



Wireless actuator
 Noiseless 2-channel impulse
 switch with integrated relay function
 FSR71SSR-2x-230V

**Only skilled electricians may install
 this electrical equipment otherwise
 there is the risk of fire or electric
 shock!**

Temperature at mounting location:
 -20°C up to +50°C.
 Storage temperature: -25°C up to +70°C.
 Relative humidity:
 annual average value <75%.

Noiseless 2-channel impulse switch with
 integrated relay function, 400W. 2 solid
 state relays not potential free. Encrypted
 wireless, bidirectional wireless and
 repeater function are switchable. Only
 0.8 watt standby loss.

Mounting in the 230V power supply
 cord, e.g. in false ceilings and lamps.
 146mm long, 46mm wide and 31mm
 deep.

**The rated switching capacity of 400W is
 applied for one contact and also for the
 sum of the two contacts. The parallel
 connection of multiple devices to
 increase power is allowed.**

If supply voltage fails, the device is
 switched off in defined mode.

**The channels can be taught-in as ES
 and/or ER channel separately from
 each other.**

Scene control:

Several channels of one or several
 FSR71SSR devices can be switched on or
 off in a scene by one of the four signals
 of a pushbutton with double rocker
 taught-in as a scene pushbutton.

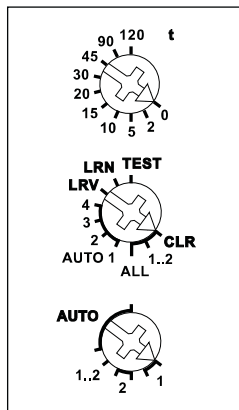
Central commands on PC are sent
 using the Wireless Building Visualisation
 and Control Software GFVS. To do this,
 teach-in one or several FSR71SSR
 devices.

Encrypted sensors can be taught in.
 You can switch on **bidirectional wire-**

less and/or a **repeater function.**

Every change in state and incoming
 central command telegrams are confirmed
 by a wireless telegram. This wireless tele-
 gram can be taught-in in other actuators,
 in universal displays FUA55 and in the
 GFVS software.

Function rotary switches



Use the rotary switches to teach-in the
 pushbuttons and test the 2 channels as
 required. For normal mode, the middle
 and lower rotary switches are then set to
 AUTO. With the upper rotary switch the
 EW time (0-120 seconds) is directly set
 for relays or the RV time (0-120 minutes)
 for impulse switches for all channels if
 necessary.

When **FBH wireless motion/brightness
 sensors (masters)** are taught-in, the
 switching threshold is defined separately
 for each channel using the upper rotary
 switch. The switching threshold switches
 the lighting on or off depending on the
 brightness (in addition to motion) (from
 approx. 30lux in position 0 to approx. 0
 300lux in position 90).

If **FBH devices (slaves)** are taught-in in
 Position 120, they are only evaluated as
 motion detectors. Several FBH devices are
 interlinked per channel. If an FBH signals
 'motion', the NO contact closes. Only
 when all FBH devices signal 'no motion'
 does the NO contact open after the pre-
 set RV time. When an FBH is taught-in,
 the RV time only applies to the FBH.

Press the ON side of a direction pushbutton
 for 2 seconds to switch it on permanently.

Signals are not evaluated by the FBH.
 Press the OFF side of a direction push-
 button for 2 seconds to switch it off per-
 manently. Signals are not evaluated by
 the FBH. Press the direction pushbutton
 briefly to re-evaluate FBH signals.

When wireless brightness sensors

FAH60 are taught-in, define the switching
 threshold separately for each channel
 using the top rotary switch. The switching
 threshold switches the lighting on or off
 depending on the brightness (from approx.
 0lux in position 0 to approx. 50lux in
 position 120). A hysteresis of approx.
 300lux is permanently set for switch on/
 off. An additionally set RV time is not tak-
 en into account.

