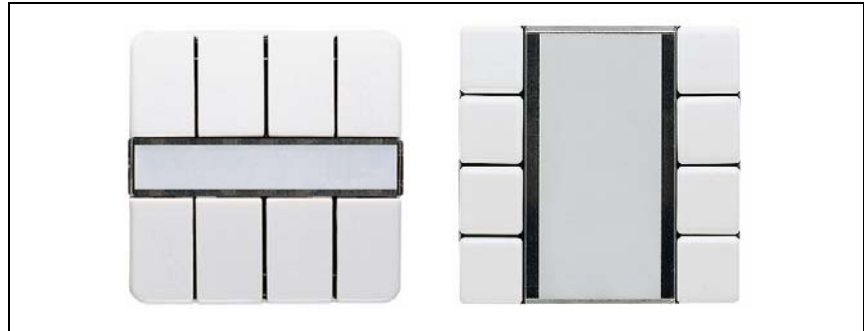


## Operating instructions Flat-Type Wall-Mounted Radio Control Insert



### 1. Function

The wall-mounted radio control insert permits remote control of all receivers of the Funk-Management system. This wall-mounted radio control insert is available as a singlechannel, two-channel or four-channel unit of the CD 500, CD plus, LS 990 and Edelstahl series. Upon actuation of the respective key, the wall-mounted radio control insert transmits a radio telegram. Such radio telegram can be understood and evaluated by any radio receivers of the Funk-Management system. Two opposite keys, in each case, belong to one channel. The wall-mounted radio control insert is provided with a triplefunction switch. It allows the function to be selected. The latter can be changed any time. Special functions such as "ALL OFF" or "lightscape" can be assigned to individual keys of the touch sensor. The wall-mounted radio control insert is powered by two lithium button cells (CR2016).

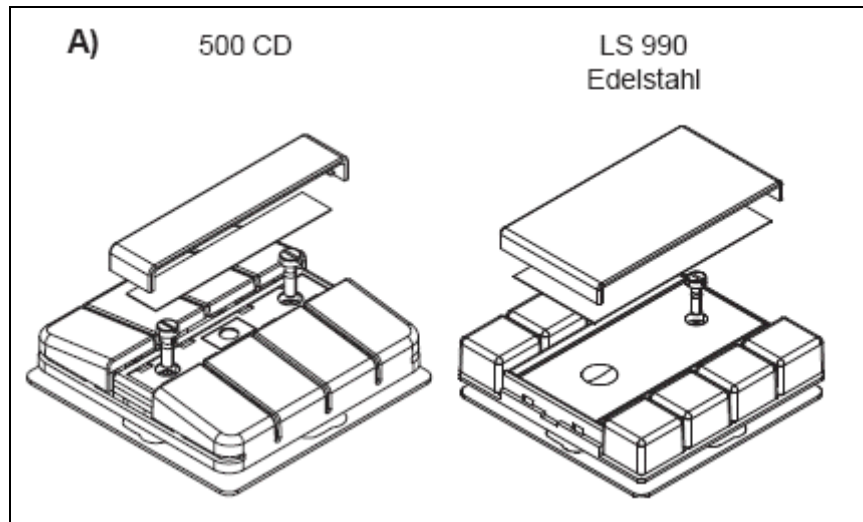
### 2. Safety warnings



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

### 3. Fitting

1. Remove label cover with a screwdriver (Figure A).



2. Loosen the screws underneath:

CD 500 series: 2 screws.

LS 990/Edelstahl series: 1 screw.

3. Paste or screw the wall-mounted radio control insert bottom plate directly to the background (e. g. plastered surface, wood, glass, mirror or switch box). The "TOP/OBEN" mark must be on top.

4. Fasten the wall-mounted radio control insert with screws on the baseplate as shown in fig. A. Tighten the screws only to such a degree that the frame can no longer be moved.

