theben

EN LED dimmer

DIMAX 540 APP B
5400230

DIMAX 540 APP BN
5400234

1. General

- LED dimmer for installation in a flush-mounted box
- Suitable for retrofitting
- Complies with EN 60669-2-1 when installed as intended
- Ideal for dimmable LEDs, halogen lamps, and incandescent lamps (trailing edge only)
- The brightness is adjusted using the button connected to the dimmer or the app
- Commissioning and programming via mobile devices with app **Theben 540 Series**
- Wireless networking via Bluetooth Mesh 5.0 of multiple dimmers and scenes
- **Optional accessories**: compensation module (9070825)

2. Security

Assembly and installation must only be carried out by a qualified electrician or a person with appropriate professional training, knowledge, and experience to recognize and avoid the dangers posed by electricity.

Before installation/removal, disconnect the power supplyand ensure that the power supply is disconnected.

Before commissioning and using the product, read and follow the operating instructions carefully.
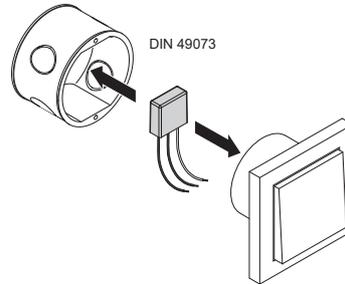
3. Intended use

- The dimmer switches and dims the brightness of various light sources such as incandescent lamps, halogen lamps, or dimmable LED lamps
- Suitable for flush mounting in closed rooms (in private and public residential buildings)

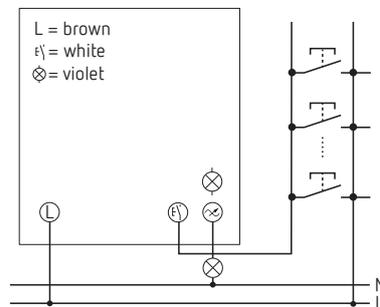# 4. Installation and connection

Installing the LED dimmer

ⓘ The dimmer cannot be dimmed during installation. Install the **Theben 540 Series** app before use to configure the device.
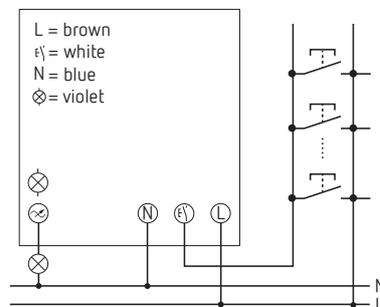
ⓘ A push button must always be connected.

➤ Install the LED dimmer in a flush-mounted box behind a standard push button or in a separate flush-mounted box (in accordance with DIN 49073).

Connecting the LED dimmer

ⓘ Only use ballasts that are suitable for phase section control for the dimmer.

ⓘ To prevent the LEDs from glowing or flickering, a compensation module (9070825) can be used.

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5. Operation via a push button

1. Switch on/off

The light can be switched on or off with a push of a button.

2. Memory function

The last light value set remains stored and dims to this value the next time the light is switched on. The connected light can be dimmed back to 100 % with a simple click on the push button.

3. Minimum brightness

A minimum brightness can be set to prevent LED lamps from flickering.

4. Switch light on to 100 %

Double-click the button to switch the light on to 100 %.

Light is OFF

1 x short button press	< 0.5 s	The light is switched on.
1 x short button press	< 0.5 s	**Memory function** The dimmer switches on with the last brightness value saved before it was switched off.
1 x long push button press	> 0.5 s	**Dimming function** The dimmer switches on at minimum brightness and dims until the button is released or maximum brightness (100 %) is reached.
2 x short button press	< 0.5 s	The light is switched on to 100 %.

Light is ON

1 x short button press	< 0.5 s	The light is switched off.
1 x long push button press	> 0.5 s	**Dimming function** The dimmer switches on at maximum brightness and dims until the button is released or the minimum brightness is reached.
The dimmer must be switched on! press the button 5 times briefly (LED flashes twice)	< 0.5 s	**Program minimum brightness** The LED flashes, set the desired brightness using the button and release the button when it is reached; wait until the LED flashes again. → The minimum brightness is saved.

