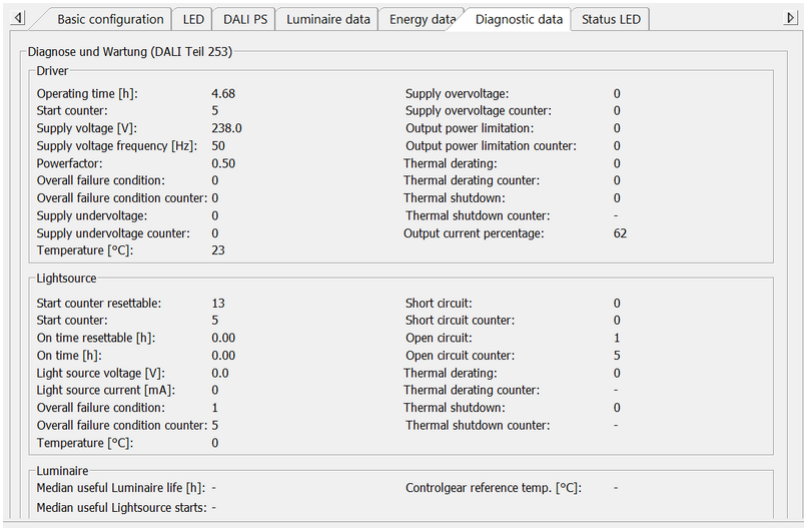


This function provides the asset management with accurate data about the luminaire.

Parameter	Description
Active Energy	Indicates the integral of the current power over a time interval.
Active Power	Indicates the mean value of the current power, taken over one period.
Apparent Energy	Indicates the integral of apparent power over a time interval, measured in units of VA hour.
Apparent Power	Indicates the power, calculated with the rms voltage and the rms electric current.
Active Energy Load side	Indicates the integral of load side power over a time interval.
Active Power Load side	Indicates the input power minus the power used for the DALI bus power supply if present and the AUX power supply if present.

7 Configuration

7.1.16 Device Type 52: Diagnostics & Maintenance (DALI Part 253)



Parameter	Description
Supply undervoltage counter	Indicates how often undervoltage was measured at the mains input.
Supply overvoltage counter	Indicates how often overvoltage was measured at the mains input.
Supply voltage frequency	Indicates the supply frequency measured at the mains input.
Supply undervoltage	Indicates if there is currently undervoltage measured at the mains input.
Supply overvoltage	Indicates if there is currently undervoltage measured at the mains input.
Operating time	Indicates the time the LED Driver was operated either via mains or from battery.
Start counter	Indicates how often the LED Driver was started.
Overall failure condition counter	Indicates how often a failure was detected.
Output power limitation counter	Indicates how often the output power had to be limited.
Thermal derating counter	Indicates how often the LED Driver reached a critical temperature and the Intelligent Temperature Guard function (ITG) started reducing the output power.
Thermal shutdown counter	Indicates how often the LED Driver reached a critical temperature and the Intelligent Temperature Guard function (ITG) turned off the device.
Overall failure condition	Indicates if a failure is currently detected.
Output power limitation	Indicates if the output power is currently limited by the LED Driver.
Thermal derating	Indicates if the output power of the LED Driver has been reduced due to a critical temperature.

7 Configuration

Thermal shutdown	Indicates if the LED Driver has been turned off due to a critical temperature.
Output current percentage	Indicates the active output current percentage.
Start counter	Indicates how often the LED was switched on.
On time	Indicates for how long the LED has been switched on.
Overall failure condition counter	Indicates how often a failure was detected.
Short circuit counter	Indicates how often a short circuit was detected.
Open circuit counter	Indicates how often a open circuit was detected.
Thermal derating counter	Indicates how often the LED had reached the overload temperature.
Thermal shutdown counter	Indicates how often the LED had reached the shutdown temperature.
Light source voltage	Indicates the voltage at the LED output.
Light source current	Indicates the current at the LED output.
Overall failure condition	Indicates if a failure is currently detected.
Short circuit	Indicates if a short circuit is currently detected.
Open circuit	Indicates if a open circuit is currently detected.
Thermal derating	Indicates if a temperature overload is currently detected.
Thermal shutdown	Indicates if a shutdown temperature is currently detected.

7 Configuration

7.1.17 Device Type 255: Multi-device types

Multi-device types are shown in the DALI device tree diagram with the  symbol and the short description **Multi**. They comprise at least two device types. There are several combinations available.

Note
The configuration options for the multi-device type depend on the configuration options for the individual device types which make up the multi-device type.

7 Configuration

7.2 DALI XC

The DALI XC is represented in the DALI device tree diagram by the  icon and the short name **DALI XC**. When addressing, the DALI XC is given an eD address (eA) and can be configured in the detail view using this address.

Note
The masterCONFIGURATOR software uses the counting method given in DALI standard IEC 62386. Addresses, groups and scenes are counted starting with 0.
However there are devices that are counted starting with 1, e.g. DALI XC. If scene 1 is selected via a rotary selector switch, for example, it is displayed in the masterCONFIGURATOR software as scene 0.

Device information

The following device information is displayed in the header:

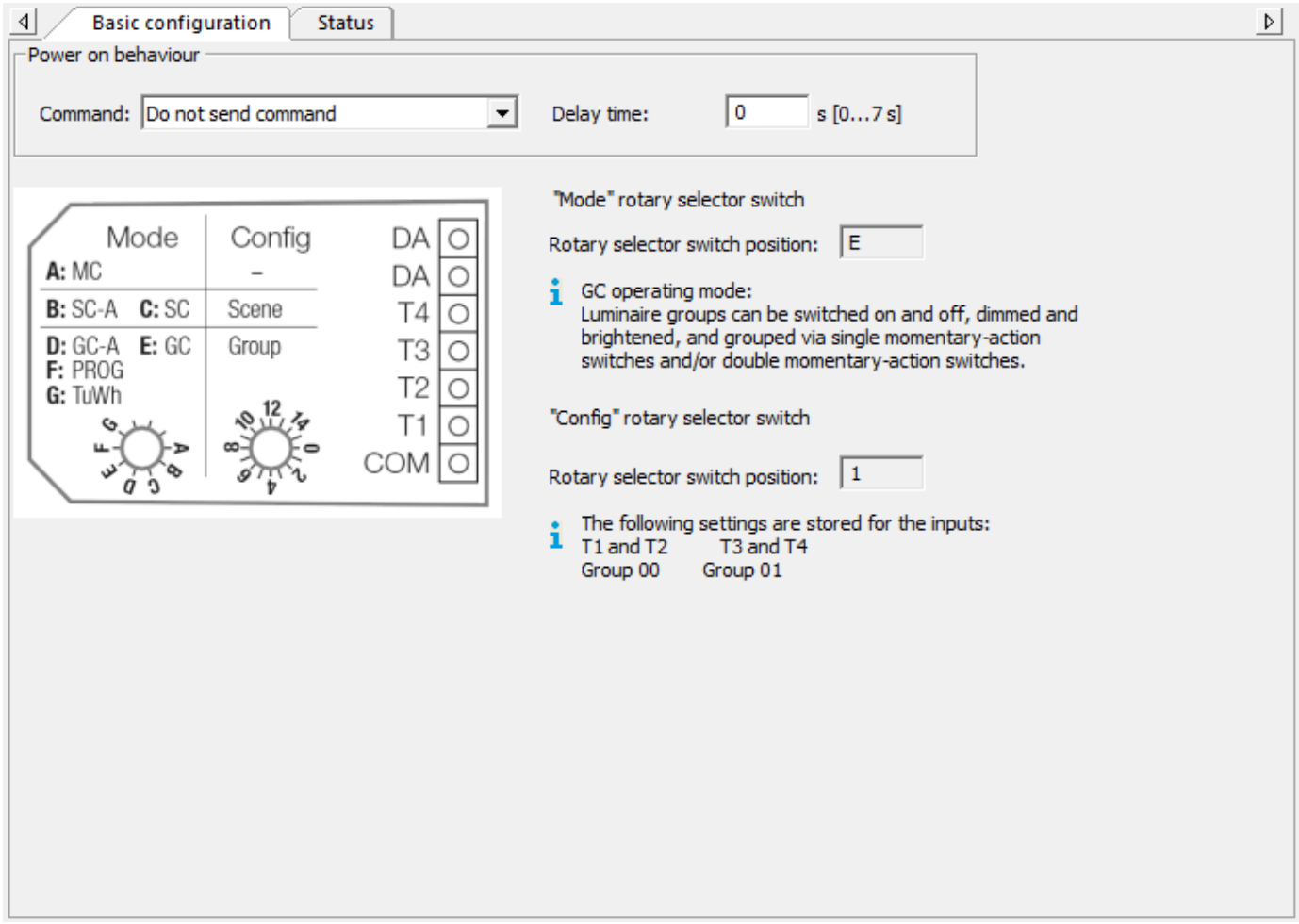
Device information	Description
Name	Displays the name of the device.
Article number	Displays the article number of the device.
Serial number	Displays the unique serial number of the device.
Date of manufacture (CW.YYYY)	Displays the date of manufacture of the device in the format CW.YYYY (calendar week, year).
Firmware version	Displays the firmware version of the device.
eD version	Displays the version of the eD specification supported by the device. **Note** eD is an enhanced protocol based on DALI connections.

Table 76: Device information

7 Configuration

7.2.1 Basic configuration

The power on behaviour can be set and the current configuration of the DALI XC can be viewed in the **Basic configuration** tab.



Power on behaviour

The power on behaviour indicates how the DALI XC responds after the voltage supply has failed. The power on behaviour can be configured in all operating modes.

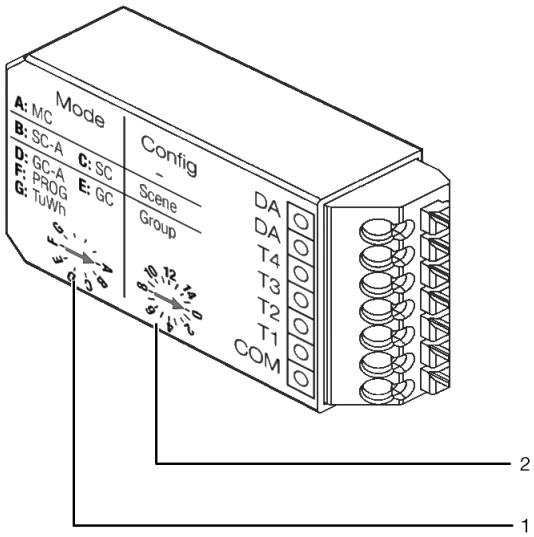
Command	Indicates which command the DALI XC sends to all of the luminaires connected to the DALI control line after the power is restored: • **Off** • **Recall scene X** (0–15) • **Do not send command**: If more than one DALI XC is connected to the DALI control line, the power on behaviour can only be set on one DALI XC. **Do not send command** must be set for all other DALI XC devices.
Delay time	Time after which the selected command is sent. **Value range:** • **0–7 s**

Table 77: Configuration options for "pow er on behaviour"

7 Configuration

"Mode" and "Config" rotary selector switches

There are two rotary selector switches on the DALI XC.



(1)	**Mode** rotary selector switch The operating mode of the DALI XC can be set via this rotary selector switch.
(2)	**Config** rotary selector switch The inputs of the DALI XC can be configured via this rotary selector switch.

Operating modes

The DALI XC has seven operating modes (A–G), which are set via the **Mode** rotary selector switch.

Rotary selector switch position	Description	Configuration
A	**MC** operating mode: Programmed functions can be recalled via single momentary-action switches and/or double momentary-action switches and/or standard switches.	This operating mode is configured via the masterCONFIGURATOR software. Rotary selector switch **Config** (2) has no function here. For a detailed description of the setting options, see Section Configuration of operating mode "MC"... 173
B	**SC-A** operating mode: Scenes can be recalled via single momentary-action switches.	This operating mode is configured via rotary selector switch **Config** (2) on the DALI XC. A scene is assigned to each of the four inputs. The settings are displayed in the masterCONFIGURATOR software.
C	**SC** operating mode: Scenes can be recalled and saved via single momentary-action switches.	This operating mode is configured via rotary selector switch **Config** (2) on the DALI XC. A scene is assigned to each of the four inputs. The settings are displayed in the masterCONFIGURATOR software.
D	**GC-A** operating mode: Luminaire groups can be switched on and off and dimmed and brightened via single momentary-action switches and/or double momentary-action switches.	This operating mode is configured via rotary selector switch **Config** (2) on the DALI XC. A luminaire group is assigned to each of the four inputs. The settings are displayed in the masterCONFIGURATOR software.
E	**GC** operating mode:	This operating mode is configured via rotary selector

7 Configuration

Rotary selector switch position	Description	Configuration
	Luminaire groups can be switched on and off, dimmed and brightened, and grouped via single momentary-action switches and/or double momentary-action switches.	switch **Config** (2) on the DALI XC. A luminaire group is assigned to each of the four inputs. The settings are displayed in the masterCONFIGURATOR software.
F	**PROG** operating mode: Commissioning or a system extension can be started and completed in this operating mode. The control points for this DALI XC are locked. All other DALI XC devices can be operated as normal.	This operating mode is configured via rotary selector switch **Config** (2) on the DALI XC. A luminaire group is assigned to each of the four inputs. The settings are displayed in the masterCONFIGURATOR software.
G	**TuWh** operating mode: The intensity and colour temperature of Tunable White luminaires can be set via double momentary-action switches.	This operating mode is configured via rotary selector switch **Config** (2) on the DALI XC. A luminaire group is assigned to each of the four inputs. The settings are displayed in the masterCONFIGURATOR software.

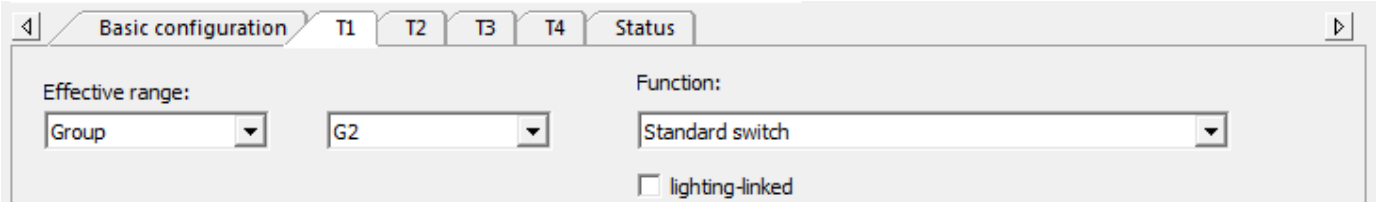
Table 78: Operating modes of the DALI XC

7 Configuration

7.2.2 Configuration of operating mode "MC"

In the **MC** operating mode, single momentary-action switches and/or double momentary-action switches and/or standard switches can be used to recall programmed functions. These functions are configured via the masterCONFIGURATOR software. The **Config** rotary selector switch has no function.

The DALI XC has four inputs (T1–T4). The effective range of the respective input and its function can be set in tabs **T1**, **T2**, **T3** and **T4**.

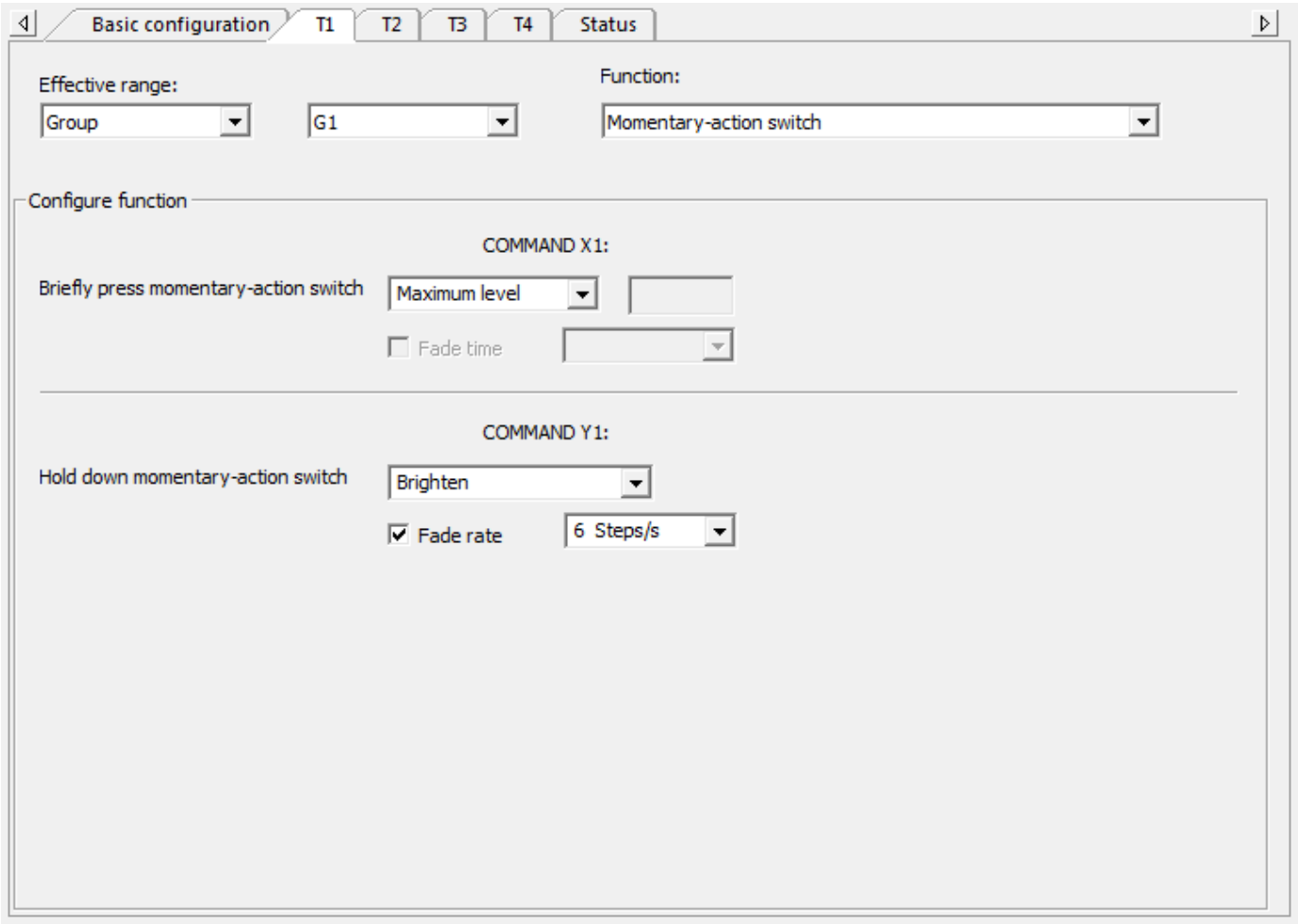


Configuration option	Description
Effective range	Range controlled via the relevant input (T1, T2, T3 or T4): • **All** • **Group** (0–15) • **Address** (0–63)
Function	Function stored for the selected effective range on the relevant input (T1, T2, T3 or T4): • **No function**: The selected input has no function. • **Momentary-action switch:** more information can be found here... 174 • **Changeover switch:** more information can be found here... 176 • **Standard switch:** more information can be found here... 178 • **Macro: stairwell function** More information can be found here... 180 • **Macro: dynamic scene recall** More information can be found here... 180 • **Macro: sequential scene recall** More information can be found here... 184 • **Macro: user-defined command sequence** More information can be found here... 185 • **User-defined configuration of the inputs**: settings stored on the DALI XC do not correspond to the setting options in the masterCONFIGURATOR software. **Note** As soon as the system is switched from function **User-define configuration of the inputs** to another function and this is saved, the user-defined configuration of the inputs is lost and cannot be restored.

Table 79: Configuration options for "MC" operating mode

7 Configuration

Momentary-action switch



The selected input is configured as a momentary-action switch.

The following configuration options are available for this function:

Configuration option	Description
Briefly press momentary-action switch	Briefly pressing the momentary-action switch will send **command X1** one time. The following commands can be selected from the dropdown list for **command X1**: • **Ignored** • **Intensity (DAP)**: in percent • **Off** • **Maximum level** • **Minimum level** • **Last active level** • **Recall scene X** (0–15) A **fade time** can also be stored depending on the command.

7 Configuration

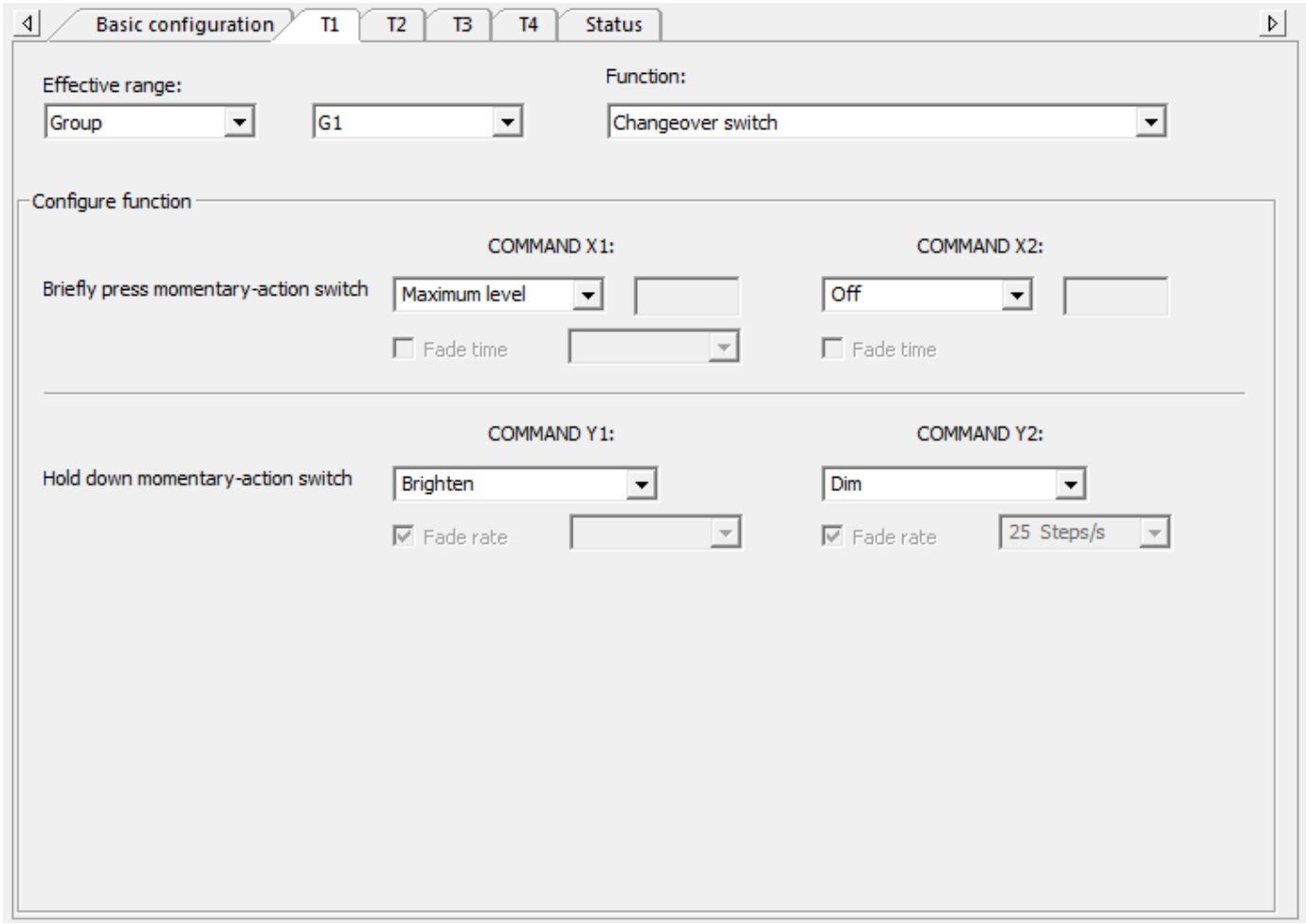
Configuration option	Description
	Note For a precise description of the DALI commands, see Section **DALI commands...**
Hold down momentary-action switch	Holding down the momentary-action switch will send **command Y1**. The commands are repeatedly sent for as long as the momentary-action switch is held down. The following commands can be selected from the dropdown list for **command Y1**: • **Ignored** • **Brighten** • **Dim** • **Increase colour temperature** • **Decrease colour temperature** A **fade rate** can also be stored depending on the command. **Note** For a precise description of the DALI commands, see Section **DALI commands...**

Table 80: Configuration options for the "momentary-action switch" function

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

Changeover switch



The selected input is configured as a changeover switch. Each time the momentary-action switch is briefly pressed **command X1** and **command X2** are sent in alternating sequence. Each time the momentary-action switch is held down **command Y1** and **command Y2** are sent in alternating sequence.

The command sent each time depends on the lighting status and is automatically selected by the DALI XC.

The following configuration options are available for this function:

Configuration option	Description
Briefly press momentary-action switch	Each time the momentary-action switch is briefly pressed **command X1** and **command X2** are sent in alternating sequence. The following commands can be selected from the dropdown list for **command X1** and **command X2**: • **Ignored** • **Intensity (DAP)**: in percent • **Off** • **Maximum level** • **Minimum level** • **Last active level** • **Recall scene X** (0–15)

7 Configuration

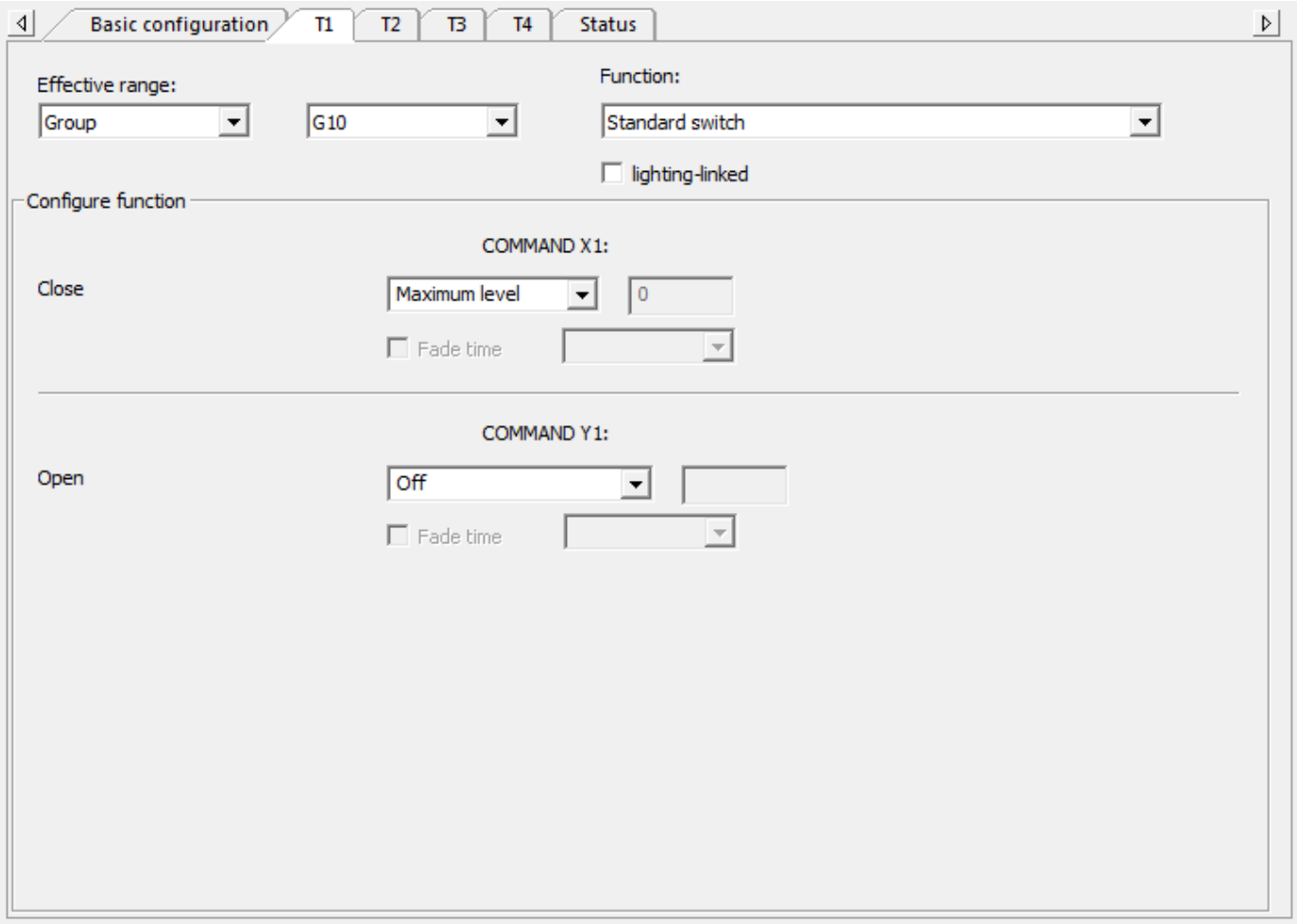
Configuration option	Description
	Note For a precise description of the DALI commands, see Section **DALI commands...**
Hold down momentary-action switch	Each time the momentary-action switch is held down **command Y1** and **command Y2** are sent in alternating sequence. The commands are repeatedly sent for as long as the momentary-action switch is held down. The following commands can be selected from the dropdown list for **command Y1**: • **Ignored** • **Brighten** • **Increase colour temperature** The following commands can be selected from the dropdown list for **command Y2**: • **Ignored** • **Dim** • **Decrease colour temperature** **Note** For a precise description of the DALI commands, see Section **DALI commands...**

Table 81: Configuration options for the "changeover switch" function

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

Standard switch



The selected input is configured as a standard switch.

