Programming Software Time switches AlphaSoft

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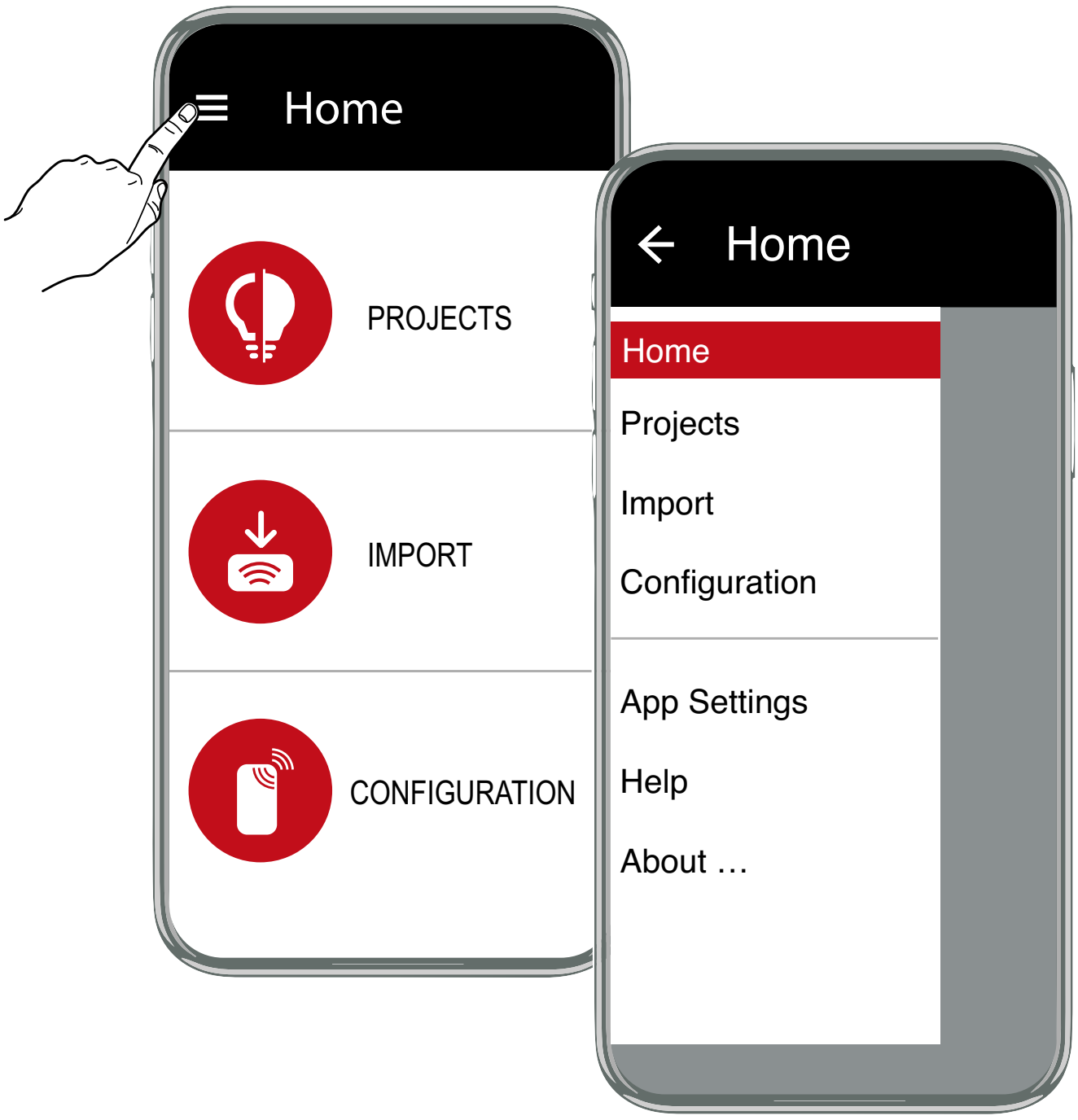
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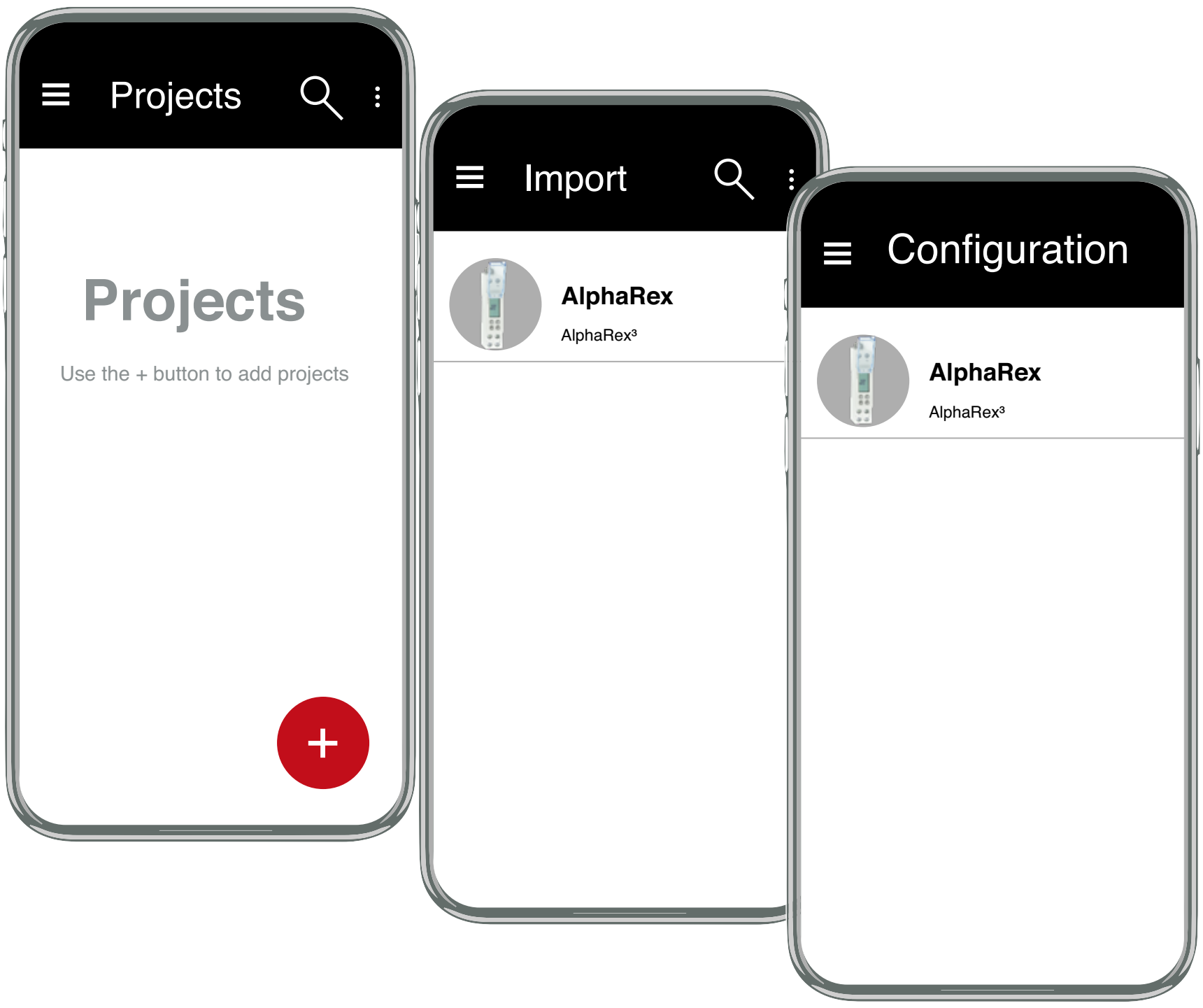
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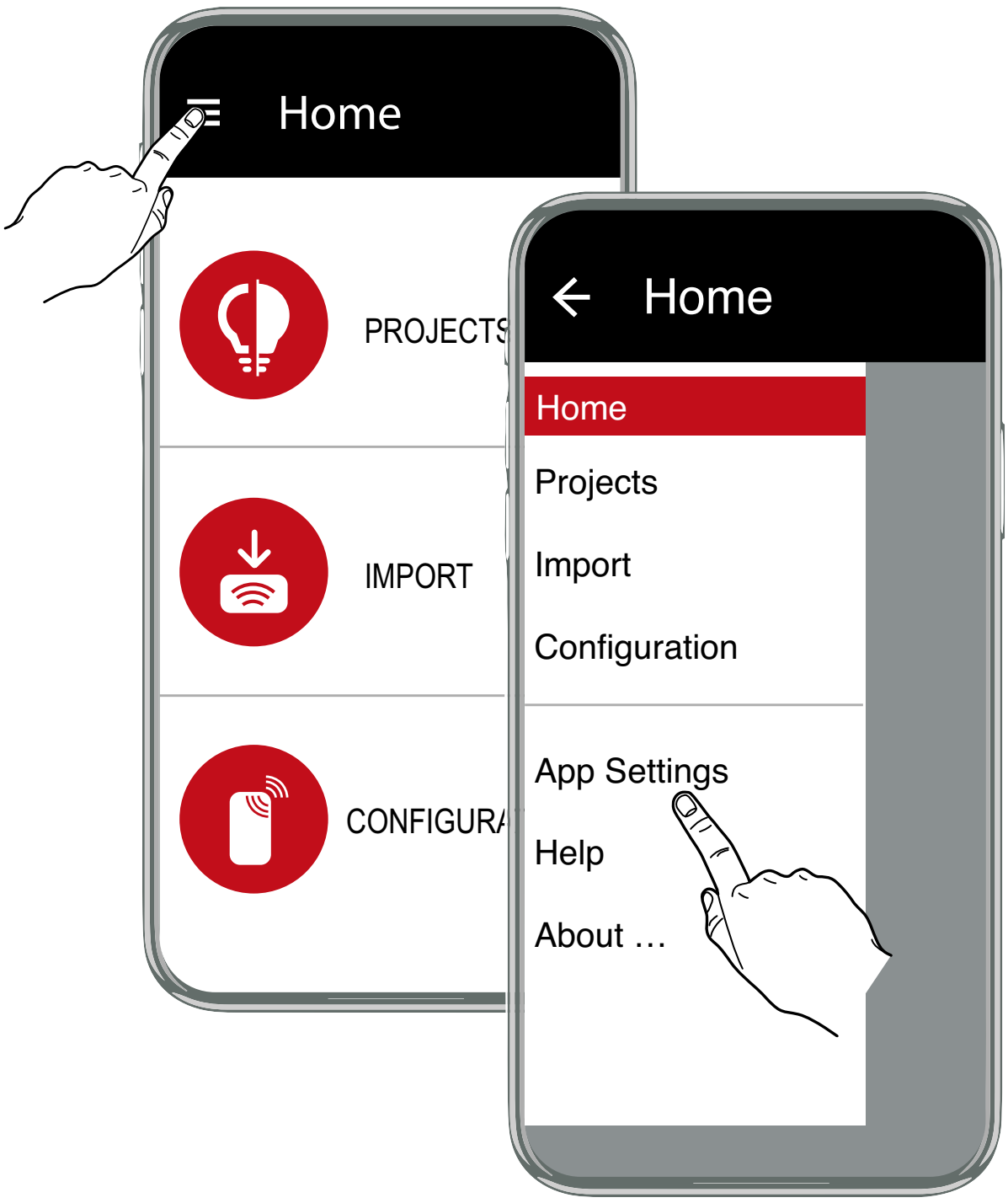
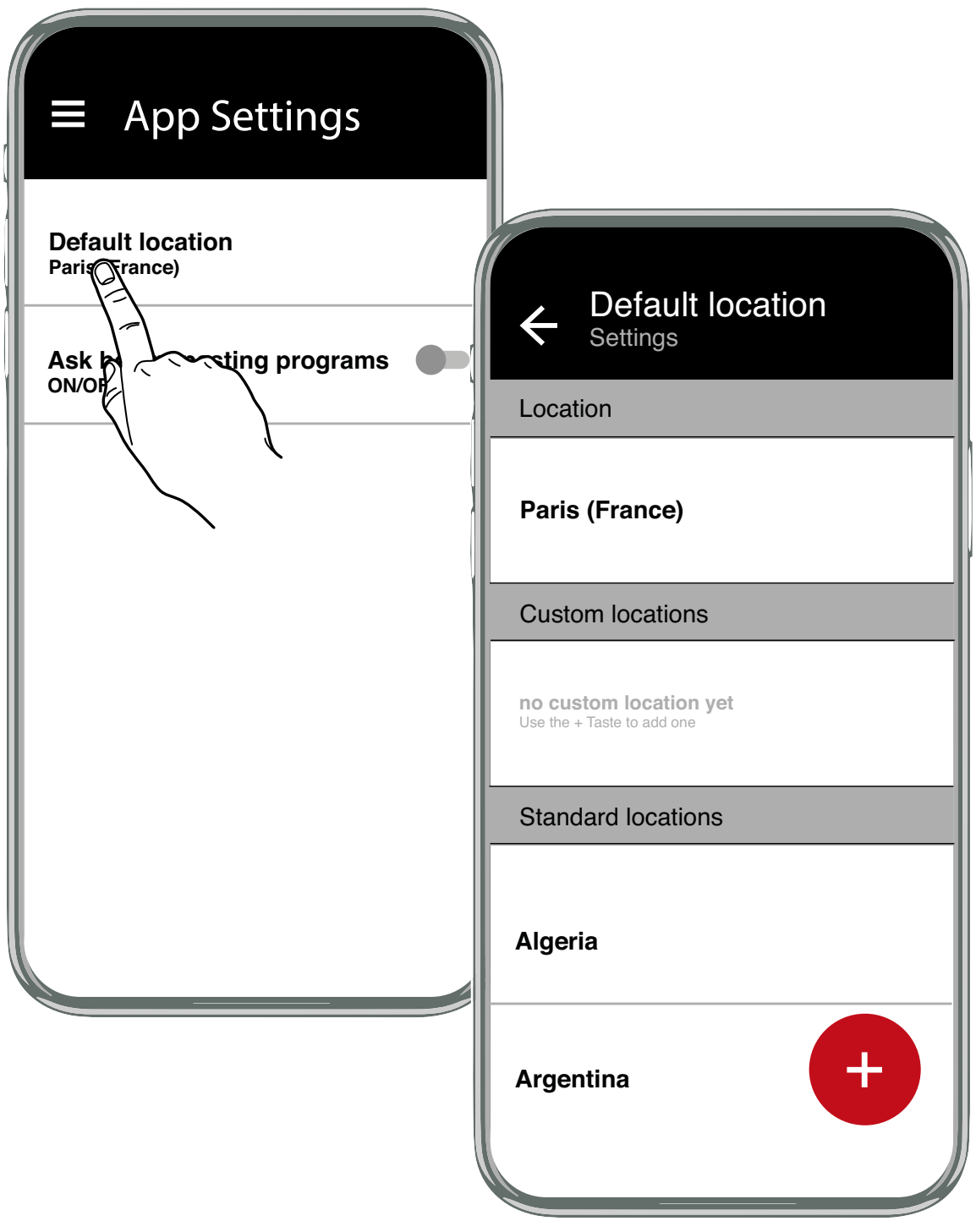
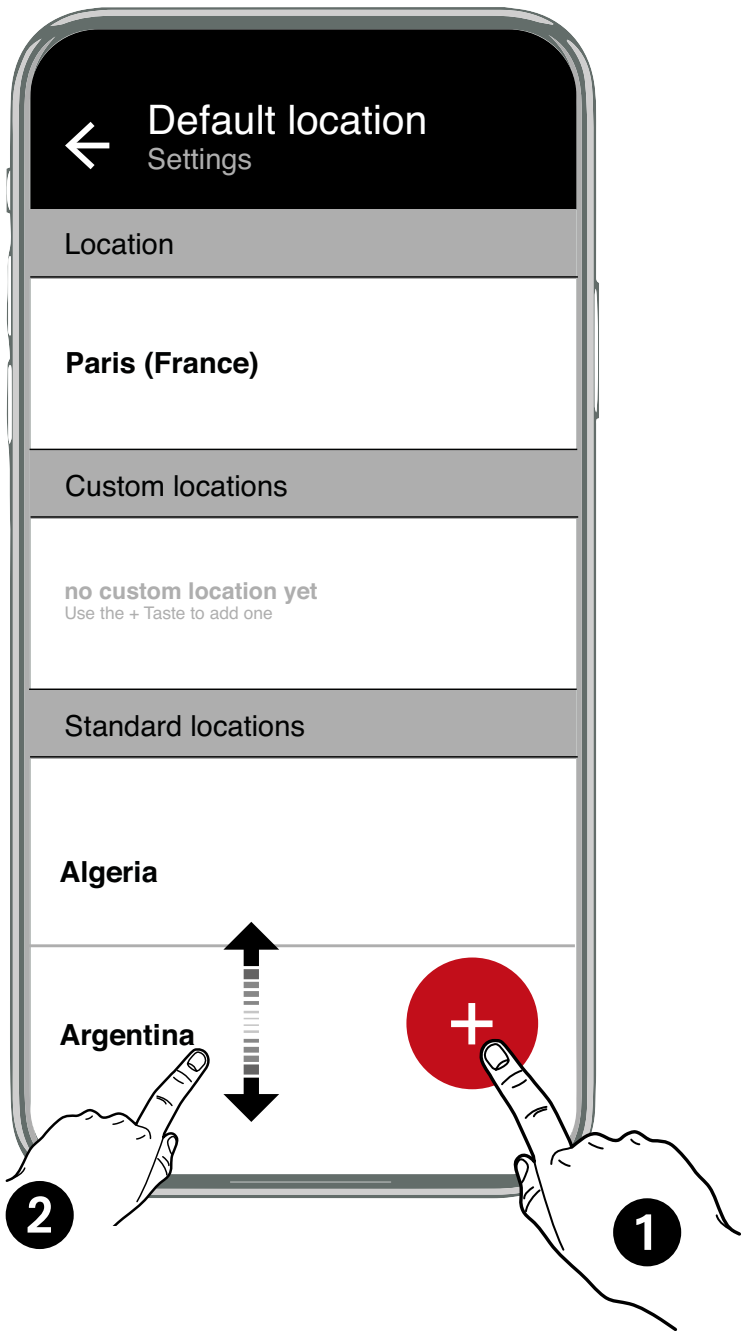
App-Settings - Location







