



ELKO EKO07090 Smart Dim Puck Uni User Guide

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SmartDim puck Uni
Device User Guide
Commissioning instructions for the ELKO Smart system, devices and app.
02/2023



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Safety information

Important information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

 The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

 This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that accompany this symbol to avoid possible injury or death.

 **DANGER**

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury. Failure to follow these instructions will result in death or serious injury.

 **WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION**

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

SmartDim puck Uni



EKO07090

 **DANGER**

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Safe electrical installation must be carried out only by skilled professionals. Skilled professionals must prove profound knowledge in the following areas:

- Connecting to installation networks.
- Connecting several electrical devices.
- Laying electric cables.
- Safety standards, local wiring rules and regulations.

Failure to follow these instructions will result in death or serious injury.



DANGER
HAZARD OF ELECTRIC SHOCK

- Make sure that the terminal connection area does not come in contact with the metallic parts of any device installed in the same location.
- Do not short the outputs to neutral.

Failure to follow these instructions will result in death or serious injury.



CAUTION
EQUIPMENT DAMAGE

- Always operate the product in compliance with the specified technical data.
- Never connect any mixed inductive/capacitive loads.
- Connect only dimmable loads.
- Do not connect the dimmer output to the socket outlet.

Failure to follow these instructions can result in injury or equipment damage.

About the device

The SmartDim Puck Uni (hereinafter referred to as Puck / Micro Module Dimmer) combines the advantages of smart dimmer functionality with ordinary mechanical push-button switches. It transforms a conventional switch into a connected device which can be controlled from the switch or through the ELKO Smart app. It can switch and dim the ohmic, inductive, or capacitive loads and it is also compatible with dimmable LEDs.

NOTE: Do not control any devices that depend on a permanent power supply.

Additional features:

- Remote control with maximum of 10 single mechanical push-buttons.
- Setting the LED operating mode manually (RL LED mode).
- Electronic overload protection, overheating protection, and short-circuit protection.
- Setting the dimming range: minimum and maximum brightness.
- Setting a time schedule.

Installing the device

Refer to the installation instruction supplied with this product.

See SmartDim puck Uni.

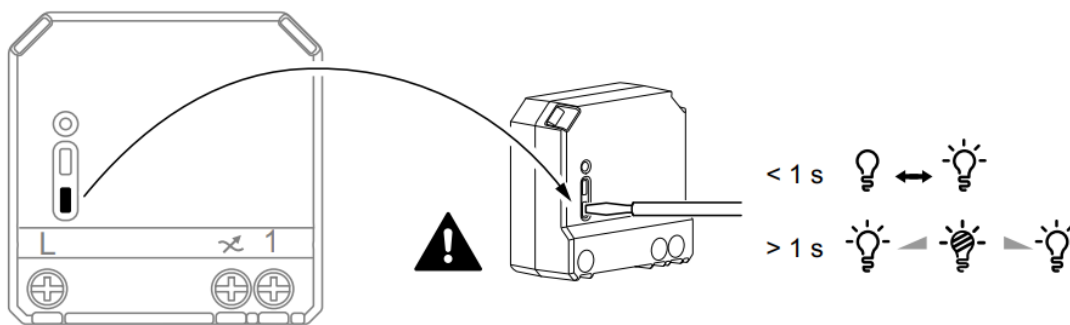
Testing the device

Before using the Puck, manually test the Puck and make sure that it works when connected to the lighting devices.



WARNING
HAZARD OF ELECTRIC SHOCK

- Observe the regulations for working on live parts.
- Only actuate the device buttons using insulated auxiliary equipment that meets the requirements of EN 60900.
Failure to follow these instructions can result in death, serious injury, or equipment damage.
- Short press the test button once, the connected lighting device turns On/Off.
- Press and hold the test button to adjust the dimming level of the connected lighting device.




Pairing the device with Smart Hub

Using the ELKO Smart app, first pair your device with the ELKO SmartHub to access and control the device. You can either add the device manually or do an auto-scan to pair it.

Pairing device manually

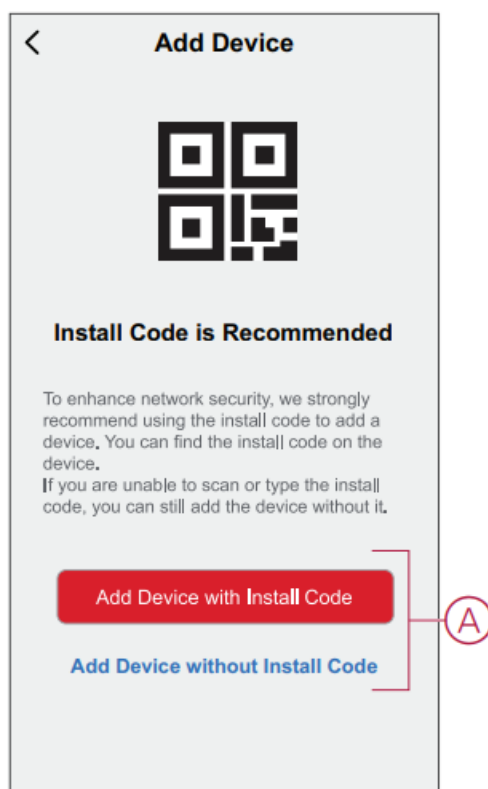
To pair the device manually:

1. On Home page, tap +.

2. Tap  and select ELKO SmartHUB on the slide-up menu and tap Done.

3. Select any one of the options to add device (A):

- Add Device with Install Code
- Add Device without Install **Code**



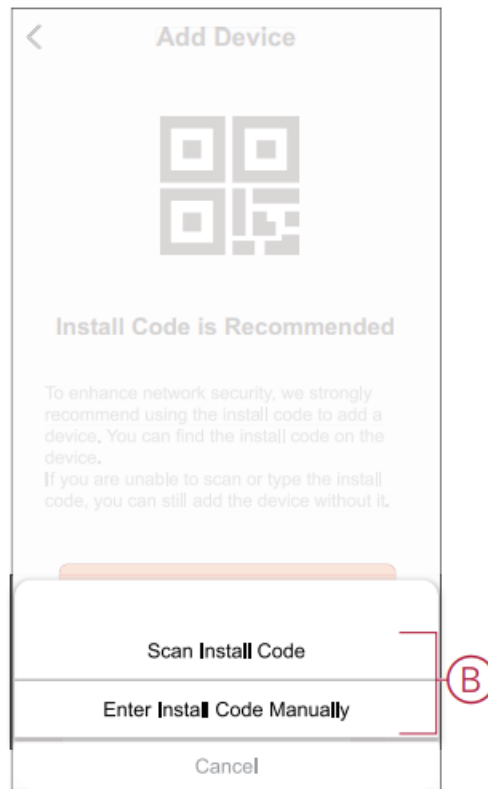
TIP: It is recommended to add the device with install code.

4. To pair the device with install code, tap Add Device with Install Code to display the slide-up menu. Select any one of the options (B):

- Scan Install Code: you can scan the device for the install code.
- Enter Install Code Manually: you can manually enter the install code from the device.

TIP: you can find the install code on the rear side of the device.

