DALI PROFESSIONAL

New features

Software Version 2.2.x

OSRAM

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1. Introduction

1.1 General

The OSRAM DALI PROFESSIONAL System (DALI PRO System) is a lighting control based on standardized DALI Bus according to IEC 62386, see: http://www.dali-ag.org/.

With this, a flexible addressable digital lightning control can be built-up. The central component is the DALI PRO CONTROLLER with 4 DALI lines. These DALI lines can be equipped with DALI suitable ECG for lamp operation and DALI operation units / sensors.

The DALI PRO PC software allows a comfortable setup and visualization of individual configurations for the DALI PRO system. Complete configurations can be shown and changed on the screen with mouse clicks.

Changes on screen are transferred by upload from PC to the controller memory via USB or remotely by local LAN connection.

The DALI PRO PC software provides various possibilities which are all described in detail by software manual.

This document provides:

- a general step by step instructions for commissioning the DALI PROFESSIONAL new features, see *2 General introduction to adding and configuring new features, page 6*
- an introduction to DALI PROFESSIONAL new features:
  - Color Control (RGB), see chapter *3, page 12*
  - Tunable White, see chapter *4, page 26*
  - Daylight simulation, see chapter *5, page 36*
  - Smartphone configuration, see chapter *6, page 39*

1.2 System limits

1.2.1 DALI PRO Cont-4 RTC functionalities and limitations

- 4 x 16+ groups, line overlapping allowed; '+' means additional 'virtual' groups possible by software, but uses addressed commands. Final max. number of groups only limited by controller memory
- 4 x 16 scenes, line overlapping allowed, but then one scene used for each line
- 4 x 8 active light regulation loops; more possible when noticeable delay accepted, limited by reaction times
- Full- and semi-automatic energy saver function with occupancy- and light-sensor
- Up to 10 light sensors / sensor couplers per regulation
- Corridor function with two standby levels
- PIR disable / enable function
- Sequences consisting of scenes, fade control, loops
- Visible resource status message
- Switch function
- Serial / parallel configuration of grouped switches
- 4 x programmable internal relay
- Test-function for all DALI devices
- Configuration check comparing physical available devices
- Retrieve configuration by download from controller
- Full project documentation in HTML file
- Up to 50 different configurable timers

1.3 Required equipment

All DALI PROFESSIONAL commissioning responsible should have a recommended tool kit in their possession.

1.3.1 Additional equipment for Smartphone control

To control a DALI PRO CONT-4 RTC controller with a smartphone the following equipment is needed in addition to the standard equipment:

- A standard Wifi router
- A RJ45 Cat 5 patch cable between wireless IT-switch and controllers

2. General introduction to adding and configuring new features

This section describes some fundamental functions of the DALI Professional software.

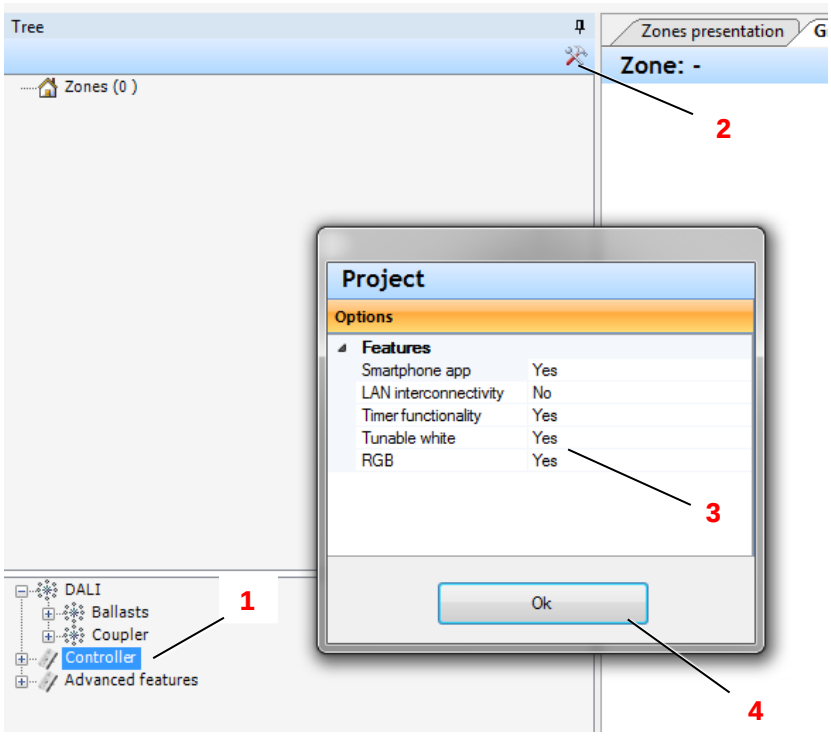
To enable, generate and configure a new feature always takes the following steps which are explained in depth in chapters 2.1 to 2.5:

1. Enable a feature, see *2.1, page 6*.
2. Generate devices, see *2.2, page 7*.
3. Generate a button for a device, see *2.3, page 10*.
4. Create a function to connect button and device, see *2.4, page 10.*
5. Configure the functionalities for the button, see *2.5, page 11*.

In case you are an advanced user, please continue with chapter 3 to 5.

2.1 Enable a feature

Before generating a new device for a feature, the feature has to be enabled.



1. Select the corresponding controller (1).
2. Click **Settings** (2) to open the Project Features list.
3. Set **Yes** for the required features (3).
4. Confirm by clicking **Ok** (4).

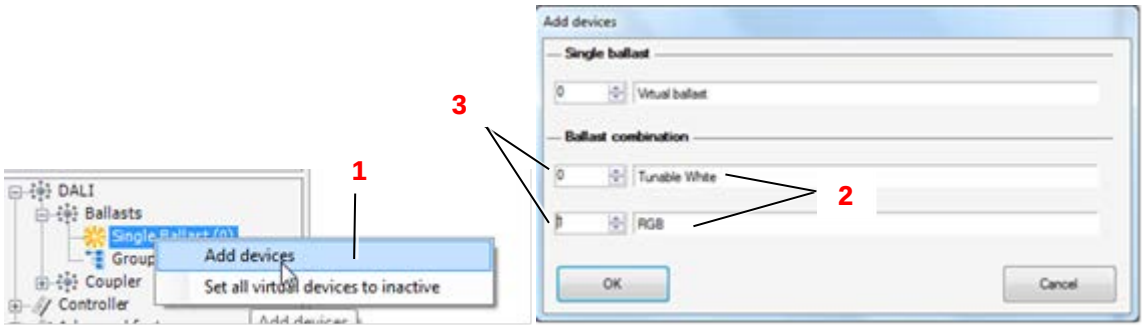
2.2 Generate a device

Before using a feature, a device of this feature has to be generated.

Devices can be:

- Used (connected) devices
  With the localization window, the connected devices can be added to the device tree.
  See *2.2.2 Generate used devices from the localisation window, page 8*.
- Virtual devices (for planning/preconfiguration purposes)
  These devices can be merged later to used devices.
  In the device tree, virtual devices can be added manually.
  See *2.2.1 Generate a virtual device from the device* tree*, page 7*.

2.2.1 Generate a virtual device from the device tree

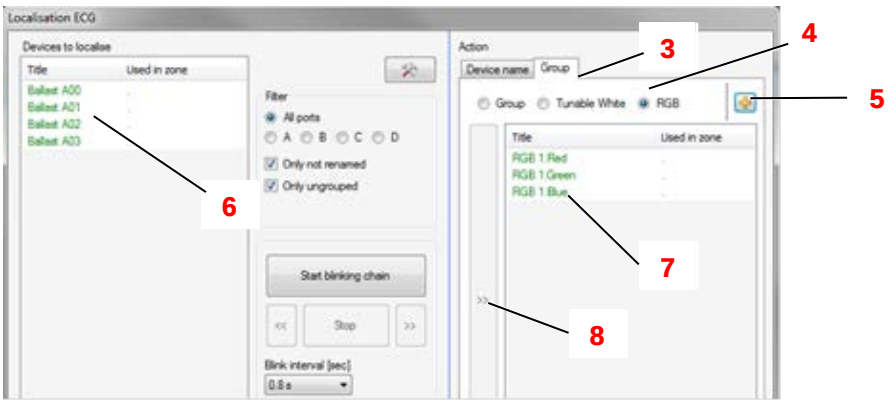


1. Select with right-mouse-click: *Ballasts* > *Single Ballasts* > *Add devices* (1).
2. Select the type of device (feature) (2) and the number of devices (3).

2.2.2 Generate used devices from the localisation window

INFO: The localisation window is only available, when the PC is connected to the DALI PRO Cont-4 RTC controller.

Prerequisites: A device scan (1) is done.



1. Select *Ballasts* > *Locate devices* (2).
   The connected devices (ECGs, couplers) are shown in the **Devices to localise** list.
   The list can be filtered (e.g. by port).
2. Optional: Select *Ballasts* > *Locate devices* (2) to skip the device scan and directly open the Localisation window; requires one Scan for devices (1) after connecting..

2.2.3 Group devices

The localized devices can be grouped.

Adding a new group:

1. Select the **Group** tab (3).
2. Select a feature (4).
3. Click **+** to generate a new group (5).

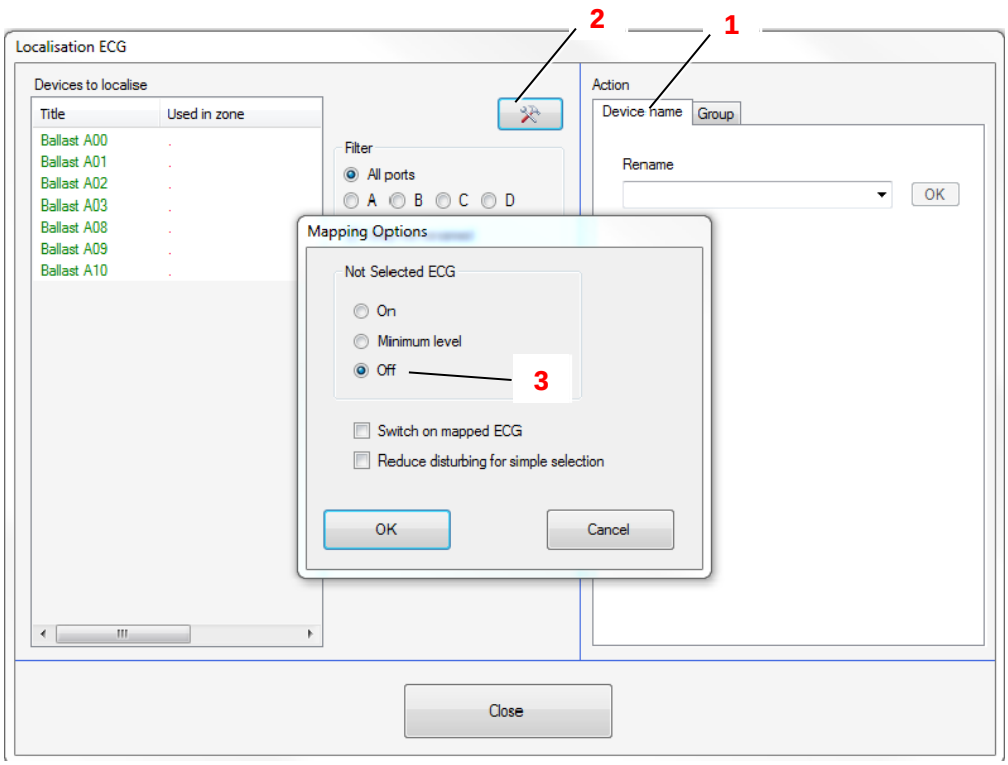
Adding a device to a group:

1. Select a device in the list (6). The actual selected device is blinking.
2. Select a group (7).
3. Click **>>** (8) to add the selected device to the selected group (7).

2.2.4 Mapping options

It is possible to set mapping options for one or all ports.

INFO: It is recommended to select *Non selected ECG > Off* (3).

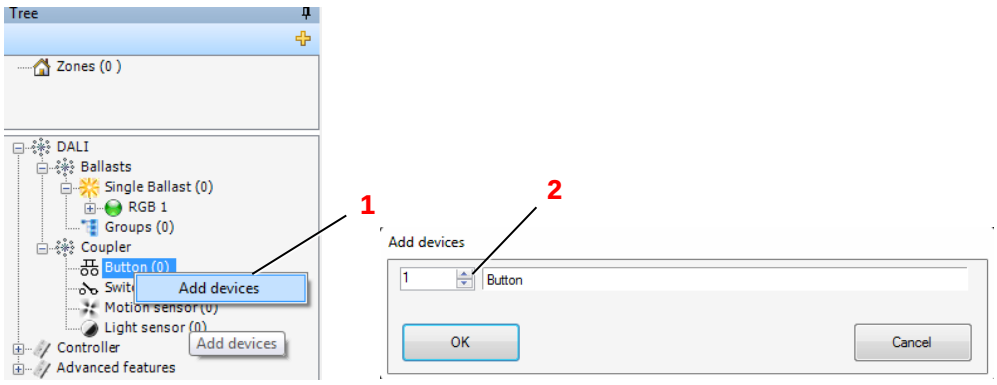


1. Select **Device name** (1).
2. Click **Settings** (2).
3. Select the required settings in the **Mapping Options** window, see following table.
4. Confirm with OK.

Option	Explanation
On	While the localization window is running, all non selected luminaires are on.
Minimum level	While the localisation window is running, all non selected ECG are at minimum level.
Off	Recommended setting! While the localisation window is running, all non selected ECGs are off.
Switch on or off mapped ECG	While the localisation window is running, all mapped ECGs are on or off to easier identify unmapped ECGs.
Reduce disturbing for simple selection	While the localisation window is running, only the selected ECG is blinking, and the others are working as normal (only used when the system was already running to minimize interruption of the normal work).

