

## Radio push-button controller, built-in

Art. No. : FST1240EB

### Operating instructions

## 1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

**Danger of electric shock.** The 1...10 V control voltage is a functional extra-low voltage (FELV), and can be connected to mains potential. On installing, ensure safe separation to SELV/PELV systems. In order to disconnect the connected luminaires, disconnect both the mains voltage and control voltage circuits.

**Danger of electric shock.** Device is not suitable for disconnection from supply voltage.

The radio communication takes place via a non-exclusively available transmission path, and is therefore not suitable for safety-related applications, such as emergency stop and emergency call.

Do not shorten, extend or strip the antenna. Device can be damaged.

These instructions are an integral part of the product, and must remain with the end customer.

## 2 Device components

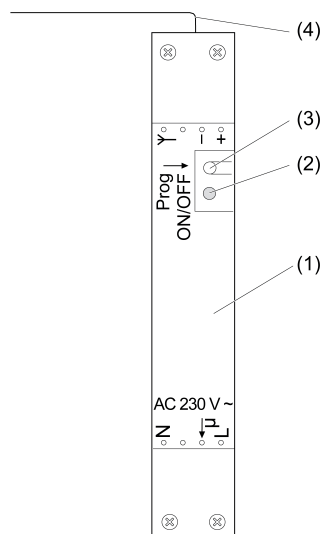


Figure 1

- (1) Radio control unit
- (2) LED
- (3) Programming button
- (4) Antenna

## 3 Function

### System information

By statute, the transmitting power, the reception characteristics and the antenna cannot be changed.

The range of a radio system from the transmitter to the receiver depends on various circumstances.

The range of the system can be optimised by selecting the optimal installation location, taking into account the structural circumstances.

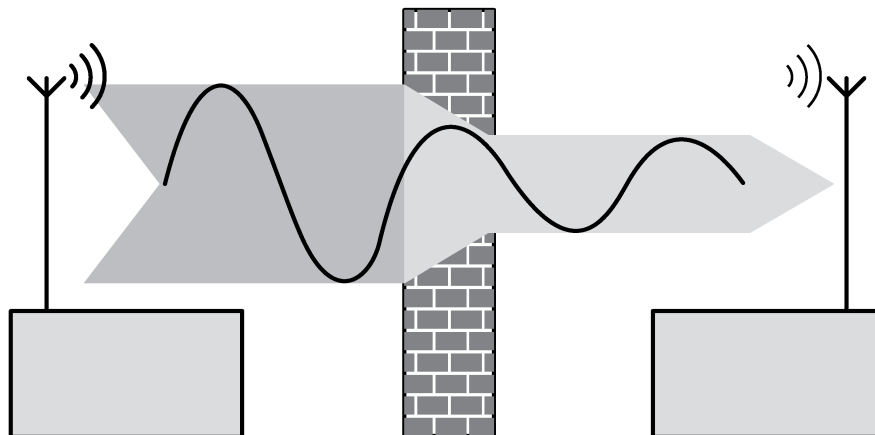


Figure 2: Reduced range due to structural obstacles

#### Example of penetration of various materials:

Material	Penetration
Wood, Plaster, Plasterboard	approx. 90%
Brick, Chipboard	approx. 70%
Reinforced concrete	approx. 30%
Metal, Metal grid	approx. 10%
Rain, Snow	approx. 1-40%

#### Intended use

- Radio-controlled switching and brightness setting for lamp operating devices with 1-10 V interface
  - Installation in false ceilings or surface mounting
  - Operation with suitable radio transmitters
- i** It is not possible to teach a combination of presence detector and motion detector.

#### Product characteristics

- Switch-on brightness can be saved permanently
- Switch-on via bulb-preserving soft start
- Light scene operation possible
- Constant light regulation possible in connection with a radio presence detector
- Run-on time of approx. 1 minute in connection with radio motion detectors

## 4 Operation

A radio transmitter has to be taught in order to be able to operate the device.

- i** Observe the instructions for the radio transmitter.

## 5 Information for electrically skilled persons

### 5.1 Fitting and electrical connection



#### DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

#### Mounting and connecting the device

Maintain a distance of at least 0.5 m from metal surfaces and electrical devices, e.g. microwave ovens, hi-fi and TV systems, electronic ballasts or transformers.

Maintain a distance of at least 1 m between transmitter and receiver in order to prevent overmodulation of the receiver.

