

Legal information

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Manufacturer

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1 How to use these instructions

We are pleased that you have chosen this *Zumtobel Lighting GmbH* 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 i	nstructions are numbered.		
\triangleright	Single-step instructions	s are indicated by the \triangleright icon at the beginning of the line.		
Э		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 no	eed to be checked before carrying out a step are indicated by $-$.		
i	Notes can be recognise	ed by the ${f i}$ icon. In addition, notes are identified by the word ${f Note}$.		
[Bold text]	Bold text indicates wor	Bold text indicates words that are shown on a device display or software user interface.		
\triangle		Danger and safety instructions are indicated by this icon. Safety and warning information is labelled and classified using the following words:		
	DANGER	DANGER indicates an immediate danger. This could lead to death or severe injury if not avoided.		
	WARNING indicates a potentially dangerous situation. This could lead to deserve injury if not avoided.			
	CAUTION	indicates a potentially dangerous situation. This could lead to minor injury or damage to property if not avoided.		
	Attention	Attention indicates a situation involving potential damage. If it is not avoided, the product or something in the vicinity may be damaged.		

Table 1: Signs and icons in these instructions

Further information

Further information on the setup and function of your *LITECOM* 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.zumtobel.com

Target audience of these instructions

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

Software version

These instructions are based on software version LITECOM 2.17.0.



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 *LITECOM* manuals can be downloaded from the website: http://www.zumtobel.com/gb-en/products/litecom.html

Manual	Description	
Commissioning and maintenance	This manual is aimed at electricians without any special <i>Zumtobel</i> 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 <i>Zumtobel</i> product training and describes how shows can be commissioned and configured.	
Daylight linking	This manual is aimed at electricians without any special <i>Zumtobel</i> 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 <i>Zumtobel</i> product training and describes how emergency lighting functions for self-contained emergency luminaires can be commissioned, configured and monitored in a <i>LITECOM</i> system that itself has already been commissioned.	
BACnet	This manual is aimed at electricians and system integrators without any special <i>Zumtobel</i> product training and describes how BACnet can be commissioned and configured.	
REST API & MQTT	This manual is aimed at system integrators without any special Zumtobel product training and describes how REST API and MQTT can be commissioned and configured.	

Table 2: Other available documents – LITECOM

3 Safety instructions



Attention

- The LITECOM 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 LITECOM 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
< # * > < - * * >	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%. 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 putton, these control values are increased by one unit (81%, 61%, 21%). This function is not available for all setting options.
- +	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.
— 12:00 +	Special feature: set the time If the time is tapped, the Set time view appears. The hours and minutes can be set separately here.
> ~	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.
✓	Save or confirm Tap this button to save the settings or confirm a message.
	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.
	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.
	Setting not selected – setting selected If an empty button is tapped (e.g. blind position at device level), the button is filled in with colour. One or more control elements (such as sliders) appear below.
	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.
ZUMTOBEL	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.

Table 3: Navigation principles

5 LITECOM and special luminaires

Special luminaires are luminaires with multiple light sources (such as lamps or LED modules). *LITECOM* 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 *LITECOM* 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 LITECOM system

The following steps are required:

- Step 1: activate the **Special luminaires** app. Path: App overview > **LITECOM Store**For more information see Section <u>Licensing</u>
- 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

• Step 4: configure the special luminaires.

Path: App overview > System image > Configure

For more information see Section Configuration options for luminaires 12

• 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.

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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 > LITECOM Store > Special luminaires

The following steps are required:

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



Figure 1: Licensing overview

	Function	Brief description	
(1)	Licensing information	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. You can also see whether the licence has been activated or not.	
		Note	
		If several licences have been activated, the number of enabled devices will be added together.	
(2)	Activate licence	You can activate the licence with a licence number here.	
		 Note To recall the ordered licence numbers, go to the litecom.zumtobel.com website and enter the reference number (HW-ID) of the LITECOM CCD. 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.



Note

In *LITECOM infinity* systems, it must be ensured that the luminaires used to form a special luminaire have not been addressed to different control devices.

Path: App overview > Special luminaires

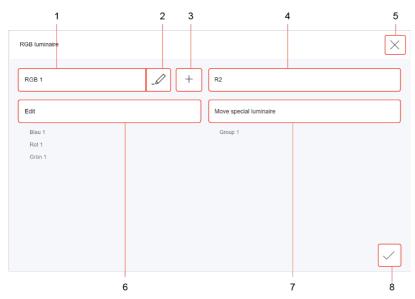


Figure 2: "Special luminaires" app view

	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.