6. Operation via the app

Terms used in the app

Group: A group comprises all dimmers that are controlled together.
Devices: Individual dimmers to which several light sources are connected.
Scene: Different dimmers can be combined in different scenes with individual brightness levels and controlled with a single click.
Astro program: This function is used, for example, to switch lighting on or off depending on sunrise and sunset; scenes can also be controlled via the astro program depending on the natural position of the sun.

Connect LED dimmer with mobile device (plus app)

The LED dimmer can be programmed using the **Theben 540 Series** app via mobile devices. Communication takes place via Bluetooth Mesh 5.0.
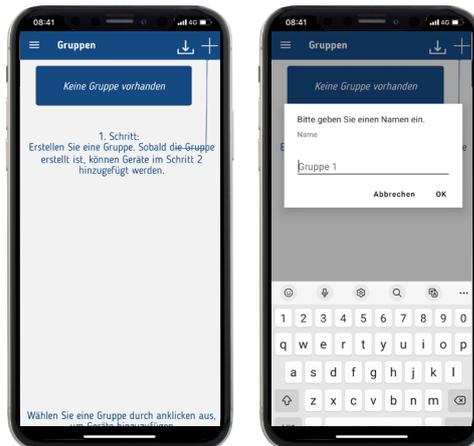
ⓘ Bluetooth must always be enabled on the mobile device!

ⓘ To use the app for the first time, you must **create** a group.

ⓘ A group can consist of different rooms, floors, etc.

ⓘ A group can contain different dimmers.

ⓘ All dimmers in a group can communicate with each other, but **not** with dimmers in another group.

➤ App **Theben 540 Series** download from the store.

Create group

➤ Open the app and press **+** to create a new group.
➤ Give the group a name and press **OK**.
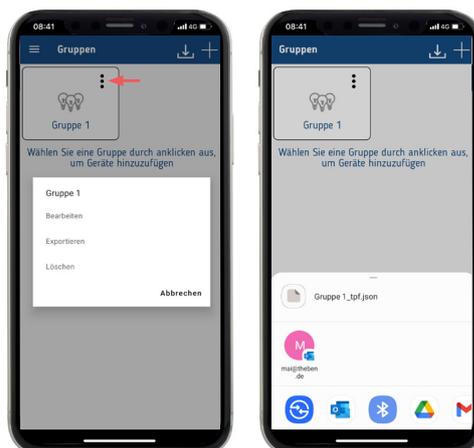 → A new group will be created.

➤ Repeat these steps to create additional groups.

Edit, export, delete group

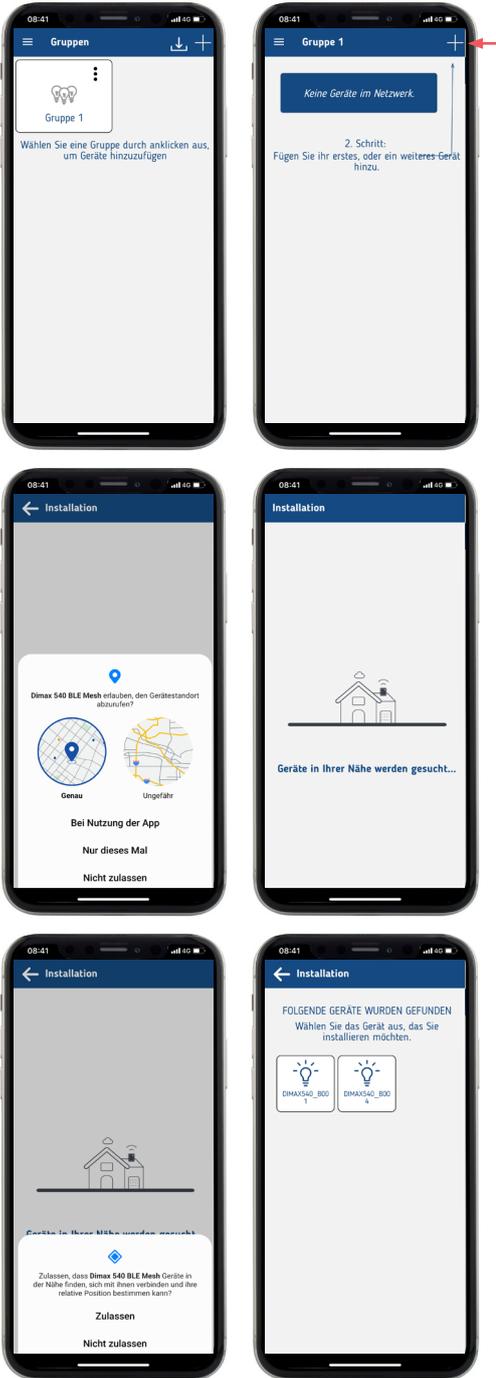Once you have created the group, you can edit, export, or delete it.
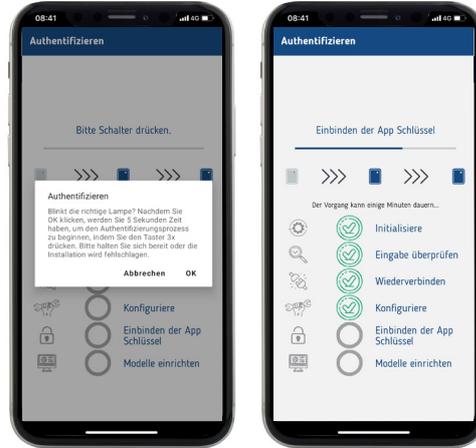➤ Tap on the 3 dots.