2.3 Generate a button for a device

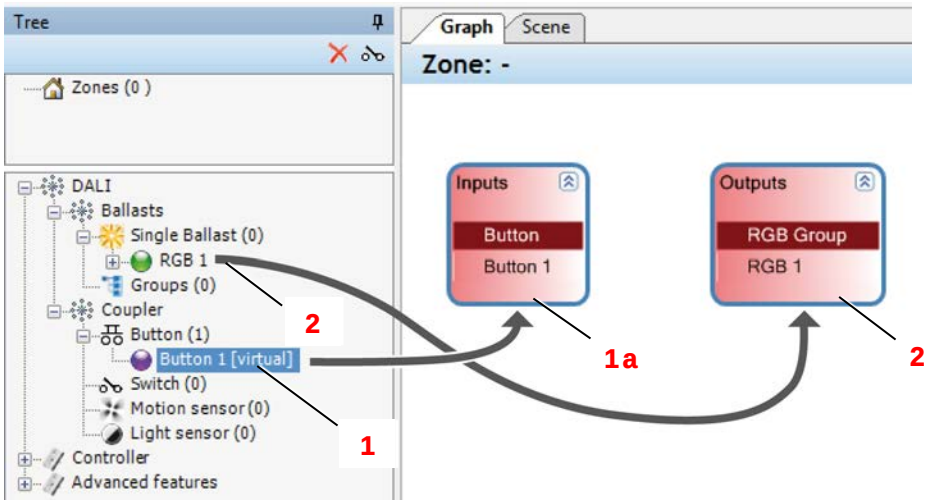
In order to use a device, a button has to be generated.

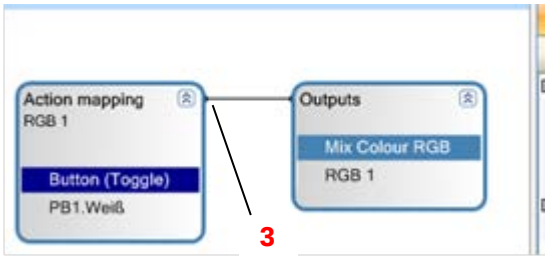


1. Select with right-mouse-click: *Coupler* > *Button* > *Add devices* (1).
2. Select the number of buttons (2).
3. Confirm with OK.

2.4 Create a function

In order to have the device respond to a button action, button and device have to be connected. This allows for a function to be executed.

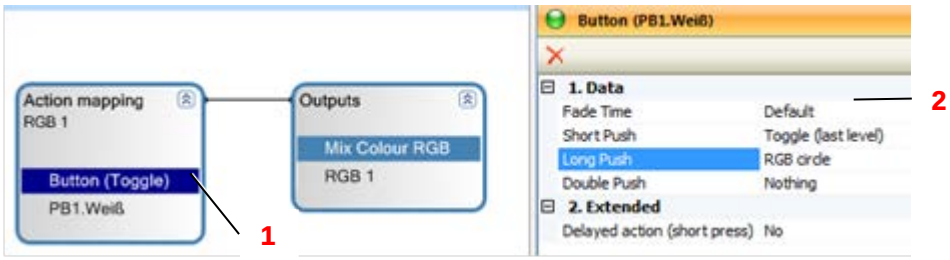




1. Drag the button (1) from the device tree into the Graph Panel (1a).
2. Drag the device (2) from the device tree into the Graph Panel (2a).
3. Drag a line from the button to the device to connect them (3).

2.5 Configure the functionalities of a button

In order to set multiple button functionalities, the button has to be configured in the properties window.

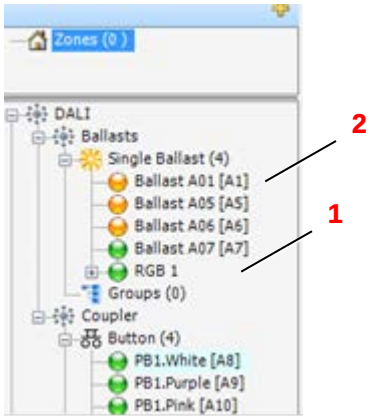


1. Select the button function (1).
2. Select the action(s) and the corresponding effect(s) from the Properties window (2), see *3.3 Add and configure buttons, page 13.*

3. Color Control (RGB)

3.1 General

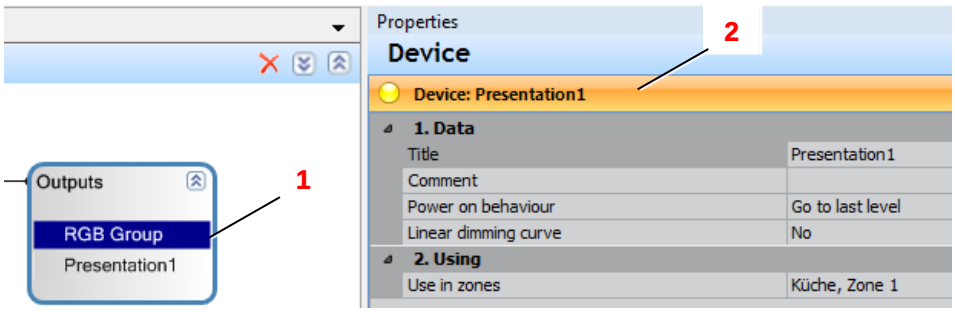
- To control colored light, an RGB device (1) has to be generated by combining three DALI ECGs with red, green and blue light.
- For RGB functions, only combined RGB devices can be used.
- The single ECGs (of a combined RGB device) are shown in orange (2) and no longer usable.



INFO: The DALI Device Type 8 for colored light is not supported by the DALI PRO-Cont4 RTC controller.

3.2 Add RGB device and configure basic settings

3.2.1 Adding RGB device



1. Enable the RGB functions in the Project Features list, see *2.1 Enable a feature, page 6*.
2. In the device tree, select with right-mouse-click: *Ballasts > Single Ballast > Add devices*. (For details see *2.2 Generate a device page 7)*. .
3. Select the number of RGB devices and confirm.
4. Drag the device from the device tree into the Graph Panel.
5. Select the RGB group (1).
6. Configure the device in the Properties window (2).

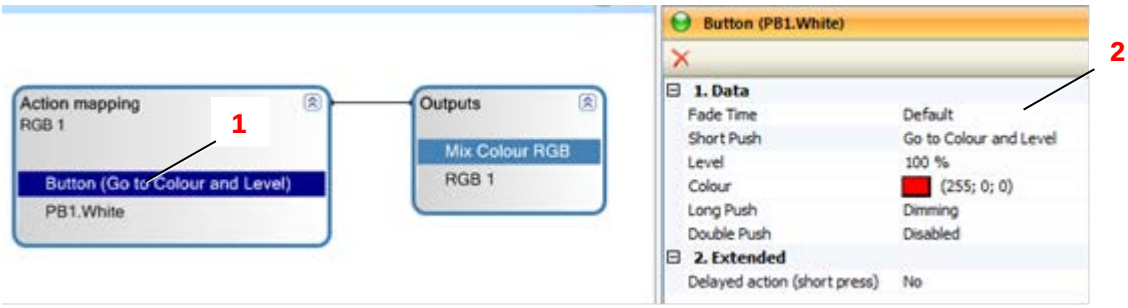
3.2.2 Configuration settings

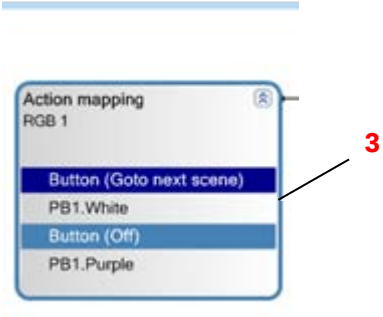
Option	Explanation	Parameters/Examples
Title	Rename the RGB device.	e.g. Foyer RGB lightwall 1
Comment	Add a comment for further information.	e.g. device located above luminaire
Power on behavior	Light on situation: - Go to last level: Light on – with values from the situation before the power loss - Go to level: light level after power cycle	Power On Level (0 – 100 %) Color (RGB settings), see *3.3.7 Setting a color value, page 17.*
Linear dimming curve	Enable dimming.	No Yes (light level will stay constant when changing the color, optimized for RGB)
Use in zones	Lists zones, where RGB device is used.	e.g. conference room

3.3 Add and configure buttons

3.3.1 Adding buttons

Usually, button actions are combined to utilize the full scope of functionalities.





1. Select a button function (1).
2. Configure the button in the Properties window (2), see following tables.
3. If required, add more than one button function to the Action mapping box (3) and configure them.

3.3.2 General settings

Option	Explanation	Parameters/Examples
Fade Time	Duration to dim to the new brightness level.	Default (uses fade time stored from the ECGs) No fade 0.7 – 90.5 s
Short Push	Select action for a short push on a button.	See *3.3.4 Short Push actions, page 15.*
Long Push	Select action for a long push on a button.	See *3.3.5 Long Push actions, page 16.*
Double Push	Select action for a double push on a button.	See *3.3.6 Double Push actions, page 16.*
Delayed action	Define up to two delayed actions for a Short Push.	No 1 (number of delayed actions), see *3.3.3 Delayed action configuration options, page 14.* 2 (number of delayed actions), See *3.3.3 Delayed action configuration options, page 14.*

3.3.3 Delayed action configuration options

Option	Explanation	Parameters/Examples
Time Delay	Step 1: Delay time until the first delayed action starts. Step 2: Delay time between the first and the second delayed action.	
Fade Time	Duration to dim to the new brightness level.	
Action	Delayed action type: - Off - Go to level	Level (0 – 100 %)

3.3.4 Short Push actions

The following functionalities are available for Short Push button actions:16

Short Push action	Explanation	Parameters/Examples
Off	Switch off the light.	
Go to level	Light on – dim brightness to parameter value.	Level (0 – 100 %)
Go to last level	Light on – with values from the situation before the last light off.	
Go to scene	Light on to scene, selected by name.	Scene, see *3.4 Add and configure a colored scene page 18*.
Go to next scene	Light on to the scene, selected by name. If Scene 1 is already running, Scene 2 will be recalled by pressing the button – loop with each button press.	Scenes count (numbers, up to five scenes possible) Scene 1 Scene 2 Scene 3 …
Toggle (level)	Toggle between off and the light value from the additional parameter level.	Level (0 – 100 %)
Toggle (last level)	Toggle between off and the level value from the situation of the last light on.	
Toggle (scene)	Toggle between off and the scene, selected by name.	Scene, see *3.4 Add and configure a colored scene page 18*.
Go to Color	Light on to selected color.	Color (RGB settings), see *3.3.7 Setting a color value, page 17*.
Go to Color and Level	Light on to selected color and level.	Level (0 – 100 %) Color (RGB settings), see *3.3.7 Setting a color value, page 17*.

INFO: The following effects are only visible, when an effect (RGB sequence, Daylight Simulation) is connected to the Action Mapping box:
- Start Effect
- Stop Effect
- Toggle Effect

Start Effect	Start an color effect, see *3.5 Add and configure a color effect (RGB sequence), page 21*.	
Stop Effect	Stop an color effect, see *3.5 Add and configure a color effect (RGB sequence), page 21*.	
Toggle Effect	Toggle effect, see *3.5 Add and configure a color effect (RGB sequence), page 21*.	

3.3.5 Long Push actions

The following functionalities are available for Long Push button actions:

Long Push action	Explanation
Dimming	Continuous change of the level. With each long push, the dimming direction is changed.
Dimming Up	Continuous change to more light (for button with label up).
Dimming Down	Continuous change to less light (for button with label down).
RGB circle	Walk through the colors of the RGB circle (over 32 different colors).
RGB circle with white	Walk through the colors of the RGB circle, including white.
Change Red/Green/Blue	Change color value of Red, Green or Blue.
Increase Red/Green/Blue	Increase color value of Red, Green or Blue.
Decrease Red/Green/Blue	Decrease color value of Red, Green or Blue.

3.3.6 Double Push actions

The following functionalities are available for Double Push button actions:

Double Push action	Explanation	Parameters/Examples
Off	Switch off the light.	
Go to level	Light on – dim brightness to parameter value.	Level (0 – 100 %)
Go to scene	Light on to scene, selected by name	Scene, see *3.4 Add and configure a colored scene page 18.*
Go to Color and Level	Light on to selected color and level.	Level (0 – 100 %) Color (RGB settings), see *3.3.7 Setting a color value, page 17*.

INFO: The following effects are only visible, when an effect (RGB sequence, Daylight Simulation) is connected to the Action Mapping box:
- Start Effect
- Stop Effect

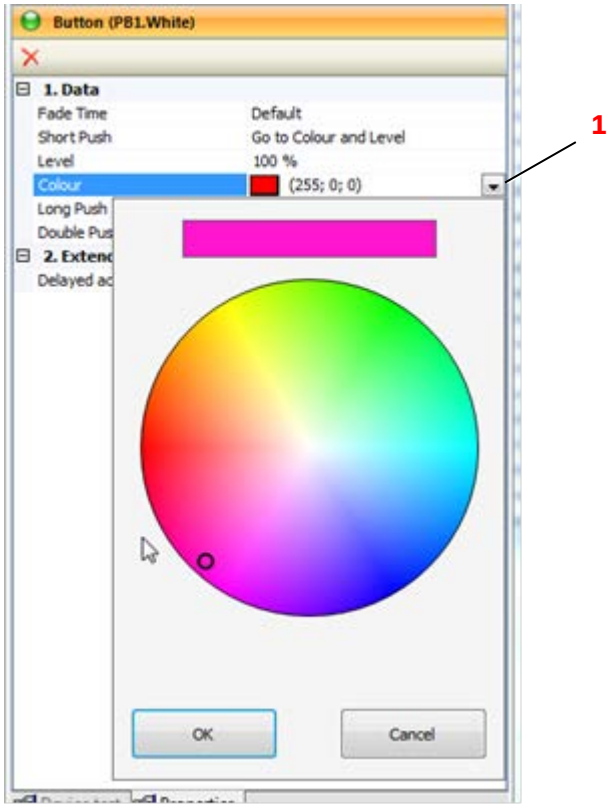
Start Effect	Start a color effect, see *3.5 Add and configure a color effect (RGB sequence), page 21*.	
Stop Effect	Stop a color effect, see *3.5 Add and configure a color effect (RGB sequence), page 21*.	

3.3.7 Setting a color value

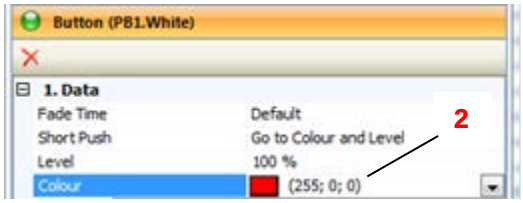
All RGB values can manually be added to the devices. Each single color is a combination of RGB values.

On order to set a color value for one or more button actions, use one of the following options:

Option 1: Click the list (1), to open the RGB circle and select a color. Confirm with OK.



