



NOVA series
Ceiling lights with
a colour temperature of 3000 K and 4000 K

Detailed operating instructions

Version	Date	Comment
BA01061201	31.10.2016	Second edition

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An der Strusbek 40, 22926 Ahrensburg, Germany

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Table of contents

1	Information about the document	6
1.1	Manufacturer address.....	6
1.2	Product identification.....	6
1.3	Highlighted information within the text.....	11
1.4	Structure of these instructions.....	11
1.5	Warnings.....	12
2	Basic safety information	12
2.1	Intended use.....	12
2.2	Liability and damages.....	13
2.3	Safety instructions.....	13
3	Product description	13
3.1	Functions.....	14
3.2	Mechanical set-up.....	16
3.3	Presence detector.....	18
3.4	Type plate.....	18
4	Installation	19
4.1	Dimensions diagrams.....	19
4.2	Recessed ceiling mounting.....	21
4.3	Connecting the master light.....	21
4.4	Master light connection options.....	23
4.4.1	Connecting NOVA slave lights.....	24
4.4.2	Master lights in parallel connection.....	25
4.4.3	Connecting NOVA DALI lights.....	25
4.4.4	Connecting DALI switch devices.....	26
4.5	Connecting to KNX bus.....	27
4.6	Warm-up phase.....	28
4.7	Factory settings.....	28
5	Overview of the operating modes	29
5.1	Sequence of the operating modes.....	29
5.2	Manually triggered operating modes.....	31
5.3	Operating modes and detected movements.....	33
6	Setting via remote control	34
6.1	Selecting X-Light Control remote control.....	35
6.2	X-Light Control menu layout.....	35

7	The <Functions> remote control menu	38
7.1	Channel 1, 2, 3 and 4	38
7.1.1	On/Off.....	39
7.1.2	Start/stop dimming.....	39
7.1.3	Light value	40
7.2	All channels	41
7.3	Call scene	41
7.4	Store scene	42
7.5	DALI switch.....	42
7.5.1	DS1/DS2 on	42
7.5.2	DS1/DS2 off.....	43
7.6	Reset.....	43
7.7	Test start/stop	44
7.8	KNX Prog. On/KNX Prog Off	44
8	The remote control menu <Programming>	45
8.1	Activate/deactivate programming mode	45
8.2	Calibration.....	45
8.3	All channels	47
8.3.1	Store brightness.....	47
8.3.2	Light set value	49
8.3.3	Off delay time.....	50
8.3.4	Off warning.....	50
8.3.5	Orientation light.....	51
8.3.6	Orient. light mode	52
8.3.7	Orient. light in min.....	53
8.3.8	Orient. light from h/Orient. light to h	54
8.3.9	Full automatic	55
8.3.10	Semi automatic.....	56
8.4	Channel Map	56
8.5	DALI map.....	57
8.6	DALI switch.....	58
8.6.1	DS1/DS2 connected.....	58
8.6.2	DS1/DS2 not connected	59
8.6.3	DS1/DS2 off delay time	59
8.6.4	DS1/DS2 mode.....	60
8.7	Scene editor	61
8.8	Calender	62
8.9	Factory Reset.....	63
8.10	Reset Editor	64
8.11	Sensitivity	64
8.12	Detector LED on/Detector LED off.....	65
8.13	Light value on/Light value off	66
8.14	Detector Fact. reset.....	67

8.15	Detector Light Factor	67
9	Operation via Bluetooth	69
9.1	NOVA lights with Bluetooth	69
9.2	The ESYLUX LIGHT CONTROL app.....	69
9.2.1	Using the app	70
9.2.2	Differences between the Android and iOS app.....	70
9.3	Setting up a Bluetooth connection	71
10	The app main menu	73
11	The app menu <Manual>.....	74
11.1	Switching channels on and off.....	74
11.2	Adjust brightness	76
11.3	Back to normal operation mode	77
11.4	Switching the switching channels on and off.....	77
12	The app menu <Profiles>.....	78
13	The app menu <Settings>.....	80
13.1	The General submenu.....	81
13.1.1	Date and time.....	81
13.1.2	Adjusting the radio range	82
13.1.3	Adjusting automatic mode.....	83
13.1.4	Setting the off delay time.....	84
13.1.5	Setting the Switch-off warning.....	85
13.1.6	Changing orientation light brightness	86
13.1.7	Setting orientation light afterglow	86
13.1.8	Resetting lights to factory settings	87
13.2	Light management submenu	88
13.2.1	Constant light management, light target value and light measurement	88
13.2.2	Configuring via light sensors.....	89
13.2.3	Manual settings	92
13.3	Switching channels submenu	95
13.3.1	Switching channel - Active	96
13.3.2	Switching channel - Operating mode	96
13.3.3	Switching channel - Delay time	96
13.4	DALI mapping submenu	97
14	Settings via the 230 V button.....	98
14.1	Button S1	98
14.1.1	Switching the lighting on/off	98

14.1.2 Dim lighting	98
14.2 S2 button.....	99
14.2.1 Calling up scenes 1 to 4	99
15 Settings via DALI button.....	100
15.1 List of DALI commands	100
16 Maintenance.....	102
16.1 Cleaning.....	102
16.2 Troubleshooting.....	102
17 Technical data	103
18 Disposal	105
19 EC Declaration of Conformity.....	105
20 ESYLUX MANUFACTURER'S GUARANTEE	105

1 Information about the document

These operating instructions contain detailed information about device functions and the processes for commissioning and assembling the specified devices.

This document is also available online at www.esylux.com and can be printed in A4 format.

Please read the operating instructions through in full and note all safety information and warnings.

Navigating on screen

When you are reading the document on screen, you can use the following functions:

- **Linked table of contents:** Clicking on the chapter title opens the corresponding chapter.
- **List of bookmarks:** All chapters can be accessed from the list of bookmarks. You can usually open the list of bookmarks in the PDF software by clicking the symbol.
- **Linked references:** You can move to specified locations by clicking on the link. Many PDF programs highlight such links when you hover the mouse cursor over the link. For example:

(siehe Kapitel „13.2.3 Manuelle Einstellung“).

1.1 Manufacturer address

ESYLUX GmbH
 An der Strusbek 40
 22926 Ahrensburg, Germany
 Website: www.esylux.com
 Email: info@esylux.com

1.2 Product identification

These operating instructions apply to NOVA-series products with colour temperatures of 3000 and 4000 kelvin as listed below. The operating instructions apply to master lights as well as sets. The sets always consist of one master light and three slave lights.

Summary of the item description

The item designation contains important information about the product. Meaning of the item designation:

PNL	NOV	10	030	830	WH	C	L	ELCM	00	B
□	□	□	□	□	□	□	□	□	□	□
1	2	3	4	5	6	7	8	9	10	11

Number	Information	Explanation of the abbreviation
1	Product family	PNL: Panel light
2	Series name	ALC: NOVA
3	Dimensions	10: 593 x 593 mm ² 11: 618 x 618 mm ²
4	Luminosity in watts (equivalent)	030: 30 watts 040: 40 watts With sets, the maximum luminosity is given in watts (equivalent).
5	Colour temperature	830: 3000 K 840: 4000 K
6	Housing colour	WH: White
7	Diffusor	C: Crystal O: Milky
8	Light sensor	L: Light sensor fitted 0: No light sensor
9	Connections	ELCM: ESYLUX light control master ELCS: ESYLUX light control slave ELCX: ESYLUX light control set with master and slave lights
10	Connection	00: Standard connection terminal
11	Operating interface	B: Bluetooth and infrared K: KNX and infrared No entry: Infrared

These instructions apply to the following ESYLUX NOVA lights:

Master lights

Item number	Item designation
EQ10112188	PNLNOV10030830WH00ELCM00
EQ10120107	PNLNOV11030830WH00ELCM00
EQ10112485	PNLNOV10030840WH00ELCM00
EQ10120381	PNLNOV11030840WH00ELCM00
EQ10112126	PNLNOV10030830WHCOELCM00
EQ10112935	PNLNOV11030830WHCOELCM00
EQ10112362	PNLNOV10030840WHCOELCM00

	Item number	Item designation
Master lights with light sensor	EQ10120244	PNLNOV11030840WHCOELCM00
	EQ10112331	PNLNOV10030830WHOLELCM00
	EQ10120138	PNLNOV11030830WHOLELCM00
	EQ10112546	PNLNOV10030840WHOLELCM00
	EQ10120411	PNLNOV11030840WHOLELCM00
	EQ10112157	PNLNOV10030830WHCLELCM00
	EQ10112997	PNLNOV11030830WHCLELCM00
	EQ10112393	PNLNOV10030840WHCLELCM00
Master lights with Bluetooth	EQ10120275	PNLNOV11030840WHCLELCM00
	EQ10120251	PNLNOV11030840WHCOELCM00B
	EQ10120114	PNLNOV11030830WHOOELCM00B
	EQ10112492	PNLNOV10030840WHOOELCM00B
	EQ10120398	PNLNOV11030840WHOOELCM00B
	EQ10112133	PNLNOV10030830WHCOELCM00B
	EQ10112942	PNLNOV11030830WHCOELCM00B
	EQ10112379	PNLNOV10030840WHCOELCM00B
Master lights with KNX	EQ10120251	PNLNOV11030840WHCOELCM00B
	EQ10120985	PNLNOV10030830WHOOELCM00K
	EQ10121180	PNLNOV11030830WHOOELCM00K
	EQ10121029	PNLNOV10030840WHOOELCM00K
	EQ10121302	PNLNOV11030840WHOOELCM00K
	EQ10120886	PNLNOV10030830WHCOELCM00K
	EQ10121166	PNLNOV11030830WHCOELCM00K
	EQ10121005	PNLNOV10030840WHCOELCM00K
Master lights with light sensor and Bluetooth	EQ10121289	PNLNOV11030840WHCOELCM00K
	EQ10112348	PNLNOV10030830WHOLELCM00B
	EQ10120145	PNLNOV11030830WHOLELCM00B
	EQ10112584	PNLNOV10030840WHOLELCM00B
	EQ10120428	PNLNOV11030840WHOLELCM00B
	EQ10112164	PNLNOV10030830WHCLELCM00B

	Item number	Item designation	
	EQ10120084	PNLNOV11030830WHC LELCM00B	
	EQ10112430	PNLNOV10030840WHC LELCM00B	
	EQ10120282	PNLNOV11030840WHC LELCM00B	
Master lights with light sensor and KNX	EQ10120992	PNLNOV10030830WH OELCM00K	
	EQ10121197	PNLNOV11030830WH OELCM00K	
	EQ10121036	PNLNOV10030840WH OELCM00K	
	EQ10121319	PNLNOV11030840WH OELCM00K	
	EQ10120893	PNLNOV10030830WHC LELCM00K	
	EQ10121173	PNLNOV11030830WHC LELCM00K	
	EQ10121012	PNLNOV10030840WHC LELCM00K	
	EQ10121296	PNLNOV11030840WHC LELCM00K	
	Sets	EQ10111167	PNLNOV10030830WH O0ELCX00
		EQ10111761	PNLNOV11030830WH O0ELCX00
EQ10111365		PNLNOV10030840WH O0ELCX00	
EQ10111969		PNLNOV11030840WH O0ELCX00	
EQ10111129		PNLNOV10030830WHC 0ELCX00	
EQ10111723		PNLNOV11030830WHC 0ELCX00	
EQ10111327		PNLNOV10030840WHC 0ELCX00	
EQ10111921		PNLNOV11030840WHC 0ELCX00	
Sets with light sensor		EQ10111181	PNLNOV10030830WH OELCX00
		EQ10111785	PNLNOV11030830WH OELCX00
	EQ10111389	PNLNOV10030840WH OELCX00	
	EQ10111983	PNLNOV11030840WH OELCX00	
	EQ10111143	PNLNOV10030830WHC LELCX00	
	EQ10111747	PNLNOV11030830WHC LELCX00	
	EQ10111341	PNLNOV10030840WHC LELCX00	
	EQ10111945	PNLNOV11030840WHC LELCX00	
Sets with Bluetooth	EQ10111174	PNLNOV10030830WH O0ELCX00B	
	EQ10111778	PNLNOV11030830WH O0ELCX00B	
	EQ10111372	PNLNOV10030840WH O0ELCX00B	

	Item number	Item designation
	EQ10111976	PNLNOV11030840WHOOELCX00B
	EQ10111136	PNLNOV10030830WHCOELCX00B
	EQ10111730	PNLNOV11030830WHCOELCX00B
	EQ10111334	PNLNOV10030840WHCOELCX00B
	EQ10111938	PNLNOV11030840WHCOELCX00B
Sets with KNX	EQ10110146	PNLNOV10030830WHOOELCX00K
	EQ10110382	PNLNOV11030830WHOOELCX00K
	EQ10110184	PNLNOV10030840WHOOELCX00K
	EQ10110542	PNLNOV11030840WHOOELCX00K
	EQ10110122	PNLNOV10030830WHCOELCX00K
	EQ10110368	PNLNOV11030830WHCOELCX00K
	EQ10110160	PNLNOV10030840WHCOELCX00K
	EQ10110528	PNLNOV11030840WHCOELCX00K
Sets with light sensor and Bluetooth	EQ10111198	PNLNOV10030830WHOLELCX00B
	EQ10111792	PNLNOV11030830WHOLELCX00B
	EQ10111396	PNLNOV10030840WHOLELCX00B
	EQ10111990	PNLNOV11030840WHOLELCX00B
	EQ10111150	PNLNOV10030830WHCLELCX00B
	EQ10111754	PNLNOV11030830WHCLELCX00B
	EQ10111358	PNLNOV10030840WHCLELCX00B
	EQ10111952	PNLNOV11030840WHCLELCX00B
Sets with light sensor and KNX	EQ10110153	PNLNOV10030830WHOLELCX00K
	EQ10110399	PNLNOV11030830WHOLELCX00K
	EQ10110191	PNLNOV10030840WHOLELCX00K
	EQ10110559	PNLNOV11030840WHOLELCX00K
	EQ10110139	PNLNOV10030830WHCLELCX00K
	EQ10110375	PNLNOV11030830WHCLELCX00K
	EQ10110177	PNLNOV10030840WHCLELCX00K
	EQ10110535	PNLNOV11030840WHCLELCX00K

1.3 Highlighted information within the text

To make these user instructions easier to read, certain information is highlighted by different means.

The labels have the following meaning:

< > indicates remote control menu items

Grey indicates a function

➤ indicates individual call for action

✓ is used to highlight results of actions



indicates important and useful information



warns of high voltage

1.4 Structure of these instructions

Chapters 2 to 4 include technical data and all information for safe installation and operation of the NOVA lights.

Chapter 3.1 contains an overview of functions. Chapter 5 explains the operating modes. Understanding the sequence of the operating modes makes it easier to configure the lights.

All lights can be operated by remote control and buttons. Remote control makes it much more convenient to choose the settings, and many settings are only possible via remote control.

Remote control

Chapters 6 to 8 cover the remote control menu. The remote control groups the functions according to whether they directly control the lights or are used to configure the lights:

- **Direct control:** The corresponding functions are found in the remote control sub-menu <Functions>. Direct controls adjust the lights to more unusual situations for which the basic settings are not ideal. Such adjustments to the programmed sequence, for example, changing brightness, are temporary. The adjustments are not saved.
- **Configuration:** Other than a few exceptions, the basic settings that are sufficient for most situations are made in the remote control menu <Programs>.

Operation via app

Remote control required

Lights with a Bluetooth radio module offer an additional and particularly convenient operating option: Users of Bluetooth-capable devices such as smartphones or tablets can control these lights via the free ESYLUX LIGHT CONTROL app. The universal remote control must only be used once to activate light measurement (see page 92) for Bluetooth lights without light sensors. Operation via app is explained starting from Chapter 9.

1.5 Warnings

Warnings are listed at the start of the relevant chapter if a hazardous situation is likely to occur.

The preceding signal words have the following meanings:

DANGER!

This signal word denotes a hazard involving a high level of risk. Failure to observe the warning will lead to serious or fatal injury.

WARNING!

This signal word denotes a hazard involving a moderate level of risk. Failure to observe the warning may lead to serious or fatal injury.

CAUTION!

This signal word denotes a hazard involving a low level of risk. Failure to observe the warning may lead to minor or moderate injury.

CAUTION!

This signal word warns against situations that could lead to instances of property damage if the information is not observed.

2 Basic safety information

2.1 Intended use

The ESYLUX NOVA louvre lights may only be used for the following purposes:

- Installation in internal areas as recessed surface-mounted ceiling light.
- The light is designed for illuminating working areas, offices, or corridors.
- NOVA master lights are ideal for power supply routing. The maximum total current of the mains terminal is 10 A.
- NOVA master lights can be used as a control unit for a maximum of three NOVA slave lights.
- The NOVA slave light is powered and controlled exclusively via the NOVA master light. NOVA slave lights must only be connected to NOVA master lights.

NOVA lights contain in-built LED bulbs. The light source of these lights may only be replaced by the manufacturer or an engineer contracted to the manufacturer or other similarly qualified person.

2.2 Liability and damages

The device must not be changed, modified or painted — doing so will void any warranty claims.

The manufacturer will not accept any liability for instances of personal injury or property damage caused by improper use.

Check the product for damage after unpacking. If the device is damaged in any way, return it to the relevant place of sale.

2.3 Safety instructions

Electrical devices connected to a 230-V mains supply may only be assembled and commissioned by electrical installation technicians or trained electricians, taking country-specific regulations into account.

Specialist personnel!



DANGER!

Risk of fatal injury from electric shock!

- The following five safety rules must always be observed:
 1. Disconnect the power supply
 2. Secure the power supply from being switched on again
 3. Check that the relevant components have been de-energised
 4. Set up the earthing and short-circuiting mechanisms as required
 5. Cover or isolate neighbouring live parts

PLEASE NOTE:

Incorrect connection will destroy the DALI electronic ballasts!

- Note the DALI specifications (IEC 62386)

3 Product description

The ESYLUX NOVA louvre lights are intended for indoor use as recessed surface-mounted ceiling lights. The built-in LEDs have low energy consumption and ensure optimal lighting.

Parameters can only be set on the NOVA master lights. Each master light has its own presence detector and an infrared operating interface. The master lights are also available with the following additional equipment:

Master lights variants

- Light sensor
- Bluetooth operating interface
- KNX module
- Light sensor and Bluetooth operating interface
- Light sensor and KNX module

Set variants

The master lights are available individually and as a Quadro set with three slave lights. The sets are also available with the following additional equipment:

- Light sensor
- Bluetooth operating interface
- KNX module
- Light sensor and Bluetooth operating interface
- Light sensor and KNX module

The item numbers of master lights and sets are listed in Section “Product identification” from page 6.

Connectable lights

NOVA master lights have DALI and RJ-45 interfaces. The following NOVA lights can be connected via these interfaces:

- DALI: additional master lights with and without light sensors and Bluetooth, as well as NOVA DALI lights
- RJ-45: slave lights with and without light sensor

DALI switch

Accessories such as DALI switches can also be connected. For more information on the connection options, see page 23.

3.1 Functions

A presence detector integrated into the master light controls the connected lighting in relation to the ambient light level when presence is detected.

Constant light control

Constant light control only occurs if the presence detector detects the presence of people or animals. Master lights that also have a light sensor measure the ambient light level via the light sensor and not the presence detector because the light sensor can be calibrated, allowing more precise settings.

DALI

With the DALI system (Digital Addressable Lighting Interface), the master light receives the control telegrams via the electronic ballast, and simultaneously controls all lights connected in the DALI group.

The table below provides a list of the master light functions. This overview is intended to serve as a decision-making aid for electrical installation technicians and users when configuring the settings at a later point.



Most settings can be only be adjusted via remote control or app.

Overview of functions

Function	Benefit
Dim lighting	Adjusts the illumination level.
Constant light control with detected presence	Consistent lighting conditions by automatically adjusting the illumination level to the ambient light levels when people are detected.
Light measurement	The light sensor of the presence detector or an additional light sensor measures the ambient light level and light from reflective surfaces.
Setting the off delay time for lighting	The off delay of the light following the last detected presence can be configured.
Switch-off warning	Indicates that the switch-off delay time has elapsed.
Setting the orientation light	Activates or deactivates subtle lighting of rooms and corridors following expiry of the switch-off delay time.
Set duration of orientation light	The duration of the orientation light can be set to hours or a specific time.
Full automatic mode	Automatic control of the lighting when presence is detected.
Semi-automatic mode	Automatic control of the lighting when presence is detected must be activated manually via an external button.
Light scenes	Select from four configurable light configurations for room lighting.

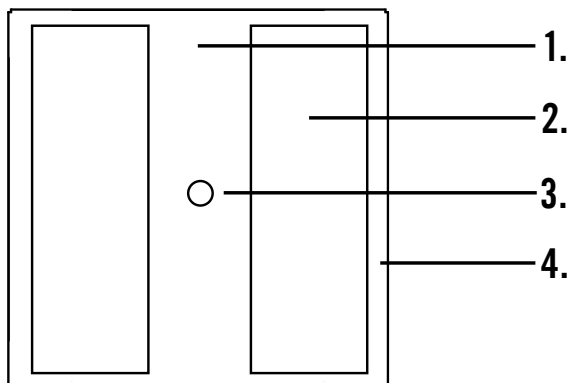


For detailed function descriptions, refer to the chapters on operation via remote control or app.