❶ Use the + button to find the exact location.
Note: The location service and data transfer on your device must be enabled.

or

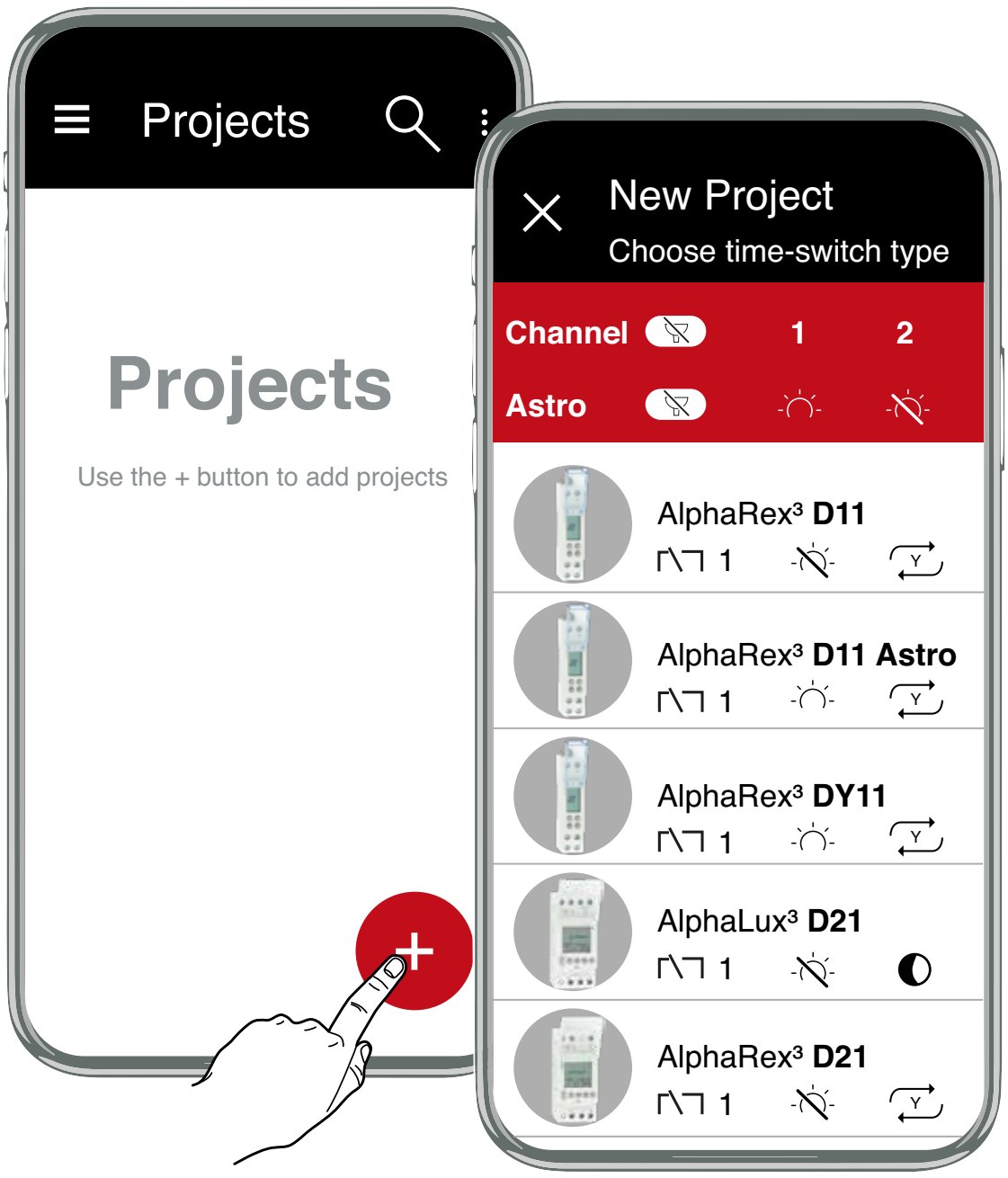
❷ Move the location list to your country and select a location in your area from the location list.

New Project

Use the + button to create a new project. Select a type from the list of time switches or use the filter function to offer you some different types of time switches.