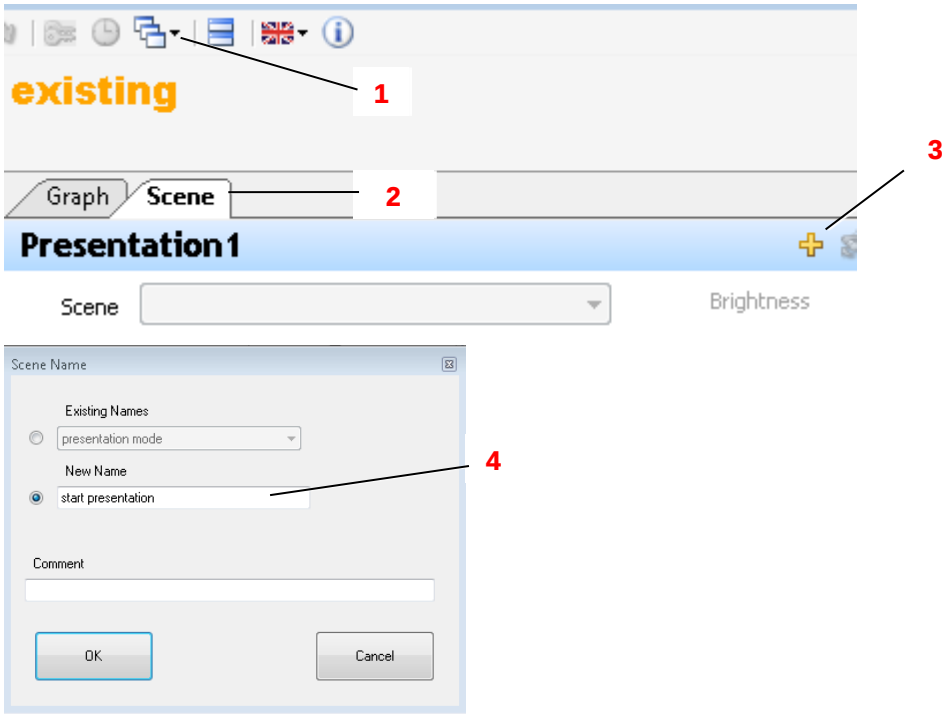
Option 2: Set the exact values (2) for Red, Green and Blue, e.g. to set the exact CI color values of a company.



3.4 Add and configure a colored scene

- In addition to the light level, the color control for each RGB output will be shown in the scene panel.
- It is also possible to have one button correspond with up to five scenes (*Short Push > Go to next scene*).

3.4.1 Adding a colored scene



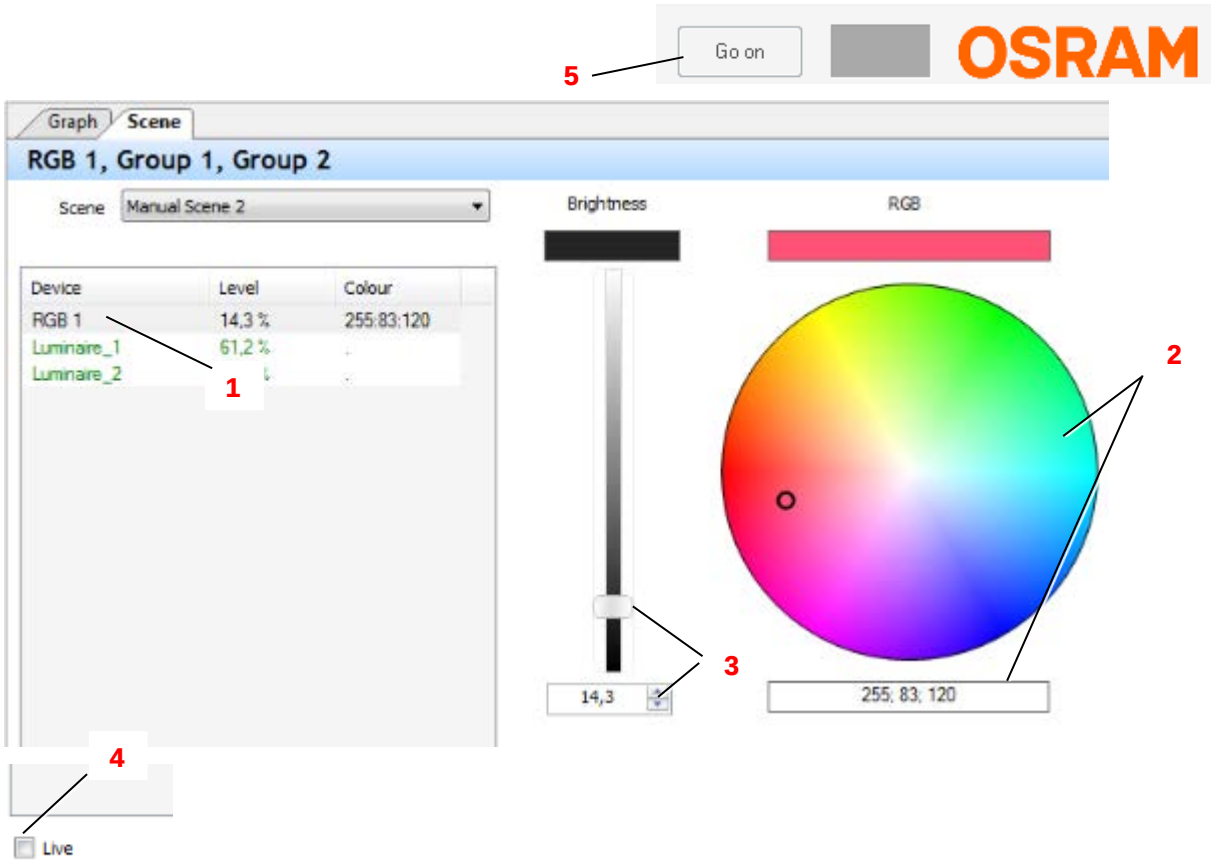
1. Select the required Action Mapping box in the Graph Panel, in order to select the outputs that will be affected by the scene.
2. Click the list (1) and activate the **Scene** tab (2).
3. Click **+** (3) to add a scene.
4. Rename the scene (4) in the window.
5. Confirm with OK.

3.4.2 Configuring a colored scene

In the scene panel, all devices to be affected by this scene are listed.

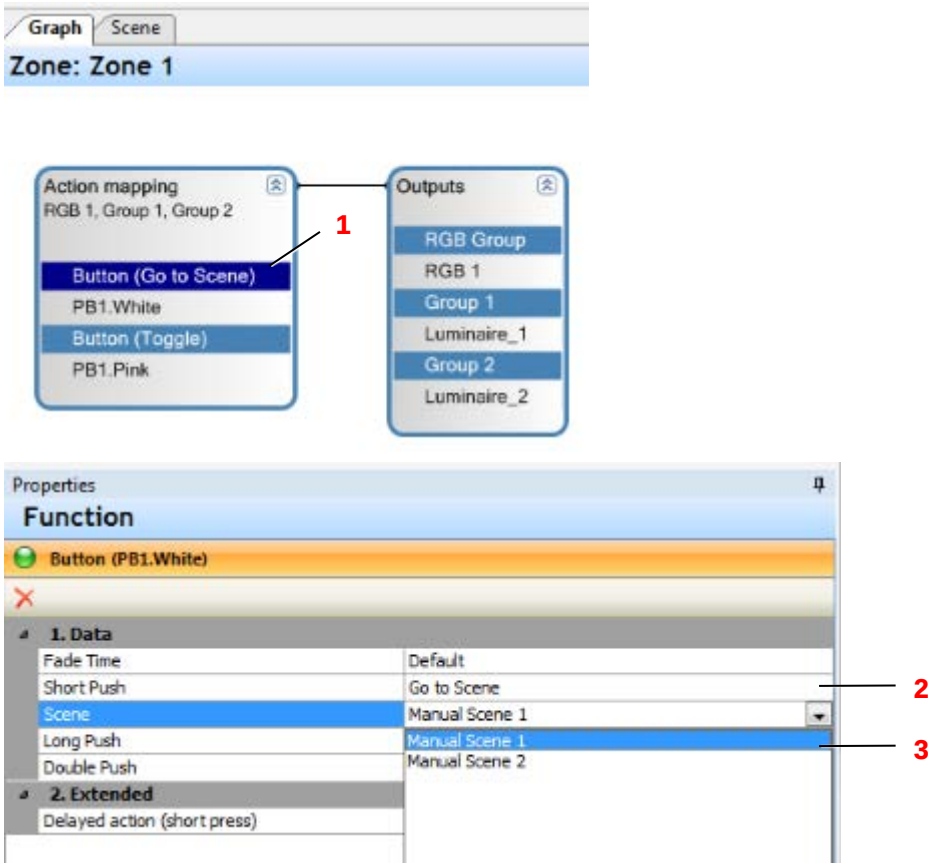
Each device in this list can have different brightness and color levels, but they also can have the same settings.

RGB and normal ECG can be mixed in the scene.



1. Select the required device (1) – press [Shift] or [Strg] to select multiple devices.
2. Select the color values (2).
3. Select the brightness level (3).
4. If connected to the controller: Activate **Live** (4), to visualize the selection. Click **Go on** (5) after final selection to activate the configuration again.

3.4.3 Recalling a scene

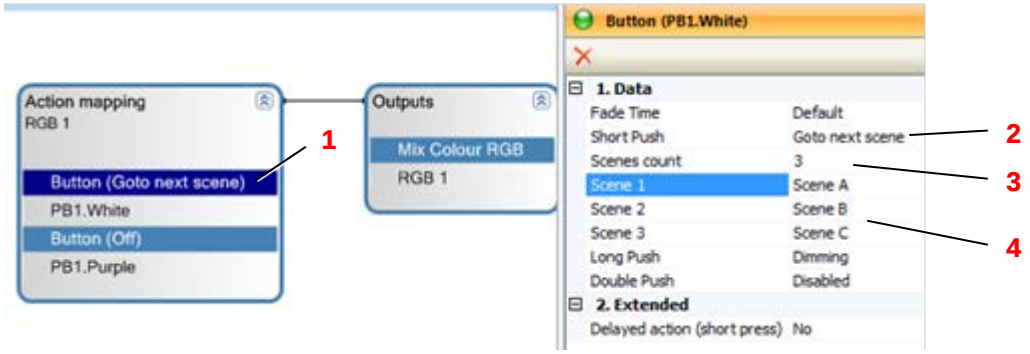


Select the button function in the Graph Panel (1).

1. Select: *Short Push* > *Go to scene* (2) in the Properties window.
2. Select the scene (3).

3.4.4 Recalling multiple scenes

One button function can be used to toggle between multiple scenes



1. Select the button function in the Graph Panel (1).
2. Select: *Short Push* > *Go to next scene* (2) in the Properties window.
3. Select the number of scenes for the loop (3).
4. Select the names of the scenes (4).

3.5 Add and configure a color effect (RGB sequence)

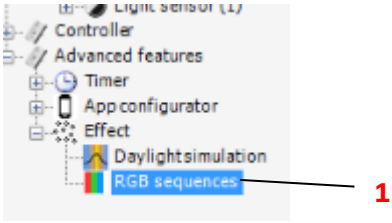
The color effect offers the following functionalities:

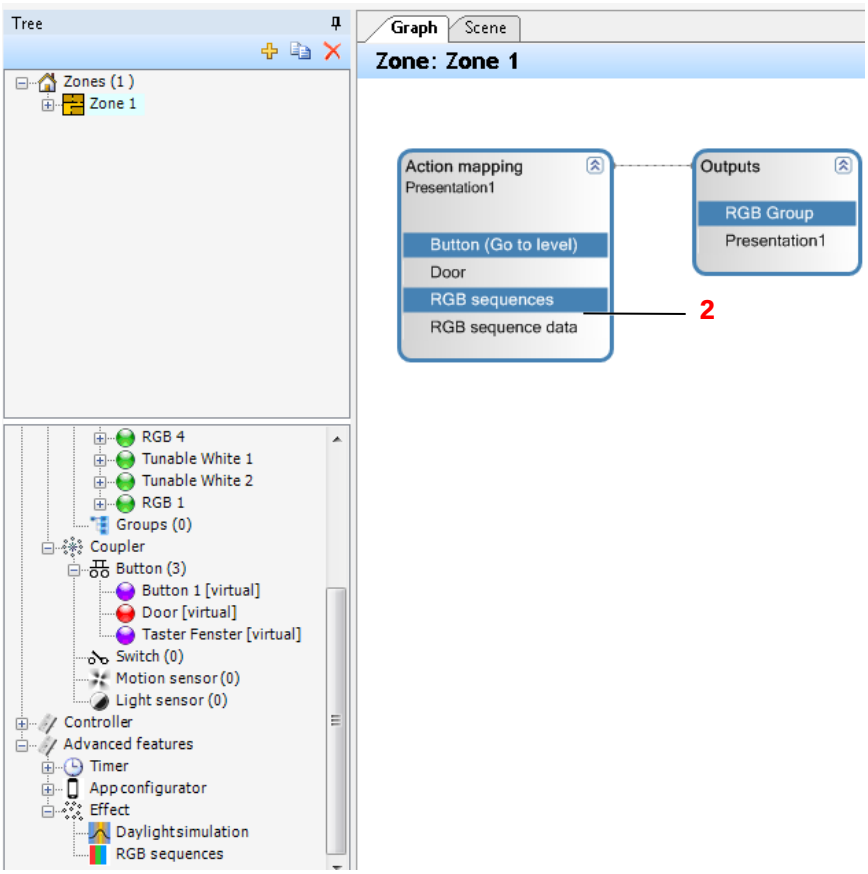
- play an RGB sequence
- provide an easy continuous color change.

This procedure requires multiple steps:

- Generating the RGB sequence.
- Selecting a Short Push or Double Push button function for the effect, see *3.3 Add and configure buttons, page 13.*
- Configuring an automatic or a self-defined RGB sequence.