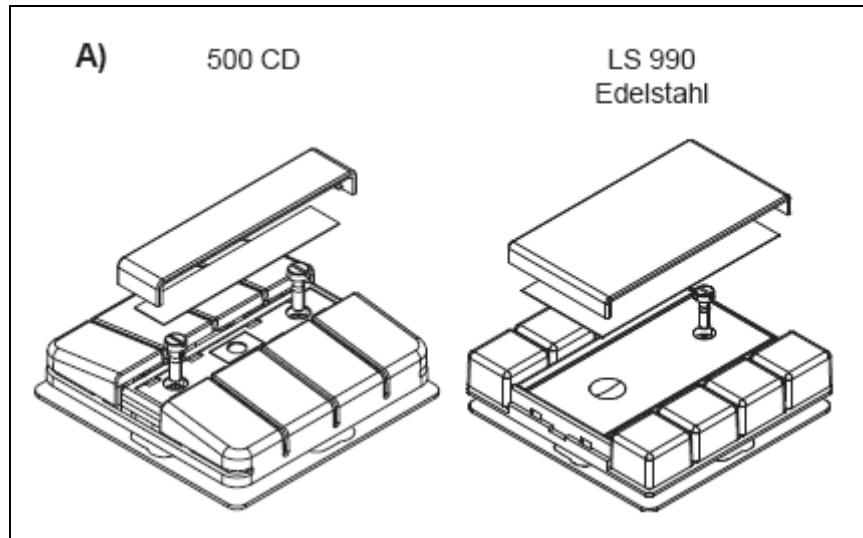
**Important:**



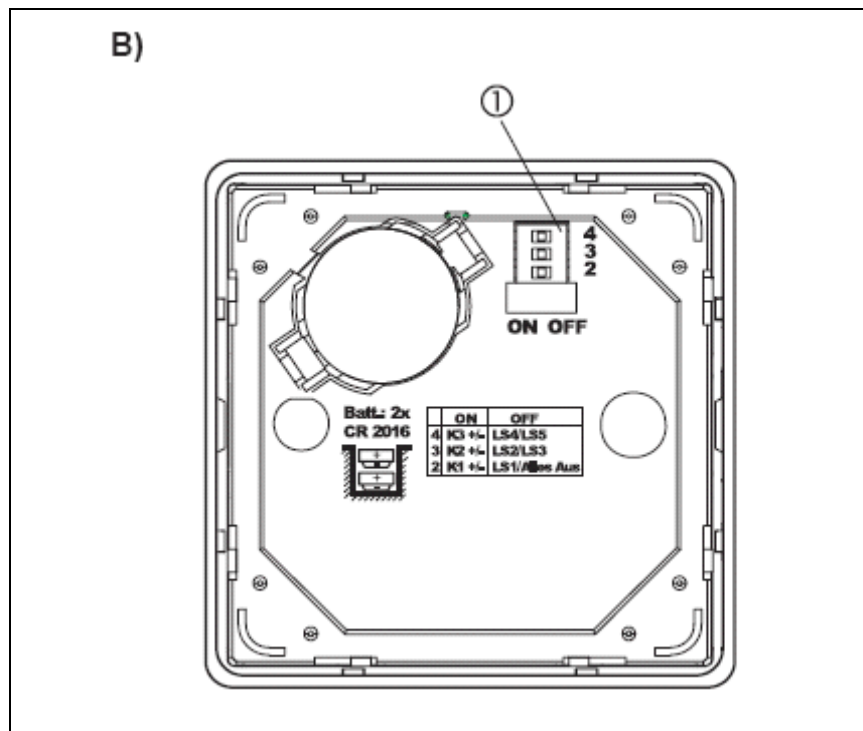
Excessive tightening of the screws may cause malfunctioning of the wall-mounted radio control insert.

## Getting started

1. Unscrew the wall-mounted radio control insert from its bottom plate as shown in Figure A.



2. Select the key functions by function switch (1) at the wall-mounted radio control insert rear side (Figure B). The function can be changed any time by changing individual switches F (2...4) after taking off the touch sensor.