The following time switches types are available:

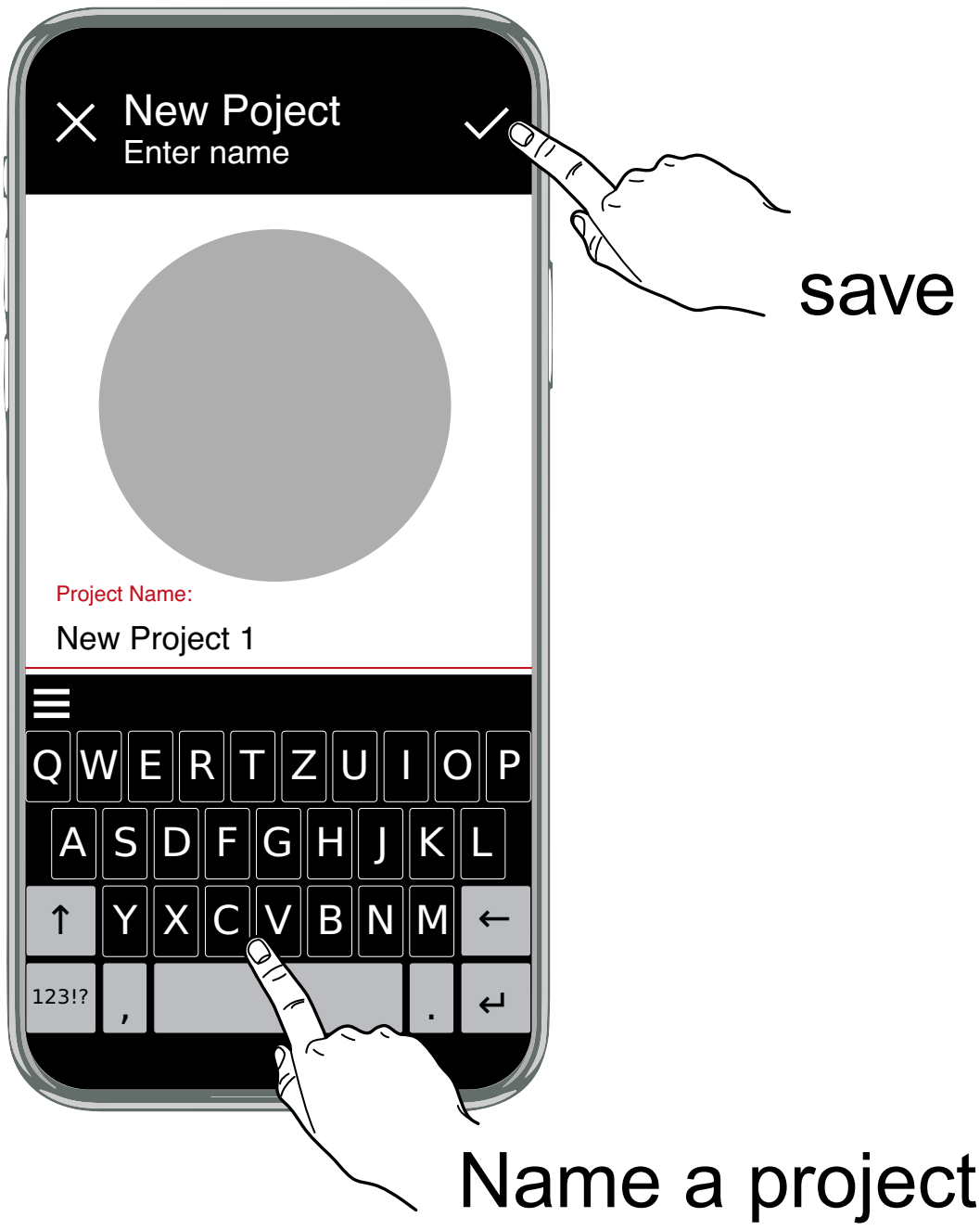
AlphaRex³ **D11**	**One-channel weekly time switch**
AlphaRex³ **D11 astro**	**One-channel astro time switch**
AlphaRex³ **DY11**	**One-channel annual time switch**
AlphaLux³ **D21**	**One-channel AlphaLux with light sensor**
AlphaRex³ **D21**	**One-channel weekly time switch**
AlphaRex³ **D22**	**Two-channel weekly time switch**
AlphaRex³ **D21 astro**	**One-channel astro time switch**
AlphaRex³ **D22 astro**	**Two-channel astro time switch**
AlphaRex³ **DY21**	**One-channel annual time switch**
AlphaRex³ **DY22**	**Two-channel annual time switch**



Explanation of symbols

1 / 2	Channel selection
	Filter function
1	Number of channels
	with astronomy function
	without astronomy function
Y	Annual time switch
	Twilight switch

Either select a time switch type directly from the list or use the filter function to propose a time switch type.



Name a project

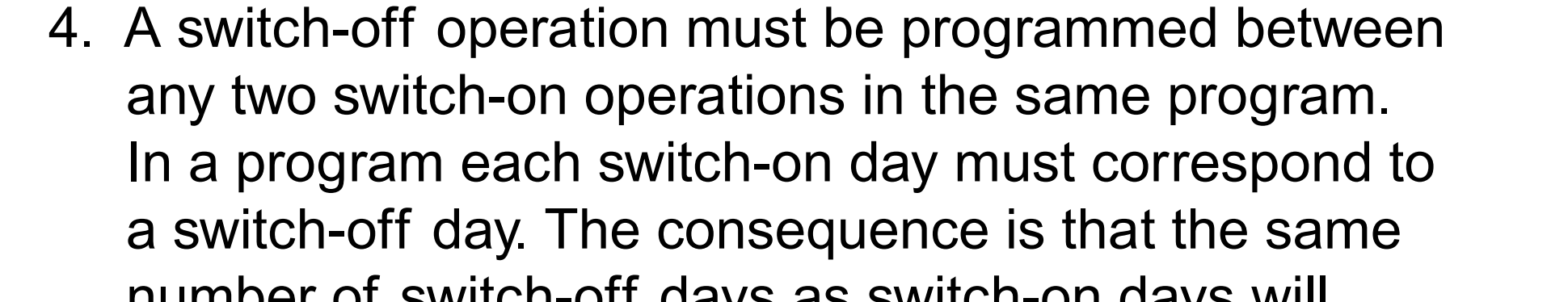
A program always contains the switch-on time, the switch-on days (1 to 7), the switch-off time and the switch-off days (1 to 7). The switching days specify the day of the week on which the respective switching time is applied.

Rules for creating a program:

1. The switch-on time must lie within the range 00:00:00 to 23:59:59.
2. The switch-off time must lie within the range 00:00:00 to 24:00:00.
3. A switch-on time and a switch-off time in the same program may not coincide on the same day of the week at the same time.
4. A switch-off operation must be programmed between any two switch-on operations in the same program. In a program each switch-on day must correspond to a switch-off day. The consequence is that the same number of switch-off days as switch-on days will always need to be selected.

Programs of the same type for one channel are combined with a logical OR; meaning the relay will be switched on if at least one of the combined programs is on. (overlaid by additive method); i.e. the resultant switching behaviour is generated by the overlaying of various programs.

Example :



Weekly programs and annual programs are overlaid in the same way. Exception programs invalidate weekly and annual programs within their validity period.

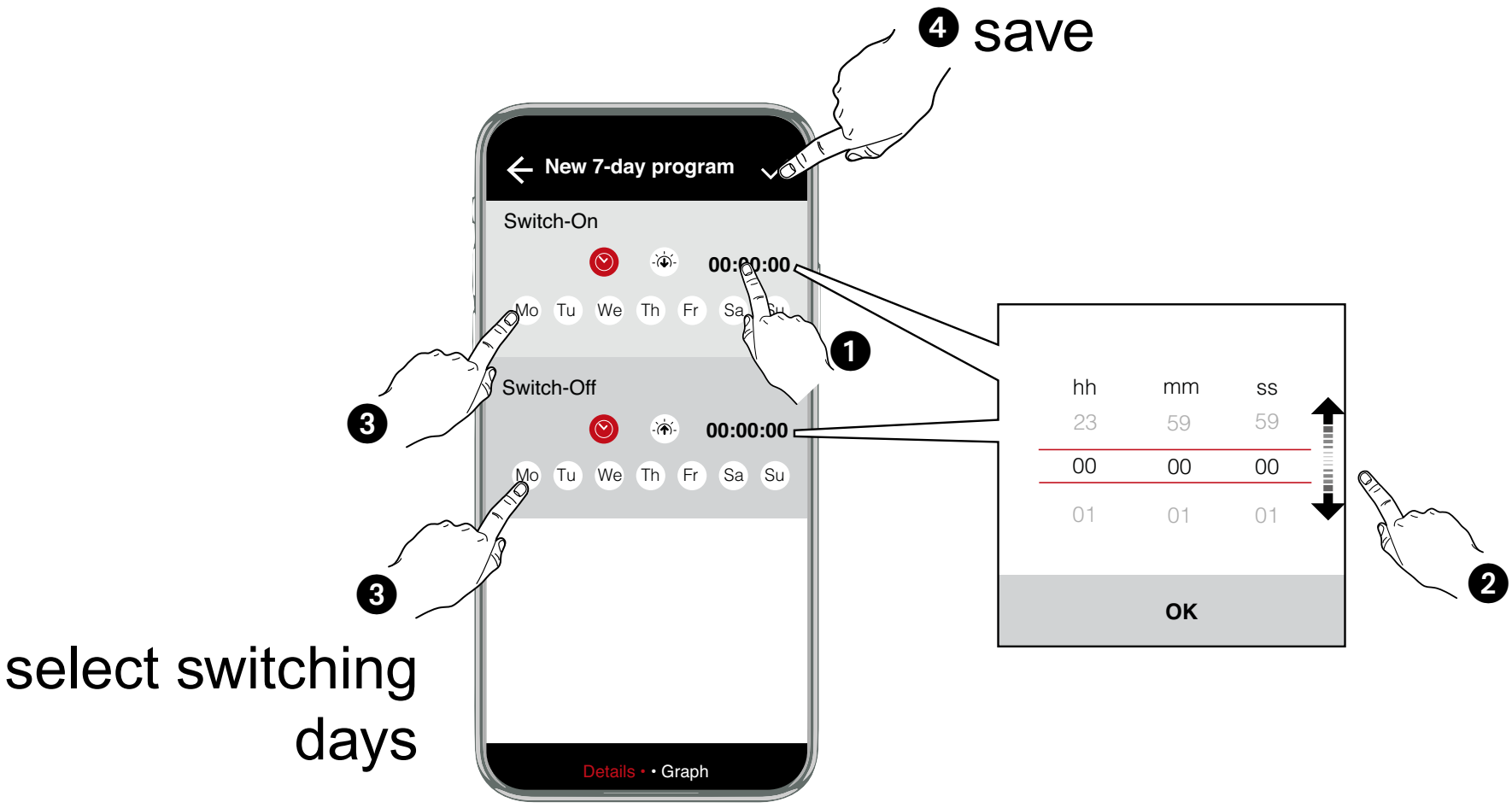
Combination of program types

	WEEKLY program	ANNUAL program	EXCEPTION program
WEEKLY program	Execution of the switching cycles for various weekly programs is additive. *	Execution of the switching cycles for weekly and annual programs is additive. *	Exception programs replace all other programs within the validity range.
ANNUAL program	Execution of the switching cycles for annual and weekly programs is additive. *	Execution of the switching cycles for various annual programs is additive. *	Exception programs replace all other programs within the validity range.
EXCEPTION program	Only exception programs are effective within the validity range.	Only exception programs are effective within the validity range.	Between exception programs logical OR ➡ additive

* logical OR ➡ additive

Example 7-day programm

Setting switching times and days



select switching days

	switching times
	sunset
	sunrise

⚙ Settings

Location (Xxxxxxxx)	Select a location from the list that is in the immediate area.
Astro XX | XX | XX	Longitude and latitude, time zone
Summertime Europa | Start | End	**Daylight saving time**: ±1h **Europe**: Factory setting. **SPECIAL**: Summer time changeover can be freely programmed by entering a start and end date and is always carried out on the same weekday, e.g. Sunday, in the following years.
Sunset earliest | latest channel X: 0h 0m 0s	Displays the earliest and latest sunset times, Offset settings/channel
Sunrise earliest | latest channel X: 0h 0m 0s	Displays the earliest and latest sunrise times, Offset settings/channel
Options	
Expert mode Passive	The expert mode adds another function(s) to the device. After reactivation, the expert mode is executed again with the basic settings.
Holiday period Passive	After activation, the holiday program is executed between the start date 0:00 h and the end date 24:00 h (FIXED ON/OFF). The holiday program must be reactivated after it has expired once.
Set offset (Sunrise/Sunset)	The astro time switch is switched on respectively at sunset and sunrise times. Here the offset is taken into account, to allow the switching times to deviate from the sunset time and sunrise time. The following can be entered as an offset value • Arc value in arcminutes within the range of max. +/- 12° 00’ • Time value in minute increments up to max. +/- 2 h 00 min,

Control input
Delta | 0 h 00m

A control signal is superimposed on all program commands (OR circuit). While this control signal is applied, the output is switched ON. When the control signal is switched off, the output is switched OFF after a delay time, unless an ON command is applied by a program.