Only one FBH (masters) or FAH is taught-in
 per channel. However, one FBH (masters)
 or FAH can be taught-in in several chan-
 nels.

When wireless window/door contacts

FTK oder Hoppe window handles are
 taught-in, different functions can be set
 with the middle rotary switch in position
 AUTO 1 to AUTO 4 and linked to maximum
 116 FTKs: AUTO 1 = window closed then
 output active. AUTO 2 = window open then
 output active. In settings AUTO 3 and
 AUTO 4 the FTKs taught-in to a single
 channel are linked automatically. With
 AUTO 3 all FTKs must be closed so that
 the NO contact closes (e.g. for climate
 control). With AUTO 4 one open FTK is
 sufficient to close the NO contact (e.g. for
 an alarm signal or to switch on the power
 supply for an extractor hood). One or
 several FTKs can be taught-in in several
 channels to allow several simultaneous
 functions in each FTK. After a power failure
 the link is restored by a new signal to the
 FTK and a signal on the next status
 message 15 minutes later. An additionally
 set RV time is not taken into account.

When **FRW** wireless smoke alarms are
 taught-in, they are interlinked per channel.
 When an FRW signals 'smoke', the NO
 contact closes. Only after all FRW devices
 signal 'no smoke' does the NO contact
 open.

When **water probes** are taught-in, a
 variety of functions can be set using the
 middle rotary switch in positions AUTO 1

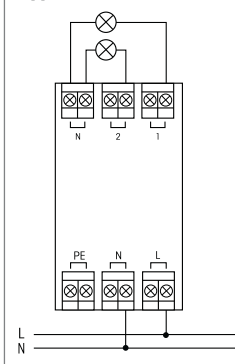
to AUTO 4.

AUTO 1 = 'no water', then NO contact
 closed.
 AUTO 2 = 'water', then NO contact closed.
 In Positions AUTO 3 and AUTO 4 the
 water probes taught-in to a single channel
 are interlinked automatically. With AUTO 3,
 all water probes must signal 'no water'
 before the NO contact closes. The NO
 contact opens when a water probe signals
 'water'. With AUTO 4, the NO contact
 closes when a water probe signals 'water'.
 Only when all water probes signal 'no
 water' does the NO contact open. An
 additionally set RV time is ignored.

The red LED accompanies the teach-in
 process and indicates control commands
 in operation by flashing briefly.

The green LED flashes briefly when a
 confirmation telegram is sent.

Typical connection



Teaching-in wireless sensors in wire- less actuators

**All sensors must be taught-in in the
 actuators so that they can detect and
 execute commands.**

Teaching-in actuator FSR71SSR-2x-230V

Before starting the teach-in pro-
 cess, connect the device and plug
 in the power supply unit.

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 ALL. The
 LED flashes at a high rate. Within the next
 10 seconds, turn the upper rotary switch
 three times to the right stop (turn clock-
 wise) 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.

Clear device configuration:

Set the middle rotary switch to ALL. The red
 LED flashes at a high rate. Within the next
 10 seconds, turn the upper rotary switch
 six times to the left stop (turn anticlock-
 wise) and away again. The red LED stops
 flashing and goes out after 5 seconds.
 The factory settings are restored.

Teaching-in sensors:

A total of 120 memory locations are
 available.

1. Select the required channel 1, 2 or 1..2
 using the lower rotary switch.
2. Use the upper rotary switch to select
 the required teach-in function.
 0 = teach in 'direction button';
 Rocker is completely taught-in automat-
 ically when operating the pushbutton.
 The side on which the pushbutton is
 first operated is defined for switching
 on, the other side for switching off.
 5 = teach in 'universal pushbutton ES';
 10 = teach in 'universal pushbutton ER';

15 = teach in 'central control push-button ON' with priority;

20 = teach in 'central control push-button OFF' with priority;

Central pushbutton have priority as long as they are pressed.