3.2 Mechanical set-up

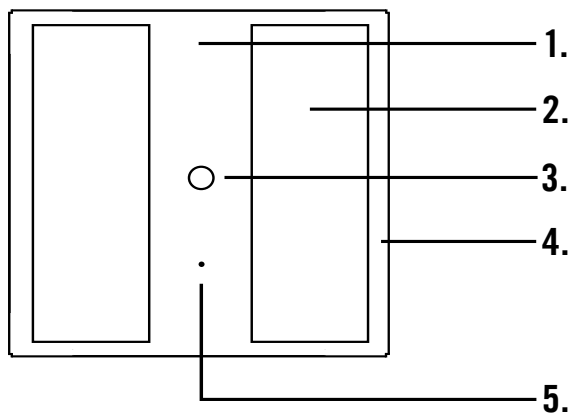
NOVA master light without light sensor

Components

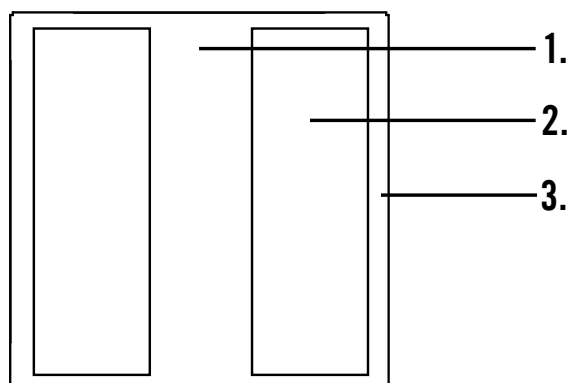


1. Central cover
2. Light surface
3. Presence detector
4. Light border

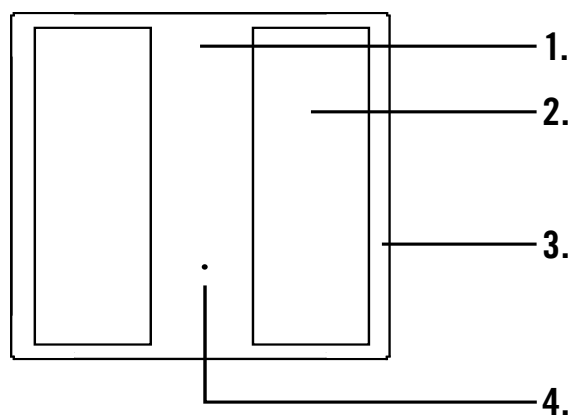
NOVA master light with light sensor



1. Central cover
2. Light surface
3. Presence detector
4. Light border
5. Light sensor

NOVA slave light and DALI light without light sensor

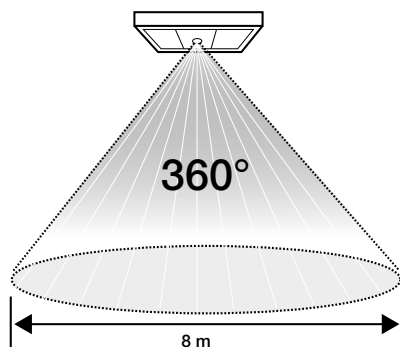
1. Central cover
2. Light surface
3. Light border

NOVA slave light with light sensor

1. Central cover
2. Light surface
3. Light border
4. Light sensor

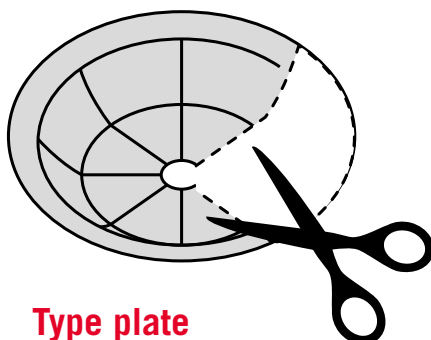
3.3 Presence detector

Field of detection and range



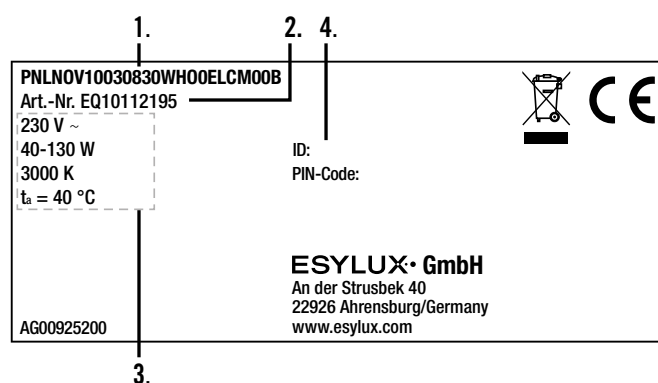
- The field of detection spans 360°
- The field of detection covers approximately 8 m at an installation height of 2.5 m.

Using the lens mask provided, specific areas of detection can be masked out.



3.4 Type plate

Type plate features



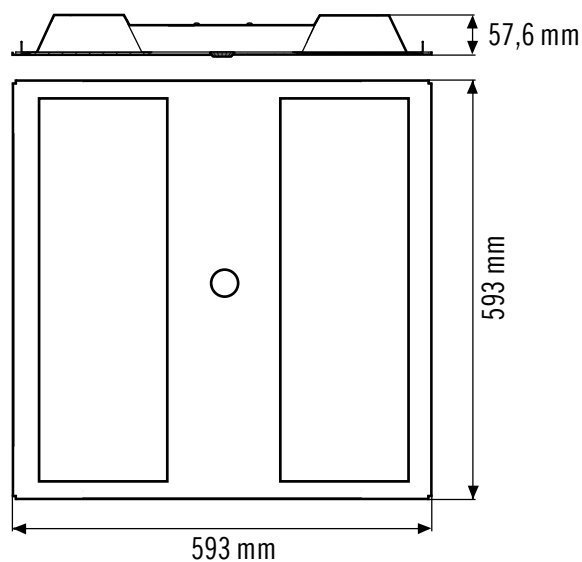
1. Item designation
2. Item number
3. Technical information
4. ID and PIN code (master lights with Bluetooth only)

4 Installation

4.1 Dimensions diagrams

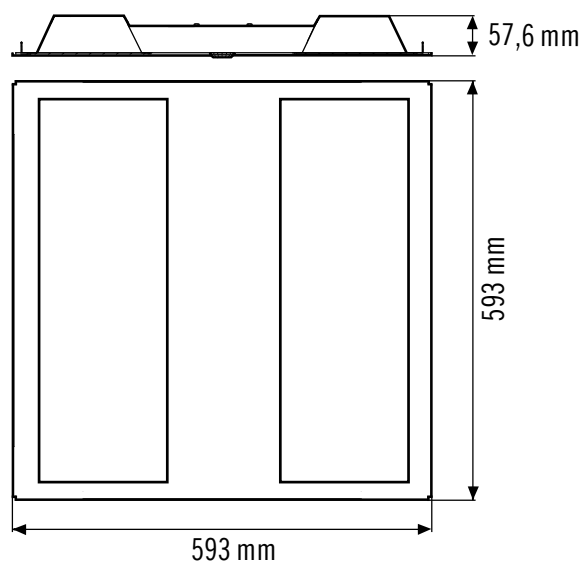
NOVA master

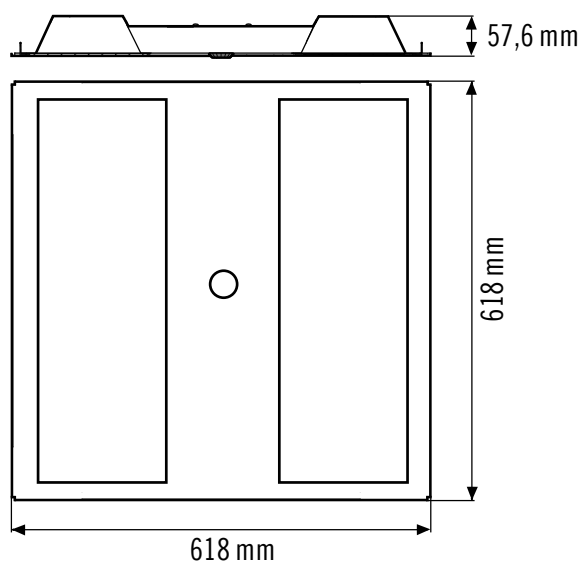
NOVA master lights measuring 593 x 593 mm

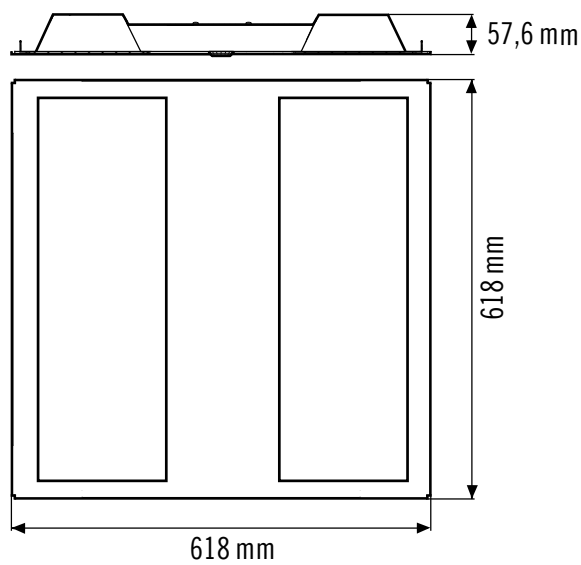


NOVA slave,
NOVA DALI

NOVA slave and DALI lights measuring 593 x 593 mm



NOVA master**NOVA master lights measuring 618 x 618 mm**

**NOVA slave,
NOVA DALI****NOVA slave and DALI lights measuring 618 x 618 mm**

4.2 Recessed ceiling mounting

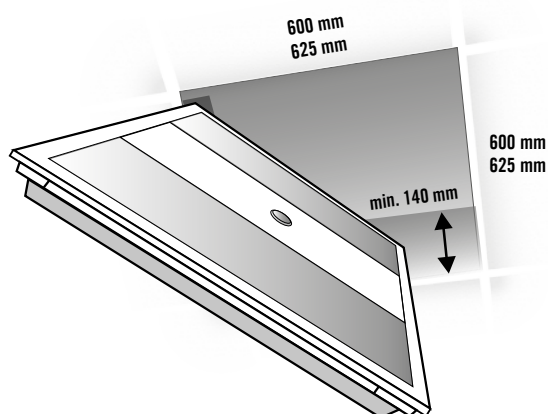
The ESYLUX NOVA series is intended for recessed ceiling mounting for ceiling systems with hidden or visible mounting rails.

- Install the NOVA louvre light in a suspended ceiling.

PLEASE NOTE:

Note the necessary ceiling installation height!

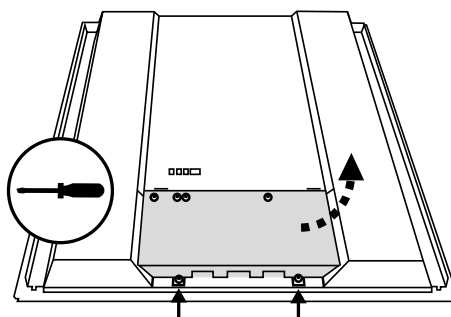
NOVA lights can only be mounted directly in the suspended ceiling without removing the braces if the ceiling installation height is at least 140 mm.

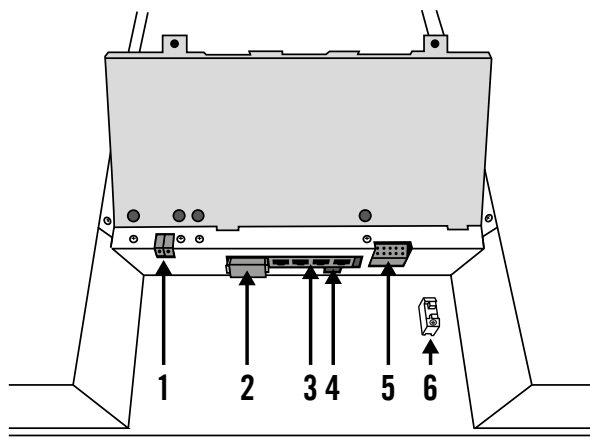


4.3 Connecting the master light

Prerequisite

- Remove the screws on the rear of the lights to access the connections.





1. Only Models PNLNOV1x0308x0WHxxELCxxxK: KNX connector
2. DALI connector for connection to DALI devices and other NOVA master lights 3000 K/4000 K
3. RJ-45 sockets for connection to NOVA slave lights 3000 K/4000 K
4. USB connection, exclusively for service purposes
5. Mains connection terminal
6. Earth conductor

⚠ DANGER!



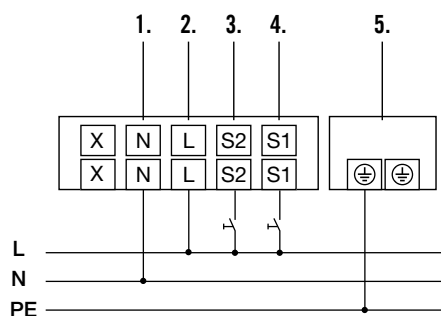
Risk of fatal injury from electric shock!

- Switch off the power to the cable
- Check that the cable is de-energised

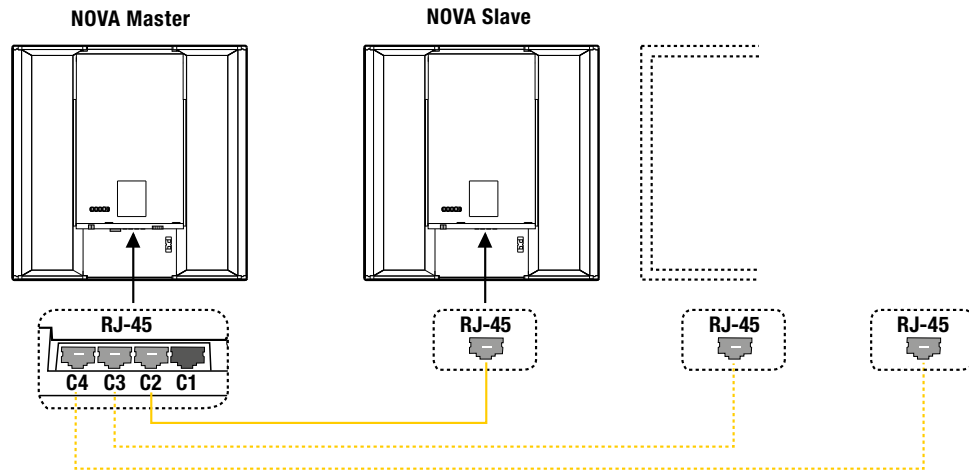
Proceed as follows to connect the master light:

- Connect the light as outlined in the wiring diagram.
 1. Neutral conductor
 2. Phase 230 V AC
 3. Button 1
 4. Button 2
 5. Earth conductor

Wiring Diagram:



4.4.1 Connecting NOVA slave lights



RJ-45 jack

The slave lights are powered by the master light via the connection cable. The master light has four RJ-45 interfaces for these connections. By default, the master light is connected to the first RJ-45 interface. You can connect up to three slave lights to the other interfaces.

Each RJ-45 interface is a separate lighting channel (C1, C2, C3, C4), which the master light can control separately. By default, the master light is connected to lighting channel C1. However, you can also connect a slave light to this channel.

RJ-45 cable delivered with sets

The scope of delivery of the sets includes two 5 m RJ-45 patch cables, and one 10 m patch cable.



Any up-to-date network cable, type Cat5 or higher, can be used as the RJ-45 patch cable.

PLEASE NOTE:

Note the maximum cable length!

The RJ-45 connection cable must not exceed 10 metres.

Connection to be used for NOVA lights only!

Only NOVA lights may be connected to the RJ-45 interfaces. Other equipment such as Internet routers or lights designed to be powered via a LAN cable (power over Ethernet) could be irreparably damaged by connecting them to the RJ-45 jacks.

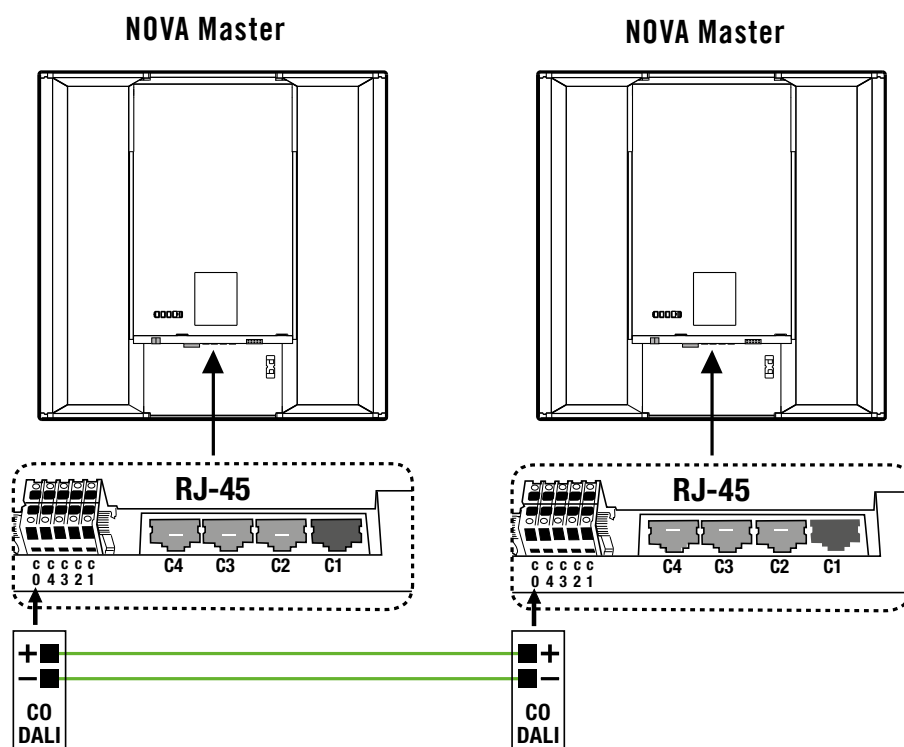
**DALI
interface****4.4.2 Master lights in parallel connection**

A maximum of four NOVA master lights may be connected to the DALI interface C0. Both of the DALI connectors labelled "C0" may be used.

If you connect master lights in parallel, you can choose which master light is responsible for measuring the room lighting. See section "8.13 Light value on/Light value off" on page 66 for more information about this setting.

NOTE!**Reversing the polarity can destroy the master lights!**

- Note the labels on the terminals.

**4.4.3 Connecting NOVA DALI lights**

A maximum of four DALI groups can be connected to the four DALI interfaces DALI C1 to C4 on the master light. A maximum of 25 DALI devices can be connected in each group, with the groups being powered via the DALI bus. The parameters are automatically applied to the electronic ballasts via broadcast.

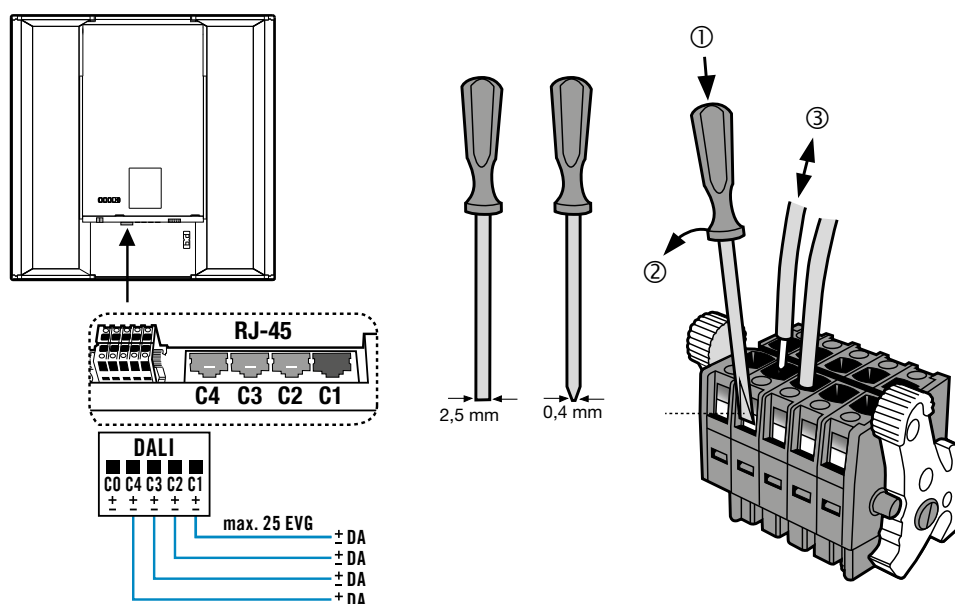
The DALI interfaces are numerically assigned to the lighting channels. For example, the DALI interface C4 corresponds to the lighting channel C4.

i You can change the assignment of the DALI interfaces DALI C1–C4 to the lighting channels C1–C4 (RJ-45 connection). See Chapter **DALI Map**, page 57.

NOTE!

Incorrect connection will destroy the DALI electronic ballasts!

- Note the DALI specifications (IEC 62386)



4.4.4 Connecting DALI switch devices

DALI switch devices can also be connected to the DALI interfaces C1–C4. DALI switch devices can be used to connect non-DALI compatible equipment such as fans or screen controllers.

