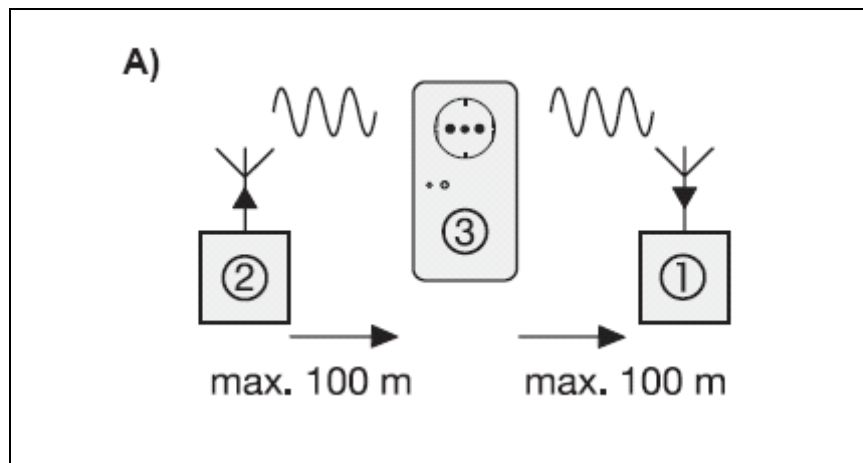


## Operating Instructions Radio-repeater plug

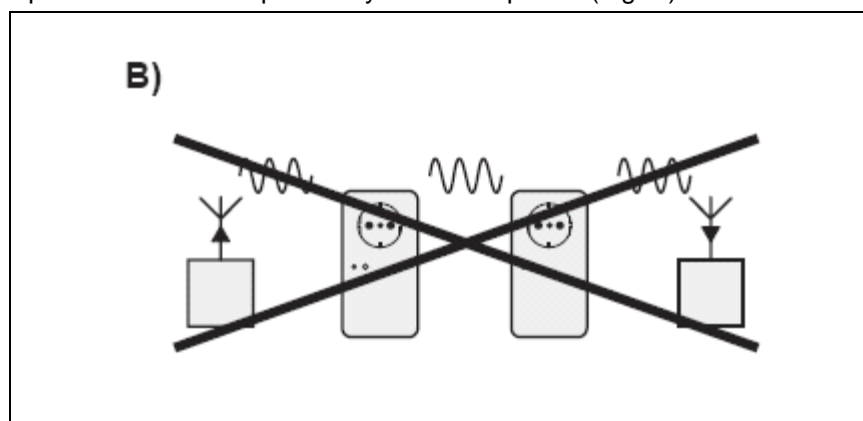


### 1. Function

The use of a repeater extends the radius of action of the Radio Management System by approx. 100 m (free field). Repeater (1) receives radio telegrams from a radio transmitter (2) and repeats them. The telegrams are received and evaluated by a radio receiver (3) (Fig. A).

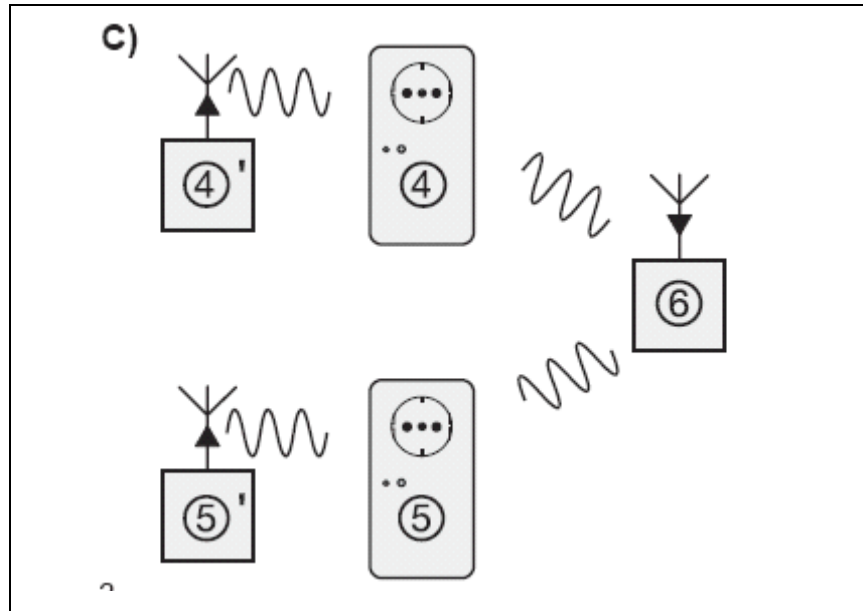


It is not possible to connect repeaters in cascade, i. e. telegrams sent by a repeater will not be repeated by another repeater (Fig. B).