Grid synchronization

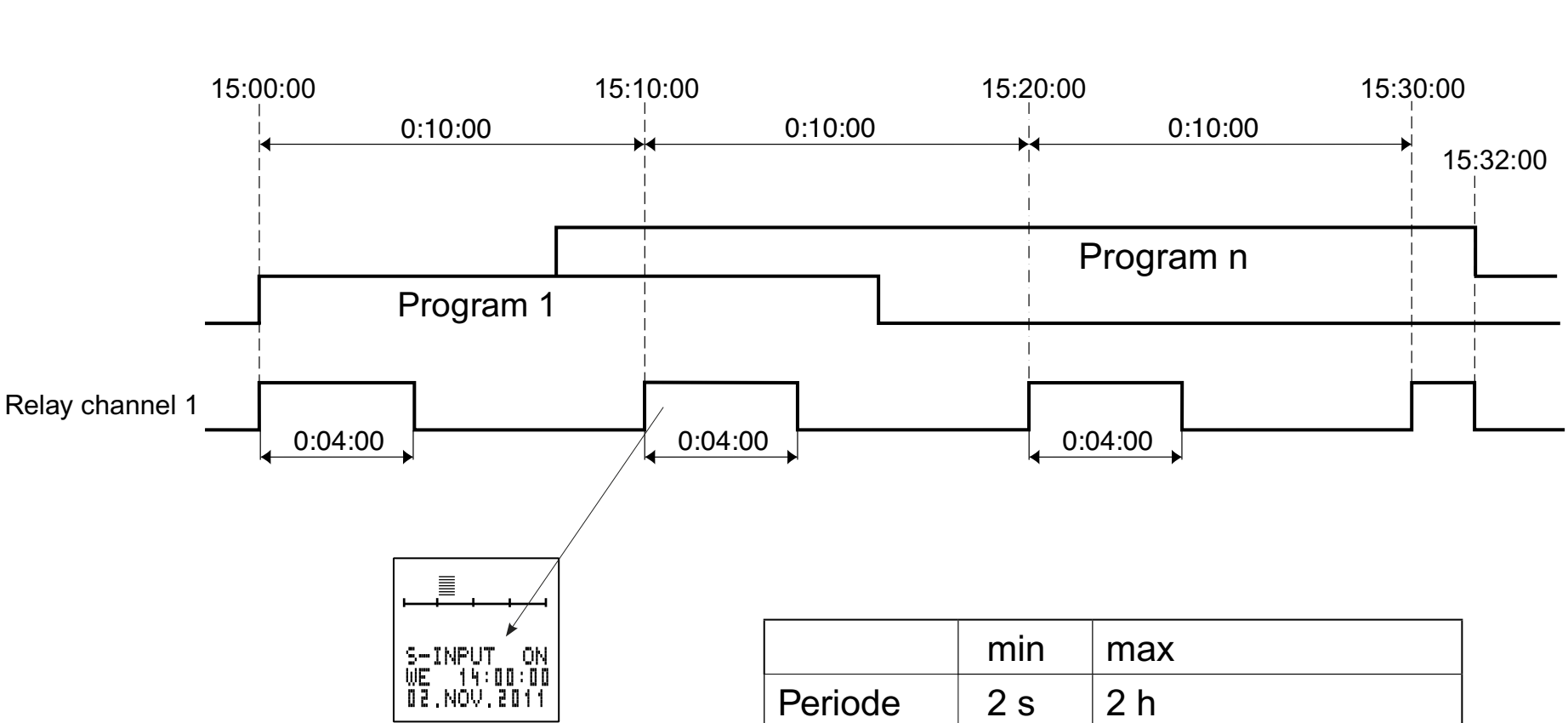
This function is available in expert mode.
PASSIVE is preset. To increase the long-term accuracy, it is preferable to activate synchronization in 50/60Hz networks with frequency adjustment.

Random switching

Function for presence simulation.
Function ACTIVE, the programmed switching cycles are randomly shifted in the range of ± 15 minutes.

Cyclic switching

For cyclic switching commands, the duty cycle is defined by linking programs of all types with Or. A fixed cycle with an adjustable pulse length then runs within these limits. The cycle always begins with the Switch-on time.
Cycle duration and pulse length can be set independently of each other in a second raster.
If the duty cycle of the switching program is shorter than the cycle duration, the cycle is shortened accordingly. If the duty cycle of the switching program is even shorter than the pulse length, this is also shortened accordingly.



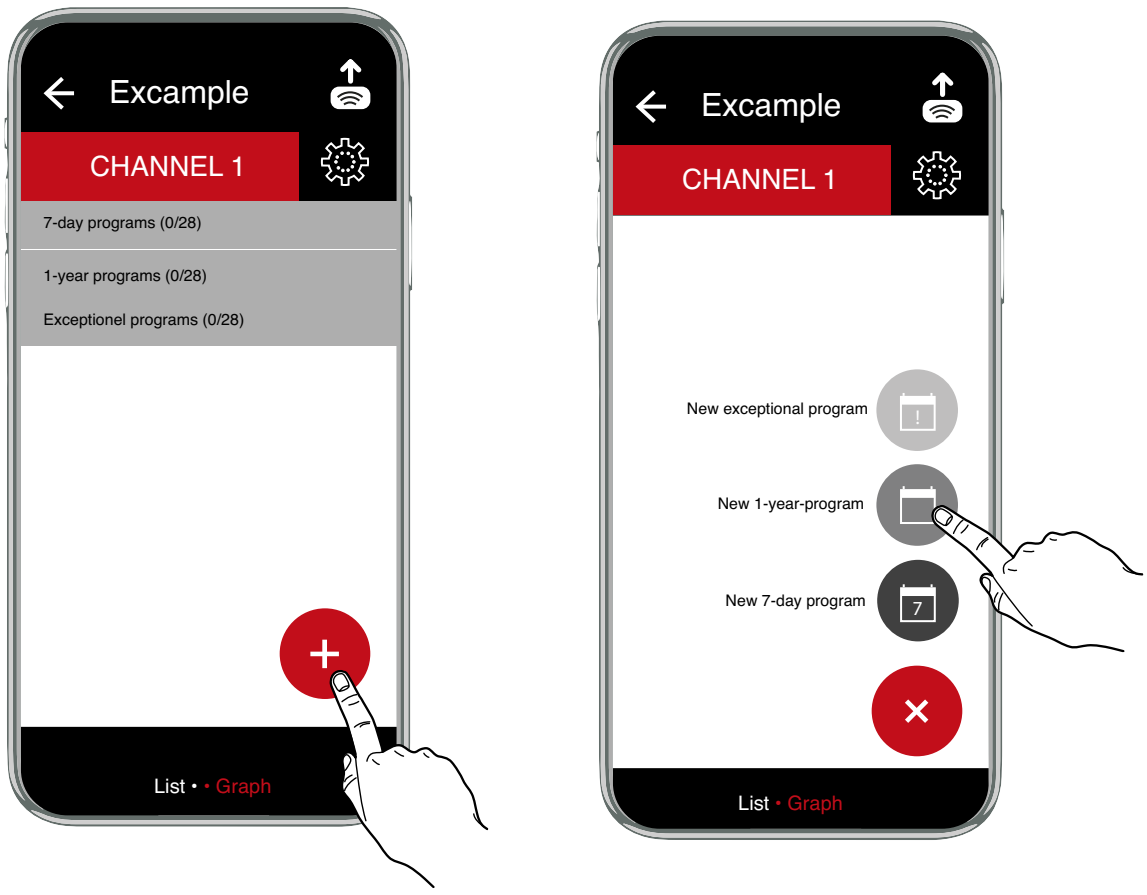
	min	max
Periode	2 s	2 h
Impuls	1 s	1 h 59 min 59 s

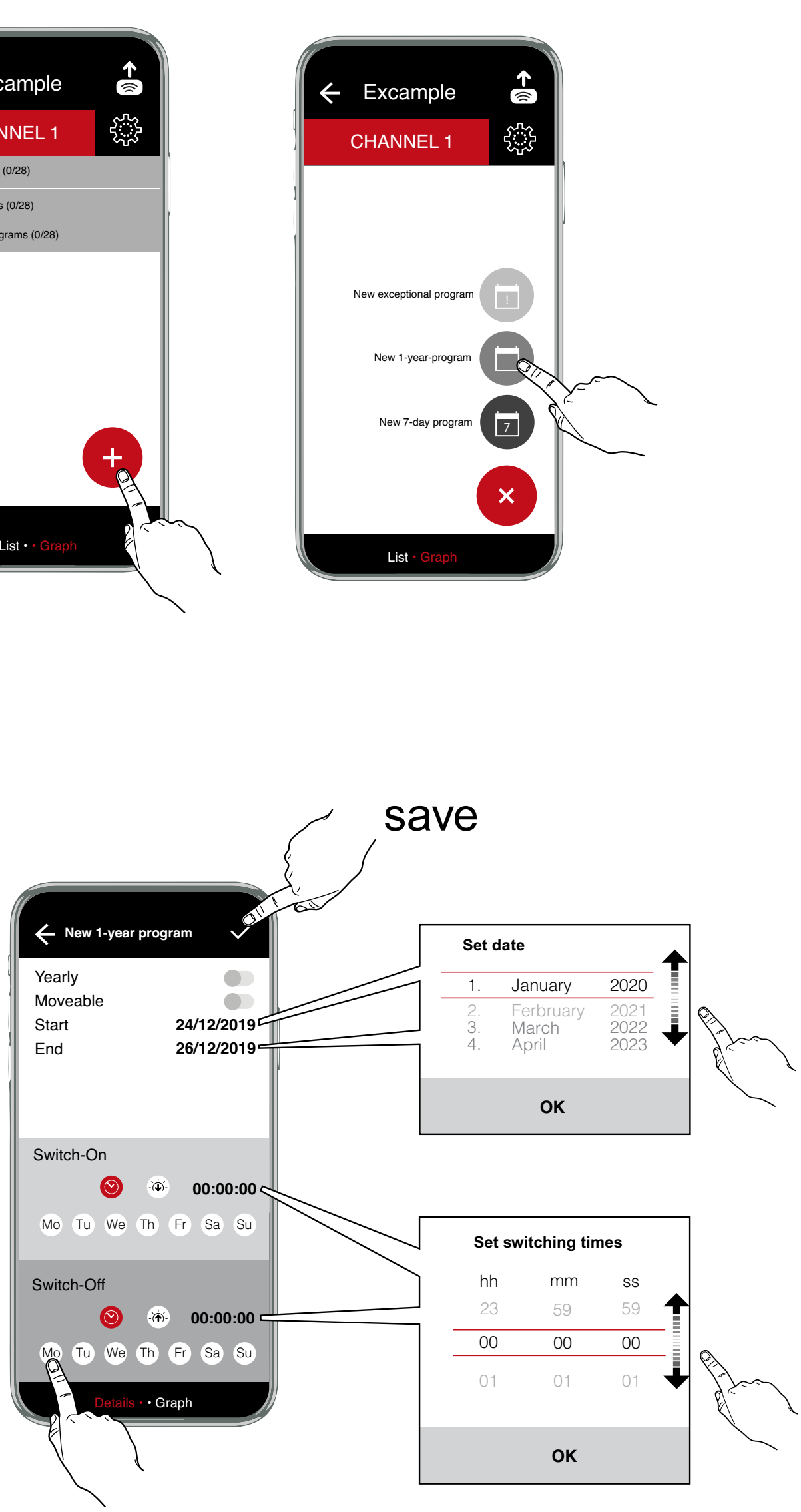
channel switching Passive	The outputs are automatically swapped over once a day (12 noon) or once a week (Sunday at 12 noon).

