

Sensors & Controls

sceneCOM

Manual

Special luminaires



TRIDONIC

Legal information

Copyright

Copyright © Tridonic GmbH & Co KG
All rights reserved.

Manufacturer

Tridonic GmbH & Co KG
Färbergasse 15
6851 Dornbirn AUSTRIA

Tel. +43 5572 395-0
Fax +43 5572 20176
www.tridonic.com

Document number

sceneCOM, Special luminaires
2.1 | 08.2021 | en

Table of contents

| | | |
|----------|--|-----------|
| 1 | How to use these instructions | 3 |
| 2 | Other available documents | 5 |
| 3 | Safety instructions | 6 |
| 4 | Navigation principles | 7 |
| 5 | sceneCOM and special luminaires | 8 |
| 6 | Licensing | 10 |
| 7 | Commissioning | 12 |
| 7.1 | Overview of the “Special luminaires” app | 12 |
| 8 | Configuration | 14 |
| 8.1 | Configuration options: luminaires | 14 |
| 9 | Appendix | 16 |
| 9.1 | Factory settings | 16 |
| 9.2 | Icons | 16 |
| 9.3 | Glossary | 18 |

1 How to use these instructions

We are pleased that you have chosen this *Tridonic GmbH & Co KG* product. So that you can get the most from these instructions, this section provides the following information:

- Signs and icons in these instructions
- Further information
- Target audience of these instructions
- Software version

Signs and icons in these instructions

The following signs and icons are used in these instructions:

| Sign/icon | Explanation |
|---|---|
| 1. | Individual steps in the instructions are numbered. |
| ▷ | Single-step instructions are indicated by the ▷ icon 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 the ↻ icon at the beginning of the line. |
| — | Requirements which need to be checked before carrying out a step are indicated by —. |
| i | Notes can be recognised by the i icon. In addition, notes are identified by the word Note . |
| [Bold text] | Bold text indicates words that are shown on a device display or software user interface. |
|  | <p>Danger and safety instructions are indicated by this icon. Safety and warning information is labelled and classified using the following words:</p> <p>DANGER indicates an immediate danger. This could lead to death or severe injury if not avoided.</p> <p>WARNING indicates a potentially dangerous situation. This could lead to death or severe injury if not avoided.</p> <p>CAUTION indicates a potentially dangerous situation. This could lead to minor injury or damage to property if not avoided.</p> <p>Attention indicates a situation involving potential damage. If it is not avoided, the product or something in the vicinity may be damaged.</p> |

Table 1: Signs and icons in these instructions

1 How to use these instructions

Further information

Further information on the setup and function of your *sceneCOM* system can be found in our product and system documentation.

If you should have any further questions, please contact your sales partner.

General information on our products can be found on our website:

www.tridonic.com

Target audience of these instructions

These instructions are aimed at electricians without any special *Tridonic* product training. They describe how to commission and configure special luminaires (e.g. RGB luminaires, TW luminaires).

Software version

These instructions are based on software version *sceneCOM 2.16.0*.



Note

This manual contains path information which can be used to access the configuration options. The path always starts from the app overview.

Example: "Path: app overview > **Basic settings** > **Date and time**" means that you should go to the app overview, tap on **Basic settings** and then tap the **Date and time** button.

2 Other available documents

All *sceneCOM* manuals can be downloaded from the website:

<https://www.tridonic.com>

| Manual | Description |
|-------------------------------------|--|
| Commissioning and maintenance | This manual is aimed at electricians without any special product training and describes how the basic functions can be commissioned. It also describes general maintenance functions. |
| Shows | This manual is aimed at electricians without any special product training and describes how shows can be commissioned and configured. |
| Daylight linking | This manual is aimed at electricians without any special product training and describes how daylight linking with light sensor can be commissioned and configured. |
| Self-contained emergency luminaires | This manual is aimed at electricians without specific product training and describes how emergency lighting functions for self-contained emergency luminaires can be commissioned, configured and monitored in a <i>sceneCOM</i> system that itself has already been commissioned. |
| BACnet | This manual is aimed at electricians without any special product training and describes how BACnet can be commissioned and configured. |

Table 2: Other available documents – *sceneCOM*

3 Safety instructions



Attention

- The *sceneCOM* system may only be used for the application area specified.
- Relevant health and safety regulations must be observed.
- Assembly, installation and commissioning may only be carried out by qualified personnel.
- The *sceneCOM* system and connected devices can only be operated when in complete working order.
- The manufacturer is neither liable nor does it accept any guarantee for consequential damage that may occur if these instructions are not followed.