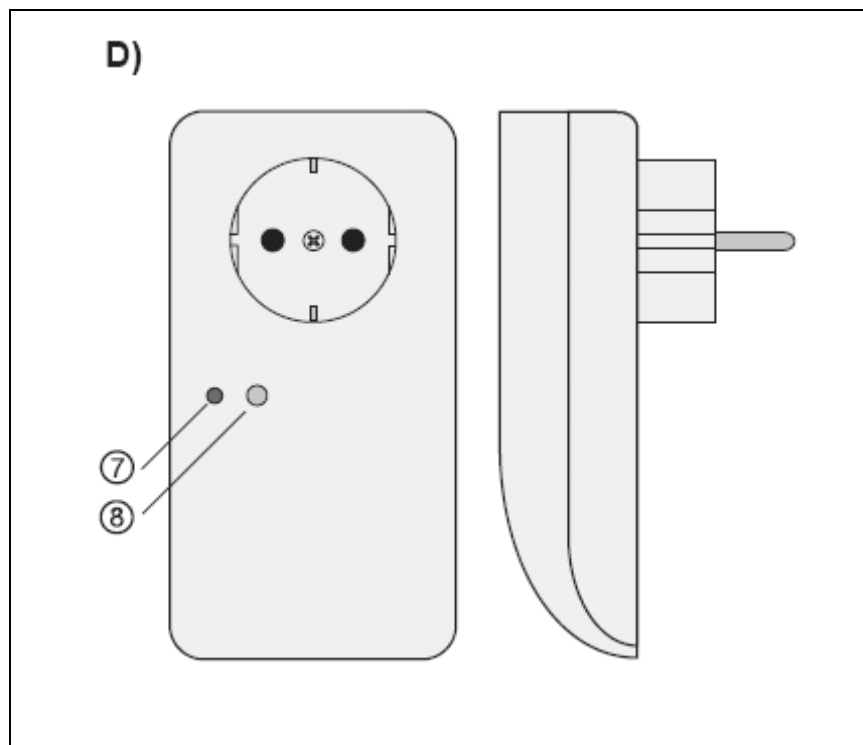


You can install several repeaters within a system, e. g. two repeaters ((4) + (5)) transmit to one radio actuator (6) (Fig. C).

Up to 60 radio transmitters can be programmed into one repeater.



The repeater has (Fig. D):  
(7) a two-colour LED (red, green).  
(8) a programming key.

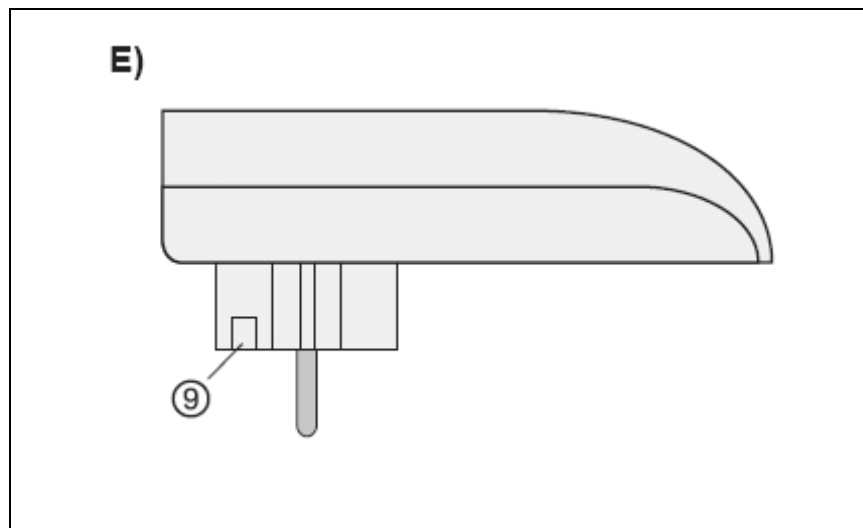


### LED status indicator

- The operational status is indicated by a two-colour (red, green) LED.
- Brief lighting up of the red LED indicates reception of a radio telegram.
- Brief lighting up of the green and the red LED indicates that an identified radio telegram is being retransmitted.
- Permanent flashing of the red LED for 1 min. indicates readiness for programming (programming or deleting transmitters).
- If such flashing changes into permanent lighting of the red LED, a transmitter has been programmed. If it begins to flash faster, a transmitter has been erased. Refer to the „Programming a Radio Transmitter into the Repeater“ chapter.

