Eltako ELECTRONICS

Tap-radio®-pushbutton actuator dimmer without N connection

TF-TA55DL

CE

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%.

Wireless pushbutton actuator dimming without N connection. For single mounting 80x80x15/33 mm or mounting into the 55 series switching system. Pure white glossy. With Power MOSFET. Incandescent and halogen lamps up to 200 W, depending on ventilation conditions. Energy saving lamps ESL and 230V LED lamps in 'trailing edge' mode up to 200 W or up to 40 W in 'leading edge' mode, depending on ventilation conditions. Min. load 20 W at 'trailing edge' mode and 8 W at 'leading edge' mode.

No inductive (wound) transformers. With switching operation for children's rooms and snooze function. With integrated universal/direction pushbutton and terminals for additional wired pushbuttons. Only 0.7 watt standby loss.

Using easy tap-radio® technology, up to 24 wireless universal pushbuttons, wireless direction pushbuttons, wireless central control pushbuttons and motion sensors TF-BSB and TF-BHSB can be taught in. In addition the actuator can be locally controlled with a conventional 230V wired pushbutton without glow lamp. The integrated pushbutton works ex work as an universal pushbutton and can be taught-in as an direction pushbutton using the corresponding tap-radio tapping code.

Bidirectional wireless switchable.

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

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

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.

If 230V LED lamps are lightly glowing when they are turned off, a GLE base load must be installed parallel to the lamp.

Mounting over a 55 mm switch box. 16 mm over and 33 mm into the box. 230V power supply and wired pushbutton terminals on the rear.

Typical connection
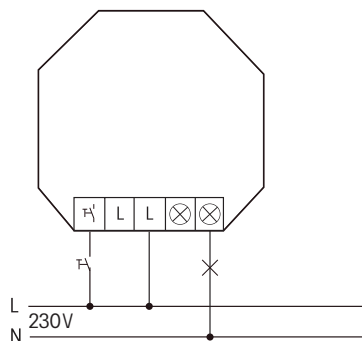
First unlock the teach-in mode before teaching in wireless pushbuttons or changing the function of the integrated pushbutton.

Unlock teach-in mode:
Tap the rocker, a cable-bound pushbutton or an already taught-in wireless pushbutton (but not a central control button) 4 times briefly and once long (>1 second). Readiness for teach-in is indicated by briefly switching the load on/off.

In its as-delivered state, the rocker operates as an universal pushbutton when the top or bottom part is pressed.

It can be changed into a direction pushbutton in teach-in mode by tapping 4 times briefly. The part where you tap is then defined as switch-on and dim up. The other side automatically becomes switch-off and dim down.

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 part where you tap is then defined as switch-on and dim up. The other side automatically becomes switch-off and dim down.
Central control pushbutton On:
Tap briefly 5 times;
Central control pushbutton Off:
Tap briefly 6 times;
Wireless motion sensor TF-BSB, TF-BHSB: teach-in telegram 0x1C080D80;
Rotary switch and **GFVS:** teach-in telegram 0xE0400D80, this automatically switches on and sends confirmation telegrams. It locks automatically the teach-in mode.

Teaching-in a pushbutton, is confirmed by briefly switching the load on/off. The teach-in mode is then 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 load switched on/off briefly twice.

Block teach-in mode immediately:
Tap 3 times briefly and once long (>1 second) 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.

Clear memory content completely (restore as-delivered state):
1. Switch power supply on/off.
2. Tap 8 times briefly and once long (>1 second) 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. Unlock the teach-in mode.
3. Set the required minimum brightness using a taught-in wireless pushbutton or the local pushbutton.
4. Tap briefly twice the rocker, the local pushbutton or an already taught-in wireless pushbutton (not a central control 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 (>1 second) 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 (>1 second) 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 briefly 9 times the rocker, the local pushbutton or an already taught-in wireless pushbutton. 'Slow' is indicated by the lamp briefly switching on/off.
Medium: Tap briefly 10 times the rocker, the local pushbutton or an already taught-in wireless pushbutton. 'Medium' is indicated by the lamp switching on/off briefly twice.

<u>Fast (factory setting):</u> Tap briefly 11 times the rocker, the local pushbutton or an already taught-in wireless pushbutton. '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 (>1 second) 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 TF-BSB, TF-BHSB wireless motion sensor (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 TF-BSB, TF-BHSB taught-in wireless motion sensor:

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 Motion detector 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 lamps 230V (R)	up to 200W[1]
Inductive transformers (L)	–
Electronic transformers (C)	up to 200W[1][2]
Dimmable energy saving lamps ESL	up to 200W[1][3]
Dimmable 230V LEDs	up to 200W[1]3
Max./min. temperature at mounting location	-20°C up to +50°C[4]
Standby loss (activ power)	0.7W

[1] The switching capacity depends on the ventilation conditions.
[2] **When calculating the load a loss of 5% for capacitive (electronic) transformers must be considered in addition to the lamp load.**
[3] If energy savings lamps or 230V LED are used in the leading edge operating mode, the maximum load is only up to 40W.
[4] Affects the max. switching capacity.

EnOcean wireless

Frequency	868,3MHz
Transmit power	max. 10mW

Hereby, Eltako GmbH declares that the radio equipment type TF-TA55DL 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!

Eltako GmbH

D-70736 Fellbach

Technical Support English:
☎ Michael Thünte +49 176 13582514
✉ thuente@eltako.de

☎ Marc Peter +49 173 3180368
✉ marc.peter@eltako.de

eltako.com