4 Navigation principles

There are different buttons in the web application for commissioning, configuring and operating the system. If a button is tapped, its colour changes briefly.

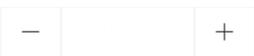
| Button | Description |
|---|--|
|  | <p>Set value (e.g. on the start page) You can enter a specific value in the click area so that all devices have the same control value. If, for example, different control values (80%, 60%) are set for the luminaires and you tap on 50%, all luminaires switch to the control value of 50%.</p> <p>If you tap on the left or right click area, the value you are setting decreases or increases respectively in the entire effective range by one unit. If different control values are saved for the luminaires (80%, 60%, 20%) and you tap on the ☀ button, these control values are increased by one unit (81%, 61%, 21%). This function is not available for all setting options.</p> |
|  | <p>Set value (e.g. fade time) Tap these buttons to increase or decrease the value being set. Tap the button to change the value by one unit. Tap and hold the button to change the value, and release when the desired value has been reached. The longer the button is held, the faster the value is changed.</p> |
|  | <p>Special feature: set the time If the time is tapped, the Set time view appears. The hours and minutes can be set separately here.</p> |
|  | <p>Expand – collapse The arrow indicates that additional information or selection options can be displayed (e.g. devices in a group). Tap the arrow pointing right to expand the information or selection options. The arrow changes so that it is pointing down. Tap the arrow pointing down to collapse the information or selection options. The arrow changes so that it is pointing right again.</p> |
|  | <p>Save or confirm Tap this button to save the settings or confirm a message.</p> |
|  | <p>Option not selected – option selected (single choice) This button marks multiple options that are available (e.g. different types of date groups), from which only one can be selected. As soon as an option for a switch is selected, all other switches change to the other option accordingly.</p> |
|  | <p>Option not selected – option selected (multiple choice) This button marks multiple options that are available, from which multiple options can be selected. As soon as an option is selected, it is highlighted.</p> |
|  | <p>Setting not selected – setting selected If an empty button is tapped, the button is marked with a purple background. One or more control elements (such as sliders) appear below.</p> |
|  | <p>Switch between individual pages of the app overview The number of points corresponds to the number of the pages in the app overview. The point filled in with colour indicates the page currently being displayed. Tap an empty point to go to the corresponding page.</p> |
|  | <p>Tap the logo to access the Information view. This page contains manufacturer information, the reference number and version of the web application and information on the licences used.</p> |

Table 3: Navigation principles

5 sceneCOM and special luminaires

Special luminaires are luminaires with multiple light sources (such as lamps or LED modules). *sceneCOM* can be used to combine the light sources into one luminaire so that they can be controlled together.

The following special luminaires can be controlled in your *sceneCOM* system: RGB luminaires, Balance luminaires and TW luminaires.

RGB luminaires

An RGB luminaire is a luminaire that consists of three light sources (red, green, blue). Coloured light is generated through additive colour mixing. Each light source is addressed individually. The type must be assigned during addressing: red, green or blue. The light sources are then combined into one RGB luminaire. As soon as the RGB luminaire has been created and the light sources have been assigned, only the RGB luminaire is displayed in the system image; the light sources no longer appear individually. The intensity, saturation and colour of the RGB luminaire can then be changed via the start page.

Balance luminaires

A Balance luminaire is a luminaire with multiple light sources. One part of the light sources is used for direct lighting and the other for indirect lighting. For this reason, the ratio of direct to indirect lighting (light balance) can also be changed for this type of luminaire in addition to the intensity. Each light source is addressed individually. The type must be assigned during addressing: direct or indirect. The light sources are then combined into one Balance luminaire. As soon as the Balance luminaire has been created and the light sources have been assigned, only the Balance luminaire is displayed in the system image; the light sources no longer appear individually. The intensity and light balance of the Balance luminaire can then be changed via the start page.