Annual programs

Programs which should only be executed within a defined validity period. These programs are overlaid with each other and with the weekly programs of the same channel in accordance with the OR-operation shown above.
The validity period is specified by entry of the start/end date. Validity from start date 00:00:00 until end date 24:00:00. The start date must precede the end date. These programs behave like weekly programs within their validity range. Outside of the validity range, these programs do not affect the switching behaviour.

- The „annual“ option should be selected if the additional switching times have the same validity period for every year. (e.g. Christmas, national public holidays, birthdays etc.)
- The „annual“ option should be deleted (= „ONCE“) if additional switching times are desired within one validity period (e.g. holiday periods), however the start/end date of holidays changes from one year to the next.





select switching days

	switching times
	sunset
	sunrise

Exception programs

These programs have a higher priority than weekly or annual programs. Weekly and annual programs in the same channel
are no longer executed within the validity period of an exception program. However, other exception programs are also executed within the validity period. Various exception programs are overlaid according to the above OR-operation.

- The „annual“ option should be selected if the additional switching times have the same validity period for every year. (e.g. Christmas, national public holidays, birthdays etc.)
- The „annual“ option should be deleted (= „ONCE“) if additional switching times are desired within one validity period (e.g. holiday periods), however the start/end date of holidays changes from one year to the next.

Exception programs only exist on annual time switches.

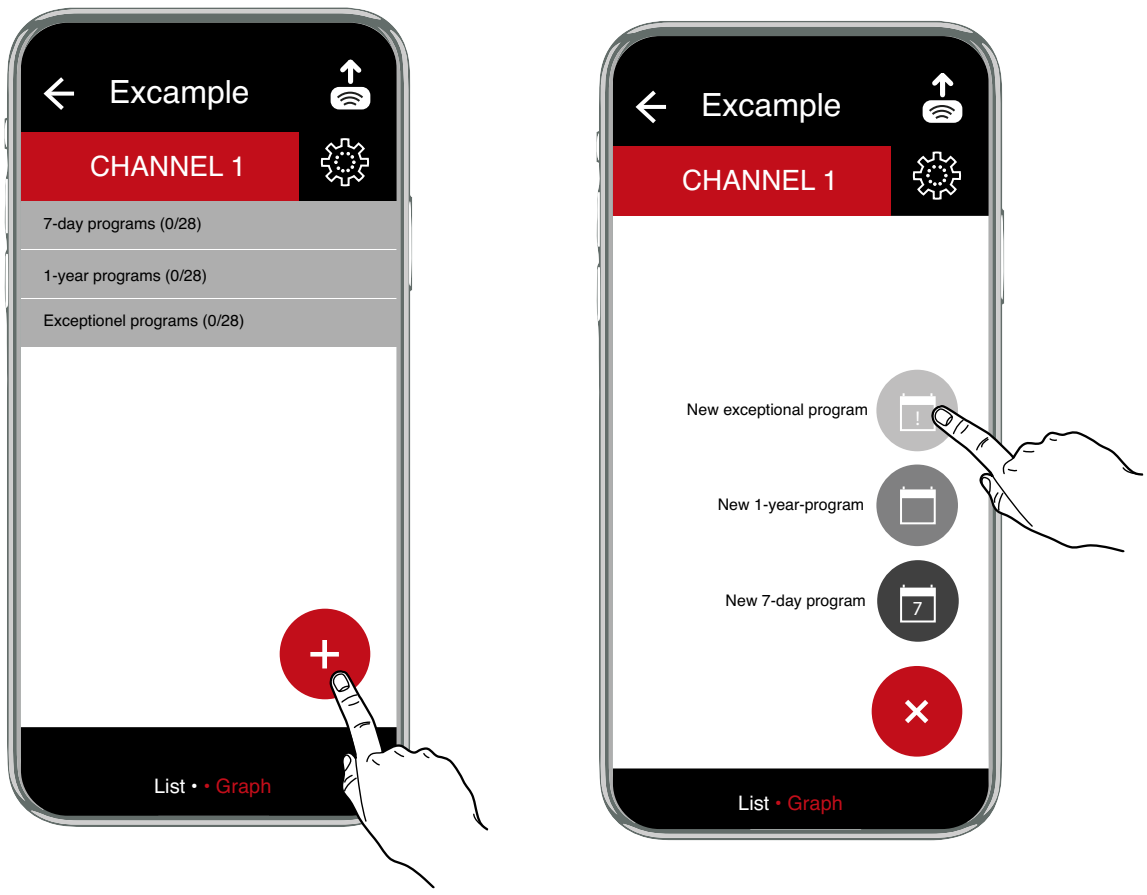
INDIVIDUAL option
Validity from the start date 00:00:00 to the end date 24:00:00. During this period, the corresponding channel only switches according to the exception program.

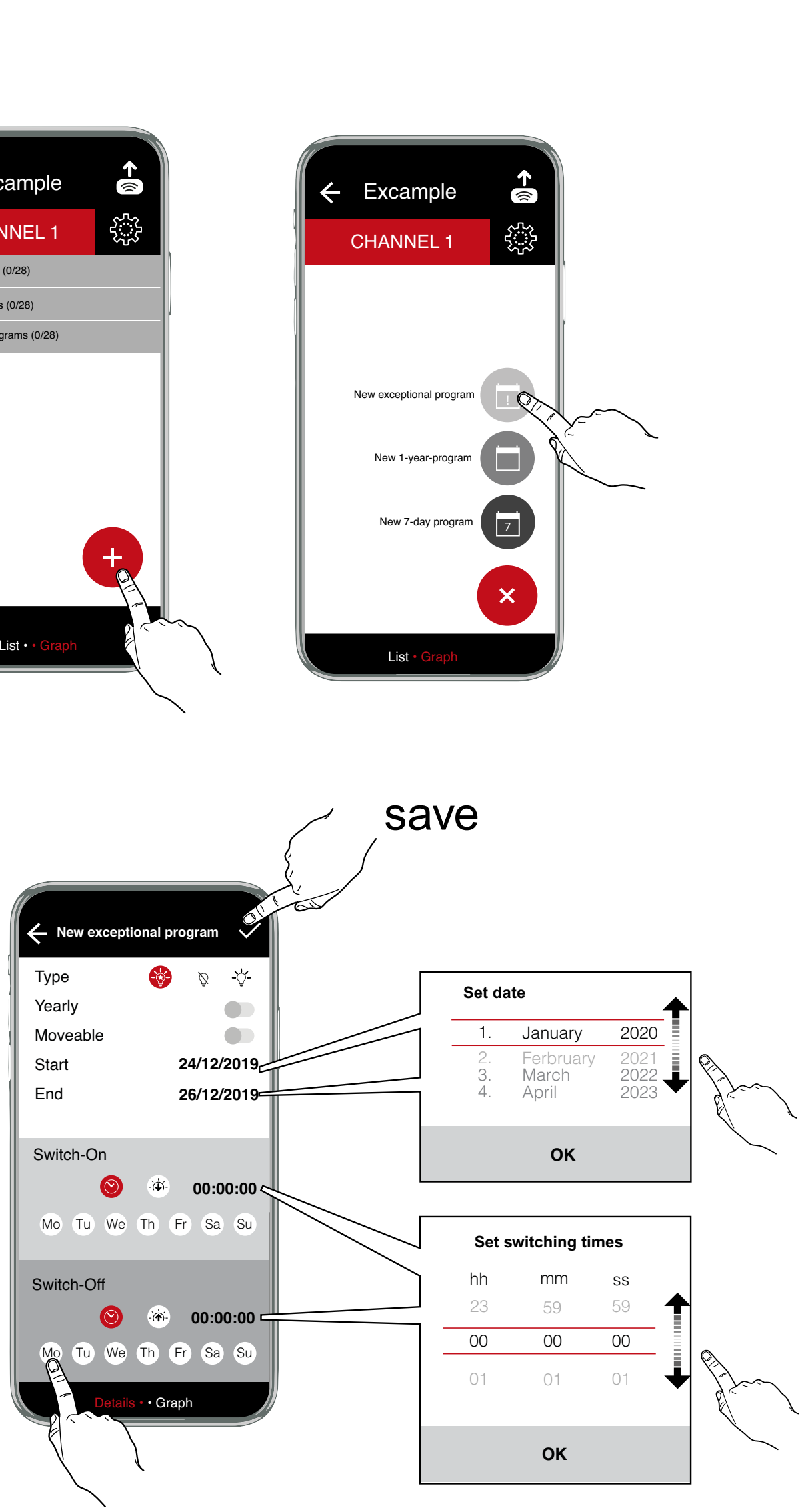
PROG ON option
Validity from start date switch-on time to end date switch-off time. The corresponding channel is switched on permanently during this period.

The validity is dependent on the days of the week. Therefore no days of the week can be selected here.

PROG OFF option
Validity from start date switch-on time to end date switch-off time. The corresponding channel is switched off permanently during this period. This status can only be changed in this area by another exception program in which the usual operation of programs of equal value (OR-operation) is applied.

The validity is dependent on the days of the week. Therefore no days of the week can be selected here.