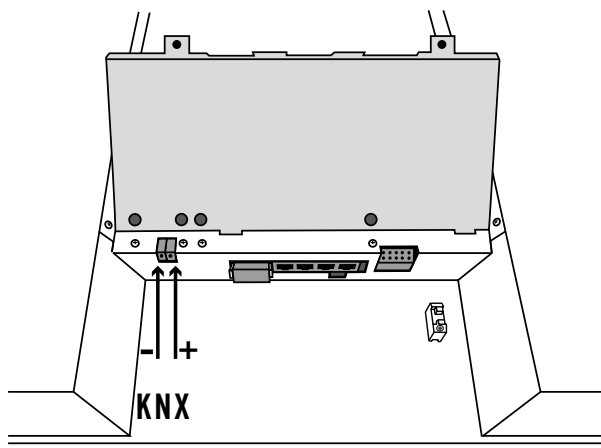
The DALI switch devices are available as accessories. By default, the model SW DALI Full Automation (item no. EP10427473) is set to full automatic with a switch-off delay time of 30 minutes. By default, the model SW DALI Semi Automation (item no. EP10427480) is set to semi-automatic with a switch-off delay time of six minutes. You can change these factory settings on both models via the remote control. For more information about these devices, see our website www.esylux.com.

External DALI button

An external DALI button can be connected to the DALI interface C0. The DALI button is an external module that sends standard 16-bit commands (IEC 62386-102:2009). You can dim the illumination level or select light scenes via the external DALI button. Chapter “15.1 List of DALI commands” contains a list of the possible DALI commands.

4.5 Connecting to KNX bus

Models PNLNOV1x0308x0WHxxELCxxxK have a KNX module and can be connected to a KNX bus.



NOTE!

Reversing the polarity of the connections will lead to a loss of functionality in one or more participants.

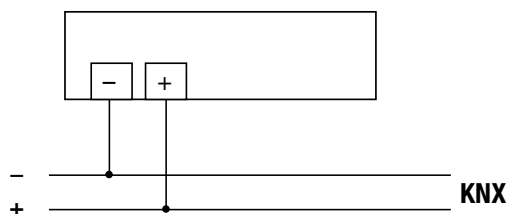
- Note the labels on the terminals.

The protection against reverse polarity integrated in the EIB devices will prevent damage.

Proceed as follows to connect the lamp to the KNX bus:

- Use a pin connector to connect the KNX bus cable to the KNX connection on the lamp so that the polarity is correct.

Wiring Diagram:



4.6 Warm-up phase

The master light starts the warm-up phase every time the power is switched on.

Light properties during the warm-up phase:

- The light is on
- The red and green LEDs in the presence detector flash alternately five times.
- After approx. 15 seconds, the light is ready for operation and functions in line with the factory settings or the user-defined program.



After the warm-up phase, the LED signals mean the following: Red LED = remote control command is being received; green LED = presence detected; blue LED = light is in programming mode.

4.7 Factory settings

The master lights are equipped with a default program. These defaults can be changed according to preference. ESYLUX recommends noting down the changed settings in the right-hand column of the table.

Settings	Default	Individual
Operating mode	Full automatic	
Brightness target value	500 lux	
Switch-off delay time	5 minutes	
Orientation light	Brightness 10%	
Duration of orientation light	0 minutes	
Switch-off warning channel 1–4	60 seconds	
DALI channel 1 map	Master channel 1 (C1)	
DALI channel 2 map	Slave channel 2 (C2)	
DALI channel 3 map	Slave channel 3 (C3)	
DALI channel 4 map	Slave channel 4 (C4)	
DALI switch DS1	Active, mode: Full automatic	
Switch-off delay time DS1	30 minutes	
DALI switch DS2	Active, mode: Semi-automatic	
Switch-off delay time DS2	30 minutes	
Sensitivity setting of the presence detector	Sensitive	

5 Overview of the operating modes

The master light can control the energy-saving properties of the room lighting by taking into account the presence of people and the brightness of the ambient light. The following information is helpful to speed up access to the desired settings:

- The automatic sequence of the operating modes if the master light does not detect any presence.
- Operating modes of the light that are triggered manually.
- The effect of detected presence on the individual operating modes.

Changes in the ambient light can cause the lighting to switch on or off automatically depending on the settings. However, changes in the ambient light do not cause the current operating mode to change.

5.1 Sequence of the operating modes

If the master light is switched on and no further presence is detected, it runs through the following operating modes in sequence: 'Normal operation mode' -> 'Switch-off warning mode' -> 'Orientation light mode' -> 'Energy-saving mode'. Operating modes such as switch-off warning mode and orientation light mode may run unnoticed if their duration is set to 0 seconds.

Normal operation mode

<p>Action in normal operation mode</p>	<ul style="list-style-type: none"> • Illuminates in accordance with the program/factory settings when presence is detected. <p>Note: Deactivation of the lighting may form part of normal operation mode if the light has been programmed to a target light value that is exceeded by the ambient daylight.</p>
<p>Trigger for normal operation mode</p>	<ul style="list-style-type: none"> • When Full automatic is activated: <ul style="list-style-type: none"> - Presence is detected. - Manual activation via the button or remote control. • When Semi automatic is active: <ul style="list-style-type: none"> Manual activation via the button or remote control. • Regardless of semi- or full automatic: Normal operation mode can also be triggered by motion detection during the switch-off warning time (see below) if override mode (see below) was previously active.

Duration	<ul style="list-style-type: none"> For such time that motion is detected, plus the switch-off delay time. The off delay time can be set to a value of between one minute and 240 minutes.
Subsequent operating mode	<ul style="list-style-type: none"> Off warning mode.

Switch-off warning mode

Action in switch-off warning mode	<ul style="list-style-type: none"> Illuminates in accordance with the settings for the orientation light.
Trigger for switch-off warning mode	<ul style="list-style-type: none"> Expiry of the switch-off delay time in normal operation or override mode.
Duration	<ul style="list-style-type: none"> Depending on the settings, 0 to 240 seconds.
Subsequent operating mode	<ul style="list-style-type: none"> Orientation light mode.

Orientation light mode

Action in orientation light mode	<ul style="list-style-type: none"> Illuminates in accordance with the settings for the orientation light.
Trigger for orientation light mode	<ul style="list-style-type: none"> Expiry of the set time for switch-off warning mode.
Duration	<ul style="list-style-type: none"> Depending on the settings. 0 to 240 minutes or according to specific time interval.
Subsequent operating mode	<ul style="list-style-type: none"> Energy-saving mode.

Energy-saving mode

Action in energy-saving mode	<ul style="list-style-type: none"> Deactivates the lighting.
Trigger for energy-saving mode	<ul style="list-style-type: none"> Expiry of the orientation light time.

Duration	<ul style="list-style-type: none"> When Full automatic is activated: Until presence is detected or the ambient brightness falls below the set value. When Semi automatic is active: Until normal operation mode is started via the button or remote control.
Subsequent operating mode	<ul style="list-style-type: none"> Normal operation mode or override mode.

5.2 Manually triggered operating modes

Other than these operating modes that the lights can automatically switch between, there are other operating modes that are triggered manually or by certain events:

Override mode

Action	<ul style="list-style-type: none"> Illumination that differs from normal operation mode owing to manual interventions such as changes to brightness or activation of light scenes. Manual changes are temporary and are not stored. Note: Switch-off delay time settings for normal operation mode also apply to override mode.
Trigger for override mode	<ul style="list-style-type: none"> Command via the button, remote control or app during normal operation Motion detection during the off warning time if override mode was active before the off warning.
Duration	<ul style="list-style-type: none"> For such time that motion is detected, plus the set switch-off delay time.
Subsequent operating mode	<ul style="list-style-type: none"> Switch-off warning mode, as after normal operation mode.

Programming mode

Trigger	<ul style="list-style-type: none"> Remote control button or app command to start programming mode.
Action	<ul style="list-style-type: none"> Saves the settings for lighting conditions, off delay time times, etc. transmitted by remote control or app.

Subsequent operating mode	<ul style="list-style-type: none"> When Full automatic is activated: Energy-saving mode, transition to normal operation mode following presence detection. When Semi automatic is active: Energy-saving mode.
Trigger for subsequent operating mode	<ul style="list-style-type: none"> Remote control button for ending programming mode or confirming a setting changed via app. Five minutes of inactivity (programming mode then ends automatically).

Test mode

Trigger	<ul style="list-style-type: none"> Remote control button for starting test mode.
Action	<ul style="list-style-type: none"> All light channels work at 100%, blue notification LED flashes following detected movement.
Subsequent operating mode	<ul style="list-style-type: none"> When Full automatic is activated: Energy-saving mode, transition to normal operation mode following presence detection. When Semi automatic is active: Energy-saving mode.
Trigger for subsequent operating mode	<ul style="list-style-type: none"> Remote control button for ending test mode.

Error mode

Action	<ul style="list-style-type: none"> All light channels work at 100%.
Trigger	<ul style="list-style-type: none"> Defect in the presence detector or DALI power supply.
Subsequent operating mode	<ul style="list-style-type: none"> When Full automatic is activated: Energy-saving mode, transition to normal operation mode following presence detection. When Semi automatic is active: Energy-saving mode.
Trigger for subsequent operating mode	<ul style="list-style-type: none"> Rectification of the error.

5.3 Operating modes and detected movements

To enable you to configure the light according to your preferences, you also need to know what happens if movement is detected during an operating mode.

Normal operation mode

Effect of detected movement	<ul style="list-style-type: none"> Any movement detected during the switch-off delay time causes the switch-off delay time to re-start, which extends normal operation mode.
Subsequent operating mode	<ul style="list-style-type: none"> None, normal operation mode remains active owing to detected movement.

Switch-off warning mode

Effect of detected movement	<ul style="list-style-type: none"> Ends the switch-off warning mode.
Subsequent operating mode	<ul style="list-style-type: none"> Switch to the previous operating mode, which is either normal operation mode or override mode.

Orientation light mode

Effect of detected movement	<ul style="list-style-type: none"> Ends the orientation light mode.
Subsequent operating mode	<ul style="list-style-type: none"> Normal operation mode.

Energy-saving mode

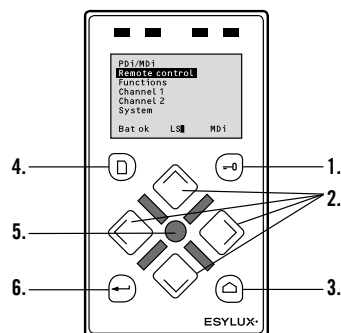
Effect of detected movement	<ul style="list-style-type: none"> Depends on the current settings.
Subsequent operating mode	<ul style="list-style-type: none"> When Full automatic is activated: Normal operation mode. When Semi automatic is active: Detected movement has no effect; normal operation mode or override mode must be started via the button, remote control or app.

6 Setting via remote control

The master light settings can be input via remote control. If further master lights are connected to a master light, all master lights assume the settings of the first master light.

Universal remote control

The infrared remote control Mobil-PDi/MDi-universal (ep10433993) makes it simple for electricians and users to set parameters and special functions. This remote control is available as an accessory.



1. Key button
2. Navigation buttons
3. Home button
4. SD button
5. OK button
6. Return button

For optimum reception, point the remote control directly at the master light detector when programming the settings.







In direct sunlight, the standard remote control range of approximately 8 m may be reduced due to the infrared proportion of the sunlight.

The Mobil-PDi/MDi-universal remote control offers functionality for virtually all ESYLUX remote controls. If ESYLUX makes improvements to the remote control menus or commands, you can update the universal remote control. Simply download the latest software version for one of the implemented remote controls from the ESYLUX website to an SD card. Unscrew the bottom cover on the rear of the remote control to insert the SD card into the universal remote control. Select the menu item <System/Software> on the universal remote control to update the device.

For the settings of the master light, select the X-Light Control remote control. Following selection, this remains the default remote control.

6.1 Selecting X-Light Control remote control

1. Switch on the remote control using the  button.
2. On activation, confirm the highlighted menu item <Remote controls> with the  button.
3. Press the  button to select the remote control <X-Light Control>, and confirm the selection with the  button.
 - ✓ The X-Light Control is now the active remote control.

Temporary settings to the master light can be made via the menu item <Functions>.

Permanent settings to the master light can be made via the menu item <Programming>. For the exceptions, see the start of Chapter 7.

Automatic switch off



The remote control automatically switches off if it has been inactive for one minute.

Fast access to menus



If you change a setting or program multiple times, for example to try and find the optimum setting, you can set up quick access to this setting. To do so, activate the function <Save navigation> in the <System> menu item. The remote control then shows the last used menu item every time it is switched on. You can undo this setting by selecting the function <Standard navigation> in the remote control menu item <System>. All instructions in this manual assume that the menu item <Standard navigation> is selected.

6.2 X-Light Control menu layout

The following tables provide an overview of the <Functions> and <Programming> menu items. The tables serve as an initial guide, and may help you to find a required function.



The remote control does not show the most recently programmed values because there is no bi-directional communication between the master light and the remote control. We recommend noting down the settings you make using the template provided on page page 28.

Layout of the <Functions> menu item

Functions
Channel 1
Channel 2
Channel 3
Channel 4
All Channels
Call scene
Bat ok LS ELC

Functions
Store scene
DALI Switch
Reset
Test start
Test stop
Detector LEDs On
Bat ok LS ELC

Functions	Channel 1	On
		Off
	Same sub-menu:	
	Channel 2	Dim start
		Dim stop
	Channel 3	
	Channel 4	Light value
		On
		Off
	All channels	Dim start
		Dim stop
		Light value
		Scene 1
		Scene 2
	Call scene	Scene 3
		Scene 4
		Scene 1
		Scene 2
	Store scene	Scene 3
		Scene 4
		DS 1 on
		DS 1 off
	DALI Switch	DS 2 on
		DS 2 off
	Reset	
	Test start	
	Test stop	
	KNX Prog. On	
	KNX Prog. Off	

Table 1: "Functions" menu with sub-menus

Layout of the <Programming> menu item

Channel 1
Calibration
All Channels
DALI Map
DALI Switch
Scene editor
Calender
Bat ok LS
ELC

Programming		Channel 1
	Calibration	Channel 2
		Channel 3
		Channel 4
		Store brightness
	All channels	Light set value
		Off delay time
		Off warning time
		Orientation light
		Orient. light mode
		Orient. light in min.
		Orient. light from h
		Orient. light to h
		Full automatic
		Semi automatic
	Channel Map	C1
		C2
		C3
		C4
	DALI map	DALI 1
		DALI 2
		DALI 3
		DALI 4
	DALI switch	DS1 connected
		DS1 not connected
		DS1 off delay time
		DS1 Mode
		DS2 connected
		DS2 not connected
		DS2 off delay time
		DS2 mode

Programming	Scene editor	CH1 %	
		CH2 %	
		CH3 %	
		CH4 %	
		DS 1	
		DS 2	
		Scene	
	Calender	Years	
		Months	
		Days	
		Hours	
		Minutes	
		Seconds	
		Factory Reset	
		Reset Editor	
		Sensitivity	
		Detector LEDs On	
	Detector LEDs Off		
	Light value on		
	Light value off		
	Detector Fact. reset		
	Detector Light Factor		

Table 2: "Programming" menu with sub-menus

7 The <Functions> remote control menu

Settings made in the <Functions> menu item are executed temporarily but not stored as a new basic setting. When settings are made in this menu, the master light is in override mode.

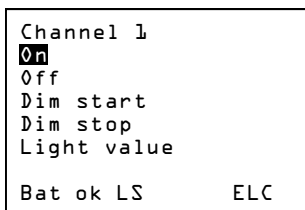
Exceptions: Permanent settings

In the <Functions> menu, there are two settings that are not temporary but stored permanently:

- Scene changes via the <Store scenes> command
- Activate/deactivate the KNX programming mode

7.1 Channel 1, 2, 3 and 4





The sub-menu items for <Channel 1>, <Channel 2>, <Channel 3> and <Channel 4> are identical. For each lighting channel, the following functions are possible in the sub-menus:




7.1.1 On/Off





The lighting for each channel is temporarily switched on or off with the <On> and <Off> menu items.


Switching a channel on:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Channel 1>, for example, and confirm the selection with the  button.
3. Select the <On> menu item and confirm the selection with the  button.
 - ✓ The lighting is switched on.

To return to the main menu, press the  button.

Switching a channel off:





1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Channel 1>, for example, and confirm the selection with the  button.
3. Select the <Off> menu item and confirm the selection with the  button.
 - ✓ The lighting is switched off.

To return to the main menu, press the  button.

7.1.2 Start/stop dimming


With the **Dim start/Dim stop** functions, you can adjust the illumination level in both directions and stop the dimming process.

Dimming the illumination level:






1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Channel 1>, for example, and confirm the selection with the  button.
3. Select the <Dim start> menu item and confirm the selection with the  button.

- ✓ The lighting is adjusted in a specific direction, e.g. from dark to bright.

Changing the dimming direction:

- Press the  button to confirm the <Dim start> menu item again during the dimming process.
- ✓ The lighting is adjusted in a different direction, e.g. from bright to dark.










Stopping the dimming process:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Press the  button to select the channel to be dimmed, and confirm the selection with the  button.
3. Select the < Dim stop> menu item and confirm the selection with the  button once the dimming process has reached the required brightness.
- ✓ The dimming process stops.
To return to the main menu, press the  button.

7.1.3 Light value

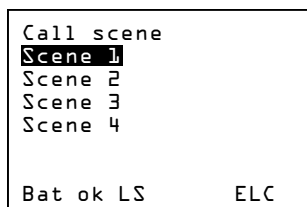
The function **Light value** sets the illumination level to a percentage of the maximum brightness.

Changing the light value:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Channel 1>, for example, and confirm the selection with the  button.
3. Select the  button to choose the menu item <Light value> and confirm the selection with the  button.
4. Use the  or  buttons to set the required illumination level, and confirm the selection with the  button.
- ✓ The lighting is changed to the set percentage.
To return to the main menu, press the  button.

7.2 All channels

In the menu item <All channels>, you can set general settings for all lighting channels. The menu sub-items are identical to those for the individual channels 1 to 4 as described in “Channel 1, 2, 3 and 4” from page 38.



7.3 Call scene

The menu item <Call scene> activates one of the four light scenes. You can configure each scene according to your preferences.

A light scene consists of up to four lighting channels and two DALI switch devices. The DALI switch devices are connected to a DALI cable to control a non-DALI compatible lighting channel. The scenes have default factory settings, as described in the following table.






i You can customise the light scenes for each lighting channel. See Chapter “Scene editor” from page 61 for more information.


	Sc1	Sc2	Sc3	Sc4
CH1 %	10	100	30	70
CH2 %	10	100	30	70
CH3 %	10	100	30	70
CH4 %	10	100	30	70
DS 1	Off	On	Off	On
DS 2	Off	On	Off	On

Table 3 Default scene settings

i A light scene can also be activated by an external button, see Section “Calling up scenes 1 to 4” on page 99.

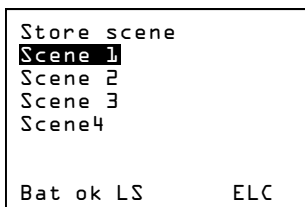
Calling up a scene:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Call scene>, and confirm the selection with the  button.
 - ✓ The sub-menu shows an overview with the four scenes <Scene 1>, <Scene 2>, <Scene 3> and <Scene 4>.
3. Select the  button to choose the menu item <Scene 2>, for example, and confirm the selection with the  button.





- ✓ The selected scene is activated.
- To return to the main menu, press the  button.


7.4 Store scene

You can customise the light scenes for each lighting channel. To do so, change the Light value of one or more channels as described in Chapter “Light value” on page 40. You can store this setting as a scene for the respective channel. When you save the setting, the previous scene settings for the channel, for example the default factory settings, are deleted.



Saving a light scene:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Store scene>, and confirm the selection with the  button.
 - ✓ The sub-menu shows an overview with the four scenes <Scene 1>, <Scene 2>, <Scene 3> and <Scene 4>.
3. Select a menu item, e.g. <Scene 4>, and confirm the selection with the  button.
 - ✓ The setting is saved as <Scene 4>.
4. Press the Return button once to exit the <Store scene> menu.

To return to the main menu, press the  button.

7.5 DALI switch


The <DALI switch> menu item allows you to control additional non-DALI compatible devices. For example, you can use the DALI switch to switch on non-DALI compatible blackboard lighting in a classroom. The master lights are configured in the factory to enable them to send commands to connected DALI switches. You can change this setting.

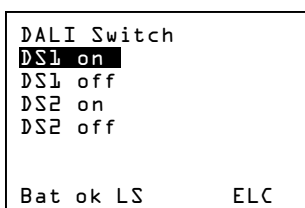
DALI switch devices are available as accessories including SW DALI Full Automation (item no. EP10427473) and SW DALI Semi Automation (item no. EP10427480).






7.5.1 DS1/DS2 on

The menu items <DS1 on> and <DS2 on> are identical.

How to switch on a lighting channel with DS1 or DS2:

1. Select the <Functions> menu item and confirm the selection with the  button.









2. Select the  button to choose the menu item <DALI switch>, and confirm the selection with the  button.
3. Now select the  button to choose the menu item <DS2 on>, and confirm the selection with the  button.
 - ✓ The DALI switch device switches the lighting on.
 To return to the main menu, press the  button.