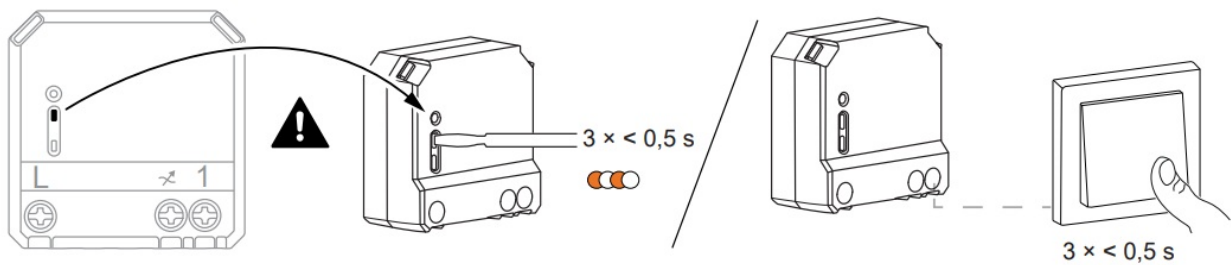
After scanning or entering the install code, proceed to Step 7.



5. To pair the device without install code, tap Add Device without Install Code.

6. Select any one of the options to add the device:

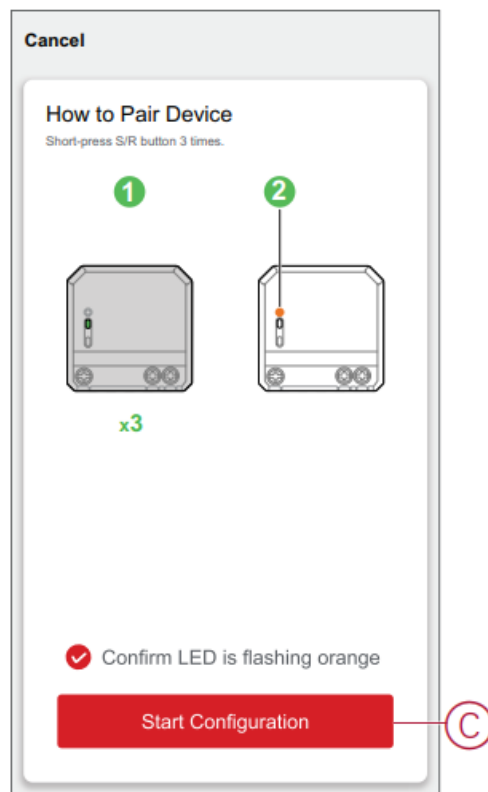
- Short press the S/R (setup/reset) button 3 times ($<0,5$ s) on the Puck with a screwdriver.
- Short press the push button 3 times.



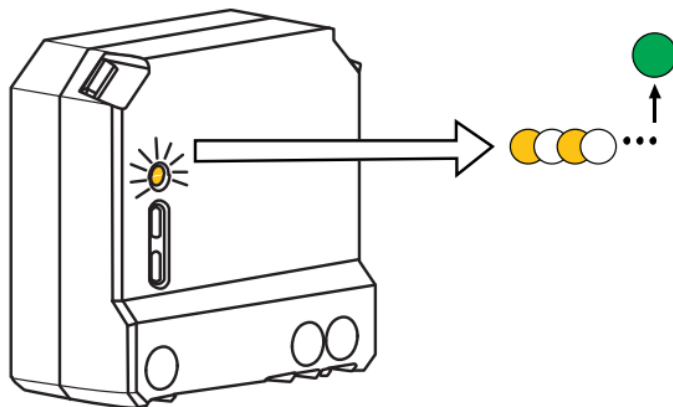
The LED blinks orange.

NOTE: If the puck is located behind the push button, the status LED is not visible.

7. In the app, select Confirm LED is flashing orange and tap Start Configuration (C).



After a few seconds, a solid green LED indicates that the device is successfully paired to the ELKO SmartHUB.



8. Tap Done when the pairing is successful..

Pairing device with auto scan

Pairing the device with auto scan automatically discovers the device when the corresponding device is powered on.

1. On the Home page, tap +.
2. Tap Auto scan > Confirm.
3. Enable permissions to Access location and Wi-Fi for scanning device and tap Start scanning.

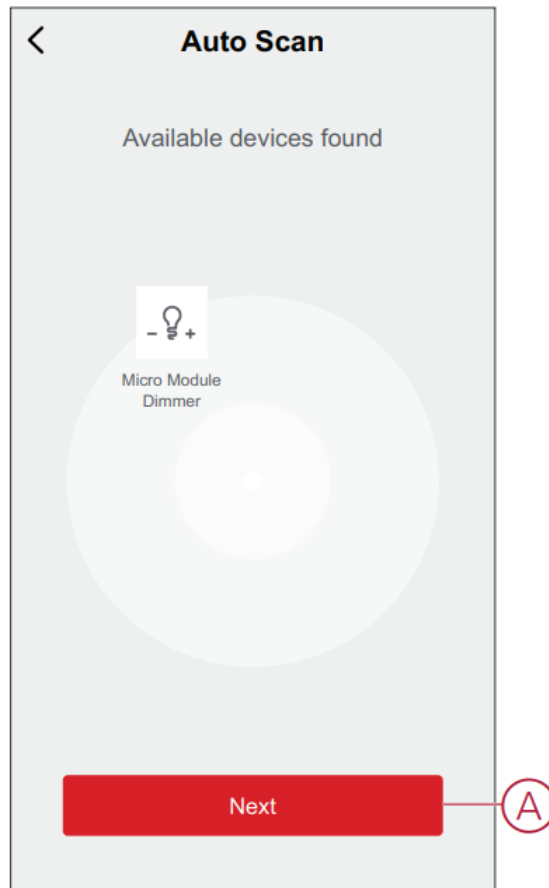
NOTE: If you have multiple hubs, do Step 4 or proceed to Step 5.

4. Tap Select hub and select the ELKO SmartHub from the slide-up menu.
5. Short press the setup/reset button 3 times (< 0,5 s) and wait for a few seconds until the device search is complete.

The LED blinks orange.

TIP: If you want to pair multiple devices at once, perform step 5 on each device and wait for a few seconds for them to be detected.