### Fuse

The plug of the repeater is provided with a fuse (Fig. E (9)) which will trip in the event of overload.



If the fuse has tripped, the repeater will also be out of operation. If the device is defective check this fuse (T 6.3 H 250 V) first. The fuse holder contains a spare fuse.

**Always use fuses of the same rating.**

## 2. Installation

The repeater should be plugged into a wall socket in the middle of the desired radio link, not in the vicinity of the floor, if possible. The function of the wall socket is unaffected, i. e. you can plug a load into the socket outlet of the repeater. This socket is protected by a T 6.3 H 250 V fuse. If this fuse has tripped, the repeater will also be out of operation.

### Installation instructions



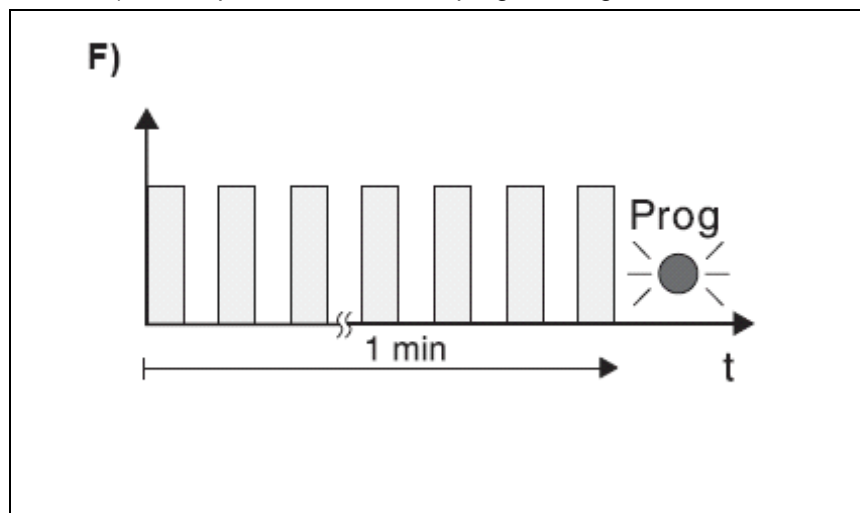
- The distance to electrical loads (e. g. microwave oven, hifi and TV systems) must be at least 0.5 m.
- To avoid saturation of the repeater, the distance between the repeater and a transmitter must be at least 1 m.

### 3. Programming of radio-control transmitters

To enable the radio repeater to retransmit the radio telegram of a transmitter, this device must be programmed into the repeater beforehand. In the programming mode of a radio transmitter, the sensitivity of the repeater is reduced to approx. 5 m. Therefore, the distance between the repeater and the radio transmitter to be programmed should be between 0.5 m and 5 m. For this programming process, the repeater must be plugged into a wall socket.

#### Procedure

1. Press the programming key for about 4 s to get into the programming mode. LED (2) will be flashing for about 1 min. (Fig. F). The repeater is now in the programming mode.



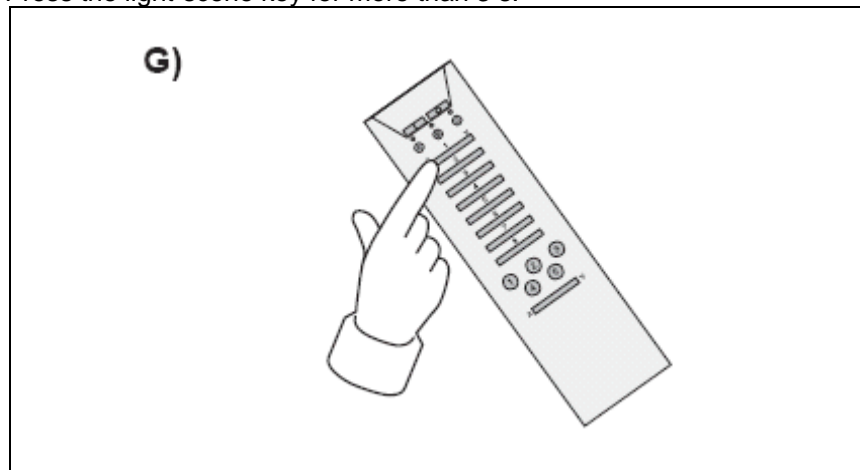
2. Start the selected radio transmitter and send a radio telegram (Fig. G); refer to the „Radio Transmitter“ operating instructions): The entire functionality of a radio transmitter (e. g. channel, ALL-ON, ALL-OFF and light-scene keys) is programmed after any one of the transmitter keys has been programmed.

