

Universal radio control transmitter

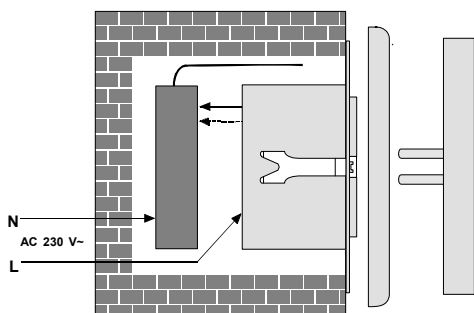
Order No.: 0521 00

Function

The universal radio control transmitter is a component of the Radio Bus System. It permits enlarging the existing electrical system by the possibility of transmitting 230 V control signals by radio.

The universal radio control can be used to transmit control commands from switches, push-buttons and louver control attachments.

When the inputs (E1, E2) are connected to the mains voltage (230 V AC), the universal radio control transmits a data telegram that can be understood and processed by all radio receivers of the Radio Bus System.



- **2-channel switch function (channel 1 and 2)**
The universal radio control transmits switching commands (On, Off) for two independent channels (channel 1, channel 2).
The inputs are activated by connecting them via conventional switches (n.o. contacts) to the 230 V AC mains voltage.
As a special function, the "doorbell mode" permits transmitting a radio data telegram after brief actuation of a push-button with n.o. contact (depressing the button (> 0,2 s) = transmission of ON telegram, releasing the button = transmission of OFF telegram).
- **1-channel push-button function (On/Off)**
The universal transmitter transmits switching command telegrams (On, Off) for one channel. This means that the push-button mode permits only one-channel operation.
The inputs are activated by two independent **push-button commands**, for instance, by using 2 push-buttons (n.o. contacts) (push-button 1 = switches on, push-button 2 = switches off).
- **1-channel louver control function**
The universal transmitter transmits louver commands for one channel.
The inputs are activated by a louver switch or a louver control insert.

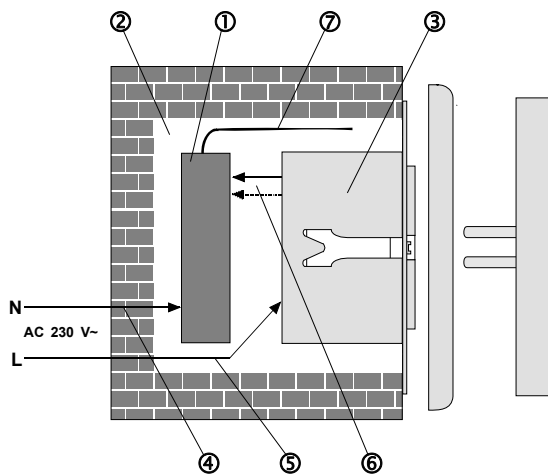
Fitting

Attention: Electrical appliances may be installed and fitted by qualified electricians only.

Do not connect motors in parallel with the universal control transmitter.

If the transmitter is to be fitted outside a flush-mounting box, take care to ensure sufficient shock-hazard protection by installing the universal radio control transmitter for instance in a surface-mounted distribution box.

When universal radio control transmitters with switches and push-buttons are to be used together with a socket outlet with earthing contact in the same combination, Gira socket outlets with earthing contact and screwless plug-in terminals must be used to ensure shock-hazard protection even after removal of the cover.



Install the universal radio control transmitter ① in a 60 mm-deep flush-mounting box ② behind a flush-mounted insert ③.

Important: In the programming mode, the normal receiving range of the receivers of approx. 100 m (in free space) is reduced to approx. 5 m.

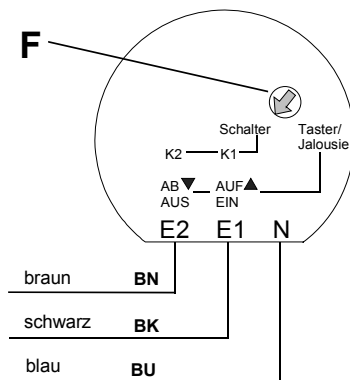
Installation

1. Select the desired function. See "Installation and adjustment".
2. Connect phase conductor **L** of the mains voltage ⑤ (230 V AC) and control wires ⑥ of the radio universal control transmitters depending on the desired function to the flush-mounted insert ③,; see also "Installation and adjustment".

