



# Eltako FMZ61-230V Wireless Actuator Multifunction Time Relay Instruction Manual

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**Eltako FMZ61-230V Wireless Actuator Multifunction Time Relay**



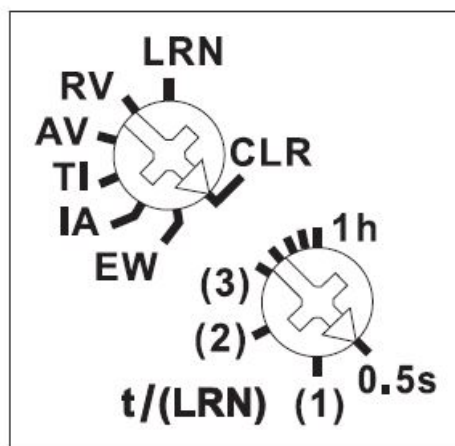
Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock.

- 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 27/22. 1 NO contact potential free 10A/250V AC, incandescent lamps 2000 Watt. Encrypted wireless, bidirectional wireless and with repeater function. Only 0.8 watt standby loss. For installation 45mm long, 45mm wide, 33mm deep. Supply voltage and control voltage locally 230V. If a power failure occurs, the switching state is retained. If a power failure occurs repeatedly, the device is switched off in a defined sequence. This wireless actuator features state-of-the-art hybrid technology that we developed: we combined the wear-free receiver and evaluation electronics with a bistable relay. 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 wireless actuator can also be controlled locally by a conventional 230V control switch if fitted previously. Glow lamp current is not permitted.

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 and in the GFVS software.

## Function rotary switches



With the top rotary switch in the setting LRN up to 35 wireless pushbuttons can be assigned therefrom one or more central control pushbuttons. In addition, wireless window/door contacts (FTK) may have a NO or NC function when the window is open. If a direction switch is taught-in, a function e.g. TI can be started using the top switch

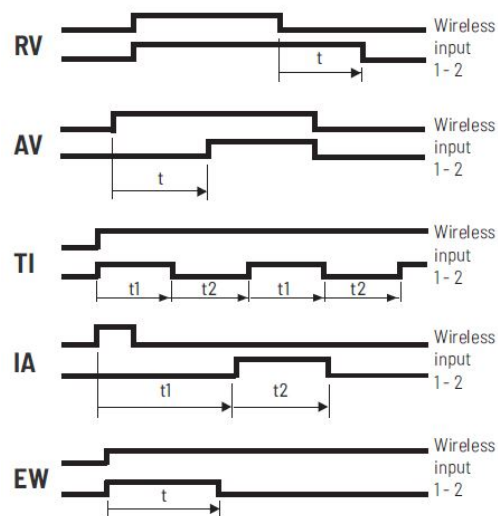
START and stopped with the bottom switch (STOP). The required function of the wireless actuator can then be

selected. Switching will be visualised by flashing of the LED.

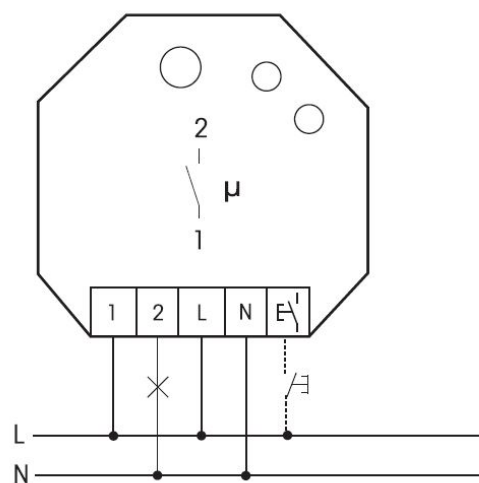
- RV = off delay
- AV = operate delay
- TI = clock generator starting with impulse
- IA = impulse controlled operate delay
- EW = freeing NO contact

The bottom rotary switch sets the time from 0.5 to 60 minutes. The LED below the upper function rotary switch performs during the teach-in process according to It shows control commands by short flashing during operation.

## Description of functions



## Typical connection



## Technical data

- Rated switching capacity 10A/250V AC
- Standby loss (active power) 0,8W

## Teaching in wireless sensors in wireless actuators

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

### Teaching in actuator FMZ61

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

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 0.5s = teach-in FTK as NO contact

- (1) = teach-in central OFF.
- (2) = teach-in universal switch.
- (3) = teach-in FTK as NC contact.

### Right stop 1h

FTK as NC contact for air conditioner control, teach-in direction switches. Direction switches are completely taught-in automatically when operating the top or bottom pushbutton. The side on which the pushbutton is first operated is defined for START and the other side for STOP. Rotary switches and GFVS can be taught in in any position, confirmation telegrams are automatically activated and sent. Set the upper rotary switch to LRN. The LED flashes at a low rate. Operate the sensor to 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. 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.
3. The LED flashes very rapidly.
4. Within 120 seconds, enable sensor encryption.
5. The LED goes out. Caution: Do not switch off the power supply.

6. Then teach in the encrypted sensor as described in T each in sensors.

To teach in other encrypted sensors, turn the upper rotary switch briefly away from position LRN and then turn it to 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 When TF RWB smoke detectors or FWS81 water sensors are taught in, they are connected automatically. When they are in operation, turn the upper rotary switch to RV. When a sensor receives an alarm telegram, the relay switches on immediately. If the lower rotary switch is at 0.5s, the relay switches all sensors off at the end of the alarm telegram. If the lower rotary switch is at 1h, the relay does not switch off all sensors automatically at the end of the alarm telegram. Instead, they must be switched off by pressing the Central OFF pushbutton.

## **Wireless window/door contacts**

- FTK (EEP D5-00-01, F6-10-00, A5-14-01, -03, -09, -0A)
- Function setting RV: Several FTK are linked with each other.
- NO function: if a window is opened, the contact closes.
- If all windows are closed, the contact opens after the set RV time has elapsed.
- NC function: If all windows are opened, the contact opens after the set RV time has elapsed.
- If a window is closed, the contact closes.

## **Function normally closed for climate control**

If a window is opened, the contact opens after the set RV time has elapsed. All windows must be closed for the contact to close. If FTK were taught in as NC contact for air conditioner control and the RV function was selected, the switching state is retained after the supply voltage fails and returns, the relay is not defined switched off. After all FTK have sent their status through cyclical sending, the switching status is synchronized.

### **Switching on/off repeater**

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 the local control input has to be used for changing of switching position and simultaneously transmitting of feedback. 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.

## **Documents in further languages**




[http://eltako.com/redirect/FMZ61 230V](http://eltako.com/redirect/FMZ61%20230V)

Hereby, Eltako GmbH declares that the radio equipment type FMZ61 230V is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:  
[eltako.com](http://eltako.com)

- Technical Support English: +49 711 94350025
- technical [support@eltako.de](mailto:support@eltako.de)
- [eltako.com](http://eltako.com)

## Documents / Resources

	<a href="#">Eltako FMZ61-230V Wireless Actuator Multifunction Time Relay</a> [pdf] Instruction Manual FMZ61-230V, Wireless Actuator Multifunction Time Relay, FMZ61-230V Wireless Actuator Multifunction Time Relay, Actuator Multifunction Time Relay, Multifunction Time Relay, Time Relay
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## References

-  [Home » Eltako](#)
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