F	= Function	OFF	ON
F2	= Key 1- = Key 1+	All functions OFF Lightscape 1 (ON)	Channel 1- Channel 1+
F3	= Key 2- = Key 2+	Lightscape 2 (ON) Lightscape 3 (ON)	Channel 2- Channel 2+
F4	= Key 3- = Key 3+	Lightscape 4 (ON) Lightscape 5 (ON)	Channel 3- Channel 3+

**Important:**



- Key 4+ or 4-, resp., always corresponds to channel 4+ or 4-, resp.
- The positions of the keys (1-, 1+, 2-, ...) are shown in Figure E.

3. Screw the wall-mounted radio control insert back onto its bottom plate.

## 4. Safety and disposal instructions



**Caution:** Always keep button cells out of the reach of children. Seek medical advice immediately if a button cell has been swallowed.

Remove empty batteries immediately and dispose of them without polluting the environment. Replace batteries only with those of the same type.

## 5. Batteries

The wall-mounted radio control is operated with two lithium button cells (CR2016) (supplied with the insert). The batteries will have to be replaced if all LEDs flash on and off five times after a key has been actuated for less than 3 seconds.

**Replacing the Batteries:**

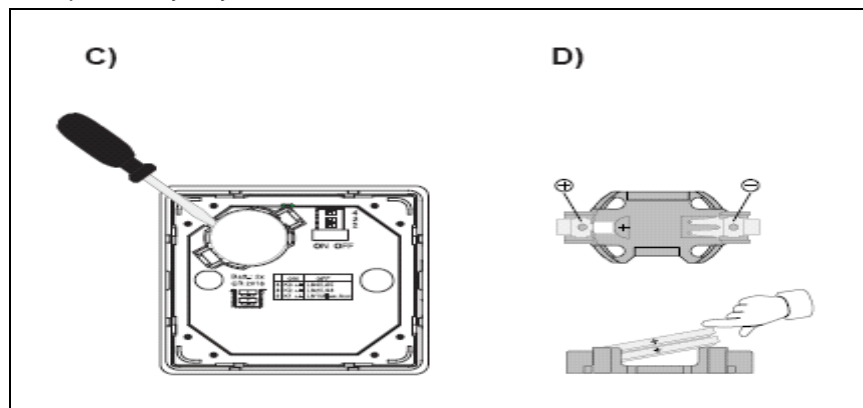
1. Unscrew the wall-mounted radio control insert from its bottom plate (Figure A).
2. Remove the exhausted batteries with a screwdriver to be introduced through the notch in the enclosure (Figure C).

**Important:**

Do not apply and lift up the screwdriver under the battery holder.

3. Ensure correct polarity as shown in Figure D when inserting fresh batteries (+ve pole up).

4. Depress any key for about 1 sec.



## 7. Programming a Receiver to identify a Transmitter

In order to enable a radio receiver to understand a radio data telegram transmitted by the wall-mounted radio control insert, the receiver must “learn” to identify this radio telegram. The number of receivers that can be assigned to a special channel of the wallmounted radio control insert is unlimited. Learning causes the channel information to be stored only in the radio receiver.

### Procedure:

1. Set the radio receiver to the learning mode. Refer to the “Radio Receiver” Operating Instructions.

2. **Learning procedure for a channel:**

Depress the +/- key of the desired channel for at least 1 sec.

**Learning procedure for the ALL-OFF key:**

Depress the ALL-OFF key for at least 10 sec.

**Learning procedure for a lightscape key:**

Depress the desired lightscape key for at least 3 sec.

3. Set the radio receiver back to the normal mode. Refer to the “Radio Receiver” Operating Instructions.

⇒ This completes the learning process!

### Clearing of Channels

Reprogramming of the channel, lightscape or ALL-OFF keys of the wall-mounted radio control insert clears the assignment stored in the radio receiver.

