

Wireless actuator  
Staircase off-delay timer  
FTN61NP-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%.

**valid for devices from production week 11/14** (see bottom side of housing)

1 NO contact not potential free 10A/250V AC, incandescent lamps up to 2000 watts, switch-off early warning and switchable pushbutton permanent light. Encrypted wireless, bidirectional wireless and repeater function are switchable. Only 0.8 watt standby loss.

For installation.  
45mm long, 55mm wide, 33mm deep.  
Supply voltage, switching voltage and control voltage local 230V.

**Zero passage switching to protect contacts and consumers.**

**This wireless actuator is a staircase off-delay timer 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. After installation, wait for short automatic synchronisation before the switched consumer is connected to the mains.

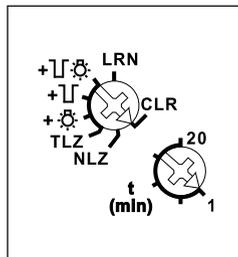
In addition to the wireless control input via an internal antenna, this staircase off-delay timer can also be controlled locally by a conventional 230V control switch previously mounted. Glow lamp current up to 5mA, dependent on the ignition voltage of the glow lamps.

The lighting is switched on again after a power failure provided the set time has not yet elapsed.

**Starting in production week 11/14, you can teach in encrypted sensors.** You can switch on **bidirectional wireless** and/or a **repeater** function.

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

### Function rotary switches



**With the top rotary switch** in the setting LRN up to 35 wireless pushbuttons and/or wireless motion/brightness sensors FBH can be assigned of which one or more central pushbuttons. The required function of this staircase off-delay timer can then be selected.

**NLZ** = off-delay timer

**TLZ** = staircase time switch

- + [⊗] = TLZ with pushbutton permanent light
- + [⊏] = TLZ with switch-off early warning
- + [⊏] [⊗] = TLZ 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 60 minutes or by pressing the pushbutton for longer than 2 seconds.

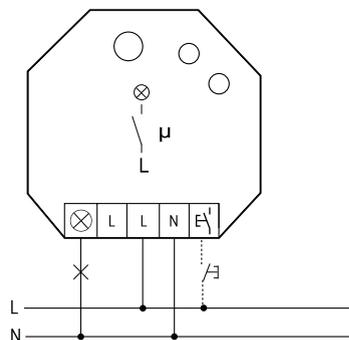
**If the switch-off early warning** [⊏] is switched on, the light starts to flicker approx. 30 seconds before time-out. This is repeated three times at decreasing time intervals.

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.

**With the bottom rotary switch**, the off delay is adjusted from 1 to 20 minutes. When teaching-in **motion and brightness sensors FBH**, the switching threshold is defined on the last FBH taught-in to switch the light on/off depending on the brightness. The off delay set on the FTN61NP is prolonged by a setting of 1 minute fixed in the FBH.

**The LED** performs during the teach-in process as mentioned in this instruction manual below. It shows wireless control commands by short flickering during operation.

### Typical connection



### Technical data

|   |               |
|---|---------------|
| Rated switching capacity  | 10A/250V AC   |
| Incandescent lamp and halogen lamp load <sup>1)</sup>                         | 2000W 230V    |
| Fluorescent lamp load with KVG* 1000VA in lead-lag circuit or non compensated |               |
| Fluorescent lamp load with KVG* 500VA shunt-compensated or with EVG*          |               |
| Compact fluorescent lamps with 15x7W EVG* and energy saving lamps 10x20W      |               |
| Local control current at 230V control input                                   | 3.5mA         |
| Max. parallel capacitance (approx. length) of local control lead at 230V AC   | 0.01 μF (30m) |

Standby loss (active power) 0.8W

- <sup>1)</sup> Applies to lamps of max. 150W.  
\* EVG = electronic ballast units;  
KVG = conventional ballast units

### Teaching-in wireless sensors in wireless actuators

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

### Teaching-in actuator FTN61NP-230V

The teach-in memory is empty on delivery from the factory. To ensure that a device was not previously taught-in, **clear the memory completely:**

Turn the upper rotary switch to CLR. The LED flashes at a high rate. Within 10 seconds, turn the lower rotary switch three times to right stop (turn clockwise) and back again. The LED stops flashing and goes out after 2 seconds. All taught-in sensors are cleared; the repeater and the confirmation telegrams are switched off.

### Clear single taught-in sensors:

Turn the upper rotary switch to CLR. The LED flashes at a high rate. Operate the sensor. The LED goes out.

If all the functions of an encrypted sensor are cleared, teach-in must be repeated as described under *Teach-in encrypted sensors*.

### Teaching-in sensors:

1. Setting of the lower rotary switch to the desired teaching-in function:

The flashing of the LED as soon as a new setting range has been reached when turning the rotary switch helps to find the desired position reliably.

**Left stop 1** = teach-in 'central OFF' and FTK as NO contact;

**Approx. middle** = teach-in 'switch ON or press again';

**Right stop 20** = teach-in 'central ON' or FTK as NC contact.

When an **FBH is taught-in as motion/brightness sensor**, the position of the bottom rotary switch during teach-in defines the threshold between 1 = movement detection at darkness and 20 = movement detection at brightness.

2. Set the upper rotary switch to LRN. The LED flashes at a low rate.

3. Operate the sensor which should be taught-in. The LED goes out.

To teach-in further sensors, turn the upper 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.

**To prevent unintentional teach-in, teach in pushbuttons by 'double-clicking' (pressing rapidly twice in succession).**

Within 2 seconds, turn the upper rotary switch three times to right stop LRN (turn clockwise). The LED flashes 'double'.

'Double-click' the pushbutton you want to teach in. The LED goes out.

To change back to teach-in with a 'single click', turn the upper rotary switch 3 times to right stop LRN (clockwise) within 2 seconds. The LED flashes at a low rate.

After a power supply failure, the device reverts automatically to teach-in with a 'single click'.

You can teach in unencrypted and encrypted sensors.

**Teach in encrypted sensors:**

1. Turn the upper rotary switch to LRN.

2. Turn the lower rotary switch three times to left stop (anticlockwise).  
The LED flashes very rapidly.

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

Caution: Do not switch off the power supply.

4. Then teach in the encrypted sensor as described in *Teach in sensors*.

To teach in other encrypted sensors, turn the upper rotary switch briefly away from position LRN 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.

If control voltage is applied to the local control input when the power supply is switched on, the repeater is switched on/off. When the power supply is switched on, the LED lights up for 2 seconds = repeater off (as-delivered state) or 5 seconds = repeater on to indicate the state.

**Switch-on confirmation telegrams:**

For deliveries ex-works the confirmation telegrams are switched-off. Set the upper rotary switch to CLR. The LED flashes nervously. Now within 10 seconds turn the bottom rotary switch 3 times to the left (anticlockwise) and then back away. The LED stops flashing and goes out after 2 seconds. The confirmation telegrams are switched-on.

**Switch-off confirmation telegrams:**

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

**Teaching-in feedback of this actuator in other actuators :**

Set the upper rotary switch to NLZ. For switching ON and simultaneously transmitting of feedback the local control input has to be used. For switching OFF and simultaneously transmitting of feedback set the upper rotary switch from NLZ to TLZ.

**Teaching-in feedback of other actuators in this actuator:**

'Switch on' will be taught-in in position 'central ON'. 'Switch off' will be taught-in in position 'central OFF'. After teach-in the function and desired off-delay will be set. If the switch-off warning is activated it will still be run after 'central off'.



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!**

**Eltako GmbH**

D-70736 Fellbach

+49 711 94350000

www.eltako.com

03/2014 Subject to change without notice.