6. Tap Next (A) and select Micromodule Dimmer.





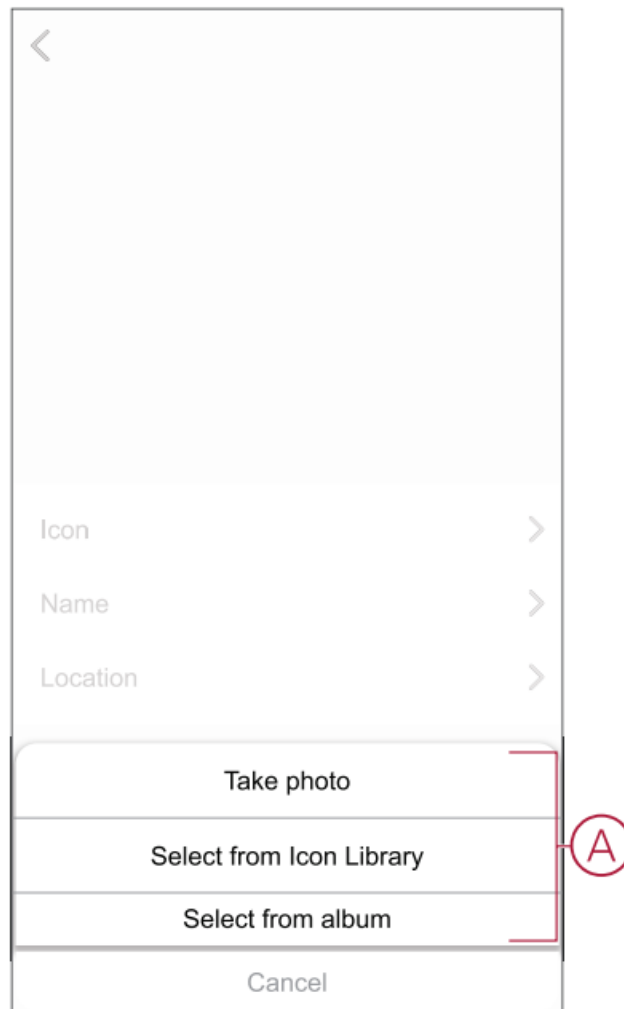
7. Once the device is added successfully, tap Done.

Configuring the device

Changing the device icon



You can change the device icon using the ELKO Smart app.

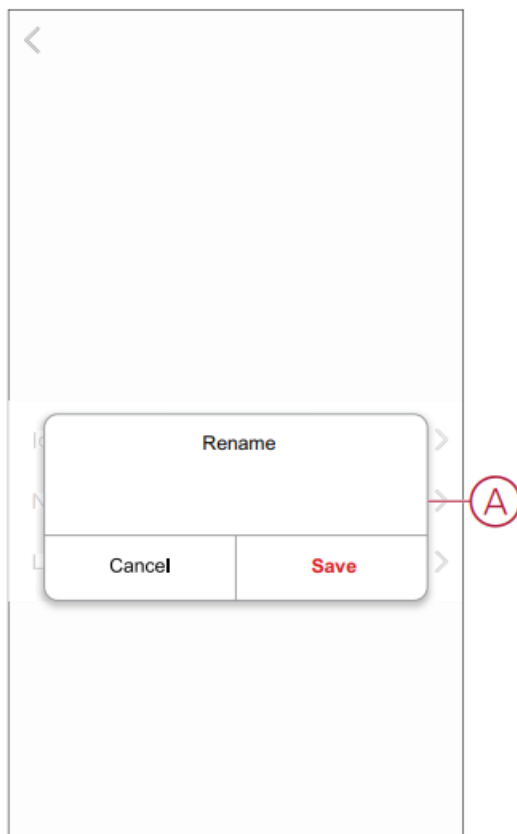
1. On the Home page, select the device for which you wish to change the icon.
2. At the top-right corner of the screen, tap .
3. Tap edit  next to the device name.
4. Tap Icon to view the menu.
5. In the slide-up menu, select any one of the following (A) to change the device icon:
 - Take photo – allows you to click a photo from the mobile camera.
 - Select from Icon Library – allows you to select an icon from the app library.
 - Select from Album – allows you to select a photo from the mobile gallery.



Renaming the device



You can rename the device using the ELKO Smart app.

1. On the Home page, select the device for which you wish to rename.
2. At the top-right corner of the screen, tap .
3. Tap edit  next to the device name.
4. Tap Name, enter the new name (A) and then tap Save.



Changing the device location

You can change the device location using the ELKO Smart app.


1. On the Home page, select the device for which you wish to change the location.
2. At the top-right corner of the screen, tap .
3. Tap edit  next to the device name.
4. Tap Location.
5. Select the desired location from the list (A) and then tap Save.

Device location		Save
Living Room	<input type="radio"/>	A
Master Bedroom	<input type="radio"/>	
Kitchen	<input type="radio"/>	
Dining Room	<input type="radio"/>	
Study Room	<input type="radio"/>	
Kids Room	<input type="radio"/>	

Setting RL-LED mode

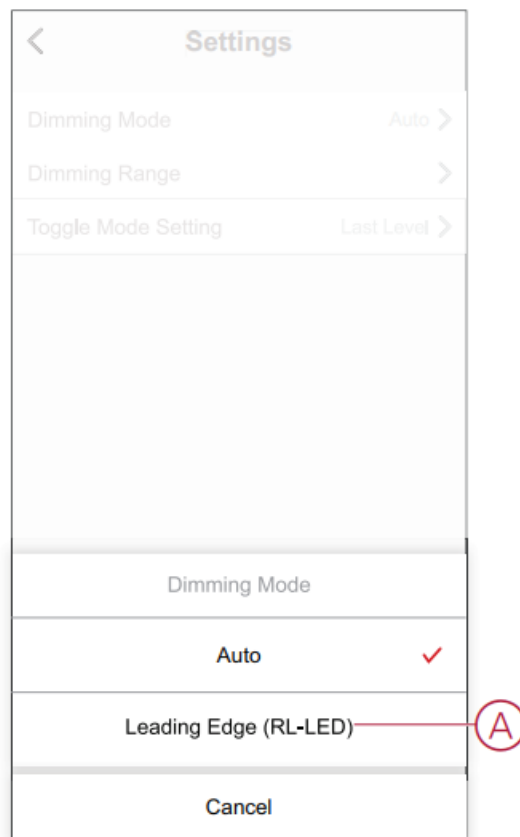
You can change the dimming mode in the app if you have problems with light flickering. By changing the dimming mode, the dimming quality is also improved.

To set the RL-LED mode:

1. On the Home page, Tap All devices > Micromodule Dimmer
2. Tap  **Settings**.
3. Tap Dimming Mode and Select Leading Edge (RL-LED) (A) from the slide- up menu.

NOTE:


- Refer to Technical Data, page 23 for more information.
- Manual operation (Optional): Press the TEST button 14 times.
 - If the status LED blinks 3 times in green, RL-LED mode is enabled.
 - If the status LED blinks once in green, Auto mode is enabled.

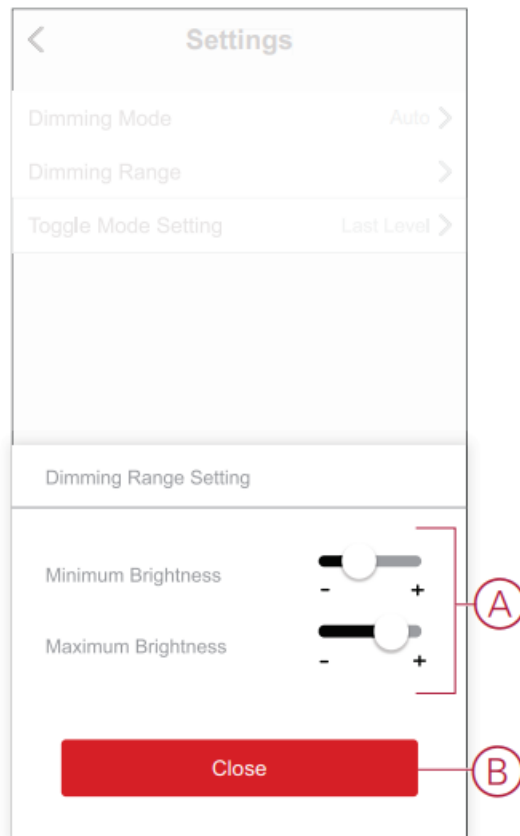


Setting brightness level

If the dimmer is connected to an LED, the minimum and maximum brightness should be set to avoid flickering and switching off the LED.