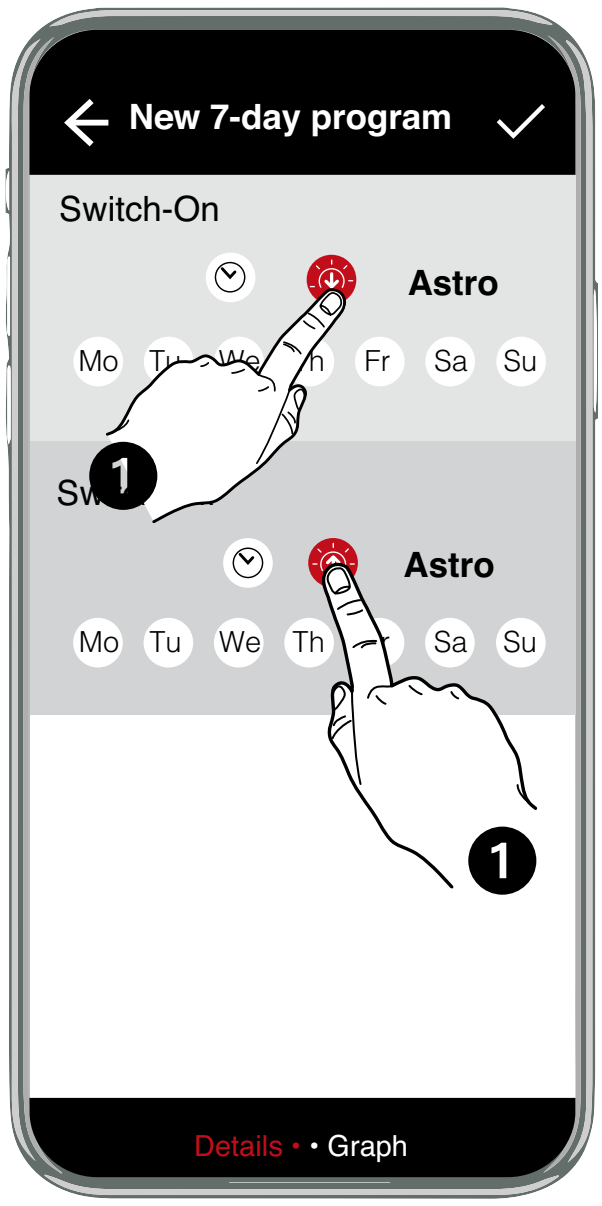


select switching days

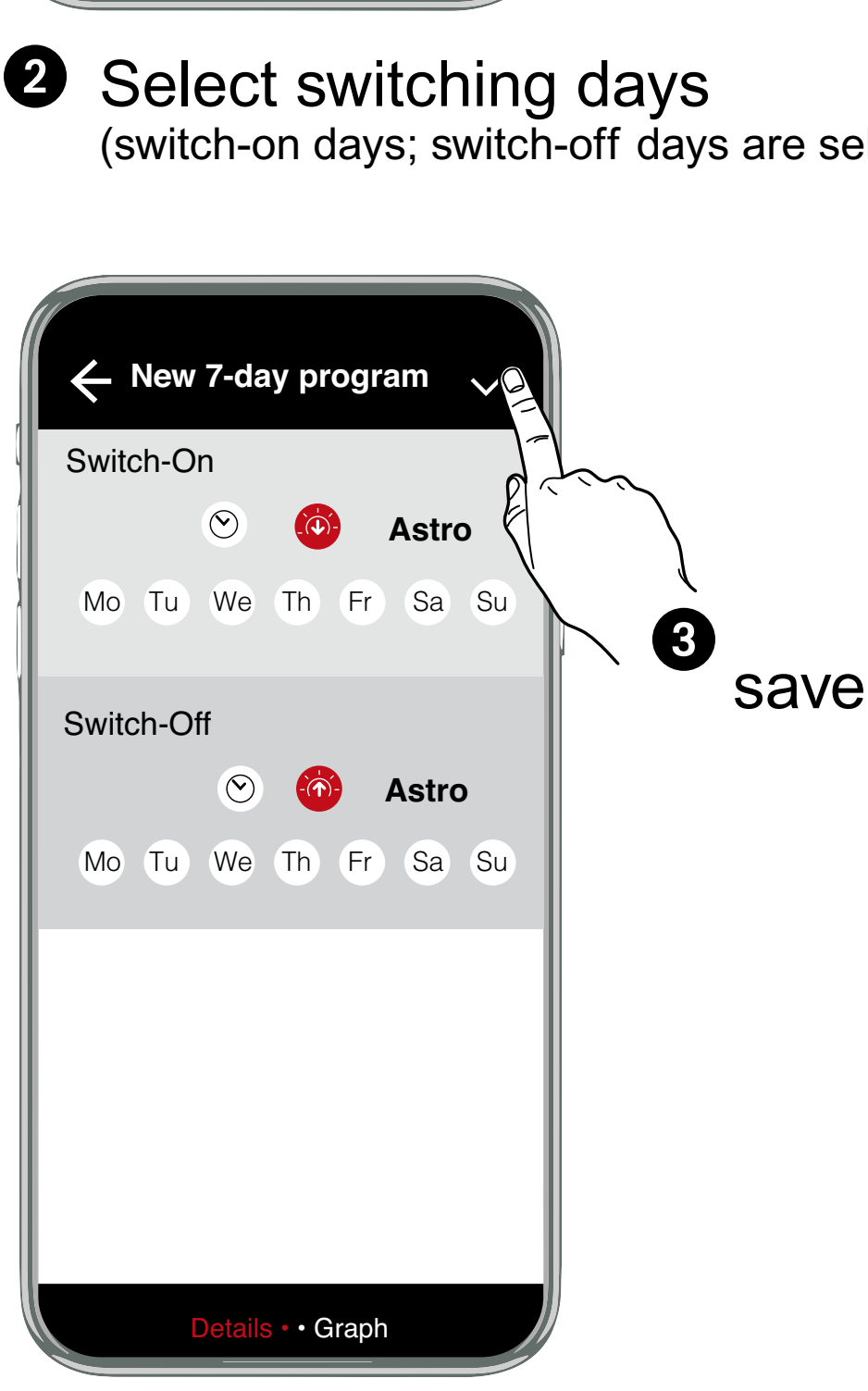
	Individual
	Prog OFF
	Prog ON
	switching times
	sunset
	sunrise

Example - Astronomical Program

The sunset / sunrise times are calculated daily on the basis of the stored geographical position and the current date. The switching behaviour is defined as follows: Sunset = switch on, sunrise = switch off.

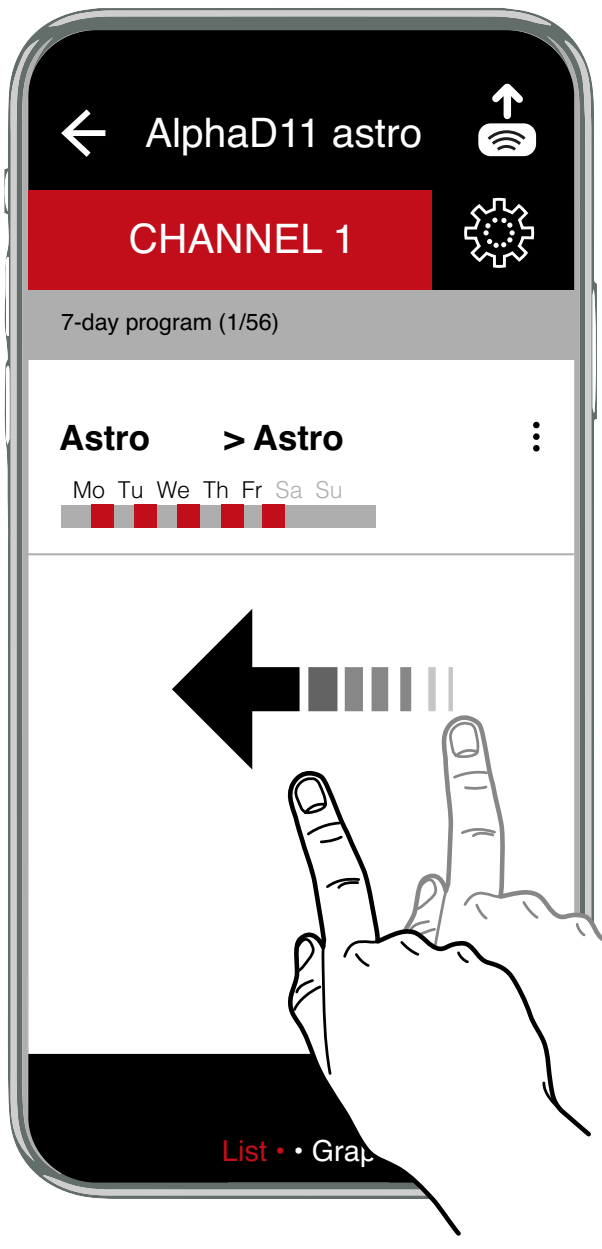


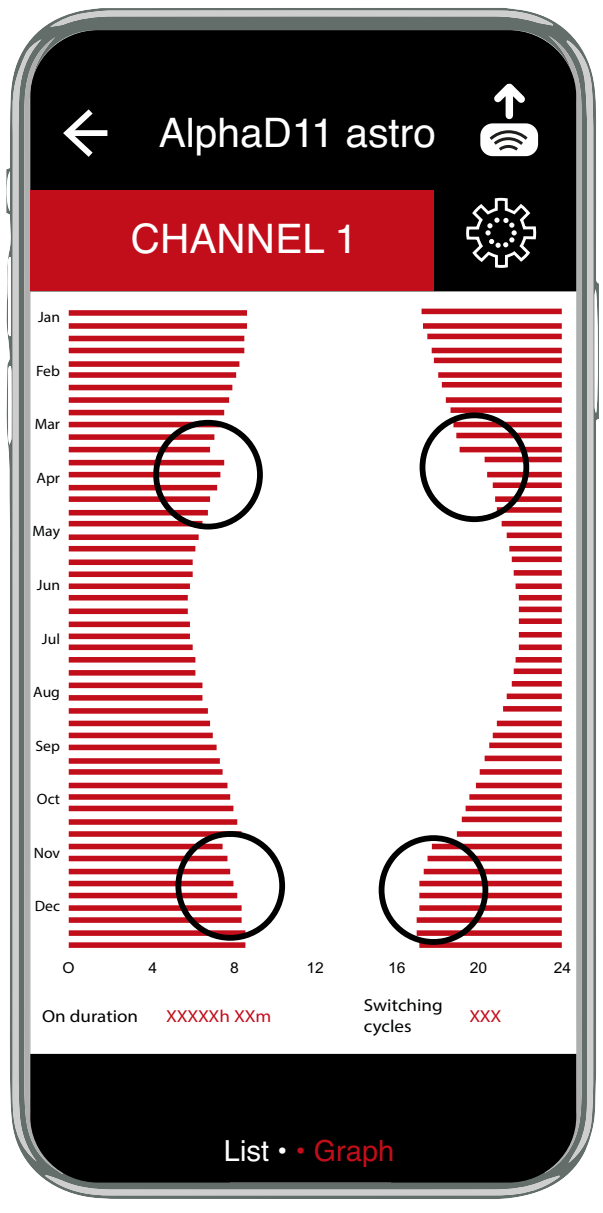
❷ Select switching days
(switch-on days; switch-off days are selected automatically)



Graphical Display

The switching chart displays the switching behaviour of the time switch for a selectable period in a graphical format.

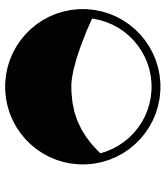




The switching chart clearly shows the different switching times of the astro program throughout the year. The switching curve runs over the year in a more or less cosine shape according to the sunset and sunrise. The start and the end of summer time can be seen as a step within the shape of the switching curve.