The following configuration options are available for this function:

Configuration option	Description
Lighting-linked	The command sent each time depends on the lighting status and is automatically selected by the DALI XC. **Note** If the standard switch is configured to be lighting-linked, no **fade time** can be stored for **command X1** and **command Y1**.
Close	When the switch is closed, **command X1** is sent one time. The following commands can be selected from the dropdown list for **command X1**: • **Ignored** • **Intensity (DAP)**: in percent • **Off** • **Maximum level**

7 Configuration

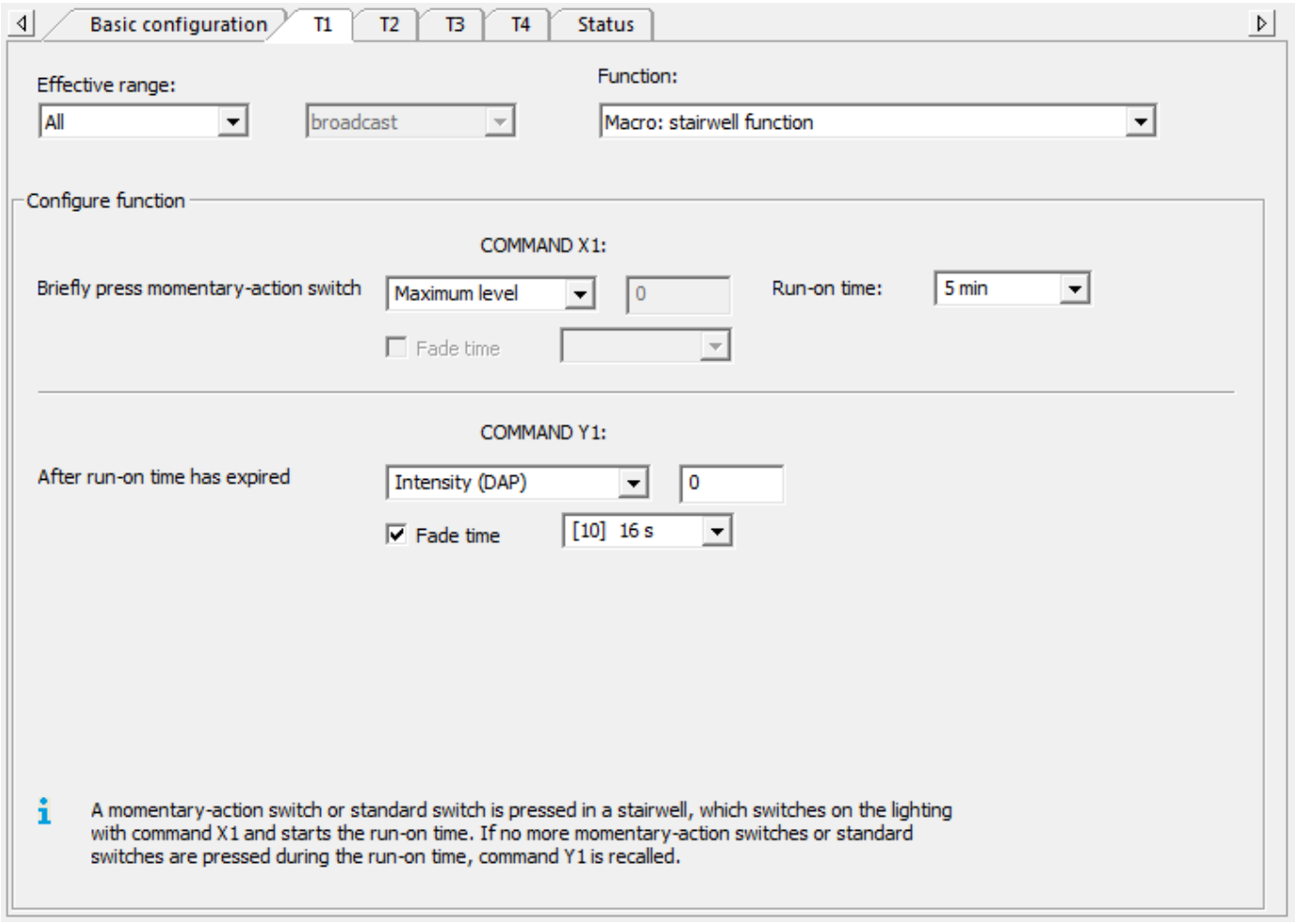
	• **Minimum level** • **Last active level** • **Recall scene X** (0–15) A **fade time** can also be stored depending on the command. **Note** For a precise description of the DALI commands, see Section **DALI commands...**
Open	When the switch is opened, **command Y1** is sent one time. The following commands can be selected from the dropdown list for **command Y1**: • **Ignored** • **Intensity (DAP)**: in percent • **Off** • **Maximum level** • **Minimum level** • **Last active level** • **Recall scene X** (0–15) A **fade time** can also be stored depending on the command. **Note** For a precise description of the DALI commands, see Section **DALI commands...**

Table 82: Configuration options for the "standard switch" function

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

Macro: stairwell function



A momentary-action switch or standard switch is pressed in a stairwell, which switches on the lighting with **command X1** and starts the run-on time. If no one presses a momentary-action switch or standard switch again during the run-on time, **command Y1** is then sent.

The following configuration options are available for this function:

Configuration option	Description
Briefly press momentary-action switch	When the momentary-action switch or standard switch is pressed, **command X1** is sent one time. The following commands can be selected from the dropdown list for **command X1**: • **Ignored** • **Intensity (DAP)**: in percent • **Off** • **Maximum level** • **Minimum level** • **Recall scene X** (0–15) A **fade time** can also be stored depending on the command.

7 Configuration

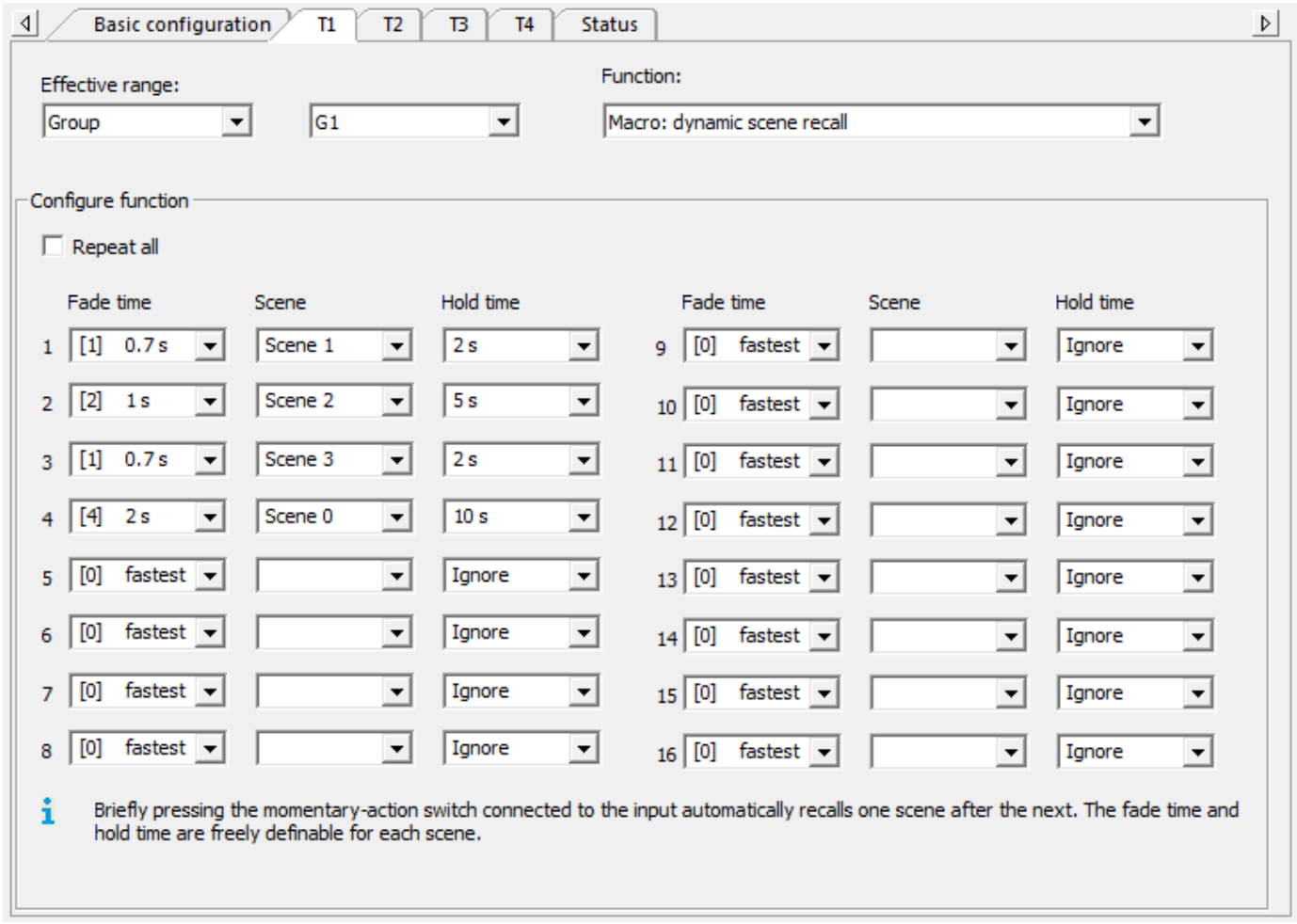
Configuration option	Description
	Note For a precise description of the DALI commands, see Section **DALI commands...**
Run-on time	Time that starts when the lighting is switched on and after which **command Y1** is sent. If someone presses a momentary-action switch or standard switch again in this stairwell during the run-on time, the run-on time starts again. **Value range:** • **1 s – 60 min** • **None**
After run-on time has expired	After run-on time has expired, **command Y1** is sent one time. The following commands can be selected from the dropdown list for **command Y1**: • **Ignored** • **Intensity (DAP)**: in percent • **Off** • **Maximum level** • **Minimum level** • **Recall scene X** (0–15) A **fade time** can also be stored depending on the command. **Note** For a precise description of the DALI commands, see Section **DALI commands...**

Table 83: Configuration options for the "stairwell function"

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

Macro: dynamic scene recall



A dynamic scene recall consists of no more than 16 scenes that are automatically recalled one after the other. The order of the scenes can be selected freely. Scenes may occur more than once in a dynamic scene recall. A **fade time** and **hold time** are defined for each scene.

Briefly pressing the momentary-action switch connected to the input starts the dynamic scene recall; one scene after the other is recalled.

Briefly pressing the momentary-action switch again interrupts the dynamic scene recall. The last scene recalled remains active. Briefly pressing the momentary-action switch again continues the dynamic scene recall.

Holding down the momentary-action switch stops the dynamic scene recall and sends an off command. Briefly pressing the momentary-action switch again starts the dynamic scene recall again from the start.

The following configuration options are available for this function:

Configuration option	Description
Repeat all	When the last scene is recalled, the scene recall starts again with the first scene. If the dynamic scene recall is not repeated, the last hold time runs indefinitely and the scene is not switched.
Fade time	The time it takes to change from one scene to the next.

7 Configuration

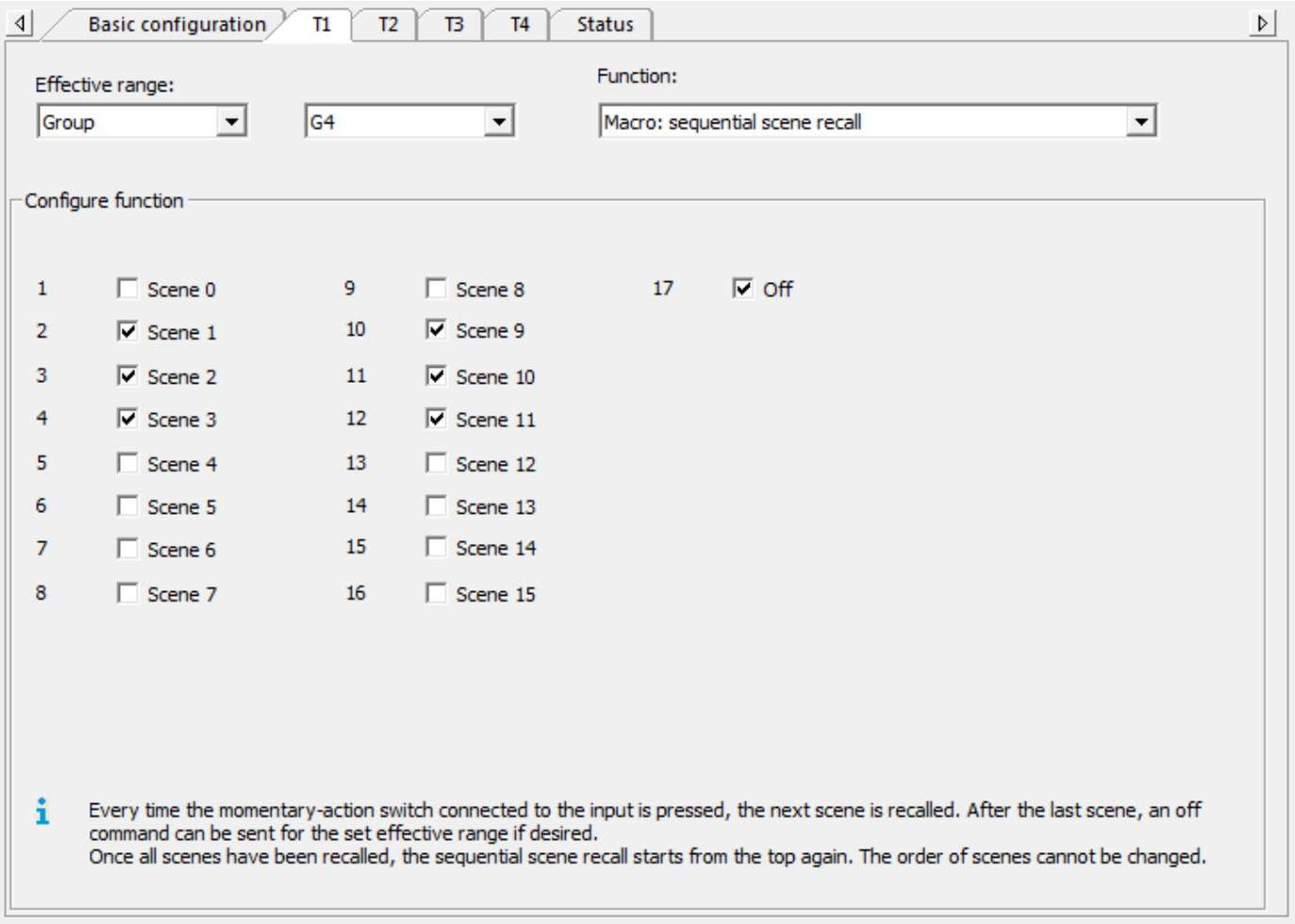
Configuration option	Description
	Value range: • **fastest** • **0.7 – 90.5 s** **Note:** 90.5 s is the slowest fade time.
Scene	Scene being recalled. Scenes can be used repeatedly within a dynamic scene recall. **Value range:** • **Scene X** (0–15)
Hold time	Time for which the set scene is held. Once the hold time expires, the next scene is recalled with the defined fade time. **Value range:** • **1 s – 60 min** • **Ignore:** the set fade time and scene are ignored. This setting is used when a scene needs to be removed from a dynamic scene recall that is already defined, without having to reconfigure the entire dynamic scene recall.

Table 84: Configuration options for the "macro: dynamic scene recall" function

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

Macro: sequential scene recall



A sequential scene recall consists of no more than 16 scenes. The order of the scenes cannot be influenced. An off command can be sent to the set effective range after the last scene if desired.

Every time the momentary-action switch connected to the input is pressed, the next selected scene is recalled. Once all scenes have been recalled, the sequential scene recall starts again from the start.

Note

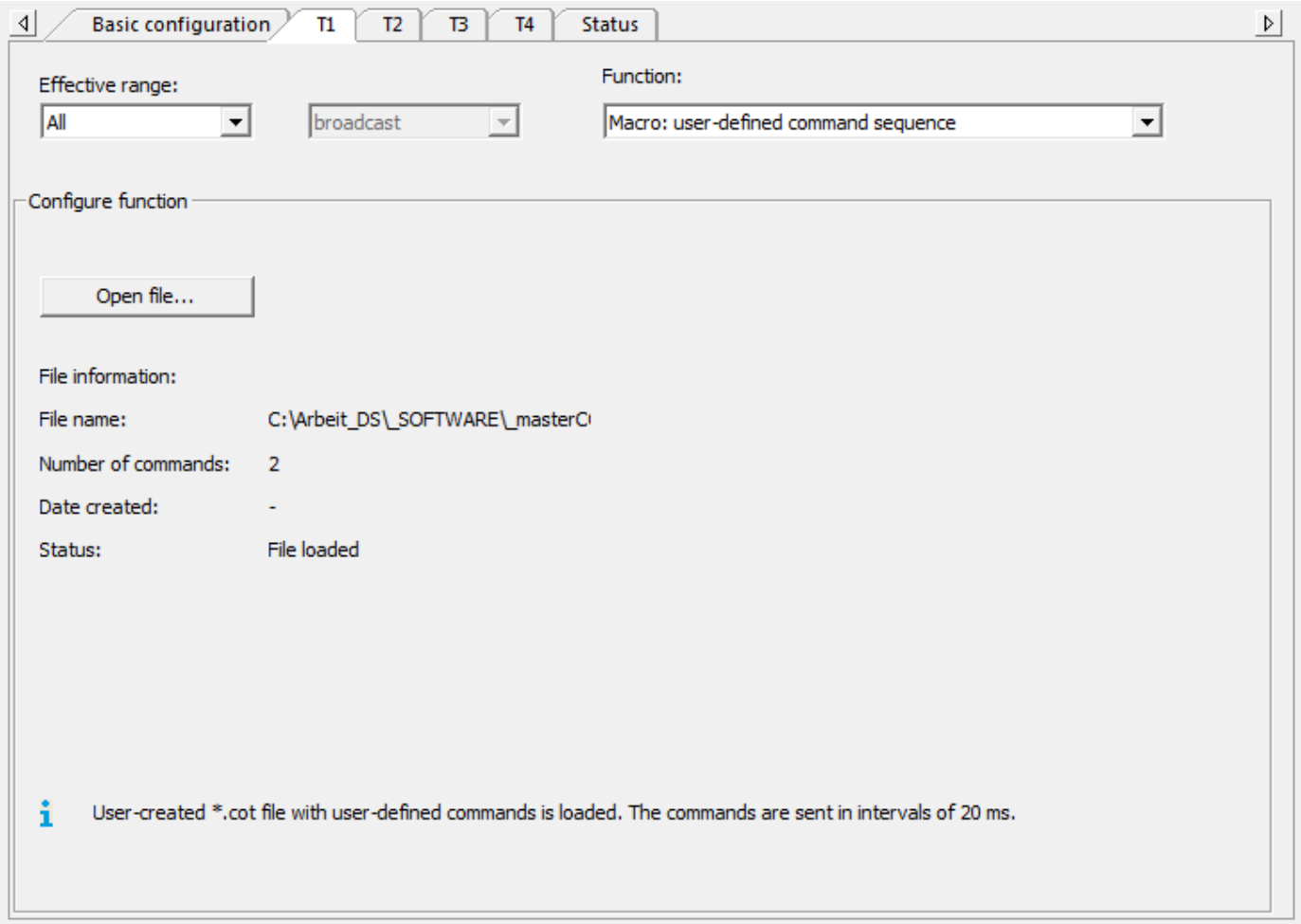
An off command from another device sent to the set effective range or an off command sent to all control gear connected to the control line is interpreted by the DALI XC as such and the sequential scene recall is stopped. The sequential scene recall starts again from the start the next time a momentary-action switch is pressed.

Note

To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

Macro: user-defined command sequence



A *.cot file created by the user with user-defined commands is loaded. Every time the momentary-action switch connected to the input is pressed, the user-defined command sequence is recalled.

The *.cot file can be created with the command administrator. A detailed description of the command administrator can be found in Section Command administrator... 268

Definition of the *.cot file

- The effective range must be defined in the *.cot file.
- The *.cot file can contain maximum 20 commands.
- The delay time for sending the commands must be 20 ms.

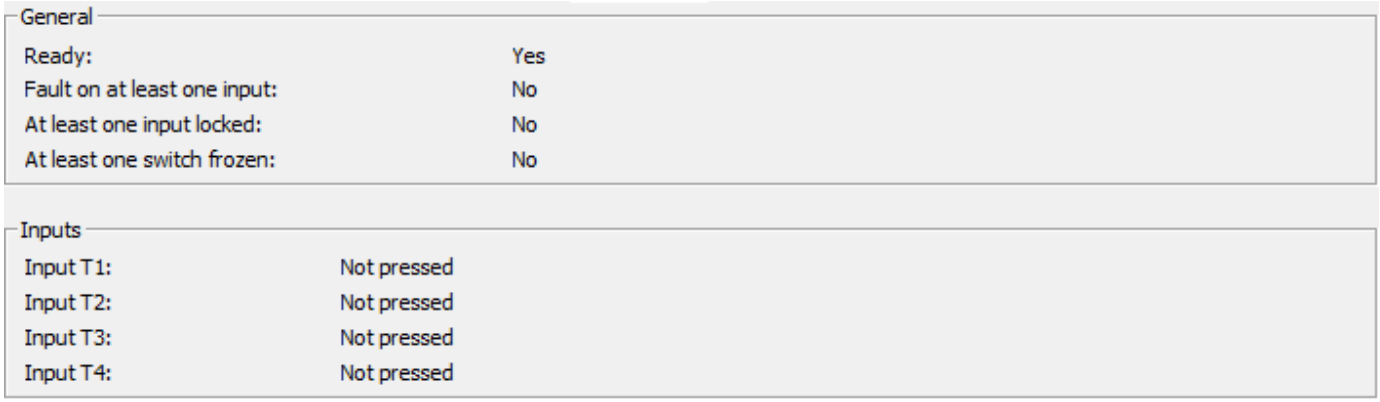
Note
If a different time is defined for sending the commands, the masterCONFIGURATOR software ignores this information and uses 20 ms instead.

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

7.2.3 Status

The **Status** tab shows all status information which can be queried by the DALI XC.



General status of the DALI XC

Status	Description
Ready	Indicates whether the DALI XC is ready for communication.
Fault on at least one input	Indicates whether a fault exists on at least one input. **Note** To find out which inputs are affected, press each input in order. Status **Input Tx pressed** shows the input on which a fault exists.
At least one input locked:	Indicates whether at least one input is locked from operation. **Note** The eD commands can be used to lock and unlock inputs from operation.
At least one switch frozen	Indicates whether at least one switch is frozen.

Table 85: Status information for the DALI XC

7 Configuration

Status of the inputs of the DALI XC

Status	Description
Input T1	Indicates whether the momentary-action switch or standard switch connected to input T1 is currently pressed.
Input T2	Indicates whether the momentary-action switch or standard switch connected to input T2 is currently pressed.
Input T3	Indicates whether the momentary-action switch or standard switch connected to input T3 is currently pressed.
Input T4	Indicates whether the momentary-action switch or standard switch connected to input T4 is currently pressed.

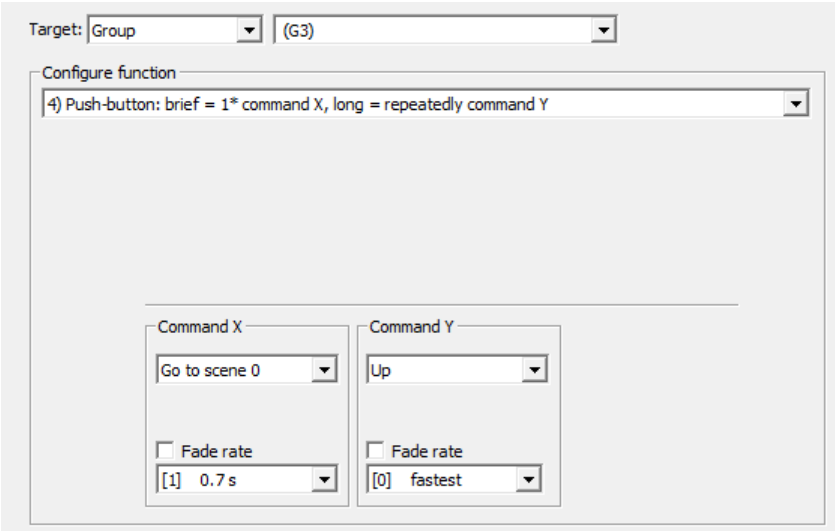
Table 86: Status information for the DALI XC

7 Configuration

7.3 DALI MC

The DALI MC is represented in the DALI device tree diagram by the icon and is configured in the detail view.

The DALI MC has four independent inputs. To make it possible to parameterise these inputs freely, each of the four inputs must have its own eDALI address (eA).



Configuration option	Description
Power on behaviour	Specifies how the DALI MC behaves when power is restored: • **do not send command** • **OFF** • **Scene 0–15**
Delay time	Time after which the selected command is sent. The delay time is used to take into account the start-up time of the DALI control gear after power is restored.

Table 87: Configuration options for the DALI MC

Note
The behaviour when power is restored can only be set via the detail view of input T4. This function is not available for any of the other inputs.

7 Configuration

Parameterising the inputs

Requirement:
– Each DALI MC input has its own eDALI address (eA).

1. In the DALI device tree diagram, select a DALI MC input.
   ➲ The configuration is displayed in the detail view.
2. From the **Target** drop-down list, select the destination address to which the command is to apply: **All**, **Group 0–15** or individual **Address**.
3. From the **Configure function** drop-down list, select a function or macro.
4. Define the function via input fields, lists and radio buttons.
5. Click on **Save**.
   ➲ The configuration is saved in the DALI MC.

Note
The saved configuration can now be tested directly in the DALI installation.

Functions

In the **Configure function** drop-down list, choose between the following functions:

Function	Description
1) Push-button: short or long = 1 * command X	Briefly pressing or holding down the push-button will send command X one time.
2) Push-button: short = 1 * command X, long = 1 * command X then 1 * command Y	• Briefly pressing the push-button will send command X one time. • Holding down the push-button will send command X once, and then command Y once.
3) Push-button: short = 1 * command X, long = 1 * command X then repeatedly command Y	• Briefly pressing the push-button will send command X one time. • Holding down the push-button will send command X once, and then command Y repeatedly.
4) Push-button: short = 1* command X, long = repeatedly command Y	• Briefly pressing the push-button will send command X one time. • Holding down the push-button will repeatedly send command Y.
5) Push-button (toggle): short or long = toggle between command X and Y	Briefly pressing or holding down the push-button will alternate between sending commands X and Y.
6) Push-button (toggle): short or long = toggle between command X and Y, lighting-based	Briefly pressing or holding down the push-button will alternate between sending commands X and Y. The command sent in each case depends on the status of the lighting: • If the lighting was previously switched off, command X is sent. • If the lighting was previously switched on, command Y is sent.

7 Configuration

7) Push-button (dimming key): short = toggle between command X and Y, long = dimming, lighting-based	SwitchDIM mode
	• Briefly pressing on the dimming key will alternate between sending commands X and Y. The command sent in each case depends on the status of the lighting.
	  • If the lighting was previously switched off, command X is sent.
	  • If the lighting was previously switched on, command Y is sent.
	• Holding down the dimmer switch dims or brightens the lighting.

8) Switch: close = command X, open = command Y	• When the switch is closed, command X is sent. • When the switch is opened, command Y is sent.
9) Changeover switch: close = command X, open = command Y, lighting-based	Each time the switch is pressed, the commands X and Y are sent in alternating order. The command sent in each case depends on the status of the lighting: • If the lighting was previously switched off, command X is sent. • If the lighting was previously switched on, command Y is sent.
10) Stairwell function: close = command X, start run-on time, run-on time elapsed = command Y	If the push-button is pressed, command X is sent and the run-on time starts. Once the run-on time has elapsed, command Y is sent.

Table 88: DALI MC functions

Note
Commands X and Y represent variables. The following commands can be selected:

- **Intensity (DAP)**
- **Off**
- **Down**
- **Step up**
- **Step down**
- **Recall max**
- **Recall min**
- **Step down and off**
- **On and Step up**
- **Go to Scene X (0–15)**
- **No function**

For a precise description of the DALI commands, see Section DALI commands 268.

7 Configuration

Macros

In the **Configure function** drop-down list, choose between the following macros:

Macro 1: Go home	
Function	Dim off luminaire within a defined time.
Adjustable parameters	• **Fade time**: time required to reach the absence level. • **Reset fade time**: time required to reach the presence level again.

Table 89: DALI MC macro 1: Go home

Macro 2: MSensor automatic	
Function	Ambient light control of the DALI MSensor is enabled.
Target	• The destination address of the macro is either **All** or the eDALI (eA) of the appropriate DALI MSensor.

Table 90: DALI MC macro 2: MSensor automatic

Macro 3: Sequential scene recall	
Function	Every time the push-button connected to the input is pressed, the next scene is recalled. At the end of the sequence, the process begins again.
Adjustable parameters	• **Scenes 0–15**: selection of scenes to be recalled. • **Off**: selection of whether an off command is to be sent at the end of the sequence.

Table 91: DALI MC macro 3: Sequential scene recall

Note
The order of the scenes cannot be influenced. The scenes are always recalled in ascending order.

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Macro 4: Dynamic scene	
Function	Pressing the push-button recalls a sequence of four scenes. The fade time and delay time can be defined freely for each scene.
Sequence	• Press the push-button briefly: the sequence starts. • Briefly press the push-button with scene running: the sequence stops. • Hold down the push-button with scene running: sequence is stopped and an off command is sent.
Adjustable parameters	• **Delay time**: delay time before the scene is recalled. This can be between 0 and 255 seconds. The delay time for the next scene is therefore the dwell time for the preceding scene. • **Fade time**: fade time for the new scene. • **Scene**: selection of which scene is to be recalled. • **Repeat**: when the last scene is reached, the sequence starts again with the first scene.

Table 92: DALI MC macro 4: Dynamic scene

Note
The delay time before the first scene only comes into effect when the sequence is repeated, since it is the dwell time of the fourth scene and will only start right before the first scene is recalled. It is ignored when the sequence is started with the push-button.

Macro 5: DALI reset	
Function	Reset for defined devices. Optionally, the addresses may also be deleted. The following parameters are reset to the reset values: • Group and scene settings • **Maximum level, minimum level** • **Power on level, system failure level** • **Fade time, fade rate** If the DALI control gear possesses other parameters (e.g. ePower on level on the PCA Ip), they are not reset.
Adjustable parameters	• **additionally delete addresses**: the devices are reset and the addresses are deleted.