3.5.1 Generating an RGB sequence

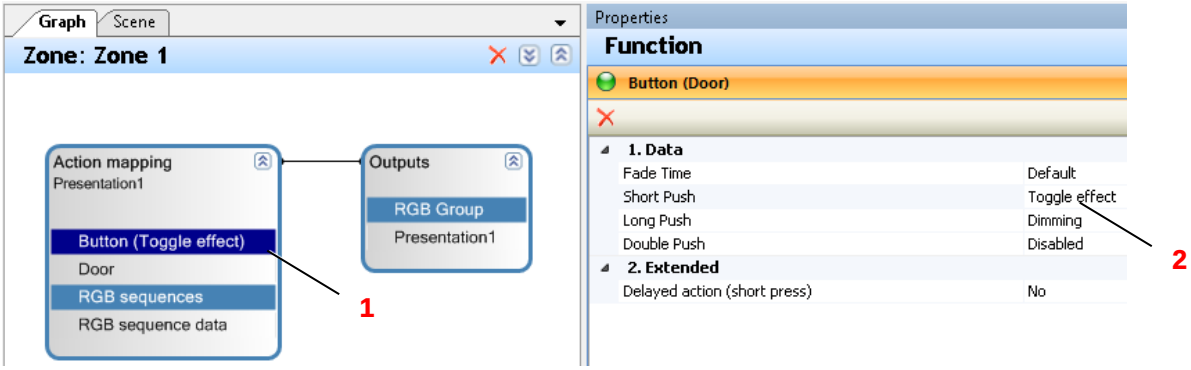




1. Select *Advanced features* > *Effect* > *RGB sequences* (1).
2. Drag the RGB sequence from the device tree into the Action mapping box of a button. The new RGB sequence is generated (2).

3.5.2 Selecting a button function for the RGB sequence

To use the RGB sequence, it has to be connected to a button function.



1. Select the button function (1) in the Action mapping box and configure a button action for the RGB sequence, e.g. *Short Push > Toggle Effect* (2).

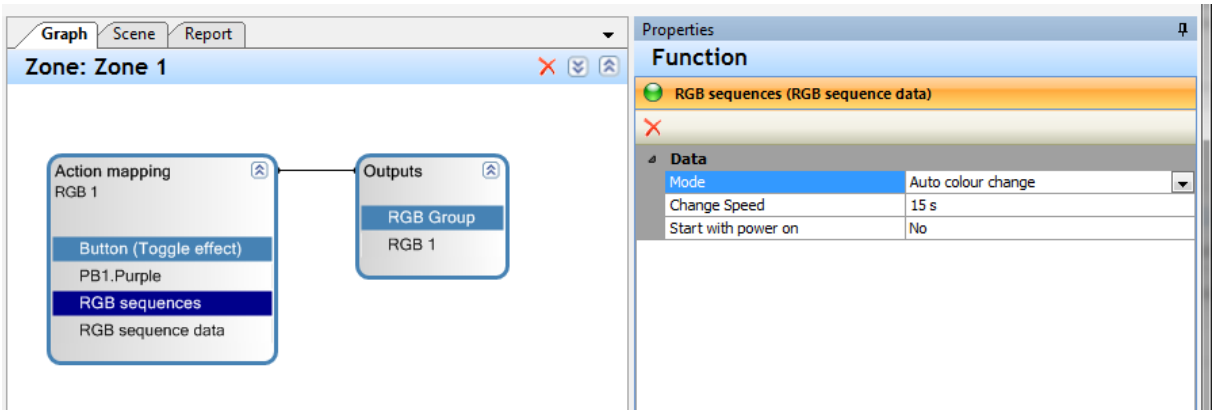
3.5.3 Configure the RGB sequence

Two modes are available to configure RGB sequences:

- **Auto color change** mode
  Use this mode for fast comissioning if no specific color is required.
- **RGB sequence** mode
  Use this mode to define an individual customizable color change.

3.5.3.1 Configure auto color change

The **Auto color change** mode uses a preconfigured automatic program to change color.

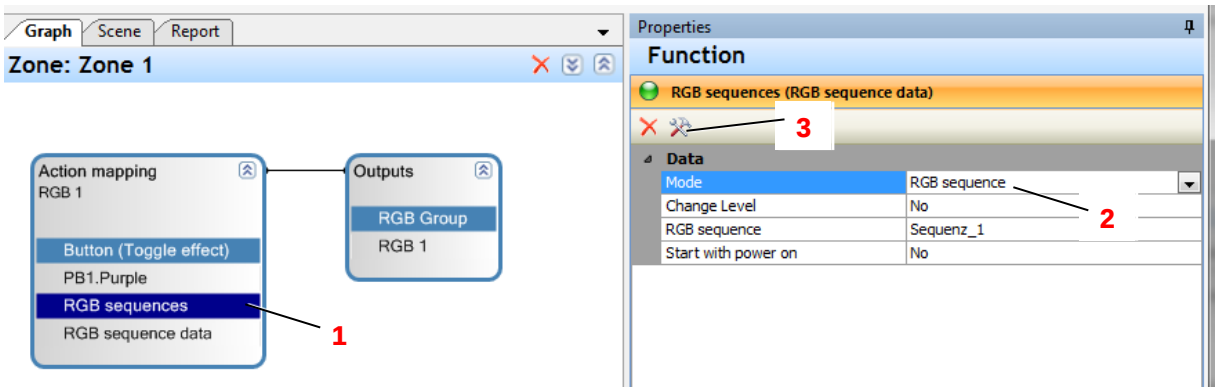


1. Select the RGB sequence (1) in the Action mapping box.
2. Select **Auto color change** mode and the required settings in the Properties window (2).

Option	Explanation	Parameters/Examples
Mode	Preconfigured automatic color change program	Auto color change
Change Speed	Time for one change through all colors.	15 s
Start with power on	Auto start after power cycle.	No Yes

3.5.3.2 Configure an individual RGB sequence

The **RGB sequence** mode allows to define a sequence of colors.



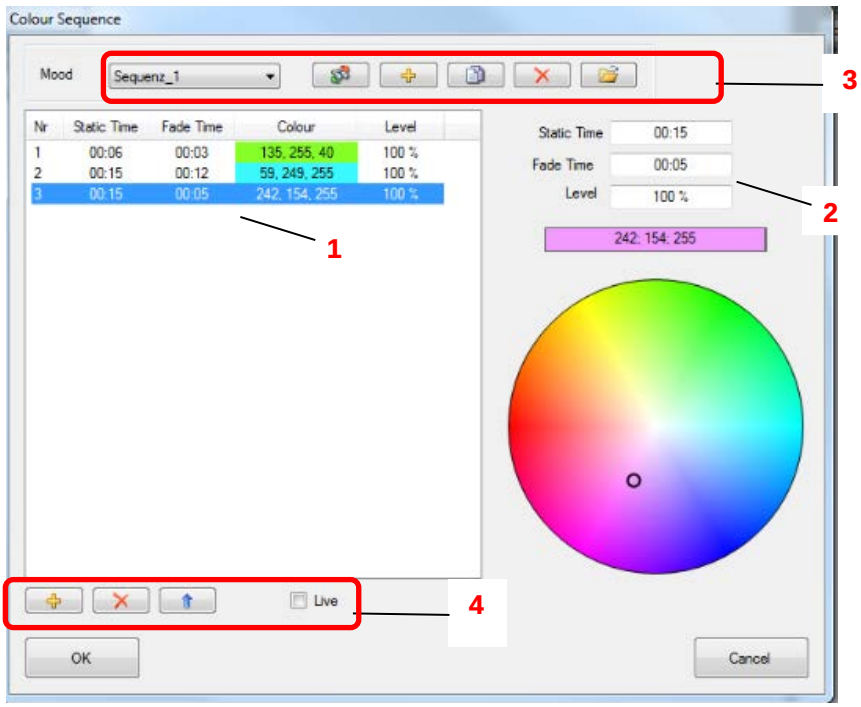
1. Select the RGB sequence (1) in the Action mapping box.
2. Select **RGB sequence** mode and the required settings in the Properties window (2), see following table.
3. Click **Settings** (3).
   Define a color sequence by modifying time/color settings (see next section).

4. Option	**Explanation**	**Parameters/Examples**
Mode	Individual color change program	RGB sequences
Change level	When activated the brightness level is configurable for each color. If deactivated the actual light level will not be changed while color change.	Yes No
Start with power on	Auto Start after power cycle	No Yes
RGB sequence	Select RGB sequence by name.	Sequence name

3.5.4 Defining color sequences

In the **Color Sequence** window, sequences of colors can be configured.

Each sequence is a list of time and color settings (1).



1. To create a new sequence, use the upper **+** button (3).
2. To modify an entry in the sequence, select it and edit entries in the configuration fields (2).
3. To add an entry to the sequence, use the lower **+** button (4).
4. Modify the sequence. For the complete set of functions in the window see the following tables. Confirm with OK.

Sequence menu (6)

Option	Explanation
	List of available RGB sequences
	Rename RGB sequence.
	Add RGB sequence.
	Copy RGB sequence.
	Delete RGB sequence.
	Import RGB sequences from other other DALI PRO project files

Time/color settings menu (7)

Option	Explanation
Nr.	Number of time/color settings for this RGB sequence, note that **Nr. 3** is marked in the image for further configuration.
	Add a time/color setting.
	Delete a time/color setting.
	Shift the selected time/color setting upward in the list.
	Shift the selected time/color setting downward in the list.
	Option for real-time visualization of the RGB sequence
Static Time	RGB values will be shown for selected time.
Fade Time	RGB values will fade within selected time.
Color	RGB color values
Level	Color level

4. Tunable White

4.1 Adding Tunable White (TW) device and configure basic settings

4.1.1 General

Two different types of Tunable White devices are supported.

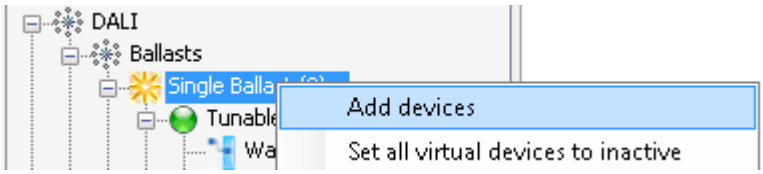
- TW Group as combination of standard DALI devices with warm white and cold white color temperature
- TW device as DALI Device Type 8 TW device (DALI DT8 devices)

Attention: DALI DT8 devices can only be integrated when connected to a controller via device scan.
(See *2.2.2 Generate used devices from the localisation window, page 8*.)

4.1.2 Adding a TW Group with standard DALI devices

Check prerequisites:

Check if **Tunable White** feature is enabled in the Project Features list,
see *2.1 Enable a feature, page 6*.



1. To add a virtual TW device:
   In device tree, select with right-mouse-click: *Ballasts* > *Single Ballast* > *Add devices*.
2. Select the number of TW devices in the window and confirm.

Optional: To generate a TW Group from the localization window see *2.2.2 Generate used devices from the localisation window, page 8*.

4.1.3 Changing the color temperature

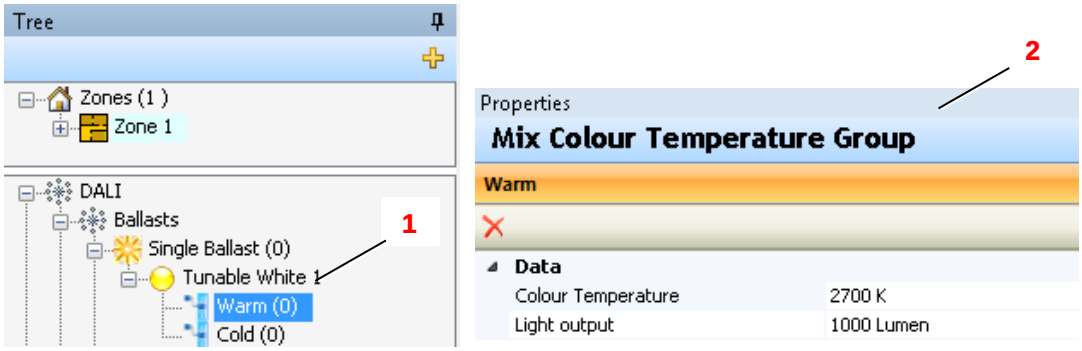
Depending on the device the method of changing the color temperature is different.

.

4.1.3.1 Changing the color temperatures for a Tunable White

It is possible to set the color temperature of the connected warm white and cold white device.
Also the lumen output.

HINT: Only change, if you have special requirements on Tunable white devices.



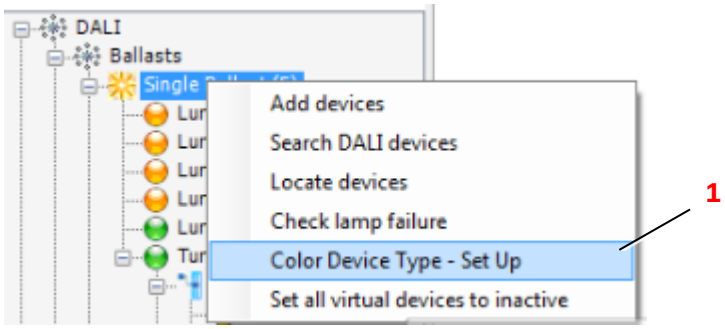
1. Select the Warm or the Cold channel (1) for the TW device in the device tree.
2. Select the required settings in the Properties window (2), see following table.

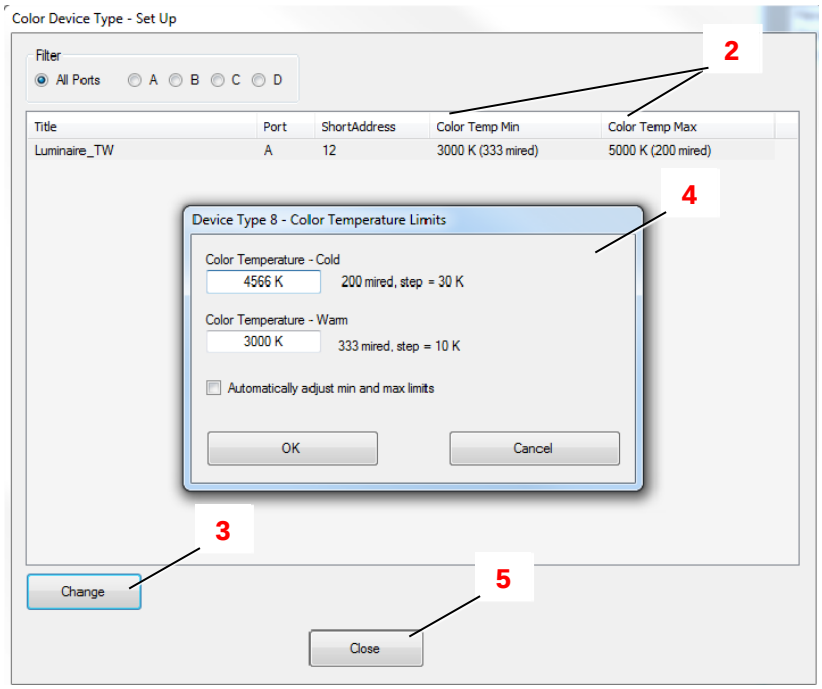
Option	Explanation	Parameters/Examples
Color Temperature	Set the color temperature (in Kelvin).	2700 K
Light output	Set the light output (in Lumen).	1000 Lumen

4.1.3.2 Configuring the color temperature limits for DALI DT8 devices

If required, minimum and maximum color temperature values can be adapted.

