

## Wireless actuator



### Impulse switch with integr. relay function FSR70-230V

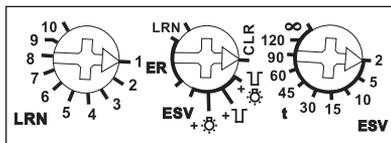
1 NO contact not potential free 10A/250V AC, incandescent lamps up to 2000 watts. Only 0.8 watt standby loss.

Mounting in the power supply cord, e.g. in false ceilings. 100mm long, 50mm wide and 25mm deep.

**This wireless actuator is an impulse switch with integrated relay function and features state-of-the-art hybrid technology that we developed: we combined the wear-free receiver and evaluation electronics and a bistable relay with zero passage switching.**

By using a bistable relay coil power loss and heating is avoided even in the on mode.

#### Function rotary switches



With the middle rotary switch on the side in the setting LRN up to 35 wireless pushbuttons can be assigned, of which one or more central control pushbuttons. In addition wireless window/door contacts with the function N/O contact or N/C contact while the window is open. The required function of the impulse switch with integrated relay function can then be selected:

**ER** = switching relay

**ESV** = impulse switch.

Possibly with off delay, then:

- + = ESV with pushbutton permanent light
- + = ESV with switch-off early warning
- + = ESV with pushbutton permanent light and switch-off early warning

**If the permanent light function is switched on**, the function can be activated by pressing the pushbutton for longer than 1 second. This function switches off automatically after 2 hours or by pressing the pushbutton.

**If the switch-off early warning is switched on**, the light starts to flicker approx. 30 seconds before time-out. This is repeated three times at decreasing time intervals.

If both switch-off early warning and pushbutton permanent light are switched on, switch-off early warning is activated before automatic switch-off of the permanent light.

The function **ESV on the right rotary switch on the side** sets the off delay from 2 to 120 minutes. In setting  $\infty$  normal impulse switch function ES without off delay, without pushbutton permanent light and without switch-off early warning.

In setting ER = switching relay of the middle rotary switch, this rotary switch fulfils a safety and power saving function in the settings except  $\infty$ . If the switch-off command is not recognised, e.g. since the pushbutton is jammed or it was pressed too quickly, the relay switches off automatically on expiry of a time adjustable between 2 and 120 seconds. When a FTK is taught-in, this time function is turned off.

**Twilight switch** with taught-in wireless outdoor brightness sensor FAH and then in function setting ESV. In time setting 120 the contact opens with a delay of 4 minutes if the brightness level is sufficient. In time setting  $\infty$  the contact opens instantly. The local and central pushbutton control is still possible.

**When teaching-in**, the switching threshold is also taught-in: between break of twilight and complete darkness.

**The LED** performs during the teach-in process according to the operation manual. It shows wireless control commands by short flickering during operation.

#### Teaching-in wireless sensors in wireless actuators

**All sensors such as wireless pushbuttons, wireless hand-held transmitters, wireless transmitter modules, wireless window/door contacts, wireless timers and wireless motion/brightness sensors must be taught-in in the actuators (receivers with dimmers, switches and relays) so that they can detect and execute commands.**

#### Teaching-in actuator FSR70-230V

The teach-in memory is empty on delivery from the factory. If you are unsure whether the teach-in memory contains something or not, you must first clear the memory contents completely:

Set the middle rotary switch to CLR. The LED flashes at a high rate. Within the next 10 seconds, turn the left rotary switch three

times to the right stop (turn clockwise) and then turn back away from the stop. The LED stops flashing and goes out after 2 seconds. All taught-in sensors are cleared.

**Clear individual taught-in sensors** in the same way as in the teach-in procedure, except that you set the middle rotary switch to CLR instead of LRN, and operate the sensor. The LED previously flashing at a high rate goes out.

#### Teaching-in sensors

1. Setting of the left rotary switch to the desired teaching-in function:
  - 1 = teach-in pushbutton 'ON/OFF';
  - 2 = teach-in 'central OFF';
  - 3 = teach-in 'central ON';
  - 4 = teach-in pushbutton as NC contact;
  - 5 = teach-in FTK and Hoppe window handle as NC contact;
  - 6 = teach-in FTK and Hoppe window handle as NO contact

When a **FAH is taught-in as twilight sensor**, the position of the right rotary switch defines the threshold: 2 = complete darkness and 120 = break of twilight.

2. Set the middle rotary switch to LRN. The LED flashes at a low rate.
3. Operate the sensor which should be taught-in. The LED goes out.

The base plate of the wireless window/door contact must be removed in order to conduct a teach-in. Press the red button to initiate a teach-in.

To teach-in further sensors, turn the middle rotary switch briefly away from position LRN. Continue the procedure from pos 1.

After teach-in, set the rotary switches of the actuators to the required function.



When an actuator is ready for teach-in (the LED flashes at a low rate), the very next incoming signal is taught-in. Therefore, make absolutely sure that you do not activate any other sensors during the teach-in phase.

## Important reminder!

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