You can also **export** a group. This is a json file that can be sent by email, etc.

Assign individual dimmers to a group

You must now assign different dimmers to the groups.

➤ Press the desired group.
➤ **No devices in the network** appears.
➤ To add a dimmer to this group, press **+** .
    → All nearby dimmers are listed.
➤ Press a dimmer to install it.
    → The lamp flashes and the initialization process starts.

➤ Press OK **and** quickly press the button 3 times.
➤ Press **Continue** .
    → The initialization process is complete. You can now create dimming values, scenes, astro programs, etc.

➤ **If you want to assign additional dimmers to a group, you must repeat the steps above.**

Importing a group (file)

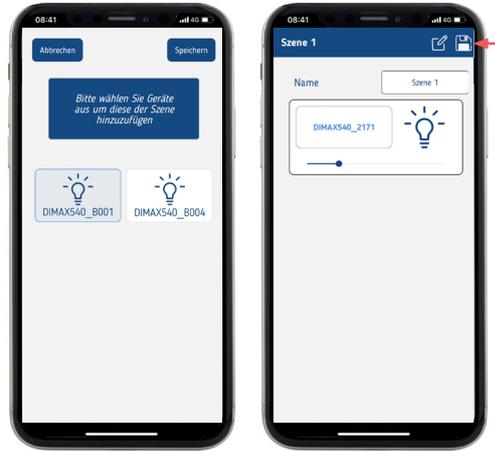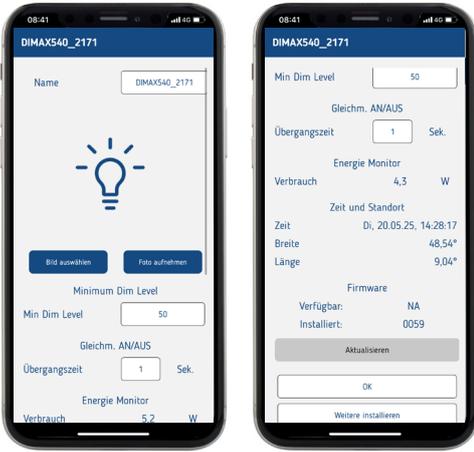

You can transfer files in json format (scenes, programs, etc.) from one mobile device to another.

ⓘ Images created in a group are not transferred.

ⓘ During import, admin mode (default) is deactivated and must be reactivated separately.

