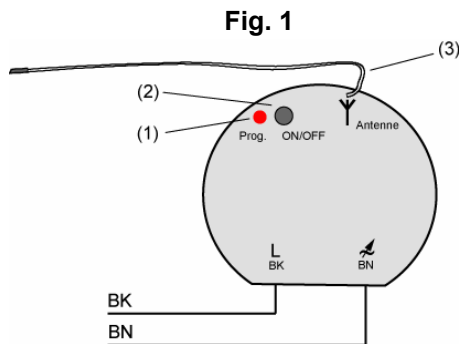


Radio-control universal dimmer Mini

Order no.: 2255 00

Device layout



- (1) LED
- (2) programming button
- (3) antenna



Safety instructions

Electrical equipment must be installed and fitted by qualified electricians only.

Failure to observe the instructions may cause damage to the device and result in fire or other hazards.

To avoid electric shocks, disconnect the circuit breaker before working on the load or on the device itself.

The device is not suited for safe disconnection of the mains supply.

Shutting off the device does not separate the load electrically from the supply.

If inductive transformers are used, each transformer must be fuse-protected on the primary side in accordance with the manufacturer's instructions.

Use only safety transformers in acc. with EN 61558-2-6 (VDE 0570 Part 2-6).

The radio transmission makes use of non-exclusive frequencies and is therefore not suitable for safety-related applications such as emergency shut-offs and emergency calls.

Do not connect energy-saving lamps to the device.

Do not connect luminaires with integrated dimmer to the device.

Do not connect the device to socket outlets. Risk of connecting unsuitable loads.

The antenna is provided with basic insulation.

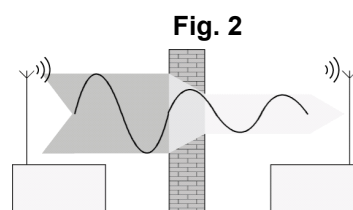
Do not lay the antenna outside the mounting box.

These operating instructions are part of the product and must be left with the final customer.

Function

System information

The transmitting range of a radio system is dependent on transmitter output power, receiver characteristics, atmospheric humidity, mounting height and local building conditions.



Examples for the penetration of building materials by radio waves:

Dry material	Degree of penetration
Timber, gypsum, gypsum plasterboards	approx. 90 %
Brickwork, pressboards	approx. 70 %
Reinforced concrete	approx. 30 %
Metal, metal grating	approx. 10 %
Rain, snow	approx. 0 - 40 %

The interconnection of this radio system with other communication networks must comply with national legislation.

This radio system must not be used for communication beyond property boundaries.

Operation in Germany is subject to the relevant regulations (Amtsblatt Vfg 30/2006).

If utilized in conformity with its designated use, this device fulfills the requirements of the R&TTE Directive (1999/5/EC). The declaration of conformity can be found on our Web-site.

The device is approved for use in all EU and EFTA countries.

Designated use

- Only for switching and dimming of 230 V incandescent lamps, 230 V halogen lamps and LV halogen lamps with inductive transformers or with TRONIC transformers.
- Installation in flush-mounting boxes as per DIN 49073.
- Operation with suitable radio-control transmitter.

Operation

A suitable radio-control transmitter must have been programmed beforehand.

Switching the lights on and off

- Press the key of a programmed transmitter briefly.

Dimming the light

The light is on.

- Press the key of a programmed transmitter longer.

Product features

- The dimer automatically selects the dimming mode adapted to the load (phase cut-on or phase cut-off operation).

Load types	Electrical characteristics	Dimming principle
230 V incandescent lamps	resistive load	phase cut-off
230 V halogen lamps	resistive load	phase cut-off
LV halogen lamps with TRONIC transformers	capacitive load	phase cut-off
LV halogen lamps with inductive transformers	inductive load	phase cut-on

- protected against short-circuits and over-temperature conditions
- switch-on brightness can be stored as memory value
- light-scene operation
- constant light control available
- can be combined with radio-control movement detector



Telecontrol signals from the power supply companies may cause flickering of the lamps. This is not a defect of the product.