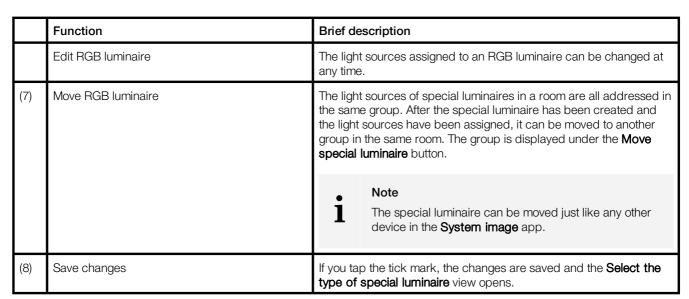


Table 5: Functions in the "Special luminaires" app

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 *LITECOM* system:

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



Note

A relay (e.g. *LM-4RUKS*) addressed as a luminaire is displayed in the system image but cannot be configured using *LITECOM*.

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
Upper dimming limit	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.
System Failure Level	Specifies the value the control gear adopts after a DALI bus failure. Enable System Failure Level Mask to ensure no change is made upon restoration following a DALI bus failure.
Power On Level	Specifies the value the control gear adopts after a voltage supply failure. Enable Power On Level Mask to ensure no change is made upon restoration following a voltage supply failure.
Flip (For SEQUENCE infinity only)	If more than one SEQUENCE infinity is installed in a room, they must be identically aligned. The orientation (direction) of the SEQUENCE infinity can be changed with this setting.
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: 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 safety 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.

i

Note

- 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.

Test group

(Only for self-contained emergency luminaires)

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.

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.



WARNING

If test groups are incorrectly assigned, the emergency lighting will not function.

If too many emergency luminaires are tested simultaneously, the emergency lighting function cannot be guaranteed in an emergency.

- 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.

Info text 1-3

(Only for self-contained emergency luminaires)

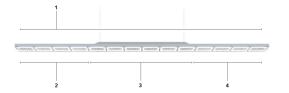
Information entered by the user for the self-contained emergency luminaire (e.g. lamp type, article number).

Table 6: Configuration options - Luminaires

9 LITECOM and SEQUENCE infinity

The SEQUENCE infinity product group comprises different luminaire designs:

• SEQUENCE infinity pendant luminaire: a SEQUENCE infinity pendant luminaire consists of four segments (indirect, left, centre and right).



(1)	Indirect		
(2)	Left	ft	
(3)	Centre	Direct	
(4)	Right		

Table 7: Segments of a SEQUENCE infinity pendant luminaire

• SEQUENCE infinity surface-mounted luminaire: a SEQUENCE infinity surface-mounted luminaire consists of three segments (left, centre and right).



(1)	Left	
(2)	Centre	Direct
(3)	Right	

Table 8: Segments of a SEQUENCE infinity surface-mounted luminaire

The **SEQUENCE** infinity app was specially developed for configuring *SEQUENCE* infinity patterns.

Patterns are preset control values for the 3 or 4 DALI short addresses for *SEQUENCE infinity*, which provide activity-related light distribution (e.g. **concentrated work**, **presentation**, **conference** lighting). Patterns are used to control the *SEQUENCE infinity* intensity. The created pattern can then be stored for a scene (e.g. **reading**) for *SEQUENCE infinity*.

Ten patterns for different applications are stored in the *LITECOM* web application.

	All off		Orientation left
	Direct light		Orientation right
	Informal meeting	مر	Presentation left
\bigvee	Conference		Presentation right
	Concentrated work	\bigwedge	Tablet PC



Note

- Defaults are stored for these patterns. The default values can be changed if necessary. For more information see Section Factory settings 25
- Additional patterns can also be defined.

Integrating SEQUENCE infinity in a LITECOM system

The following steps are required:

• Step 1: activate the **SEQUENCE** infinity app. Path: App overview > **LITECOM** Store
For more information see Section <u>Licensing</u> 16

Step 2: address SEQUENCE infinity.
 Path: App overview > Addressing > Luminaires
 For more information see Section Commissioning 17

• Step 3: configure SEQUENCE infinity.

