

Wireless actuator FSP1 CE

Plug phase cut-off dimmer for German socket outlets.

R and C loads 60-420 W.

This dimmer receiver can be used to switch and dim consumers such as incandescent lamps, HV halogen lamps and electronic transformers. The device has a diagnose function to detect inappropriate consumers (see "Diagnostic function for inappropriate load types"). The receiver is operated with wireless push-buttons and wireless hand-held transmitters.

Startup

Load output can be switched and dimmed

LED display

Learn mode:
LED = red
Function prog.:
LED = green or orange
Diagnose mode:
LED flashes 5 times orange
→ continuously red

LRN/SET button

Learn mode and function setting

CLR/MODE button (side)

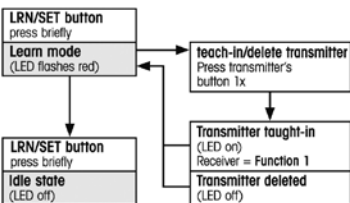
Delete all transmitters and parameter setting



Teaching-in

The receiver must be connected to the mains to conduct a teach-in, so the intermediate plug must be plugged in.

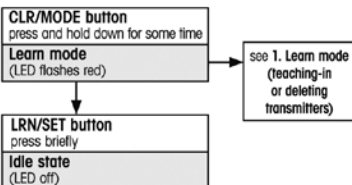
1. Learn mode (teaching-in or deleting transmitters)



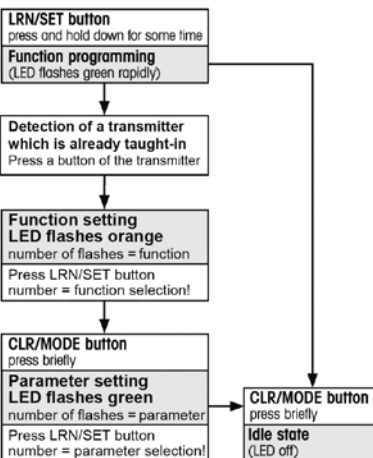
Notes:

- No transmitter is taught-in in the receiver on delivery from the factory.
- Several transmitters can be taught-in (max. 32) or deleted in the learn mode.
- A transmitter is alternately taught-in (LED ON) or deleted (LED OFF) each time the button is pressed!
- The receiver's Function 1 is preset after teaching-in a transmitter in the receiver. If requested set another function and parameter (see 3. Function programming).
- If no action takes place, learn mode will be terminated after 30s.

2. Deleting all taught-in transmitters



3. Function programming



Transmitter detection

Press a button of the transmitter LED flashes orange: transmitter detected
Number of flashes: function

Function setting (e.g. function 3)

LRN/SET button press 3 times LED flashes 3 times orange: function 3

Parameter setting (e.g. parameter 2)

LRN/SET button press 2 times LED flashes 2 times green: parameter 2

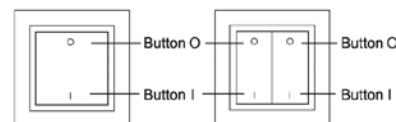
Note!

If no action takes place, function programming will be terminated after 30s.

Operating and functions

Manual operation of this device is not possible. The receiver is operated with wireless push-buttons and wireless hand-held transmitters. Before use, the transmitters must be taught-in in the receiver (max. 32 transmitters). Every transmitter can control an unlimited number of receivers. The receiver's Function 1 is preset after teaching-in a transmitter in the receiver. It can be changed by function programming.

Functions of the wireless push-buttons FT4 and/or wireless hand-held transmitters FHS8, FHS12 and FMH4



Function 1, direction switches with Memory

When the dimmer is switched on the consumer dims up to the maximum brightness or to the stored dim value (memory value). Standard function after teach-in of the transmitter!

| Transmitter | Function |
|-----------------------------------|---|
| Press button I briefly | Switch on with memory value |
| Press button O briefly | Switch off, store dim value (memory value) |
| Press button I long | Dim up consumer |
| Press button O long | Dim down consumer |
| Button I or O, long press/release | Dimming process stops, memory value is stored |

Function 2, direction switches without Memory

The brightness of the consumer after switch-on can be adjusted by setting parameters.

| Transmitter | Function |
|-----------------------------------|--------------------------|
| Press button I briefly | Switch on with parameter |
| Press button O briefly | Switch off |
| Press button I long | Dim up consumer |
| Press button O long | Dim down consumer |
| Button I or O, long press/release | Dimming process stops |