Switching on the lights with minimum brightness

The light is off.

- Press the OFF-key of a programmed transmitter longer.

Recalling a light-scene

The light-scene key of the radio-control transmitter has been programmed beforehand. (see „Programming a radio-control transmitter“)

- Press the light-scene key briefly.

Storing a light-scene

The light-scene key of the radio-control transmitter has been programmed beforehand.
(see „Programming a radio-control transmitter“)

- Select the brightness.
- Press the light-scene key for at least 3 s.
The old light-scene is recalled.
After about 3 s the new light-scene is called up.
- Release the key.
The light-scene is now stored.

Information for qualified electricians



DANGER!

**Electric shock in case of accidental contact with live parts.
Electric shocks can be fatal.
Disconnect the power supply before working on the device.**

Fitting and electrical connection

Connecting and fitting the dimmer

Keep a distance of at least 0.5 m to metal surfaces and to electrical appliances such as microwave ovens, hi-fi and TV sets, electronic ballasts or transformers.

Keep a distance of at least 1 m between radio-control transmitter and receiver.

If possible, stretch out the antenna (3) as shown (Fig. 3).

Do not shorten, extend or bare the antenna wire.

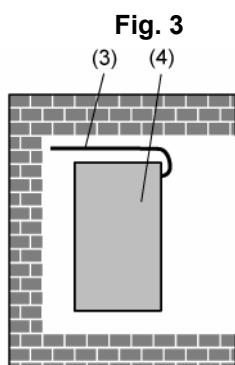
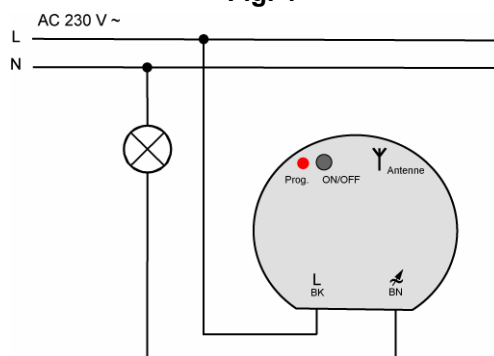


Fig. 3

Observe the Technical Operating Conditions of the power supply companies.

Observe the technical data.

Fig. 4



CAUTION!

**Risk of irreparable damage with mixed loads.
Do not connect capacitive loads (e.g. electronic transformers) and inductive loads (e.g. inductive transformers) in common to the universal dimmer.**

- Connect the dimmer as shown in the wiring diagram (Fig. 4) using the push-lock terminals supplied (Fig. 4).
- Install the device in the mounting box so that the programming button and the LED are visible (Fig. 3).
- Switch on the mains voltage.
The dimmer sets itself to the dimming mode suitable for the load.



During load detection, the dimmer does not accept any control commands.

In the case of resistive loads, the auto-detection cycle is characterized by brief flickering of the lamp and lasts between 1 and 10 seconds depending on power supply conditions.

The load can be switched on or off by a brief press (abt. 1 s) on the programming button.

Commissioning

Programming a radio-control transmitter

The distance between the radio-control receiver and the transmitter to be programmed should be between 0.5 and 5 m.

The load is off.

- Press the programming button (2) for abt. 4 s. The device is now for abt. 1 min. in the programming mode and the LED (1) is flashing.
- Activate the transmitter and send a programming telegram (see transmitter operating instructions) The LED lights up. The transmitter has been programmed into the device.



The light-scene key must be programmed separately (see transmitter operating instructions).

Quitting the programming mode

- Press the programming button (2) briefly (Fig. 1). The load is switched on and the dimmer is in the normal operating mode.



The programming mode ends automatically after abt. 1 min.

