

Operating instructions

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DALI EASY RMC

Version 1.0

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Safety information



The following information is provided for your safety:

- Please read these operating instructions carefully before installing and using the DALI EASY RMC remote control. This is the only way to ensure that you use the equipment safely and correctly. Keep these operating instructions in a safe place for future reference. You should make sure that everyone who uses the DALI EASY RMC has read these operating instructions.
- The relevant safety and accident prevention regulations must be observed.

Definition of terms

Sequence

A sequence is taken to be the automatic retrieval of stored lighting scenes and their cyclic playback.

Group, luminaire group

A group is a collection of luminaires connected to the same DALI output channel. This means that all the luminaires in a group always have the same brightness.

IR receiver

The infra-red receiver receives the signals from the remote control and forwards them to the DALI EASY controller.

Short press

A short press means pressing a pushbutton for less than one second. A short press is used for example for switching luminaires on and off.

Long press

A long press means pressing a pushbutton for more than one second. A long press is used for example for dimming the luminaires.

Light switch

Light switches are used to switch luminaires on and off in a room and to fade them up and down. They are connected to the "external switch" input on the DALI EASY controller.

Scene, lighting scene

A lighting scene defines the lighting situation in a room. This presupposes that there are a number of luminaires or luminaire groups in a room and that their brightness can be adjusted independently of one another.

Example 1: Office lighting

Offices often have rows of luminaires running in parallel to the window.

Lighting scene A: The luminaires near the window are set to minimal brightness. The luminaires furthest away from the window are set to maximum brightness.

Lighting scene B: All the luminaires are set to the same brightness.

(after dusk)

Example 2: Coloured effect lighting

The luminaires or luminaire groups have different colours (red, green, blue, white). They are set to different brightness levels according to the shade of colour required for the room lighting. This mixing colour is a lighting scene.

Fade time

The fade time is the time in which the lighting system changes from one lighting scene to the next in sequencer mode.

Cycle time

The cycle time is the time in which the daylight simulation system runs through a complete daylight cycle.

Function

The remote control sends digital coded Infra-red signals to the IR-receiver type DALI EASY IR. The receiver converts the Infra-red into corresponding telegrams and transmits them to the connected DALI EASY control units.



Application

The infra-red receiver can be mounted in a luminaire, a ceiling panel or, with an appropriate cover, in a cavity socket. Make sure that the remote control can point at the infra-red sensor at an angle as steep as possible. Bear in mind that the maximum range of the remote control is around 10-15 metres.



Note:

Make sure that there is a line of sight between the IR receiver and the remote control. Up to four IR receivers may be connected. To ensure that the remote control function operates properly, the IR receiver must not be exposed to direct light. Wherever possible, mount the IR receiver in a shaded spot.

Description of the button functions

Ch1 ... Ch4:

Buttons "Ch1" to "Ch4" switch the luminaires in a group on and off and fade them up and down.

- Short press: The luminaires in the selected group are switched on or off.
- Long press: The luminaires in the selected group are faded up or down. The fade direction changes each time the button is held down. If the group is switched off, a long press switches it on and fades it from minimum to maximum brightness.

Start; time +:

This button starts the sequence or lengthens the fade time.

- Short press: " $5\mathcal{E}$ " appears on the display. The stored lighting scenes are called up cyclically starting with Scene 1. If a scenes was called up before the sequence started, the sequence will start with the fade to the next scene.
- Long press: The fade time is shown on the display for three seconds. The fade time can be changed while the display is active. This time is lengthened or shortened with the "Start; *time* +" and "Stop; *time* -" buttons. The new fade time is activated when the sequence is next started.

Stop; time -:

This button stops the sequence or shortens the fade time.

- Short press: "HD" appears on the display The sequence is stopped. The sequence can be resumed with the "Start; *time* +" button.
- Long press: The fade time is shown on the display for three seconds. The fade time can be changed while the display is active. This time is lengthened or shortened with the "Start; *time* +" and "Stop; *time* -" buttons. The new fade time is activated when the sequence is next started.

Scene 1 ... Scene 4:

These buttons are used to store the individual scenes and call them up.

Short press: The selected scene ($1 \dots 1$) appears on the display. The scene is called up.

Long press: The selected scene (1, .., -1) appears on the display after three seconds. The scene is stored. The luminaires will flash once to confirm that the scene has been stored.

