



Tap-radio® universal dimming actuator adapter

TF100D-230V

Ambient temperature:  
0°C up to +35°C.  
Storage temperature: -25°C up to +70°C.  
Relative humidity:  
annual average value <75%.

**valid for devices from production week 20/18** (see bottom side of housing)

Wireless universal dimming actuator adapter. 100x55x45 mm (measurements without plug), pure white glossy. 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.

Adapter for German fused safety sockets. Using easy tap-radio® technology, up to 24 wireless universal pushbuttons, wireless direction pushbuttons, wireless central control pushbuttons and motion sensors TF-BSB can be taught in.

During teach-in, the dimming actuator can be set to phase control to permit optimum dimming for various LED lamps.

Bidirectional wireless switchable.

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

Supply voltage and switching voltage 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.

#### Start-up:

After plugging the device into the socket 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);

**Rotary switch and GFVS:** Teach-in telegram 0xE0400D80, this automatically switches on and sends confirmation telegrams. It blocks the teach-in mode.

After teaching-in a pushbutton, teach-in is confirmed by the lamp switching on/off briefly; 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.

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).

Readiness for teach-in is indicated by the lamp briefly switching on/off.

#### Clear memory content completely (restore as-delivered state):

1. Unplug or plug in the adapter.
2. Tap 8 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton).  
Clear is indicated by the lamp briefly switching on/off.
3. Apply on 'Teach in wireless pushbutton'.

#### Clear memory content completely (restore as-delivered state) without a pushbutton:

unplug and plug in the adapter 8 times within 20 seconds. Clear is indicated by the lamp briefly switching on/off.

#### Adjust and save minimum brightness:

1. Unplug or plug in the adapter.
2. If necessary, unlock the teach-in mode.
3. Set the required minimum brightness using a taught-in wireless pushbutton (not central command pushbutton).
4. Tap 2 times briefly (not central command pushbutton) on a wireless pushbutton that is already taught in. 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. Unplug or plug in the adapter.
2. Tap 5 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton).  
Phase control is indicated by the lamp switching on/off briefly three times.

#### Switch over to AUTO:

1. Unplug or plug in the adapter.
2. Tap 6 times briefly and once long

(>2 seconds) on a wireless pushbutton already taught in (not a central command 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. Unplug or plug in the adapter.
2. Tap 7 times briefly and once long (>2 seconds) on a wireless pushbutton already taught in (not a central command pushbutton).  
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 pushbutton or direction pushbutton 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 pushbutton or direction pushbutton 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 <sup>1)</sup> lamps 230V (R)	up to 300W <sup>2)</sup>
Inductive transformers (L)	–
Electronic transformers (C) up to 300W <sup>2)3)</sup>	–
Dimmable energy saving lamps ESL	–
Dimmable 230V LEDs	up to 100W <sup>2)5)</sup>
Ambient temperature	0°C up to +35°C <sup>4)</sup>
Standby loss (activ power)	0.7W

<sup>1)</sup> For lamps with 150W max.

<sup>2)</sup> The switching capacity is dependent on the ventilation conditions.

<sup>3)</sup> **When calculating the load, take into account 5% loss in addition to lamp load for capacitive (electronic) transformers.**

<sup>4)</sup> Influences maximum switching capacity.

<sup>5)</sup> 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).



**May only be used in closed dry rooms.**

**The socket must be easily accessible.**

**Don't insert in a row.**

#### **EnOcean wireless**

Frequency	868,3MHz
Transmit power	max. 10mW

**Hereby, Eltako GmbH declares that the radio equipment type TF100D-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)**

WEEE registration number DE 30298319

**Must be kept for later use!**

#### **Eltako GmbH**

D-70736 Fellbach

##### **Technical Support English:**

☎ Michael Thünte +49 176 13582514

✉ [thuente@eltako.de](mailto:thuente@eltako.de)

☎ Marc Peter +49 173 3180368

✉ [marc.peter@eltako.de](mailto:marc.peter@eltako.de)

[eltako.com](http://eltako.com)

13/2019 Subject to change without notice.