## 6. Lightscapes

Before a lightscape can be stored or recalled, respectively, the lightscape key must be programmed correspondingly (refer to “Learning Procedure for a Lightscape Key”). You can store five different lightscapes (long-time actuation: 3 sec. min.) and recall them (short-time actuation: 3 sec. max.).

### Changing a Lightscape

1. Adjust the desired lighting situation

2. Depress the desired lightscape key for at least 3 sec.

**Note:** The previous lightscape is recalled first (do not release the key) before the new one is activated.

3. The flush-mounted radio receivers confirm this by a short signal tone.

### ALL OFF

During radio channel programming, the ALL-OFF key of the radio receiver is automatically “learned” at the same time (exception: radio louver attachment). To avoid erroneous operation, depress the 1- key for at least 1 sec. when actuating the ALL-OFF key. The load is switched off on all programmed radio receivers.

### Clearing ALL OFF

If a specific radio receiver is to disregard the ALL-OFF key command, this function will have to be erased from memory.

## Procedure

1. Set the radio receiver to the learning mode. (Refer to the "Radio Receiver" Operating Instructions.)
2. Depress ALL-OFF key 1- for at least 10 sec.
3. Set the radio receiver back to the normal mode. (Refer to the "Radio Receiver" Operating Instructions.)

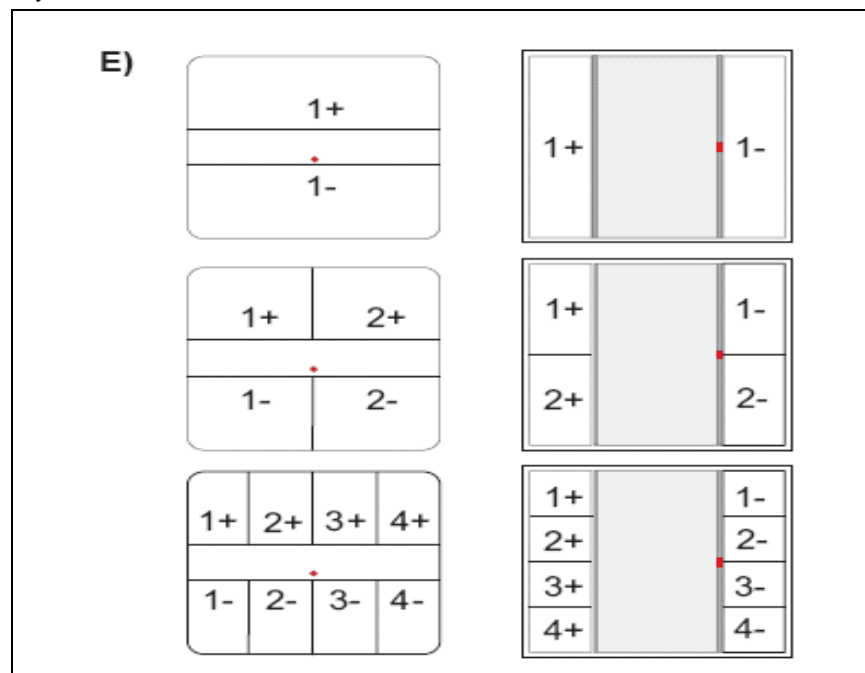
⇒ This completes the clearing process!

## 7. Operation

Depressing a channel key (e. g. 1+) causes a radio telegram to be transmitted. This is confirmed by the LED being lit. Depending upon the type of radio receiver, the response is as follows:

Key	Duration	Lighting	Louver
X+	1 sec. max.	Switching ON	Blade adjustment
X-	1 sec. max.	Switching OFF	Blade adjustment
X+	1 sec. min.	Dimming up	Continuously UP
X-	1 sec. min.	Dimming down	Continuously DOWN