The dimmer has 30 memories for storing transmitters. When all memory locations are occupied, a transmitter already programmed must be deleted before a new one can be programmed.

Storing the switch-on brightness

A selected brightness can be stored in the dimmer as switch-on brightness. In the as-supplied state, the switch-on brightness is set to maximum.

- Turn down the lights to the desired brightness.
- Press the programming button (2) longer than 4 s (Fig. 1). The light is switched off and then on again with the switch-on brightness.



The stored switch-on brightness level is safe against mains voltage failures.

Deleting individual transmitters

- Repeat the programming of the radio-control transmitter to be deleted (see „Programming a radio-control transmitter“). The LED flashes fast. The transmitter is now deleted.



All channels and light-scene keys can be deleted individually.

Deleting all transmitters

The load is off.

- Press the programming button for at least 20 s. After abt. 4 s: the LED (1) flashes After abt. 20 s: the LED (1) emits short light pulses
- Release the programming button during the next 6s and press again for abt. 1 s. The LED is on and the transmitters are being deleted. The LED flashes fast. All radio-control transmitters have now been deleted.



The LED stops flashing after abt. 1 min or after a brief press on the button.

Technical data

Rated voltage:	AC 230 V ~
Frequency:	50/60 Hz
Ambient temperature:	approx. 0 ... +45 °C
Air humidity:	approx. 15 % to 50 % no condensation
Dimensions (Ø x H):	52.5 x 27.5 mm
Rated power at 35 °C:	max. 210 W / VA



At temperatures above 35 °C, the connectable load must be reduced by 10 % for every temperature increase of 5 °C.

All power ratings are inclusive of transformer losses.

230 V	
incandescent lamps:	50...210 W
230 V halogen lamps:	50...210 W
LV halogen lamps with electronic transformers:	50...210 W / VA



Flawless operation can only be ensured with TRONIC transformers of our production.

LV halogen lamps with inductive transformers:	50...210 W / VA
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Operate inductive transformers with at least 85 % of their rated load.

Mixed loads, resistive-capacitive:	50...210 W / VA
Mixed loads, resistive-inductive:	50...210 W / VA



The share of resistive loads must not exceed 50 % max. Otherwise risk of faulty auto-detection of the dimming mode.

Mixed loads, capacitive-inductive:	not permissible
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The symbols used to identify dimmer loads designate the type of the electrical behaviour of loads connected to dimmers:

R = ohmic, L = inductive, C = capacitive

Receive frequency:	433.42 MHz, ASK
Number of programmable radio channels:	30 max.
Connection:	push-lock terminals
solid wire:	1...2.5 mm ²
Connectable power boosters:	none

Help in case of trouble

The dimmer switches off, the load can be switched on again only after some time.

Cause: Over-temperature protection has triggered.

Reduce the load connected to the dimmer.

The dimmer switches off the load, the load remains off.

Cause: The short-circuit protection of the dimmer has triggered.

Cut out the mains supply.
Remove the short-circuit.
Switch on the mains voltage.
Switch on the dimmer.

Radio transmitter range insufficient.

Cause: Distance too great, transmitting range reduced due to local building conditions.

Lay the antenna in a straight line to enlarge the transmitting range.
Install a radio repeater.

The dimmer does not respond at all or only intermittently.

Cause: Transmitter battery empty.

Accessories

All radio-control transmitters of the Radio Bus System, e.g.

Handheld radio-control transmitter ‚Komfort‘: Order no. 0527 00

Universal radio-control transmitter 2: Order no. 0521 00

Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

Please return the unit postage paid to our central service department giving a brief description of the fault:

Gira
Giersiepen GmbH & Co. KG
Service Center
Dahlienstrasse 12
D-42477 Radevormwald

Gira
Giersiepen GmbH & Co. KG
Postfach 1220
D-42461 Radevormwald

Telefon: +49 / 21 95 / 602 - 0
Telefax: +49 / 21 95 / 602 - 339
Internet: www.gira.de