Path: App overview > System image > Configure

For more information see Section Configuration options for luminaires 12

Step 4: configure a pattern.
 Path: App overview > SEQUENCE infinity
 For more information see Section Overview of the "SEQUENCE infinity" app 221

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

9.1 Licensing

The SEQUENCE infinity patterns can only be configured if the SEQUENCE infinity app has been activated.

i

Note

This app may already have been activated upon delivery.

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

Path: App overview > LITECOM Store > SEQUENCE infinity

The following steps are required:

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



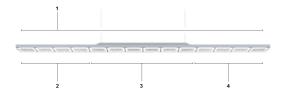
Figure 3: Licensing overview

	Function	Brief description	
(1)	Licensing information	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. You can also see whether the licence has been activated or not.	
		Note	
		If several licences have been activated, the number of enabled devices will be added together.	
(2)	Activate licence	You can activate the licence with a licence number here.	
		 Note To recall the ordered licence numbers, go to the litecom.zumtobel.com website and enter the reference number (HW-ID) of the LITECOM CCD. Multiple licences can be activated. The licence number, number of activated devices and the validity period are shown for each activated licence. 	

Table 9: Licensing overview

9.2 Commissioning

SEQUENCE infinity consists of four segments as standard (indirect, left, centre and right).



(1)	Indirect	
(2)	Left	
(3)	Centre	Direct
(4)	Right	

Table 10: SEQUENCE infinity segments

Each segment is identified during addressing using its production number. However, the final address must only be assigned to one of the four segments; the other segments are added automatically.

If more than one *SEQUENCE infinity* is installed in a room, they must be identically aligned. This is required so that the patterns of all *SEQUENCE infinity* devices can be implemented in exactly the same way in order to create a consistent scene in the room. Normally the *SEQUENCE infinity* devices are installed perpendicular to the window.

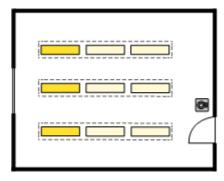


Figure 4: SEQUENCE infinity installed perpendicular to the window; the segment to be selected during addressing is dark yellow

The **Flip** button can be used during addressing to correct the orientation of the *SEQUENCE infinity* without having to install the *SEQUENCE infinity* and physically reverse the order of the segments. As soon as the **Flip** button is tapped, one segment brightens (100%) and the others switch to the minimum value.

If the SEQUENCE infinity devices are installed perpendicular to the window, the segment closest to the window should be selected. If the SEQUENCE infinity devices are controlled via daylight linking, the deviation of the left segment from the other segments is calculated as a percentage.

If the SEQUENCE infinity devices are installed parallel to the window, the same segment should be selected in each case. The LITECOM web application saves this selected segment as the **left** segment.

Addressing SEQUENCE infinity

Requirement:

Rooms and groups have been created.
 Path: App overview > System image

Path: App overview > Addressing > Luminaires

- 1. Navigate to the path.
 - ⇒A search for unaddressed luminaires is performed. This process may take several minutes.
 - ⇒ As soon as all luminaires are found, the **Locate luminaires** view appears.
 - ⇒ Luminaires are dimmed to the minimum value. One luminaire brightens.
 - The number of unaddressed luminaires is displayed in the header.
- 2. Tap the arrow key until the luminaire to be addressed brightens.

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When addressing SEQUENCE infinity, each segment is identified using its production number. Each of the segments responds individually when luminaires are being located. However, the final address must only be assigned to one of the four segments; the LITECOM web application then adds the remaining segments automatically.

3. Tap the tick mark.

Note

The **Assign** view is displayed.



Note

- The name of the SEQUENCE infinity device consists of the product name and the RGA address. Example: SEQ INF DI 105W LED840 LDO ASI1000 SR / 5-1-1
- The default name of the SEQUENCE infinity device can only be changed in the system image.
- 4. Select the **SEQUENCE** type in the left-hand column.
- 5. Select the room in the middle column.
- 6. Select the group in the right-hand column.



/

- 7. Tap the tick mark.
 - → The LITECOM web application searches for the remaining SEQUENCE infinity segments.
 - One segment (left or right) brightens; all other segments switch to the minimum value.
 - ⇒The message for aligning the SEQUENCE infinity device is displayed.
- 8. Check whether the SEQUENCE infinity device is aligned correctly.
- 9. If the SEQUENCE infinity device is not correctly aligned, tap the Flip button.
- 10. As soon as the SEQUENCE infinity device is correctly aligned, tap the tick mark.
 - ⇒If additional unaddressed luminaires exist, the **Locate luminaires** view appears.
 - ⇒ As soon as all luminaires have been addressed, the **Addressing** view appears.