Hint: The color temperature is stored in a different form in the device. The number will be changed to the next color temperature number available in the device.

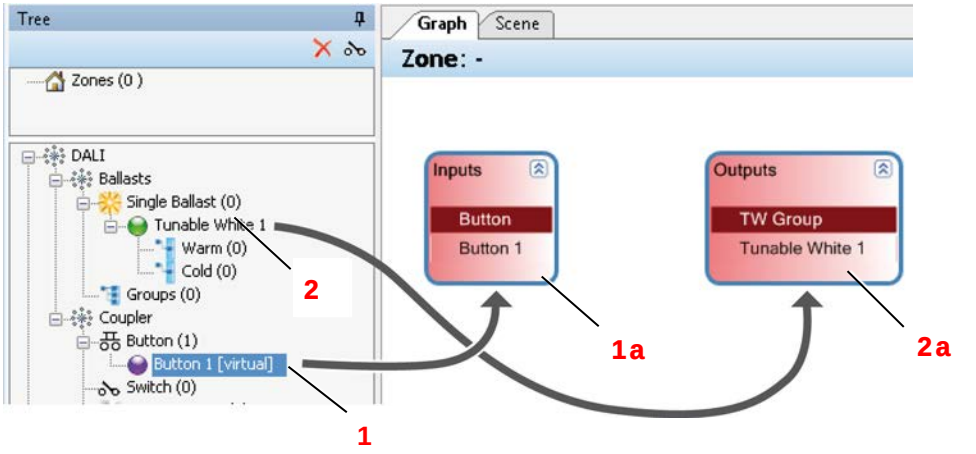


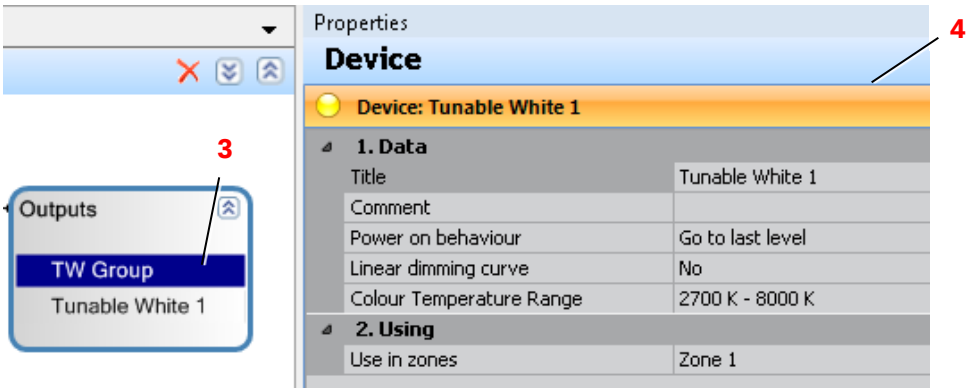


1. Select with right-mouse-click: *Ballasts* > *Single Ballast* > *Color Device Type – Set Up* (1).
   The **Color Device Type – Set Up** window opens.
   It shows a list with TW devices and the configured temperatures (2).
2. Select a TW device in the list and click **Change** (3).
3. Configure the temperatures in the window (4).
   Confirm with **OK**.
4. Confirm with **Close** (5).

4.1.4 Configuring the TW device

To assign a coupler to a TW device, add both devices to the Graph panel and configure the properties.





1. Drag the button (1) from the device tree into the Graph panel (1a).
2. Drag the TW device (2) from the device tree into the Graph panel (2a).
3. Select the TW group (3).
4. Configure the device in the Properties window (4).

4.1.4.1 Configuration settings

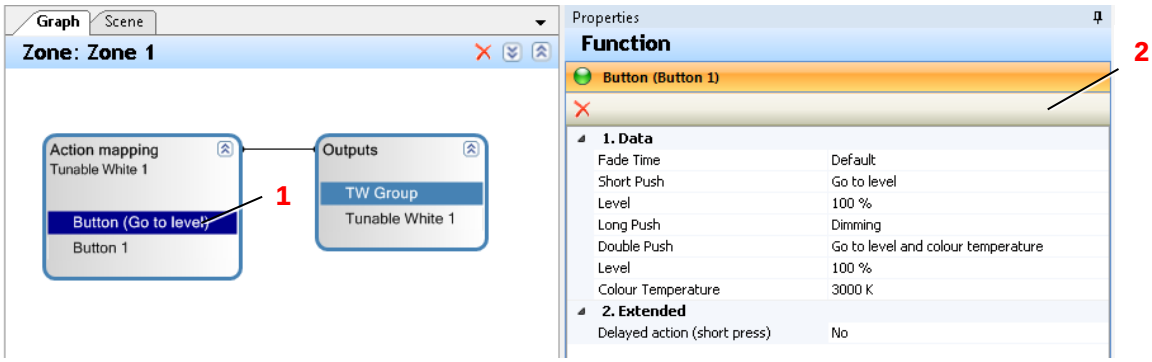
Option	Explanation	Parameters/Examples
Title	Rename the TW device.	e.g. Foyer
Comment	Add a comment for further information.	e.g. device located above luminaire
Power on behavior	Light on situation: - Go to last level: Light on – with values from the situation before the power loss - Go to level: light level after power cycle	Power On Level (0 – 100 %)

Option	Explanation	Parameters/Examples
Linear dimming curve	Enable dimming.	No Yes (light level will stay constant when changing the color temperature, optimized for TW)
Color Temperature Range	Warm-cold range for the TW device in Kelvin. See *4.1.3 Changing the color temperature, page 27* to set these values.	2700 K - 8000 K
Use in zones	Lists zones, where TW device is used.	e.g. conference room

4.2 Configuring a button

4.2.1 Configuring functions

Usually, button actions are combined to utilize the full scope of functionalities.



1. In Graph panel, connect the TW device (**Inputs**) and with the button (**Outputs**):
   Click Inputs and drag mouse to Outputs. A connector line is shown. The title **Inputs** is changed to **Action mapping**.
2. Select a button function (1).
3. Configure the button in the Properties window (2), see the following tables.

4.2.2 General settings

Option	Explanation	Parameters/Examples
Fade Time	Duration to dim to the new brightness level.	Default (uses fade time stored from the ECGs) No fade 0.7 – 90.5 s
Short Push	Select action for a short push on a button.	See *4.2.4 Short Push actions, page 32*
Long Push	Select action for a long push on a button.	See *4.2.5 Long Push actions, page 33*
Double Push	Select action for a double push on a button.	See *4.2.6 Double Push actions, page 33*
Delayed action	Define up to two delayed actions for a Short Push. If one or two actions will be configured, the additional properties for each action will be displayed, see *4.2.3 Delayed action configuration options.*	No 1 2

4.2.3 Delayed action configuration options

Option	Explanation	Parameters/Examples
Time Delay	Step 1: Delay time until the first delayed action starts. Step 2: Delay time between the first and the second delayed action.	e.g. 05:00 for 5 hours
Fade Time	Duration in seconds to dim to the new brightness level.	e.g. 1.0 s for one second
Action	Delayed action type: - Off (switch off) - Go to level (in percent)	e.g. Go to level
Level	Set the brightness level in percent.	e.g. 50 %

4.2.4 Short Push actions

The following functionalities are available for Short Push button actions:

Short Push action	Explanation	Parameters/Examples
Disabled		
Off	Switch off the light.	
Go to level	Light on – dim brightness to parameter value.	Level (0 – 100 %)
Go to last level	Light on – with values from the situation before the last light off.	
Go to scene /Scene	Light on to a configured scene, selected by name. See *4.3 Add and configure a TW scene*, *page 34*.	Scene name
Go to next scene	Light on to the scene, selected by name. If Scene 1 is already running, Scene 2 will be recalled by pressing the button – loop with each button press. See *4.3 Add and configure a TW scene*, *page 34*.	Scenes count (numbers, up to five scenes possible), Scene names
Toggle (level)	Toggle between off and the light value from the additional parameter level.	Level (0 – 100 %)
Toggle (last level)	Toggle between off and the level value from the situation of the last light on.	
Toggle (scene)	Toggle between off and the scene, selected by name. See *4.3 Add and configure a TW scene*, *page 34*.	

Short Push action	Explanation	Parameters/Examples
Go to Color Temperature	Light on a defined color temperature	Color temperature in Kelvin
Go to level and color temperature	Light on a defined color temperature and level (in percent)	Color temperature in Kelvin, Level (0 – 100 %)

4.2.5 Long Push actions

The following functionalities are available for Long Push button actions:

Long Push action	Explanation
Disabled	
Dimming	Continuous change of the level. With each long push, the dimming direction is changed.
Dimming Up	Continuous change to more light (for button with label up).
Dimming Down	Continuous change to less light (for button with label down).
Change Color	Continuous change of color temperature. With each long push, the color temperature direction is changed.
Colder	Continuous change to colder color temperature.
Warmer	Continuous change to warmer color temperature.

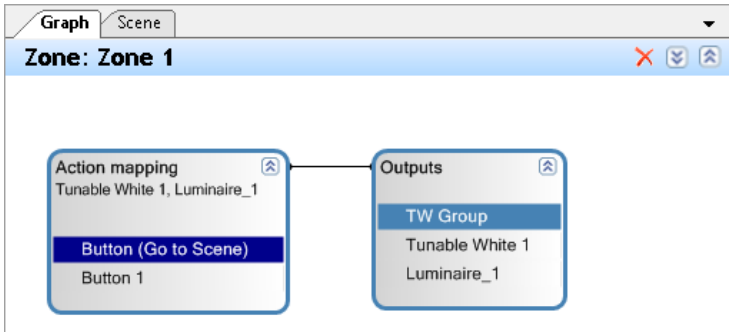
4.2.6 Double Push actions

The following functionalities are available for Double Push button actions:

Double Push action	Explanation	Parameters/Examples
Disabled		
Off	Switch off the light.	
Go to level	Light on – dim brightness to parameter value.	Level (0 – 100 %)
Go to scene	Light on to scene, selected by name	Scene name
Go to level and color temperature	Light on to selected color and level.	Level (0 – 100 %)

4.2.7 Configuring a button for multiple TW devices

If more TW devices should be controlled with one button, you can configure this in Graph panel:



1. Drag a TW device from the device tree to the Graph panel. A new (red) Outputs group is shown.
2. Drag the new Outputs group in the Action mapping box.
   After this, the new TW device is merged to the existing Outputs group.

The configured Action mapping is valid for all TW devices in the Outputs group.

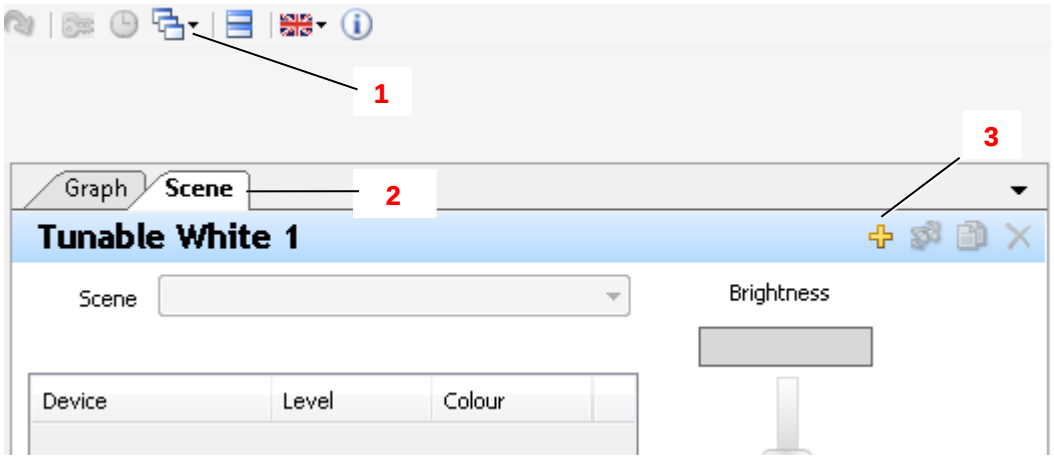
Note: TW Groups and TW DT8 Devices cannot be in the same group. To control TW group and TW DT8 with one button, the button has to be connected to both groups by dragging the button into each group.

4.3 Add and configure a TW scene

Light scenes are intended for the use case that the ECGs in an Outputs group should have different color temperatures / levels at the same time.

It is possible to have one button correspond with up to five scenes (*Short Push > Go to next scene*).

4.3.1 Adding a TW scene

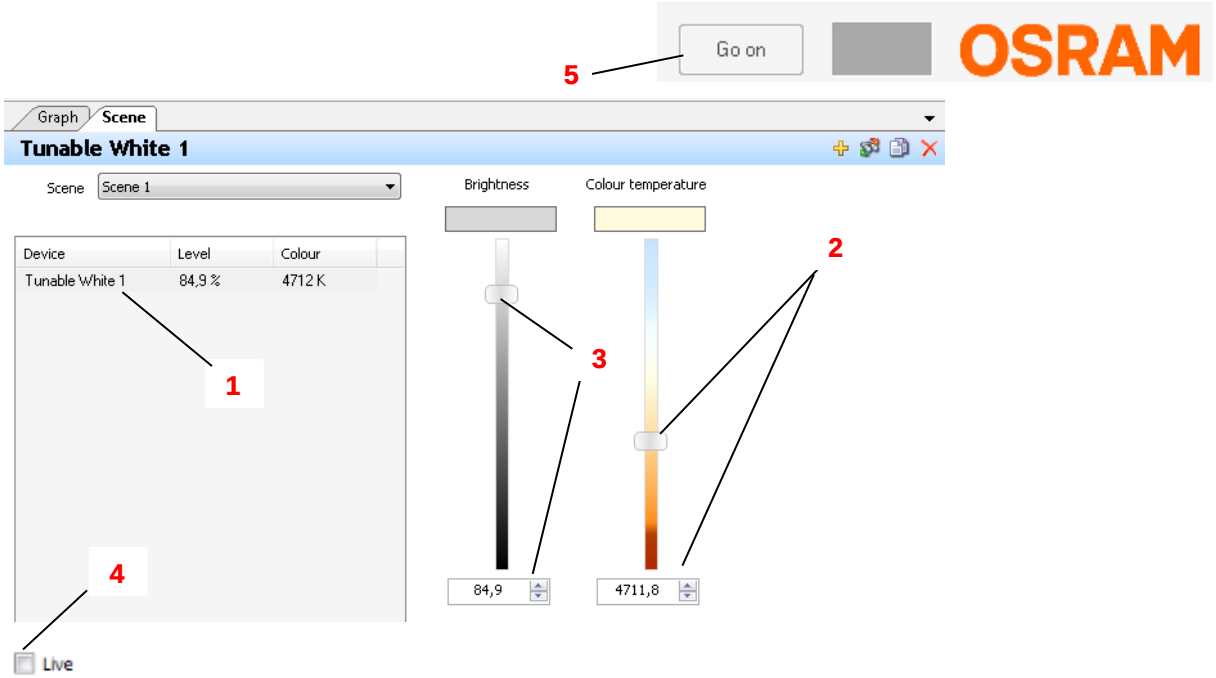


1. Select the required Action mapping box in the Graph Panel, in order to select the outputs that will be affected by the scene.
2. Click the list (1) and activate the **Scene** tab (2).
3. Click **+** (3) to add a scene.
4. Rename the scene in the window.