 The DALI switch can be activated and deactivated for any scene.

7.5.2 DS1/DS2 off

The menu items <DS1 off> and <DS2 off> are identical. You can switch on any non-DALI compatible lighting channel individually.

How to switch off a lighting channel with DS1 or DS2:


1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <DALI switch>, and confirm the selection with the  button.
3. Select the  button to choose the menu item <DS1> for example, and confirm the selection with the  button.
 - ✓ The DALI switch device switches the lighting off.
 To return to the main menu, press the  button.




7.6 Reset

The reset command has two purposes: It switches off the entire room lighting temporarily. It also deletes any commands that put the light into override mode.

After a reset, the light switches to energy-saving mode. The lighting remains off until the master light detects a presence or receives a command to switch the lighting back on. After presence has been detected or a re-activation command has been received, the light works in normal mode in accordance with the programming.

Triggering a reset:




1. Select the <Functions> menu item and confirm the selection with the  button.

2. Select the  button to choose the menu item <Reset>, and confirm the selection with the  button.
 - ✓ The entire lighting switches off.
 - To return to the main menu, press the  button.





7.7 Test start/stop

The **Test start** function tests the detection range of the detector. During the test phase, the lighting is set to maximum brightness.

Activating the test function:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Test start>, and confirm the selection with the  button.
 - ✓ The entire lighting is switched on.
 - ✓ The blue LED flashes in the sensor head when motion is detected.




Ending the test function:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item < Test stop>, and confirm the selection with the  button.
 - ✓ The test lighting switches off.
 - To return to the main menu, press the  button.




7.8 KNX Prog. On/KNX Prog Off

These remote control commands are for NOVA lights with a KNX module. The command <KNX Prog. On> enables you to assign a physical address to the KNX module.

Activating the KNX program function:

1. Select the <Functions> menu item and confirm the selection with the  button.
2. Use the button  to select the menu item <KNX Prog. On> and confirm the selection with the button .
 - ✓ The KNX module is in programming mode.

Ending the KNX program function:

1. Select the <Functions> menu item and confirm the selection with the button .
2. Use the button  to select the menu item <KNX Prog. Off> and confirm the selection with the button .
 - ✓ The KNX module is no longer in programming mode.

8 The remote control menu <Programming>


In the <Programming> menu item, you can set permanent settings for the master light.




The settings are retained even when the luminaire is not supplied with current — for example because the power supply in the building is switched off overnight.

8.1 Activate/deactivate programming mode

Activating programming mode via the remote control:

- Press the  button.
 - ✓ The blue LED on the master light illuminates.
 - ✓ The lighting is switched to 100% light value.
 - ✓ The red LED on the detector flashes twice to confirm each received command.

Quitting programming mode:**Prerequisites:**

- The blue LED illuminates in the sensor head.
- Press the  button.
 - ✓ The settings are saved, and programming mode ends.
 - ✓ The blue LED goes out and the light switches the lighting.



If programming mode is not ended via the key button within five minutes of the last entry, the master light switches back to normal mode. The settings are automatically saved.

8.2 Calibration

The **Calibration** function can be used with master or slave lights with in-built

**Only lights
with light sensor**

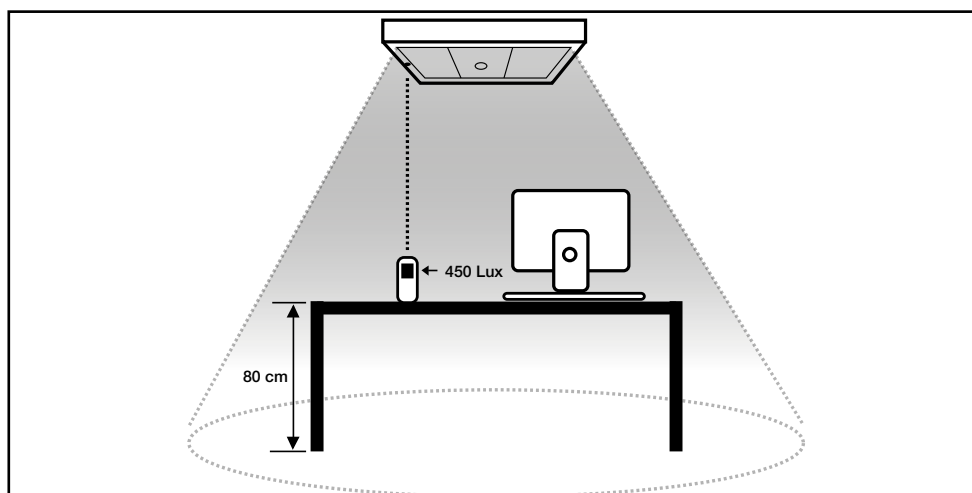
light sensors. The light sensor is affected by light from reflective work surfaces, walls and floors. Calibration is important for ensuring that the surface remain evenly lit at a specific height.

Lux meter

A lux meter is required for the calibration. The light values measured with the lux meter can be transferred to the master light by remote control. The measured lux values are reference values that the master light uses for precise comparisons. The calibration allows the master light to calculate more precisely which illumination level is required to retain a constant target brightness.



For more information about setting the target brightness, see Chapter “Light set value” from page 49.



Greater precision through repetition

The light sensor must be calibrated with three measurements at least once per lighting channel. We recommend three measurements per channel for optimum illumination results.




If a lighting channel is extended with DALI louvre lights, position the slave light with the light sensor in the darkest area of the room. This is the only way to ensure even the darkest area is sufficiently lit.



The sub-menu items for <Channel 1>, <Channel 2>, <Channel 3> and <Channel 4> are identical. The calibration must be performed individually for each lighting channel. During the calibration, only the lighting channel that is being calibrated is illuminated.

Calibration procedure



Calibrating a light sensor:

1. Select the <Programming> menu item and confirm the selection with the  button.









Measurement 1

2. Select the  button to choose the menu item <Channel 3>, for example, and confirm the selection with the  button.
 - ✓ The lighting on channel 3 is switched on with maximum brightness. The other lighting channels are not active. The light sensor measures the brightness.

Measurement 2

3. Use a lux meter to measure the current light value at the desired location, e.g. at a desk. The reading is 600 lux for example.
4. Enter the lux value using the  button, and confirm the entry with the  button.
 - ✓ The master light receives the value, and dims the light value for the next measurement.

Measurement 3

5. Now measure the light value again using the lux meter. The value is now less than the first measurement, and reads 300 lux for example.
6. Enter this lux value in the remote control using the  or  button and confirm the entry with the  button.
 - ✓ The master light receives the value, and switches the lighting off.
7. Now measure the current light value using the lux meter. The reading is 40 lux, for example.
8. Enter this lux value in the remote control using the  or  button, and confirm the entry with the  button.
 - ✓ This completes the calibration process. The master light switches the lighting on at maximum brightness.
9. Press the  button to end the calibration.
10. Press the  button to close programming mode.
 - ✓ The blue LED goes out in the sensor head.
 - ✓ The lighting goes out. If the ambient brightness falls below the target brightness value, the light sensor brightens the lights on channel 3.

To return to the main menu, press the  button.

8.3 All channels

The menu item <All channels> implements settings for all lighting channels.

8.3.1 Store brightness

The **Store brightness function** saves the current light values for the channels as the target brightness value. The values act as a reference value for the

```
All Channels
Store brightness
Light set value
Off delay time
Off warning time
Orientation light
Orient. light mode
Bat ok LS      ELC
```










automatic lighting when presence is detected. The current light values can be entered via the following sensors:

- Master lights without a light sensor capture the current light value using the integrated presence detector.
- Master lights with an integrated light sensor capture the current light value using the light sensor.
- Slave lights with an integrated light sensor send the current light value of their channel to the master light.



If a channel does not have a sensor because only one slave light without a light sensor is working on the channel, the value of the master light is used for this channel.





First the required reference value must be set manually for the read-in process. This is performed in the Functions menu.

Setting the reference values for the store brightness function:

1. Press the  button to activate programming mode.
 - ✓ The light switches to programming mode and the lights produce maximum brightness.
2. Select the <Functions> main menu item and confirm the selection with the  button.
3. Select the a lighting channel, for example <Channel 1>, and confirm the selection with the  button.
4. Select the  button to choose the menu item <Light value>, and confirm the selection with the  button.
5. Enter the percentage value of the maximum light value by pressing the  or  buttons. Confirm your selection with the  button.
 - ✓ The illumination level changes according to your input.
6. Select the other lighting channels of the room, and repeat steps 4 and 5 for these channels.
 - ✓ The desired brightness is set and can be read in.
7. Press the  button to return to the main menu for the other settings.

Adopting the reference value with the Store brightness function:

1. Select the <Programming> main menu and confirm the selection with the  button.
2. Select the  button to choose the menu item <All channels>, and

- confirm the selection with the  button.
3. Select the <Store brightness> menu item and confirm the selection with the  button.
 4. Close programming mode with the  button.
 - ✓ The reference value is now saved.
 - To return to the main menu, press the  button.

8.3.2 Light set value












The light set value is the target brightness value and acts as the threshold value for the lighting control. If the ambient light level is below the target brightness, the master light controls the illumination level when presence is detected. If the daylight exceeds the value, for example, the light automatically switches off.

The light set value function specifies the brightness in lux for all lighting channels in a room. You can send the desired or measured lux values to the master light via the remote control.



This process gives the best results for lights with a calibrated light sensor.

Setting the light set value:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels> and confirm the selection with the  button.
4. Select the  button to choose the menu item <Light set value>, and confirm the selection with the  button.
5. Use the  or  buttons to set the required lux value, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The light set value is set.
 - To return to the main menu, press the  button.

i If you wish to assign different target brightness value to the channels, use the **Store brightness** function. For information, please see Chapter “8.3.1 Store brightness” on page 47.










8.3.3 Off delay time


The **Off delay time** function determines for how long the light remains switched on after the last detected movement. The off delay time applies to normal mode and override mode, which is a temporary change to normal mode. For more information about the operating modes, see “Overview of the operating modes” from page 29.

The master light ends normal or override mode after the switch-off delay time has elapsed. Any movement detected during the switch-off delay time causes the switch-off delay time to re-start, which extends normal mode or override mode.

- The minimum switch-off delay time is one minute.
- The maximum switch-off delay time is 240 minutes.

Setting the off delay time:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.
4. Select the <Off delay time> menu item and confirm the selection with the  button.
5. Use the  or  buttons to set the required off delay time, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The entered duration is now saved.


To return to the main menu, press the  button.

8.3.4 Off warning

The **off warning** indicates that the set off delay time has elapsed. In off warning mode, the lighting uses the brightness value that was set for the orientation light.










If movement is detected during the off warning time, the detector returns to the last active operating mode. This may be normal operation mode or override mode.


The off warning time can be set to a duration of 0 to 240 seconds.

 The **off warning** is disabled when the time is set to 0 seconds.

Example: The illumination level was dimmed manually via an external button, and the light is in override mode as a result. The set off delay time has elapsed. The off warning time now starts, which is set to 60 seconds. During this time, the lighting uses the brightness that is set for the orientation light. If presence is detected during this time, the master light returns to override mode.

Setting the off warning:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.
4. Select the <Off warning time> menu item and confirm the selection with the  button.
5. Use the  or  buttons to set the required duration, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The off warning time is now set.

To return to the main menu, press the  button.

8.3.5 Orientation light



The **Orientation light** function offers subtle lighting. You can also set the brightness of the orientation light to values between 10% and 50% of the maximum illumination level. You can also set for how long or from when you want the orientation light to remain active.










Prerequisites

- The orientation light only switches on once the set off delay time or a set off warning time have elapsed. The orientation light duration can also be set to zero minutes.

Brightness

Setting the brightness of the orientation light:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.

3. Select the  button to choose the menu item <All channels> and confirm the selection with the  button.
4. Select the  button to choose the menu item <Orientation light>, and confirm the selection with the  button.
5. Use the  or  buttons to set the brightness as a percentage of the maximum brightness, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The brightness for the orientation light is now set.
 To return to the main menu, press the  button.

8.3.6 Orient. light mode








Mode duration

The menu item <Orient. light mode> specifies whether the duration for the orientation light is set in minutes or as with a fixed start and end time. The following applies:

- If you enable the setting <In minutes>, the settings in the menu item <Orient. light from h> and <Orient. light to h> are disabled.
- If you enable the setting <From h to h>, the setting in the menu item <Orient. light in min.> is disabled.









Duration in minutes

Activating minutes mode:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.
4. Select the menu item <Orient. light mode> and confirm the selection with the  button.
5. Confirm the menu item <In minutes> with the  button.
6. End programming mode by pressing the  button.
 - ✓ The duration of the orientation light can now be set in the menu item <Orient. light in min.>.

For more information about entering the desired number of minutes, see the following section “Orient. light in min.” from page 53.

Duration according to times**Activating time mode:**

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.
4. Select the menu item <Orient. light mode> and confirm the selection with the  button.
5. Select the  button to choose the menu item <From h to h>, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The duration of the orientation light can now be set with the menu items <Orient. light from h> and <Orient. light to h>.

For information about setting the desired start and end time, read from page 54.

8.3.7 Orient. light in min.

The <Orient. light in min.> menu item sets the orientation light duration to a value of between 0 to 240 minutes.








If the orientation light duration is set to zero minutes, the orientation light is disabled.

```
All Channels
Orient. light in min
Orient. light from h
Orient. light to h
Full automatic
Semi automatic
Bat ok LS      ELC
```






Prerequisites:

- The setting <In minutes> is enabled in the menu item <Orient. light mode>. For more information, see Chapter “Orient. light mode” from page 52.

Enter number of minutes**Setting the orientation light duration in minutes:**

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.
4. Select the  button to choose the menu item <Orient. light in

min.>, and confirm the selection with the  button.

5. Use the  or  buttons to set the required time in minutes, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The duration for the orientation light is now set in minutes.
 To return to the main menu, press the  button.

8.3.8 Orient. light from h/Orient. light to h

The menu items <Orient. light from h> and <Orient. light to h> specify the duration of the orientation light using fixed start and end times.















Thanks to the built-in battery, the configured times are also retained in the event of a power failure.





Enter times


Prerequisites:

- The correct time must be set in the <Calendar> menu. See section “8.8 Calendar” on page 62.
- The setting <From h to h> in the <Orient. light mode> must be active. For more information, see Chapter “Orient. light mode” on page 52

Setting the start and end time:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.
4. Use the  button to select the <Orient. light from h> menu item, and confirm the selection with the  button.
5. Use the  or  buttons to set the start time, and confirm the selection with the  button.
 - ✓ The start time is now set.
6. Press the  button once.
7. Use the  button to select the <Orient. light to h> menu item, and confirm the selection with the  button.

8. Use the  or  buttons to set the end time, and confirm the selection with the  button.
9. End programming mode by pressing the  button.
 - ✓ The duration of the orientation light is now set with a start and end time.

To return to the main menu, press the  button.

Difference from time switching control



The setting using a start and end time is not the same as a switching time control. If the off delay time in normal mode and the off warning time elapse before the start time of the orientation light, the light switches to energy-saving mode without illumination. The time-controlled orientation light is then not activated. If you want to be sure that the orientation light remains lit overnight, set the start time to a time when movement will still be detected. After the switch-off delay time has elapsed, the light then switches to orientation light mode.

8.3.9 Full automatic

Behaviour of the light when **Full automatic** is enabled:






The lighting automatically switches on if

- the ambient light is below the set target brightness
and
- the detector detects presence.


The lighting automatically switches off if

- the ambient light is brighter than the set target brightness
or:
- no movement is detected
and
- the set off delay time has elapsed.


Activating full automatic:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.
4. Select the  button to choose the menu item <Full automatic>, for

example, and confirm the selection with the  button.

5. End programming mode by pressing the  button.

✓ Full automatic mode is now active.

To return to the main menu, press the  button.

8.3.10 Semi automatic

If the function **Semi automatic** is active, the lighting can only be activated via an external button. The lighting automatically switches off if the detector does not detect movement during the off delay time.

The lighting automatically switches off if

- the ambient light is brighter than the set target brightness


or:


- no movement is detected



and


- the preset off delay time for the light has elapsed.


Activating semi automatic:

1. Select the <Programming> menu item and confirm the selection with the  button.


2. Enable programming mode by pressing the  button.

3. Select the  button to choose the menu item <All channels>, and confirm the selection with the  button.

4. Select the <Semi automatic> menu item and confirm the selection with the  button.

5. End programming mode by pressing the  button.

✓ Semi automatic mode is now active.

To return to the main menu, press the  button.

















8.4 Channel Map

This function enables you to assign a different channel number to a light. The new channel number must not be assigned to a different light. The remote control helps you to re-sort the channel numbers by preventing any invalid assignments.



If you want to use multiple master lights, execute the Channel Map function before you connect the master lights via DALI.

Assigning a new channel to a light:












1. Select the <Programming> menu item and confirm the selection with the button .
2. Enable programming mode by pressing the button .
3. Use the button  to select the menu item <Channel Map> and confirm the selection with the button .
4. Press the button  again.
5. Assign the required channel number to the first channel. To do this, press the button  to select the channel number and confirm the selection with the button .
6. Return to the channel selection by pressing the button .
7. Use the button  to select the next channel and confirm the selection with the button .
8. Assign the required channel number to the channel. To do this, press the button  to select the channel number and confirm the selection with the button .
9. Follow the same process for the two remaining channels.
10. Once each channel has a channel number, return to the channel selection by pressing the button .
11. Use the button  to select the <OK> command and confirm the selection with the button .
12. End programming mode by pressing the button .
 - ✓ The channel numbers are reassigned.

8.5 DALI map

The four DALI interfaces of the master light are initially assigned to the lighting channels numerically. For example, DALI interface C2 corresponds to the lighting channel C2.

This allocation can be changed to suit your preferences using the **DALI map** function. You can also assign several DALI interfaces to one lighting channel.

Assigning a different lighting channel to a DALI interface:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <DALI map>, and confirm the selection with the  button.
4. Press the  button to select the desired DALI interface, and confirm the selection with the  button.
 - ✓ The DALI interface is displayed with the current light channel number.
5. Use the  or  buttons to choose the light channel to which you want to assign the DALI interface, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The DALI interface is now assigned to the desired light channel.
To return to the main menu, press the  button.






8.6 DALI switch

You can configure DALI switches 1 and 2 under the DALI switch menu item. The settings options for DALI switch 1 and 2 are identical.

8.6.1 DS1/DS2 connected


This function allows the master light to send control commands. By default, **DS1/DS2 connected** is active. As such, you only need this function if you have disabled the command output with the function **DS1/DS2 not connected**.



Activating the output of control commands to DALI switch 1 or 2:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <DALI switch> and confirm the selection with the  button.
4. Press the  button to select the DALI switch that you want to regis-

```

DALI Switch
DS1 connected
DS1 not connected
DS1 off delay time
DS1 Mode
DS2 connected
DS2 not connected
Bat ok LS      ELC
  
```









ter as connected, and confirm the selection with the  button.

5. End programming mode by pressing the  button.
 - ✓ The selected DALI switch is now registered as connected.
 To return to the main menu, press the  button.

8.6.2 DS1/DS2 not connected

This function disables the output of control commands to a DALI switch. If this setting is enabled, you can no longer temporarily switch the DALI switch on or off in the functions menu.






Disabling DALI switch 1 or 2:







1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <DALI switch> and confirm the selection with the  button.
4. Press the  button to select the DALI switch that you no longer want to be connected, and confirm the selection with the  button.
5. End programming mode by pressing the  button.
 - ✓ The selected DALI switch is now disconnected.
 To return to the main menu, press the  button.

8.6.3 DS1/DS2 off delay time

This function sets how long the DALI switches keep the connected devices activated following the last detected movement. You can choose a time of one to 255 minutes.

Setting the off delay time for DALI switch 1 or 2:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <DALI switch>, and confirm the selection with the  button.
4. Select the  button to choose the menu item <DS1 off delay time>

- or <DS2 off delay time>, and confirm the selection with the  button.
5. Use the  or  buttons to set the required duration, and confirm the selection with the  button.
 6. End programming mode by pressing the  button.
 - ✓ The off delay time is set for the selected DALI switch.
 To return to the main menu, press the  button.

8.6.4 DS1/DS2 mode












This function enables more precise configuration of the DALI switches. The following settings are possible:

Full automatic: When this function is active, the DALI switch switches the connected device on when a presence is detected. This function can also be activated if the master light is operating in Semi automatic mode.

Semi automatic: If this function is active, the DALI switch must be activated manually if the off delay time in normal operation or override mode has elapsed.

Pulse Mode tic: If this function is enabled, the DALI switch switches devices such as automatic stairwell timers or current impulse relays on with an impulse. The impulse is repeated regularly for as long as movement is detected.

Setting the mode for DALI switch 1 or 2:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <DALI switch>, and confirm the selection with the  button.
4. Select the  button to choose the menu item <DS1 Mode> or <DS2 Mode>, and confirm the selection with the  button.
5. Select the  or  button to choose the desired mode, and confirm the selection with the  button.
6. End programming mode by pressing the  button.
 - ✓ The selected DALI switch now operates in the set mode.
 To return to the main menu, press the  button.



