Note

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The SEQUENCE infinity alignment can be corrected at any time.

Path: App overview > System image > Configure devices

For more information see Section Configuration options for luminaires 12

9.3 Configuration

This section explains how to configure SEQUENCE infinity.

9.3.1 Configuration options: luminaires

Path: App overview > System image

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

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



Note

A relay (e.g. *LM-4RUKS*) addressed as a luminaire is displayed in the system image but cannot be configured using *LITECOM*.

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

Parameter	Description
Lower dimming limit Upper 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.
System Failure Level	Setting a lower and upper dimming limit can limit the dimming range further. Specifies the value the control gear adopts after a DALI bus failure. Enable System Failure Level Mask to ensure no change is made upon restoration following a DALI bus failure.
Power On Level	Specifies the value the control gear adopts after a voltage supply failure. Enable Power On Level Mask to ensure no change is made upon restoration following a voltage supply failure.
Flip (For SEQUENCE infinity only)	If more than one SEQUENCE infinity is installed in a room, they must be identically aligned. The orientation (direction) of the SEQUENCE infinity can be changed with this setting.
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: 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 safety 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.

i

Note

- 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.

Test group

(Only for self-contained emergency luminaires)

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.

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.



WARNING

If test groups are incorrectly assigned, the emergency lighting will not function.

If too many emergency luminaires are tested simultaneously, the emergency lighting function cannot be guaranteed in an emergency.

- 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.

Info text 1-3

(Only for self-contained emergency luminaires)

Information entered by the user for the self-contained emergency luminaire (e.g. lamp type, article number).

Table 11: Configuration options - Luminaires

9.3.2 Overview of the "SEQUENCE infinity" app

The following contains an overview of the functions in the **SEQUENCE infinity** app.

Path: App overview > **SEQUENCE infinity**

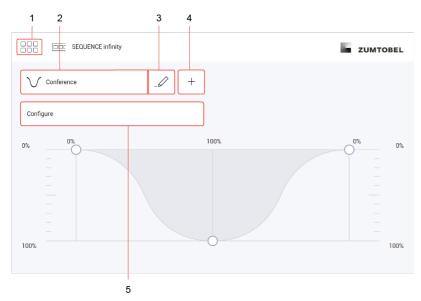


Figure 5: "SEQUENCE infinity" app view

	Function	Brief description
(1)	Return to app overview	The app overview can be accessed via this button.
(2)	Select pattern	Select an existing pattern to edit it.
(3)	Rename pattern	Change the name of an existing pattern. The 10 standard patterns cannot be renamed.
	Copy pattern	To create a pattern that is only slightly different from an existing pattern, the existing pattern can be copied. All settings are applied in this case. The copied pattern can then be edited.
	Delete pattern	When a pattern is deleted all settings for the pattern are deleted. If a pattern stored in the Scenes app is deleted, a new pattern must be stored in the Scenes app. The 10 standard patterns cannot be deleted.
	Reset pattern	Each of the 10 standard patterns can separately be reset to the factory settings.
(4)	Create pattern	Create a new pattern. Name the pattern as required (e.g. Reading).
(5)	Configure pattern	As soon as Configure is tapped, an intensity can be set for each of the four segments and the pattern curve can be defined (wave-like, incremental, linear).

Table 12: Functions in the "SEQUENCE infinity" app

Configuring a pattern

There are three types of pattern curve: wave-like, incremental and linear.

The following figures show the same pattern, each time with a different curve. The shaded areas represent the intensity. Example:

• Left segment: 80%

• Centre segment: 13%

• Right segment: 80%

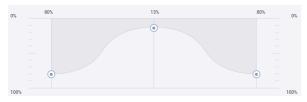


Figure 6: Wave-like

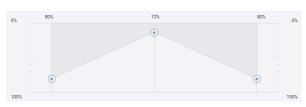


Figure 8: Linear



Figure 7: Incremental

The following contains an overview of the functions in the Configure pattern view.