TW luminaires

A TW luminaire is a luminaire with multiple light sources that supports *Tunable White* (TW). One part of the light sources is used for warm-white light and the other for cool-white light. Each light source is addressed individually. The type must be assigned during addressing: warm-white or cool-white. The light sources are then combined into one TW luminaire. As soon as the TW luminaire has been created and the light sources have been assigned, only the TW luminaire is displayed in the system image; the light sources no longer appear individually. The intensity and colour temperature of the TW luminaire can then be changed via the start page.

Integrating special luminaires in a sceneCOM system

The following steps are required:

- Step 1: activate the **Special luminaires** app.
Path: App overview > **sceneCOM Store**
For more information see Section [Licensing](#)^[10]
- Step 2: address special luminaires.
Path: App overview > **Addressing** > **Luminaires**
For more information see manual **Commissioning and maintenance**
- Step 3: create special luminaires and assign light sources.
Path: App overview > **Special luminaires**
For more information see Section [Overview of the "Special luminaires" app](#)^[12]
- Step 4: configure the special luminaires.
Path: App overview > **System image** > **Configure**
For more information see Section [Configuration options for luminaires](#)^[14]

5 sceneCOM and special luminaires

- Step 5: configure a scene.
Path: App overview > **Scenes**
For more information see manual **Commissioning and maintenance**

6 Licensing

Special luminaires can only be created if the **Special luminaires** app has been activated.

i

Note

This app may already have been activated upon delivery.

If the **Special luminaires** app has not yet been activated, you must first activate the licence.

Path: App overview > **sceneCOM Store** > **Special luminaires**

The following steps are required:

- Step 1: request licence.
Path: App overview > **sceneCOM Store** > **Licensing information**
- Step 2: activate licence.
Path: App overview > **sceneCOM Store** > **Activate licence**



Figure 1: Licensing overview

| | Function | Brief description |
|-----|------------------------------|---|
| (1) | Licensing information | <p>This page provides information about your licence (article number of the app and reference number). You will need this information to request a licence from your sales partner.</p> <p>You can also see whether the licence has been activated or not.</p> <div style="background-color: #f0f0f0; padding: 5px;"> <div style="font-size: 2em; font-weight: bold; margin-right: 10px;">i</div> <p>Note</p> <p>If several licences have been activated, the number of enabled devices will be added together.</p> </div> |
| (2) | Activate licence | <p>You can activate the licence with a licence number here.</p> <div style="background-color: #f0f0f0; padding: 5px;"> <div style="font-size: 2em; font-weight: bold; margin-right: 10px;">i</div> <p>Note</p> <ul style="list-style-type: none"> • To recall the ordered licence numbers, go to the scenecom.tridonic.com website and enter the reference number (HW-ID) of the <i>sceneCOM</i>. </div> |

6 Licensing

| | | |
|--|--|---|
| | | <ul style="list-style-type: none">• Multiple licences can be activated.• The licence number, number of activated devices and the validity period are shown for each activated licence. |
|--|--|---|

Table 4: Licensing overview

7 Commissioning

This section explains how to commission special luminaires.

7.1 Overview of the “Special luminaires” app

As soon as the type of special luminaire is selected in the **Special luminaires** app, you can begin creating the special luminaire. The following contains an overview of the functions available, using an RGB luminaire as an example.