8.7 Scene editor

	Sc1	Sc2	Sc3	Sc4
CH1 %	10	100	70	70
CH2 %	10	100	30	70
CH3 %	10	100	30	70
CH4 %	10	100	30	70
DS1	off	on	off	on
DS2	off	on	off	on
Bat	ok	LS		ELC

The <Scene editor> menu item saves the brightness as a percentage of the maximum brightness for a light scene. You can also set whether a DALI switch should be switched on or off with the scene.

Setting a scene:

The change is made using an example from scene 3 on channel 2.

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Scene editor>, and confirm the selection with the  button.
 - ✓ The sub-menu shows a matrix with the default light values for each channel and scene. You can customise these values.
3. In the matrix, use the  button to navigate to the column <Sc3> and the  button to choose line <CH2>. Confirm your selection with the  button.
4. Change the light value to 60 percent using the  button. Confirm your selection with the  button.
5. Press the  button once.
6. To change the switch status of DALI switch 1 or 2, use the  button to navigate to the matrix point DS 1 or DS 2, and confirm the selection with the  button.
7. Use the  or  buttons to set the required switching status, and confirm the selection with the  button.
8. Press the  button once.
 - ✓ You are now in the matrix again at the previous position. The set values must now be transmitted to the light:
9. Use the  button to navigate to the line <Scene>.
 - ✓ The matrix point <OK> is highlighted.
10. Press the  button once.
 - ✓ <Scene send...> appears in the display. The remote control sends the new values to the master light.
 - To return to the main menu, press the  button.


















i The scene editor saves the last set values. Therefore, if you want to set the same scene in a room, simply enter programming mode, and send the desired scene to the light with <OK>.





8.8 Calender

In the <Calender> menu, you can enter the date and time. It is important to set the time if you want the orientation light to start and end at fixed times. The time should be set once a year.























i Thanks to the built-in battery, the configured times are also retained in the event of a power failure.

Setting the date:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <Calender>, and confirm the selection with the  button.
4. The menu item <Years> is highlighted. Confirm your selection with the  button.
5. The input mask is configured for values from the year 2000. Use the  or  buttons to set the year, and confirm the setting with the  button.
✓ The year is now set.
6. Return to the Calender menu with the  button.
7. Select the  button to choose the menu item <Months>, and confirm the selection with the  button.
8. Use the  or  buttons to set the month, and confirm the setting with the  button.
✓ The month is now set.
9. Return to the Calender menu with the  button.
10. Select the  button to choose the menu item <Days>, and confirm the selection with the  button.

11. Use the  or  buttons to set the day, and confirm the setting with the  button.
✓ The day is now set.
12. Save your changes by exiting programming mode via the  button.







Setting the time:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <Calender>, and confirm the selection with the  button.
4. Select the  button to choose the menu item <Hours>, and confirm the selection with the  button.
5. Use the  or  buttons to set the hour, and confirm the setting with the  button.
6. Return to the Calender menu with the  button.
7. Select the  button to choose the menu item <Minutes>, and confirm the selection with the  button.
8. Use the  or  buttons to set the minute, and confirm the setting with the  button.
9. Return to the Calender menu with the  button.
10. Select the  button to choose the menu item <Seconds>, and confirm the selection with the  button.
11. Use the  or  buttons to set the seconds, and confirm the setting with the  button.
✓ The time is now set.
12. Save your changes by exiting programming mode via the  button.

8.9 Factory Reset

The **Factory reset** function restores the light to its default program settings. For more information about the default factory settings, see Section “Factory settings” on page 28.

Performing a factory reset:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <Factory reset>, and confirm the selection with the  button.
4. End programming mode by pressing the  button.
 - ✓ The light is now reset to the default factory settings.
 - To return to the main menu, press the  button.






8.10 Reset Editor

If you change settings in the scene editor, you can undo these changes using the **Reset editor** function. The values in the scene editor are then reset to the default settings.



The **Reset editor** function does not change the master light settings. The function simply restores the default scene editor values locally in the remote control.

Restoring the original scene editor values:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Reset editor>, and confirm the selection with the  button.
3. End programming mode by pressing the  button.
 - ✓ The values in the scene matrix are reset to the default values.
 - To return to the main menu, press the  button.

**Settings
values**

8.11 Sensitivity










The master lights are equipped with a precise and highly-sensitive presence detector. In rare cases, interferences such as hot air currents may cause erroneous presence detection. The **Sensitivity** function adjusts the sensitivity of the presence detector.

You can set the sensitivity to:

<sensitive>, <normal>, <reduced> and <sharply reduced>.

By default, the presence detector is set to <sensitive>.

Setting the sensitivity of the presence detector:

1. Select the <Programming> menu item and confirm the selection with the  button.
2. Enable programming mode by pressing the  button.
3. Select the  button to choose the menu item <Sensitivity>, and confirm the selection with the  button.
4. Use the  or  buttons to set the required sensitivity, and confirm the selection with the  button.
5. End programming mode by pressing the  button.
 - ✓ The sensitivity of the presence detector is based on the set value.
 - To return to the main menu, press the  button.



8.12 Detector LED on/Detector LED off

The LEDs in the sensor head of the master light show the status of the presence detector. This function is activated by default. It can be switched on and off via the remote control. The LED signals are:

- The red LED flashes when commands are received from the remote control.
- The blue LED lights up when the detector is in programming mode.
- The green LED flashes when the detector detects movement.

You can deactivate the green LED to stop it flashing every time motion is detected.

Deactivating the green LED in the sensor head:


1. Select the <Functions> menu item and confirm the selection with the  button.
2. Select the  button to choose the menu item <Detector LEDs off>.



and confirm the selection with the  button.

✓ The green LED switches off.

To return to the main menu, press the  button.

Activating the green LED in the sensor head:

1. Select the <Functions> menu item and confirm the selection with the  button.

2. Select the  button to choose the menu item <Detector LEDs on>, and confirm the selection with the  button.

✓ The green LED switches on.

To return to the main menu, press the  button.

8.13 Light value on/Light value off

If you connect master lights in parallel, you can choose which master light is responsible for measuring the room lighting with the function **Send light value**. The presence detector of the master light then also measures the brightness.

The function **Send light value** is deactivated by default. It is activated with <Light value on>. If the master lights do not have an additional light sensor, you will need to activate the function **Send light value** on one of the master lights. If the master lights are connected in parallel, the function **Send light value** can only be activated on one of the master lights.

Master light with light sensor




For precise lighting with constant brightness, a master light with an integrated light sensor is needed. The light sensor can be further calibrated. The presence detector is then only responsible for detecting presence. For master lights with an additional light sensor, you do not need the functions **Light value on** or **Light value off**.




For more information about calibrating the light sensor, see Section “Calibration” from page 45.

Prerequisites:

- Choose a position as close as possible to being directly underneath the master light that you want to configure.
- Aim the remote control directly at the detector so that only this light receives the remote control signal.

Activating light measurement on a master light:

1. Select the <Functions> menu item and confirm the selection with the  button.

2. Select the  button to choose the menu item <Light value on>, and confirm the selection with the  button.
✓ The red LED flashes three times in the sensor head.
3. Press the Return button once.
To return to the main menu, press the  button.







8.14 Detector Fact. reset

The function **Detector Fact. reset** enables you to reset the following settings to the factory settings:

- Send light value
- Sensitivity of the presence detector
- Detector LEDs

The detector factory reset does not change any other settings, e.g. for the switch-off delay time.

Performing a detector factory reset:










1. Select the <Programming> menu item and confirm the selection with the button .
2. Enable programming mode by pressing the button .
3. Use the button  to select the menu item <Detector Fact. reset> and confirm the selection with the button .
4. End programming mode by pressing the button .
✓ The values stored in the detector are reset to the factory settings
To return to the main menu, press the button .

8.15 Detector Light Factor

The Nova light measures the brightness using either the integrated detector or an additional light sensor. In both cases, the measurement is taken at some distance from the desk surface. If the brightness provided by day-light at the position of the light and at the position of the desk surface are very different, the desk may not be sufficiently illuminated. In these cases, it can be helpful to adjust the sensor measurement by changing the light value factor.

The light value factor is set to a value of 2.5 ex works. If the desk surface is not sufficiently illuminated, the light value factor can be reduced, e.g. to 1.5 or 1.

Setting the light value factor:

1. Select the <Programming> menu item and confirm the selection with the button .
2. Enable programming mode by pressing the button .
3. Use the button  to select the menu item <Detector Light Factor> and confirm the selection with the button .
4. Use the  or  buttons to set the required sensitivity and confirm the selection with the button .
5. End programming mode by pressing the button .
✓ The light value measurement has been adjusted.
To return to the main menu, press the button .

9 Operation via Bluetooth

9.1 NOVA lights with Bluetooth

NOVA master lights with an integrated Bluetooth module can be operated using the app and Bluetooth wireless connection, in addition to the infrared remote control.

Bluetooth enables convenient configuration of the lights using your smartphone or tablet, even in locations in which WLAN is not available.

NOVA Bluetooth lights work with the energy-saving standard "Bluetooth low energy", also known as "Bluetooth Smart" or "Bluetooth 4 LE". This wireless connection has a range of up to 10 metres.

Prerequisites

To control the lights via Bluetooth, you need:

- A device that can send via Bluetooth and that supports the "Bluetooth low energy" standard. This is usually the case for current Smartphones, Notebooks and tablets. Some manufacturers identify these devices with the logo "Bluetooth Smart Ready". Devices on which the ESYLUX app can be installed are usually also compatible with this Bluetooth standard.
- The free app ESYLUX LIGHT CONTROL must be installed on the Bluetooth device.

9.2 The ESYLUX LIGHT CONTROL app

The free ESYLUX LIGHT CONTROL app enables you to control and configure the lights without using the infrared remote control.

Remote control required

The universal remote control must only be used once to activate light measurement for lights without light sensors (see Chapter "13.2.3 Manual settings").







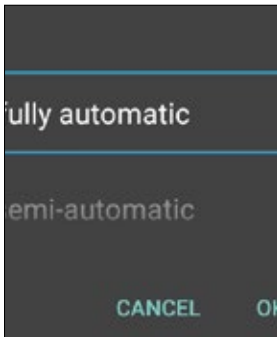
The app is currently available for the following mobile devices:

- Apple devices
with operating system iOS 9 or above
- Android devices
with Android version 5.0 or above

The app is available in the Apple Store and Google Playstore.

9.2.1 Using the app

The app is based on traditional operating conventions. The following operating actions are possible:

Control element	Example	Operating action	Effect (example)
Simple button		Tap	Navigate to higher menu; Confirm input
Slide switch		Slide	Switch between values such as 'on' and 'off'
Slide control		Slide	Set values
Text or value field		Tap	Activate fields for input; display keypad or drop-down list for selection
Selection field		Swipe, scroll through a list of values	Select values

In the following operating steps, buttons are indicated in pointed brackets < >.

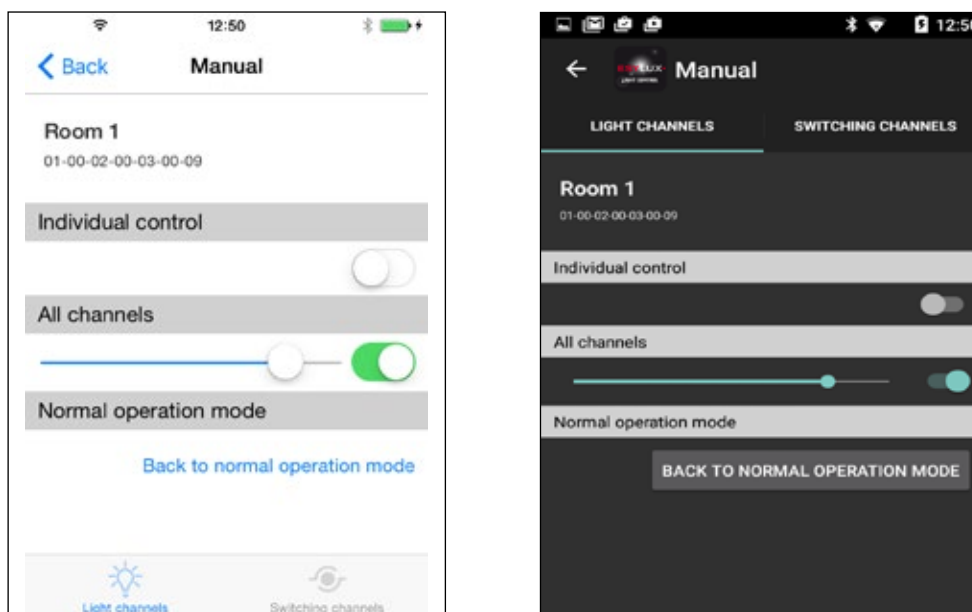
9.2.2 Differences between the Android and iOS app

The app has the same functions under both operating systems. However, the names of the buttons may differ in some cases. For example, the confirmation button in the Android app is often labelled <OK>, while the button in the Apple app is often labelled <Done>.

There may be further minor differences in the form of icons and buttons. In individual cases, the buttons may be in different places. The Android app also has a different background colour to the iOS app. The background colours may also differ between Android apps that are installed on different devices. The reason: The Android app adapts to the colour scheme of the device on which it is installed.

**Differences
between
Android apps**

The differences between the app versions are shown on this settings screen:



Background colours and button colours are different. In addition, the <Light channels>/<Switching channels> buttons appear at the bottom in the Apple app (left) and at the top in the Android app (right).

Screenshots:
Apple left, An-
droid right



The screenshots are taken from an iPhone with iOS 9 and a smartphone with Android 5. On a tablet, the distances between the buttons are much greater.

In the following, the iOS screenshots are always on the left and the Android screenshots on the right.

9.3 Setting up a Bluetooth connection

Before you can control an NOVA Bluetooth light using the app, you first have to register the light in the app using the ID code. You only need to do this once.

Prerequisites:

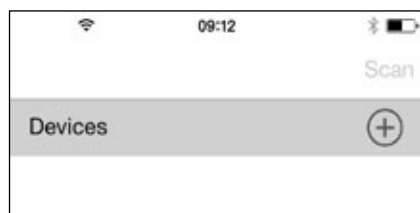
- NOVA Bluetooth light is connected
- Bluetooth is activated on the end device
- The ID code on the name plate is available.

Setting up the Bluetooth connection:

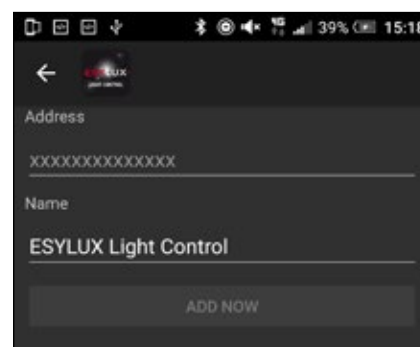
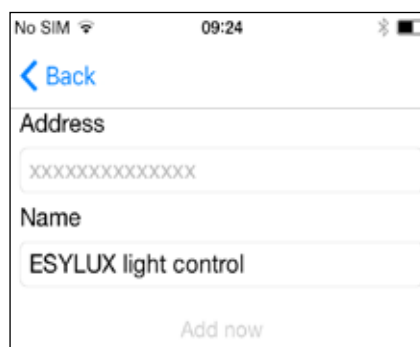
1. Start the ESYLUX LIGHT CONTROL app.
 - ✓ The device selection screen appears:

**Device
selection screen**

Device registration screen

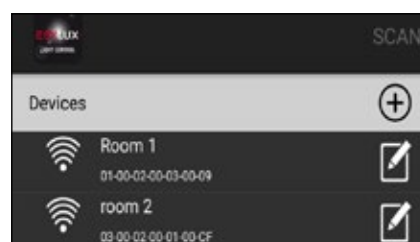
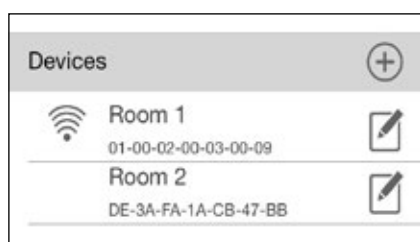


2. Tap on the button <+>.
 - ✓ The device registration screen appears:



3. Tap in the input field below “address” to enter the ID of the light.
 - ✓ The keypad of your end device appears.
4. Enter the ID code for the light without hyphens or blank spaces and tap <Add Now> to confirm your entry.
 - ✓ The light is now registered on your Bluetooth device.
The app is ready to control the light.

After registration, the light is always displayed in the device selection screen of the app. Multiple registered NOVA Bluetooth lights are displayed in a list, for example:



Scan function


Each time the app is started, it automatically searches for the Bluetooth devices in the list. Therefore, the button <Scan> cannot be used immediately after start-up, as the scan process is already active. If a connection to a light exists, this is indicated by the <📶> symbol in front of the device name.

After the first scan, you can trigger further scans by tapping on the <Scan> button. For example, if you wish to operate lights in a different room, you can rapidly update the connections using the scan function.

Number of Bluetooth connections

Only one current Bluetooth connection to the light is possible at any one time. If a different person is currently operating the light via Bluetooth, the app cannot establish a connection.

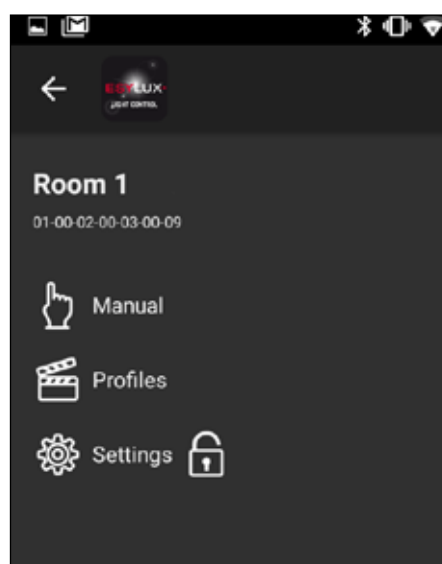
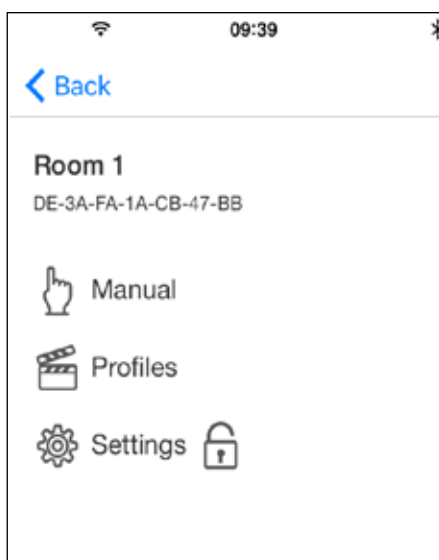
Delete lights from list

To remove a light from the list, open the Edit menu for the light. The Delete option can be found here. To access the Edit menu, click on the  button next to the light in the device selection screen.





Rename lights

In the Edit menu, you can assign a different name to the light, for example, the name of a room. To do this, tap in the input field below <Name>, enter the new name and confirm the entry.

10 The app main menu

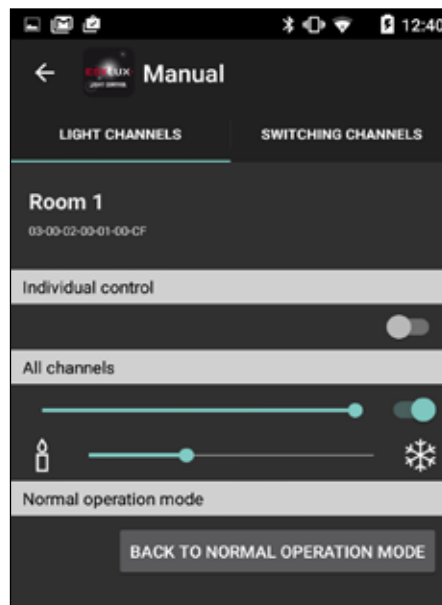
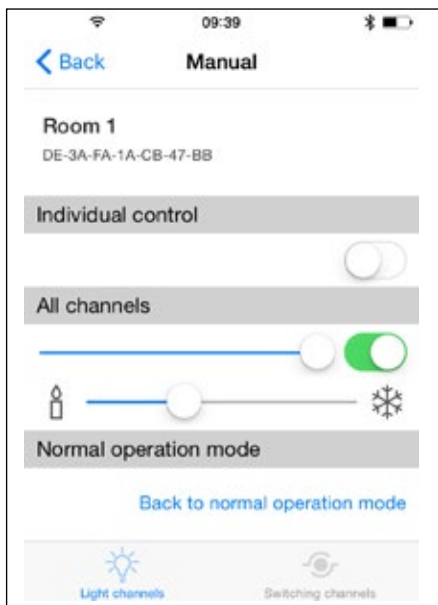


As soon as you have selected a connected light in the device selection screen, the main menu of the app is displayed with the following submenus:

-  **Manual**: Here you will find functions with which you can deactivate the programmed settings for a limited time.
-  **Profiles**: In this submenu you can call and edit light profiles.
-  **Settings** : The first time the lights are switched on, they use the factory settings described in Chapter 4.7. You can adjust the settings as required in this menu item.



All menus and functions are explained in the following chapters.

