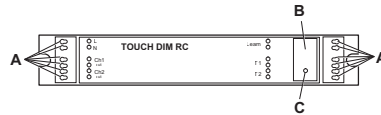# OSRAM

TOUCH DIM RC

Radio receiver module
Operating instructions

Description

Purpose and application

The TOUCH DIM RC radio receiver module enables the wireless control of two luminaire groups, each with up to 15 electronic control gears featuring the TOUCH DIM® function.

The radio receiver can be installed in luminaires or, with the optional cable strain relief kit LMS CI BOX, in suspended ceilings.

Function

The radio receiver converts the radio signals from TOUCH DIM WCU wall transmitters or TOUCH DIM RMC hand-held transmitters to TOUCH DIM signals and transmits these to the connected electronic control gears.

Design

The radio receiver is made up of the following components:

- Connections (A):
  - L, N: power supply
  - Ch 1, Ch 2: floating outputs, e.g. for connecting electronic control gear (channels 1 and 2)
  - Learn: optional pushbutton input for training and untraining wall-mounted/hand-held transmitters
  - T1, T2: optional pushbutton inputs for control via a cable
- „Press to activate learn mode" button for training/untraining wall-mounted/hand-held transmitters (B)
- LED (C)

Operation

Functionality

The radio control system consists of two channels (Ch 1 und Ch 2). The luminaire groups connected to outputs „Ch 1" and „Ch 2" can be independently operated with TOUCH DIM WCU wall transmitters or TOUCH DIM RMC hand-held transmitters.

Basically, the transmitters can be used to operate all TOUCH DIM/TOUCH DIM sensor functions of OSRAM electronic control gear.

The wall-mounted and hand-held transmitters must be trained in the radio receiver.

Note: To operate the wall-mounted and hand-held transmitters, see the separate instructions.

Optionally, the luminaire groups can also be operated with external pushbuttons connected to inputs T1 and T2. The pushbutton at T1 acts on channel 1 (Ch 1) and the pushbutton at T2 acts on channel 2 (Ch 2).

Training/untraining wall-mounted/ hand-held transmitters

① To activate the learn mode, press and hold the „press to activate learn mode" button (B) using a suitable tool (e.g. an insulated screwdriver) or the pushbutton connected to the „Learn" input.

Confirmation: „Learn mode active" LED (C) and lighting flash.

While the LED and lighting flash, up to 30 wall transmitters can be trained or untrained.

② Press the button of the wall-mounted or hand-held transmitter being trained or untrained.

Wall transmitter: upper button.
→ The upper button operates channel 1; the lower button automatically operates channel 2.

Hand-held transmitter: button 1 (or button 3).
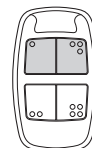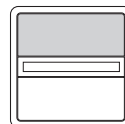→ Button 1 (button 3) operates channel 1; button 2 (button 4) below it automatically operates channel 2.

Confirmation:
- Training: The „learn mode active" LED and the lighting light up for 4 s, go out for another 4 s and then continue to flash.
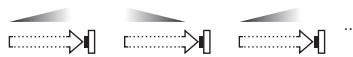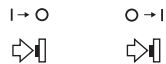- Untraining: The „learn mode active" LED and the lighting go out for 4 s and then continue to flash.

Note: In learn mode, the sensitivity of the receiver module is reduced to avoid training neighbouring transmitters accidentally. Move the wall-mounted or hand-held transmitter closer to the radio receiver.

③ To end the learn mode, press the „press to activate learn mode" button or the pushbutton connected to the „Learn" input. The learn mode is ended automatically after 30 seconds if there is no activity.

Operation (cont.)

I → O   O → I

⮕▷❙   ⮕▷❙

⟵⟶▷❙   ⟵⟶▷❙   ⟵⟶▷❙ ...

Switching on and off the luminaires

A short press on one of the channel pushbuttons of the wall-mounted or hand-held transmitter or the pushbuttons connected to inputs T1 and T2 switches the luminaire group connected to the corresponding channel on or off.

Changing the brightness

A long press on one of the channel pushbuttons of the wall-mounted or hand-held transmitter or the pushbuttons connected to inputs T1 and T2 changes the brightness of the luminaire group connected to the corresponding channel.

Each repeated long key button press causes a toggle between increased brightness and decreased brightness.

Troubleshooting

If you cannot remedy the fault, please contact the Customer Service department of the luminaire manufacturer.

Luminaire does not function
No mains voltage present.
→ Use a voltage tester to test if mains voltage is present.
Illuminants are faulty.
→ Replace illuminant.
Luminaire was switched off via the wall-mounted or hand-held transmitter.
→ Switch on luminaire.

Luminaire does not react as expected to the press of a button.
Wall-mounted or hand-held transmitter has not been trained.
→ Train the wall-mounted or hand-held transmitter.

The radio receiver is too far away from the wall-mounted or hand-held transmitter.
→ Reduce the distance between the wall-mounted or hand-held transmitter and the radio receiver.
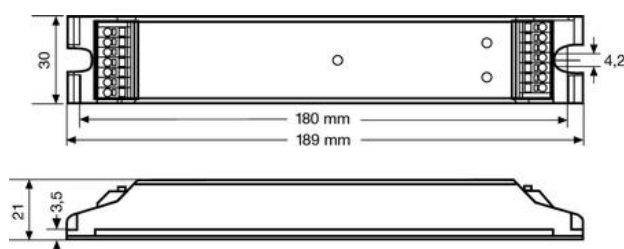
Button on the wall-mounted or hand-held transmitter was pressed too long or too short.
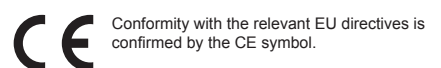→ See „Changing the brightness manually".

Appendix

Technical data

Operating voltage	220-240 V / 50-60 Hz
Current consumption	Approx. 9 mA
Power consumption	Max. 1.5 W
Inputs (learn, T1, T2)	Inputs for floating make contacts
Outputs (Ch 1, Ch 2)	Floating semiconductor relay, max. 45 mA / 240 V
Load capacity of signal output (electronic control gears per output)	Max. 15 QTi DALI ECG , HTi transformers, 15 QT DALI ECG or OTi DALI DIM LED dimmer
Max. number of wall-mounted/ hand-held transmitters	30
Operating temperature	0 °C … +50 °C
Frequency band	868.3 MHz
Integrated overheating protection	Resets independently, not replaceable
Functional range	In the open air: Approx. 300 m
	Halls: Approx. 100 m
	Passageways and corridors: Approx. 50 m
	Rooms with wooden or plasterboardwalls: Approx. 30 m (max. 7walls)
	Rooms with brick or autoclaved aerated concretewalls: Approx. 20 m (max. 3 walls)
	Rooms with reinforced concrete walls: Approx. 10 m (max. 1 wall)
Protection class	II
Protection type	IP 20
Dimensions (L x W x H)	189 x 30 x 21 mm

Dimensioned drawing

30

4,2

180 mm

189 mm

21   3,5

Dimensioned drawing

CE   Conformity with the relevant EU directives is confirmed by the CE symbol.