To set the minimum and maximum brightness level:


1. On the Home page, Tap All devices > Micromodule Dimmer.
2. Tap  **Settings**.
3. Tap Dimming Range then drag the sliding bar to increase or decrease the Minimum Brightness and Maximum Brightness (A).
4. Tap Close (B).

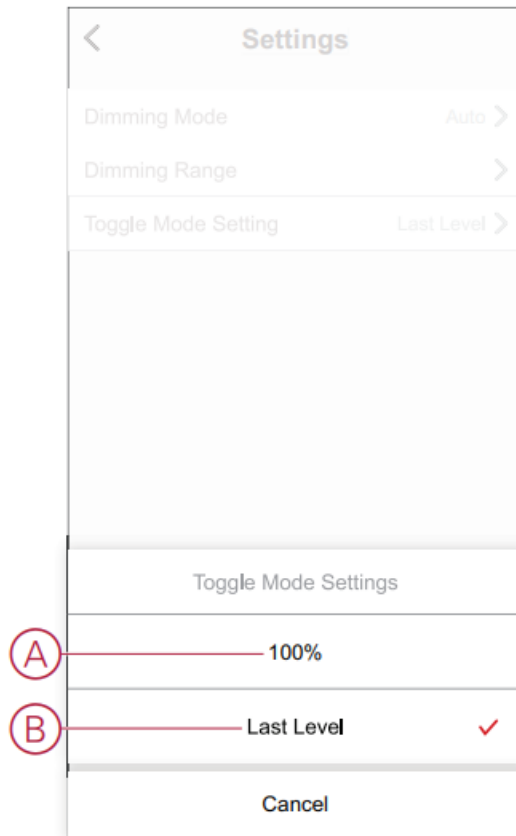


Toggle mode setting

You can toggle between the last used brightness level or with 100% brightness level when the dimmer is turned on.

To toggle between the brightness level:


1. On the Home page, tap All devices > Micromodule Dimmer.
2. Tap  **Settings**.
3. Tap Toggle Mode Setting and select either one of the function for default action.
 - 100% (A) : to set the brightness level to 100% by default when ever the device is turned on.
 - Last Level (B) : to set the previously used brightness level by default when ever the device is turned on.

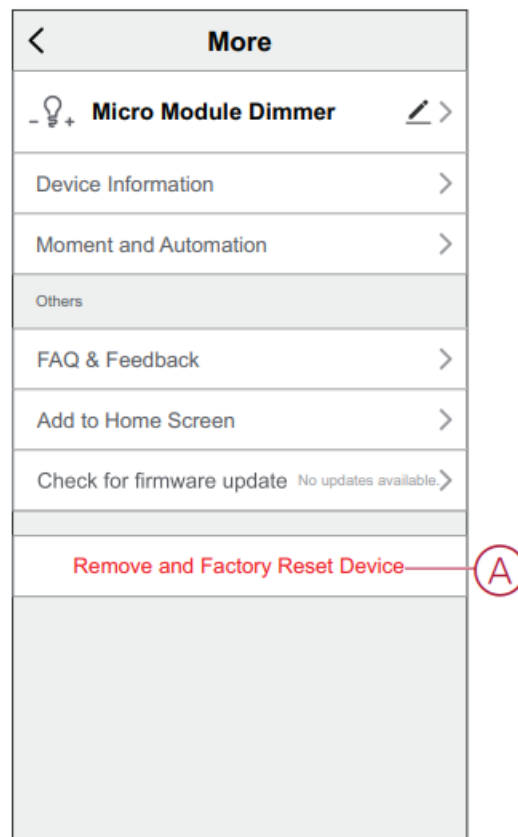


Removing the device

Using the ELKO Smart app, you can remove a device from the device list.

To remove the device:

1. On the Home page, tap All devices > Micromodule Dimmer.
2. Tap  to display more details.
3. Tap Remove and Factory Reset Device (A).



TIP: Alternatively, you can long tap on the Micromodule Dimmer on the Home page to remove the device.

NOTE:

- Removing the device will reset the Puck. After reset the LED turns orange indicating that the Puck is ready to pair with another network.
- If there is a problem while pairing or resetting the Puck, refer to Resetting the device manually, page 13.

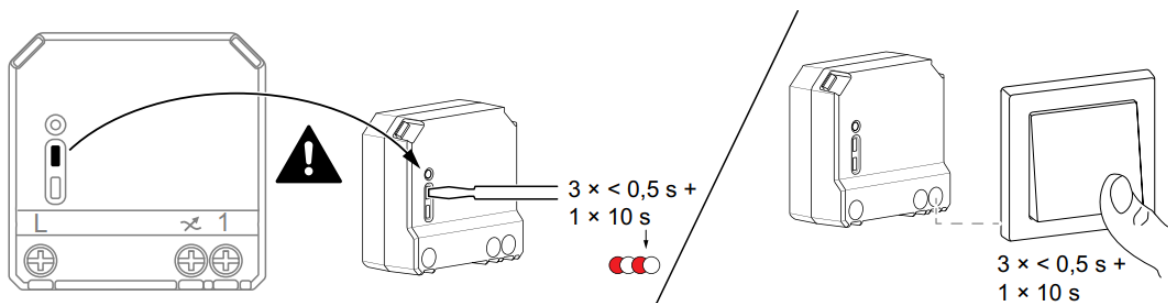
Resetting the device

You can reset the device to factory default manually.

1. Short press the Setup/Reset button 3 times (< 0.5 s) and then long press the Setup/Reset button once (> 10 s).

or

Short press the push button 3 times and then long press the push-button once for 10 s.



2. After 10 s, LED starts blinking red, then release the push-button.

NOTE: All configuration data, user data, and network data are deleted.

After which

- No connectivity to other devices or rooms.
- Memory function is active.
- Automatic load detection is active, RC mode is set.

- Dimmer settings will reset to default.

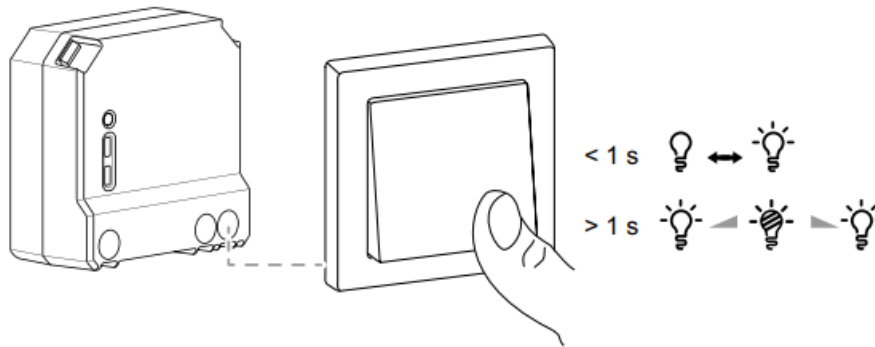
The LED stops blinking upon successful reset of the device.
The Puck restarts and blinks green for a few seconds.