On/Off; Dimming:

This button is used to switch all the luminaires on and off and to change their brightness.

- Short press: All the luminaires are switched on or off.
- Long press: All the luminaires are faded up or down. The fade direction changes each time the button is held down. If the luminaires are switched off, a long press switches them on and fades them from minimum to maximum brightness.

Remote control display

Display in response to buttons

| Display | Meaning | Description |
|---------|-----------------------|--|
| 58 | sequence | The sequence or daylight simulation is started |
| HÜ | hold | The sequence or daylight simulation is put on hold |
| 14 | scene 14 | Scenes 1 to 4 are called up |
| d 1d4 | daylight scene 14 | Scenes 1 to 4 of the daylight simulation are called up |
| d 5 | daylight sequence | Daylight simulation is started |
| 15 | learn IR- sequence | A new IR coding is transferred |
| • | | A command via "Ch14" or "On/Off/Dimming" is transferred |
| | | The function is not available in the current operating mode. |

Display for the fade time of a sequence

| Description | Display | Time range | |
|--------------|---------|--------------------|--|
| Effect Light | 0.10.9 | 0.1 to 0.9 seconds | |
| Wellness | 0159. | 1 to 59 seconds | |
| Long Time | 0 /99 | 1 to 99 minutes | |

Display for the cycle time in daylight simulation

| Description | Display | Time range |
|---------------------|---------|---------------|
| Daylight simulation | 0124 | 1 to 24 hours |

Remote control settings

The following settings can be made using the DIP switches in the battery compartment of the remote control:

| DIP s | witch | Function |
|-------|---------|--|
| 1 | OFF | IR code 1 is active |
| 1 | ON | IR code 2 is active |
| 2 | OFF | Storing of scenes is disabled |
| 2 | ON | Storing of scenes is enabled |
| 3 | OFF | Sequencer mode is disabled |
| 3 | ON | Sequencer mode is enabled |
| 4 | OFF | Daylight simulation is disabled |
| 4 | ON | Daylight simulation is enabled |
| 3/4 | ON / ON | Learn mode for transferring the IR code to DALI EASY <u>and</u> resetting DALI EASY to the factory defaults (RESET) |

Disabling scene storage

Storing of scenes can be disabled by means of DIP switch 2. The ensures that scenes cannot be changed by mistake. The DIP switch positions are shown in the table.

Changing between sequencer mode and daylight simulation

Sequencer mode and daylight simulation mode are activated using DIP switches 3 and 4. Both operating modes may also be deactivated. DALI EASY then operates in lighting control mode. The necessary DIP switch positions are shown in the table.

RESET or setting the IR code

The two IR codes enable two separate DALI EASY lighting control systems to be operated in the same room, each with its own remote control with no interference between them.

This is how you process a RESET resp. change the infra-red codes:

- 1. Set the infra-red code you want on DIP switch 1:
 - DIP switch 1 to OFF: IR code 1
 - DIP switch 1 to ON: IR code 2
- 2. Note the settings of DIP switches 3 and 4.
- 3. Set DIP switches 3 and 4 to ON.
- 4. Press any button on the remote control (the remote control must be pointing at the IR sensor).
 - " \mathcal{L} 5" then appears on the remote control display. The luminaires provide confirmation of the setting:
 - For IR code 1: the luminaires flash once
 - For IR code 2: the luminaires flash twice
- 5. Set DIP switches 3 and 4 to their original positions.

The functions of the DIP switches are given in the table above.

Notes on RESET and changing the IR code:

In the event of a RESET or change of IR code, all the connected control units are reset or changed. You should therefore disable the connection to the IR receiver for the control units that are not to be reset or changed, or disconnect the power supply for these units. If there is more than one system in the reception area their IR receivers must first be disconnected or adequately covered to avoid an unwanted RESET.

Appendix

Technical data

| EASY RMC |
|--|
| Micro AAA / LR03 (Alkaline type) |
| bance immune 38 KHz Rmap protocol, digital coded. |
| RAM specific codings selectable |
| ox. 10-15m (follow mounting instructions of the IR-receiver) |
| + 40°C |
| |
| : 57 x 26 mm (L x B x H) |
| |

CE The CE symbol signifies compliance with the relevant EU Directives.