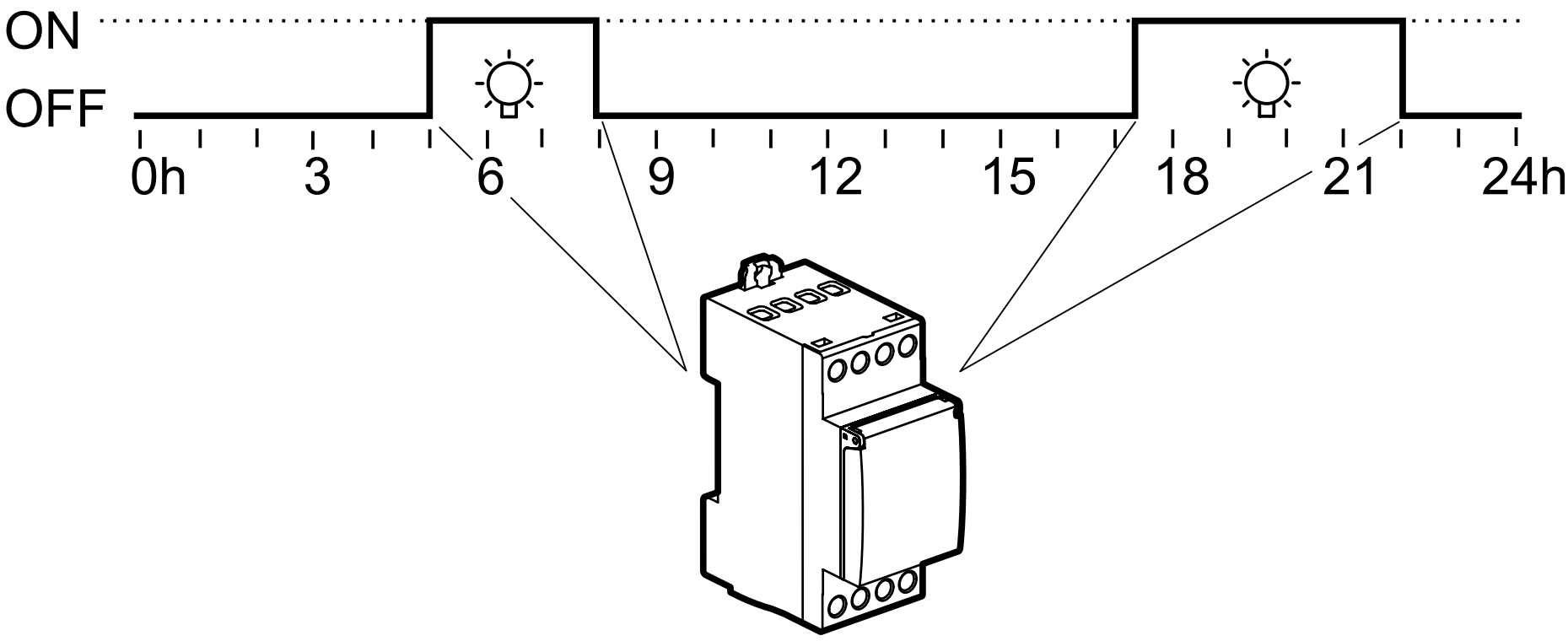
Example - AlphaLux

Alphalux timers switch according to adjustable brightness thresholds.
The Alphalux time switch has three different program types:

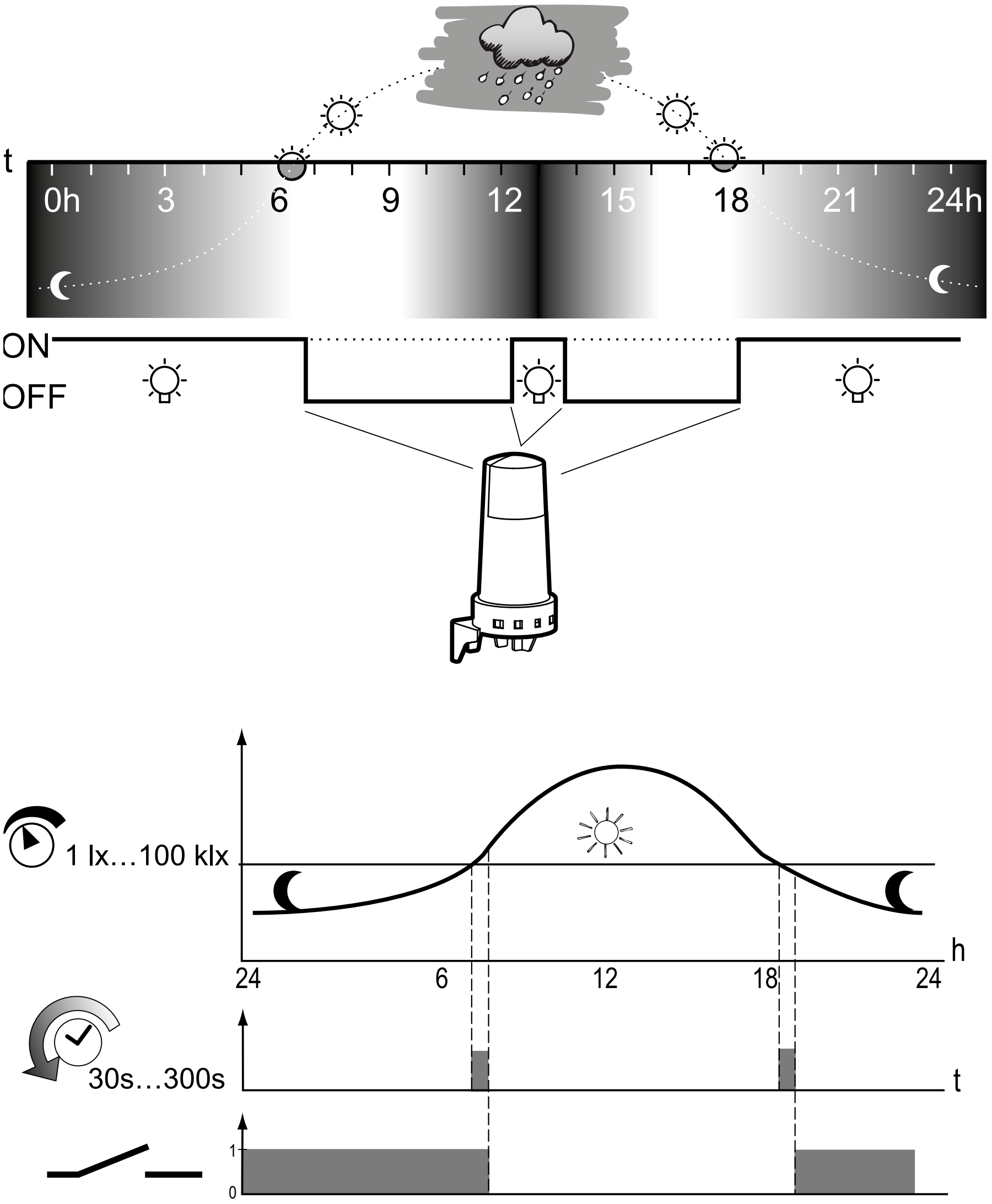
	Time	The time switch operates according to fixed times
	Light	The time switch operates according to brightness
	Light and Time	The timer switches within a specified period depending on the brightness

The program types Time and Light can be set separately for switching-on and switching-off.
The program type Light and Time cannot be combined with other program types.