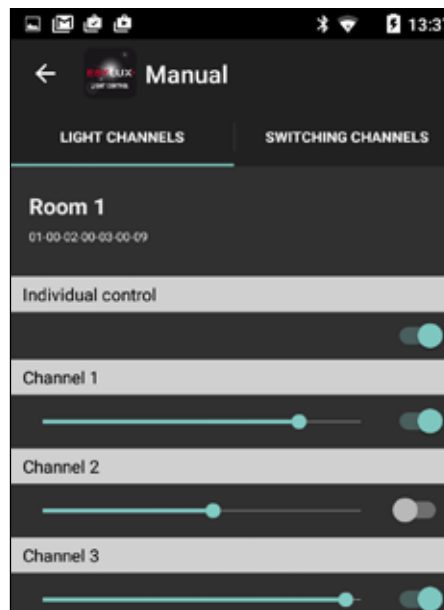
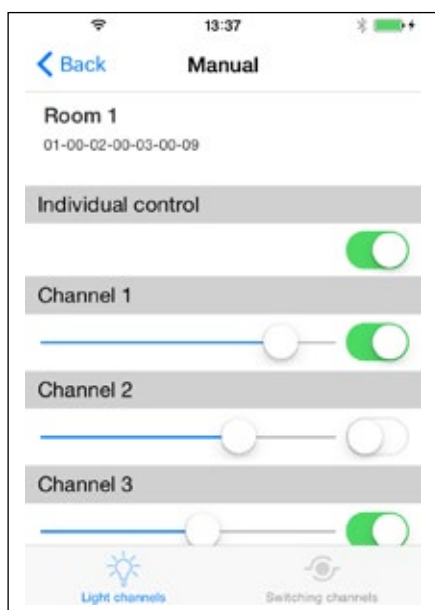
11 The app menu <Manual>



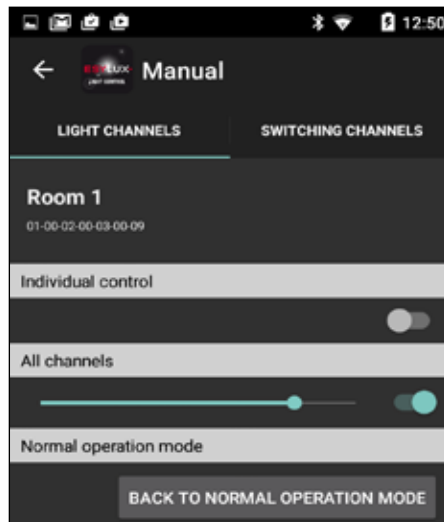
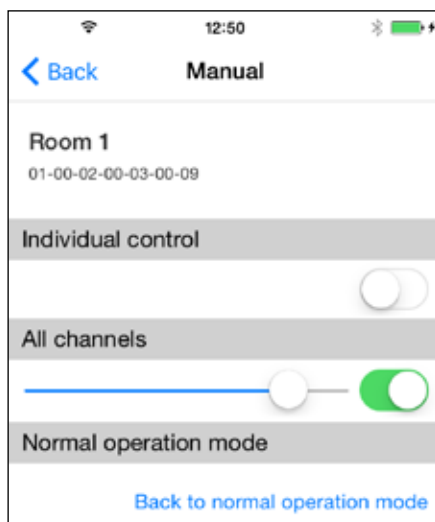
Lights can be controlled directly using the functions found under the menu item <Manual>. This temporarily deactivates the programmed settings. Commands from this menu instruct the light to work in override mode. For more information on the operating modes, see Chapter 5.

11.1 Switching channels on and off

You can switch the channels on and off individually or switch all channels together. To select between individual control or all channels, activate () or deactivate () the individual control switch. The screen changes according to the selected setting.



Switching the channels on and off individually:

- Activate individual control ()
- Slide the switch belonging to the required channel to on () or off ()
- ✓ The channels are switched on or off as required.

Switching all channels on and off together:

- Deactivate individual control ()
- Slide the switch under **All channels** to on () or off ()
- ✓ The channels are switched on or off as required.

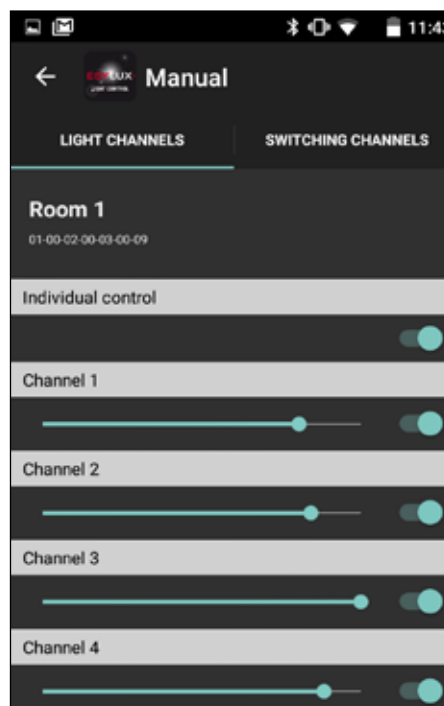
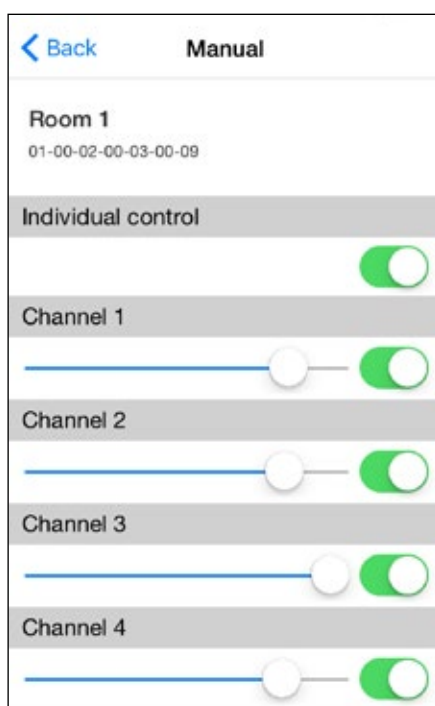
11.2 Adjust brightness


You can set the brightness for all channels individually or for all channels together. To select between individual or collective control, activate () or deactivate () the individual control switch. The screen changes according to the selected setting.

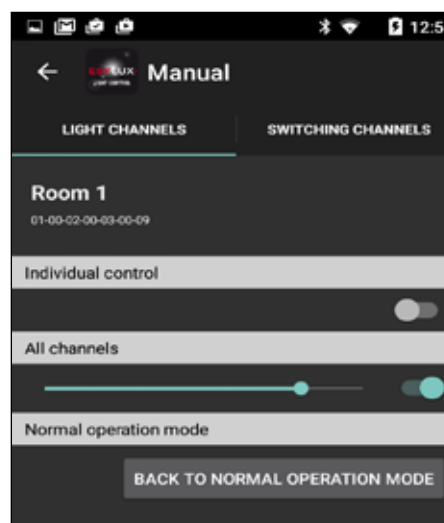
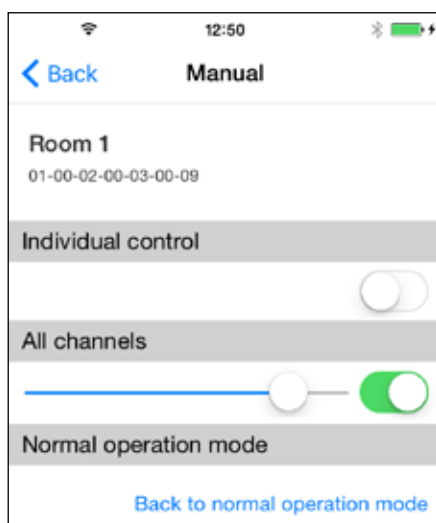
Use the slide controllers to adjust brightness:


- Moving the brightness slide controller to the right increases the brightness; moving it to the left reduces the brightness.

Adjusting brightness for each channel individually:



- Activate individual control ()
- Slide the brightness slide controller belonging to the selected channel in the required direction.
 - ✓ The brightness is now set.


Setting the brightness for all channels:

- Deactivate individual control (.
- Slide the brightness slide controller in the required direction.
 - ✓ The brightness changes on all channels; all channels produce the same brightness.

11.3 Back to normal operation mode

Below the channel control, you will see the heading **Normal operation mode**. If you actuate the button <Back to normal operation mode> below this, the temporary settings you have made will be deleted. The light switches back to normal operating mode and uses the programmed settings.


11.4 Switching the switching channels on and off

You can also turn the switching channels on and off temporarily in the  **Manual** menu.




Switching channel and DALI switch

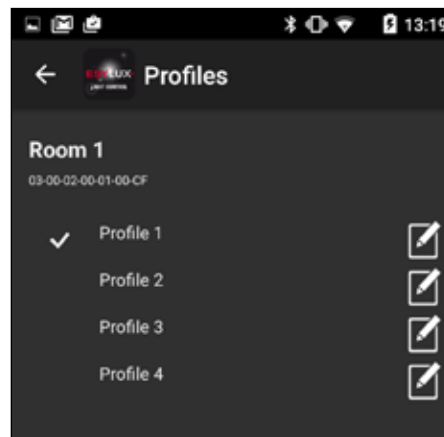
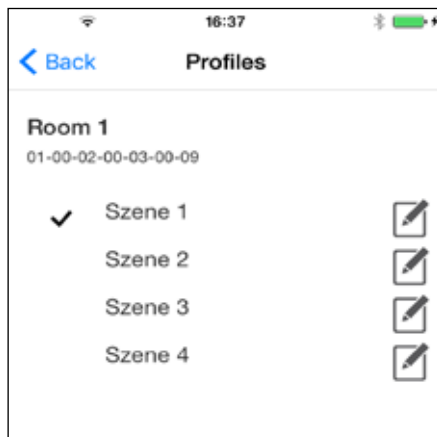
Switching channels control DALI switch devices that are connected to the C1 and C2 DALI interfaces of the master light. Non-DALI-compatible devices can be connected to the DALI switch devices. For example, you can use the switching channel to switch on non-DALI-compatible blackboard lighting in a classroom. Master lights are factoryconfigured to enable them to send commands to connected DALI switches via the switching channels.

DALI switch devices are available as accessories including SW DALI Full Automation (item no. EP10427473) and SW DALI Semi Automation (item no. EP10427480).

To open the switching channel control screen, tap on the <Switching channels> button on the  **Manual** screen. On Android devices, this is found at the top of the screen and on iOS devices, at the bottom.

Switching the switching channels on and off:**Prerequisites:**

- The  Manual menu screen is open.
- Tap on the <Switching channels> button.
 - ✓ The switching channels screen is displayed.
- Turn the switching channels on () or off () as required.
 - ✓ Switching channel settings are now complete.



12 The app menu <Profiles>

Under the main menu item , you can select and edit scenes. You can also give the scenes informative names.

Profile components

A light scene consists of up to four lighting channels with a distinct brightness. A scene can also switch up to two switching channels. Scenes are temporary settings in the same way as the functions in the <Manual> menu.

Activating and deactivating scenes:

- In the main menu, tap on the menu item  Profiles >.
 - ✓ The Profiles menu screen appears.
- Tap on the name of the scene that you wish to activate.
 - ✓ The scene is activated and marked with the symbol .
- To deactivate the active scene, tap on its name.
 - ✓ The light ends the scene and continues in normal operating mode.
 - ✓ The scene is no longer marked as active.


Changing scene settings:

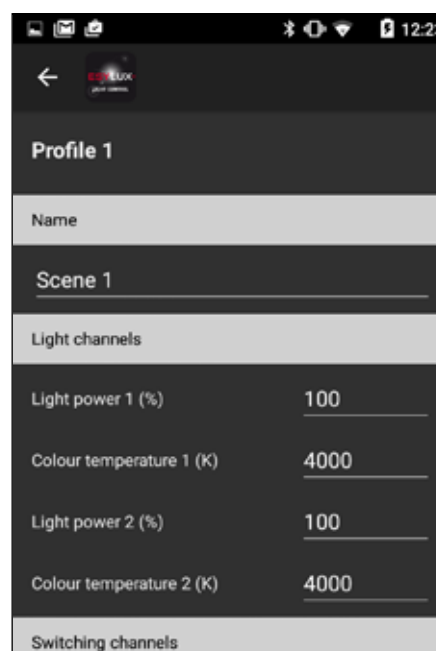
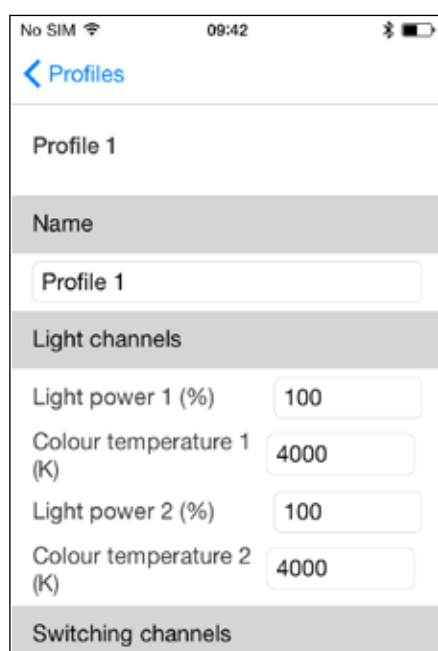
For each scene, the light value can be adjusted and switching channels turned on or off.

You can adjust the following values:

Light power: 0 to 100%


Switching channels 1 and 2: on () and off ()

- In the Profile menu, tap on the Edit symbol  for the scene you wish to change.
- ✓ The Profiles settings screen is opened and shows these settings, for example:

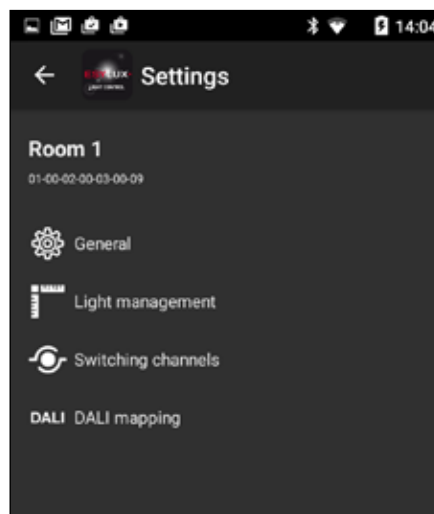
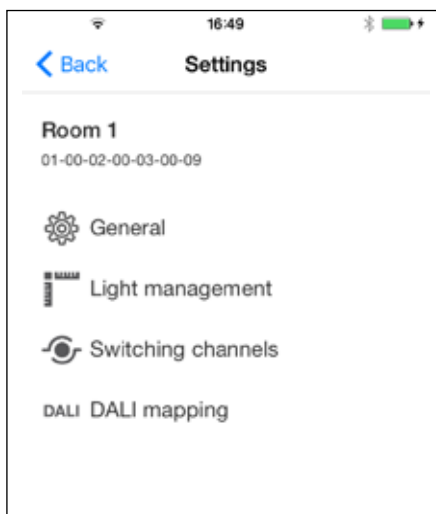


- Tap the input fields whose values you wish to change.
- Change the required value and confirm your input.
- ✓ Scene settings are now complete.


Changing profile names:

- Open the Profile menu and tap on the Edit symbol  of the scene whose name you wish to change.
- ✓ The scene settings screen opens.
- Tap the name field of the scene whose name you wish to change.
- ✓ The operating device keypad is activated.
- Type in the desired name and confirm your entry.
- ✓ The scene now has the required name.

13 The app menu <Settings>



Password

The **Settings** menu, is used to configure lights, for example, by adjusting factory settings to suit your requirements. To prevent unauthorized persons from altering the programming, this menu requires you to enter a password. The password is the PIN code. You will find this on the name plate of the master light. After you enter the password, the menu symbol changes. An open padlock is shown (), which means that settings can now be adjusted.

The settings menu remains accessible without requiring a new password. If you want this menu to be accessible only with a password, reactivate password protection. To do this, tap on the open padlock in the main menu and then tap on <Lock>.

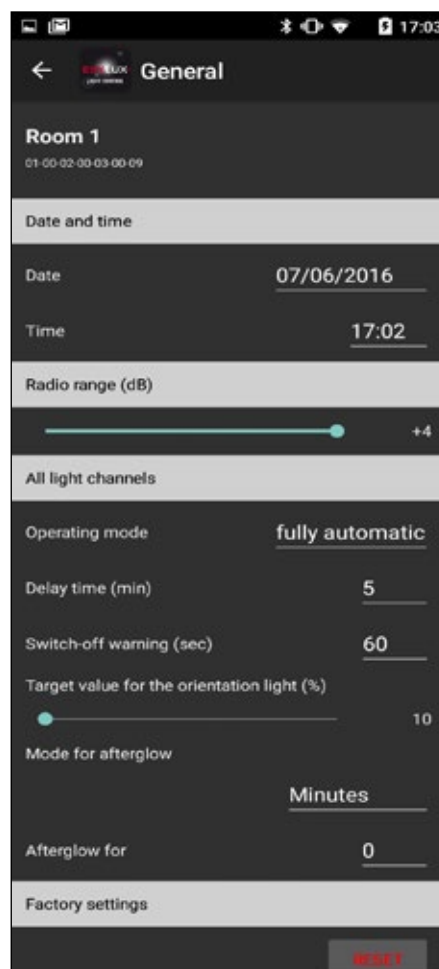
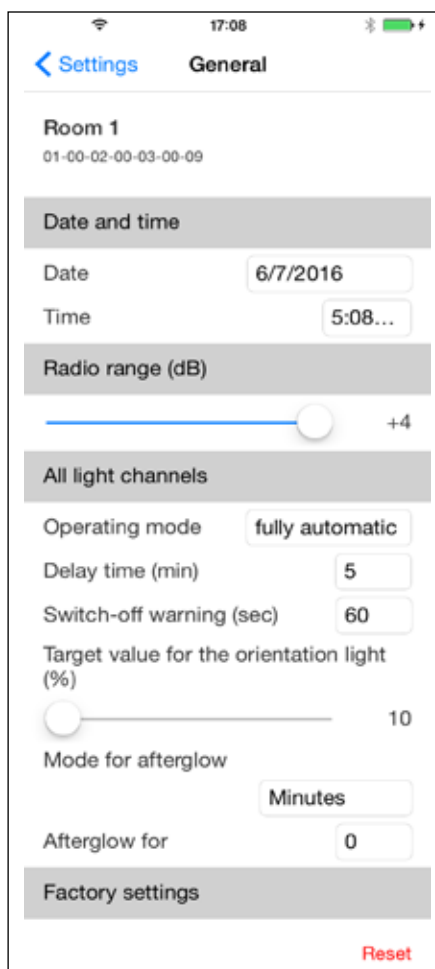
The menu contains the following submenus:

- <General>: General settings for all light channels.
- <Light management>: Functions for setting constant light management and for calibrating the lights with a light sensor.
- <Switching channels>: Switching channel configuration
- <DALI mapping>: Assignment of DALI channels to light channels.



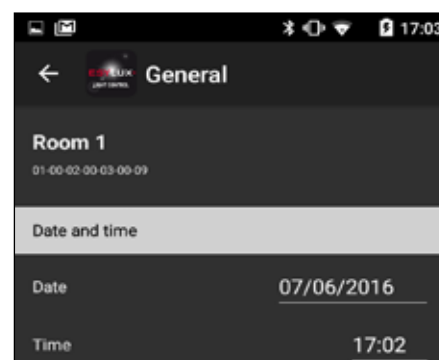
The settings are retained even when the luminaire is not supplied with current — for example because the power supply in the building is switched off overnight.

13.1 The General submenu



The screenshots show an overview of settings.

13.1.1 Date and time



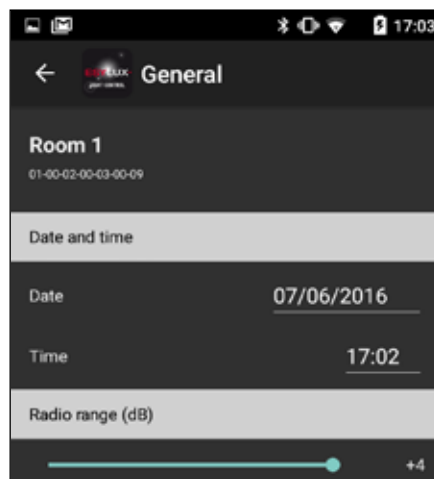
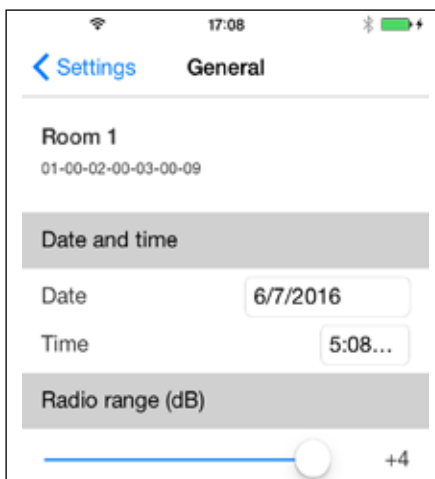
The time must be set correctly if you want the orientation light to start and end at fixed times. The time should be set once a year.

i Thanks to the built-in battery, the configured times are also retained in the event of a power failure.

Setting the date and time:

- Tap in the field displaying the date.
 - ✓ The date settings appear.
- Set the current date and confirm your entry.
- Tap in the field containing the time.
 - ✓ The time settings appear.
- Set the current time and confirm your entry.
 - ✓ The date and time of the lights are set.