Table 93: DALI MC macro 5: DALI reset

Note
The reset values can be found in Section Reset values 283.

7 Configuration

Macro 6: e-Power ON level	
Function	Sets the power-on level of the DALI control gear to the defined value. DALI devices which do not support this function will ignore the command.
Adjustable parameters	• **Memory value**: sets the power-on level to the value before power failure (memory value). • **user-defined**: the power-on level is shown as a percentage. In addition, a fade time can be defined.

Table 94: DALI MC macro 6: e-Power ON level

Macro 7: PCA compatibility	
Function	Sets the **PCA compatibility** parameter in the PCA EXCEL one4all devices to the defined value. DALI devices which do not support this function will ignore the command.

Table 95: DALI MC macro 7: PCA compatibility

Macro 8: User-defined DALI commands	
Function	Executes a **.cot* file that can be created by the user. The following points must be observed: • The **.cot* file must not exceed the limit of 10 commands. • The destination address must be specified in the **.cot* file. • The delay time from one command to another is set to 20 ms and cannot be changed.

Table 96: DALI MC macro 8: User-defined DALI commands

7 Configuration

7.4 DALI basicDIM DGC

DALI basicDIM DGC is represented in the DALI device tree diagram by the  icon and is configured in the detail view.

DALI basicDIM DGC consists internally of three device classes, which are listed individually in the DALI device tree diagram:

- Light sensor: A detailed description of the light sensor can be found in Section DALI basicDIM DGC – Light sensor 202.
- Motion sensor: A detailed description of the motion sensor can be found in Section basicDIM DGC – Motion sensor 204.
- Remote control: A detailed description of the remote control can be found in Section basicDIM DGC – Remote control 208.

Device information

The following device information is displayed in the header:

Device information	Description
Name	Displays the name of the control gear.
Lamp type	Displays the lamp type of the lamp connected to the control gear.
Article number	Displays the article number of the control gear.
Serial number	Displays the unique serial number of the control gear.
Date of manufacture	Displays the date of manufacture for the control gear.
Firmware version	Displays the firmware version of the control gear.
DALI version	Displays the version of the DALI specification supported by the control gear.
eD version	Displays the version of the eD specification supported by the control gear. **Note** eD is an enhanced protocol based on DALI connections.

Table 97: Device information

7 Configuration

7.4.1 Basic configuration

The group assignment for control gear and scenes and default DALI parameters can be set for each control gear element in the **Basic configuration** tab.

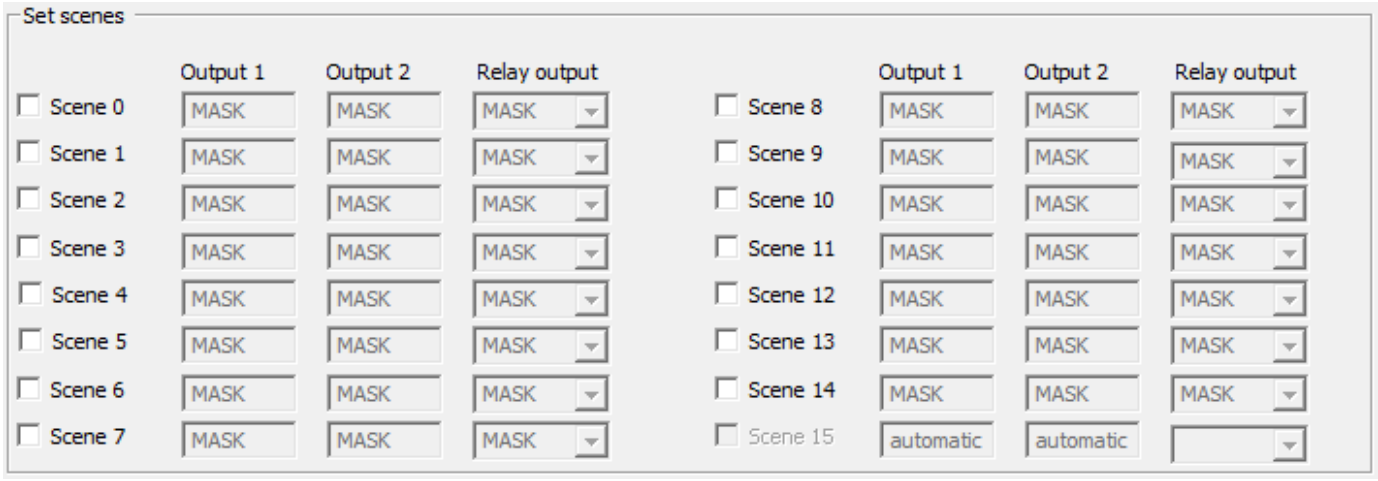
Member of group(s)

Member of group(s) specifies the group or groups to which the control gear belongs. These groups are indicated by the blue background.

With these 16 keys the group membership can be changed easily.

Scenes

The intensity of the different outputs can be set for all 16 scenes (0–15) here.



Setting scenes

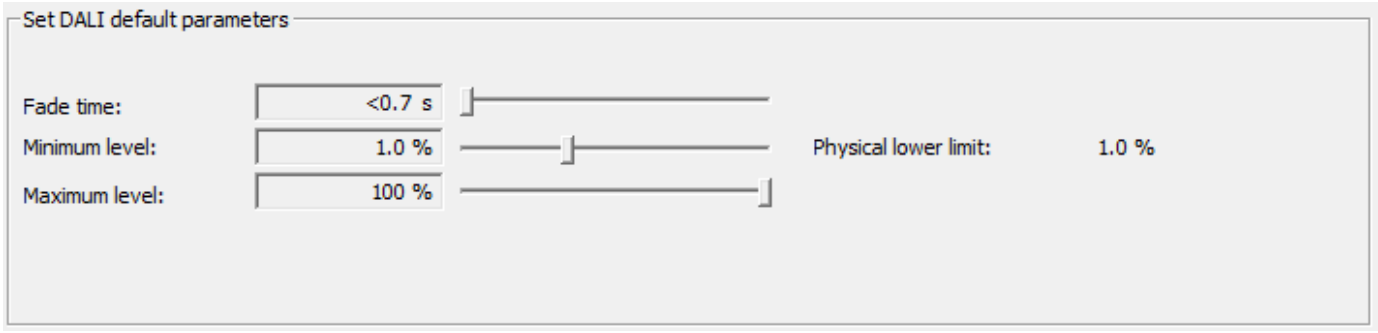
1. Enable the checkbox for a scene, in order to assign an intensity to the luminaire.
   ➲ The input field can be edited.
2. For **Output 1** and **Output 2**: Enter a value between 0 % and 100 %.
3. For **Relay output:** Enter **off**, **on** or **MASK.**
4. To define settings for additional scenes, repeat steps 1 and 3.
5. Click on **save**.
   ➲ Changes are stored in the device.

Note
MASK means that the luminaire in this group will retain its current intensity when the relevant scene is recalled.

7 Configuration

DALI default parameters

DALI default parameters can be set here.



Setting DALI default parameters

1. Set the value for the individual parameter using the slider.
   ➲ The value is shown to the left of the slider.
2. Click on **save**.
   ➲ Changes are stored in the device.

The following DALI default parameters can be set:

DALI default parameters	Description
Fade time	The selected value is set as the fade time in seconds. **Value range:** • **< 0.7–90.5 s** **Note:** < 0.7 s is the DALI default. < 0.7 s is the fastest fade time, and 90.5 s is the slowest.
Minimum level	The selected value is set as the minimum level for the control gear. This value cannot be fallen below during dimming/brightening. **Value range:** • **Physical lower limit – Maximum level** **Note:** The **physical lower limit** of the control gear is shown to the right of the **Minimum level** as a percentage. The **minimum level** must be above this value.
Maximum level	The selected value is set as the maximum level for the control gear. This value cannot be exceeded during dimming/brightening. **Value range:** • **Minimum Level – 100%**

Table 98: DALI default parameters

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

7 Configuration

7.4.2 Room profiles

In the **Room profiles** tab you can choose and activate a room profile. The following five room profiles are available:

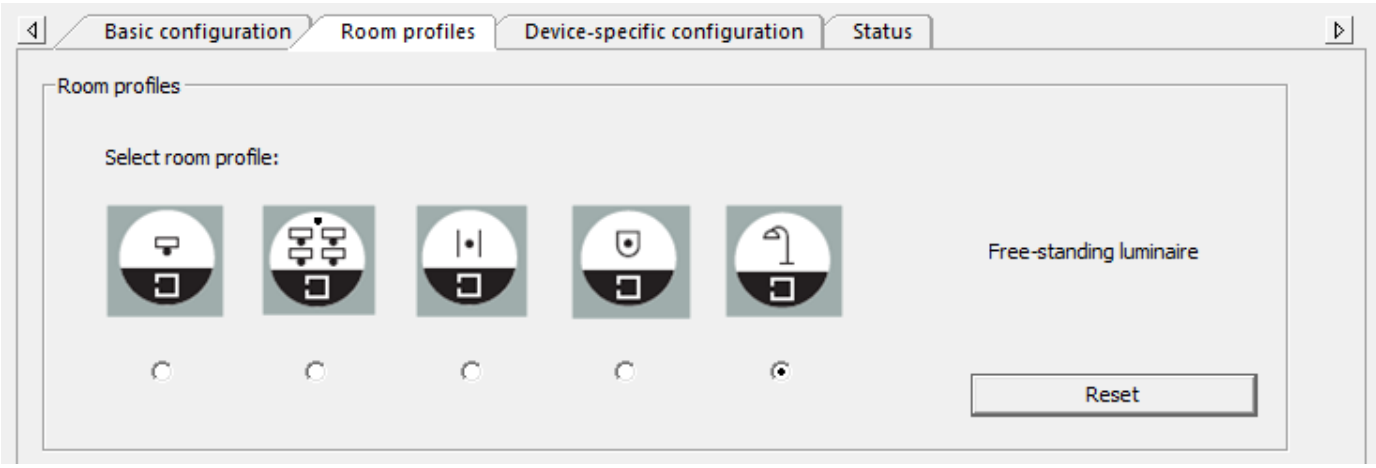


Image	Profile name	Description
	Individual room	Two illumination areas (windows area, rest of the room), two switches, motion sensor(s) Switch 1 operates the lighting of the windows area, switch 2 operates the lighting of the rest of the room.
	Classroom	Three illumination areas (windows area, rest of the room, separate presentation area), two switches, motion sensor(s) Switch 1 operates the lighting of the windows area and the rest room of the room together (ratio of the two dimming levels remains the same), button 2 operates the presentation area.
	Corridor	One illumination areas, switches, motion sensor(s) Switches operates the lighting of all the luminaires. Different dimming levels can be defined for presence detection in another room (neighbourhood function), for presence detection in the corridor itself and for the absence of any presence detection.
	Restroom	Two illumination areas (sink and mirror area, toilet area), two switches, motion sensor(s) Switch 1 operates the lighting of the sink and mirror area, switch 2 operates the lighting of the toilet area. In connection with presence detection different dimming levels can be defined for the two lighting areas.

7 Configuration

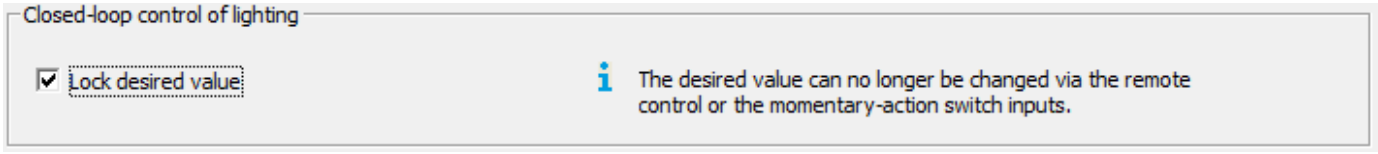
Image	Profile name	Description
	Free-standing luminaire	Two illumination areas (direct and indirect lighting), two switches, motion sensor(s) Switch 1 controls direct lighting, switch 2 controls indirect lighting. If no presence is detected the free-standing luminaire is switched off completely to avoid stand by losses.

Table 99: Room profiles of the DALI basicDIM DGC

Note
With the neighbourhood function presence detection can be transferred from one room to another. By default the neighbourhood function is deactiviated.

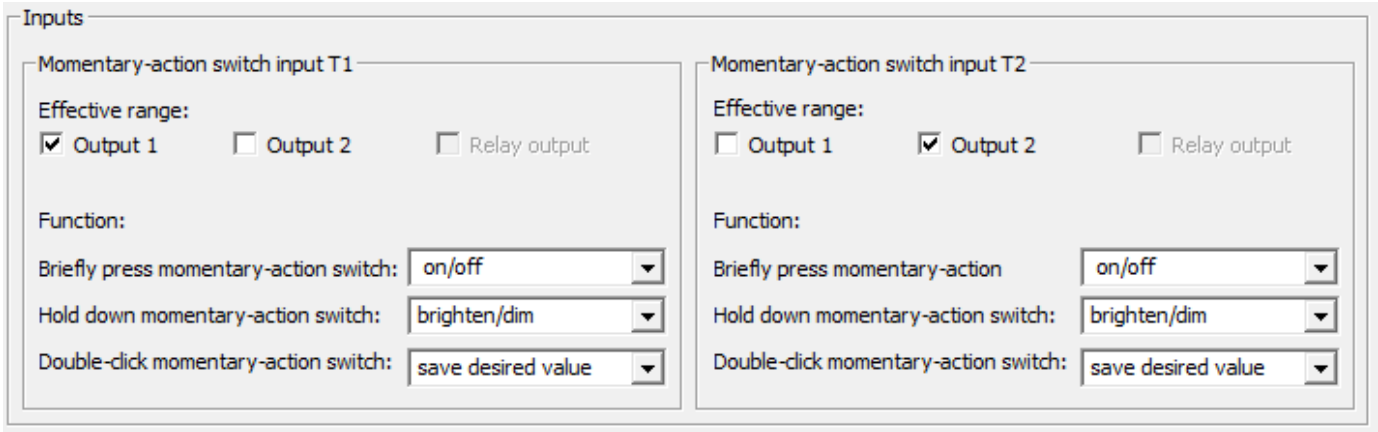
Note
Clicking on **Reset,** resets the current profile to its default values.

7.4.3 Device-specific configuration



Note
If the checkbox **Lock desired value** has been activated, the nominal value cannot be changed via remote control or the momentary-action switch input.

Inputs

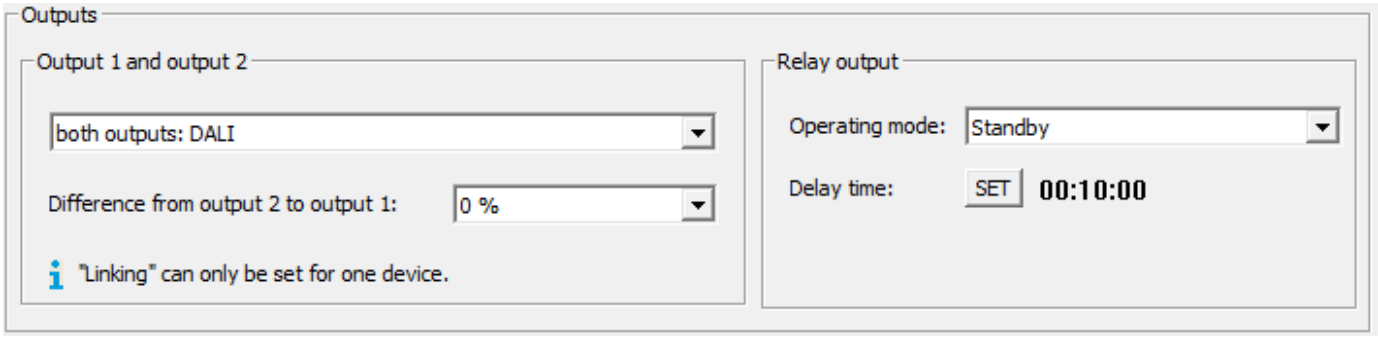


7 Configuration

Configuration option	Description
Effective range:	Range that is operated by momentary-action switch input T1 and T2: • **Output 1** • **Output 2** • **Relay output**
Briefly press momentary-action switch	Determines the reaction of the lighting when the momentary-action switch is briefly pressed: • **no function** • **only on** • **only off** • **on/off**
Hold down momentary-action switch	Determines the reaction of the lighting when the momentary-action switch is held down: • **no function** • **brighten** • **dim** • **brighten/dim**
Double click the momentary-action switch	Determines the reaction of the lighting when the momentary-action switch is double clicked: • **no function** • **save desired value**

Table 100: Configuration options for the "momentary-action switch" function

Output 1, 2 and relay



Configuration option	Description
Output 1 and output 2	Determines the settings for output 1 and output 2: • **both outputs: DSI** • **both outputs: DALI** • **output 1: DALI; output 2: linking (DALI In Deactivated)** • **output 1: DSI; output 2: linking (DALI In Deactivated)**
Difference from output 2 to output 1:	Determines the difference from output 2 to output 1: • Range of values: **-95% - +95%**, adjustable in 5% steps

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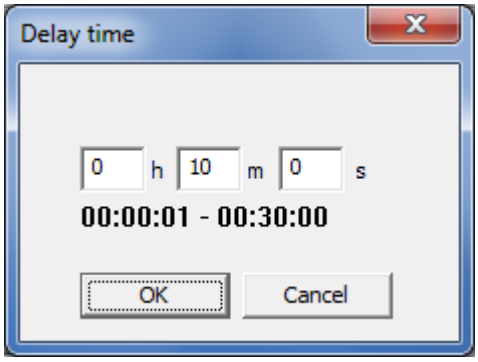
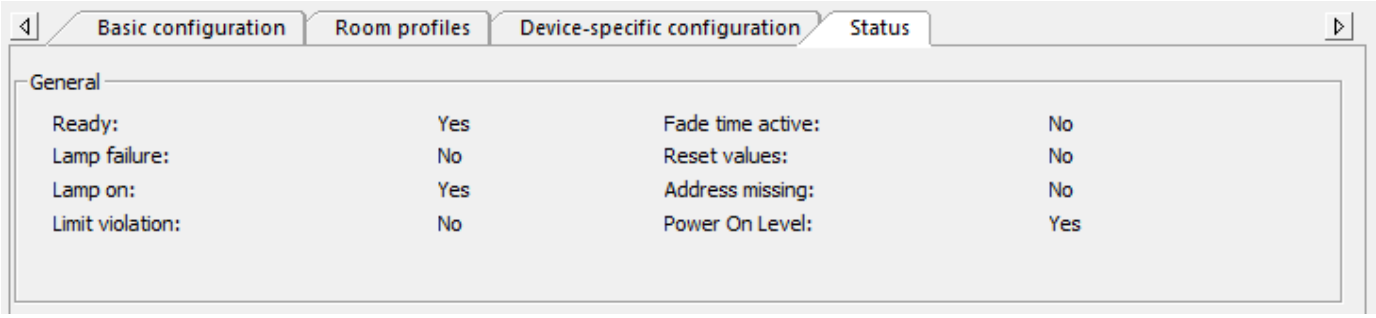
Configuration option	Description
Operating	Determines the settings for the operation mode: • **Standby:** If the basicDIM DGC module is switched off, the relay will switch off (after 10 minutes). If the basicDIM DGC is switched on, the relay will switch on. Switching: relay in standby mode • **onlyOFF:** The relay is switched on via momentary-action switch or remote control. The relay is switched off via the presence detector if no presence is detected. • **ON/OFF:** The relay is switched on or off via the presence detector. • **Relay output:** The relay can be used as 3rd output channel.
Delay time:	Determines the settings for the delay time. (In energy-saving mode the contact is opened after the delay time)  **Range of values:** • **1 s - 30 min**, default: 10 min **Note** Time parameters can be entered in seconds, but are partially rounded to a higher or lower value. The exact specifications fo Timing parameter 284.

Table 101: Configuration options for the "momentary-action switch" function

7.4.4 Status



The **Status** tab shows all status information which can be queried by the control gear.

Note
An overview of which functions are supported by the control gear can be found in the **Overview of functions** tab. This tab is only visible if **advanced settings** have been enabled.

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General status of control module

Status	Description
Ready	Indicates whether the DALI control gear is ready for communication.
Lamp failure	Indicates whether a lamp failure (short circuit, open circuit, load decrease or load increase) has occurred.
Lamp on	Indicates whether the lamp is on.
Limit violation	Indicates that the luminaire was unable to switch to a value, as this value was outside of the defined range (minimum level and maximum level).
Fade time active	Indicates whether a device is changing from one control value to another.
Reset values	Indicates whether the DALI control gear has been reset to the reset values.
Address missing	Indicates whether the DALI control gear is unaddressed.
Power On Level	Indicates whether the DALI control gear has gone to the Power On Level.

Table 102: Status information of the control module

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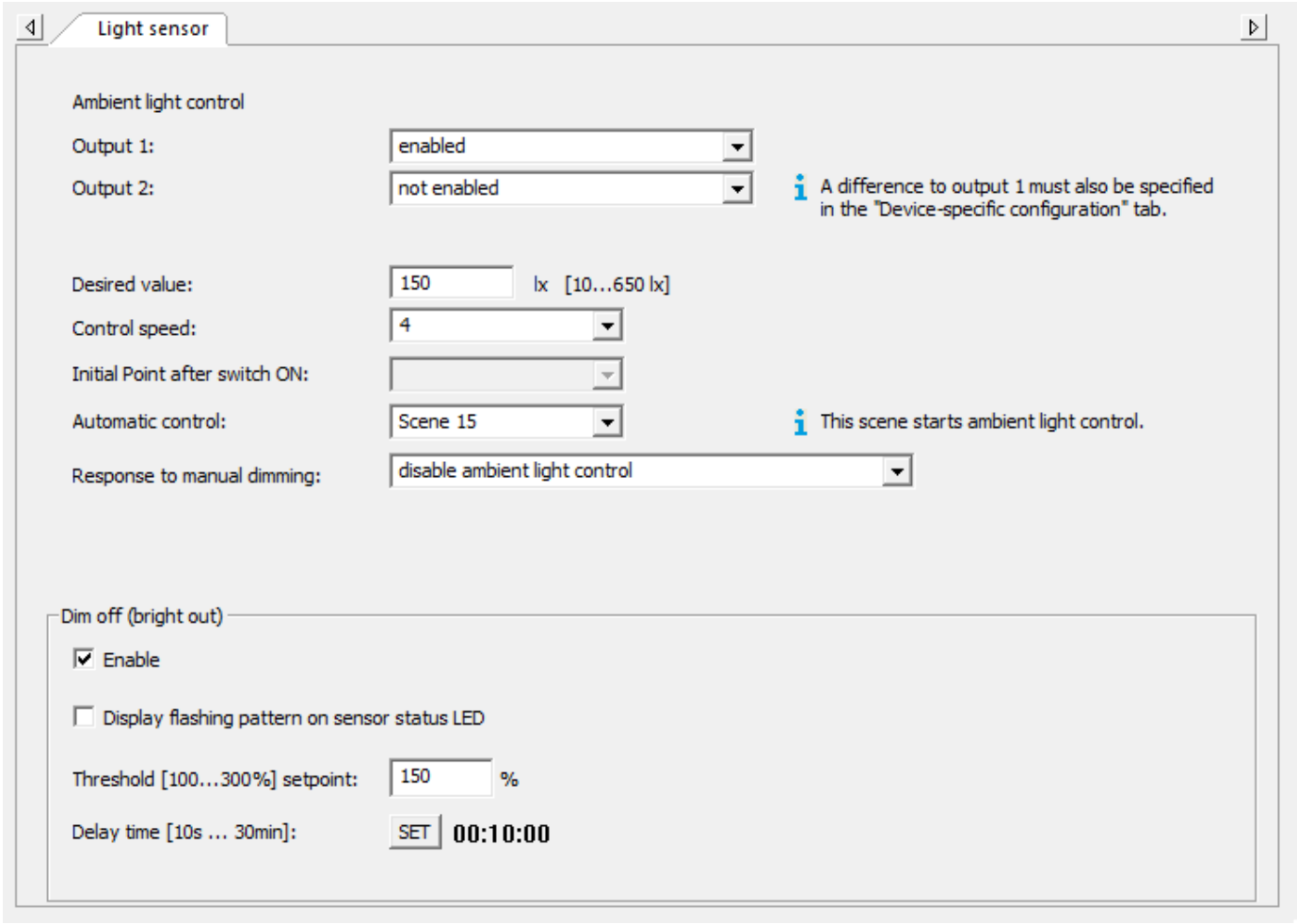
7.4.5 Light sensor

Note
If several sensors are connected to the DALI basicDIM DGC, all these sensors have the same settings.



Configuration options in direct master mode

The following configuration options are displayed for the light sensor in **direct master mode**:

Configuration option	Description
Ambient light control output 1:	Ambient light control can be **enabled** or **disabled**.
Ambient light control output 2:	**Available options:** • **not enabled** • **connected to output 1**
Desired value:	Value used by the light sensor to regulate the control gear. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher. **Value range:**

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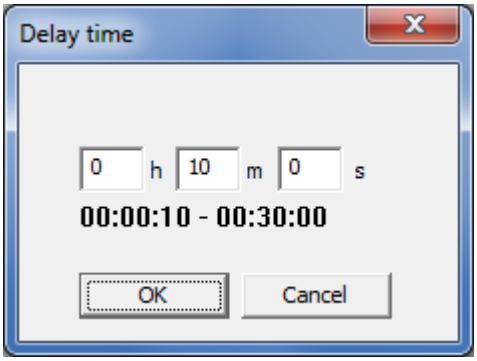
	• **10–650 lx**
Control speed:	Speed at which the control gear reaches the desired value. **Value range:** • increments **0–7**, with 0 being the slowest and 7 the fastest.
Automatic control:	Indicates the scene used to control the lighting based on whether presence is detected. If this scene is recalled the motion sensor is enabled and the luminaires are controlled based on whether presence is detected. **Value range:** • Scene **0 - 15** **Note** The scene selected here is identified in the **Basic configuration** as **automatic**.
Response to manual dimming:	**Available options:** • **disable ambient light control** • **permanent desired value change** • **temporary desired value change**
Enable dimming off (bright out)	Checkbox enabled: if the measured illuminance exceeds the defined **threshold** for a period longer than the set **delay time**, the luminaire group is switched off even if motion is detected in the room. As soon as the measured illuminance falls below the **desired value**, the luminaire group is switched on again.
Display flashing pattern on sensor status LED:	Checkbox enabled: Device status is displayed by a flashing pattern on sensor status LED.
Threshold	Value above which the luminaire group is switched off by the light sensor. **Value range:** • **100–300%** of the desired value
Delay time	Time during which the threshold must be exceeded in order for the luminaire group to be switched off by the light sensor.  **Value range:**

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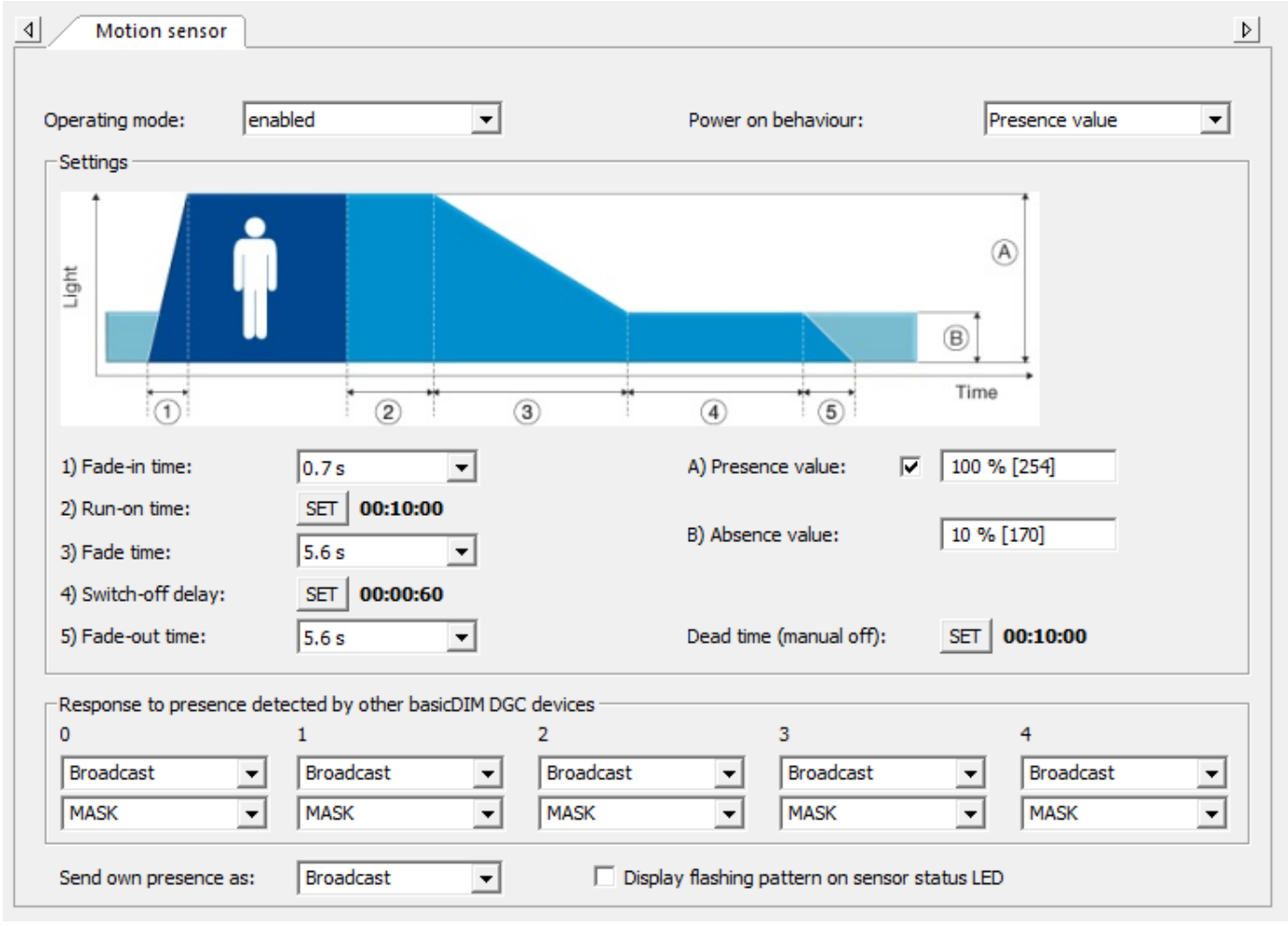
	• **10 s - 30 min** **Note** Time parameters can be entered in seconds, but are parti rounded to a higher or lower value. The exact specificatior Timing parameter 284.

