Eltako
ELECTRONICS

CE

Tap-radio® universal dimming actuator

TF61D-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 24/17 (see bottom side of housing)

Wireless universal dimming actuator. With power MOSFET. 230V incandescent lamps and halogen lamps up to 300W, 230V LEDs up to 100W. No inductive (wound) transformers. With children's rooms and snooze function. No minimum load. Standby loss only 0.7 watt.

For installation.

45mm long, 45mm wide, 33mm deep.

Up to 24 wireless universal pushbuttons, wireless direction pushbuttons, wireless central control pushbuttons and motion sensors TF-BSB can be taught in using easy tap-radio® technology.

Bidirectional wireless switchable.

Zero passage switching with soft ON and soft OFF to protect lamps.

Supply voltage, switching voltage and control voltage local 230V.

No minimum load.

The brightness level is stored on switch-off (memory).

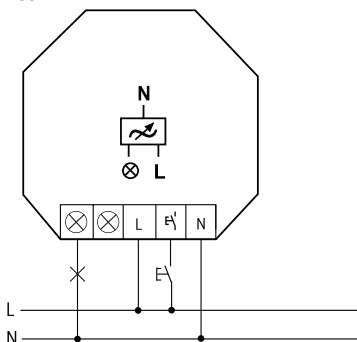If supply voltage fails, the device is switched off in defined mode.

When switched on for the first time, the device is at maximum brightness.

Automatic electronic overload protection and overtemperature switch-off.

In addition to the wireless control input via an internal antenna, this tap-radio®

actuator can also be controlled locally by a conventional 230V control switch if fitted previously. Glow lamp current is not permitted.

Typical connection

Start-up:
After you switch on the power supply, the teach-in mode is automatically active for 2 minutes provided the memory content is empty (as-delivered state) and/or the teach-in mode is not blocked.
Readiness for teach-in is indicated by the lamp briefly switching on/off.

Teach in wireless pushbutton:
Universal pushbutton: tap briefly 3 times;
Direction pushbutton: tap briefly 4 times;
Direction pushbutton teach-in is fully automatic when the pushbutton is tapped. Where you tap is then defined as switch-on. The other side automatically becomes switch-off.

Central control pushbutton On:
Tap briefly 5 times;

Central control pushbutton Off:
Tap briefly 6 times;

Wireless motion sensor TF-BSB, TF-BHSB:
(EEP: A5-07-01);**:**
teach-in telegram 0x1C080D80;

Rotary switch and **GFVS:** teach-in telegram 0xE040D80, this automatically switches on and sends confirmation telegrams. It locks automatically the teach-in mode.

After teaching-in a pushbutton, confirm teach-in by briefly switching the lamp on/off; the teach-in mode is active for a further 2 minutes.

To prevent unintentional teach-in, the teach-in mode is automatically blocked

2 minutes after the last teach-in, if an universal or direction pushbutton is already taught in. This is indicated by the lamp switched on/off briefly twice.

Block teach-in mode immediately:
Tap 3 times briefly and once long (>2 seconds) on a wireless pushbutton (not central control pushbutton) that is already taught in or the local pushbutton.
A block is indicated by the lamp switching on/off briefly twice.

Unblock teach-in mode:
Tap 4 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton) or the local pushbutton.
Readiness for teach-in is indicated by the lamp briefly switching on/off.

Clear memory content completely (restore as-delivered state):
1. Switch power supply on/off.
2. Tap 8 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton) or the local pushbutton.
   Clear is indicated by the lamp briefly switching on/off.
3. Apply on 'Teach in wireless pushbutton'.

Adjust and save minimum brightness:
1. Switch power supply off/on.
2. If necessary, unlock the teach-in mode.
3. Set the required minimum brightness using a taught-in wireless pushbutton (not central command pushbutton) or the local pushbutton.
4. Tap 2 times briefly (not central command pushbutton) on a wireless pushbutton that is already taught in or the local pushbutton.
   Save is indicated by the lamp briefly switching on/off.
5. Block teach-in mode.

The wireless dimming actuator is a universal dimming actuator when it is in factory setting (AUTO) and dims with phase cut-off or phase control depending on the connected load.