Path: App overview > **Special luminaires**

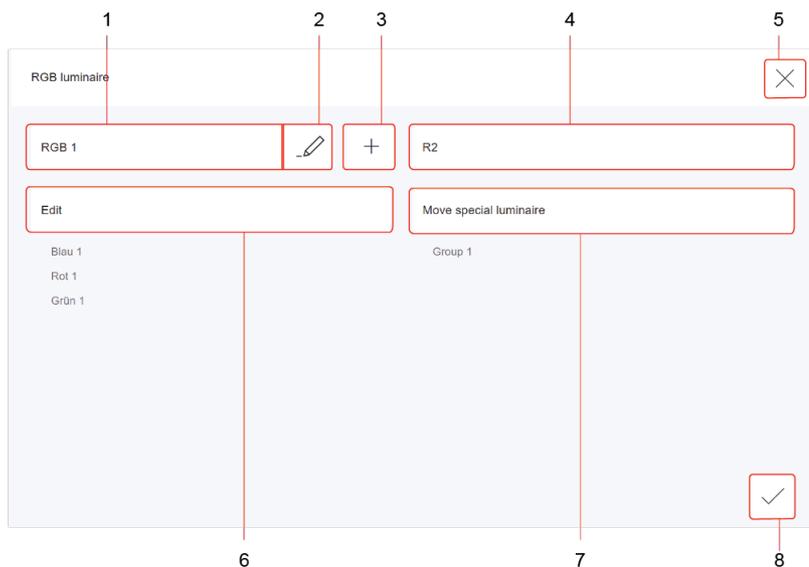


Figure 2: “Special luminaires” app view

| | Function | Brief description |
|-----|--|---|
| (1) | Select RGB luminaire | Select an existing RGB luminaire to edit it. Only RGB luminaires located in the selected room are displayed. |
| (2) | Rename RGB luminaire | Change the name of an existing RGB luminaire. |
| | Disassemble RGB luminaire | The selected RGB luminaire can be disassembled. The individual light sources are not deleted when a special luminaire is disassembled. |
| (3) | Create new RGB luminaire | Create a new RGB luminaire. |
| (4) | Select room | Select the room in which you want to create or change an RGB luminaire. |
| (5) | Return to the Select the type of special luminaire view | If you tap the cross, the changes are saved and the Select the type of special luminaire view opens. |
| (6) | Assign light sources | Combine the light sources into one RGB luminaire. As soon as the RGB luminaire has been created and the light sources have been assigned, only the RGB luminaire is displayed in the system image; the light sources no longer appear individually. The individual light sources are listed under the Edit button. |
| | Edit RGB luminaire | The light sources assigned to an RGB luminaire can be changed at any time. |

7 Commissioning

| | Function | Brief description |
|-----|--------------------|--|
| (7) | Move RGB luminaire | <p>The light sources of special luminaires in a room are all addressed in the same group. After the special luminaire has been created and the light sources have been assigned, it can be moved to another group in the same room. The group is displayed under the Move special luminaire button.</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p>i Note The special luminaire can be moved just like any other device in the System image app.</p> </div> |
| (8) | Save changes | If you tap the tick mark, the changes are saved and the Select the type of special luminaire view opens. |

Table 5: Functions in the “Special luminaires” app

8 Configuration

This section explains how to configure special luminaires.

8.1 Configuration options: luminaires

Path: App overview > **System image**

The following luminaires can be configured in your *sceneCOM* system:

- Standard luminaires
- Special luminaires: RGB luminaires, Balance luminaires and TW luminaires
- Self-contained emergency luminaires

The following table provides a description of the individual configuration options:

| Parameter | Description |
|---|--|
| Lower dimming limit | The dimming range is a range in which the intensity of the luminaires can be smoothly adjusted. It is restricted to the physical upper and lower limits. Setting a lower and upper dimming limit can limit the dimming range further. |
| Upper dimming limit | |
| Switching mode (Only for self-contained emergency luminaires) | Type of behaviour emergency luminaires can have during mains and/or emergency operation. The following switching modes are available: <ul style="list-style-type: none"> • Maintained light: switching mode in which the emergency luminaire is permanently switched on during both mains and emergency operation. The emergency luminaires cannot be dimmed/brightened. This switching mode is used, for example, for escape-sign luminaires. • Non-maintained light: switching mode in which the emergency luminaire is switched off during mains operation but switched on during emergency operation (in the event of a mains failure and during emergency lighting tests). • Lighting management: switching mode in which the emergency luminaire can be switched on and off as well as dimmed/brightened during mains operation, but is always switched on during emergency operation. <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p>i Note</p> <ul style="list-style-type: none"> • A switching mode is assigned to each emergency luminaire by default during addressing. The assigned switching mode depends on the type of emergency luminaire. • Not every emergency luminaire supports all switching modes; if a switching mode is not supported, it is greyed out. </div> |