4.3.2 Configuring a TW scene

In the scene panel, all devices to be affected by this scene are listed.

Each device in this list can have different brightness and color temperature values, but they also can have the same settings.



1. Select the required device (1).
2. Select the color temperature (2).
3. Select the brightness (3).
4. If connected to the controller: Activate **Live** (4), to visualize the selection.
5. Click **Go on** (5) after final selection to activate the configuration again.

5. Daylight simulation

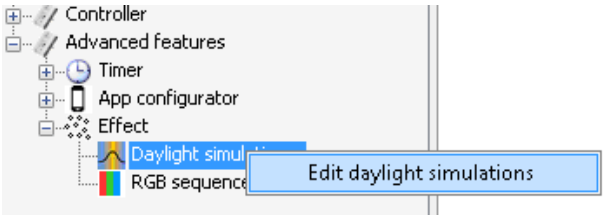
5.1 General

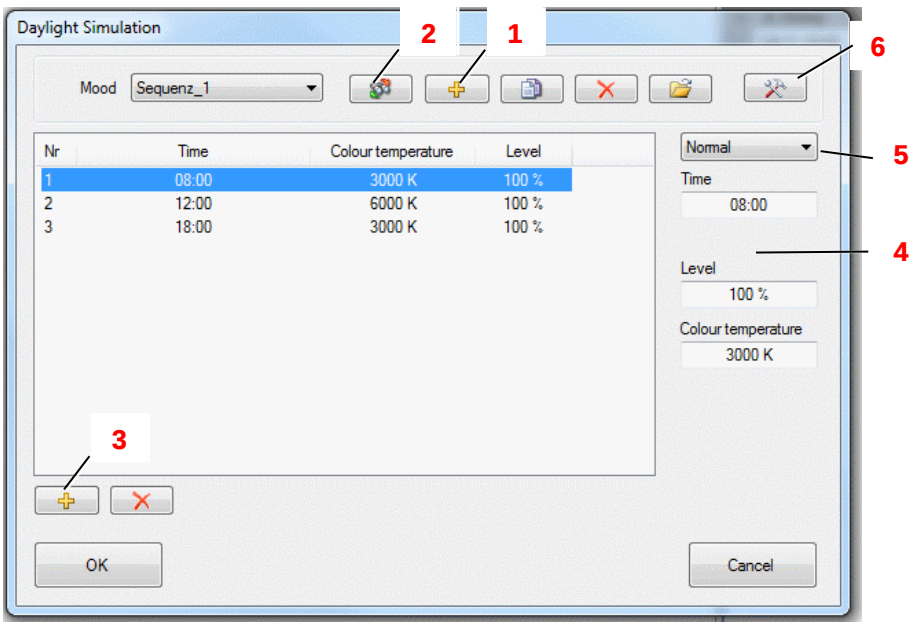
The daylight simulation is using a table of time (including of sunrise or sundown), with defined color temperatures and light levels to simulate the daylight in its natural progression through the day.

INFO: This function is only available for the DALI Pro RTC version.

5.2 Add a daylight simulation sequence

In the **Daylight Simulation** window, a sequence of color temperatures can be defined.



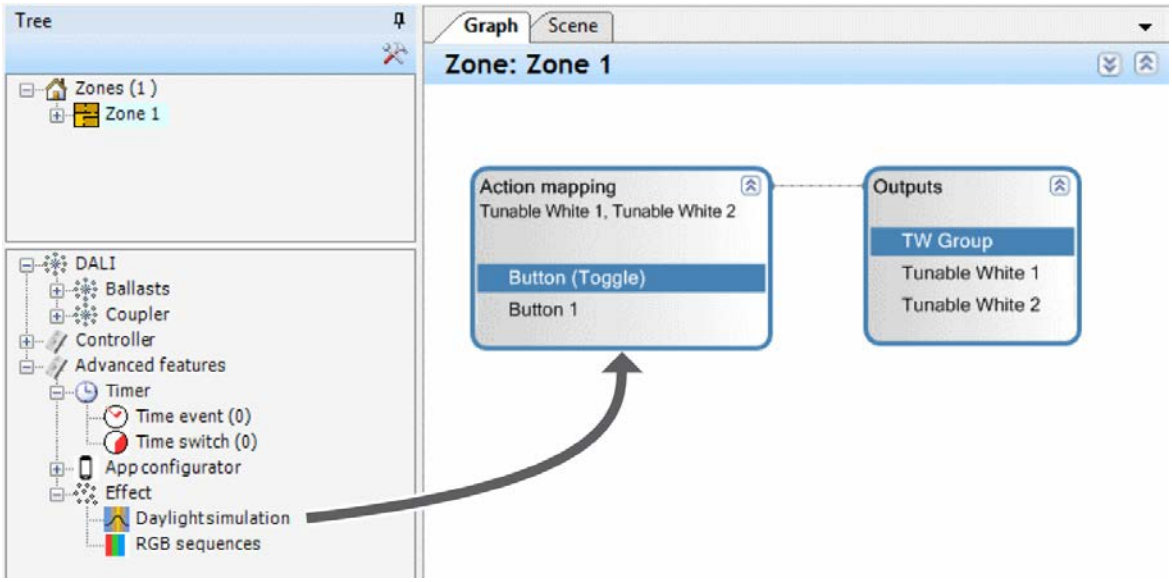


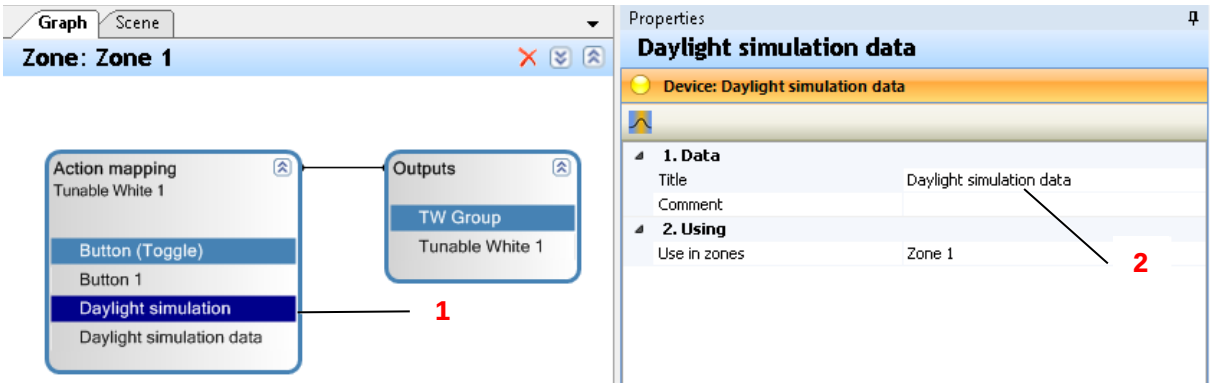
1. Select in the device tree **Edit daylight simulation** with right mouse click *Advanced features* > *Effect* >*Daylight simulation*.
2. To add a new sequence, click **+** in the upper area (1).
   A new sequence is added (e.g. Sequenz_2).
   The automatic name of the new sequence can be changed (2).
3. To add a new entry in the sequence, click **+** in the lower area (3).

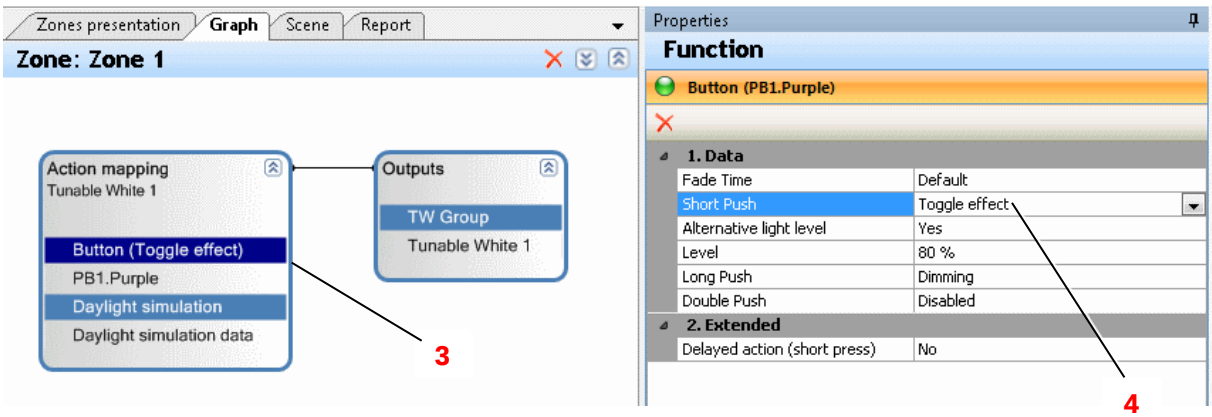
4. To change the values for time, color temperatue and level, select the entry and insert the values in the input fields (4).
   A constant light level can be set by activating the **Alternative light level** at the Start Effect or Toggle Effect Short press functionality.

   Beside the normal time, relative time to sunrise and sundown times can be used (5).
5. To select your location with corresponding sunrise and sundown settings, click Settings (6).)

5.3 Configure a daylight simulation







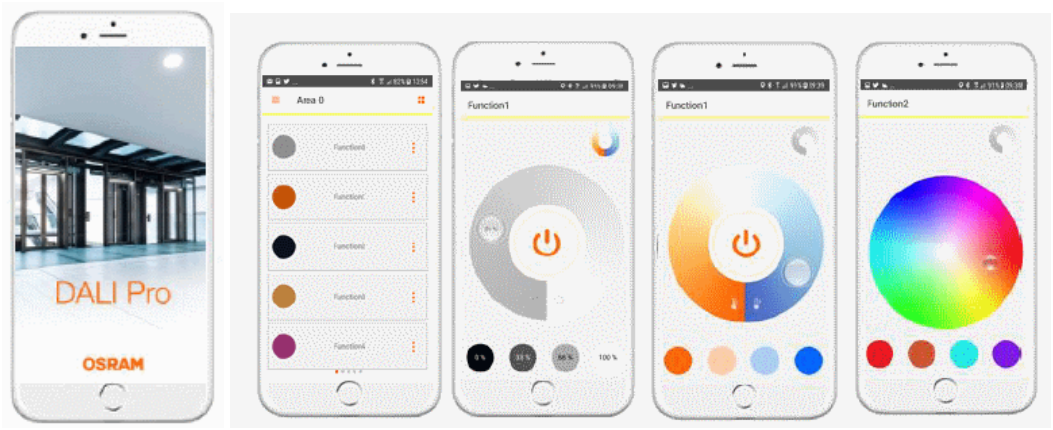
1. Drag the **Daylight simulation** from the device tree to an Action mapping box in the Graph panel.
2. Edit the **Daylight simulation** (1) in the Properties window: Set the daylight simulation sequence (2). For all properties, see the following table.
3. Change the Short Push function to Toggle (Effect) (4):
4. To define a constant light level, activate the **Alternative light level** property. Define the light level (in percent). This configuration changes the predefined light levels in the daylight simulation sequence.

The following functionalities are available for Daylight simulations:

Double Push action	**Explanation**	**Parameters/Examples**
Title	Sets the daylight simulation sequence	Name of sequence
Comment	Add a comment for further information.	e.g. Simulates a summer day in auditorium
Use in zones	List zones where the daylight simulation is used.	

6. Smartphone Application

This chapter describes how the DALI Smartphone APP can be configured and customized with the DALI Professional software.



6.1 General

INFO: To control a DALI PRO CONT-4 RTC controller with a smartphone, the following additional equipment is needed:
- WiFi router to provide the WiFi
- RJ45 Cat 5 patch cable between wireless IT-Switch and controllers

INFO: To make the smartphone functionality visible, the smartphone APP feature must be enabled in the software (enabled by default).

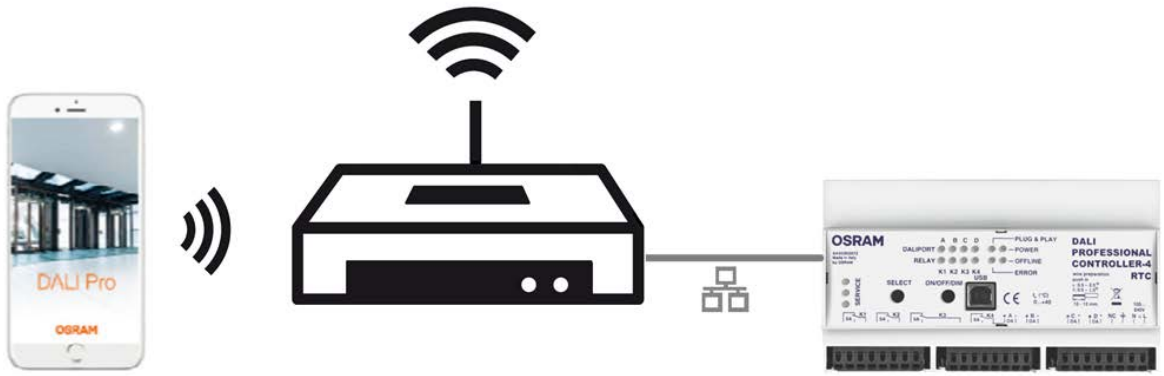
6.1.1 Prerequisites

The following prerequisites must be fullfilled:

- The DALI controller(s) as well as the Smartphone(s) have access to a common wireless local area network (WLAN).
  OSRAM recommends to assign a static IP address for the DALI controller(s).
- All devices (controllers and smartphones) must be in the same subnet. The DALI PRO CONT-4 RTC controller is using UDP messages to communicate to smartphone
- The Laptop/PC with DALI Professional software is connected to the controller via USB.