13.1.2 Adjusting the radio range



NOVA Bluetooth master lights have a maximum radio range of approx. 10 metres if no obstacles obstruct the radio path. This range may be too large: For example, if a smartphone is connected to a light and the smartphone owner takes their device into the next room, the connection may remain established unintentionally. However, an existing connection prevents different devices from connecting to the light.

The **Radio range** function can be used to reduce the range so that only persons in the immediate vicinity can operate the light. The range can be reduced to around two metres.

Do not stand too close to the light when reducing the radio range. This is because if you accidentally reduce the radio range too far, you will need to move into even closer proximity to re-establish the connection and correct the radio range.

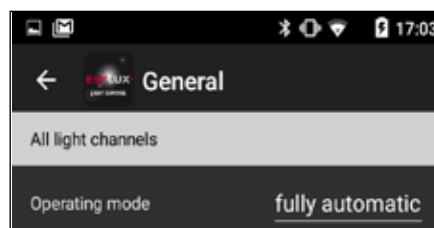
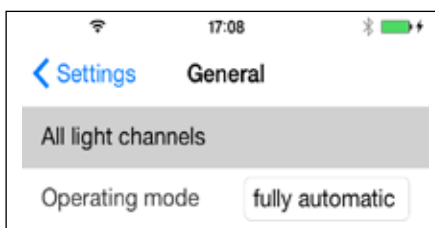
Note the starting position

-
- i** Range reduction does not always restrict the connection to the room in which the lights are located: Persons in the room directly above may sometimes also be able to establish a radio connection to the light.
-

Adjusting the radio range:

- Position yourself at the distance from the light to which you wish to restrict the radio connection and then move approximately one further metre away from the light.
 - Move the slide controller to the left in stages.
 - After each movement of the slide controller, send commands to the master light to check whether a connection still exists. For example, you can switch the light on and off.
 - If the connection is interrupted, move to the desired distance and check whether the light and the Bluetooth device can connect. To do this, you can switch to the device registration screen and use the < Scan > button.
 - If a connection is not made, move closer until the app can re-establish the connection.
 - When the connection to the light is re-established, increase the radio range slightly by moving the slide controller to the right.
 - Move back to the desired distance and check whether the light and the Bluetooth device can connect. If this is not the case, repeat the two steps above until connection is successful at the desired distance.
- ✓ The radio range is now adjusted.

13.1.3 Adjusting automatic mode



You can operate the lights in **fully automatic** and **semi-automatic** mode.

fully automatic

Behaviour of the light when **fully automatic** is enabled:

The lighting automatically switches on if

- the ambient light is below the set target brightness
- and
- the detector detects presence.

The lighting automatically switches off if

- the ambient light is brighter than the set target brightness

or:

- no movement is detected

and

The off delay time has expired

Semi-automaticBehaviour of the light when **semi-automatic** is enabled:**The lighting switches on if**

- an external button is actuated.

The lighting automatically switches off if

- the ambient light is brighter than the set target brightness

or:

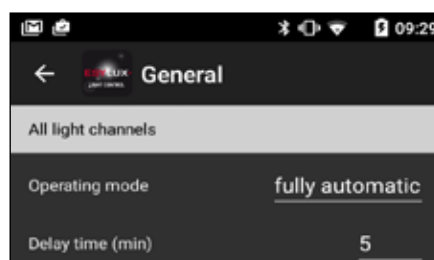
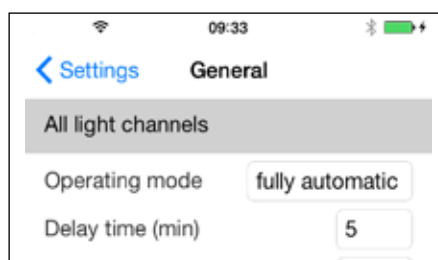
- no movement is detected

and

- The off delay time has expired

Setting fully automatic or semi-automatic mode:

- Tap in the selection field that displays either **fully automatic** or **semi-automatic**.
- Select the required automation level and confirm your selection.
 - ✓ The required automatic mode is set.

13.1.4 Setting the off delay time

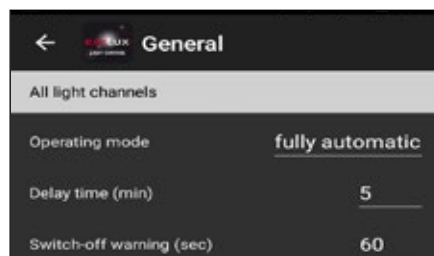
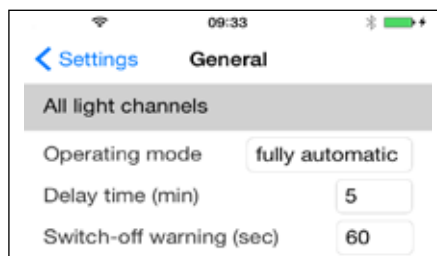
The **off delay time** function determines for how long the light remains switched on after the last detected movement. The off delay time starts again every time a movement is detected.

- The minimum off delay time is one minute.
- The maximum off delay time is 240 minutes.

The off delay time applies to normal operating mode and to override mode. For more information on operating modes, see “Overview of the operating modes” from page 29.

Setting the delay time:

- Tap in the time selection field.
- Set the required time and confirm your selection.
 - ✓ The delay time is now set.

13.1.5 Setting the Switch-off warning

The **Switch-off warning** indicates that the set off delay time has elapsed. In switch-off warning mode, the lighting uses the brightness value that was set for the orientation light.

If movement is detected during the off warning time, the detector returns to the last active operating mode. This may be normal operation mode or override mode.

The switch-off warning time can be set to a duration of 0 to 240 seconds.

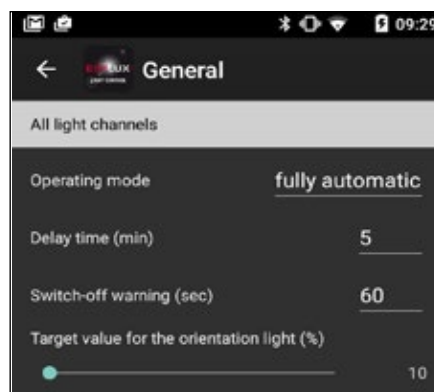
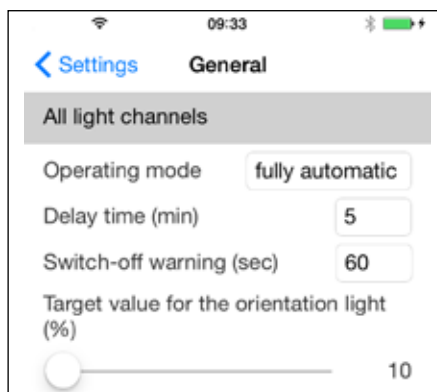
i **Switch-off warning** is disabled if the time is set to 0 seconds.

Example: The illumination level was dimmed manually via an external button and the light is in override mode as a result. The set off delay time has elapsed. The switch-off warning time now starts, which is set to 60 seconds. During this time, the lighting uses the brightness that is set for the orientation light. If presence is detected during this time, the master light returns to override mode.

Setting the off warning time:

- Tap in the time selection field.
- Set the required time and confirm your selection.
 - ✓ The switch-off warning time is now set.

13.1.6 Changing orientation light brightness



The **Orientation light** function provides subtle lighting. You can use the slide controller to set orientation light brightness to values between 10% and 50% of the maximum illumination level.

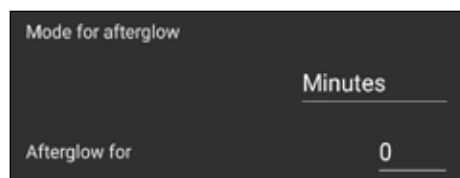
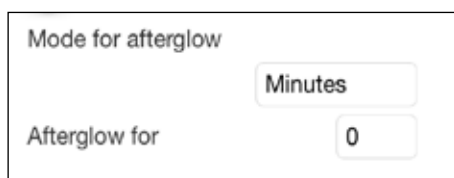
Prerequisites

The orientation light only switches on once the set off delay time or a set off warning time have elapsed. The orientation light duration can also be set to zero minutes.

Setting orientation light brightness:

- Move the slide controller until the required percentage value is reached.
- ✓ The target brightness is now set.

13.1.7 Setting orientation light afterglow



The length of time for which the orientation light should be lit is referred to as the "afterglow". There are two ways to set the afterglow:

- Enter the duration in minutes. Possible values: 0 - 240 minutes.
- Enter the start and end times. Only full hours can be entered as the times.



Thanks to the built-in battery, the configured times are also retained in the event of a power failure.

Select which type of time setting to use in the menu item **Mode for afterglow**. Appropriate input fields are displayed after selection.

Setting the afterglow in minutes:

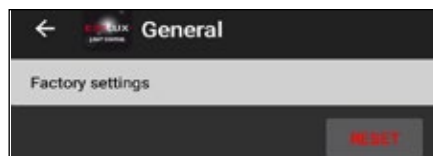
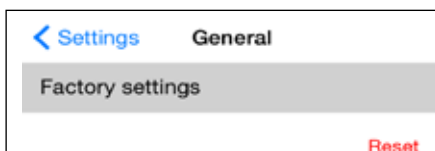
- Tap on the button for the menu item **Mode for afterglow**.
 - ✓ A selection menu appears.
- Choose the <Minutes> setting and confirm your selection.
- Tap on the button for the menu item **Afterglow for**
 - ✓ A settings menu appears.
- Set the required duration and confirm your selection.
 - ✓ The afterglow is now set in minutes.

Adjusting the afterglow using a start and end time:

- Tap on the button for the menu item **Mode for afterglow**.
 - ✓ A selection menu appears.
- Choose the <Time> setting and confirm your selection.
- Tap on the button for the menu item **From time**.
 - ✓ A settings menu appears.
- Set the required start time and confirm your selection.
- Tap on the button for the menu item **By time**.
 - ✓ A settings menu appears.
- Set the required end time for the orientation light and confirm your selection.

**Difference from
time switching
control**

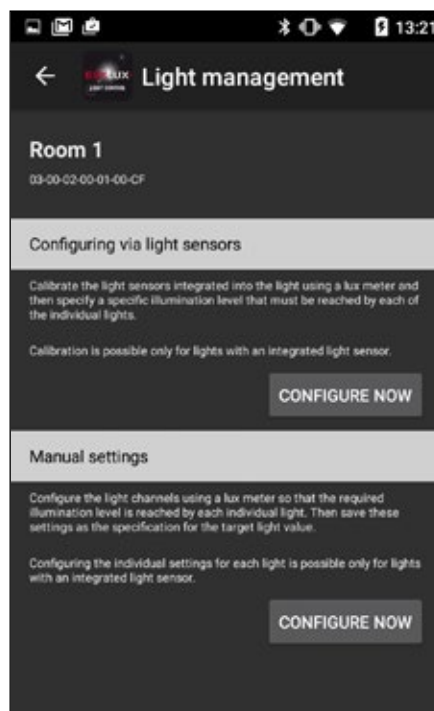
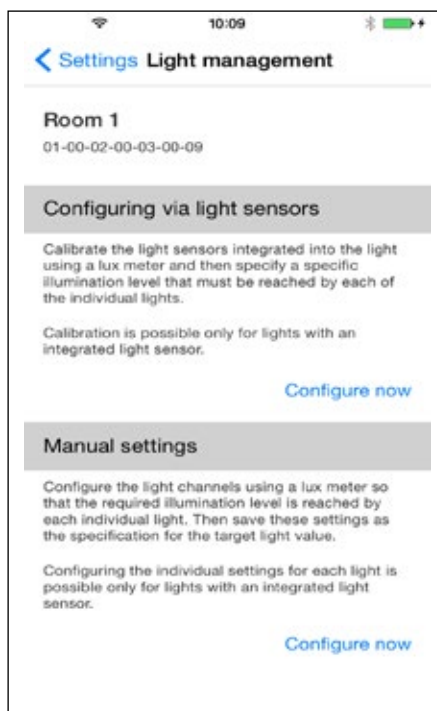
The afterglow is now set with a start and end time. Setting a start and end time is not the same as timer control. If the switch-off delay time in normal mode and the switch-off warning time elapse before the start time of the orientation light, the light switches to energy-saving mode without illumination. The time-controlled orientation light is then not activated. If you want to be sure that the orientation light remains lit overnight, set the start time to a time when movement will still be detected. After the switch-off delay time has elapsed, the light then switches to orientation light mode.

13.1.8 Resetting lights to factory settings

The **Factory settings** function restores the light to its default program settings. For more information on the default factory settings, see Section “4.7 Factory settings” on page 28.

Restoring factory settings:

- Tap on the <RESET> button and answer the confirmation prompt with <Yes>.
- ✓ The light goes out and subsequently uses default factory settings.

13.2 Light management submenu

Settings for constant light management are made in the Light management submenu. The type of setting differs depending on whether you are adjusting NOVA lights with light sensors or without light sensors.

The submenu **Configuring via light sensors** is intended for lights with light sensors. Here, you can calibrate the light sensors and then set the target light value.

The submenu **Manual settings** can be used to set lights with or without light sensors. Both types of setting and their differences are explained in the following chapters. See the background information above for information on the constant light regulation function.

13.2.1 Constant light management, light target value and light measurement

Constant light management uses the light target value to determine whether, for example, the light power increases in daylight and if a presence is detected, as the daylight is lower than the light target value. It can also determine whether the light switches off because daylight exceeds the light

target value. By default, the light target value is set to 500 lux per channel. This can be changed in the two submenus **Configuring via light sensors** and **Manual settings**.

Apart from the light target value, constant light management also requires the current light value in order to compare both values. The manner in which NOVA lights measure light depends on their design:

- **Master lights without a light sensor** capture the current light value using the integrated presence detector. One light value measurement must be performed by remote control.
- **Master lights with an additional light sensor** capture the current light value using the light sensor. The presence detector only detects presence. The light sensor can be calibrated.
- **Slave lights without a light sensor** do not measure a light value. If only one slave light without a light sensor is active on a channel, the constant light management for this channel uses the measured light value from the master light on the other channel.
- **Slave lights with light sensors** measure the current light value using the light sensor and report the light value to the master light that performs constant light regulation. The light sensor can be calibrated.

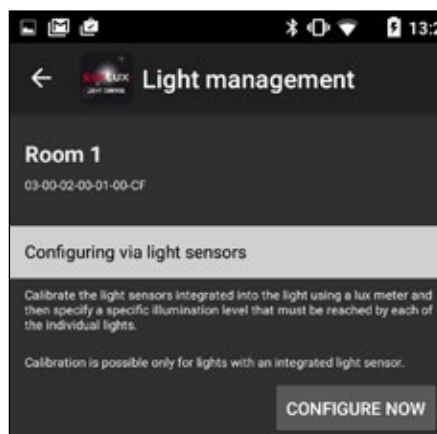
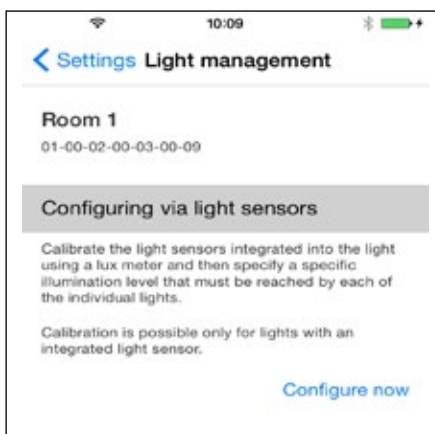
Channels and management of individual lights

Light target values always apply to one channel. However, constant light management can control different lights on one channel in different ways if these lights have light sensors. If a channel only has lights without light sensors, all lights are regulated to the same brightness value.

13.2.2 Configuring via light sensors

Prerequisites:

- Lux meter
- NOVA lights with light sensors



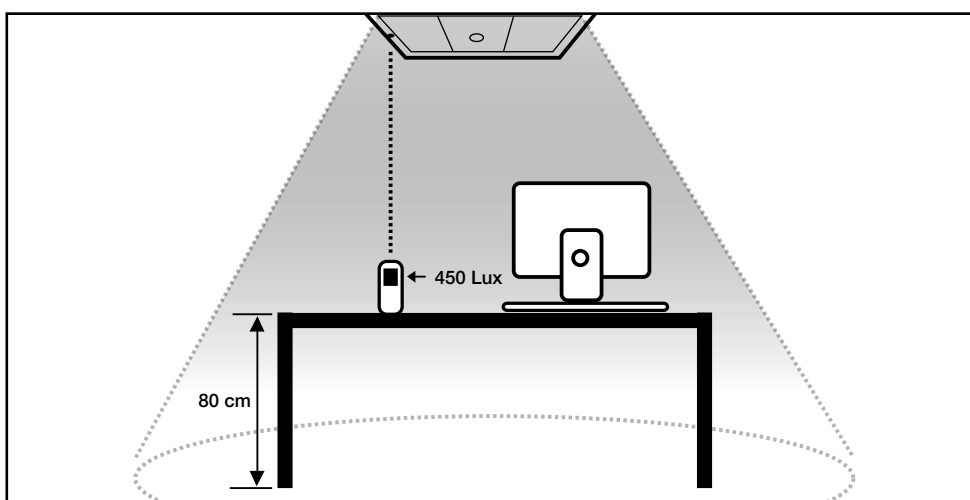
The setting is made in two stages: First, calibrate the light sensors. Then set the light target value in lux for each light channel.

Lux meter

A lux meter is required for calibration. The light values measured with the lux meter are transferred to the master light via the app. The master light compares the lux values at the location of the sensor with the lux values at the location of the lux meter and uses these values to calculate a conversion factor. Calibration allows the master light to calculate the illumination level required to maintain a constant target light value in the required location with greater precision.

Advantage of calibration

The light sensor is affected by light from reflective work surfaces, walls and floors. Calibration is important for ensuring that the surface remain evenly lit at a specific height.

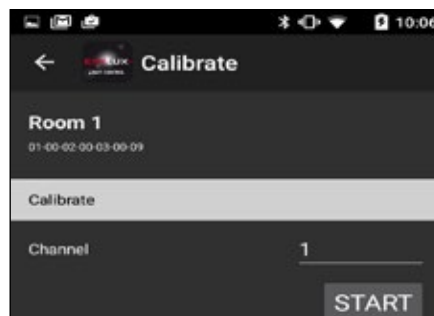


If a lighting channel is extended with DALI louvre lights, position the slave light with the light sensor in the darkest area of the room. This is the only way to ensure even the darkest area is sufficiently lit.

Calibration is performed individually for each lighting channel. During calibration, only the light channel that is being calibrated is active.

Calibrating light sensors:

- Start the calibration process by tapping on <Configure now> under **Configuring via light sensors**.
- ✓ The calibration menu is displayed:



- In the selection field, choose the channel for which you wish to calibrate the light sensors and confirm your selection.
- Tap on <Start>

Measurement 1

- Use a lux meter to measure the current light value at the desired location, e.g. at a desk. The reading is 600 lux for example.
- Enter the lux value in the field for value 1 and confirm your entry.
 - ✓ The master light receives the value and dims the light value for the next measurement.

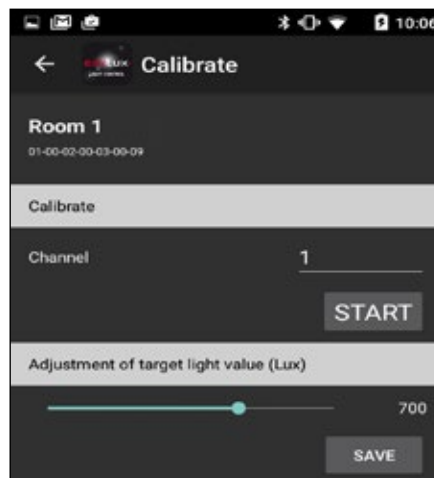
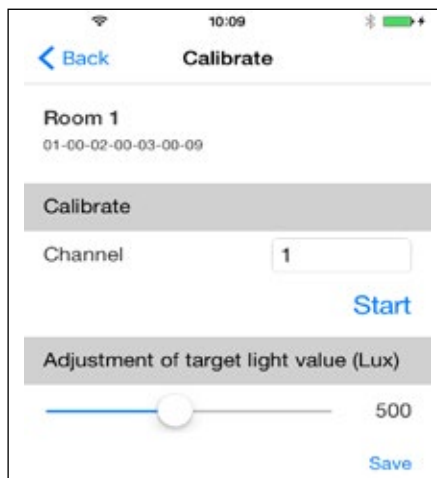
Measurement 2

- Now measure the light value again using the lux meter. The value is now less than the first measurement, and reads 550 lux for example.
- Enter this lux value in the field for value 2 and confirm your entry.
 - ✓ The master light receives the value and dims the light value for the next measurement.

Measurement 3

- Now measure the current light value using the lux meter. The reading is 450 lux, for example.
- Enter this lux value in the field for value 3 and confirm your entry.
 - ✓ The calibration process for the selected channel is now complete. The master light switches the lights off for a short time.
- To exit the calibration menu, confirm the message informing you of successful calibration. You can then set the light target value for this channel:

Setting the light target value in lux:



- Move the slide controller until the required lux value is shown in the number field.
- Tap <Save> to save the setting.
 - ✓ The light set value is set.
 Repeat the calibration and setting process for the remaining channels.

13.2.3 Manual settings

Prerequisites:

- Infrared remote control Mobil-PDi/MDi-Universal (item number EP10433993).
- The ambient light is below the required brightness at the time of setting.