Table 103: Light sensor configuration options in direct master mode

7.4.6 Motion sensor

Note
If several sensors are connected to the DALI basicDIM DGC, all these sensors have the same settings.



Configuration options

Configuration option	Description

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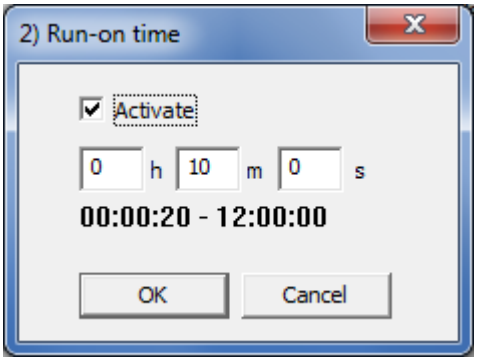
Operating mode	Motion sensor operating mode: • **enabled**: the lighting is automatically switched on and off depending on whether presence is detected. (factory setting) • **enabled (only OFF)**: the motion sensor switches the lighting off only. It must be switched on manually. • **disabled**: the motion sensor is disabled. The lighting must be switched on and off manually. **Note:** The **never OFF** function is implemented as follows: 1. Select the **enabled** operating mode. 2. Select switch-off delay **never OFF**.
Power on behaviour	Indicates how the motion sensor will react after failure of the DALI power supply: • **Standby** • **presence value**
Fade-in time	Time required to reach the **presence value**. **Value range:** • **fast** • **0.7–90.5 s**
Presence value	Value to which the luminaire group switches when presence is detected in the room. **Note** If the light regulation is active, the light will first switch to the **presence value**, but then the light regulation starts and dims the light up or down, depending on the measured lux level.
Run-on time	A time starting from the last detected movement in the room; when the run-on time expires, the **fade time** begins. If further movement is detected during the **run-on time**, it starts over again.  **Value range:** • **20 s - 12 h** • **adaptive:** The adaptive run-on time adapts the length of the run-on time automatically (between 4 and 20 min.) The length is calculated depending on the number of presence detections.

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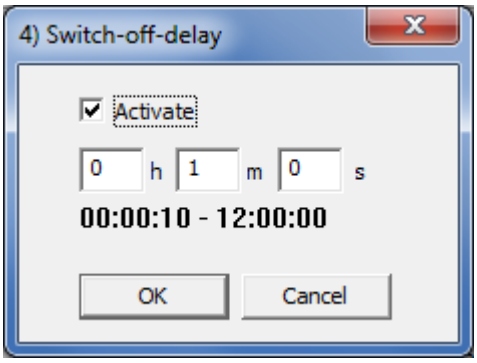
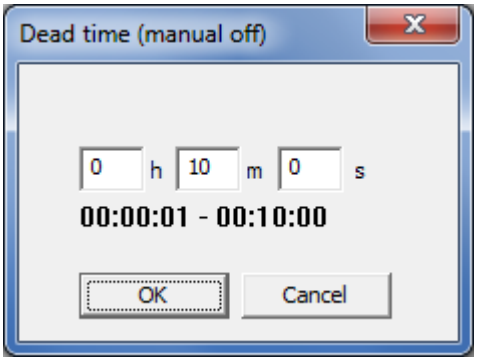
Fade time	Time during which the lighting is smoothly adjusted to the **absence value**. **Value range:** • **fast** • **0.7 – 90.5 s**
Switch-off delay	Time for which the **absence value** is maintained if no movement is detected.  **Value range:** • **10 s – 12 h** • **never OFF**: the lighting remains at the absence value until further movement is detected and the motion sensor switches to the **presence value**. The luminaire group is never switched off by the motion sensor.
Absence value	Level to which the luminaire group switches during the **switch-off delay**.
Fade-out time	Time required to dim off from the **absence value**. **Value range:** • **fast** • **0.7–90.5 s**
Dead time (manual off)	Time started by manually switching off the lighting via the momentary-action switch or the remote control and during which the motion sensor is disabled. If movement is detected in the room during this time, the dead time starts over again. If at the end of the dead time no more movement is detected in the room, the motion sensor is enabled again. 

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	Value range: • **1 s - 10 min** **Note** Time parameters can be entered in seconds, but are parti rounded to a higher or lower value. The exact specificatior Timing parameter 284.
Send own presence as	**Value range:** • **Group 0 - 15** • **Broadcast**
Note **Send own presence as** defines a unique group identifier for the basicDIM DGC. If the basicDIM DGC transmits information via the neighbourhood function, this group identifier is also transmitted. E.g. DGC is in DALI group 0, but it is possible that it sends his own presence as G5.	
Response to presence detected by other basicDIM DGC devices	This setting determines how the motion sensor responds when presence is detected in another group. Three settings in total can be configured. • **MASK**: the basicDIM DGC ignores the presence detected in another group (factory setting). • **Presence value**: the luminaire group assigned to the basicDIM DGC switches to the presence value. • **Absence value**: the luminaire group assigned to the basicDIM DGC switches to the absence value. Exception: if the luminaires are already at the presence value, they retain this setting.
Note It is possible to program the response for up to five groups. E.g. Response to G1, G2, G3, G4, G5.	
Note By default the basicDIM DGC will send information about its own presence as Broadcast command. If you program the neighbourhood function via the DGC programmer, this behaviour changes: The basicDIM DGC will start sending its own presence as Group 0 command and will only respond to presence detected in Group 0.	
Display flashing pattern on sensor status LED	Checkbox enabled: Device status is displayed by a flashing pattern on sensor status LED

Table 104: Motion sensor configuration options in direct master mode

Note
To apply the changed values, click on **save**. The saved configuration can now be tested directly in the field.

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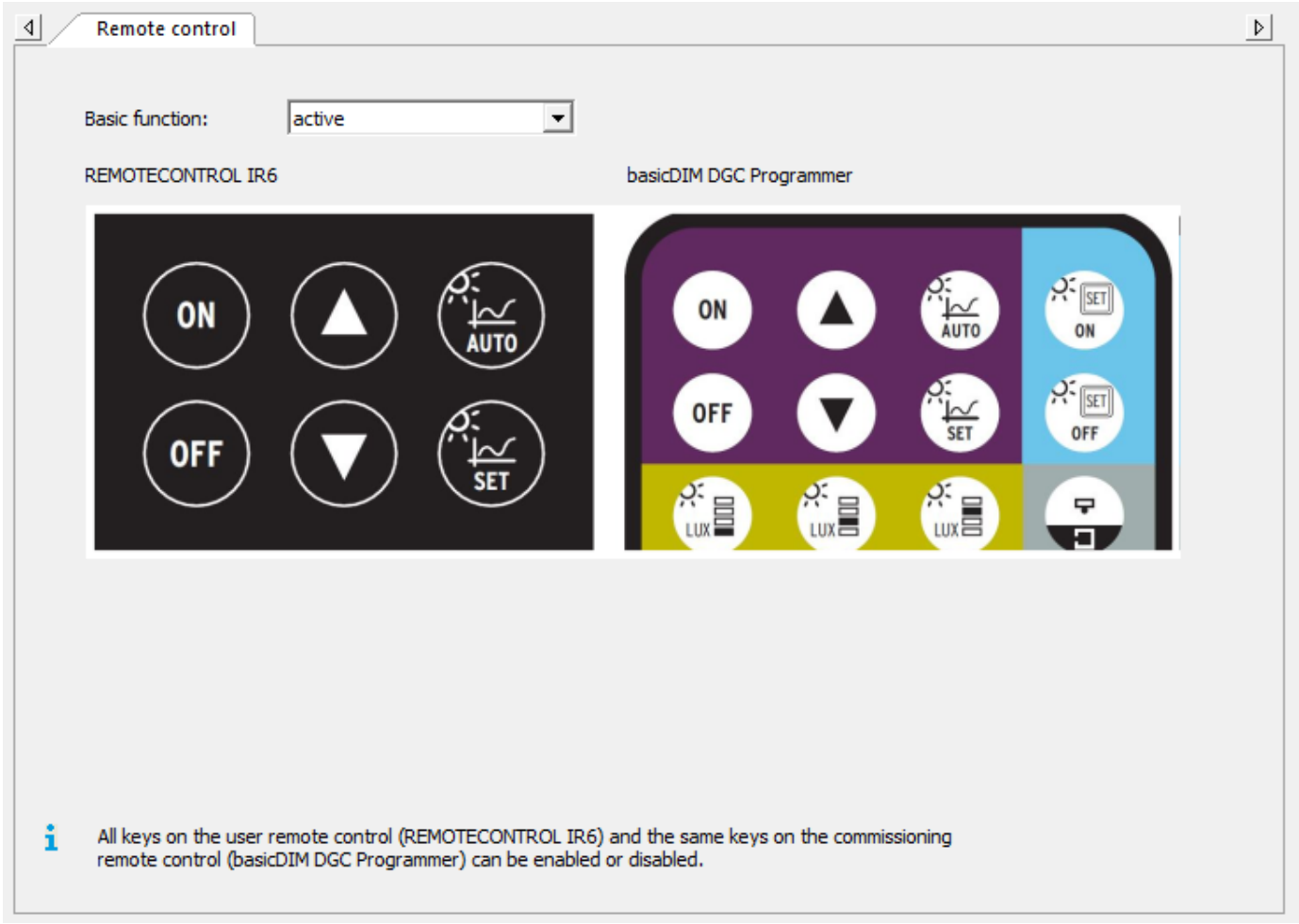
7.4.7 Remote control



Configuration options in direct master mode

The following device information is displayed for the remote control in **direct master mode**:

Configuration option	Description
Basic function	Operating functions of the remote controls: • **inactive**: the keys of the remote control are inactive. • **active:** the keys of the remote control are active.

Table 105: Remote control configuration options in direct master mode

7.5 DALI MSensor

The masterCONFIGURATOR can be used to configure the following versions of the DALI MSensor:

- MSensor 5DPI 14 209
- DALI MSensor 02 (version 2.0) 224
- DALI MSensor (version 1.5) 240
- DALI MSensor (version 1.3) 250

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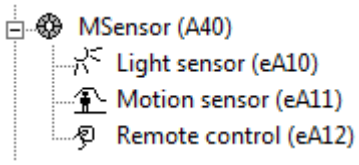
7.5.1 MSensor 5DPI 14

DALI MSensors are represented by four different symbols in the DALI device tree.



MSensor 5DPI 14 consists internally of three device classes, which are listed individually in the DALI device tree diagram:

- Light sensor: A detailed description of the light sensor can be found in Section **MSensor 5DPI 14 > Light sensor** 212 .
- Motion sensor: A detailed description of the motion sensor can be found in Section **MSensor 5DPI 14 > Motion sensor** 218.
- Remote control: A detailed description of the remote control can be found in Section **MSensor 5DPI 14 > Remote control** 222.

Group concept

The group assignment for the MSensor 5DPI 14 is displayed.

- **Luminaire group**: DALI group (G) containing the MSensor 5DPI 14. All devices in this group are controlled by the MSensor 5DPI 14.

The following groups are also displayed if advanced settings have been enabled:

- **Light sensor group**: eD group (eG) containing the light sensor.
- **Motion sensor group**: eD group (eG) containing the motion sensor.
- **Remote control group**: eD group (eG) containing the remote control.

Effective range

The MSensor 5DPI 14 controls either all devices (broadcast) or one DALI group.

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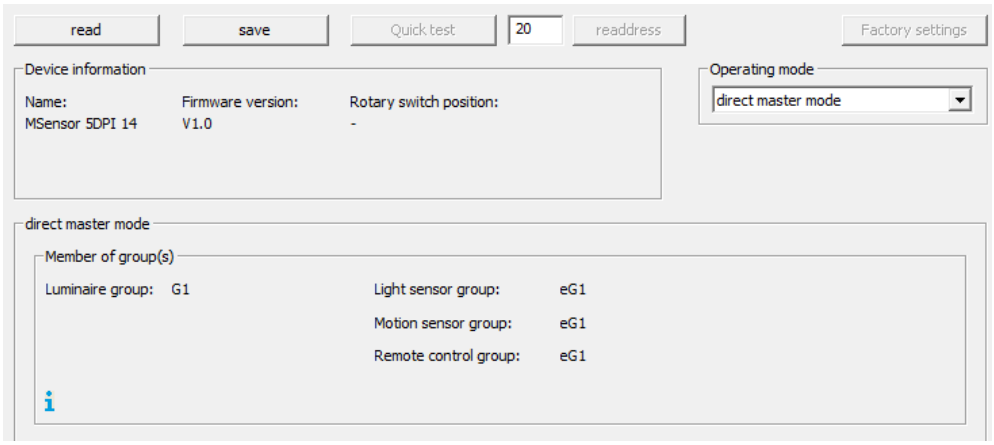
- **Assignment via the masterCONFIGURATOR**
  When the MSensor 5DPI 14 is not assigned to a group in the DALI device tree diagram, it controls all luminaire groups. To control an individual group the MSensor 5DPI 14 must be assigned to an individual group.

  1. In the DALI device tree diagram, click on the MSensor 5DPI 14 to be assigned to a group.
  2. Hold down the left mouse button.
  3. Drag the MSensor 5DPI 14 to the desired luminaire group. (Drag & Drop)
     ➲ The MSensor 5DPI 14 is removed from the individual (non-grouped) section of the DALI device tree diagram and is added to the desired luminaire group.



7 Configuration

Operating modes

The MSensor 5DPI 14 supports two operating modes. The operating mode can only be changed when the **advanced settings** are enabled.

Direct master mode (factory setting)

Function:	Master
Tasks:	• Send DALI commands to DALI control gear • Send eD commands to other MSensor 5DPI 14 devices
Addressing:	• The MSensor 5DPI 14 has one DALI address. • The light sensor, motion sensor and remote control each have one eD address.

Slave mode

Function:	Slave
Tasks:	• Respond to DALI and eD commands from a master device
Addressing:	• The MSensor 5DPI 14 has one DALI address. • The light sensor, motion sensor and remote control each have one eD address.

Note
In **slave mode** the rotary switch on the back of the MSensor 5DPI 14 does not have a function.

7 Configuration

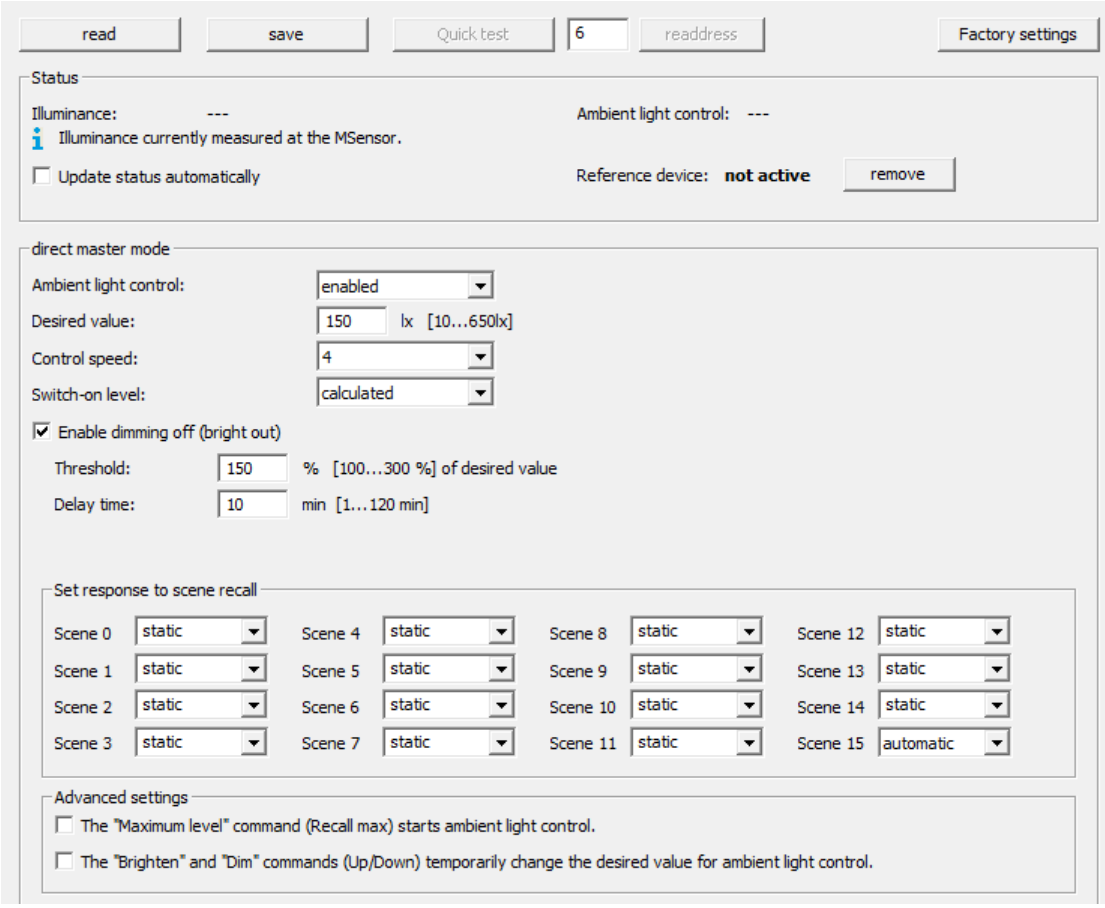
Light sensor

The light sensor supports two operating modes:

- **Direct master mode**
- **Slave mode**: the light sensor cannot be configured in this operating mode. The light sensor just responds to commands from the master device.

Note
More information on these operating modes can be found in Section MSensor 5DPI 14 209.

Direct master mode



7 Configuration

Status in direct master mode

The following status information is displayed for the light sensor in **direct master mode**:

Status	Description
Illuminance	Illuminance currently measured at the light sensor. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher.
Update status automatically	Indicates whether the light sensor status is updated automatically.
Ambient light control	Indicates the status of ambient light control for the light sensor. • **enabled**: ambient light control is enabled. • **temporarily disabled**: ambient light control has been temporarily disabled manually by the user. • **disabled**: ambient light control is disabled. • **unknown**: there is currently no connection to the light sensor.
Reference device	Indicates the DALI control gear used as a reference for calculating the switch-on level during ambient light control. If no reference device has been assigned to the light sensor, **no device** will be displayed. **Note:** Section Reference device 217 explains how a reference device is assigned.

Table 106: Light sensor status information in direct master mode

Configuration options in direct master mode

The following configuration options are displayed for the light sensor in **direct master mode**:

Configuration option	Description
Ambient light control	Ambient light control can be **enabled** or **disabled**.
Desired value	Value used by the light sensor to regulate the control gear. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher. **Value range:** • **5–500 lx**
Control speed	Speed at which the control gear reaches the desired value. **Value range:** • increments **0–7**, with 0 being the slowest and 7 the fastest.

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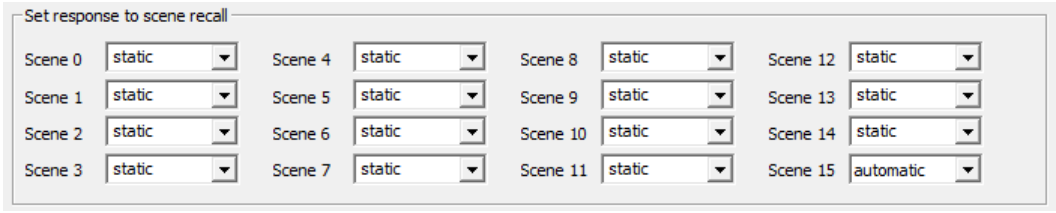
Switch-on level	Level when the lighting is switched on. Ambient light control starts from this value. • **Minimum level** • **Maximum level** • **calculated**: the switch-on level for ambient light control is specially calculated so that it is as close to the desired value as possible.
Enable dimming off (bright out)	Checkbox enabled: if the measured illuminance exceeds the defined **threshold** for a period longer than the set **delay time**, the luminaire group is switched off by the light sensor even if motion is detected in the room. As soon as the measured illuminance falls below the **desired value**, the luminaire group is switched on again.
Threshold	Value above which the luminaire group is switched off by the light sensor. **Value range:** • **100–300%** of the desired value
Delay time	Time during which the threshold must be exceeded in order for the luminaire group to be switched off by the light sensor. **Value range:** • **1–120 min**

Table 107: Light sensor configuration options in direct master mode

7 Configuration

Setting the response of the MSensor 5DPI 14 to a scene recall

In the detail view of the MSensor 5DPI 14 its response to a scene recall can be set.



A response can be configured for each of the 16 scenes. The following configuration options are available:

Configuration	Light sensor	Motion sensor
automatic	The luminaire group assigned to the light sensor switches to the presence value. Ambient light control is enabled.	• Motion sensor disabled: the motion sensor is enabled. The run-on time starts over. • Motion sensor enabled: the run-on time starts over.
static	The luminaire group assigned to the light sensor switches to the intensity set in the control gear for the scene in question. If ambient light control was enabled before the scene was recalled, it is temporarily (according to the run-on time) disabled.	• Motion sensor disabled: the motion sensor is enabled. The run-on time starts over. • Motion sensor enabled: the run-on time starts over.
off	The luminaire group assigned to the light sensor is switched off.	The motion sensor switches to status **Dead time (manual off) in progress**.
MASK	The light sensor ignores the scene recall.	The motion sensor ignores the scene recall.

Table 108: Response of the DALI MSensor 02 to a scene recall

Note
If the response to a scene recall is set to **automatic**, **off** or **MASK**, the **MASK** value for this scene must be set for all control gear elements.
Information on how scenes are configured can be found in Section DALI control gear > Configuration via the detail view 40.

Advanced settings in direct master mode

The following advanced settings are displayed for the light sensor in **direct master mode** if ambient light control has been enabled.

Advanced settings	Description
The "Maximum level" command starts ambient light control.	• Checkbox disabled: after the **Maximum level** command is received, the luminaire group switches to the maximum level until the run-on time for the motion sensor has expired. If ambient light control was enabled before the

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	Maximum level command was received, it is temporarily disabled. • Checkbox enabled: after the **Maximum level** command is received, the luminaire group switches to the maximum level. Ambient light control is started.
The "Brighten" and "Dim" commands temporarily change the desired value for ambient light control.	• Checkbox disabled: after a **Brighten** or **Dim** command is received, the luminaire group is smoothly adjusted accordingly. The desired value for ambient light control remains unchanged. • Checkbox enabled: after a **Brighten** or **Dim** command is received, the luminaire group is smoothly adjusted accordingly. The measured illuminance on the DALI MSensor after smooth adjustment is temporarily saved as a new desired value for ambient light control. The desired value is reset once the run-on time has expired or an OFF command is received.

Table 109: Light sensor advanced settings in direct master mode

Note
To apply the changed values to the light sensor, click on **save**. The saved configuration can now be tested directly in the DALI installation.

7 Configuration

Reference device

The light sensor requires a reference device in order to exactly calculate the switch-on level for ambient light control. A reference device is a DALI control gear element located in the same group as the MSensor 5DPI 14.

Note
The masterCONFIGURATOR automatically adds the first DALI control gear element located in the same group as the MSensor 5DPI 14 as a reference device. If another DALI control gear element is desired for use as a reference device, remove the reference device and add the desired DALI control gear element again.

Removing a reference device

Requirement:
– **Advanced settings** enabled.

▷ Click **Remove** in the detail view of the light sensor.
➲ The reference device is removed.

Adding a reference device

Requirement:
– MSensor 5DPI 14 has been assigned to a DALI group.

1. In the DALI device tree diagram, click on the device to be assigned to a group.
2. Hold down the left mouse button.
3. Drag the device to the desired group. (Drag & Drop)
   ➲ The device is removed from the group in which it was previously located and is added to the desired group.
   ➲ The address of the DALI control gear element is automatically displayed as the reference device in the MSensor 5DPI 14.

Note
If the DALI control gear element used as a reference device by the MSensor 5DPI 14 (or the MSensor 5DPI 14 itself) is deleted from the DALI group, the information for the reference device in the MSensor 5DPI 14 is also deleted. For **Reference device** the following appears: **none**.

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Motion sensor

The motion sensor supports two operating modes:

- **Direct master mode**
- **Slave mode**: the motion sensor cannot be configured in this operating mode. The motion sensor just responds to commands from the master device.

> **Note**
> More information on these operating modes can be found in Section MSensor 5DPI 14 209.

Direct master mode

Status in direct master mode

The following status information is displayed for the motion sensor in **direct master mode**:

Status	Description
Motion sensor	Indicates the status of the motion sensor: • **Off** • **Lighting at presence value**

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	• **Lighting at presence value, run-on time in progress** • **Lighting fading to absence value, fade time in progress** • **Lighting at absence value** • **Lighting at absence value, switch-off delay in progress** • **Dead time (manual off) in progress**
Update status automatically	Indicates whether the motion sensor status is updated automatically.

Table 110: Motion sensor status information in direct master mode

Configuration options in direct master mode

The following configuration options are displayed for the motion sensor in **direct master mode**:

Configuration option	Description
Operating mode	Motion sensor operating mode: • **enabled**: the lighting is automatically switched on and off depending on whether presence is detected. (factory setting) • **enabled (only OFF)**: the motion sensor switches the lighting off only. It must be switched on manually. • **disabled**: the motion sensor is disabled. The lighting must be switched on and off manually. **Note:** The **never OFF** function is implemented as follows: 1. Select the **enabled** operating mode. 2. Select switch-off delay **never OFF**.
Power on behaviour	Indicates how the motion sensor will react after failure of the DALI power supply: • **no action** • **last state** • **maximum level** • **off** • **presence value**: specially calculated value for ambient light control.
Fade-in time	Time required to reach the **presence value**. **Value range:** • **fast** • **0.7–90.5 s**
Presence value	Value to which the luminaire group switches when presence is detected in the room. The presence value control depends on how the light sensor is configured. • **ambient light-controlled**: If ambient light control is enabled for the light sensor, the presence value is regulated based on ambient light levels. • **fixed**: If ambient light control is disabled for the light sensor, a value can be set as a percentage between 0–100%.

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Run-on time	A time starting from the last detected movement in the room; when the run-on time expires, the **fade time** begins. If further movement is detected during the **run-on time**, it starts over again. **Value range:** • **30 s – 60 min** • **infinite**: the **run-on time** continues without end. This means that the luminaires remain at the defined **presence value** (**ambient light-controlled** or **fixed**). The **fade time** does not start.
Fade time	Time during which the lighting is smoothly adjusted to the **absence value**. **Value range:** • **fast** • **0.7 – 90.5 s**
Switch-off delay	Time for which the **absence value** is maintained if no movement is detected. **Value range:** • **0 s – 60 min** • **never OFF**: the lighting remains at the absence value until further movement is detected and the motion sensor switches to the **presence value**. The luminaire group is never switched off by the motion sensor.
Absence value	Level to which the luminaire group switches during the **switch-off delay**.
Fade-out time	Time required to dim off from the **absence value**. **Value range:** • **fast** • **0.7–90.5 s**
Dead time (manual off)	Time started by manually switching off the lighting via the momentary-action switch or the remote control and during which the motion sensor is disabled. If movement is detected in the room during this time, the dead time starts over again. If at the end of the dead time no more movement is detected in the room, the motion sensor is enabled again. **Value range:** • **0 s – 20 min**

Table 111: Motion sensor configuration options in direct master mode

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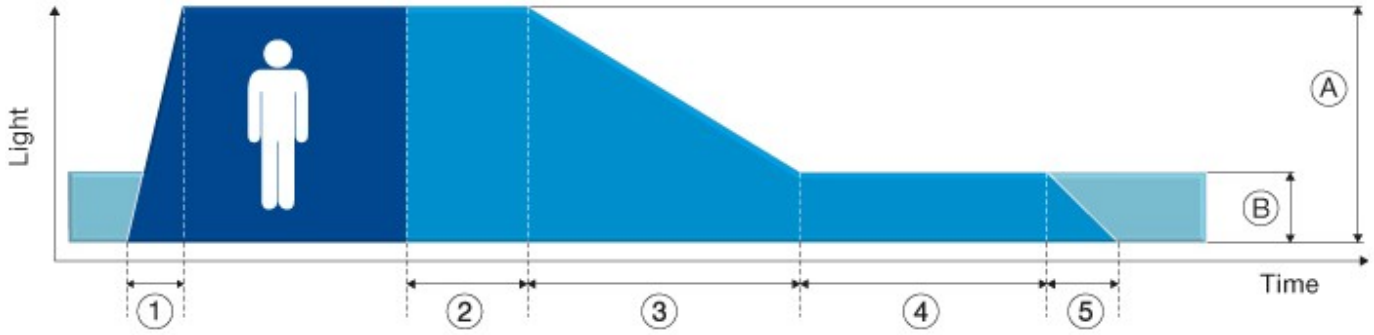
Overview of configuration options

The following figure shows a summary of the individual parameters.



1) Fade-in time
2) Run-on time
3) Fade time
4) Switch-off delay
5) Fade-out time

A) Presence value
B) Absence value

Advanced settings in direct master mode

The following advanced settings are displayed for the motion sensor in **direct master mode**:

Advanced settings	Description
Set response to presence in other groups	This setting determines how the motion sensor responds when presence is detected in another group. Four groups in total can be configured. • **MASK**: the DALI MSensor 02 ignores the presence detected in another group (factory setting). • **Presence value**: the luminaire group assigned to the DALI MSensor 02 switches to the presence value. • **Absence value**: the luminaire group assigned to the DALI MSensor 02 switches to the absence value. Exception: if the luminaires are already at the presence value, they retain this setting.

Table 112: Motion sensor advanced settings in direct master mode

Note
To apply the changed values to the motion sensor, click on **save**. The saved configuration can now be tested directly in the DALI installation.