Using the device

Manual operation

When the puck is connected to a mechanical push button, the connected lighting devices can be controlled manually.

- Short press the push button to turn on/off the light.
- Press and hold the push button to adjust the dimming level of the light.

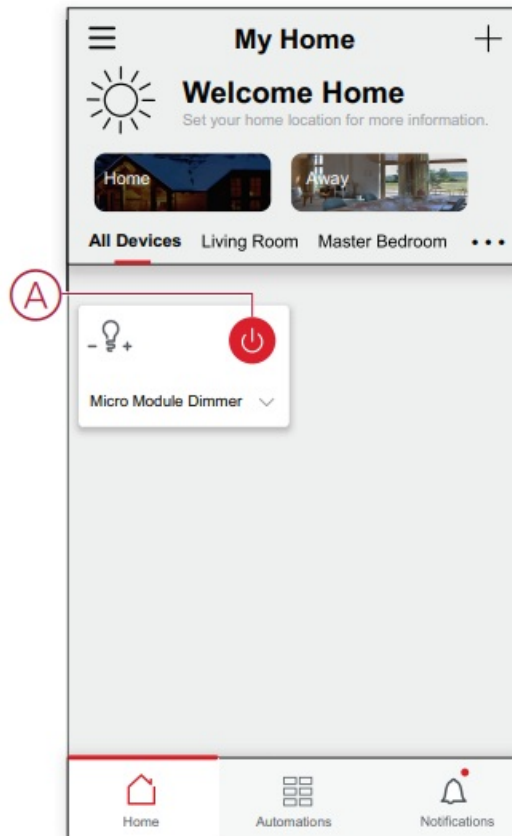



Adjusting the brightness level using app

Using the ELKO Smart app, you can increase/decrease the brightness level remotely.

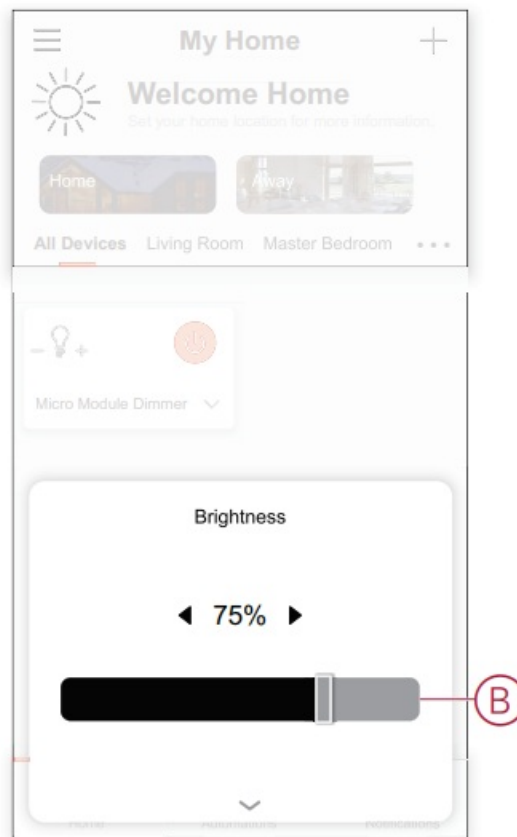
To increase/decrease the brightness level:

1. On the Home page, tap All devices.
2. In Micromodule Dimmer tap the power button (A) to turn on/off the device.

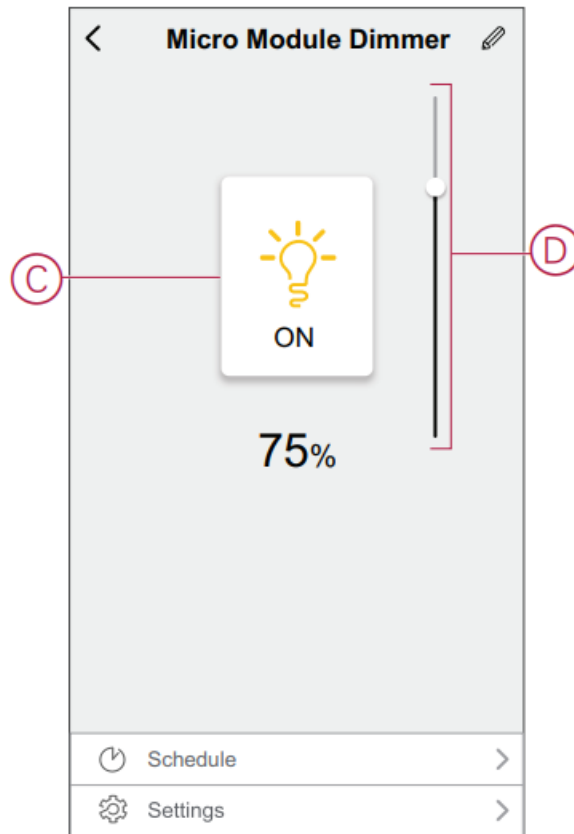


3. Tap  for slide-up menu.

4. In the slide-up menu, drag the sliding bar (B) to increase/decrease the brightness.



5. Alternatively, you can navigate to device menu and tap on (C) to turn on/off the device. When the device is turned on, drag the sliding bar (D) up/down to increase/decrease the brightness.



Setting up a schedule

The device can be fully controlled by schedule. Once the schedule is set, the device operates at a given time.

1. On the Home page, Tap All devices > Micromodule Dimmer.
2. Tap Schedule > Add Schedule to add a schedule.
3. In Add Schedule menu, set the time (A).

NOTE: The Schedule works according to the time zone where the device is located.

4. Tap Repeat (B) to select the days you want to set the schedule.
5. Tap Note (C), enter the note and tap Confirm.
6. Tap the toggle switch (D) to turn on the Notification for the schedule. The app will send a notification that the scheduled task is executed at the time of schedule.
7. Adjust the Brightness settings (E) through sliding bar.

From	To
07	08
08	07
09	08
10	09
11	10
12	11
13	12
14	13

Repeat Once >

Note >

Notification ☐

Micro Module Dimmer

Brightness Settings Off

Off 50% 100%



* *


Note - The Schedule works according to the timezone where device is located.

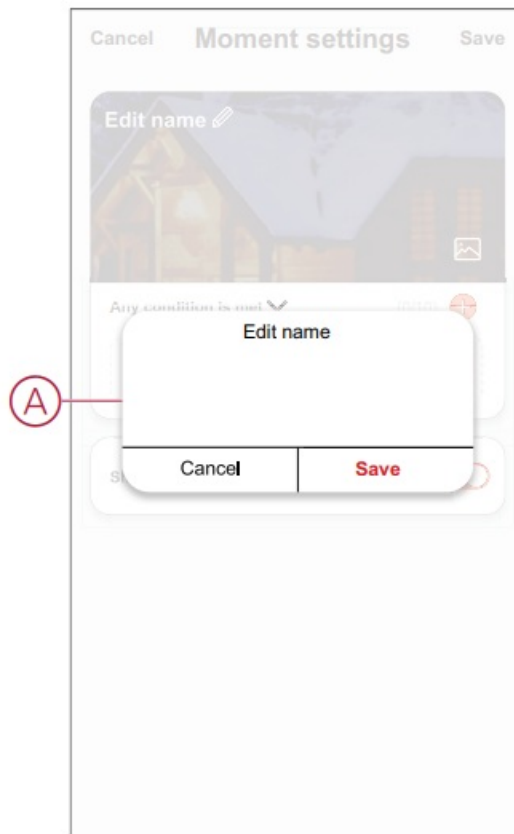
8. Tap Save

Creating a moment


Moment allows you to group multiple actions that are usually done together. Using the ELKO Smart app, you can create moments based on your needs.

