

EN Flush-mounted universal dimmer

DIMAX 541 plus E
5410130
DIMAX 542 plus S
5420130



1. Basic safety information

WARNING
Danger of death through electric shock or fire!
➤ Installation should only be carried out by a qualified electrician!

- ① Due to continuing technical progress, abnormalities in dimming response or radio interference cannot be ruled out when operating dimmed lamps (in particular LEDs)
 - The flush-mounted universal dimmer conforms to EN 60669-2-1 if correctly installed

2. Proper use

- The universal dimmer switches and dims the brightness of different lamps such as bulbs, high-voltage halogen lamps, low-voltage halogen lamps (conventional or with electronic transformer) or dimmable LED lamps for 230 V as well as fans
- The brightness can be adjusted using buttons attached to the dimmer
- DIMAX 541 plus E has no setting option (automatic mode)
- The 4 operating modes are set via the rotary switch (on DIMAX 542 plus S)
- The universal dimmer is equipped with a „gentle“ lamp conserving function for switching on and off, automatic detection of the load type (not in the case of LED2), overheating protection against overload as well as short-circuit protection
- For use in private and public residential construction, in closed rooms
- Suitable for retrofitting

Disposal

- Dispose of device in environmentally sound manner

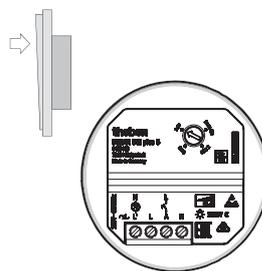
3. Installation and connection

- ① When the mains returns, the lamp illuminates briefly for load detection.

Mounting the dimmer

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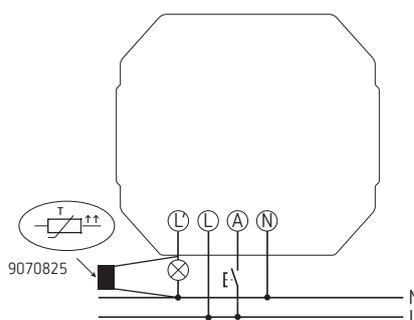
- Disconnect power source
- Ensure device cannot be switched on
- Check absence of voltage
- Earth and bypass
- Cover or shield any adjacent live components



- Install in conventional flush-mounted boxes (according to DIN 49073)

Connecting the dimmer

- ① Several dimmers can be controlled with one button.



- Use compensation module 9070825 to prevent the LEDs from afterglow or flickering.
- Install the compensation module parallel to the consumer.

WARNING Component can get hot!



Risk of electric shock!

The device does not have basic insulation around the terminals/plugs!

- Protect against accidental contact during installation.
- Maintain a minimum distance of 3 mm from live parts or use additional insulation, e.g. separating strips/walls.

- Always operate electronic and conventional transformers with the minimum load specified by the manufacturer.
- Only use dimmable LED lamps, as normal LED lamps may be destroyed.
- When changing the lamps, switch off the power supply (at the fuse box) so that the automatic load detection is reactivated.
- Do not connect dimmer load connections (L¹) in parallel.
- Do not bypass or short-circuit the dimmer.
- Do not install any isolating or variable transformers before the dimmer.
- Do not mix wound and electronic transformers in the installation.
- Do not mix wound transformers and LEDs in the installation.
- Do not connect buttons with glow lamps.
- Correct automatic load detection is only possible with a connected load.
- Only use transformers approved by the manufacturer for dimmer operation.

4. Description of the operating modes

DIMAX 541 plus E

The dimmer has the following functions in automatic mode:

- Dimming
- Memory function
- Wake-up and snooze function

DIMAX 542 plus S

The dimmer is equipped with a rotary switch which is used to choose between 4 operating modes:



Auto (default)

With comfort function, with automatic load detection for the conventional lamp types; wake-up and snooze function is active

Prog

Teach in the minimum brightness

LED 2

Function for LEDs that have poor dimming properties in **Auto**; no automatic load detection (always with **leading edge**); wake-up and snooze function is active

ⓘ Some LED lamps may cause an overload in **LED 2** that automatically leads to the load dimming.

- Select **Auto** in order to avoid this

Perm ON (test function)

With automatic load detection, dimmer is permanently on

5. Setting the functions

1. Wake-up function (comfort function)

- active in **Auto**, **LED2**

The dimmer dims from the minimum brightness to 100% within 5 min (activation via double click).

2. Snooze function (comfort function)

- active in **Auto**, **LED2**

The dimmer dims from the current brightness to the minimum brightness within 5 min and switches off (activation via double click).

3. Dimming switch-on function

- applies to **Auto**, **LED2**

The dimmer switches on with minimum brightness and dims until the button is released again, or the maximum brightness has been reached (activation by pressing the button for longer).

4. Memory function

The dimmer switches on with the last brightness value saved prior to switch-off.

5. Minimum brightness (DIMAX 542 plus S only)

- applies to **Prog**

Teach in the minimum brightness

The pre-set minimum brightness is set in such a way that most lamps still light up.

- Set rotary switch to **Prog**. The current minimum brightness is approached.
- Press the button at Input A and dim up or down until the desired minimum brightness value is reached.
- Let go of the button; the brightness value is adopted.
- Set the rotary switch back to the desired function (e.g. **Auto**).

Reason: If there is a drop below a specific brightness value, some LEDs will go out or flicker.

6. Operation

Light is OFF (with button: Input A)

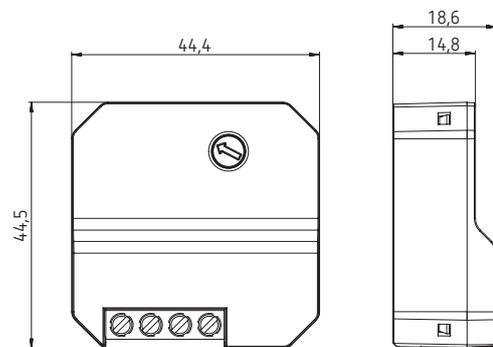
1 x short button press	< 0.5 s	Memory function The dimmer switches on with the last brightness value saved prior to switch-off.
1 x long button press	> 0.5 s	Dimming switch-on function The dimmer switches on with minimum brightness and dims until the button is released again, or the maximum brightness has been reached.
2 x short button press		Wake-up function Dimmer switches on with minimum brightness, then dims to 100% within 5 min.

Light is ON (with button: Input A)

1 x short button press	< 0.5 s	Switch off
1 x long button press	> 0.5 s	Dimmer dims up or down. Dimming stops at minimum or maximum value. The dimming direction is changed by pressing the button again.
2 x short button press		Snooze function Dimmer dims to minimum brightness within 5 min and switches off.

7. Technical data

	Trailing edge	Leading edge
Operating voltage	230 V +10% / -15%	
Frequency	50/60Hz	
Standby output	0.15 W	
Load types	R/L/C	
Minimum load	5 W	
Incandescent/halogen lamp load	250 W (up to 25 °C) 200 W (up to 45 °C)	
Dimmable LEDs	250 W (up to 25 °C) 200 W (up to 45 °C)	24 W (up to 25 °C) 12 W (up to 45 °C)
Electronic transformers (C)	250 W (up to 25 °C) 200 W (up to 45 °C)	
Inductive transformers (L)		200 W (up to 25 °C) 130 W (up to 45 °C)
Fan	–	50 W
Cable length	max. 50 m	
Cable cross-section	max. 4 mm ²	
Pollution degree	2	
Permissible ambient temperature	-25 °C ... +45 °C	



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