#### Programming a channel key

Press the channel key for more than 1 s.

#### Programming a light-scene key

Press the light-scene key for more than 3 s.



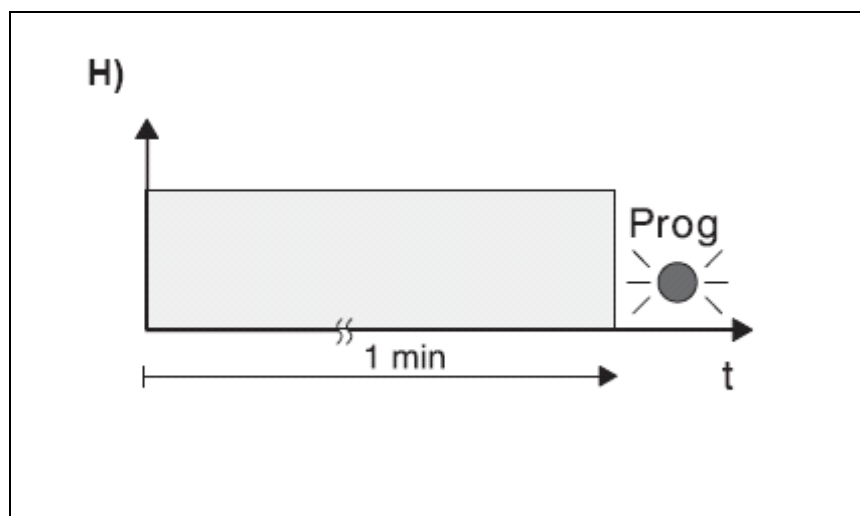
### Programming a detector

Remove the battery from the detector for approx. 2 min. Wait about 1 min. after re-inserting the battery and make a movement in the detection field of the detector within the next 10 min.

### Programming a presence detector or light sensor

Remove the battery (batteries) from the transmitter for approx. 2 min. After re-inserting the battery (batteries), the transmitter will send programming telegrams for approx. 30 s.

3. The repeater will confirm storage with the LED lighting up permanently (Fig. H).



4. The programming mode ends automatically after about 1 min. or it can be terminated by a short press on the programming key. The repeater will then be in the operating mode.

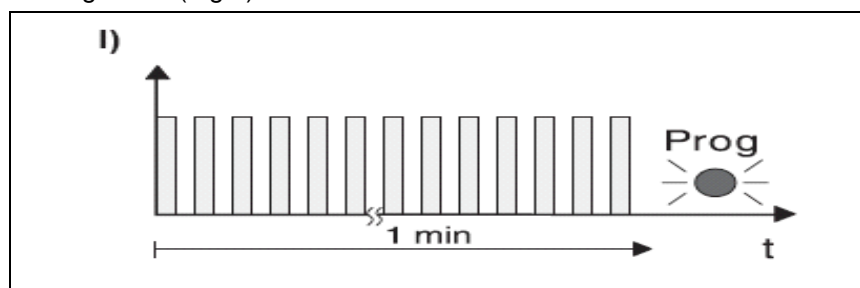
### Important



- When all of the 60 memory locations are occupied one of the radio transmitters already stored must be deleted if another one is to be programmed.
- When a radio channel is programmed (e. g. hand transmitter 'Komfort') all channels as well as the ALL-ON, ALL-OFF and the light-scene keys will automatically be programmed at the same time.

### Deleting a radio transmitter

A radio transmitter already stored can be deleted by reprogramming the same transmitter (see above). Successful deletion is indicated by the LED flashing faster (Fig. I).