8 Configuration

| | |
|--|--|
| <p>Test group (Only for self-contained emergency luminaires)</p> | <p>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. In order to ensure that a previous duration test has not emptied all batteries in an emergency, a duration test is not performed simultaneously for all self-contained emergency luminaires; the emergency luminaires are tested in two test groups (test group A and test group B). A test group is a group of self-contained emergency luminaires that are tested simultaneously during an automatic duration test.</p> <p>The self-contained emergency luminaires are automatically assigned to test groups A and B during addressing. The assignment takes place alternately. The assignment can be changed at any time.</p> <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;">  <p>WARNING</p> <p>If test groups are incorrectly assigned, the emergency lighting will not function.</p> <p>If too many emergency luminaires are tested simultaneously, the emergency lighting function cannot be guaranteed in an emergency.</p> <ul style="list-style-type: none"> • Ensure that the emergency luminaires are distributed equally between test group A and B, e.g. 25 emergency luminaires in test group A and 25 emergency luminaires in test group B. • Ensure that all emergency luminaires in the test groups are also spatially distributed. </div> |
| <p>Info text 1–3 (Only for self-contained emergency luminaires)</p> | <p>Information entered by the user for the self-contained emergency luminaire (e.g. lamp type, article number).</p> |

Table 6: Configuration options – Luminaires

9 Appendix

This section contains the following information:

- [Factory settings](#) ¹⁶
- [Icons](#) ¹⁶
- [Glossary](#) ¹⁸

9.1 Factory settings

Standard scenes

As soon as you create a room in your *sceneCOM* system, five standard scenes are enabled in the room. The following table contains the defaults for these scenes.

| Scene | Absence | Working | Writing | Meeting | Workshop |
|------------------------------------|---|---|---|---|---|
| Icon |  |  |  |  |  |
| Intensity | 0% | 100% | 40% | 16% | 7% |
| Tunable White | 3000 K | 3000 K | 3000 K | 3000 K | 3000 K |
| Colour | White | White | White | White | White |
| Light balance (direct/indirect) | 50:50 | 50:50 | 50:50 | 50:50 | 50:50 |

Table 7: Standard scenes and their defaults

9.2 Icons

This section contains an overview of all icons shown on the web application.

“Scenes” app

| Icon | Description |
|---|---|
|  | Intensity |
|  | Colour |
|  | Tunable White |
|  | Light balance |
|  | Different settings are stored for this setting at room, group and device level |
|  | Setting is controlled via daylight linking |
|  | A show is stored for this setting; the settings can only be changed in the Shows app |
|  | Configuration unknown |
|  | Locate device |

9 Appendix

| Icon | Description |
|---|-------------|
|  | Zone |

Table 8: Icons in the "Scenes" app

"System image" app

| Icon | Description |
|---|---|
|  | Luminaire |
|  | RGB luminaire |
|  | TW luminaire |
|  | Balance luminaire |
|  | Momentary-action switch/standard switch |
|  | Motion sensor |
|  | Light sensor |
|  | Emergency luminaire/escape-sign luminaire |
|  | Emergency luminaire/escape-sign luminaire (lighting management) |