Antenna

To obtain maximum transmission power, the antenna ⑦ should be used pulled out to its full length and not coiled up. Keep away as far as possible from large metal surfaces such as metallic door frames. Do not shorten or lengthen the antenna and do not strip off the insulation.

Installation and adjustment



The universal radio control transmitter transmits radio data telegrams in line with the preset function.

The desired function of the universal radio control transmitter is selected with **rotary switch F**.

The connecting wires are represented as follows:

N: neutral conductor (blue wire) BU
E1: input 1 (black wire) BK
E2: input 2 (brown wire) BN

Important: The delay between connecting the mains voltage to an input (e.g. by depressing the connected push-button) and switching of the load connected to the radio receiver (e.g. lighting on) is about 300 ms.

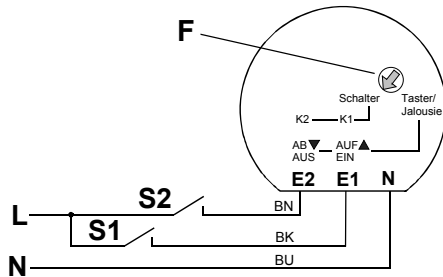
Attention:

The universal radio control transmitter must be activated for at least 2 seconds (e.g. push-button depressed for abt. 2 seconds). Activation times of less than 2 seconds may cause malfunctions.

If this happens, do not apply voltage to the universal radio control transmitter for the next 10 minutes (e.g. by not depressing the connected push-button during the next 10 minutes).



Transmitter with switch function (2 channels)



Set rotary switch **F** to the "switch" position and connect the universal radio control transmitter as shown in fig. **A1**.

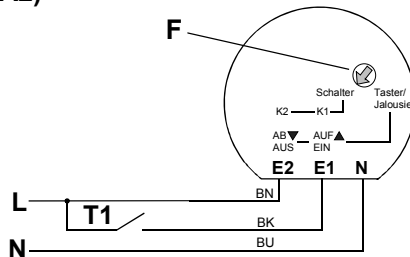
- S1 closed => "channel 1 = on"
- S1 opened => "channel 1 = off"
- S2 closed => "channel 2 = on"
- S2 opened => "channel 2 = off"

Important:

If only one channel of the universal transmitter is needed (e.g. E1, black = channel 1), connect the input of the non-used channel (e.g. E2, brown = channel 2) to neutral conductor N.

Transmitter with "doorbell" function (1 channel)

(A2)



The doorbell function offers the possibility of activating a load (e.g. the doorbell) for as long as the button is depressed (not less than 0.2 seconds).

Depressing the push-button (n.o. contact) causes transmission of an ON command whereas releasing the push-button causes transmission of an OFF command.

Set rotary switch **F** to the "Switch" position and connect the universal radio control transmitter as shown in fig. **A2**. Connect input E2 (brown wire) to phase conductor **L** of the mains voltage. See also: "Programming the doorbell mode".

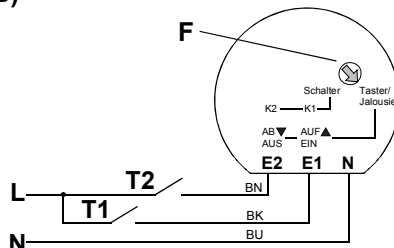
- T1 closed => "channel 1 = on"
- T1 opened => "channel 1 = off"

Important:

When programming this function (see "Programming the doorbell mode") please observe the **changes in wiring**.

Transmitter with push-button function

(B)

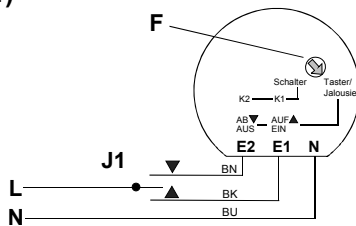


Set rotary switch **F** to the "Push-button/Louver" position and connect the push-buttons (n.o contacts) to the universal radio control transmitter as shown in fig. **B**.

- T1 closed => "channel 1 = on"
- T2 closed => "channel 1 = off"
- T1 and T2 closed => "channel 1 = on"

Important: The "dimming" and "lightscape activation" functions are not available.