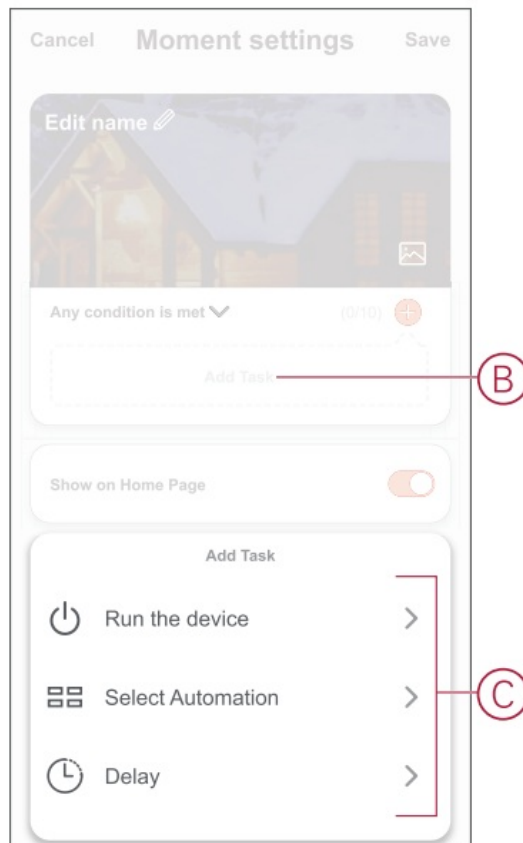
1. On the Home page, tap .
2. Go to Moment > + to create a moment.
3. Tap Edit name  (A), enter the name of the moment and tap Save.

TIP: You can choose the cover image that represents your moment by tapping .



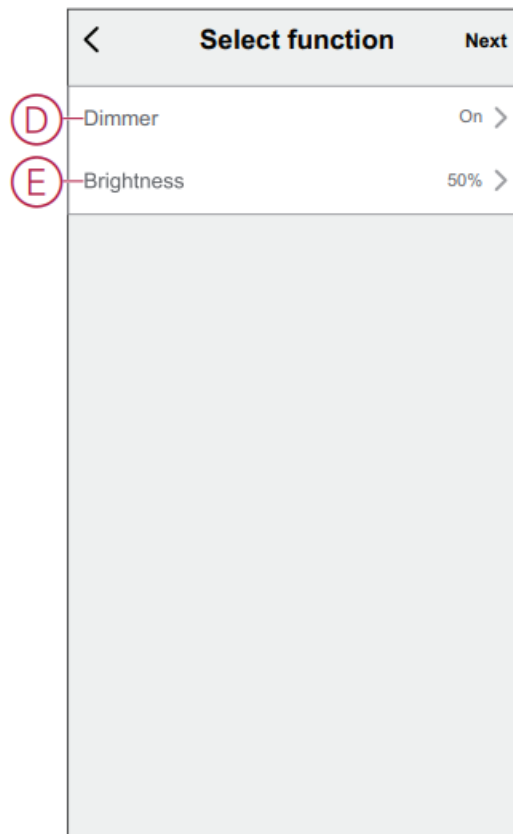
4. In the Action section, tap Add task (B) to open the slide-up menu.
5. In the Add task menu, you can do either or all of the following actions (C):
 - Run the device: select the devices that you want in a moment.
 - Select Automation: select the automation that you want to enable or disable.
 - Delay: set the delay time.

NOTE: You can add one or more actions using .

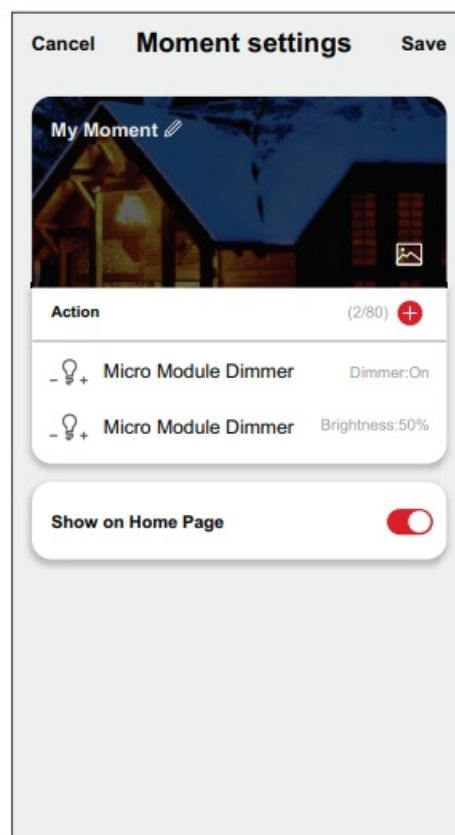


6. Tap Run the device > Micromodule Dimmer to select either or all the functions to add in the moment:
 - Dimmer (D): turn on/off the device.

– Brightness (E): set the percentage of brightness required.



7. Tap Next and once the actions are set, tap Save.




Editing a moment

To edit a moment:

1. On the Moment tab, locate the moment you want to edit and tap ●●●.
2. On the Edit page, you can tap each item (such as dimmer, shutter, delay, temperature, etc.) to change the


settings.

TIP:

- You can add one or more actions using .
- To delete an existing action, slide the each item towards left and tap  Delete.

Deleting a moment



To delete a moment:


1. On the Moment tab, locate the moment that you want to delete and then tap .
2. Tap Delete and then tap Ok.

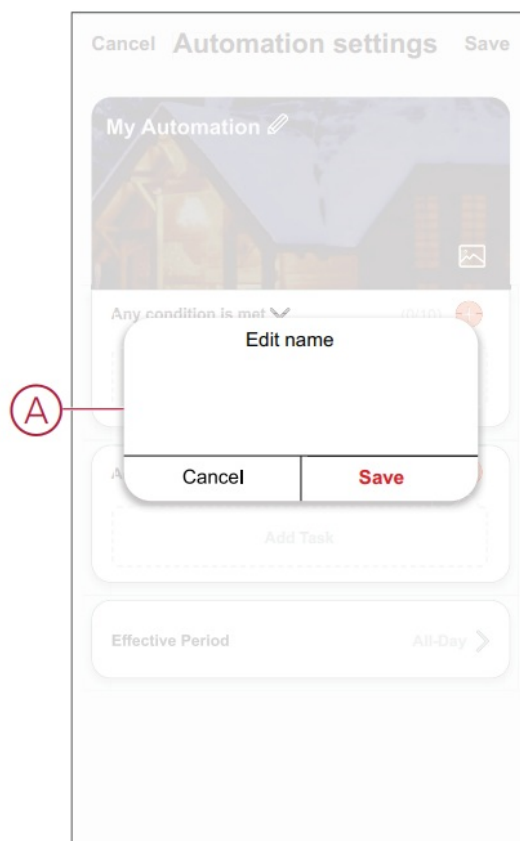
NOTE: After deleting a moment, the device action can no longer be triggered.