Path: App overview > **SEQUENCE infinity** > **Configure**

Configure pattern – direct (left, centre, right)

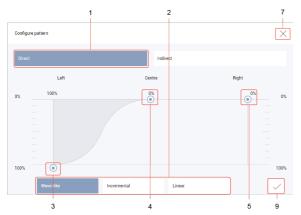


Figure 9: "Configure pattern" view > "direct share" in "Orientation left" example

Configure pattern - indirect

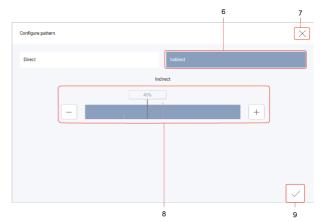


Figure 10: "Configure pattern" view > "indirect share" in "Orientation left" example

	Function	Brief description
(1)	Configure direct share	Select the Direct button to configure the direct share of the SEQUENCE infinity device.
(2)	Select curve	Select one of three curves for the pattern (wave-like, incremental, linear).
(3)	Change intensity of left segment	Drag this button up or down to reduce or increase the intensity of the left segment.
(4)	Change intensity of centre segment	Drag this button up or down to reduce or increase the intensity of the centre segment.
(5)	Change intensity of right segment	Drag this button up or down to reduce or increase the intensity of the right segment.
(6)	Configure indirect share (for pendant luminaires only)	Select the Indirect button to configure the indirect share of the SEQUENCE infinity device.
(7)	Do not save changes	If you tap the cross, the changes are not saved and the SEQUENCE infinity view opens.
(8)	Change intensity of indirect segment (for pendant luminaires only)	Change the intensity of the indirect segment. You can tap on a certain value in the click area. If you tap to the left or right of the click area, the value you are setting is incrementally reduced or increased by one unit.
(9)	Save changes	If you tap the tick mark, the changes are saved and the SEQUENCE infinity view opens.

Table 13: Functions in the "Configure pattern" view

10 Appendix

This section contains the following information:

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10.1 Factory settings

Standard scenes

As soon as you create a room in your *LITECOM* 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	Ф	显	द्ध	Ç	A
Intensity	0%	100%	40%	16%	7%
Tunable White	3000 K				
Colour	White	White	White	White	White
Pattern (SEQUENCE infinity)	-	-	_	_	-
Light balance (direct/indirect)	50:50	50:50	50:50	50:50	50:50
Blind position	0%	0%	0%	0%	0%
Slat position	0%	0%	0%	0%	0%
Window position	100%	100%	100%	100%	100%
Screen position	0%	0%	0%	0%	0%

Table 14: Standard scenes and their defaults

Standard pattern

The following values are stored for the 10 standard patterns.

Pattern	Left	Centre	Right	Indirect	Curve
All off	0%	0%	0%	0%	-
Direct light	100 %	100 %	100 %	0%	Wave-like
Informal meeting	0%	0%	0%	100 %	Wave-like
Conference	0%	100 %	0%	100 %	Wave-like
Concentrated work	100 %	100 %	100 %	100 %	Wave-like
Orientation left	100 %	0%	0%	0%	Wave-like
Orientation right	0%	0%	100 %	0%	Wave-like
Presentation left	100 %	50%	0%	0%	Wave-like
Presentation right	0%	50%	100 %	0%	Wave-like
∩ Tablet PC	100 %	0%	100 %	100 %	Wave-like

Table 15: Standard patterns and their default values

10.2 **Icons**

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

"Scenes" app

Icon	Description
☆	Intensity
*	Colour
™	Tunable White
崇	Light balance
≡	Blind position
##	Slat position
G	Window position
豆	Screen position
	Different settings are stored for this setting at room, group and device level
DL	Setting is controlled via daylight linking
C	A show is stored for this setting; the settings can only be changed in the Shows app
null	Configuration unknown
♡	Locate device
	Zone
₩	Blind position: no movement with scene recall
	Window position: no movement with scene recall
/	Slat position: no movement with scene recall
	Screen position: no movement with scene recall

Table 16: Icons in the "Scenes" app

"System image" app

Icon	Description
☆	Luminaire
A	RGB luminaire
<u>TW</u>	TW luminaire
;à¢:	Balance luminaire
宁	Free-standing luminaire
兔	Relay (luminaire)
≣	Blinds (type 3, type 3+4)
##	Blinds (type 4)