30 = teach in 'scene button';

Scene pushbuttons (double rocker) are taught-in in fully automatic mode.

'Save scenes' as described further on.

45 = teach in 'central control push-button ON';

90 = teach in 'central control push-button OFF';

120 = teach in FBH (slave) and FRW;

3. Set the middle rotary switch to LRN. The LED flashes at a low rate.

4. Press the sensor to be taught-in. The LED goes out.

The position of the upper rotary switch is unimportant for FTK, water probes and PC during the teach-in process.

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

You can teach in unencrypted and encrypted sensors.

Teach in encrypted sensors:

1. Set the middle rotary switch to LRV. The red LED flashes at a high rate.

2. Within 120 seconds, enable sensor encryption. The red LED goes out.

Caution: Do not switch off the power supply.

3. Then teach in the encrypted sensor as described in 'Teaching-in sensors'.

To teach in other encrypted sensors, turn the middle rotary switch briefly away from position LRV and then turn it to 1.

With encrypted sensors, use the 'rolling code', i.e. the code changes in each telegram, both in the transmitter and in the receiver.

If a sensor sends more than 50 telegrams when the actuator is not enabled, the sensor is no longer recognised by the enabled actuator and you must repeat teach-in as 'encrypted sensor'. It is not necessary to repeat the function teach-in.

Teach in scenes

Up to 4 scenes are being saved with a previously taught-in scene pushbutton.

1. All 2 channels of the impulse switch can be turned on or off individually with a previously taught-in universal-, direction-, or central pushbutton as it is desired for one scene.

2. The switch state is saved within 60 seconds when you press one of the four rocker ends of the doublerocker scene button for longer than 3 seconds but shorter than 10 seconds.

3. If more scenes have to be saved return back to point 1.

Recall scenes

Press one rocker of the scene pushbutton briefly to recall the scene you require. An additionally set RV time is not taken into account.

When the middle rotary switch is set to TEST, the 2 contacts can be closed individually using the lower rotary switch:

TEST + AUTO = all contacts open,

TEST + 1 = contact 1 closed,

TEST + 2 = contact 2 closed,

TEST + 1..2 = all contacts closed.

Switch on repeater:

The repeater is switched off in the factory setting. When disconnected, set the middle rotary switch to CLR and the lower rotary switch to the left stop (turning it counterclockwise). Switch on the power supply. The red LED lights up to two seconds. The repeater is switched on.

Switch off repeater:

When disconnected, set the middle rotary switch to CLR and the lower rotary switch to the right stop (turning it clockwise). Switch on the power supply. The red LED lights up to 0.5 seconds. The repeater is switched off.

Switch-on confirmation telegrams:

For deliveries ex-works the confirmation telegrams are switched-off. Set the lower rotary switch to 1. Set the middle rotary switch to CLR. The red LED flashes nervously. Now within 10 seconds turn the upper rotary switch 3 times to the left (anticlockwise) and then back away. The red LED goes out and the green LED

lights up for 2 seconds. The confirmation telegrams are switched-on.

Switch-off confirmation telegrams:

Set the lower rotary switch to 1. Set the middle rotary switch to CLR. The red LED flashes nervously. Now within 10 seconds turn the upper rotary switch 3 times to the left (anticlockwise) and then back away. The red LED goes out immediately. The confirmation telegrams are switched-off.

Use the data transformer DAT71 to create a link to a PC running the PCT14 software.

Configure FSR71:

The following points can be configured using the PC PCT14 tool:

- behavior upon return of supply voltage
- teaching-in of wireless pushbuttons and wireless Hoppe window handles with single or double click
- scenes for scene pushbuttons
- add or change sensors



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.

ELTAKO GmbH hereby declares that the products that relates to this operating manual, are in compliance with the essential requirements and other relevant provisions of directive 1999/5/EC.

A copy of the EU declaration of conformity can be requested at the address below.

Must be kept for later use!

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