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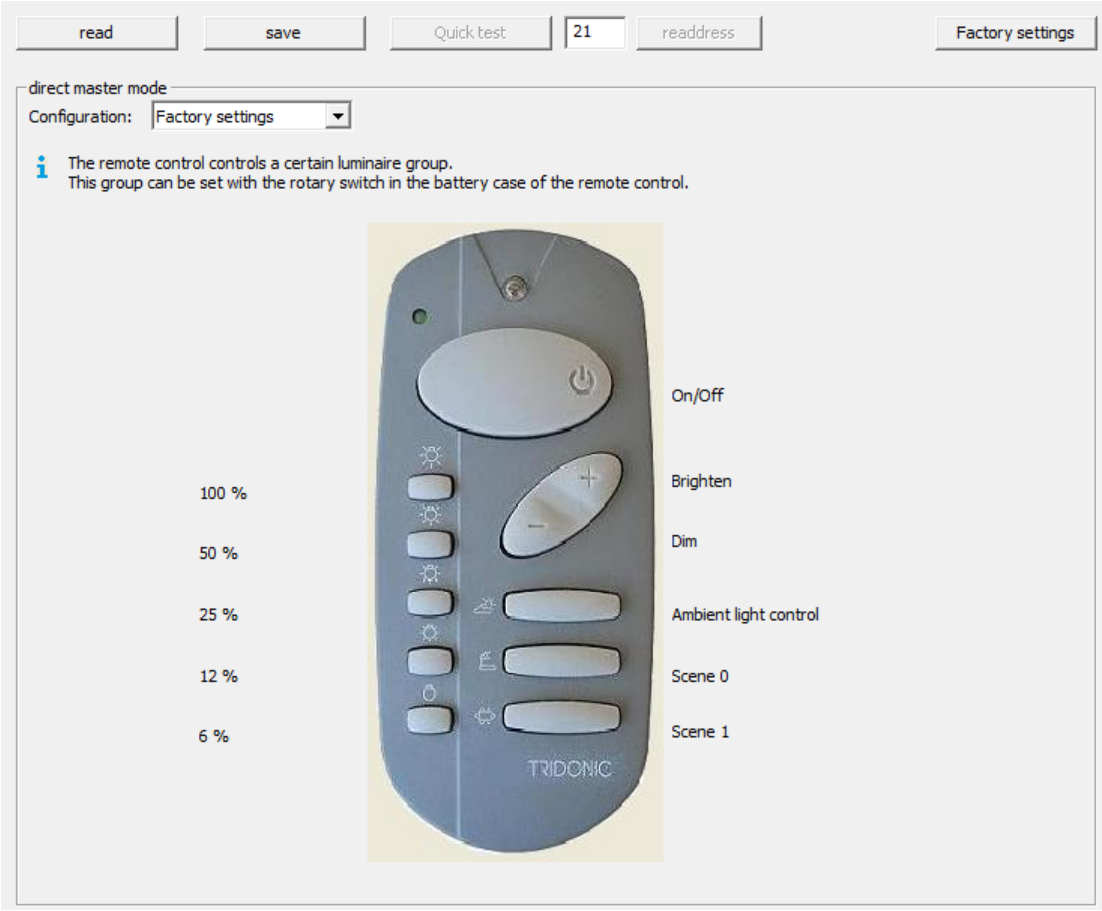
Remote control

The remote control supports two operating modes:

- **Direct master mode**
- **Slave mode**: the remote control cannot be configured in this operating mode. The remote control has no function.

> **Note**
> More information on these operating modes can be found in Section MSensor 5DPI 14 209.

Direct master mode



Configuration options in direct master mode

The following device information is displayed for the remote control in **direct master mode**:

Configuration option	Description
Configuration	Configuration of the remote control: • **Inactive**: the keys of the remote control are inactive. • **Factory settings**: the remote control keys are assigned with default settings. The luminaire group is set using the

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	rotary switch in the battery compartment of the remote control. • **user-defined**: the keys of the remote control can be assigned to selected functions.

Table 113: Remote control configuration options in direct master mode

Parameterising the key assignment

With the **user-defined** configuration, the key assignment of the remote control can be parameterised by the user.

Note
If key assignment is customised, the group assignment as defined by the rotary switch in the battery compartment of the remote control is ignored. The commands only apply to the luminaire group set directly on the rotary switch on the DALI MSensor 02.

Depending on the key, various configuration options are available:

- **On**
- **Off**
- **On/Off**
- **Brighten**
- **Dim**
- **Scene 0–15**
- **Intensity 1–100%**
- **Ambient light control**
- **Reserved**: this option is reserved for future functional enhancements and currently has no function.

Note
To apply the changed values to the remote control, click on **save**. The saved configuration can now be tested directly in the DALI installation.

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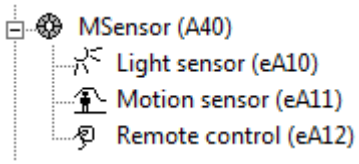
7.5.2 DALI MSensor 02 (version 2.0)

DALI MSensors are represented by four different symbols in the DALI device tree.



DALI MSensor 02 consists internally of three device classes, which are listed individually in the DALI device tree diagram:

- Light sensor: A detailed description of the light sensor can be found in Section DALI MSensor 02 (V2.0) > Light sensor 227.
- Motion sensor: A detailed description of the motion sensor can be found in Section DALI MSensor 02 (V2.0) > Motion sensor 233.
- Remote control: A detailed description of the remote control can be found in Section DALI MSensor 02 (V2.0) > Remote control 237.

Group concept

The group assignment for the DALI MSensor 02 is displayed.

- **Luminaire group**: DALI group (G) containing the DALI MSensor 02. All devices in this group are controlled by the DALI MSensor 02.

The following groups are also displayed if advanced settings have been enabled:

- **Light sensor group**: eD group (eG) containing the light sensor.
- **Motion sensor group**: eD group (eG) containing the motion sensor.
- **Remote control group**: eD group (eG) containing the remote control.

Effective range

The DALI MSensor 02 controls either all devices (broadcast) or one DALI group.

- **Assignment via the rotary switch**
  The effective range of the DALI MSensor 02 is set using the rotary switch on the back of the sensor. All control gear elements in the set effective range are controlled by the DALI MSensor 02.

Position of the rotary switch on the DALI MSensor 02	Effective range
0	All (broadcast)
1	Group 0
2	Group 1
3–9	Groups 2–8
A–F	Groups 9–14

Table 114: Position of the rotary switch on the DALI MSensor 02 and its corresponding effective range

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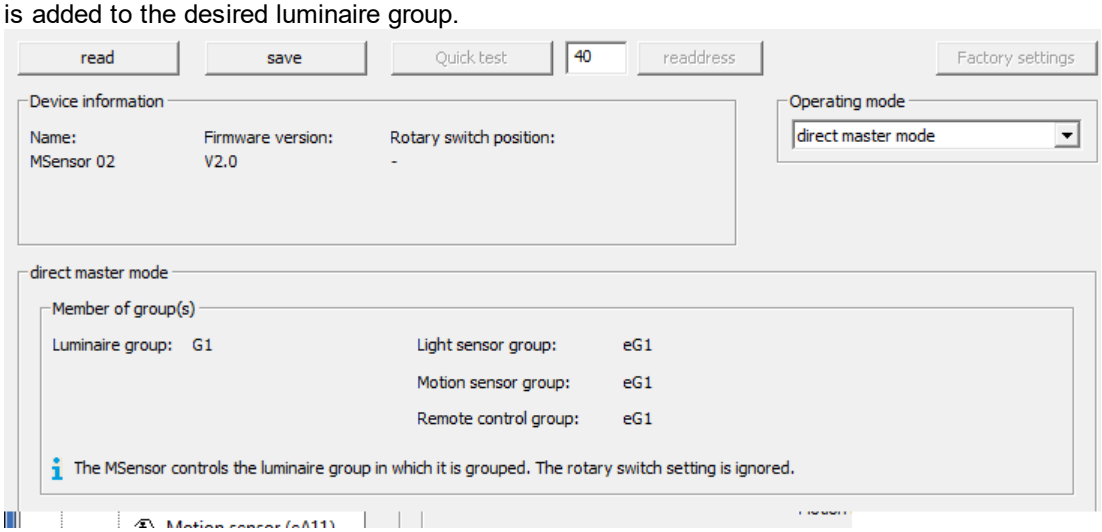
- **Assignment via the masterCONFIGURATOR**
  When the DALI MSensor 02 is not assigned to a group in the DALI device tree diagram, it controls the luminaire group set using the rotary switch on the back of the sensor. It must be assigned to a group to control an individual group.

  1. In the DALI device tree diagram, click on the DALI MSensor 02 to be assigned to a group.
  2. Hold down the left mouse button.
  3. Drag the DALI MSensor 02 to the desired luminaire group. (Drag & Drop)
     ➲ The DALI MSensor 02 is removed from the individual (non-grouped) section of the DALI device tree diagram and is added to the desired luminaire group.



Note
The position of the rotary switch on the back of the DALI MSensor 02 is ignored. If the group assignment in the masterCONFIGURATOR is undone, the rotary switch position will be active again.

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Operating modes

The DALI MSensor 02 supports two operating modes. The operating mode can only be changed when the **advanced settings** are enabled.

Direct master mode (factory setting)

Function:	Master
Tasks:	• Send DALI commands to DALI control gear • Send eD commands to other DALI MSensor 02 devices
Addressing:	• The DALI MSensor 02 has one DALI address. • The light sensor, motion sensor and remote control each have one eD address.

Slave mode

Function:	Slave
Tasks:	• Respond to DALI and eD commands from a master device
Addressing:	• The DALI MSensor 02 has one DALI address. • The light sensor, motion sensor and remote control each have one eD address.

Note
In **slave mode** the rotary switch on the back of the DALI MSensor 02 does not have a function.

7 Configuration

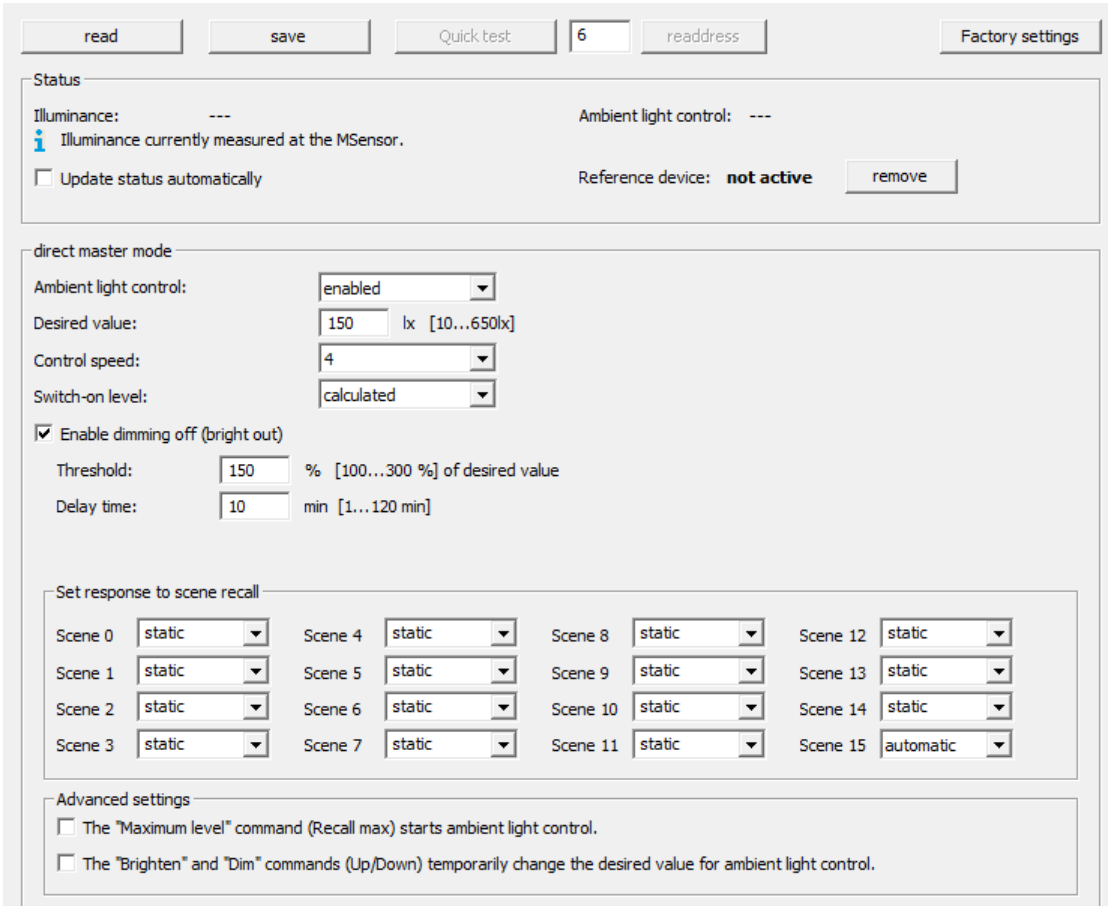
Light sensor

The light sensor supports two operating modes:

- **Direct master mode**
- **Slave mode**: the light sensor cannot be configured in this operating mode. The light sensor just responds to commands from the master device.

Note
More information on these operating modes can be found in Section DALI MSensor 02 224.

Direct master mode



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Status in direct master mode

The following status information is displayed for the light sensor in **direct master mode**:

Status	Description
Illuminance	Illuminance currently measured at the light sensor. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher.
Update status automatically	Indicates whether the light sensor status is updated automatically.
Ambient light control	Indicates the status of ambient light control for the light sensor. • **enabled**: ambient light control is enabled. • **temporarily disabled**: ambient light control has been temporarily disabled manually by the user. • **disabled**: ambient light control is disabled. • **unknown**: there is currently no connection to the light sensor.
Reference device	Indicates the DALI control gear used as a reference for calculating the switch-on level during ambient light control. If no reference device has been assigned to the light sensor, **no device** will be displayed. **Note:** Section Reference device 232 explains how a reference device is assigned.

Table 115: Light sensor status information in direct master mode

Configuration options in direct master mode

The following configuration options are displayed for the light sensor in **direct master mode**:

Configuration option	Description
Ambient light control	Ambient light control can be **enabled** or **disabled**.
Desired value	Value used by the light sensor to regulate the control gear. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher. **Value range:** • **5–500 lx**
Control speed	Speed at which the control gear reaches the desired value. **Value range:** • increments **0–7**, with 0 being the slowest and 7 the fastest.

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Switch-on level	Level when the lighting is switched on. Ambient light control starts from this value. • **Minimum level** • **Maximum level** • **calculated**: the switch-on level for ambient light control is specially calculated so that it is as close to the desired value as possible.
Enable dimming off (bright out)	Checkbox enabled: if the measured illuminance exceeds the defined **threshold** for a period longer than the set **delay time**, the luminaire group is switched off by the light sensor even if motion is detected in the room. As soon as the measured illuminance falls below the **desired value**, the luminaire group is switched on again.
Threshold	Value above which the luminaire group is switched off by the light sensor. **Value range:** • **100–300%** of the desired value
Delay time	Time during which the threshold must be exceeded in order for the luminaire group to be switched off by the light sensor. **Value range:** • **1–120 min**

Table 116: Light sensor configuration options in direct master mode

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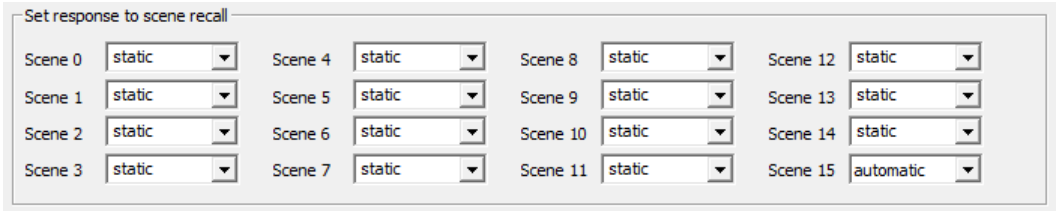
Setting the response of the DALI MSensor 02 to a scene recall

In the detail view of the DALI MSensor 02 its response to a scene recall can be set.



A response can be configured for each of the 16 scenes. The following configuration options are available:

Configuration	Light sensor	Motion sensor
automatic	The luminaire group assigned to the light sensor switches to the presence value. Ambient light control is enabled.	• Motion sensor disabled: the motion sensor is enabled. The run-on time starts over. • Motion sensor enabled: the run-on time starts over.
static	The luminaire group assigned to the light sensor switches to the intensity set in the control gear for the scene in question. If ambient light control was enabled before the scene was recalled, it is temporarily disabled.	• Motion sensor disabled: the motion sensor is enabled. The run-on time starts over. • Motion sensor enabled: the run-on time starts over.
off	The luminaire group assigned to the light sensor is switched off.	The motion sensor switches to status **Dead time (manual off) in progress**.
MASK	The light sensor ignores the scene recall.	The motion sensor ignores the scene recall.

Table 117: Response of the DALI MSensor 02 to a scene recall

Note
If the response to a scene recall is set to **automatic**, **off** or **MASK**, the **MASK** value for this scene must be set for all control gear elements.
Information on how scenes are configured can be found in Section DALI control gear > Configuration via the detail view 40.

Advanced settings in direct master mode

The following advanced settings are displayed for the light sensor in **direct master mode** if ambient light control has been enabled.

Advanced settings	Description
The "Maximum level" command starts ambient light control.	• Checkbox disabled: after the **Maximum level** command is received, the luminaire group switches to the maximum level until the run-on time for the motion sensor has expired. If ambient light control was enabled before the **Maximum level** command was received, it is temporarily disabled.

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	• Checkbox enabled: after the **Maximum level** command is received, the luminaire group switches to the maximum level. Ambient light control is started.
The "Brighten" and "Dim" commands temporarily change the desired value for ambient light control.	• Checkbox disabled: after a **Brighten** or **Dim** command is received, the luminaire group is smoothly adjusted accordingly. The desired value for ambient light control remains unchanged. • Checkbox enabled: after a **Brighten** or **Dim** command is received, the luminaire group is smoothly adjusted accordingly. The measured illuminance on the DALI MSensor after smooth adjustment is temporarily saved as a new desired value for ambient light control. The desired value is reset once the run-on time has expired or an OFF command is received.

Table 118: Light sensor advanced settings in direct master mode

Note
To apply the changed values to the light sensor, click on **save**. The saved configuration can now be tested directly in the DALI installation.

7 Configuration

Reference device

The light sensor requires a reference device in order to exactly calculate the switch-on level for ambient light control. A reference device is a DALI control gear element located in the same group as the DALI MSensor.

Note
The masterCONFIGURATOR automatically adds the first DALI control gear element located in the same group as the DALI MSensor as a reference device. If another DALI control gear element is desired for use as a reference device, remove the reference device and add the desired DALI control gear element again.

Removing a reference device

Requirement:
– **Advanced settings** enabled.

▷ Click **Remove** in the detail view of the light sensor.
➲ The reference device is removed.

Adding a reference device

Requirement:
– DALI MSensor has been assigned to a DALI group.

1. In the DALI device tree diagram, click on the device to be assigned to a group.
2. Hold down the left mouse button.
3. Drag the device to the desired group. (Drag & Drop)
   ➲ The device is removed from the group in which it was previously located and is added to the desired group.
   ➲ The address of the DALI control gear element is automatically displayed as the reference device in the DALI MSensor.

Note
If the DALI control gear element used as a reference device by the DALI MSensor (or the DALI MSensor itself) is deleted from the DALI group, the information for the reference device in the DALI MSensor is also deleted. For **Reference device** the following appears: **none**.

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Motion sensor

The motion sensor supports two operating modes:

- **Direct master mode**
- **Slave mode**: the motion sensor cannot be configured in this operating mode. The motion sensor just responds to commands from the master device.

Note
More information on these operating modes can be found in Section DALI MSensor 02 224.

Direct master mode

Status in direct master mode

The following status information is displayed for the motion sensor in **direct master mode**:

Status	Description
Motion sensor	Indicates the status of the motion sensor: • **Off** • **Lighting at presence value**

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	• **Lighting at presence value, run-on time in progress** • **Lighting fading to absence value, fade time in progress** • **Lighting at absence value** • **Lighting at absence value, switch-off delay in progress** • **Dead time (manual off) in progress**
Update status automatically	Indicates whether the motion sensor status is updated automatically.

Table 119: Motion sensor status information in direct master mode

Configuration options in direct master mode

The following configuration options are displayed for the motion sensor in **direct master mode**:

Configuration option	Description
Operating mode	Motion sensor operating mode: • **enabled**: the lighting is automatically switched on and off depending on whether presence is detected. (factory setting) • **enabled (only OFF)**: the motion sensor switches the lighting off only. It must be switched on manually. • **disabled**: the motion sensor is disabled. The lighting must be switched on and off manually. **Note:** The **never OFF** function is implemented as follows: 1. Select the **enabled** operating mode. 2. Select switch-off delay **never OFF**.
Power on behaviour	Indicates how the motion sensor will react after failure of the DALI power supply: • **no action** • **last state** • **maximum level** • **off** • **presence value**: specially calculated value for ambient light control.
Fade-in time	Time required to reach the **presence value**. **Value range:** • **fast** • **0.7–90.5 s**
Presence value	Value to which the luminaire group switches when presence is detected in the room. The presence value control depends on how the light sensor is configured. • **ambient light-controlled**: If ambient light control is enabled for the light sensor, the presence value is regulated based on ambient light levels. • **fixed**: If ambient light control is disabled for the light sensor, a value can be set as a percentage between 0–100%.

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Run-on time	A time starting from the last detected movement in the room; when the run-on time expires, the **fade time** begins. If further movement is detected during the **run-on time**, it starts over again. **Value range:** • **30 s – 60 min** • **infinite**: the **run-on time** continues without end. This means that the luminaires remain at the defined **presence value** (**ambient light-controlled** or **fixed**). The **fade time** does not start.
Fade time	Time during which the lighting is smoothly adjusted to the **absence value**. **Value range:** • **fast** • **0.7 – 90.5 s**
Switch-off delay	Time for which the **absence value** is maintained if no movement is detected. **Value range:** • **0 s – 60 min** • **never OFF**: the lighting remains at the absence value until further movement is detected and the motion sensor switches to the **presence value**. The luminaire group is never switched off by the motion sensor.
Absence value	Level to which the luminaire group switches during the **switch-off delay**.
Fade-out time	Time required to dim off from the **absence value**. **Value range:** • **fast** • **0.7–90.5 s**
Dead time (manual off)	Time started by manually switching off the lighting via the momentary-action switch or the remote control and during which the motion sensor is disabled. If movement is detected in the room during this time, the dead time starts over again. If at the end of the dead time no more movement is detected in the room, the motion sensor is enabled again. **Value range:** • **0 s – 20 min**

Table 120: Motion sensor configuration options in direct master mode

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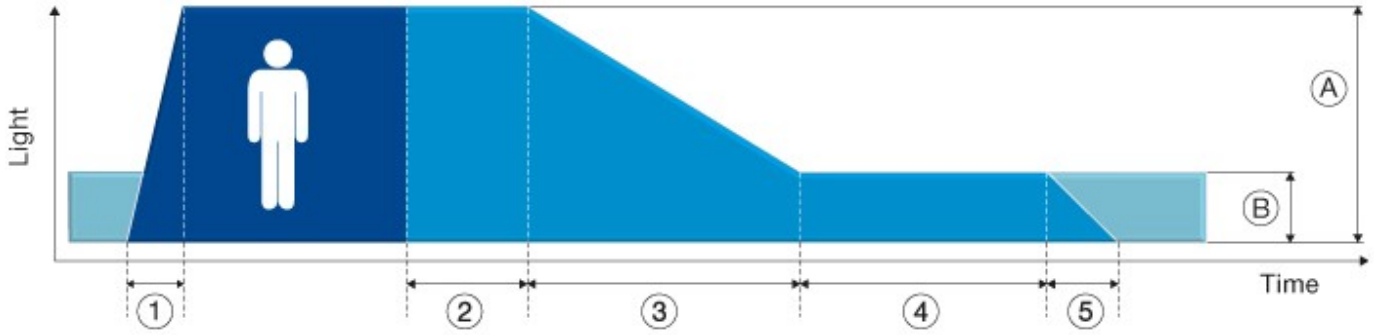
Overview of configuration options

The following figure shows a summary of the individual parameters.



1) Fade-in time
2) Run-on time
3) Fade time
4) Switch-off delay
5) Fade-out time

A) Presence value
B) Absence value

Advanced settings in direct master mode

The following advanced settings are displayed for the motion sensor in **direct master mode**:

Advanced settings	Description
Set response to presence in other groups	This setting determines how the motion sensor responds when presence is detected in another group. Four groups in total can be configured. • **MASK**: the DALI MSensor 02 ignores the presence detected in another group (factory setting). • **Presence value**: the luminaire group assigned to the DALI MSensor 02 switches to the presence value. • **Absence value**: the luminaire group assigned to the DALI MSensor 02 switches to the absence value. Exception: if the luminaires are already at the presence value, they retain this setting.

Table 121: Motion sensor advanced settings in direct master mode

Note
To apply the changed values to the motion sensor, click on **save**. The saved configuration can now be tested directly in the DALI installation.

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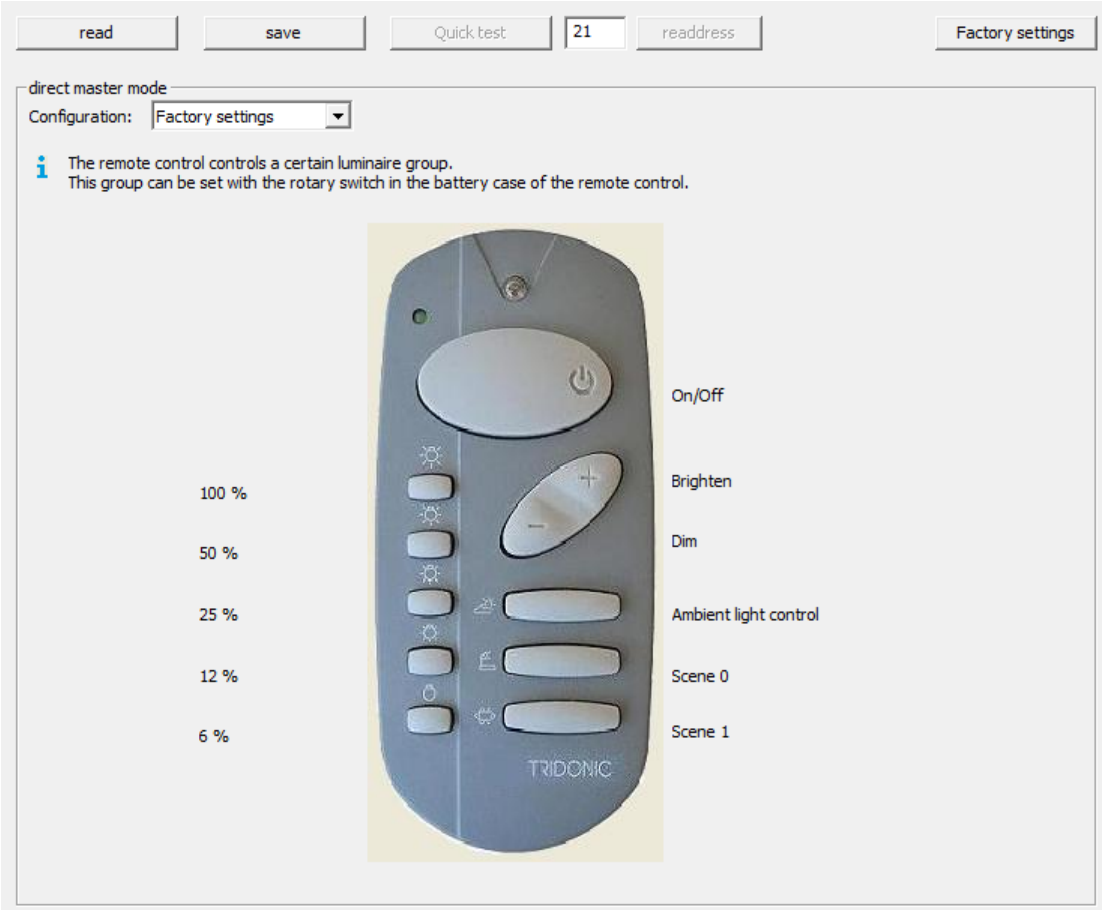
Remote control

The remote control supports two operating modes:

- **Direct master mode**
- **Slave mode**: the remote control cannot be configured in this operating mode. The remote control has no function.

> **Note**
> More information on these operating modes can be found in Section DALI MSensor 02 224.

Direct master mode



Configuration options in direct master mode

The following device information is displayed for the remote control in **direct master mode**:

Configuration option	Description
Configuration	Configuration of the remote control: • **Inactive**: the keys of the remote control are inactive. • **Factory settings**: the remote control keys are assigned with default settings. The luminaire group is set using the

7 Configuration

	rotary switch in the battery compartment of the remote control. • **user-defined**: the keys of the remote control can be assigned to selected functions.

Table 122: Remote control configuration options in direct master mode

Parameterising the key assignment

With the **user-defined** configuration, the key assignment of the remote control can be parameterised by the user.

Note
If key assignment is customised, the group assignment as defined by the rotary switch in the battery compartment of the remote control is ignored. The commands only apply to the luminaire group set directly on the rotary switch on the DALI MSensor 02.

Depending on the key, various configuration options are available:

- **On**
- **Off**
- **On/Off**
- **Brighten**
- **Dim**
- **Scene 0–15**
- **Intensity 1–100%**
- **Ambient light control**
- **Reserved**: this option is reserved for future functional enhancements and currently has no function.

Note
To apply the changed values to the remote control, click on **save**. The saved configuration can now be tested directly in the DALI installation.

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Special notes: DALI MSensor devices version 2.0 and lower

The behaviour of the DALI MSensor 02 is to some extent significantly different from that of previous versions (V1.5 or lower).

Group assignment of different generations of DALI MSensor devices

DALI MSensor 02 devices and DALI MSensor devices version 1.5 or lower cannot be assigned to the same group, as these versions work from different group concepts.

Replacing a faulty DALI MSensor (V1.5 or lower)

A faulty DALI MSensor V1.5 or lower can only be replaced by a DALI MSensor 02 to a limited extent.

Note
Further information can be found in the product manual for the DALI MSensor 02.