Parameters

- 100 % brightness
- 10 % brightness
- 25 % brightness
- 40 % brightness
- 55 % brightness
- 70 % brightness
- 85 % brightness

Function 3, switch on/off function

| Transmitter | Function |
|----------------|-----------------------------------|
| Press button I | Switch on |
| Press button O | Switch off |
| Parameters | |
| 1 | Switch on with memory value |
| 2 | Switch on with maximum brightness |

Function 4, dim up/down function

| Transmitter | Function |
|--------------------------------------|---|
| Press button I long | Dim up consumer |
| Press button O long | Dim down consumer |
| Button I or O, long press/release | Dimming process stops, memory value is stored |

Function 5, universal switch with Memory

When the dimmer is switched on the consumer dims up to the maximum brightness or to the stored dim value (memory value).

| Transmitter | Function |
|------------------------------|---|
| Press button briefly | Switch on/off with memory value |
| Press button long | Dim up or dim down consumer |
| Button long press/release | Dimming process stops, memory value is stored |
| Parameters | |
| 1 | Button O is activated |
| 2 | Button I is activated |
| 3 | Button O and I are activated |

Function 6, staircase time switch with switch-off early warning

The dimmer starts at maximum brightness level when button I or O is pressed. After the set running time (parameter) has elapsed, the brightness is reduced by 50% for a period of 30s (switch-off warning).
The dimmer switches off after the 30s period.

| Transmitter | Function |
|--------------------------------|---|
| Press button I or O briefly | Switch on with max. brightness and running time (parameter) |
| Parameters | |
| 1 | 2 min running time |
| 2 | 1 min running time |
| 3 | 5 min running time |
| 4 | 10 min running time |
| 5 | 20 min running time |
| 6 | 30 min running time |
| 7 | 60 min running time |
| 8 | 120 min running time |

Function 7, Light scenes

Realisation of light scenes with light control using multiple receivers and their taught-in transmitters.

- Teach-in one additional transmitter in each receiver, program Function 7 and set parameter.
- Switch on or dim the required receivers.
- To store the light scene (A-D) press button I or O of the previously taught-in transmitter for longer than 2s. As a confirmation, the output switches off and on.
- One of the four stored light scenes (A-D) is switched on by briefly pressing the button I or O of the transmitter.

| Transmitter | Function (parameter) |
|------------------------|---|
| Press button O briefly | Switch on light scene A/C |
| Press button O long | Store light scene A/C |
| Press button I briefly | Switch on light scene B/D |
| Press button I long | Store light scene B/D |
| Parameters | |
| 1 | button O = light scene A, button I = light scene B |
| 2 | button O = light scene C, button I = light scene D |

Troubleshooting

New system or existing system

- Check power supply (skilled electrician only).
- Check connected consumers.
- Check the system's surroundings for changes that could cause interference (e.g. metal cabinets, furniture or walls which have been moved).
- If the receiver operates at a reduced distance from the transmitter, the radio signal was encountering interference or it was used outside the transmission range.

- Use the receiver at a better location.
- Clear all taught-in transmitters and teach-in again.

Receiver switches by itself

- This may be caused by operation of an external transmitter that was coincidentally taught-in in the receiver.
- Clear all taught-in transmitters and teach-in again.

Radio signal range limitations

- Use of the transmitter/receiver near to metal objects or material with metal components. A distance of at least 10 cm should be observed.
- Humidity in materials.
- Devices which emit high-frequency signals (e.g. audio and video systems, computers and electronic ballasts). A distance of at least 0.5 m should be observed.

Diagnostic function for inappropriate load types

- LED flashes 5 times orange then remains continuously red.
- Switch-off the device and remove the consumer.
- Separate the device from power supply (pull a plug & socket device from its outlet).
- Insert the plug & socket device into its outlet again for other usage.
- Connect an appropriate consumer (see technical data).

Technical data

| | |
|----------------------------|---|
| Voltage supply | 230V~ / 50Hz |
| Number of channels | 1 |
| Permissible consumers | Incandescent lamps (Ω) HV halogen lamps Electric transformers |
| Minimum load | 60W |
| Maximum load | 420W |
| Ambient temperature limits | +10° to +40°C |
| Certifications | EN 60669-2-1 |
| Protection degree | IP20 |

Important reminder!

This electrical equipment may only be started by skilled electricians otherwise fire hazard or danger of electric shock exists!