With various 230V LED lamps, the dimming function improves when dimmed with phase control.

Switch over to phase control:
1. Switch power supply off/on.
2. Tap 5 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton) or the local pushbutton.
   Phase control is indicated by the lamp switching on/off briefly twice.

Switch over to AUTO:
1. Switch power supply off/on.
2. Tap 6 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton) or the local pushbutton.
   Phase control is indicated by the lamp switching on/off briefly four times.

Change dimming speed:
Slow: Tap a taught-in wireless pushbutton or tap the local pushbutton 9 times. 'Slow' is indicated by the lamp briefly switching on/off.
Medium: Tap a taught-in wireless pushbutton or tap the local pushbutton 10 times. 'Medium' is indicated by the lamp switching on/off briefly twice.
Fast (factory setting): Tap a taught-in wireless pushbutton or tap the local pushbutton 11 times. 'Fast' is indicated by the lamp switching on/off briefly three times.

Switch-on or -off confirmation telegrams:
1. Switch power supply off/on.
2. Tap 7 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton) or the local button.
   ON is indicated by the lamp switching on/off briefly twice.
   OFF is indicated by the lamp briefly switching on/off.

Direction pushbutton:
'Switch on and dim up' on one side and 'Switch off and dim down' on the other side. A double-click on the switch on side triggers the automatic dimming up to full brightness.

Universal pushbutton:
Short commands switch on/off, continuous activation changes brightness up to maximum value. If you interrupt activation, it changes the dimming direction.

Switching operation for children's rooms (universal switch or direction switch on the switch-on side): If the light is switched on by holding down the pushbutton, it starts at the lowest brightness level after approx. 1 second and dims up slowly as long as the pushbutton is held down without modifying the last stored brightness level.

Snooze function (universal switch or direction switch on the switch-off side): With a double impulse the lighting is dimmed down from the current dimming position to the minimum brightness level and switched off. The current dimming position as well as the adjustable minimum brightness level determine the dimming time (max. = 60 minutes) which can be reduced as required. It can be switched off at any time by short-time control commands during the lighting is dimmed down.

Semi-automatic motion detection with taught-in wireless motion sensor TF-BSB, TF-BHSB (factory setting):
Press the pushbutton to switch on. This starts a release delay time of 5 minutes during which the device switches on again if motion is detected. When motion is no longer detected, the device switches off automatically after 5 minutes. The actuator then responds to motion for a further 5 minutes before switching off automatically. After this time expires, the device must be switched on again by pressing the pushbutton. The device can be switched off at any time by pressing the pushbutton, but then motion is no longer detected.

Fully automatic motion detection with taught-in wireless motion sensor TF-BSB, TF-BHSB:
If the actuator is not to switch on automatically when motion is detected, e.g. in rooms without daylight, replug the jumper to 'active' on the TF-BSB device. When motion is no longer detected, the device switches off automatically after the 5 minute release delay time expires. Press the pushbutton at any time to switch the device on or off. When motion is detected, the device switches on again

automatically.

When controlled via the GFVS software, light scenes can be set and retrieved.

Technical data

Incandescent and halogen [1] lamps 230V (R)	up to 300W [2]
Inductive transformers (L)	–
Electronic transformers (C)	up to 300W [2][3]
Dimmable energy saving lamps ESL	–
Dimmable 230V LEDs	up to 100W [2][5]
Max./min. temperature at mounting location	-20°C up to +50°C [4]
Standby loss (activ power)	0.7W

[1] For lamps with 150W max.
[2] The switching capacity is dependent on the ventilation conditions.
[3] When calculating the load, take into account 5% loss in addition to lamp load for capacitive (electronic) transformers.
[4] Influences maximum switching capacity.
[5] Different lamp electronics may result in restricted dimming areas, on/off problems and a limited maximum number of lamps (to 10 units), especially if the connected load is very low (e.g. with 5W LEDs).

EnOcean wireless

Frequency	868,3 MHz
Transmit power	max. 10 mW

**Hereby, Eltako GmbH declares that the radio equipment type TF61D-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**

Must be kept for later use!

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