Resetting the firmware version of DALI MSensor 02 devices to version 1.5

If a faulty DALI MSensor 1.5 cannot be replaced, a DALI MSensor 02 can be reset to firmware version 1.5 using the masterCONFIGURATOR. More information on the firmware update can be found here... 277

Note
The firmware of all DALI MSensors connected to the DALI control line will be updated. If only one device needs to be updated, this device must be updated on a separate DALI control line. The device must be readdressed after the firmware has been updated.

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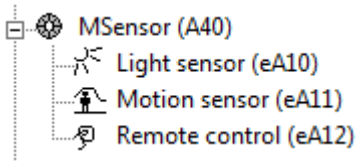
7.5.3 DALI MSensor (version 1.5 and 1.7)

DALI MSensors are represented by four different symbols in the DALI device tree.



The DALI MSensor consists internally of three device classes, which are listed individually in the DALI device tree diagram:

- Light sensor: A detailed description of the light sensor can be found in Section **DALI MSensor (V1.5 and 1.7) > Light sensor** 241.
- Motion sensor: A detailed description of the motion sensor can be found in Section **DALI MSensor (V1.5 and 1.7) > Motion sensor** 244.
- Remote control: A detailed description of the remote control can be found in Section **DALI MSensor (V1.5 and 1.7) > Remote control** 248.

Group concept

Every DALI MSensor has two groups:

- **Luminaire group**: all devices in this group are controlled by the DALI MSensor.
- **Sensor group**: a group via which the DALI MSensor can be influenced. The next highest group is automatically assigned as the sensor group.

The following groups are also displayed if advanced settings have been enabled:

- **Light sensor group**: eD group (eG) containing the light sensor.
- **Motion sensor group**: eD group (eG) containing the motion sensor.
- **Remote control group**: eD group (eG) containing the remote control.

Effective range

The DALI MSensor controls either all devices (broadcast) or one DALI group:

- **Assignment via the rotary switch**
  The effective range of the DALI MSensor is set using the rotary switch on the back of the sensor. All control gear elements in the set effective range are controlled by the DALI MSensor.

> **Note**
> The next highest group is automatically assigned as the sensor group.

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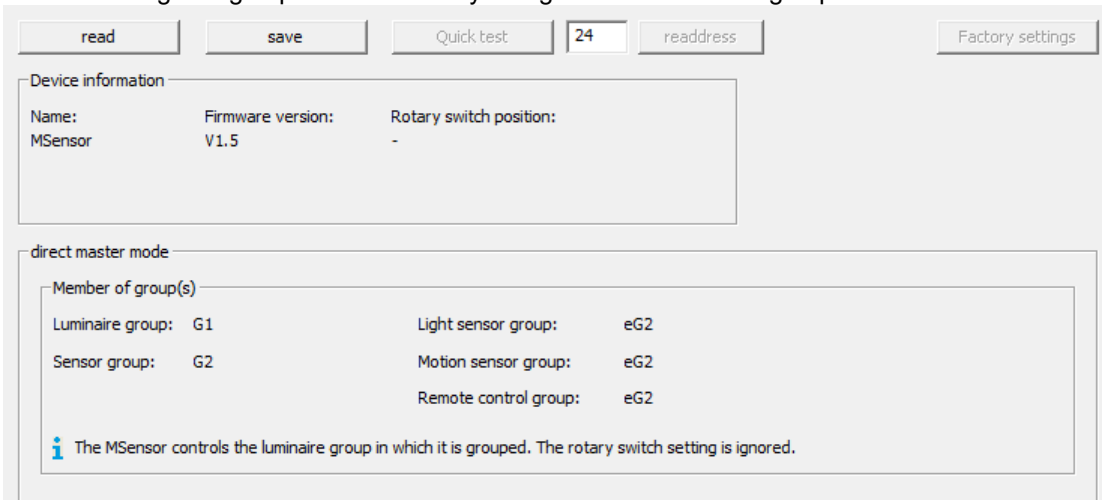
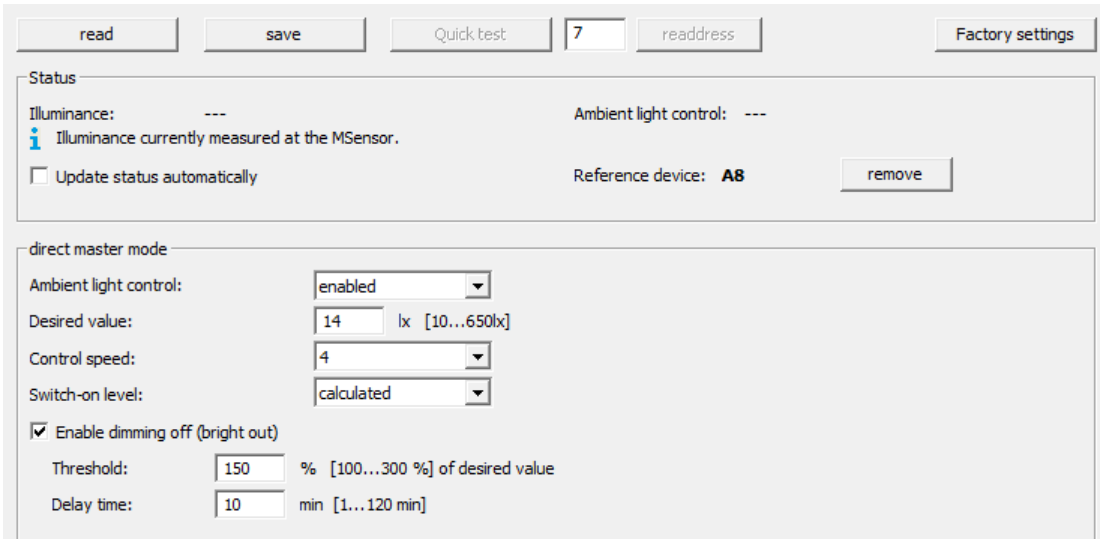
- **Assignment via the masterCONFIGURATOR**
  When the DALI MSensor is not assigned to a group in the DALI device tree diagram, it controls the luminaire group set using the rotary switch on the back of the sensor. It must be assigned to a group to control an individual group.

  1. In the DALI device tree diagram, click on the DALI MSensor.
  2. Hold down the left mouse button.
  3. Drag the DALI MSensor to the desired luminaire group.
     ➲ The DALI MSensor is removed from the individual (non-grouped) section of the DALI device tree diagram and is added to the desired luminaire group.
     ➲ The next highest group is automatically assigned as the sensor group.



Note
The position of the rotary switch on the back of the DALI MSensor is ignored. If the group assignment in the masterCONFIGURATOR is undone, the rotary switch position will be active again.

Light sensor



Status

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The following status information is displayed for the light sensor:

Status	Description
Illuminance	Illuminance currently measured at the light sensor. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher.
Update status automatically	Indicates whether the light sensor status is updated automatically.
Ambient light control	Indicates the status of ambient light control for the light sensor. • **enabled**: ambient light control is enabled. • **temporarily disabled**: ambient light control has been temporarily disabled manually by the user. • **disabled**: ambient light control is disabled. • **unknown**: there is currently no connection to the light sensor.
Reference device	Indicates the DALI control gear used as a reference for calculating the switch-on level during ambient light control. If no reference device has been assigned to the light sensor, **no device** will be displayed. **Note:** Section Reference device 243 explains how a reference device is assigned.

Table 123: Light sensor status information

Configuration options

The following configuration options are displayed for the light sensor:

Configuration option	Description
Ambient light control	Ambient light control can be **enabled** or **disabled**.
Desired value	Value used by the light sensor to regulate the control gear. On account of the room conditions and the installation height, the illuminance in the workspace may, however, be three to four times higher. **Value range:** • **10–650 lx**
Control speed	Speed at which the control gear reaches the desired value. **Value range:** • increments **0–7**, with 0 being the slowest and 7 the fastest.

7 Configuration

Switch-on level	Level when the lighting is switched on. Ambient light control starts from this value. • **Minimum level** • **Maximum level** • **calculated**: the switch-on level for ambient light control is specially calculated so that it is as close to the desired value as possible.
Enable dimming off (bright out)	Checkbox enabled: if the measured illuminance exceeds the defined **threshold** for a period longer than the set **delay time**, the luminaire group is switched off by the light sensor even if motion is detected in the room. As soon as the measured illuminance falls below the **desired value**, the luminaire group is switched on again.
Threshold	Value above which the luminaire group is switched off by the light sensor. **Value range:** • **100–300%** of the desired value
Delay time	Time during which the threshold must be exceeded in order for the luminaire group to be switched off by the light sensor. **Value range:** • **1–120 min**

Table 124: Light sensor configuration options

Note
To apply the changed values to the light sensor, click on **save**. The saved configuration can now be tested directly in the DALI installation.

Reference device

The light sensor requires a reference device in order to exactly calculate the switch-on level for ambient light control. A reference device is a DALI control gear element located in the same group as the DALI MSensor.

Note
The masterCONFIGURATOR automatically adds the first DALI control gear element located in the same group as the DALI MSensor as a reference device. If another DALI control gear element is desired for use as a reference device, remove the reference device and add the desired DALI control gear element again.

Removing a reference device

Requirement:
– **Advanced settings** enabled.

▷ Click **Remove** in the detail view of the light sensor.
➲ The reference device is removed.

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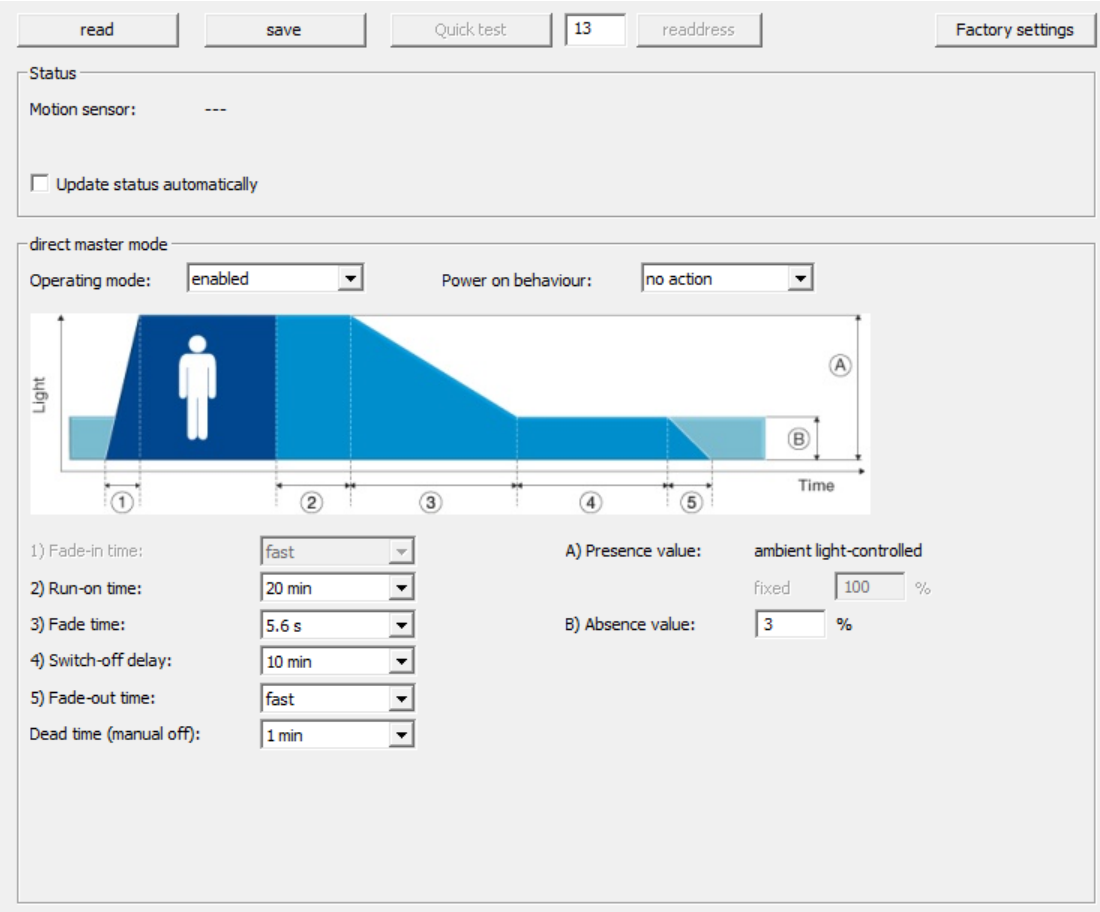
Adding a reference device

Requirement:
– DALI MSensor has been assigned to a DALI group.

1. In the DALI device tree diagram, click on the device to be assigned to a group.
2. Hold down the left mouse button.
3. Drag the device to the desired group. (Drag & Drop)
   ➲ The device is removed from the group in which it was previously located and is added to the desired group.
   ➲ The address of the DALI control gear element is automatically displayed as the reference device in the DALI MSensor.

> **Note**
> If the DALI control gear element used as a reference device by the DALI MSensor (or the DALI MSensor itself) is deleted from the DALI group, the information for the reference device in the DALI MSensor is also deleted. For **Reference device** the following appears: **none**.

Motion sensor



Status

The following status information is displayed for the motion sensor:

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Status	Description
Motion sensor	Indicates the status of the motion sensor: • **Off** • **Lighting at presence value** • **Lighting at presence value, run-on time in progress** • **Lighting fading to absence value, fade time in progress** • **Lighting at absence value** • **Lighting at absence value, switch-off delay in progress** • **Dead time (manual off) in progress**
Update status automatically	Indicates whether the motion sensor status is updated automatically.

Table 125: Motion sensor status information

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Configuration options

The following configuration options are displayed for the motion sensor:

Configuration option	Description
Operating mode	Motion sensor operating mode: • **enabled**: the lighting is automatically switched on and off depending on whether presence is detected. (factory setting) • **enabled (only OFF)**: the motion sensor switches the lighting off only. It must be switched on manually. • **disabled**: the motion sensor is disabled. The lighting must be switched on and off manually. **Note:** The **never OFF** function is implemented as follows: 1. Select the **enabled** operating mode. 2. Select switch-off delay **never OFF**.
Power on behaviour	Indicates how the motion sensor will react after failure of the DALI power supply: • **no action** • **last state** • **maximum level** • **off** • **presence value**: specially calculated value for ambient light control.
Fade-in time	Time required to reach the **presence value**. **Value range:** • **fast** • **0.7–90.5 s**
Presence value	Value to which the luminaire group switches when presence is detected in the room. The presence value control depends on how the light sensor is configured. • **ambient light-controlled**: If ambient light control is enabled for the light sensor, the presence value is regulated based on ambient light levels. • **fixed**: If ambient light control is disabled for the light sensor, a value can be set as a percentage between 0–100%.
Run-on time	A time starting from the last detected movement in the room; when the run-on time expires, the **fade time** begins. If further movement is detected during the **run-on time**, it starts over again. **Value range:** • **30 s – 60 min** • **infinite**: the **run-on time** continues without end. This means that the luminaires remain at the defined **presence value** (**ambient light-controlled** or **fixed**). The **fade time** does not start.

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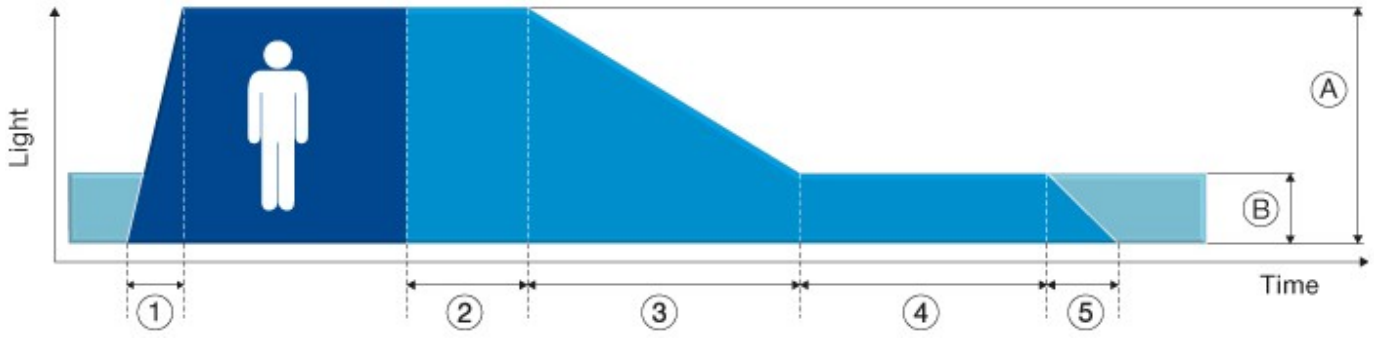
Fade time	Time during which the lighting is smoothly adjusted to the **absence value**. **Value range:** • **fast** • **0.7 – 90.5 s**
Switch-off delay	Time for which the **absence value** is maintained if no movement is detected. **Value range:** • **0 s – 60 min** • **never OFF**: the lighting remains at the absence value until further movement is detected and the motion sensor switches to the **presence value**. The luminaire group is never switched off by the motion sensor.
Absence value	Level to which the luminaire group switches during the **switch-off delay**.
Fade-out time	Time required to dim off from the **absence value**. **Value range:** • **fast** • **0.7–90.5 s**
Dead time (manual off)	Time started by manually switching off the lighting via the momentary-action switch or the remote control and during which the motion sensor is disabled. If movement is detected in the room during this time, the dead time starts over again. If at the end of the dead time no more movement is detected in the room, the motion sensor is enabled again. **Value range:** • **0 s – 20 min**

Table 126: Motion sensor configuration options

Overview of configuration options

The following figure shows a summary of the individual parameters.



1) Fade-in time
2) Run-on time
3) Fade time
4) Switch-off delay
5) Fade-out time

A) Presence value
B) Absence value

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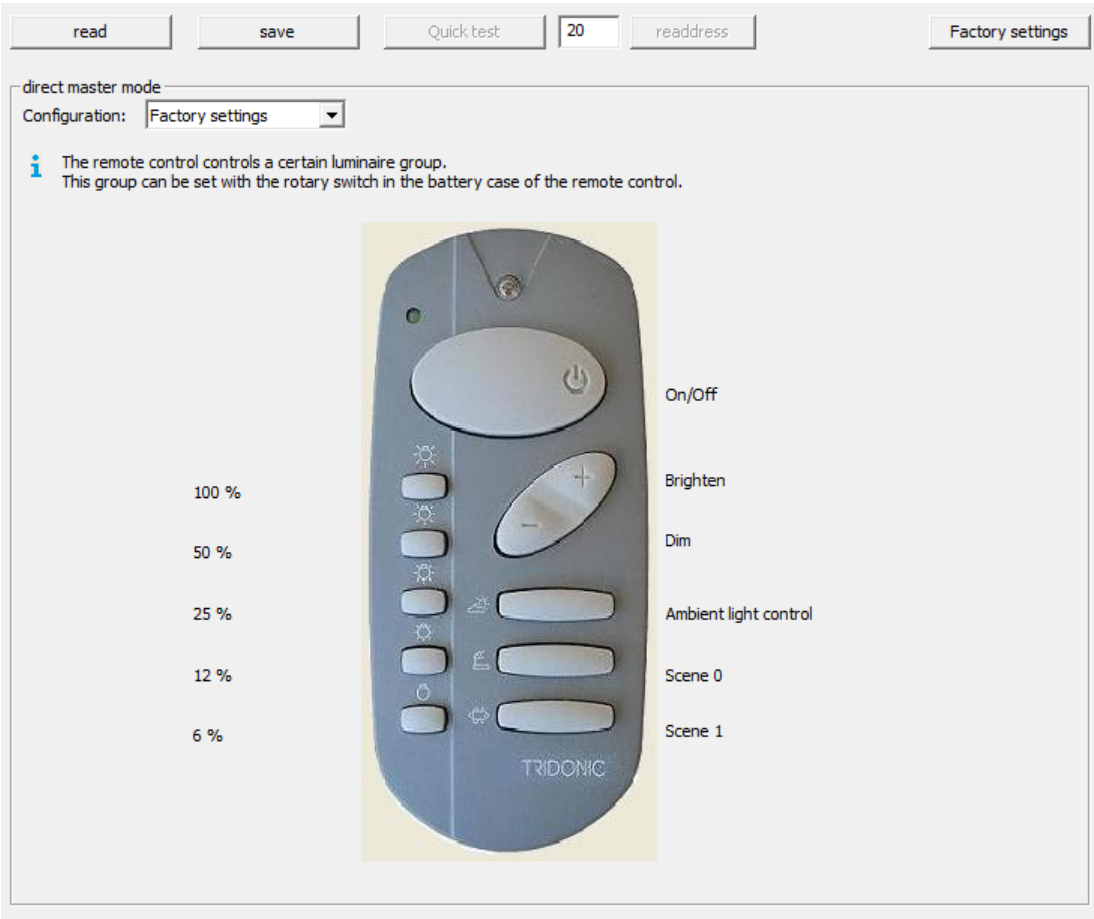
Note
To apply the changed values to the motion sensor, click on **save**. The saved configuration can now be tested directly in the DALI installation.

Remote control



Configuration options

The following device information is displayed for the remote control:

Configuration option	Description
Configuration	Configuration of the remote control: • **Inactive**: the keys of the remote control are inactive. • **Factory settings**: the remote control keys are assigned with default settings. The luminaire group is set using the rotary switch in the battery compartment of the remote control. • **user-defined**: the keys of the remote control can be assigned to selected functions.

Table 127: Remote control configuration options

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Parameterising the key assignment

With the **user-defined** configuration, the key assignment of the remote control can be parameterised by the user.

Note
If key assignment is customised, the group assignment as defined by the rotary switch in the battery compartment of the remote control is ignored. The commands only apply to the luminaire group set directly on the rotary switch on the DALI MSensor.

Depending on the key, various configuration options are available:

- **On**
- **Off**
- **On/Off**
- **Brighten**
- **Dim**
- **Scene 0–15**
- **Intensity 1–100%**
- **Ambient light control**
- **Reserved**: this option is reserved for future functional enhancements and currently has no function.

Note
To apply the changed values to the remote control, click on **save**. The saved configuration can now be tested directly in the DALI installation.

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7.5.4 DALI MSensor (version 1.3)

For DALI MSensors with firmware version 1.3, there are a few small differences compared to DALI MSensors with version 1.4 or higher.

Ambient light control: enabled/disabled

This parameter is not supported by a DALI MSensor with a firmware version lower than 1.4. In the masterCONFIGURATOR software, the parameter appears greyed out.

Ambient light control can be disabled as follows:

1. Open the detail view for the motion sensor.
2. Under "Presence value" select the **fixed** radio button.
3. Enter the percentage for the presence value.
4. Click on **save**.
   ➲ Ambient light control is disabled.

Status

There are only two status messages:

- **enabled**: ambient light control is enabled.
- **temporarily disabled**: ambient light control is disabled using the DALI RC remote control or is disabled temporarily by the user manually.

Dead time (manual off)

The lowest value which can be set for the dead time is 30 seconds.

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7.6 DALI RM

DALI RM erhält 1 DALI-Kurzadresse.

Programmierung des Einschalt- und Ausschaltpunktes

- MIN LEVEL: Setzen des Ausschaltpunktes
- MAX LEVEL: Setzen des Einschlatpunktes

Werkseinstellung:

- MIN LEVEL = 0 → OFF
- MAX LEVEL = 100 → ON

Verhalten

- Relais schaltet bei Überschreiten des MAX-LEVEL ein.
- Relais schaltet bei Unterschreiten des MIN-LEVEL aus.
- SYSTEM FAILURE LEVEL – bei fehlender Busverbindung (Versorgung) fällt das Relais ab.
- Eine Fehlerrückmeldung ist nicht möglich, ein QUERY LAMP FAILURE liefert immer NO zurück, QUERY STATUS bit 0&1 ist nicht implementiert.
- Beim Speichern eines Szenenwerts wird neben dem ACTUAL LEVEL der Relaiszustand gespeichert, welcher ausschlaggebend für den EIN / AUS Zustand des Szenenwertes ist.

Hinweis
Beim Speichern einer Szene unbedingt darauf achten, dass das Relais den gewünschten Zustand hat.

7.7 DALI-RM/S

DALI-RM/S receives 4 DALI short addresses.
For each DALI scene the 4 contact positions "opened / closed" can be defined separately.

Default parameters (not changeable)

- Control value ≥ DALI DAP 2: contact closes
- Control value ≤ DALI DAP 1: contact opens
- When calling command "Recall min. Level": contact opens
- When calling command "Recall max": contact closes (permits the identification with the "localisation" function in masterCONFIGURATOR)

7.8 DALI TOUCHPANEL

The DALI TOUCHPANEL is represented in the DALI device tree diagram by the  icon and the name **DALI Touch**. When addressing, the DALI TOUCHPANEL is given an eD address (eA) and can be configured in the detail view using this address.

7 Configuration

Note
Section Special notes on addressing control units 22 contains information on how control units are addressed using the physical selection method.

Device information

The following device information is displayed in the header:

Device information	Description
Name	Displays the name of the device.
Firmware version	Displays the firmware version of the device.

Table 128: Device information

Configuration

The following configuration options are available for the DALI TOUCHPANEL:

- **User-defined**: For a detailed description of the user-defined configuration, see Section User-defined configuration 253.
- **Tunable White**: For a detailed description of the **Tunable White** configuration, see Section Tunable White 257.
- **Factory settings**: For a detailed description of the Factory settings, see Section Factory settings 259.

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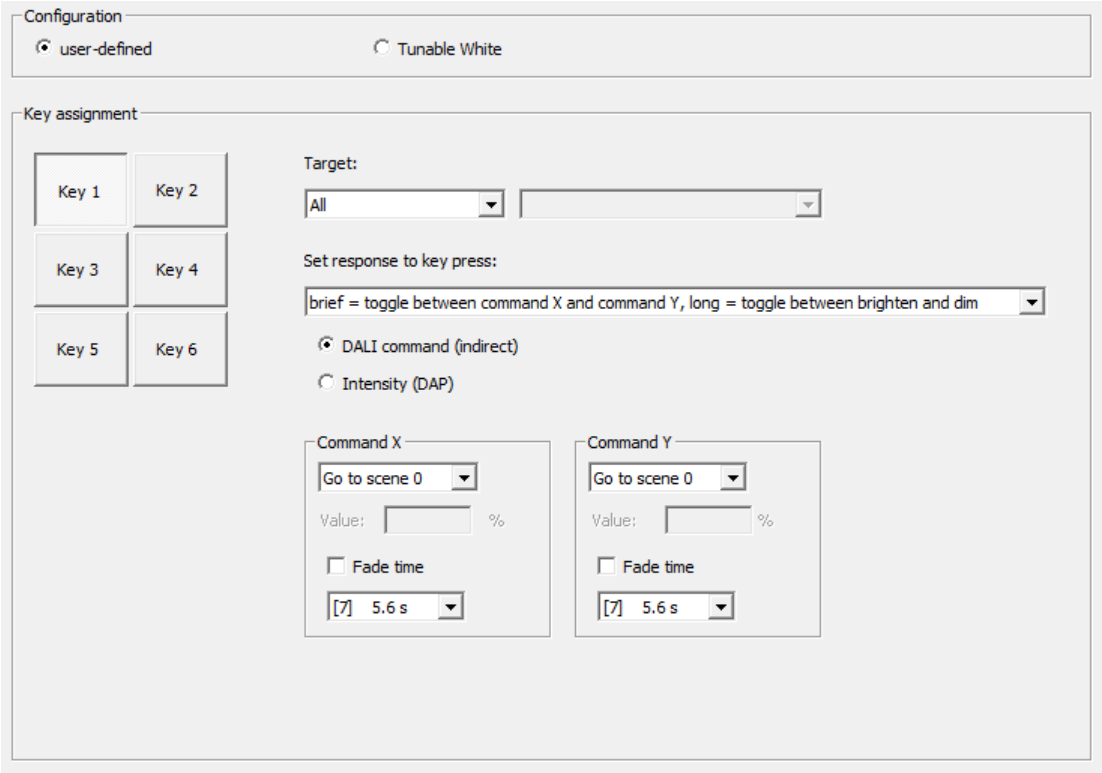
7.8.1 User-defined configuration

The **user-defined** configuration can be enabled using the masterCONFIGURATOR. The 6 keys on the DALI TOUCHPANEL can be configured individually.



Setting the user-defined configuration

1. Enable the **user-defined** radio button.
   ➲ A message appears, prompting for confirmation that the device configuration should be modified.

> **Note**
> This overwrites the existing settings.

2. Confirm the action by clicking on **Yes** .
3. Select **Key 1**.
   ➲ Current configuration of **Key 1** is loaded.
   ➲ The following configurations are performed for the selected key.
4. From the **Target** dropdown list, select the destination address to which the command is to apply: **All**, **group (0–15)** or **address (0–63)**.
5. Select a response from the **Set response to key press** dropdown list.

> **Note**
> For a precise description of possible responses see Response to key press 255 table.

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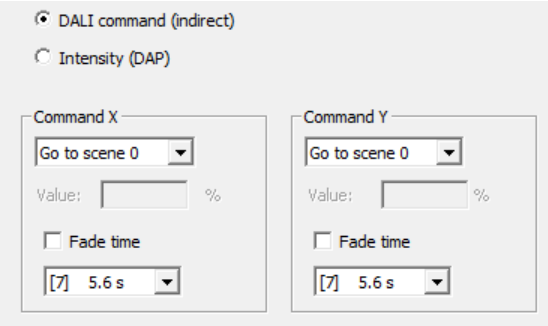
6. In order to store a DALI command for **command X** and **command Y**, enable the **DALI command (indirect)** radio button.
   -or-
   In order to store an intensity for **command X** and **command Y**, enable the **Intensity (DAP)** radio button.

> **Note**
> **Command X** and **command Y** represent variables that must be stored for the commands.
> You can either store DALI commands or an intensity.

7. Configure **command X** and **command Y**.

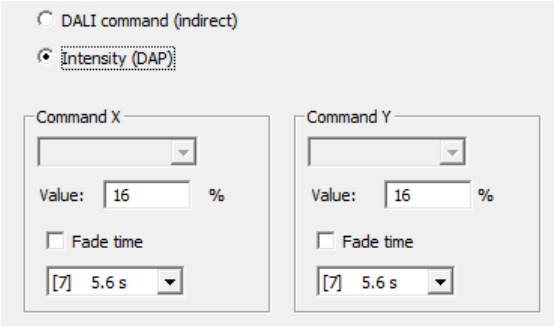
DALI command (indirect)

▷ Select a DALI command in the dropdown list.