Recommendations for network parameters:

- OSRAM recommends to assign a static IP address for the DALI controller(s).
- The subnet must be: 255.255.255.0.
- The port 23 must not be blocked.
- UDP Messages must not be blocked.

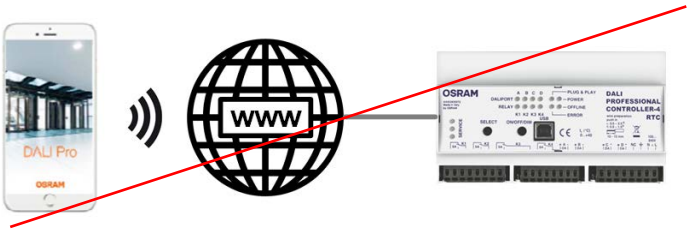


IP Address: 192.168.1.200
Subnet: 255.255.255.0

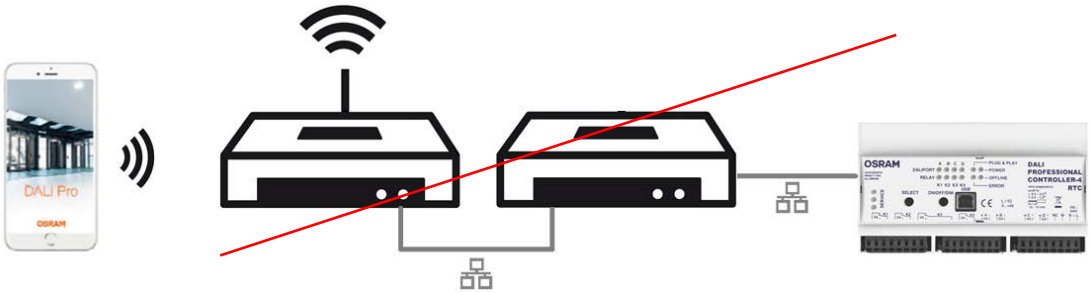
IP Address: 192.168.1.xxx
Subnet: 255.255.255.0

IP Address: 192.168.1.100
Subnet: 255.255.255.0

The DALI PRO Control APP doesn't work with the cloud.



The DALI PRO Control APP doesn't work with different sub nets.



6.1.2 Features

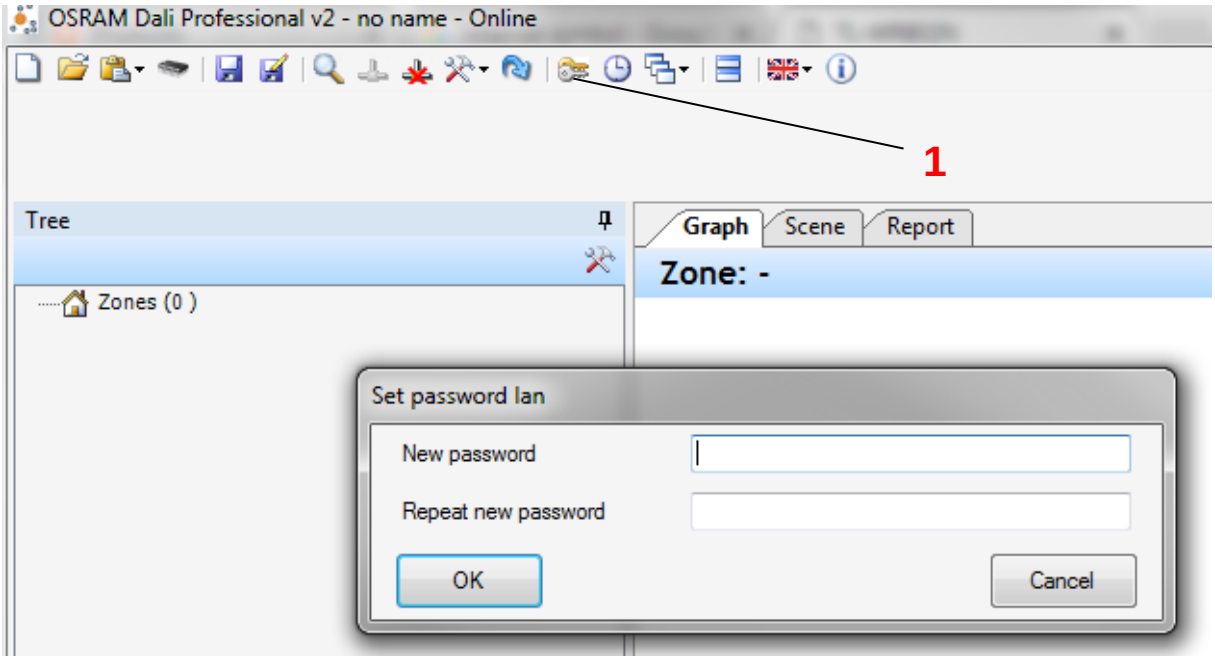
The APP Configurator of the DALI Professional software supports the following features:

- Clear and simple structure to configure the APP (tree structure)
- Multiple elements with adjustable presets configurable
- Views to group the rooms (visible as pages in the APP)
- APP configuration analog to standard DALI PRO configuration
- User control for access restriction

6.2 Configuring LAN properties

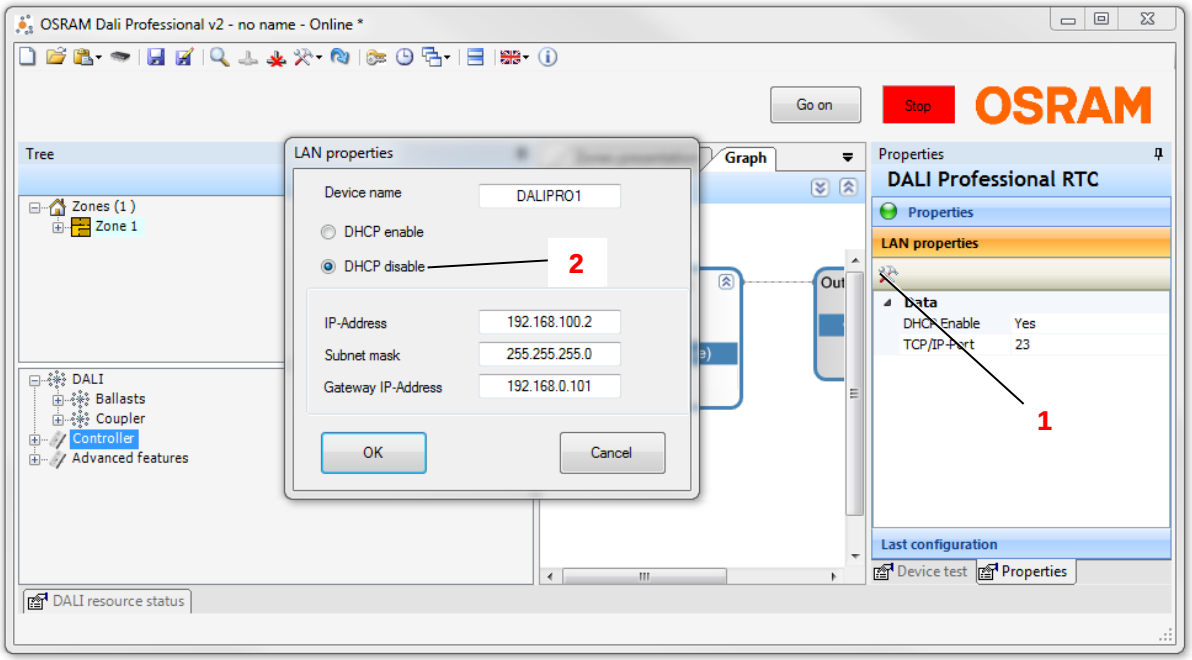
This section describes the configuration of required WLAN properties for each DALI controller, e.g. the device name and IP address.

When connecting the controller to the LAN, the controller can also be configured via LAN.
To pretend that everybody in the LAN can configure the controller with the DALI PRO software, the access to the controller has to be protected with a password. This password is only needed when connecting with the DALI Professional Software via LAN, and can be changed when connecting via USB.



1. Press **Set password LAN** (1) (Only selectable when connected via USB to the controller)
2. Enter a strong password to ensure that the controller cannot be configured via LAN (NEVER enter your default password!)

To configure the LAN properties:



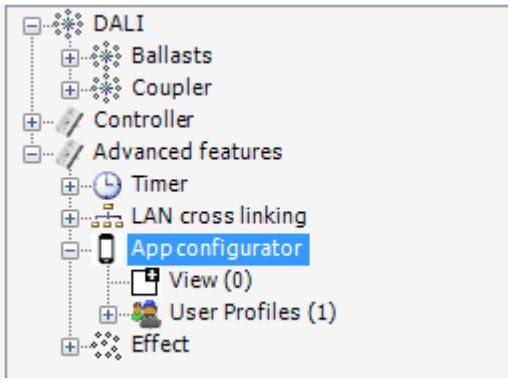
1. In the device tree, select the controller.
2. Click Settings (1) to open the LAN properties window.
3. In the LAN properties window, enter a unique device name.
4. DHCP is enabled by default. Use this setting and the Wifi Router will provide automatically the IP address to the controller. (Recommended)
5. If this is not working, use **DHCP disabled** function (2) and enter a unique IP address.Configure subnet mask and gateway suitable to your network.
6. Confirm with OK.

6.3 Configuring the APP

Check prerequisites:

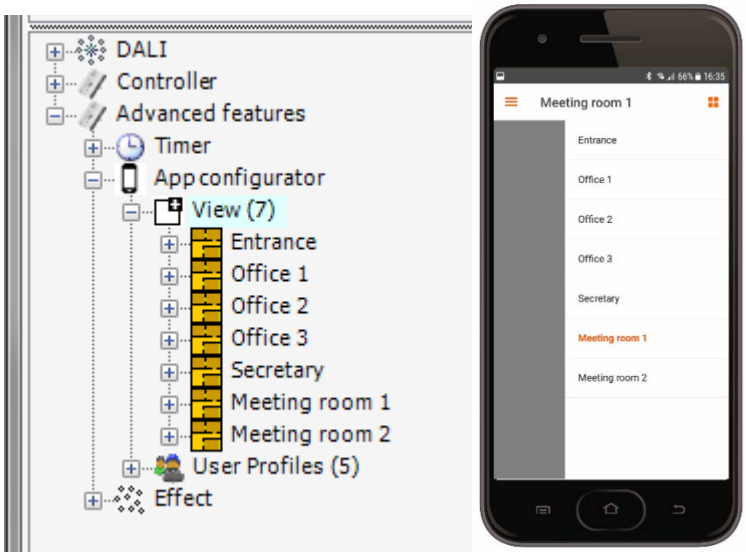
Check if **Smartphone APP** feature is enabled in the Project Features list, see *2.1 Enable a feature, page 6*.

The **APP configurator** is located in the device tree in the *Advanced features* section.

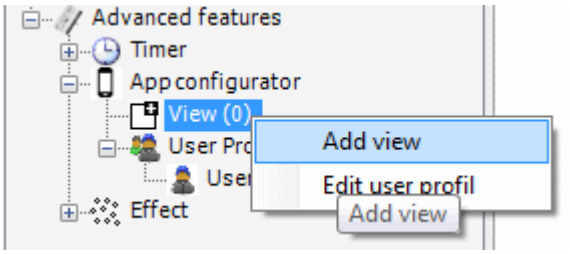


6.3.1 Defining the views

In the APP, the elements will be grouped in views. Each view defines a page in the APP.
For eaxmple, the views can represent different rooms:



6.3.1.1 Adding a view

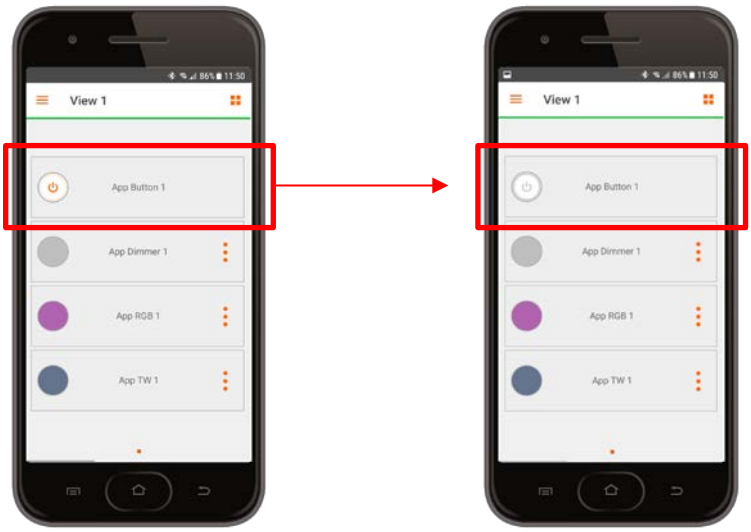


1. In device tree, select with right-mouse-click: *APP configurator* > *View* > *Add view*.
   A new **View_n** is created in the tree.
2. In the Properties window, you can rename the view (**Title** property) e.g. to **Office_1.**

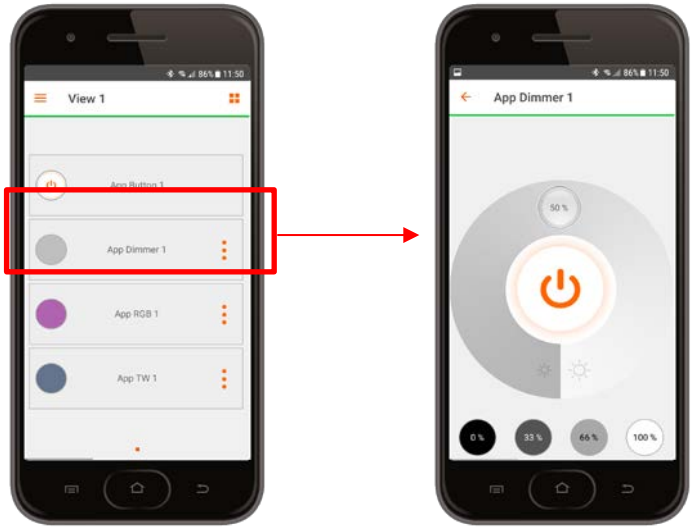
6.3.1.2 APP elements

The DALI PRO CONT-4 RTC Controller supports the following APP elements:

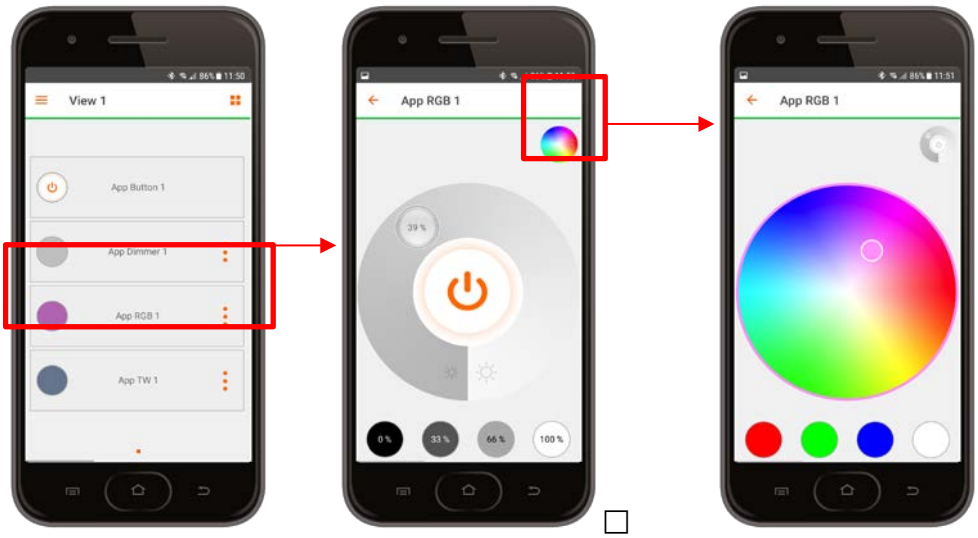
- Button element
  Simple button that can start an action, switch the light; with or without feedback.