Creating an automation

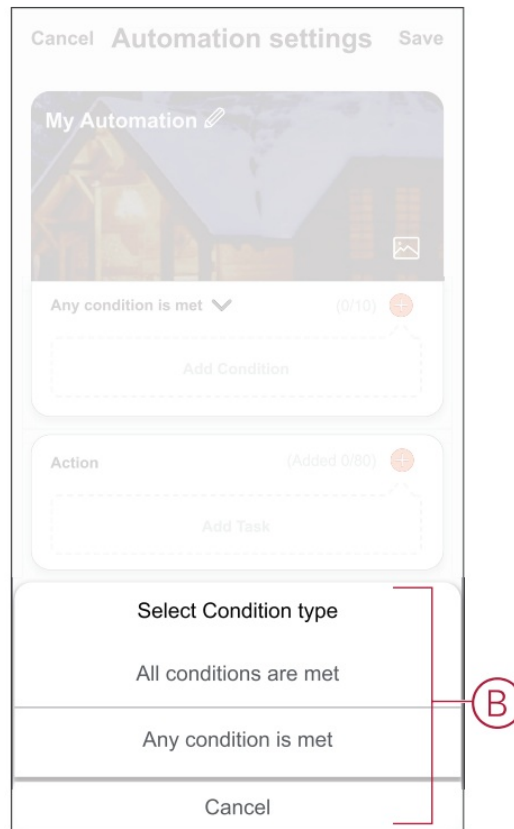
An automation allows you to group multiple actions that are usually done together, triggered automatically or at scheduled times. By using the ELKO Smart app, you can create automations based on your needs.

1. On the Home page, tap the .
2. Go to Automation > + to create an automation.
3. Tap Edit name  (A), enter the name of the automation and tap Save.


TIP: You can choose the cover image that represents your automation by tapping .

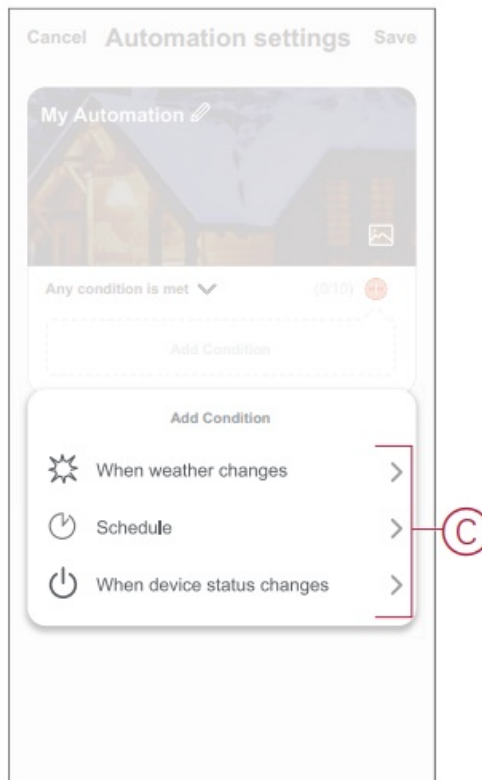


4. Tap Any condition is met to select any one of the condition type (B):
 - All conditions are met: the automation is triggered when all the conditions are met.
 - Any condition is met: the automation is triggered when at least one condition is met.



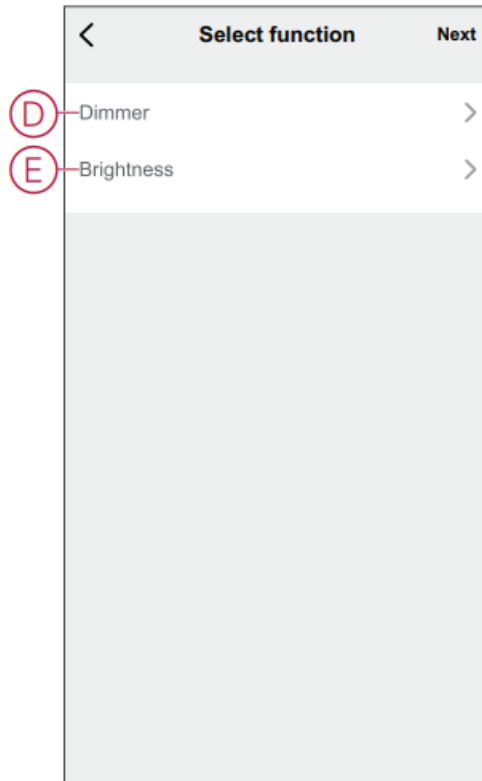
5. Tap Add Condition to open the slide-up menu.
6. In the Add Condition menu, you can do either or all of the following options (C):
 - When weather changes: select the various weather settings.
 - Schedule: set the time and day.
 - When device status changes: select the device and it's function.

NOTE: You can add one or more conditions using .



7. Tap When device status changes > Micro Module Dimmer and select either or both the functions:
 - Dimmer: turn the Dimmer on/off (D).


– Brightness: adjust the brightness level (E).

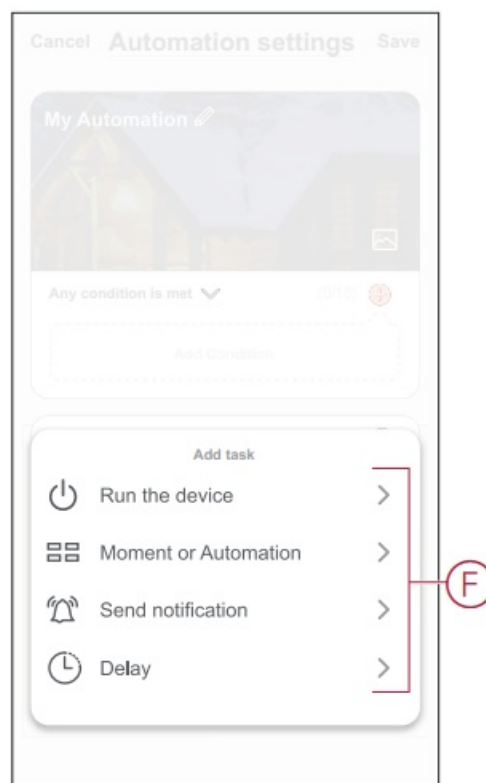


8. Tap Add task to open the slide-up menu.

9. In the Add task menu, you can do either or all of the following options (F):

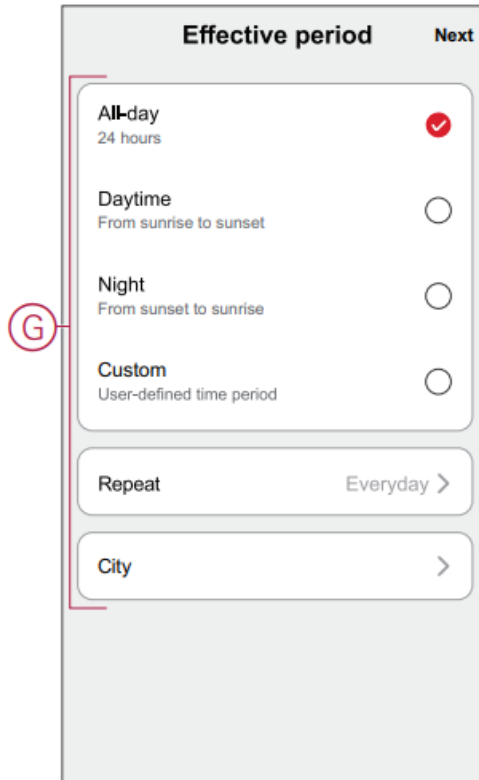
- Run the device: select the devices that you want to trigger.
- Moment or Automation: select the moment which you want to trigger or select the automation that you want to enable or disable.
- Send notification: turn on notification for the automation.
- Delay: set the delay time.