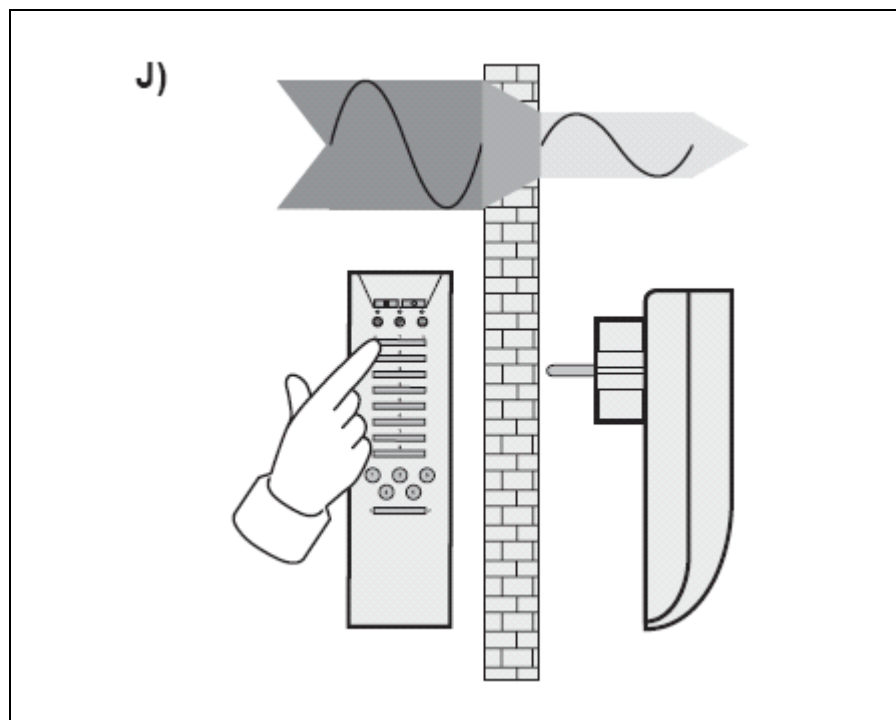


## 4. Radio transmission

Radio transmission takes place on a non-exclusive path. Therefore, interference cannot be excluded. This type of radio transmission is not suitable for safety applications such as emergency stops or emergency calls.

The range of a radio-control system depends on transmitterpower, receiver characteristics, air humidity, fitting height and building conditions. The figure illustrates the penetration of building materials by radio waves:

Dry material	Permeability
Timber, gypsum, gypsum-plasterboards	approx. 90 %
Brickwork, particle boards	approx. 70 %
Reinforced concrete	approx. 30 %
Metal, metal grating, aluminium lamination	approx. 10 %
Rain, snow	approx. 0 - 40 %



### Radio operation

The inter-connection 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.

For operation within Germany, observe the instructions of the General Approval published in Amtsblatt. Vfg 73/2000.

If utilized in conformity with its designated use, this unit fulfills the requirements of the R&TTE Directive (1999/5/EG). The complete declaration of conformity can be found in the internet under:

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

**The radio repeater may be operated in all EU and EFTA countries.**

## 5. Technical data

Nominal voltage :	AC 230 V~, 50/60 Hz
Fuse :	T 6,3 H 250 V
Receive frequency :	433,42 MHz
Modulation :	ASK
Transmission range :	100 m typ. (in free field)
Programmable transmitters :	60
Type of protection :	IP 20
Temperature range :	appr. -20 ... +55 °C
Dimensions (L x W x D) :	136 x 70 x 72 mm

**Technical specifications subject to change.**

## 6. Guarantee

Our products are under guarantee within the scope of the statutory provisions.

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

ALBRECHT JUNG GMBH & CO. KG

Service-Center

Kupferstr. 17-19

D-44532 Lünen

Service-Line: +(49) 23 55 . 80 65 51

Telefax: +(49) 23 55 . 80 61 65

E-Mail: [mail.vka@jung.de](mailto:mail.vka@jung.de)

### General equipment

Service-Line: +(49) 23 55 . 80 65 55

Telefax: +(49) 23 55 . 80 62 55


E-Mail: [mail.vkm@jung.de](mailto:mail.vkm@jung.de)

### KNX equipment

Service-Line: +(49) 23 55 . 80 65 56

Telefax: +(49) 23 55 . 80 62 55

E-Mail: [mail.vkm@jung.de](mailto:mail.vkm@jung.de)

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