- Dimmer element
  Button element to switch the light and dimmer element for the dimming level



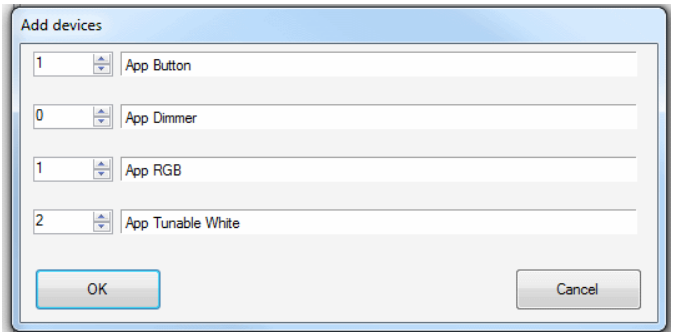
- RGB elements
  Button element to switch the light ,dimmer element for the dimming level and RGB element for the color



- TW element
  Button element to switch the light and dimmer element for the dimming level and TW element for the color temperature

6.3.2 Adding APP elements to the view

1. To add APP elements to the view:
   In device tree, select with right-mouse-click: *APP configurator* > *View* > *View* > *Add devices*.
   The **Add devices** window is shown.

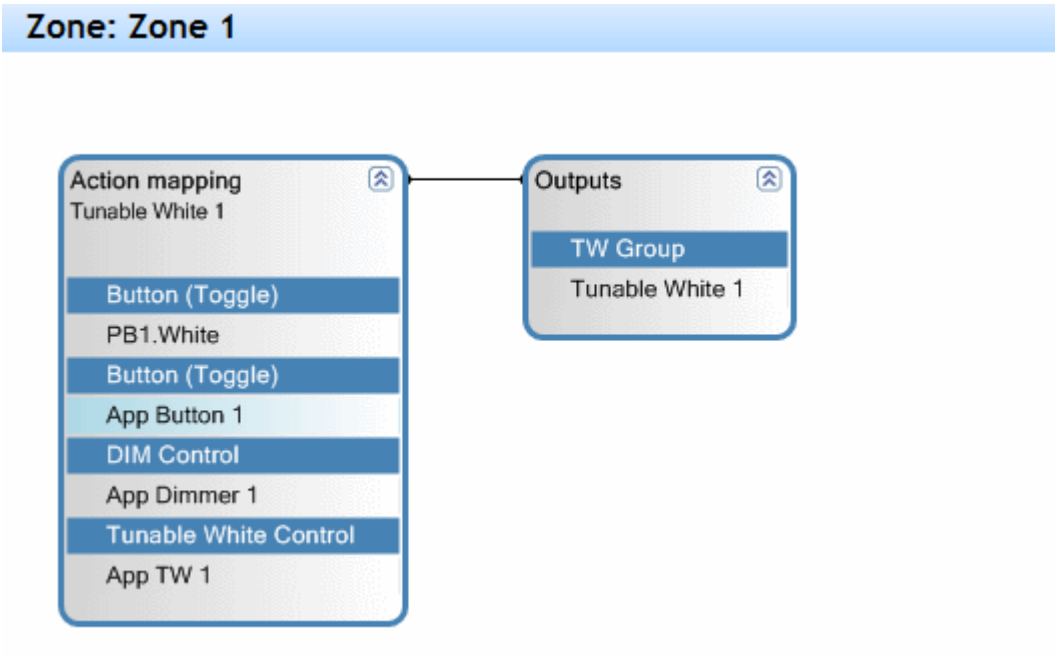


2. Select the number of APP devices in the window and confirm.
   The devices will be created in the tree.
3. You can change the Properties of each element, see the following table**.**

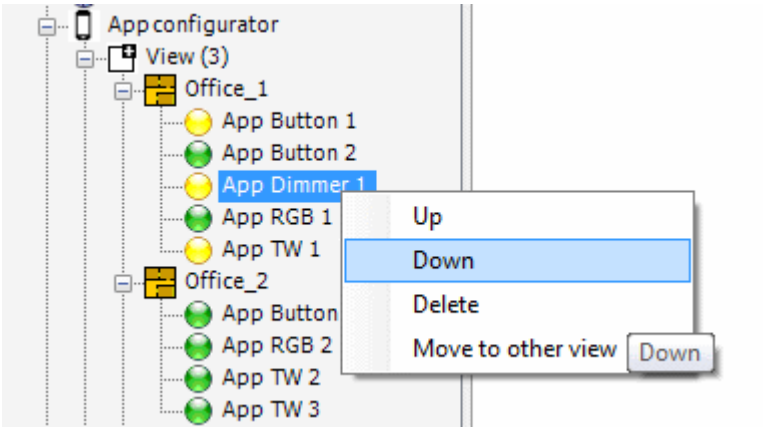
APP element properties:

Property	**Explanation**
Title	Set the name of the element
Label	Set the label of the element in the APP
Comment	Add a comment for further information
Zones	Show zones where the element is used.
Visible in	Show the views where the element is integrated.
User profile	Show the user profiles where the element is enabled.
Color temperature show numeric value	*Only for APP TW !* (Yes/No)

6.3.3 Configuring the elements



1. To assign an APP element to an output device, drag both devices to the Graph panel.
2. Connect Inputs and Outputs and configure the properties.
   See the example in the upper picture for an Action mapping with APP elements for a TW device.
3. Configure the devices in the Properties window. See *6.3.4. APP element properties, page 48.*
4. You can rearrange the sort order of the APP elements:
   Drag & drop the elements to the position you want or use the functions *Up, Down, Delete, Move to other view*.



6.3.4 APP element properties

The following properties can be set for APP elements:

Option	Explanation	Parameters/Examples
Fade Time (only visible for button element)	Duration to dim to the new brightness level.	Default (uses fade time stored from the ECGs) No fade 0.7 – 90.5 s
Short Push	Select action for a short push on a button.	*See Short Push actions*
Show state	Displays the status of the connected output (Color or shade of grey to indicate the dimming level)	Yes/No
Delayed action (only visible for button element)	Define up to two delayed actions for a Short Push. If one or two actions will be configured, the additional properties for each action will be displayed (See the following tables).	No 1 2

6.3.5 Short Push actions for button and dimmer elements

The following functionalities are available for Short Push actions for button and dimmer elements.

Short Push action	Explanation	Parameters/Examples
Disabled		
Off	Switch off the light.	
Go to level	Light on – dim brightness to parameter value.	Level (0 – 100 %)
Go to last level	Light on – with values from the situation before the last light off.	
Go to Scene	Light on to a configured scene, selected by name. See *4.3 Add and configure a TW scene*.	Scene name (only selectable if exist)
Go to next scene (only for button element)	Light on to the scene, selected by name. If Scene 1 is already running, Scene 2 will be recalled by pressing the button – loop with each button press. See *4.3 Add and configure a TW scene*	Scenes count (numbers, up to five scenes possible), Scene names
Toggle (level)	Toggle between off and the light value from the additional parameter level.	Level (0 – 100 %)
Toggle (last level)	Toggle between off and the level value from the situation of the last light on.	

Short Push action	Explanation	Parameters/Examples
Toggle (scene)	Toggle between off and the scene, selected by name. See *4.3 Add and configure a TW scene.*	

6.3.6 Short Push actions for TW element

The following functionalities are available for Short Push actions for Tunable White elements.

Short Push action	Explanation	Parameters/Examples
Disabled		
Off	Switch off the light.	
Go to level / color temperature	Light on – dim brightness to parameter value. change color temperature to parameter valve	Level (0 – 100 %) Color temperature (min. – max.)
Go to last level / color temperature	Light on – with values from the situation before the last light off.	
Go to Scene	Light on to a configured scene, selected by name. See *4.3 Add and configure a TW scene*.	Scene name (only selectable if exist)
Toggle (level / color temperature)	Toggle between off and the light value from the additional parameter level.	Level (0 – 100 %) Color temperature (min. – max.)
Toggle (last level / color temperature)	Toggle between off and the level value from the situation of the last light on.	Color temperature (min. – max.)
Toggle (scene)	Toggle between off and the scene, selected by name. See *4.3 Add and configure a TW scene.*	

6.3.7 Short Push actions for RGB element

The following functionalities are available for Short Push actions for RGB elements.

Short Push action	Explanation	Parameters/Examples
Disabled		
Off	Switch off the light.	
Go to level / color	Light on – dim brightness to parameter value. change color to parameter valve	Level (0 – 100 %) Color (RGB values)
Go to last level / color	Light on – with values from the situation before the last light off.	

Short Push action	Explanation	Parameters/Examples
Go to Scene	Light on to a configured scene, selected by name. See *4.3 Add and configure a TW scene*.	Scene name (only selectable if exist)
Toggle (level / color)	Toggle between off and the light value from the additional parameter level.	Level (0 – 100 %) Color (RGB values)
Toggle (last level / color)	Toggle between off and the level value from the situation of the last light on.	Color (RGB values)
Toggle (scene)	Toggle between off and the scene, selected by name. See *4.3 Add and configure a TW scene.*	

6.3.8 Delayed action configuration options for button element

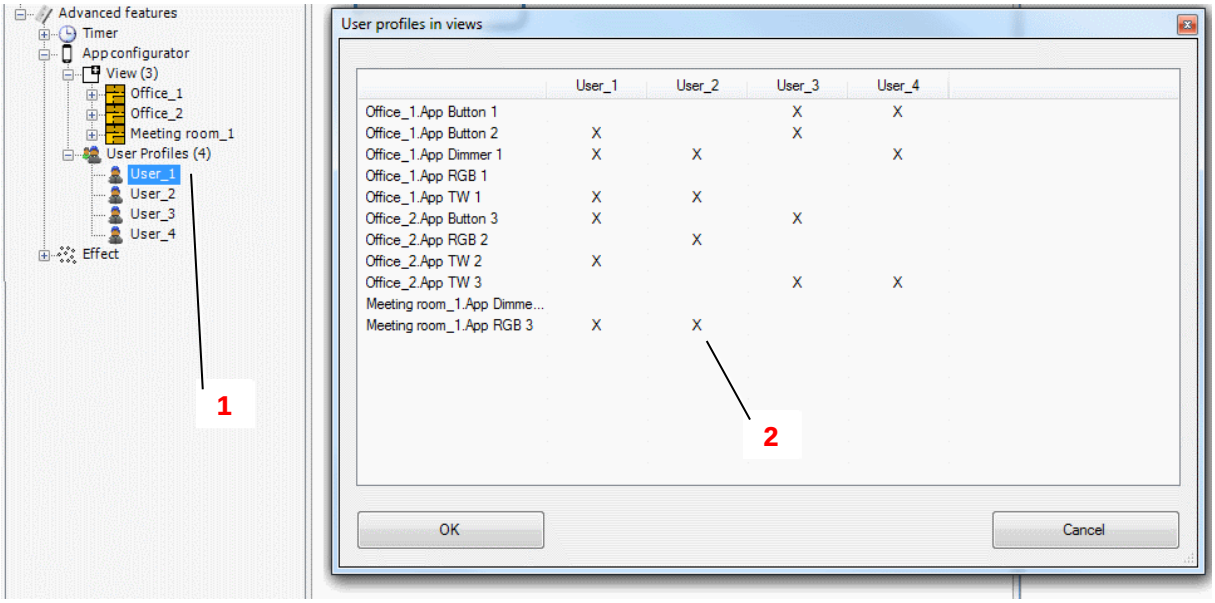
The following functionalities are available for button elements only.

Option	Explanation	Parameters/Examples
Time Delay	Step 1: Delay time until the first delayed action starts. Step 2: Delay time between the first and the second delayed action.	e.g. 05:00 for 5 hours
Fade Time	Duration in seconds to dim to the new brightness level.	e.g. 1.0 s for one second
Action	Delayed action type: - Off (switch off) - Go to level (in percent)	e.g. Go to level
Level	Set the brightness level in percent.	e.g. 50 %

6.4 Define user profiles

The visibility of the APP elements can be enabled/disabled by user profiles.
Per default, all configured elements are enabled in the pre-configured user profile **User_1**.

This section describes the configuration of additional user profiles (up to maximal 30 profiles). The user profiles can be renamed and additional a password can be set.



1. To add a user profile:
   In the device tree, select with right mouse click
   Advanced features >APP configurator >User Profiles > Add user profiles (1)
   A new user profile **User_n** is created.
2. To rename the user profile and to set a password:
   Edit the properties of the created user profile, see following table.
3. To edit the visibility of the APP elements in the user profiles select with right mouse click
   Advanced features >APP configurator >User Profiles > Edit user profiles
   The window **User profiles in views** is shown listing all configured APP elements.
4. In the list, set the **X** to enable the APP elements (2).

Properties of user profiles:

Property	**Explanation**
Title	Set the name of the user profile
PassWord	Enter a password for the user profile
Comment	Add a comment for further information