ⓘ If scenes or device settings are changed on one mobile device, these changes are applied to the other dimmer.
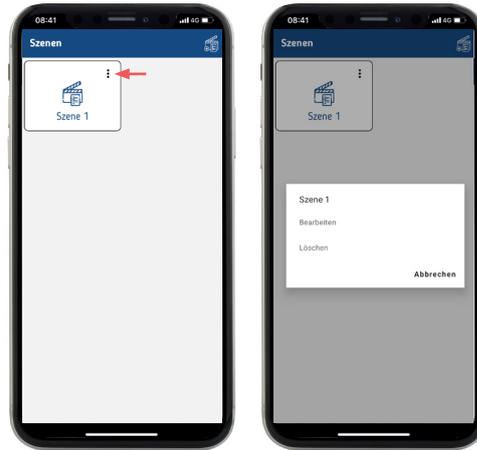
Configure dimmer

You can select a photo or image for each dimmer, set a minimum brightness (e.g., 10), the transition time (1), etc.

ⓘ The time, date, summer time, and winter time are automatically transferred from the smartphone / tablet.

The brightness can be adjusted (dimmed up and down) and switched on and off using the slider.

Set scene

➤ Press the scene icon.

➤ Press the scene icon again and assign a name.
➤ **Confirm** with OK .

The scene must now be assigned a dimmer:
➤ Press the dimmer (blue border) and **save**.

➤ If necessary, edit the scene using the slider and save it using the "Disk" icon.
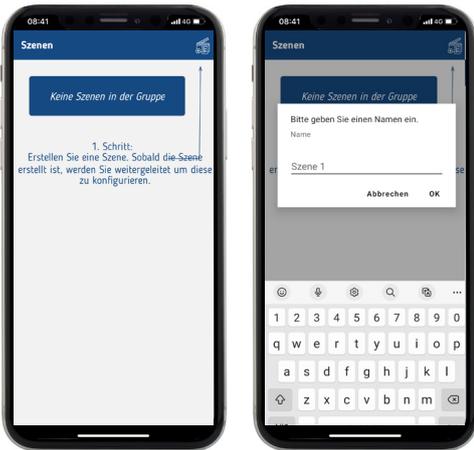

The scene can be edited or deleted again using the 3 dots.

➤ **To create another scene, follow the steps above.**

Set astro program

ⓘ A maximum of 16 time programs or 8 astro programs can be set.

ⓘ Only **one** scene can be set per astro command.

ⓘ You can select On, Off, or a scene.

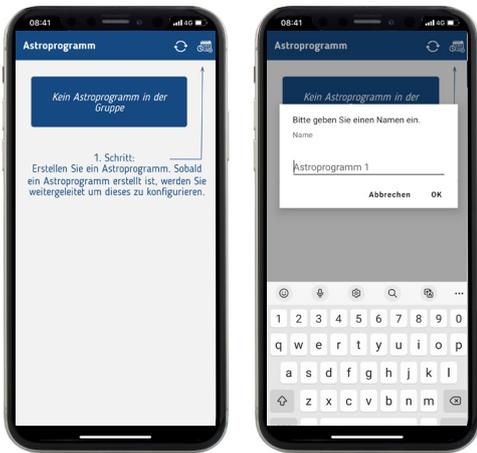ⓘ If you need multiple scenes, you must add a new astro program.

➤ Press the astro symbol.

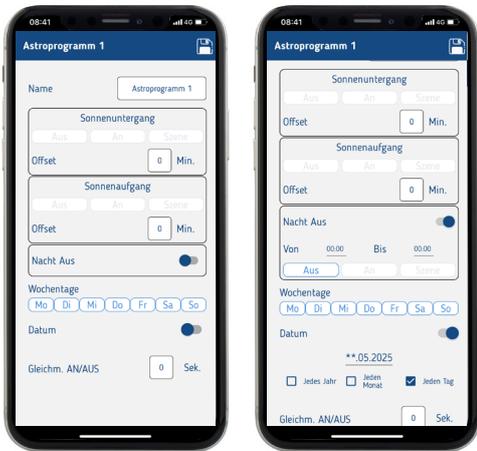➤ Press the icon again and assign a name.
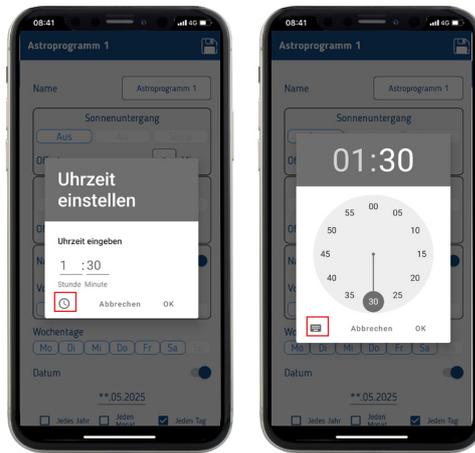➤ **Confirm** with OK .