Icon	Description
0	Window
豆	Screen
	SEQUENCE infinity
	Momentary-action switch/standard switch
	CIRCLE control unit
0	LM-CIRIA
	Remote control
© ah	Presence detector (generic and MSensorG3)
(h) (8)	Light sensor
	CO2 sensor
	Humidity sensor
(1)) (1)) (2))) cc=cc ==============================	Noise sensor (average, maximum and minimum)
€ Q:	Temperature sensor
₩	Detection of power consumption
	VOC sensor
<u>۸</u>	General contact
<u>غ</u> ر	Signalling contact, e.g. <i>LM-4RUKS</i>
<u></u> <u>~</u> <u>«</u>	Rain (input contact)
PU	Wind (input contact)
染収	Ice (input contact)
Š.	Emergency luminaire/safety sign luminaire
- Figh	Emergency luminaire/safety sign luminaire (lighting management)
00	Rocker switch (2x)
000	Rocker switch (3x)
00 00	Rocker switch (4x)
	ONLITE BRI
	Sky scanner
<u>ර</u>	Weather station
DALI 2 Ê	DALI-2 master (generic and MSensorG3)

Table 17: Icons in the "System image" app

10.3 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.
Blinds (type 3)	Blinds which can move to different positions. This type of blinds does not have slats or has slats that cannot be adjusted.
Blinds (type 3+4)	Blinds which can move to different positions and have adjustable slats.
Blinds (type 4)	Blinds with slats – the position of the blinds is fixed, but the slats are adjustable.
Building service	Component of the building's technical equipment which is part of the building's infrastructure. In <i>LUXMATE</i> building management systems, building services are controlled via modes of operation. A building service can be controlled via more than one mode of operation. Examples of building services are lighting and blinds.
Contrast sensor	Sensor that presents the environment as a contrast image
DALI load	Typical power consumption of a subscriber on the DALI control line.
DALI-2	Expansion of the existing interface log for digital communication between control gears for the lighting system – DALI (<i>Digital Addressing Lighting Interface</i>). Expansion for control devices as per <i>IEC 62386</i> and addition of new commands and functions. More detailed information can be found on the website of the <i>Digital Illumination Interface Alliance (DiiA)</i> .
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.

Term	Explanation	
End position	Maximum position (e.g. of blinds) defined by a limit switch. There can be an upper and a lower end position.	
ExD	Self-contained emergency luminaire with a nominal duration of x hours (e.g. $E1D = \text{nominal duration of 1 hour}$), individual monitoring via DALI, central test and adjustable intensity in emergency operation.	
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).	
lce alarm	The ice alarm should stop blinds from moving when ice has formed on them, preventing them from being damaged. It is triggered when the outdoor temperature drops below a certain threshold and a rain sensor has detected precipitation.	
Instance	Sub-category of an input device. Each input device can have up to 32 instance types (e.g. light sensor, presence detector, remote control, momentary-action switch, and many more).	
Light balance	Ratio of direct to indirect lighting	
Light source	System for generating light in a luminaire (e.g. lamp, LED module)	
Location	Process for determining where a network or bus subscriber is located or what its address it. How subscribers are located differs from device to device. There are three methods of locating devices: visual, acoustic and tactile.	
Mode of operation	Determines which building service is being controlled. Each building service is controlled by at least one mode of operation. Examples of modes of operation are intensity, blind position and slat position.	
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.	
Movement range	Defines the capabilities of blinds or a window to move between the end positions, if the blinds/window have an actuator which is able to measure the distance covered and send feedback about the current position of the blinds/window. Setting a lower and upper limit of the movement range can limit the range further.	
Pattern	Preset control values for 3 or 4 <i>DALI</i> short <i>SEQUENCE infinity</i> addresses, through which activity-related light distributions are created (e.g. concentrated work, presentation, conference)	

Term	Explanation
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.
Production number	Globally unique identification number of a <i>LUXMATE</i> device. The serial number can be determined from the production number.
Rain alarm	The rain alarm should prevent blinds (such as awnings) from being damaged by rain. It is triggered after a rain sensor determines that a defined precipitation level has been exceeded during a specified delay time.
Reference number	Number used to generate and check the licence number.
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>LUXMATE</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.
Slat position	Specifies how the slats of blinds tilt. Expressed as a percentage (%).
Special luminaire	Luminaire with multiple light sources (such as lamps, LED modules). The LITECOM 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.

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	Luminaire that supports Tunable White pursuant to IEC 62386-209. There are two types of TW luminaire: • 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	 Type of location in which the address of a network or 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 set of blinds, for example, responds by moving to the lower end position.
Wind alarm	The wind alarm should stop blinds from moving when wind speeds are high, for example, preventing them from being damaged. It is triggered after a wind speed sensor determines that a defined wind speed has been exceeded during a specified delay time.

T H E L I G H T



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