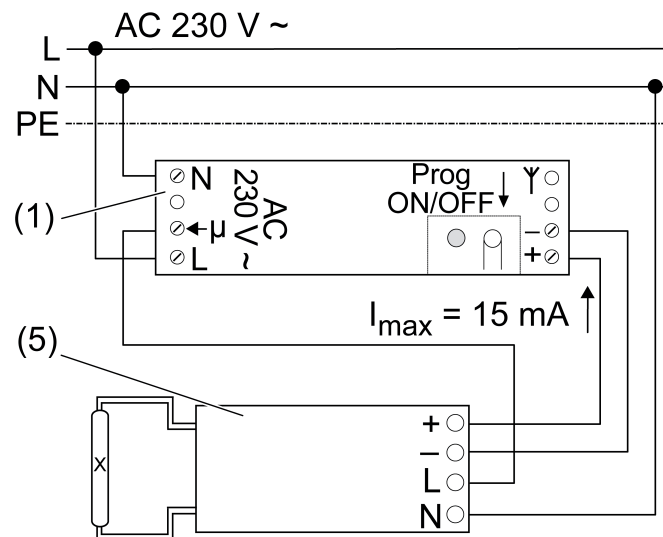


Figure 3

- Connect control unit (1) and lamp operating device (5) in accordance with connection diagram (figure 3).
- If multiple miniature circuit breakers supply dangerous voltages to the device or load, couple the miniature circuit breakers or label them with a warning, to ensure release is guaranteed.
- i** Lay the antenna stretched out freely if possible.
- i** Lay the control cable, ensuring that it is of the appropriate type and cross-section for the VDE specifications for 250 V cables, control voltage has basic insulation.
- i** The maximum number of lamp operating devices that can be controlled by the device is a function of the maximum connected load. The maximum control current must not be exceeded (see Technical data).
- i** Only use lamp operating devices and fluorescent lamps that are of the same type, the same power level, and from the same manufacturer. Otherwise there may be differences in brightness between the individual lamps.
- Switch on mains voltage.
- i** The load can be switched on or off by pressing the programming button briefly (for about 1 second).

## 5.2 Commissioning



### **DANGER!**

**Electrical shock when live parts are touched.**

**Electrical shocks can be fatal.**

**Before working on the device, cover up live parts in the working environment.**

- i** Observe the instructions for the radio transmitter.

### **Teach-in radio transmitter**

- i** If all memory slots are occupied, a radio transmitter which has already been taught must first be deleted. To do this, delete all taught channels and light scenes of the radio transmitter individually.

The distance between the receiver and the radio transmitter is from 0.5 m to 5 m.

Load is switched off.

- Press the programming button for approx. 4 seconds.  
The LED blinks. The device is in programming mode for approx. 1 minute.
- Trigger teach telegram on radio transmitter (see instructions for radio transmitter).  
LED lights up. The radio transmitter has been taught.
- Press the programming button briefly.  
The load switches on. The device is in operating mode.

- i** The programming mode is exited automatically after about 1 minute.

- i** Teach light scene buttons separately.

- i** When a radio transmitter is taught, All On and All Off buttons that are present are automatically also taught.

### **Save switch-on brightness**

A set brightness value can be saved in the device as the switch-on brightness.

- i** In the state as supplied the switch-on brightness is set to maximum.

- Set light to the required brightness.
- Press programming button for longer than 4 seconds.  
Switch-on brightness is saved.  
For confirmation the lighting switches off briefly and then on again.

- i** The saved switch-on brightness is retained in the event of a power failure.

### **Deleting radio transmitters individually**

- Teach the radio transmitter to be deleted again (see Teaching a radio transmitter).  
LED blinks quickly. The radio transmitter has been deleted.

- i** If several channels or light scenes of a radio transmitter have been taught, they all must be deleted individually.

### **Deleting all radio transmitters**

Load is switched off.

- Press the programming button for approx. 20 seconds.  
After approx. 4 seconds the LED blinks.  
After approx. 20 seconds the LED flashes.
- During the next 6 seconds, release the programming button and press it again for approx. 1 second.  
LED lights up. The radio transmitters will be deleted.  
LED blinks quickly. All radio transmitters have been deleted.

## 6 Appendix

### 6.1 Technical data

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Control voltage	1 ... 10 V
Control current	max. 15 mA
Ambient temperature	0 ... +55 °C
Degree of protection	IP 20
Circuit breaker	max. 10 A
Connected load	
Ohmic load	1800 W
Electronic ballast	Type-dependent
Switching current	8 A
Contact type	μ contact
Dimensions L×W×H	187×28×28 mm
Radio frequency	433.05 MHz ... 434.79 MHz
Receiver category	2
Teachable radio transmitter	max. 30

### 6.2 Troubleshooting

#### Device does not respond, or only sometimes.

Cause 1: battery in the radio transmitter is empty.

Change the battery in the radio transmitter.

Cause 2: Radio range exceeded. Structural obstacles reduce the range.

Check the installation situation.

Check routing of antenna. Laying the antenna stretched out increases the range.

Using a radio repeater.

### 6.3 Conformity

Albrecht Jung GmbH & Co. KG hereby declares that the radio system type

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corresponds to the directive 2014/53/EU. You can find the full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address:

[www.jung.de/ce](http://www.jung.de/ce)

### 6.4 Warranty

The warranty follows about the specialty store in between the legal framework as provided for by law.

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