NOTE: You can add one or more actions using .



10. Tap on Effective period to set the time range for the automation. You can select any one of the following (G):

- **All-day** – 24 hours
- **Daytime** – From sunrise to sunset
- **Night** – From sunset to sunrise
- **Custom** – User defined time period



11. Once all the actions and conditions are set, tap Save.

Once the automation is saved, it is visible on the Automation tab. You can tap the toggle switch on the automation to enable it.

Example of an automation

This demonstration shows you how to create an automation to turn on the dimmer at the scheduled time.

1. Go to Automation > + to create an automation.
2. Tap Edit name, enter the name of the automation and tap Save.

TIP: You can choose the cover image that best represents your automation by tapping .

3. Tap Add Condition > Schedule.
 - Tap Repeat (A), select the days you want to set the schedule and tap Save.
 - Set the time (B) at which the automation must start and tap Next.

Schedule Next

A Repeat Every Day >

Execution Time

04 29

05 30 **B**

06 31

Note - Schedule is based on family location time zone.

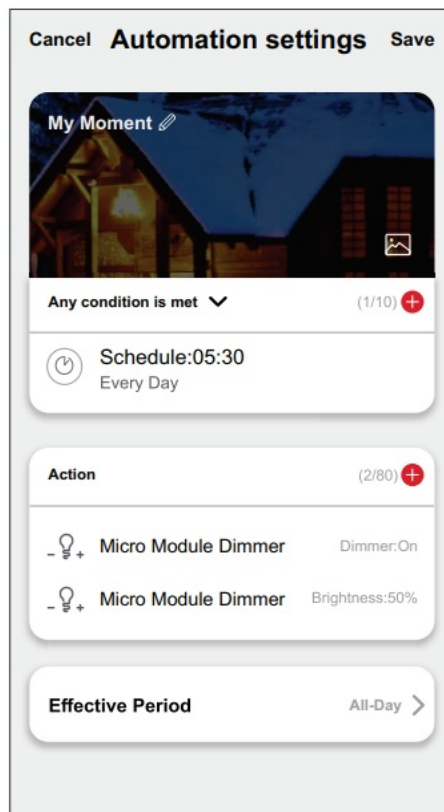
4. Tap Add task > Run the device > Micromodule Dimmer.
5. Tap Dimmer (C) and in the slide-up menu, select On and tap Save.
6. Tap Brightness (D) and update the required brightness level and tap Save.

Select function Next

C Dimmer On >

D Brightness 50% >

7. Tap Next.
8. In the Automation Settings page, tap Save.



Once the automation is saved, it is visible on the Automation tab. You can tap the toggle switch on the automation to enable it.

Editing an automation

To edit an automation:

1. On the Automation tab, locate the automation you want to edit and tap ●●●.
2. On the Edit page, you can tap each item (such as dimmer, shutter, delay, temperature, etc.) to change the settings.

TIP:

- You can add one or more actions using +.
- To delete an existing condition or action, slide each item towards left and tap Delete.

Deleting an automation



To delete an automation:

1. On the Automation tab, locate the automation that you want to delete and then tap ●●●.
2. Tap Delete and tap **Ok**.



NOTE: After deleting an automation, the device action can no longer be triggered.

LED indication

Pairing the device

User Action	LED Indication	Status
Short press the setup/reset button or push button 3 times.	LED blinks orange once per second. 	Pairing mode is active for 30 seconds. When pairing is completed, LED glows green for a few seconds before turning Off. 

Resetting the device




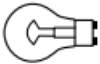



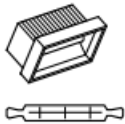



User Action	LED Indication	Status
Short press the setup/reset button or push button 3 times and hold it down once for > 10 s.	LED blinks red once per second. 	The device is in reset mode. The device then restarts and LED turns orange indicating that the device is ready for pairing. 

Troubleshooting

Symptom	Solution
Dimming up not possible.	<ul style="list-style-type: none"> • Reduce/increase load. • Allow the Puck to cool in case of overheating. • Change the load (if the load is incompatible with the Puck).
Switching on not possible.	<ul style="list-style-type: none"> • Allow the Puck to cool in case of overheating. • Reduce load. • Change load. • Check wiring between the push button and the Puck.
Flickering at minimum brightness.	<ul style="list-style-type: none"> • Increase minimum brightness (if flickering still persists, install a 31LCDA load correction device). • Change the load (if the minimum brightness is insufficient). • Set RL LED mode (it is advised to use 10 % of nominal load to avoid overheating of the puck).
Flickering	<ul style="list-style-type: none"> • Change load. • Set RL LED mode (it is advised to use 10 % of nominal load to avoid overheating of the puck).
Only slight dimming capability	<ul style="list-style-type: none"> • Change dimming range. • Set RL LED mode (it is advised to use 10 % of nominal load to avoid overheating of the puck). • Change the load (if the load is incompatible with the Puck).
The device is not ready to pair after the device is removed from the app.	Reset to factory default settings, refer to Resetting the device manually.

Technical data

Nominal power rating for load type

 LED	LED	5 – 100 VA  5 – 20 VA 
	Incandescent lamp	14 – 200 W 
	Iron core transformer	14 – 150 VA 
	Halogen lamp	14 – 150 W 
 C	Electronic step-down converter	14 – 200 VA 

Nominal voltage	AC 220-240 V, 50/60 Hz
Dimming channel	1
Standby	Max. 0.4 W
Operating Temperature	0 °C to 35 °C
Neutral conductor	Not required
Connecting terminals	Max. 2 x 2.5 mm ² , solid or stranded types
Extension connection	Max. 10 mechanical push buttons
Length of all cable sections	Max. 50 m for 3-wire NYM cable
Fuse protection	16 A circuit breaker
Operating frequency	2405 – 2480 MHz
Max. radio-frequency power transmitted	<10 mW
IP rating	IP20
Product dimensions (H x W x D)	43 x 43 x 22 mm
Communication protocol	Zigbee 3.0 certified

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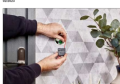

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As standards, specifications, and design change from time to time,
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DUG_SmartDim Puck_ELKO-00

Documents / Resources

 	<p>ELKO EKO07090 Smart Dim Puck Uni [pdf] User Guide EKO07090 Smart Dim Puck Uni, EKO07090, Smart Dim Puck Uni, Dim Puck Uni, Puck Uni, Uni</p>
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References

- [User Manual](#)

Manuals- Privacy Policy

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