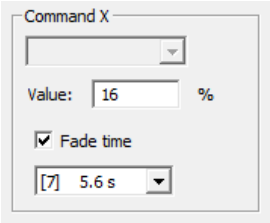
Intensity (DAP)

▷ Enter the value for the intensity.

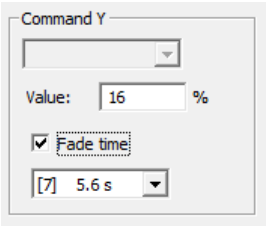


> **Note**
> For a precise description of the DALI comm 281

8. In order to invoke **command X** with a fade time, in the **command X** group field, enable the **Fade Time** checkbox and select a fade time in the dropdown list.



9. In order to invoke **command Y** with a fade time, in the **command Y** group field, enable the **Fade Time** checkbox and select a fade time in the dropdown list.



10. Click on **Save**.
    ➲ The configuration is saved in the DALI TOUCHPANEL.
11. Repeat steps 3 to 10 for **keys 2–6**.

7 Configuration

Note
The saved configuration can now be tested directly in the DALI installation.

Response to key press	Description
brief = toggle between command X and command Y, long = is ignored	• When the key is pressed briefly, **command X** and **command Y** are output alternately. • A long key press has no effect. **Adjustable parameters:** • **Command X** • **Command Y**

brief = is ignored, long = brighten	• A brief key press has no effect.
	• In the case of a long key press the command that is output depends on the status of the lighting:
	  • If the lighting was previously switched off, the minimum level is sent.
	  • If the lighting was previously switched on, the lighting is brightened.
	
	Note
	Command X and **command Y** do not have to be defined.

brief = command X, long = brighten	• Briefly pressing the key outputs the selected **command X**.
	• In the case of a long key press the command that is output depends on the status of the lighting:
	  • If the lighting was previously switched off, the minimum level is sent.
	  • If the lighting was previously switched on, the lighting is brightened.
	
	Adjustable parameters:
	• **Command X**

brief = is ignored, long = dim	• A brief key press has no effect. • In the case of a long key press the lighting is dimmed. **Note** **Command X** and **command Y** do not have to be defined.
brief = command Y, long = dim	• Briefly pressing the key outputs the selected **command Y**. • In the case of a long key press the lighting is dimmed. **Adjustable parameters:** • **Command Y**

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brief = is ignored, long = toggle between brighten and dim	• A brief key press has no effect. • In the case of a long key press the lighting is brightened and dimmed alternately. **Note** **Command X** and **command Y** do not have to be defined.
brief = toggle between command X and command Y, long = toggle between brighten and dim	• When the key is pressed briefly, **command X** and **command Y** are output alternately. • In the case of a long key press the lighting is brightened and dimmed alternately. **Adjustable parameters:** • **Command X** • **Command Y**

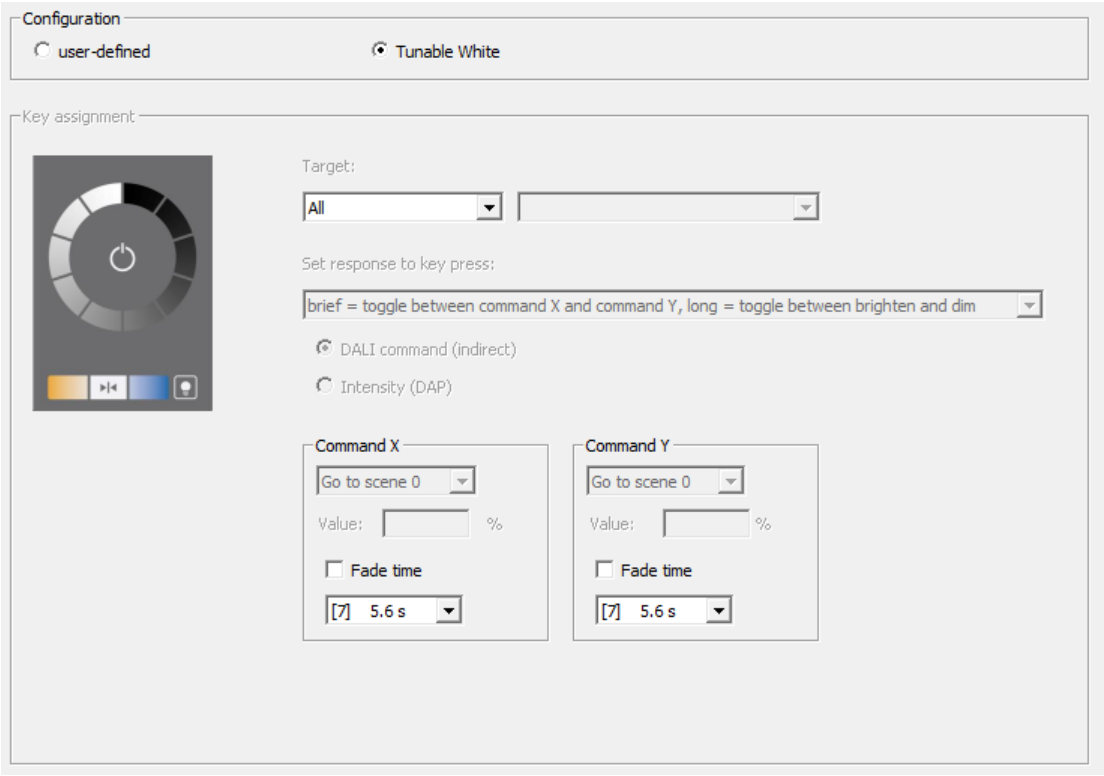
Table 129: Summary of response to key press in case of DALI TOUCHPANEL

7 Configuration

7.8.2 Tunable White

The **Tunable White** configuration can be enabled using the masterCONFIGURATOR. "Tunable White" describes the option to dynamically change the light of an LED luminaire in the white light range. The colour temperature of Tunable White luminaires can be changed in the white light range from 2700 to 6500 kelvin.

Default settings for intensity and colour temperature are assigned to the keys of the DALI TOUCHPANEL. The masterCONFIGURATOR software can be used to set the destination address and two fade times, one for switching the luminaires on and one for switching them off. As soon as a fade time has been set for switching the luminaires on or off, a fade time of 1 s is automatically stored for dimming.



Setting the "Tunable White" configuration

Requirement:
– Tunable White luminaires are in use.

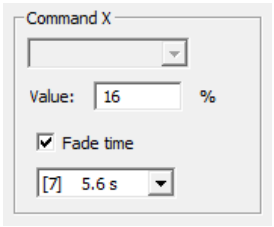
1. Enable the **Tunable White** radio button.
   ➲A message appears, prompting for confirmation that the device configuration should be modified.

> **Note**
> This overwrites the existing settings.

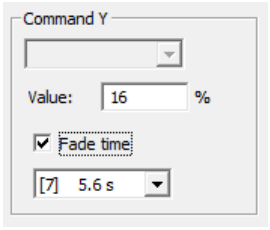
2. Confirm the action by clicking on **Yes** .
3. From the **Target** dropdown list, select the destination address that the DALI TOUCHPANEL is to control: **All**, **group (0–15)** or **address (0–63)**.

7 Configuration

4. In order to store a fade time for switching on, in the **command X** group field, enable the **Fade Time** checkbox and select a fade time in the dropdown list.



5. In order to store a fade time for switching off, in the **command Y** group field, enable the **Fade Time** checkbox and select a fade time in the dropdown list.



6. Click on **Save**.
➲ The configuration is saved in the DALI TOUCHPANEL.

Note
The saved configuration can now be tested directly in the DALI installation.

7 Configuration

7.8.3 Factory settings

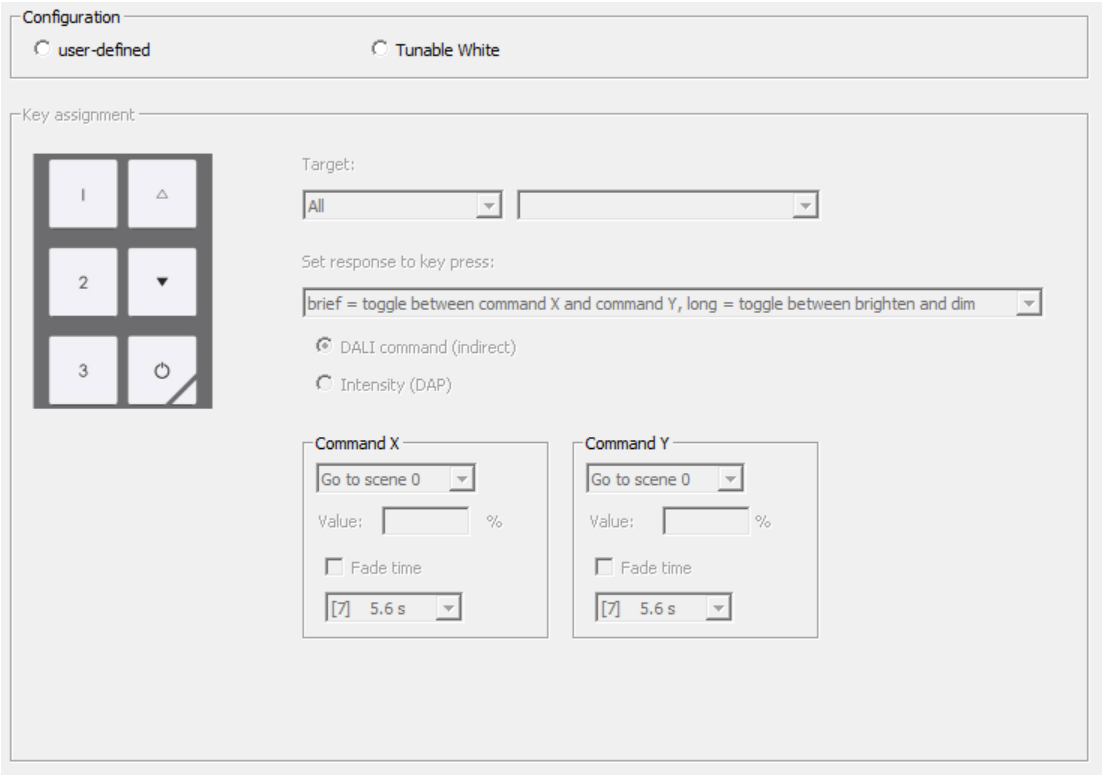
The keys of the DALI TOUCHPANEL are assigned as follows by default.

- Key 1: **Go to scene 1**
- Key 3: **Go to scene 2**
- Key 5: **Go to scene 3**

- Key 2: **Up**
- Key 4: **Down**
- Key 6: **Off**

When the factory settings are stored in the DALI TOUCHPANEL, a diagram showing the key assignments is displayed in the masterCONFIGURATOR. The factory settings cannot be modified.

Note
In order to set the DALI TOUCHPANEL up as user defined, enable the **user-defined** configuration. For a detailed description of the user-defined configuration, see Section User-defined configuration 253.



Restoring the factory settings

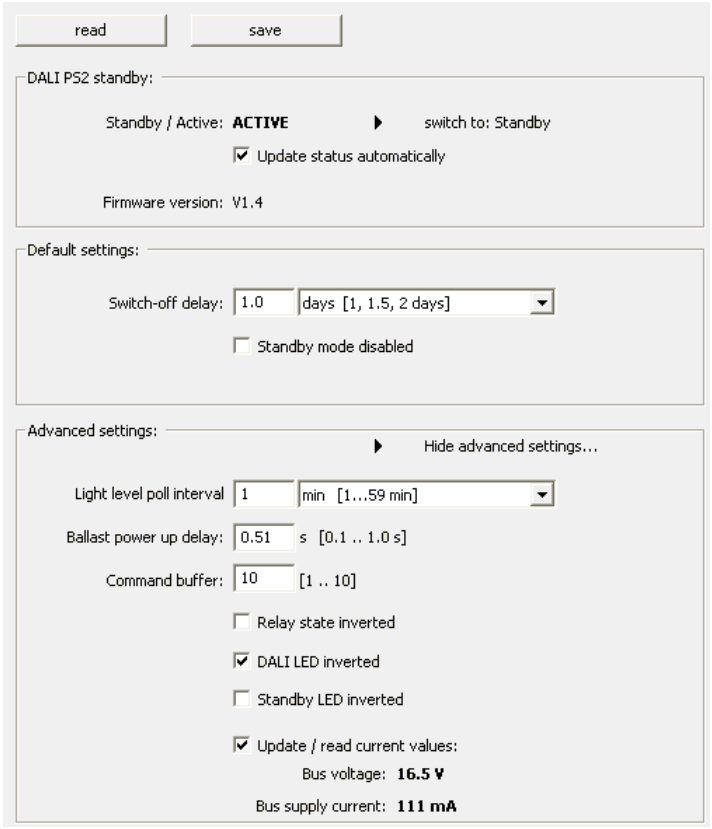
1. Click on **Factory settings.**
   ➲A message appears, prompting for confirmation that the device should be reset to its factory settings.
2. Confirm the action by clicking on **Yes**.
   ➲The device is reset to its factory settings.

7 Configuration

7.9 DALI PS2 Standby

The DALI PS2 Standby is a DALI power supply with 240 mA nominal current for DALI control gear and DALI control units which do not have their own power supply. To reduce the standby losses, the built-in relay disconnects the control gear from the mains as soon as all the luminaires have been switched off. This ensures that the power loss is reduced to a minimum.

The DALI PS2 Standby is represented in the DALI device tree diagram by the  icon and is configured in the detail view.



Configuration option	Description
Standby/Active	Indicates the status of the DALI PS2 Standby: • **Standby** • **Active**
switch to: Standby switch to: Active	This button allows the user to switch between the **Active** and **Standby** modes.
Update status automatically	The status is updated automatically.
Switch-off delay	Time that starts running as soon as it is detected that all the DALI control gear has been switched off, after which the unit switches to standby mode. **Value range:** • 1 min – 2 d
Standby mode disabled	The DALI PS2 Standby behaves like a conventional DALI power supply instead of switching to standby mode.

7 Configuration

Light level poll interval	Time interval in which the control gear is polled about the light level. **Value range:** • 1 min – 23 h
Ballast power up delay	Time during which the first 10 commands that are sent while the electronic ballasts are powering up will be buffered. At the end of the electronic ballast switch-on delay, the commands are sent from the power supply to the electronic ballasts. This ensures that no commands are lost while the electronic ballasts are starting up.
Command buffer	Number of commands that are buffered while the electronic ballasts are starting up. **Value range:** • 1–10 commands
Relay state inverted	• disabled: if all the devices are switched off, the relay output is open. (factory setting) • enabled: if all the devices are switched off, the relay output is closed.
DALI LED inverted	• enabled: LED illuminates only if there is communication on the DALI control line. (factory setting) • disabled: LED illuminates when the power supply is ready for operation. If there is communication on the DALI control line, the LED will go out briefly.
Standby LED inverted	• disabled: LED illuminates when standby mode is enabled. (factory setting) • enabled: LED illuminates when standby mode is disabled.
Update/read current values	If the checkbox is selected, the current values of the **voltage** (V) and of the flowing **supply current** (mA) are displayed.

Table 130: Configuration options for DALI PS2 Standby in the detail view

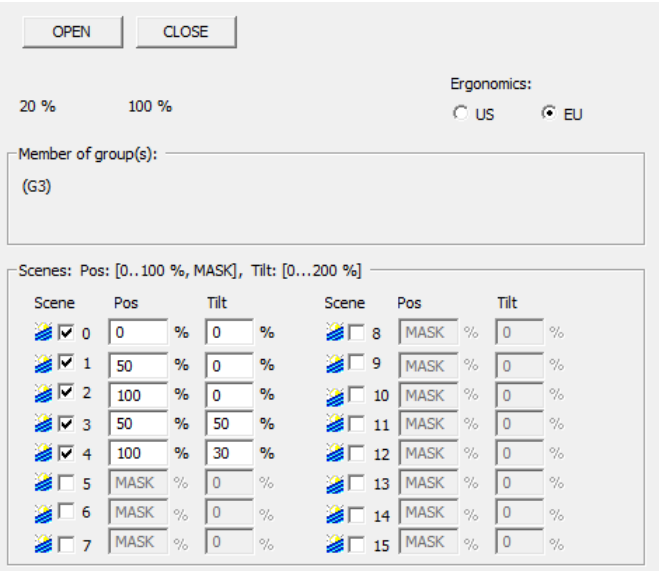
Note
To apply the changed values to the DALI PS 2 Standby, click on **Save**. The saved configuration can now be tested directly in the DALI installation.

7 Configuration

7.10 DALI-Somfy animeo Interface

The DALI Somfy animeo interface is represented in the DALI device tree diagram by the  icon and is configured in the detail view.

The DALI Somfy animeo interface is an interface module with four addresses. With each of these addresses it is possible to control one of the four motors of the animeo IB+ motor controller. Each address of the DALI Somfy animeo interface appears individually in the device tree diagram.



Configuration option	Description
Actual position of blind	Indicates the actual position (0–100%) and the actual angle (0–200%) of the blind.
Ergonomics	Determines the behaviour of the blind during tilting, when one of the following commands is sent: **Off**, **Down**, **Recall min** • **US**: moves to the lower end position • **EU**: makes a small positive angle movement **Up, On and step up, Recall max** • **US**: moves to the upper end position • **EU**: makes a small negative angle movement
Scene assignment	Configure scenes 0–16. **Value range:** • Position: 0–100% • Tilt: 0–200% • MASK: the blinds in this group retain their current position when the respective scene is called up.

Table 131: Configuration options for the DALI Somfy animeo interface in the detail view

Note
Before scenes can be set or recalled for the blinds, the running and tilting times must be set in the Somfy animeo motor controller.

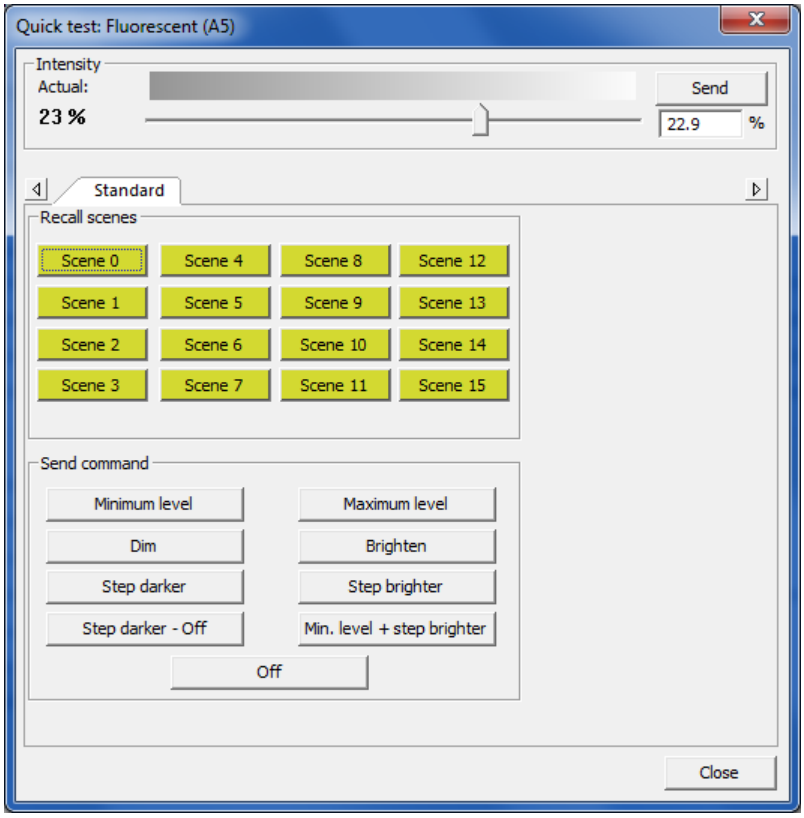
7 Configuration

Note
To apply the new values to the DALI Somfy animeo interface, click on **Save**. The saved configuration can now be tested directly in the DALI installation.

7 Configuration

7.11 Quick test

The configuration of the individual control gear elements can be tested in the **Quick test** pop-up window.



Sending current intensity

1. Set the value using the slider.
   ➲ The desired value is displayed as a DALI value in the tool tip window.
2. Click **Send**.
   ➲ The value will be sent to the control gear and recalled with the set fade time.
   ➲ The current intensity is displayed to the left of the slider.

Note
The selected value must be between the **Minimum level** and the **Maximum level**.

7 Configuration

Recalling scene X

▷ Click **Scene X** (0–15).
➲ Scene X (0–15) is recalled. The defined fade time will be used.

Sending a command

The following DALI commands can be tested:

DALI command	Description
Minimum level	The minimum level is recalled immediately without any fade time.
Maximum level	The maximum level is recalled immediately without any fade time.
Dim	The intensity is reduced by the steps defined in the fade rate. When the lighting reaches the set minimum level, it remains at this level. **Note:** As long as the **Dim** button is pressed, the **Dim** command will be sent repeatedly.
Brighten	The intensity is increased by the steps defined in the fade rate. When the lighting reaches the set maximum level, it remains at this level. **Note:** As long as the **Brighten** button is pressed, the **Brighten** command will be sent repeatedly.
Step darker	The intensity is reduced by one step.
Step brighter	The intensity is increased by one step.
Step darker - Off	• If the lighting is switched on, the intensity is reduced by one step. • If the lighting reaches the minimum level, it is switched off.
Min. level + step brighter	• If the lighting is switched off, the minimum level is recalled. • If the lighting is switched on, the intensity is increased by one step.
Off	The lighting is switched off immediately without any fade time.

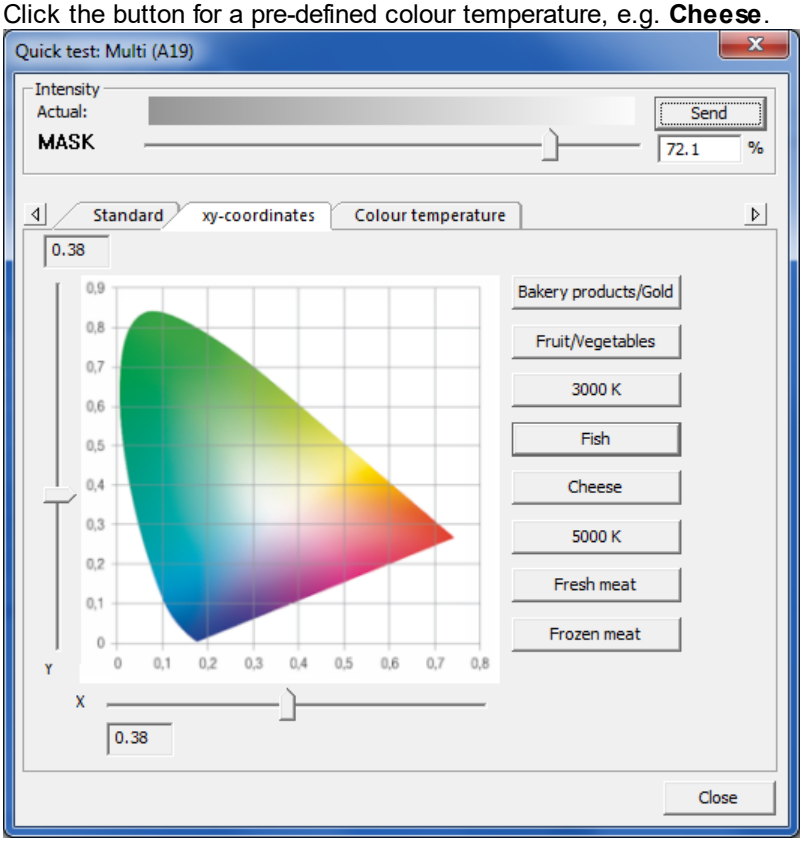
Table 132: DALI commands

Note
The DALI commands **Step darker**, **Step brighter**, **Step darker - Off** and M**in. level + step brighter** are only visible when the advanced settings are enabled. Information on how to enable the advanced settings can be found in Section **Active window...** 10

7 Configuration

Sending xy-coordinates

1. Set the value using the slider.
   -or-
   Click the button for a pre-defined colour temperature, e.g. **Cheese**.

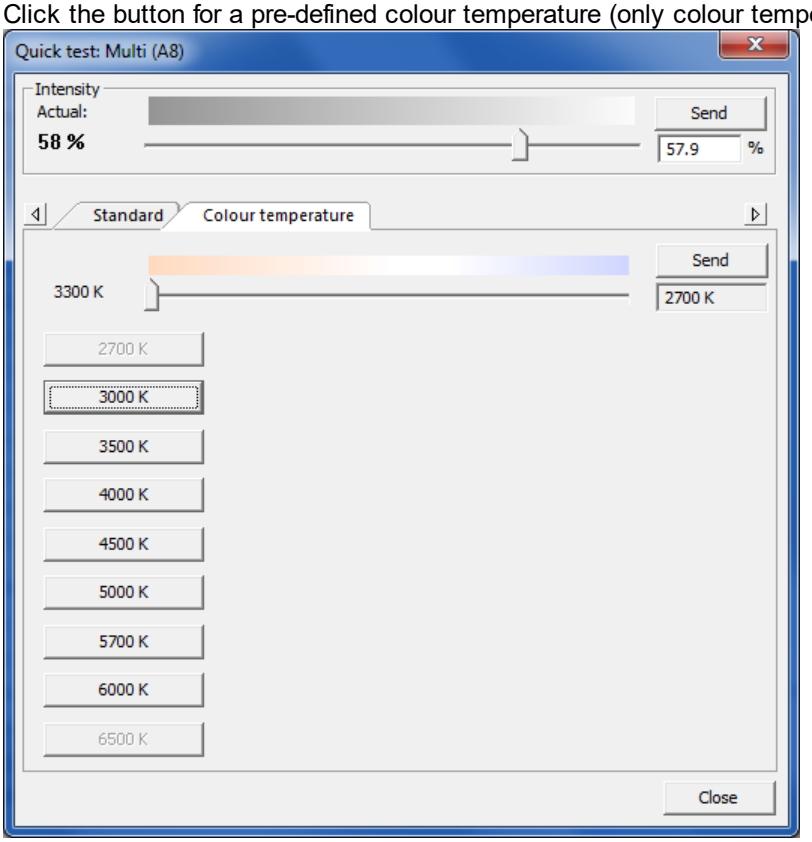


2. Click **Send**.
   ➲ The value will be sent to the control gear and recalled with the set fade time.

7 Configuration

Sending the intensity or colour temperature

1. Set the value using the slider.
   -or-
   Enter the value in the input field (only intensity)
   -or-
   Click the button for a pre-defined colour temperature (only colour temperature)



2. Click **Send**.
   ➲ The value will be sent to the control gear and recalled with the set fade time.

8 Tools

The masterCONFIGURATOR software provides the following tools:

- Command administrator 268
- Control gear wizard 273
- Firmware update 277

8.1 Command administrator

The Command administrator enables the advanced DALI user to send DALI and DSI commands directly to all control gear connected to the control line, to an individual group or an individual address, and also to work with command sequences.

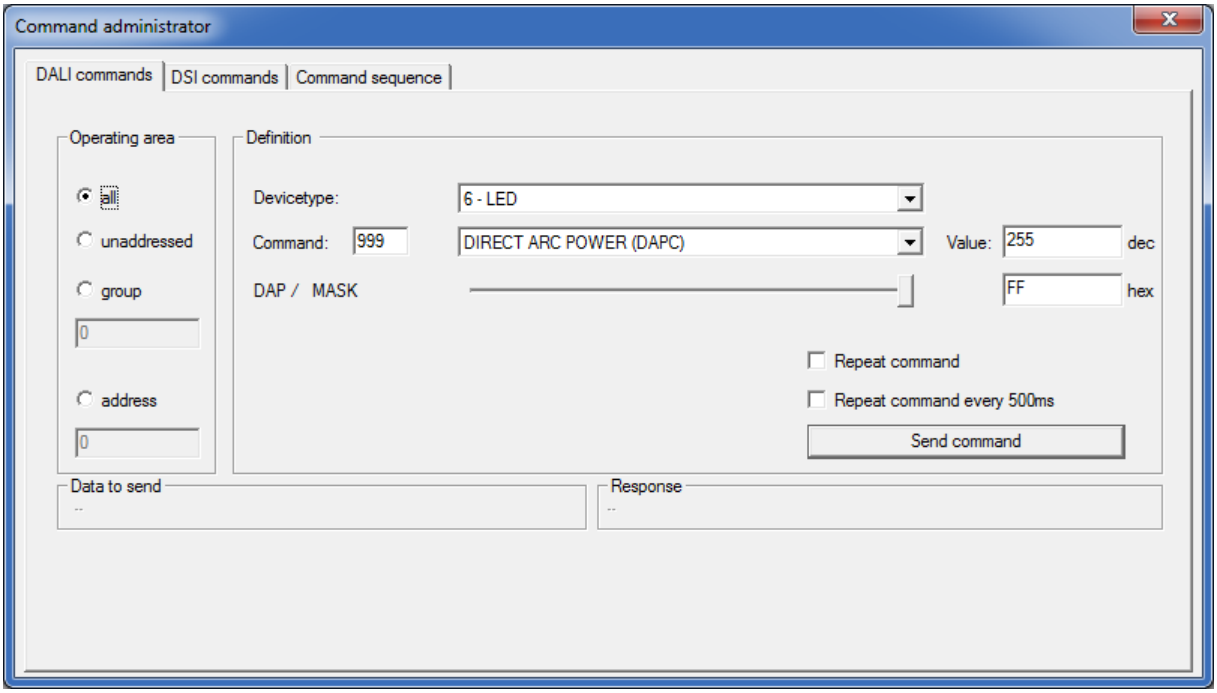
8.1.1 DALI commands

This function of the command administrator allows the user to send DALI commands to all control gear connected to the control line, to an individual group or to an individual address.

Sending a DALI command

Requirement:
– Knowledge of the DALI command set.

1. Select **Tools** > **Command administrator**.
   ➲ The **Command administrator** pop-up window appears.
2. Click on the **DALI commands** tab.