(C1)

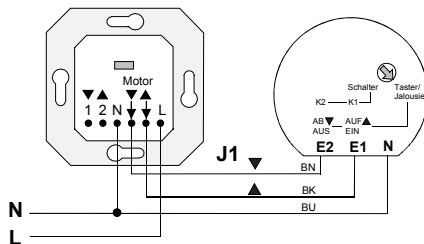


Transmitter with louver function

Set rotary switch **F** to the "Push-button/Louvers" position and connect the universal radio transmitter to a louver switch as shown in fig. **C1** or to a louver control insert as shown in fig. **C2**.

- J1  closed => "louvers = Up"
- J1  closed => "louvers = Down"

(C2)



Important: The "louvers adjustment" function is not available.

Programming of radio transmitters and receivers

(Doorbell mode excepted)

A channel of the universal radio control transmitter can be programmed for any number of radio receivers.

Important:

In the programming mode, the normal receiving range of the receivers of approx. 100 m (in free space) is reduced to approx. 5 m.

Programming of a channel

Procedure

1. Switch the radio receiver into the programming mode (see "Radio receiver" operating instructions)
2. Depress the corresponding push-button, switch or louver switch for at least 2 seconds to apply the mains voltage to the inputs (E1 or E2).
3. Switch the receiver back to the operating mode (see "Radio receiver" operating instructions).

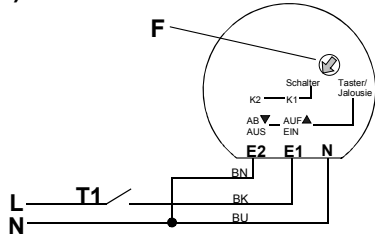
Channel programming is terminated.

Clearing a programmed channel

Reprogramming of a control transmitter channel (channel 1 or channel 2) clears the assignment stored in the radio receiver.

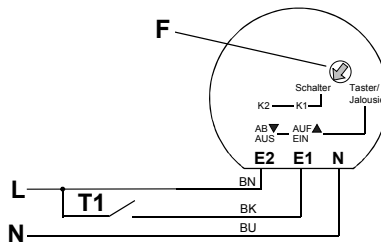
Programming the "doorbell mode"

(D1)



1. Disconnect the universal radio control transmitter from the power supply.
2. Connect the input **E2** (brown wire) to the neutral conductor **N** of the mains voltage (230 V AC) as shown in **fig. D1**.
3. Reconnect the universal transmitter to the power supply.
4. Switch the radio receiver into the programming mode (see "Radio receiver" operating instructions)
5. Close the push-button contact T1 (E1 = black wire) for at least 2 seconds.
6. Switch the radio receiver into the operating mode (see "Radio receiver" operating instructions).
7. Disconnect the universal radio control transmitter from the power supply.
8. Connect the input **E2** (brown wire) to phase conductor **L** of the mains voltage (230 V AC) as shown in **fig. A2**.
9. Reconnect the universal transmitter to the power supply.

(A2)



"Doorbell mode" programming is terminated.

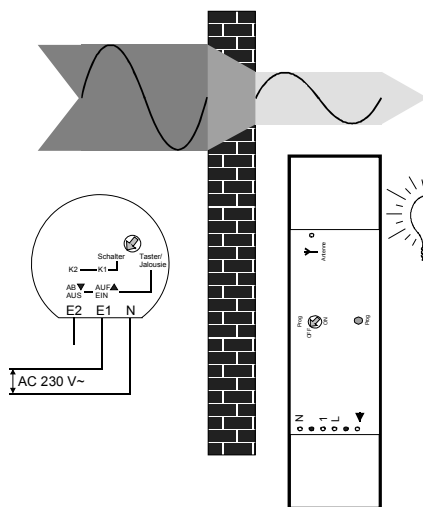
Clearing the "doorbell" programming

Reprogramming the "doorbell mode" clears the assignment stored in the radio receiver (see programming the "doorbell mode")

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 transmitting range of a radio transmitter (max. 100 m in free space) is dependent on local building conditions:

Dry material	Penetrability
Wood, plaster, gypsum	abt. 90 %
Brickwork, chipboarding	abt. 70 %
Reinforced concrete	abt. 30 %
Metal, metal gridding, aluminium overlay	abt. 10 %

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).

The Universal Radio-Control transmitter may be operated in all countries of the EU and the EFTA.

Technical specifications

Power supply:	AC 230 V ~
Transmitting frequency:	433.42 MHz, ASK
Transmission range:	abt. 100 m (in free space)
Delay:	abt. 300 ms
Temperature range:	-20 °C to +55 °C
Dimensions (Ø x H):	52 mm x 21 mm

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



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