Table 9: Icons in the "System image" app

9 Appendix

9.3 Glossary

| Term | Explanation |
|-------------------|---|
| Absence scene | Scene in an area where absence is detected. Any scene can be defined as an absence scene. |
| Action timeframe | Time during which a function is enabled (e.g. presence linking). The action timeframe can be defined using timeframes and a dead time. |
| Balance luminaire | Luminaire consisting of at least two lamps, one for direct lighting and one for indirect lighting. For Balance luminaires, the light balance can be changed in addition to the intensity. |
| Contrast sensor | Sensor that presents the environment as a contrast image |
| DALI load | Typical power consumption of a subscriber on the <i>DALI</i> control line. |
| Delay time | Time during which a specific threshold must be breached in order to trigger a response. The response or the event that follows is only permitted after this time has expired. |
| Detail control | A way of controlling devices either individually or in groups |
| Dimming range | A range in which the intensity of the luminaires can be smoothly adjusted. It is restricted to the physical upper and lower limits. Setting a lower and upper dimming limit can limit the dimming range further. |
| eD device | Sensors, control points, input devices and control units that are used in <i>DALI</i> systems. Each of these devices has its own address (0 to 63) which can be used to operate it individually. |
| Fade time | The time it takes to change from one value (scene, presence value) to another. Example with a scene as a value: If the fade time is, for example, 0 seconds, the change from one scene to the next is immediate. If the fade time is 20 seconds, the outputs will smoothly adjust to gradually switch to the control values for the next scene within those 20 seconds. All outputs reach the desired value simultaneously (once the fade time has expired). |
| Light balance | Ratio of direct to indirect lighting |
| Light source | System for generating light in a luminaire (e.g. lamp, LED module) |

9 Appendix

| Term | Explanation |
|-------------------------------|--|
| Location | Process for determining where a network or bus subscriber is located or what its address is. How subscribers are located differs from device to device. There are three methods of locating devices: visual, acoustic and tactile. |
| Momentary-action switch (MAS) | Control point that upon being operated either closes and/or opens a circuit, depending on its wiring, but without “clicking” into place like a standard switch, i.e. once it is released the affected circuit returns to its original state. |
| Presence linking | A way of controlling luminaires whilst taking into account the presence of people. Presence is usually detected by presence detectors. |
| Presence scene | Scene in an area where the presence of at least one person is detected. Any scene can be defined as a presence scene. |
| Required illuminance | Illuminance required at minimum at a specific location (e.g. workspace) so that a person can complete visual tasks effectively and accurately. |
| RGA address | Address used in <i>sceneCOM</i> systems for communication purposes. The RGA address is based on the following address scheme: room address/group address/individual address. |
| RGB luminaire | Luminaire consisting of three individual lamps (red, green, blue). Coloured light is generated through additive colour mixing. |
| Run-on time | Time that starts after a certain event (e.g. the last person leaves the room) and after which an action is triggered (e.g. fade time starts, absence scene is recalled). If an event occurs during the run-on time (e.g. someone re-enters the room), the run-on time starts again. A typical application for run-on time is the stairwell function. |
| Special luminaire | Luminaire with multiple light sources (such as lamps, LED modules). The <i>sceneCOM</i> web application can be used to combine the light sources into one luminaire so that they can be controlled together. |
| Standard switch | Control point that upon being operated either closes or opens a circuit and “clicks” into place as it does so (as opposed to a momentary-action switch). |
| System extension | Process during which new network or bus subscribers are addressed, which are used in an existing and addressed system. Addressing for previously addressed network or bus subscribers will remain unchanged. |
| Timeframe | Limited time period between two or more events which already have set times. Example: two timeframes are defined for presence linking (07:00–12:00 and 14:00–18:00). Presence linking is enabled during these timeframes. |

9 Appendix

| Term | Explanation |
|-----------------|--|
| Tunable White | Option of dynamically changing the light of the LED in the white light range. Colour temperatures from 2700 K to 6500 K, for example, can be variably set using a control. The LED luminaires achieve high colour rendering of at least Ra 80 to Ra 90. |
| TW luminaire | <p>Luminaire that supports Tunable White pursuant to IEC 62386-209. There are two types of TW luminaire:</p> <ul style="list-style-type: none"> • Luminaires that consist of at least two individual lamps, one for warm-white and one for cool-white. • Luminaires that have one individual lamp that supports Tunable White. |
| Visual location | <p>Type of location in which the address of a network or bus subscriber is used to visually locate this subscriber in the field.</p> <ul style="list-style-type: none"> • A visually located luminaire, for example, responds by switching to the maximum level. |