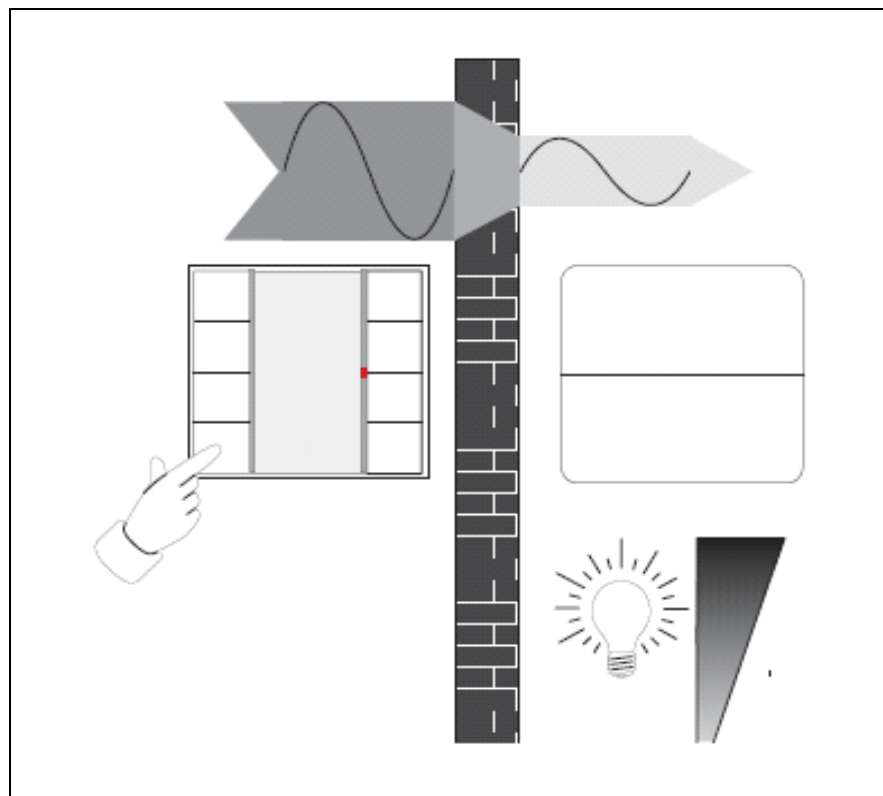
The maximum transmission cycle lasts 12 seconds, even if any of the keys is held depressed for longer. If several keys are depressed at the same time no radio data telegram will be transmitted. If you want to permanently switch on the radio-controlled switching amplifier for about 2 hrs., you will have to depress programmed channel key X+ for at least 1 sec. If the radio-controlled switching amplifier is to ignore transmissions from the radio detector for about 2 hrs., you will have to depress channel key X- for at least 1 second.



## 8. Radio transmission

The radio signals are transmitted on non-exclusive frequencies. Transmission disturbances can therefore not be excluded. The transmission by radio is not suitable for safety applications such as emergency shut-off and emergency calling functions. The range of a radio system depends on transmitter power, receiver characteristics, relative air humidity, installation height and the local conditions of the building:

Dry material	Permeability
wood, plaster, gypsum-plasterboards	ca. 90 %
brickwork, chipboards	ca. 70 %
reinforced concrete	ca. 30 %
metal, metal grids, aluminium overlay	ca. 10 %
Rain, snow	ca. 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.

- Operation in Germany is subject to the relevant regulations (Amtsblatt Vfg 73/2000).
- If utilized in conformity with its designated use, this unit fulfils 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 "flat-type" wall-mounted radio control insert may be operated in all EU and EFTA countries.**

## 9. Specifications

Power supply :	6 V DC
Batteries :	2 x lithium button cell (CR2016)
Battery life :	approx. 3 years
Transmit frequency :	433.42 MHz, ASK
Transmitting range :	typ. 30 m (in the free field)
Temperature range :	0 °C to +55 °C
Relative humidity :	80 % max. (without condensation)
Protective system :	IP 20
Specifications subject to change.	

**Please hand these instructions over to your customer after the installation.**

## 10. 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

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

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

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

### KNX equipment

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

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