3. Select radio button **all**, **group** or **address**.
4. Enter the number of the command.
   -or-
   Select the desired command from the drop-down list.

8 Tools

5. Enter the **value** in decimal (**dec**) or hexadecimal (**hex**) .
   -or-
   Set the **value** using the slider.
6. In order to repeat the command once, select the checkbox **Repeat command once**.
7. In order to repeat the command every 500 ms, select the checkbox **Repeat command every 500 ms**.
8. Click on **Send command**.
   ➲ The DALI command will be sent in accordance with the selected options.
   ➲ The response appears immediately in the **Response** field.

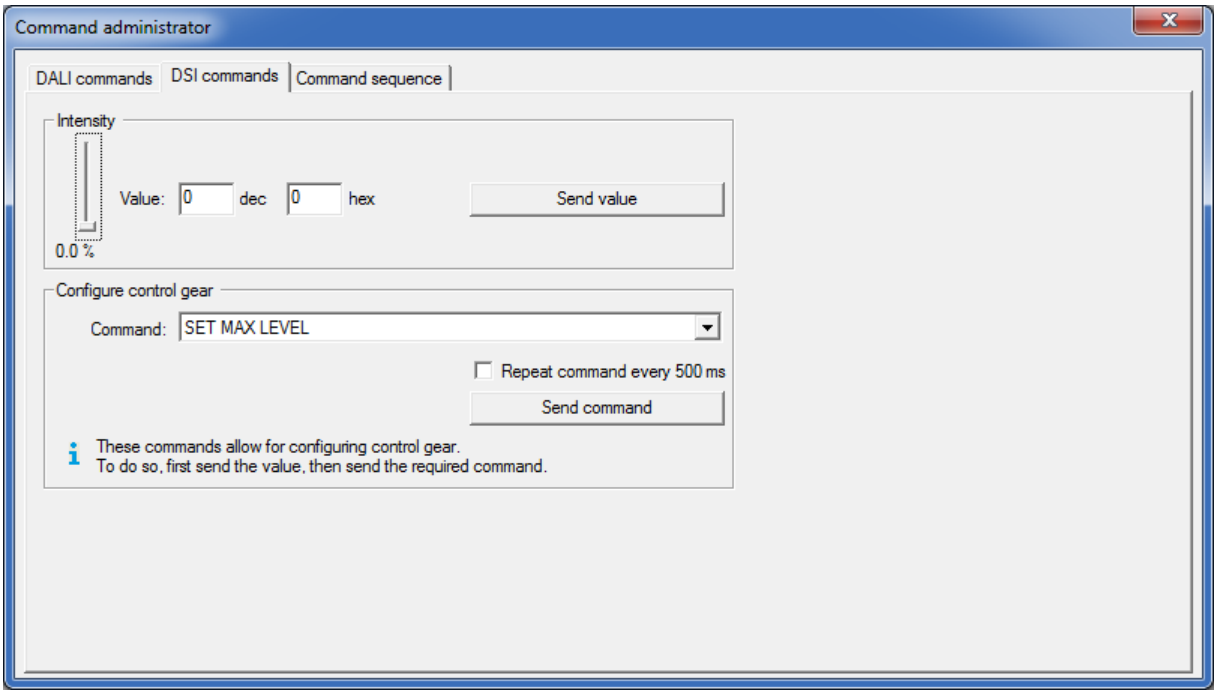
8.1.2 DSI commands

This function of the Command administrator allows the user to send DSI commands to all control gear connected to the control line. To do so, first send a value and then the desired command.

Sending a value

Requirement:
– Knowledge of the DSI command set.

1. Select **Tools** > **Command administrator**.
   ➲ The **Command administrator** pop-up window appears.
2. Click on the **DSI commands** tab.



3. Enter the intensity in decimal (**dec**) or hexadecimal (**hex**).
   -or-
   Set the intensity using the slider.
4. Click on **Send value**.
   ➲ The value will be sent to all control gear connected to the control line.

8 Tools

Sending a command

Requirements:
– Knowledge of the DSI command set.
– **Command administrator** pop-up window and **DSI commands** tab open.

1. Select the desired command from the **Command** drop-down list.
2. In order to repeat the command every 500 ms, select the checkbox **Repeat command every 500 ms**.
3. Click on **Send command**.
   ➲ The DSI command will be sent to all control gear connected to the control line.

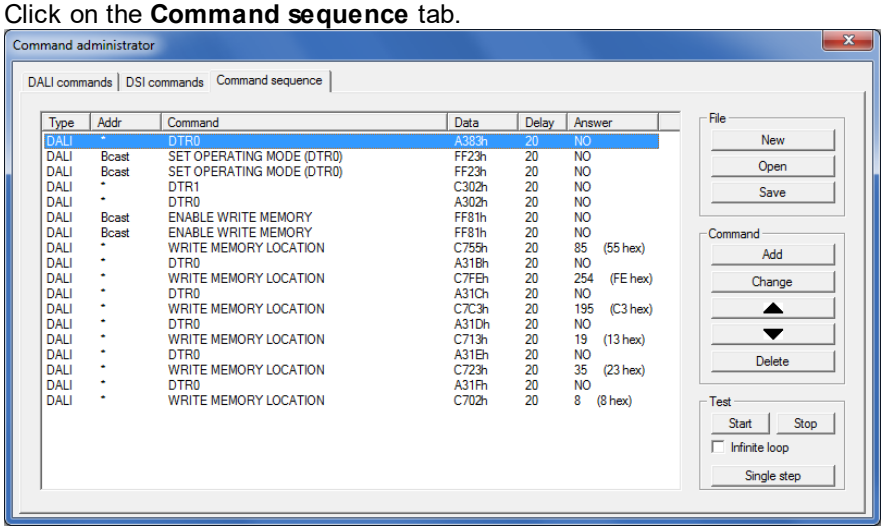
8.1.3 Command sequence

This function of the Command administrator allows the user to send a sequence of DALI, DSI and DA24 commands.

Create command sequence

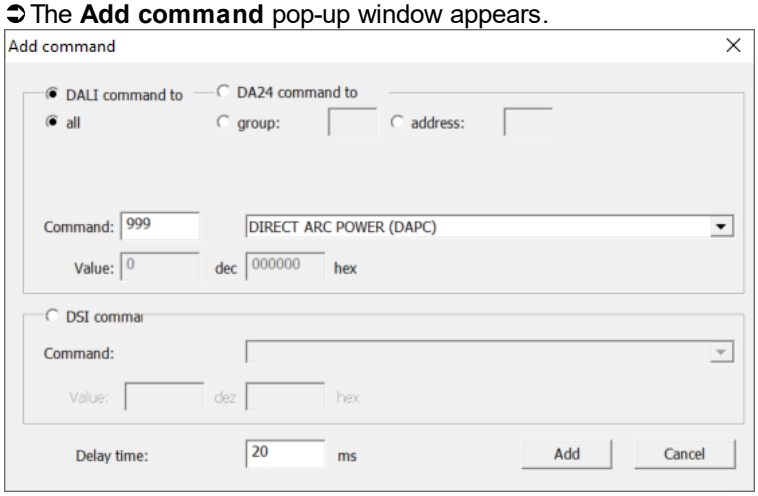
Requirement:
– Knowledge of the DALI, DSI and DA24 command sets.

1. Select **Tools** > **Command administrator**.
   ➲ The **Command administrator** pop-up window appears.
2. Click on the **Command sequence** tab.



8 Tools

3. Click on **Add command**.
   ➲ The **Add command** pop-up window appears.



4. Define the DALI, DSI and DA24 command via the input fields, lists and radio buttons.
5. Optionally, a **delay time** in milliseconds can be defined.
6. Click on **Add**.
   ➲ The DALI, DSI and DA24 command is added to the command sequence.

Further functions	Description
(File) New	Delete all commands.
(File) Open	Open a previously saved command sequence.
(File) Save	Save the current command sequence in a file with the extension **.cot*.
(Command) Add	Add a new command to the command sequence.
(Command) Change	Change the selected command.
(Command) UP 	Move selected command up.
(Command) DOWN	Move selected command down.

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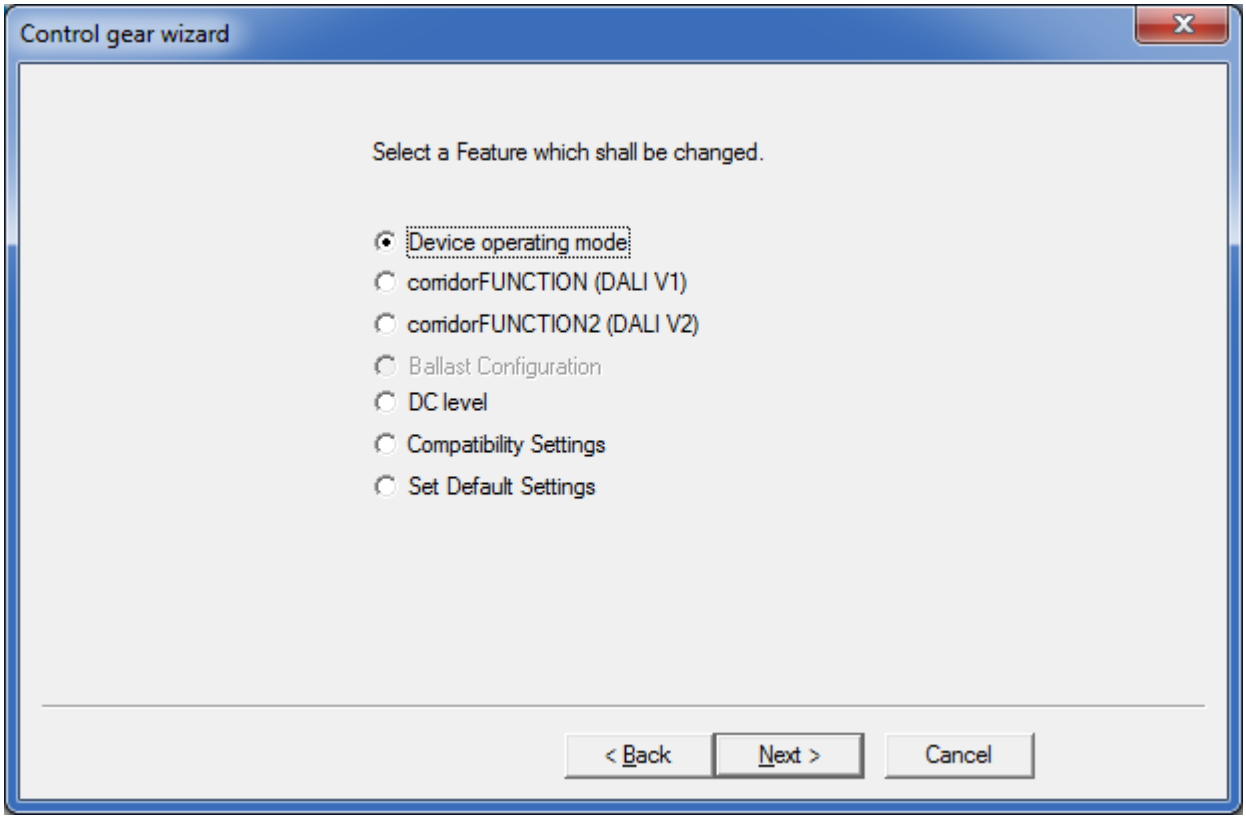
(Command) Delete	Delete the selected command.
(Test) Start	Start the command sequence. All commands are sent to the defined destination address (all, group, individual address) in the specified order.
(Test) Stop	Stop the command sequence.
(Test) Infinite loop	Repeat the command sequence endlessly.
(Test) Single step	One command at a time is sent to the devices or groups in the specified order.

Table 133: Command administrator - further functions

8 Tools

8.2 Control gear wizard

The control gear wizard can be used to enable and configure control gear functions and parameters. The configurations are sent to all control gear connected to the DALI control line.



Functions and parameters	Description
Interface mode	Select an interface operating mode.
corridorFUNCTION (DALI)	Carry out corridor control with a simple motion sensor (see Section Device operating mode DALI 52).
corridorFUNCTION (DALI 2)	Carry out corridor control with a simple motion sensor (see Section Device operating mode DALI 2 56).
Device configuration	Set the ePowerOn level and dimming/switching parameters in DC mode.
DC level	Set the intensity to which the ballast should dim/brighten in DC mode.
Compatibility settings	Parameterise the ballast so that its settings match those of the preceding generation of devices. This function is designed for replacing ballasts in existing systems.
Reset default settings	Delete all previous settings and reset to the defaults.

Table 134: Control gear wizard functions

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Note
Adjusting the settings requires extensive knowledge of the control gear. For further details on the individual functions of the control gear wizard, please refer to the relevant device documentation.

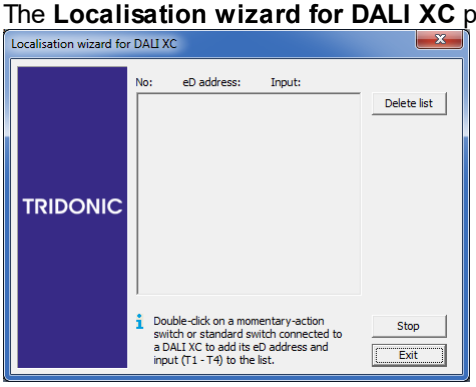
Note
In mixed settings that use both DALI and DALI 2, values are automatically checked for backward compatibility and adapted, if necessary.
This applies to e.g. the Fade-in time and Fade time, which are different for corridorFUNCTION and corridorFUNCTION2 (see Section corridorFUNCTION parameters 55 und corridorFUNCTION 2 parameters 56).

8.3 Localisation wizard for DALI XC

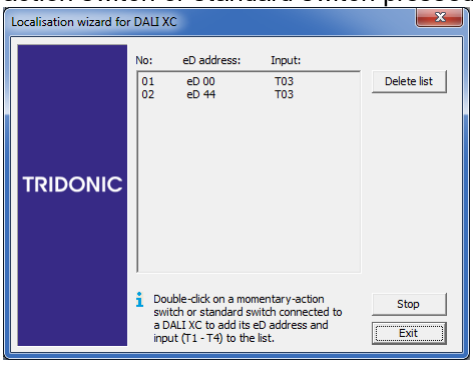
The localisation wizard for DALI XC can be used for tactile location of the individual inputs of the DALI XC with a double-click. The localisation wizard creates a list of located devices. This list can be used to note the associated address and input (T1–T4) in the addressing plan for each momentary-action switch or standard switch connected to a DALI XC.

Locating momentary-action switches or standard switches using the localisation wizard

1. Select menu item **Tools** > **Localisation wizard for DALI XC...**
   ➲ The **Localisation wizard for DALI XC** pop-up window appears.



2. Double-click one of the momentary-action switches or standard switches connected to a DALI XC.
   ➲ Consecutive numbers and eD addresses for the associated DALI XC and the input (T1–T4) of the momentary-action switch or standard switch pressed are added to the list.



3. Repeat step 2 for each of the momentary-action switches or standard switches connected to a DALI XC.
4. Note the eD addresses and inputs in the addressing plan.

8 Tools

> **Note**
> To be able to continue to use the information in a text editing program, select the content of this pop-up window using the mouse and then press **CTRL** + **C** to copy.

5. To delete the list, click **Delete list**.
   ➲ List is deleted.
6. To exit the localisation wizard, click **Exit**.
   ➲ Localisation wizard is closed.
   ➲ List is deleted.

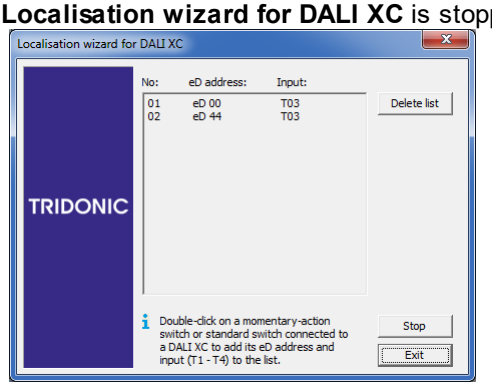
8 Tools

Configuring located momentary-action switches or standard switches

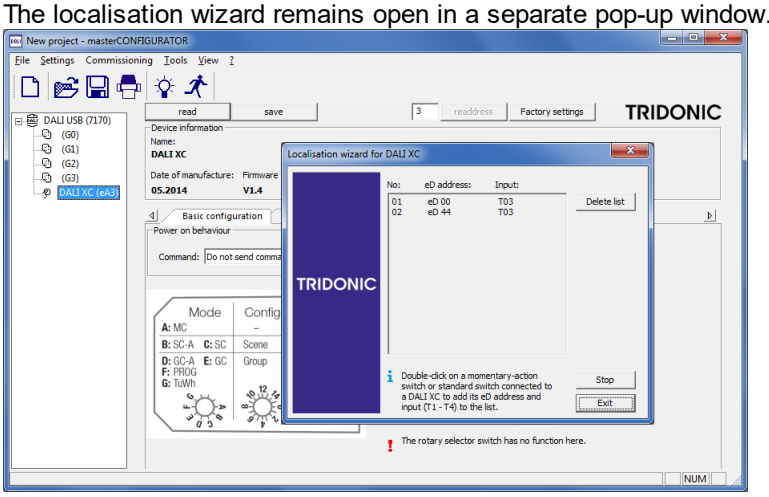
The localisation wizard for DALI XC always opens in a separate pop-up window. This window remains open until you exit the localisation wizard. The wizard provides the option of configuring a located momentary-action switch or standard switch directly.

Requirements:
– Momentary-action switch or standard switch has been located in the **localisation wizard for DALI XC**.

– **Localisation wizard for DALI XC** is stopped but not closed.



1. To configure input **T3** of the DALI XC with eD address 44, for example, click the DALI XC with eD address 44 in the DALI device tree diagram.
   ➲ The **basic configuration** is opened in the detail view.
2. Click on the **T3** tab.
   ➲ The **T3** tab is opened in the detail view.
   ➲ The localisation wizard remains open in a separate pop-up window.



3. Configure input **T3**.
4. Click on **Save**.

Note
For a detailed description of the configuration options, see Section DALI XC... 169

8 Tools

8.4 Firmware update

The firmware of the following devices can be updated using the masterCONFIGURATOR software:

- DALI MSensor

> **Note**
> Firmware version 1.5 or higher cannot be used for DALI MSensors with versions 1.3 or 1.4, as these involve different hardware.

- MSensor 5DPI 14
- DALI Somfy animeo interface
- DALI TOUCHPANEL

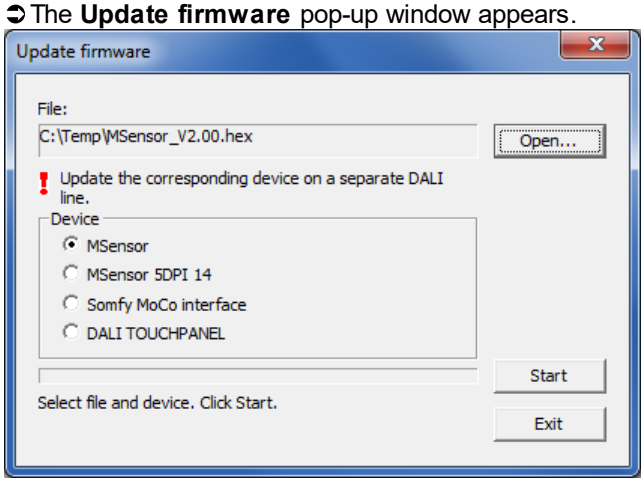
Update firmware

> **Warning**
> The firmware of all DALI MSensors, MSensor 5DPI 14, DALI Somfy animeo interfaces or DALI TOUCHPANELS connected to the DALI control line will be updated. If the wrong firmware is loaded on a device, this may damage the device.
>
> To avoid loading the wrong firmware on a device make sure that the devices that need to be updated are connected to a separate DALI control line and that no other devices are connected to this line!

> **Note**
> The updated devices must be re-addressed. More information on **system extension with unaddressed devices** can be found in Section Addressing 19.

> **Note**
> The firmware update will take around 20 minutes. During the update, the power supply and connection to the DALI control line must not be interrupted.

1. In the menu bar, click on **Tools** > **Update firmware**.
   ➲ The **Update firmware** pop-up window appears.



2. Click on **Open**.
3. Select desired *.hex file.

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Note
The naming of the *.hex files follows a consistent form, starting with an acronym for the device type, followed by the version number.

Examples:

File name	Device type	Version no
dalims150.hex	DALI MSensor	150
MSensor_Mini_v100.hex	MSensor 5DPI 14	100
SomfyMoCo_V19.hex	DALI Somfy animeo interface	19
DALITouch2_V29.hex	DALI TOUCHPANEL	29

4. Choose **device** for which the firmware will be updated:
   - **MSensor** radio button: Firmware will be updated for all the DALI MSensors connected to the DALI control line
   - **MSensor 5DPI 14** radio button: Firmware will be updated for all the MSensor 5DPI 14 connected to the DALI control line
   - **Somfy MoCo interface** radio button: Firmware will be updated for all the DALI Somfy animeo interfaces connected to the DALI control line
   - **DALI TOUCHPANEL** radio button: Firmware will be updated for all the DALI TOUCHPANEL connected to the DALI control line
5. Click on **Start**.
   ➲ A message appears which states that the update will take 20-30 minutes.
6. Confirm the message by clicking on **Yes**.
   ➲ The firmware of all DALI MSensors, MSensor 5DPI 14, DALI Somfy animeo interfaces or DALI TOUCHPANELS connected to the DALI control line will be updated.
   ➲ The **Firmware update completed** pop-up window appears. This completes the update.

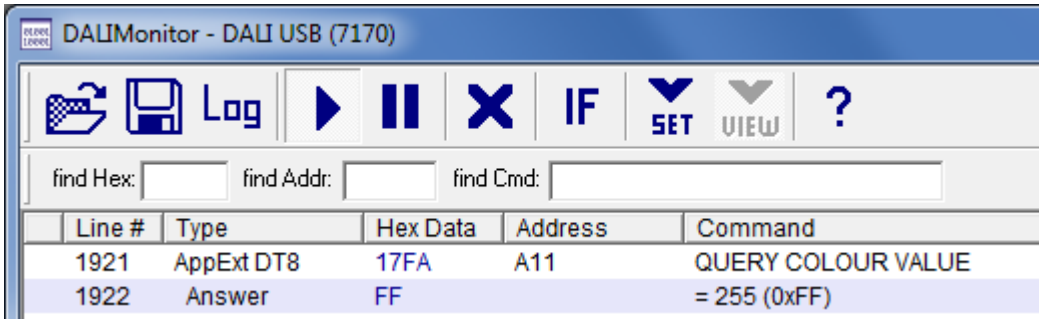
9 Further components

The programs DALI Monitor and DALI BusServer are also installed with the masterCONFIGURATOR software; these programs support the user when working with the masterCONFIGURATOR software.

As DALI interface the DALI USB or the ready2main Programmer can be used.

The DALI Monitor can be accessed via the icon  in the Windows task bar, the DALI BusServer via the icon  .

For more information about both programs, refer to the DALI Monitor product manual.
The DALI Monitor product manual can be opened by clicking on the help icon (question mark symbol) in the menu bar of the DALI Monitor (see screenshot below).



10 Appendix

The appendix contains the following sections:

10.1 Configuration commands for DALI control gear

The configuration commands can be used to set the parameters of the DALI control gear.

Configuration command	Description	Version	Command no.
RESET	Sets the control gear to the reset values (More information can be found here... 283). The address is not changed.	DALI and DALI 2	32
STORE ACTUAL LEVEL IN DTR0	The set intensity is stored in the DTR0 memory.	DALI and DALI 2	33
SAVE PERSISTENT VARIABLES	Persistent variables are stored in a secure storage area.	≥ DALI 2	34
SET OPERATING MODE (DTR0)	Allows configuring the operating mode.	≥ DALI 2	35
RESET MEMORY BANK (DTR0)	Resets the Memory Bank to its default values.	≥ DALI 2	36
IDENTIFY DEVICE	Identifies (localizes) devices.	≥ DALI 2	37
SET MAX LEVEL (DTR0)	The selected value is set as the maximum level for the control gear. This value cannot be exceeded during dimming/brightening.	DALI and DALI 2	42
SET MIN LEVEL (DTR0)	The selected value is set as the minimum level for the control gear. This value cannot be fallen below during dimming/brightening.	DALI and DALI 2	43
SET SYSTEM FAILURE LEVEL (DTR0)	The selected value is set as the value in the event of failure of the DALI power supply.	DALI and DALI 2	44
SET POWER ON LEVEL (DTR0)	The selected value is set as the value after power is restored.	DALI and DALI 2	45
SET FADE RATE (DTR0)	The selected value is set as the dimming speed. It indicates by	DALI and DALI 2	46

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	how many steps per second the intensity is changed. The **Fade Rate** is used with the DALI commands **Brighten** (Up) and **Dim** (Down).		
SET FADE TIME (DTR0)	The selected value is set as the fade time in seconds.	DALI and DALI 2	47
SET EXTENDED FADE TIME (DTR0)	Allows setting the Extended Fade Time. Only possible if the parameter „SET FADE TIME (DTR0)“ was set to 0.	≥ DALI 2	48
SET SCENE n (DTR0)	Transfer intensity from DTR0 to desired scene.	DALI and DALI 2	64 – 79
REMOVE FROM SCENE n	Remove desired scene from device.	DALI and DALI 2	80 – 95
ADD TO GROUP n	Add device to desired group.	DALI and DALI 2	96 – 111
REMOVE FROM GROUP n	Remove device from desired group.	DALI and DALI 2	112 – 127
SET SHORT ADDRESS (DTR0)	Set desired address.	DALI and DALI 2	128
ENABLE WRITE MEMORY	Enable desired write memory.	DALI and DALI 2	129

Table 135: Configuration commands for DALI control gear

10.2 Switch and dim commands

DALI-Befehl	Type of command	Description	Version	Command no.
DIRECT ARC POWER (DAPC)	DAP Direct Arc Power	Continuously adjustable intensity. The set fade time is used.	DALI and DALI 2	-
OFF	IAP Indirect Arc Power	The lighting is switched off immediately without any fade time.	DALI and DALI 2	0
UP	IAP Indirect Arc Power	The intensity is increased by the steps defined in the fade rate. When the lighting reaches the set maximum level, it remains at this level.	DALI and DALI 2	1

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DOWN	IAP Indirect Arc Power	The intensity is reduced by the steps defined in the fade rate. When the lighting reaches the set minimum level, it remains at this level.	DALI and DALI 2	2
STEP UP	IAP Indirect Arc Power	The intensity is increased by one step.	DALI and DALI 2	3
STEP DOWN	IAP Indirect Arc Power	The intensity is reduced by one step.	DALI and DALI 2	4
RECALL MAX LEVEL	IAP Indirect Arc Power	The maximum level is recalled immediately without any fade time.	DALI and DALI 2	5
RECALL MIN LEVEL	IAP Indirect Arc Power	The minimum level is recalled immediately without any fade time.	DALI and DALI 2	6
STEP DOWN AND OFF	IAP Indirect Arc Power	• If the lighting is switched on, the intensity is reduced by one step. • If the lighting reaches the minimum level, it is switched off.	DALI and DALI 2	7
ON AND STEP UP	IAP Indirect Arc Power	• If the lighting is switched off, the minimum level is recalled. • If the lighting is switched on, the intensity is increased by one step.	DALI and DALI 2	8
GO TO LAST ACTIVE LEVEL	IAP Indirect Arc Power	Es wird der letzte Intensitätswert eingenommen.	≥ DALI 2	10
GO TO SCENE (0-15)	IAP Indirect Arc Power	Scene X (0–15) is recalled. The defined fade time will be used.	DALI and DALI 2	16 - 31

Table 136: Switch and dimm commands

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10.3 Query commands

Query command	Version	Command no.
QUERY STATUS	DALI und DALI 2	144
QUERY LAMP FAILURE	DALI and DALI 2	146
QUERY DEVICE TYPE	DALI and DALI 2	154
QUERY OPERATING MODE	≥ DALI 2	158
QUERY LIGHT SOURCE TYPE	≥ DALI 2	159
QUERY ACTUAL LEVEL	DALI and DALI 2	160
QUERY MAX LEVEL	DALI and DALI 2	161
QUERY MIN LEVEL	DALI and DALI 2	162
QUERY POWER ON LEVEL	DALI and DALI 2	163
QUERY SYSTEM FAILURE LEVEL	DALI and DALI 2	164
QUERY FADE TIME/FADE RATE	DALI and DALI 2	165
QUERY MANUFACTURER SPECIFIC MODE	≥ DALI 2	166
QUERY NEXT DEVICE TYPE	≥ DALI 2	167
QUERY EXTENDED FADE TIME	≥ DALI 2	168
QUERY CONTROL GEAR FAILURE	≥ DALI 2	170
QUERY SCENE LEVEL (0-15)	DALI and DALI 2	176 – 191
QUERY GROUPS 0-7	DALI and DALI 2	192
QUERY GROUPS 8-15	DALI and DALI 2	193

Table 137: Query commands

10.4 Reset values

Parameter	Reset Value	Value
Actual level	254	100 %
Power on level	254	100 %
System failure level	254	100 %
Minimum level	Physical min level	Physical min level
Maximum level	254	100 %
Fade rate	7	45 steps/s
Fade time	0	< 0,7 s

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Extended Fade Time	0	as fast as possible
Gruppe 0–7	0000 0000 (no group)	no group
Gruppe 8–15	0000 0000 (no group)	no group
Szene 0–15	255	MASK

Table 138: Reset values

10.5 Timing parameter

To achieve uniform timing parameter access, it is desirable to have the same value describing the same time interval. Control devices may use the values in the table below unless stated otherwise.

Time input range	Input steps
1 s - 15 s	1 seconds
20 s - 1 min	5 seconds
1 min 15 s - 5 min	15 seconds
5 min 30 s - 10 min	30 seconds
11 min - 30 min	1 minutes
35 min - 2 h	5 minutes
2 h 15 min - 5 h	15 minutes
5 h 30 min - 12 h	30 minutes

Table 139: Timing parameter

Example:

- Input of 16 seconds is transformed to 20 seconds
- Input of 5 minutes 10 seconds is transformed to 5 minutes 30 seconds