Manual settings can be made for lights with and without light sensors. However, for lights with light sensors, ESYLUX recommends setting after calibration.

To set the light target value manually, use the slide controller to set the light value to the required value. The set brightness is then saved as the light target value. No lux value is entered when setting manually. However, you can use a lux meter to check the set brightness.


For lights without light sensors, manual settings are made in two stages:

1. Activate light measurement for the master light using the universal remote control.
2. Set the light target value for each channel using the lux meter or by sight using the slide controller and save the light target value.

Stage 1 is omitted for lights with light sensors.





Only for lights
without
light sensor

Activating light measurement using the integrated presence detector:

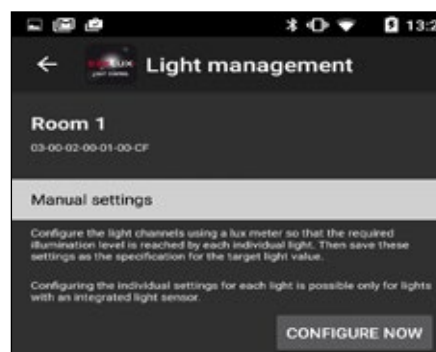
- Switch on the remote control using the  button.
- Ensure that the universal remote control displays "X-Light Control" in the first display line.
- If it does not: Set the universal remote control to the remote control X-Light Control. To do this, follow the steps in Chapter "6.1 Selecting X-Light Control remote control" on page 35.
- Choose a position as directly as possible underneath the master light for which you wish to activate light measurement.
- Aim the remote control directly at the detector so that only this light receives the remote control signal.



If you are using multiple Quadro sets in one room, you need to decide which master light should perform light measurement. For master lights connected in parallel, only one master light must perform light measurement.

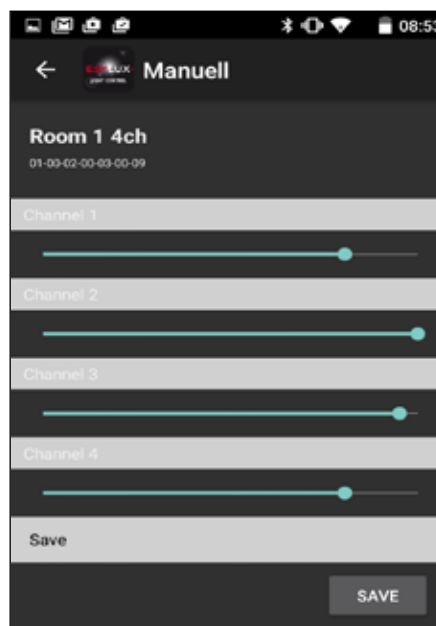
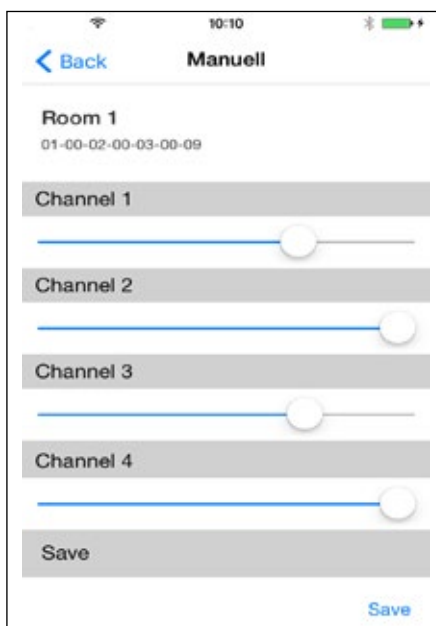
- Select the  button to choose the menu item <Functions> and confirm the selection with the  button.
- Select the  button to choose the menu item <Light value on> and confirm the selection with the  button.
 - ✓ The red LED flashes three times in the sensor head.
 - The detector now measures light values.
 - The remote control switches off automatically after a few minutes.

Setting the light target value:



- Start configuration of the light target value in the app by tapping on <Configure now>. under **Manual settings**.

- ✓ The settings menu is displayed:



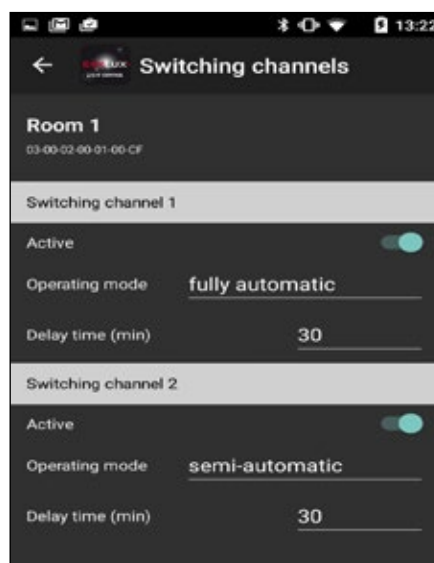
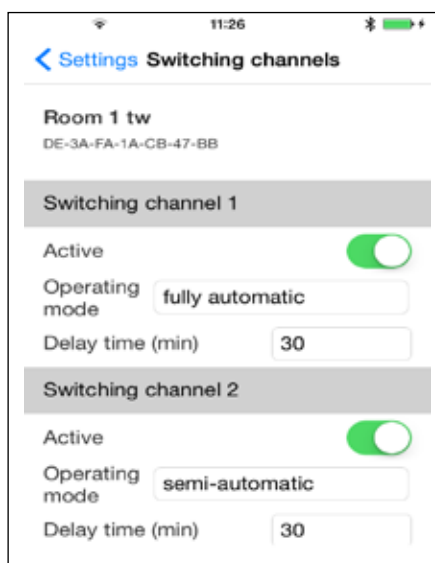
- Position yourself in the area of the room that will be illuminated by the lights assigned to channel 1.
- Slide the top slide controller until the required brightness is reached. If you are unsure whether the set brightness is too low, check the brightness using a lux meter.
- Position yourself in the area of the room that will be illuminated by the lights assigned to channel 2.
- Slide the top slide controller until the required brightness is reached. If you are unsure whether the set brightness is too low, check the brightness using a lux meter.
- Tap <Save>.
 - ✓ After the light target values have been received, the lights will go off briefly. The target light values are now saved.

Limitation for lights without light sensors



If lights without light sensors are in use on one channel, the **manual setting** process has one restriction: Although you can still use the slide controllers to set and save different brightnesses for each channel, the lights will still produce the same brightness. The reason: For lights without light sensors, brightness measurement is only performed by the master light. This means there is only one measured brightness value that constant light management uses for all channels.

13.3 Switching channels submenu



Switching channels control DALI switch devices that are connected to the C1 and C2 DALI interfaces of the master light. Non-DALI-compatible devices can be connected to the DALI switch devices. For example, you can use the switching channel to switch on non-DALI-compatible blackboard lighting in a classroom. Master lights are factory-configured to enable them to send commands to connected DALI switches via switching channels. In the Switching channels settings submenu, you can change this setting and other settings.



For information on how to temporarily activate and deactivate the switching channels, see Chapter “11.4 Switching the switching channels on and off” on page 77.

The setting options are identical for both switching channels. You can make the following settings:

13.3.1 Switching channel - Active



On. The master light sends control commands.



Off. The master light does not send any control commands.

Activating or deactivating the switching channel:

- Slide the switch to the right or left.
- ✓ The switching channel is activated or deactivated as required.

13.3.2 Switching channel - Operating mode

You can choose from the following operating modes:

Fully automatic: If this function is active, the DALI switch switches the connected device on when a presence is detected. This function can also be activated if the master light is operating in semi-automatic mode.

Semi-automatic: If this function is active, the DALI switch must be activated manually if the off delay time has elapsed in normal operation or override mode.

Pulse mode: If this function is active, the DALI switch switches devices such as automatic stairwell timers or current impulse relays on with an impulse. The impulse is repeated regularly for as long as movement is detected.

Setting the operating mode:

- Tap to activate the selection field.
- In the selection field that appears, select the required operating mode and confirm your selection.
 - ✓ The required operating mode is now set.

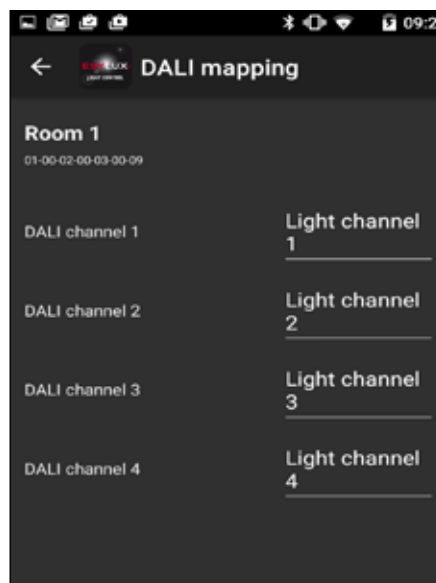
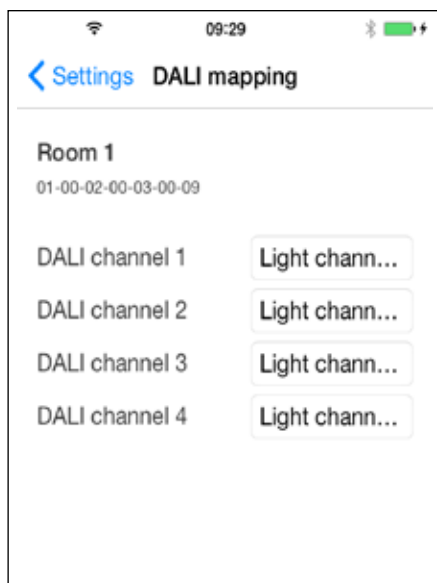
13.3.3 Switching channel - Delay time

This function sets how long the DALI switches keep the connected devices activated following the last detected movement. You can choose a time of one to 240 minutes.

Setting the switching channel delay time:

- Tap to activate the field containing the current delay time.
- In the selection field that appears, select the required time and confirm your selection.
 - ✓ The delay time is now set.

13.4 DALI mapping submenu



The two C1 and C2 DALI interfaces of the master light are initially assigned to the lighting channels numerically. For example, DALI interface C2 corresponds to the lighting channel C2.

You can change this assignment in the DALI mapping submenu. You can also assign both DALI interfaces to one lighting channel.

Assigning a different lighting channel to a DALI interface:

- Tap to activate the light channel field of the DALI channel to which another light channel is to be assigned.
- In the selection field that appears, select the required light channel and confirm your selection.
 - ✓ The light channel is now assigned to the DALI channel.

14 Settings via the 230 V button

Switch actuations are not transmitted to other master lights via DALI. To trigger several master lights that are connected via DALI, connect the switch in parallel on both master lights.

14.1 Button S1

The lighting can be switched on or off or dimmed using the S1 button.

14.1.1 Switching the lighting on/off

Switching the light on:

Prerequisites:

- The lighting is off.
- The brightness is below the set target brightness
- Press the S1 button.
 - ✓ The lighting switches on.



The light switches to normal mode when the button is pressed. If the brightness is above the target brightness, the light switches off again shortly after pressing the button.

Switching the light off:

Prerequisites:

- The lighting is switched on.
- Press the S1 button.
 - ✓ The lighting switches off.

14.1.2 Dim lighting

Adjusting the dimmer in one direction:

Prerequisites:

- The lighting is switched on.
- Press and hold the S1 button.
 - ✓ Lighting is dimmed.



The dimming process is interrupted as soon as you release the button.

The light enters override mode during the dimming process, which means the setting is not permanently saved.

Adjusting the dimmer in the other direction:

Prerequisites:

- The lighting is switched on
- Press and hold the S1 button.
 - ✓ The adjustment process starts, for example by increasing the brightness.
- Briefly release the S1 button, and then press and hold it again.
 - ✓ The adjustment process switches direction, for example, the brightness is reduced.

14.2 S2 button

The S2 button calls up stored light scenes. The scene that is activated depends on how often you press the button within 10 seconds.

14.2.1 Calling up scenes 1 to 4

Activating scene 1:

- Press the external S2
button once.
 - ✓ Scene 1 is activated.

Activating scene 2:

- Press the external S2 button twice within 10 seconds.
 - ✓ Scene 2 is activated.

Activating scene 3:

- Press the external S2 button three times within 10 seconds.
 - ✓ Scene 3 is activated.

Activating scene 4:

- Press the external S2 button four times within 10 seconds.
 - ✓ Scene 4 is activated.



If you press the S2 button more than four times within 10 seconds, the scene count starts again. In other words, pressing the button once or five times within 10 seconds activates scene 1. After 10 seconds, previous button presses are reset, and the count starts again.

15 Settings via DALI button

All lights can be controlled via external DALI buttons. The DALI button is an external module that sends standard 16-bit commands (IEC 62386-102:2009). It is connected to the DALI CO connection (see “Master light connection options” from page 23).

The following commands can be configured and executed via long or short pressing of the button:

- Lighting channel on/off
- Lighting channel dimming up/down

A DALI button module for scenes can also call up scenes.

15.1 List of DALI commands

DALI commands (16 bits)	Address	Description
UP	Broadcast	All lighting channels adjust the brightness upwards. No command to DALI switches.
UP	Group 0	Channel 1 adjusts the brightness upwards. No command to other lighting channels or DALI switches.
UP	Group 1	Channel 2 adjusts the brightness upwards. No command to other lighting channels or DALI switches.
UP	Group 2	Channel 3 adjusts the brightness upwards. No command to other lighting channels or DALI switches.
UP	Group 3	Channel 4 adjusts the brightness upwards. No command to other lighting channels or DALI switches.
DOWN	Broadcast	All lighting channels dim the brightness. No command to DALI switches.
DOWN	Group 0	Channel 1 dims the brightness. No command to other lighting channels or DALI switches.
DOWN	Group 1	Channel 2 dims the brightness. No command to other lighting channels or DALI switches.

DALI commands (16 bits)	Address	Description
DOWN	Group 2	Channel 3 dims the brightness. No command to other lighting channels or DALI switches.
DOWN	Group 3	Channel 4 dims the brightness. No command to other lighting channels or DALI switches.
OFF	Broadcast	All lighting channels and DALI switches are switched off.
OFF	Group 0	Channel 1 is switched off. No command to other lighting channels or DALI switches.
OFF	Group 1	Channel 2 is switched off. No command to other lighting channels or DALI switches.
OFF	Group 2	Channel 3 is switched off. No command to other lighting channels or DALI switches.
OFF	Group 3	Channel 4 is switched off. No command to other lighting channels or DALI switches.
OFF	Group 4	DALI switch full automation is switched off. No command to other lighting channels or DALI switches with semi-automation.
OFF	Group 5	DALI switch semi-automation is switched off. No command to other lighting channels or DALI switches with full automation.
RECALL MAX LEVEL	Broadcast	All lighting channels and DALI switches are switched on.
RECALL MAX LEVEL	Group 0	Channel 1 is switched on. No command to other lighting channels or DALI switches.
RECALL MAX LEVEL	Group 1	Channel 2 is switched on. No command to other lighting channels or DALI switches.
RECALL MAX LEVEL	Group 2	Channel 3 is switched on. No command to other lighting channels or DALI switches.
RECALL MAX LEVEL	Group 3	Channel 4 is switched on. No command to other lighting channels or DALI switches.

DAI commands (16 bits)	Address	Description
RECALL MAX LEVEL	Group 4	DAI switch full automation is switched on. No command to other lighting channels or DAI switches with semi-automation.
RECALL MAX LEVEL	Group 5	DAI switch semi-automation is switched on. No command to other lighting channels or DAI switches with full automation.
Only for DAI button modules for scenes:		
GO TO SCENE 0 / Command 16	Broadcast	Activate scene 1
GO TO SCENE 1 / Command 17	Broadcast	Activate scene 2
GO TO SCENE 2 / Command 18	Broadcast	Activate scene 3
GO TO SCENE 3 / Command 19	Broadcast	Activate scene 4

16 Maintenance

The light does not contain any components that require maintenance. The device can only be replaced as a complete unit.

16.1 Cleaning

CAUTION!

Using the wrong cleaning products will damage the device!

- Use a lint-free cloth that is either dry or dampened with water.

16.2 Troubleshooting

Problem solving

Fault	Cause/solution
Lighting is off	<ul style="list-style-type: none"> • Ambient light level is above the preset two-light switch value • Lighting has been switched off manually • The switch-off delay time has been set too short

Fault	Cause/solution
Lighting is switched off during the hours of darkness despite the presence of persons.	<ul style="list-style-type: none"> Ambient light level is above the preset twilight switch value. Lighting has been switched off manually
Lighting does not switch off or lighting switches on spontaneously when no persons are present.	<ul style="list-style-type: none"> The switch-off delay time has not yet elapsed. Erroneous function triggered by animals or plants. Moving objects such as curtains by open windows are in the field of detection. Thermal interference such as heating or ventilation is in the field of detection.
Detector does not respond.	<ul style="list-style-type: none"> Lack of power supply; check the mains voltage.

17 Technical data

Mains voltage	230 V ~/50 Hz
Master light rated output:	40 W–130 W (130 W: maximum value with three slave lights connected);
Set: lave light:	1 * 40 W + 3 * 30 W
Master light standby consumption:	< 4 W
Set:	< 4
Permissible ambient temperature	0°C to +40°C
For illuminants	140 LEDs per light (inclusive)
Ballast	Electronic ballast
Approx. dimensions	PNLNOV10xxxxxxxxxxxxxxxxx: Width 593 mm * height 593 mm * depth 57,6 mm PNLNOV11xxxxxxxxxxxxxxxxx: Width 618 mm * height 618 mm * depth 57,6 mm
Installation dimension	Installation depth 60 mm; minimum ceiling installation height to allow NOVA lights to be installed directly in the suspended ceiling without removing the braces: 140 mm.
Installation type	Panel light
Terminal	2.5 mm ² /1.5 mm ²

Interfaces	ESYLUX Light Control, DALI
Operating interfaces	Models PNLNOVxxxxxxxxxxxxxELCMxx and sets PNLNOVxxxxxxxxxxxxxELCXxx: Infrared, connection for button Models PNLNOVxxxxxxxxxxxxxELCMxxB and Sets PNLNOVxxxxxxxxxxxxxELCXxxB: Infrared, connection for push button, Bluetooth
Integrated presence detector	All master lights
Field of detection for presence detector	360°
Range (at recommended installation height of 2.5 m)	8 m
Light sensor	Only models PNLNOVxxxxxxxxWHXLxxxxxx
Housing material	powder-coated metal
Weight:	
Light	5000 grams
Set	20000 grams
Colour	white, similar to RAL 9003
Diffusor	PNLNOVxxxxxxxxWHCxxxxxxx: Crystal PNLNOVxxxxxxxxWHOxxxxxxx: Milky
Protection type	IP 20
Protection class	I (master light)/III (slave light)
Color Rendering Index (CRI)	>85 (3000 K) / > 80 (4000 K)
Luminous flux (light)	3000 K Milky: ca. 3100 lm 3000 K Crystal: ca. 3400 lm 4000 K Milky; ca. 3300 lm 4000 K Crystal: ca. 3600 lm
Light colour	PNLALCxxxxx830xxxxxxx: approx. 3000 K PNLALCxxxxx840xxxxxxx: approx. 4000 K
Glare rating	UGR ≤ 19 (Milky)/ UGR ≤ 16 (Crystal)
Color Quality Scale (CQS)	>85 (3000 K) / > 80 (4000 K)
Colour tolerance	SDCM < 3
Beam angle	110°
Energy efficiency class	A++ to A
Without illuminant	No
LED service life	50.000h L80B10

Conformity	CE, RoHS, WEEE
Technical and design features may be subject to change. The power output may deviate from the specified value by +/- 10%.	



18 Disposal

Owners of old devices are legally obliged to correctly dispose of this device. Contact your local town council for more information.

19 EC Declaration of Conformity

CE declaration

The products listed below comply with the following standards:

- EMC 2004/108/EC
- RoHS 2011/65/EU
- LVD 2006/95/EC
- Ecodesign 2009/125/EC

20 ESYLUX MANUFACTURER'S GUARANTEE

ESYLUX products are tested in accordance with applicable regulations and manufactured with the utmost care. The guarantor, ESYLUX Deutschland GmbH, Postfach 1840, 22908 Ahrensburg, Germany (for Germany) or the relevant ESYLUX distributor in your country (visit www.esylux.com for a complete overview) provides a guarantee against manufacturing/material defects in ESYLUX devices for a period of three years from the date of manufacture.

This guarantee is independent of your legal rights with respect to the seller of the device.

The guarantee does not apply to natural wear and tear, changes/interference caused by environmental factors or damage in transit, nor to damage caused as a result of failure to follow the user or maintenance instructions and/or as a result of improper installation. Any illuminants or batteries supplied with the device are not covered by the guarantee.

The guarantee can only be honoured if the device is sent back to the guarantor with the invoice/receipt, unchanged, packed and with sufficient postage, along with a brief description of the fault, as soon as a defect has been identified.

If the guarantee claim proves justified, the guarantor will, within a reasonable period, either repair the device or replace it. The guarantee does not cover further claims; in particular, the guarantor will not be liable for damages resulting from the device's defectiveness. If the claim is unfounded (e.g. because the guarantee has expired or the fault is not covered by the guarantee), then the guarantor may attempt to repair the device for you for a fee, keeping costs to a minimum.