In the Astro program, you can enter sunset / sunrise, offset, night interruption, weekdays, and date for exceptions.

ⓘ Select weekdays (default: all days are active): If you press a day, it is deselected.
➤ Select any day (the switch command only applies to that day).

Date functions

Every day	The display reads xx.05.2025. This command is executed every day in May 2025.
Every month	The display reads: 12.xx.2025. This command is executed on the 12th day of every month in 2025.
Every year	The display reads: 12.05.xxxx. This command is executed every year on May 12.

The date and time of **the night interruption** can be set using the "Clock" or "Keyboard" icon.

➤ Save the astro program (press on diskette).
➤ Press the dimmer and save.
    → The astro program is assigned to the dimmer.
    → The astro program has been created.

The astro program can be edited or deleted using the 3 dots.

➤ **To create another astro program, follow the steps above.**
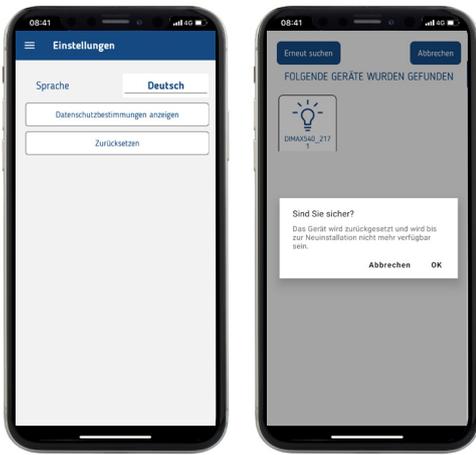
Synchronize astro program

If data has not been loaded correctly, you can synchronize it manually.
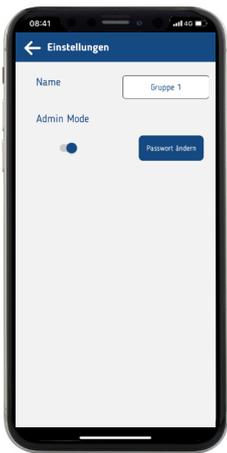
Reset settings

➤ Then press **Settings** .
➤ Press **Reset** in the settings.
    → The dimmers will be searched for and listed.
➤ Select the desired dimmer.
➤ **Important**: Press 3 x **quickly** press the button (within 20 seconds) and press **OK** .
    → The dimmer is now no longer available.

Assign password

➤ Press **Groups** and then **Edit** .
  → Here you can change the password.

7. Technical data

Operating voltage	230 V AC
Frequency	50/60 Hz
Minimum load	2 W
Standby power	≤ 0.5 W
Operating temperature	− 10 °C ... + 45 °C
Incandescent lamp load	150 W
Lamp load	max. 150 W LEDs (RC) (trailing edge)
Protection type	IP 20
Protection class	II after proper installation in the flush-mounted box
Power reserve	7 hours
Degree of soiling	2
Rated impulse voltage	4 kV
Software class	A
Max. cable length	100 m

BLE - radio frequency/transmission power - Range	BLE 2.4 ... 2.48 GHz, max. + 4 dBm Typical range: open field 25 m, indoors 15 m; multiple devices extend the range
Accessories	compensation module (9070825)

Theben AG hereby declares that this type of radio equipment complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following Internet address: www.theben.de/red-konformitaet
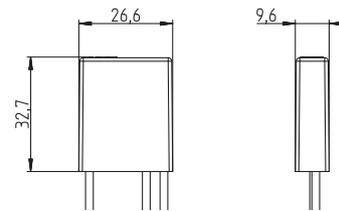
Cleaning and maintenance

➤ Clean the device surface only with a dry, soft cloth.
➤ Do not use cleaning agents or solvents.

Disposal

 Dispose of the device separately from household waste at an official collection point.

8. Dimension drawings

9. Contact

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