Switching on and off exclusively time-controlled

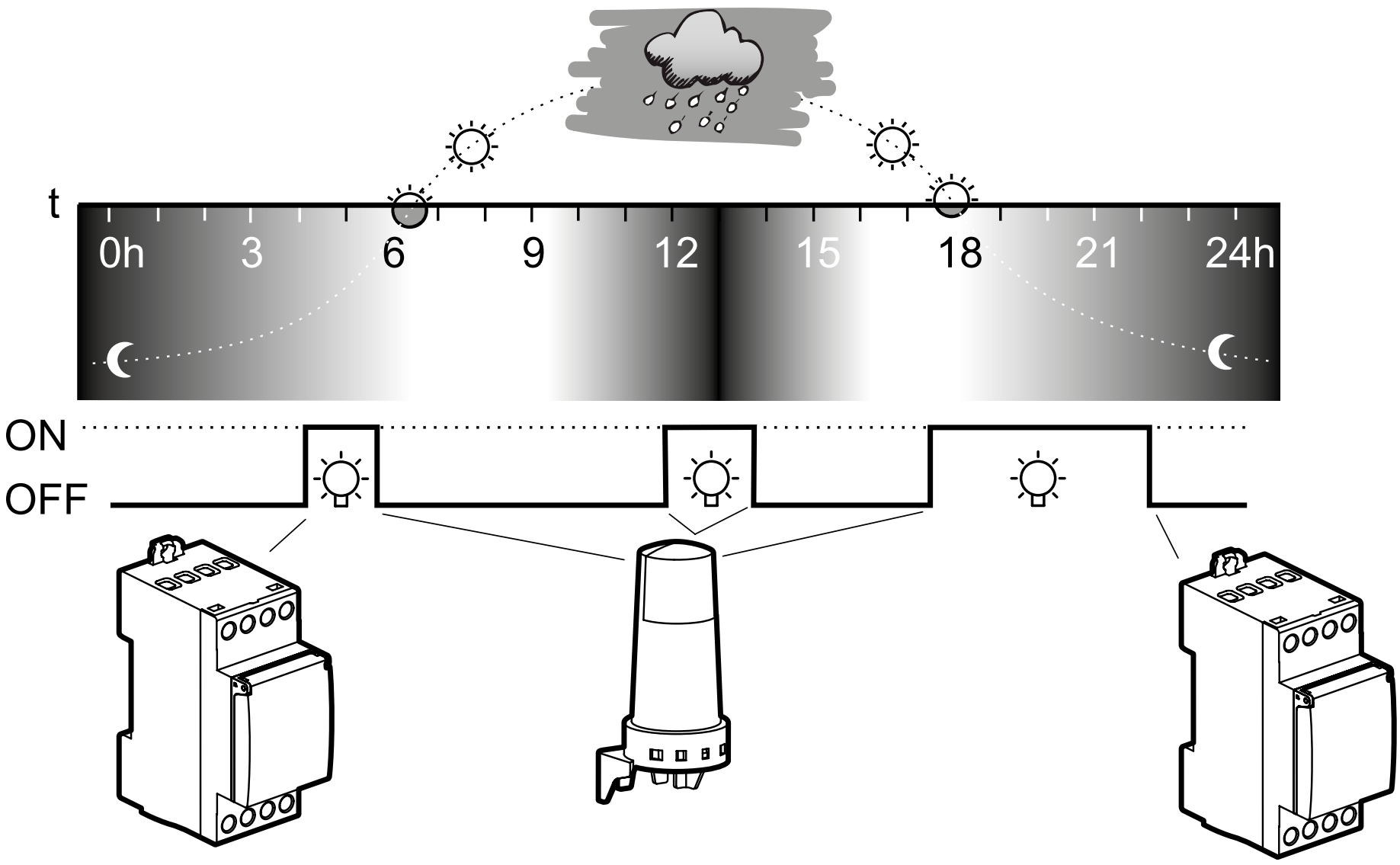


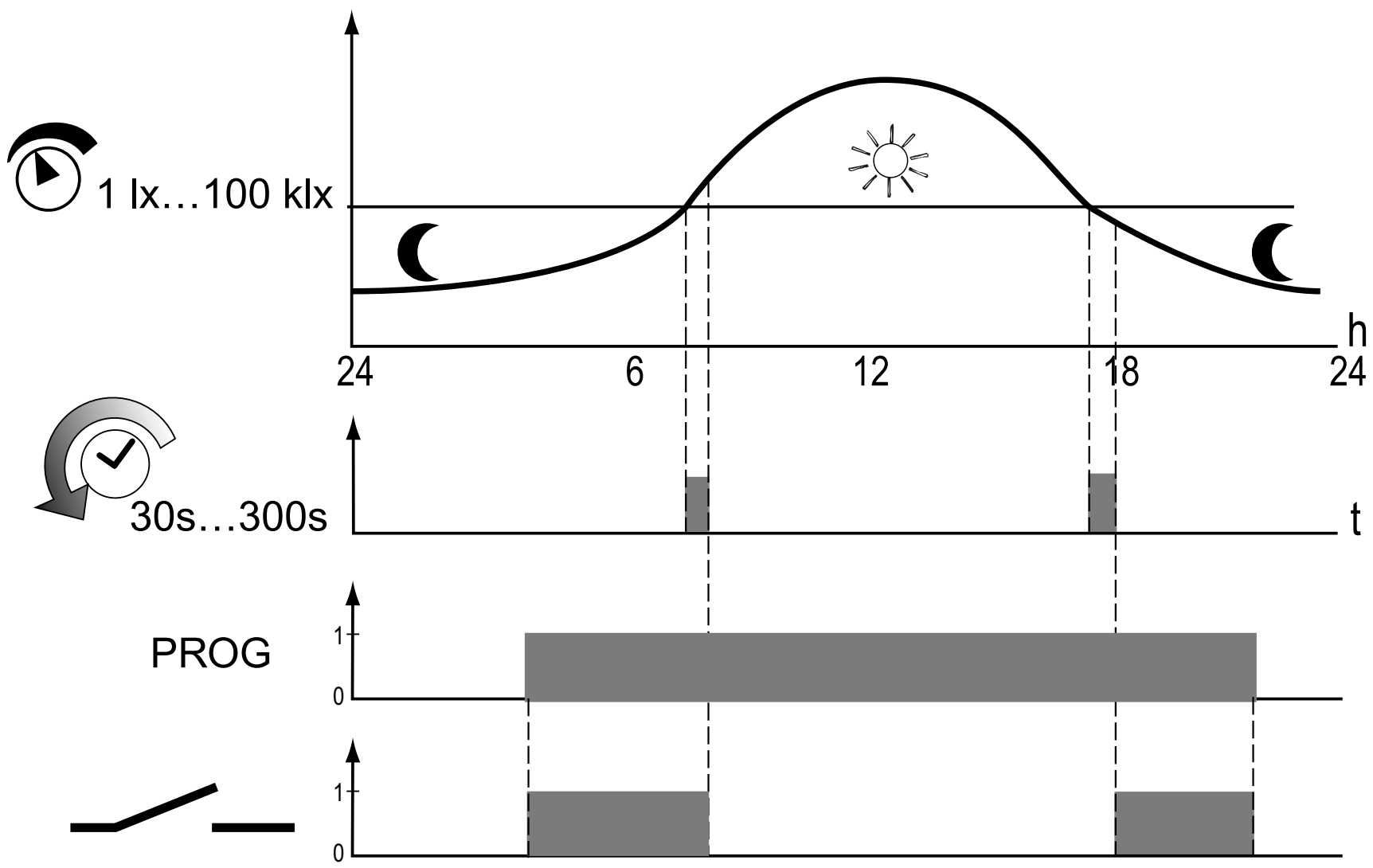
Switching on and off exclusively dependent on brightness



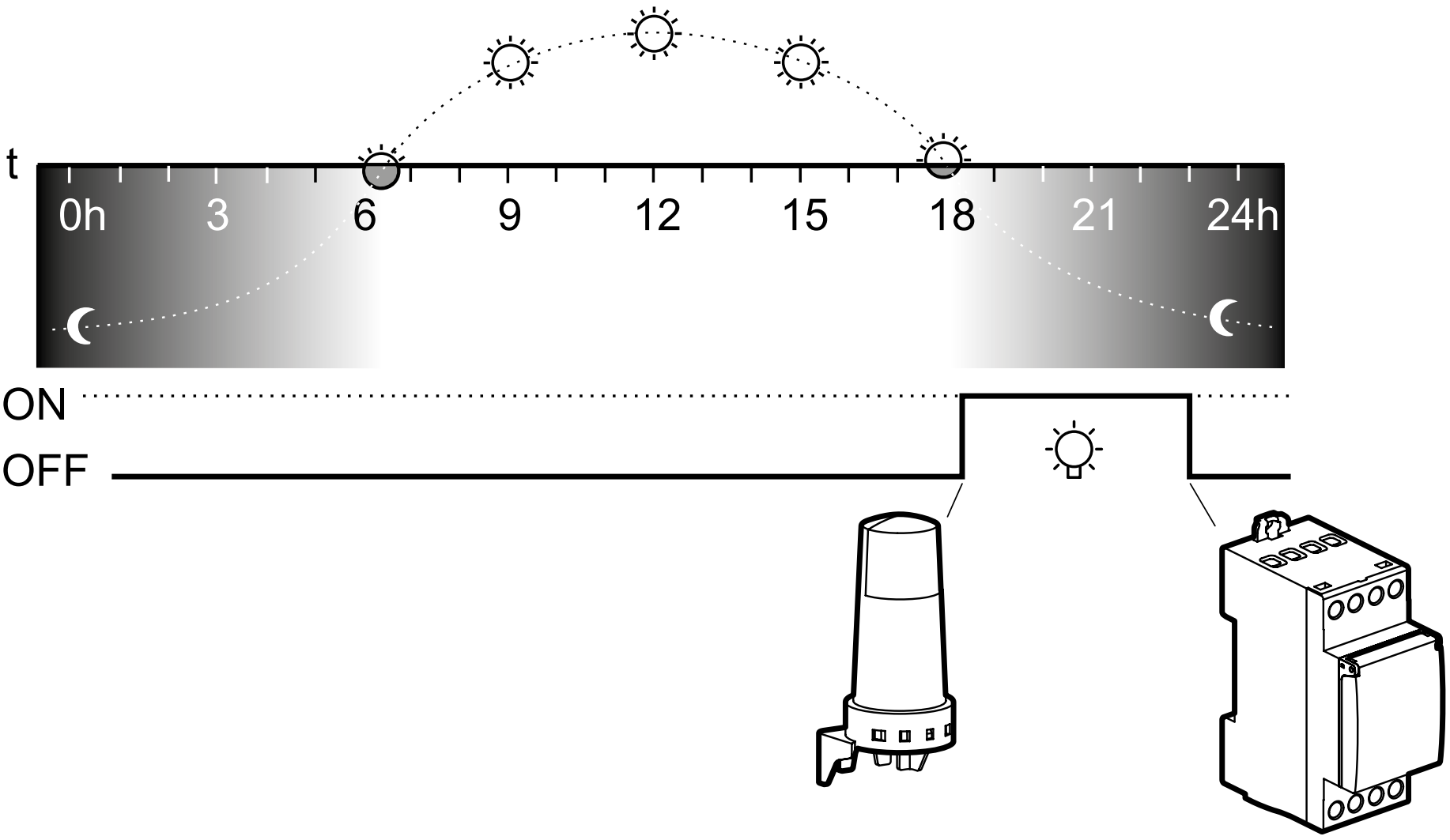
The time switch compares the brightness value measured at regular intervals to the set switch-on and switch-off threshold.
If the set brightness value drops below the set switching threshold, the time switch switches on the connected light sources. If the set brightness value exceeds the set switching threshold, the time switch switches off the connected light sources.
The switching thresholds can be set separately between 1 lx and 100 klx.

Within a specified switch-on/off time, the brightness determines the switching times

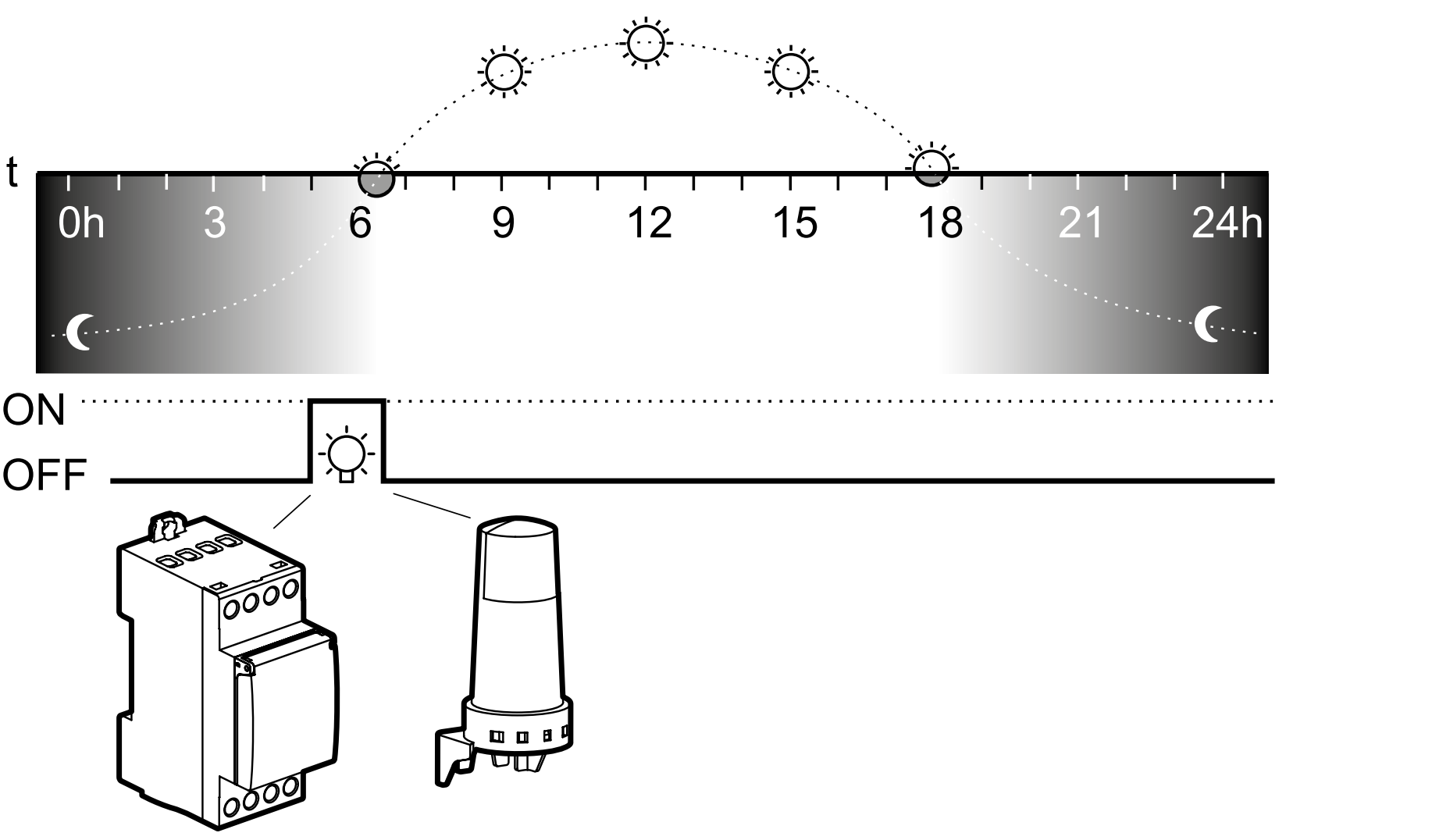




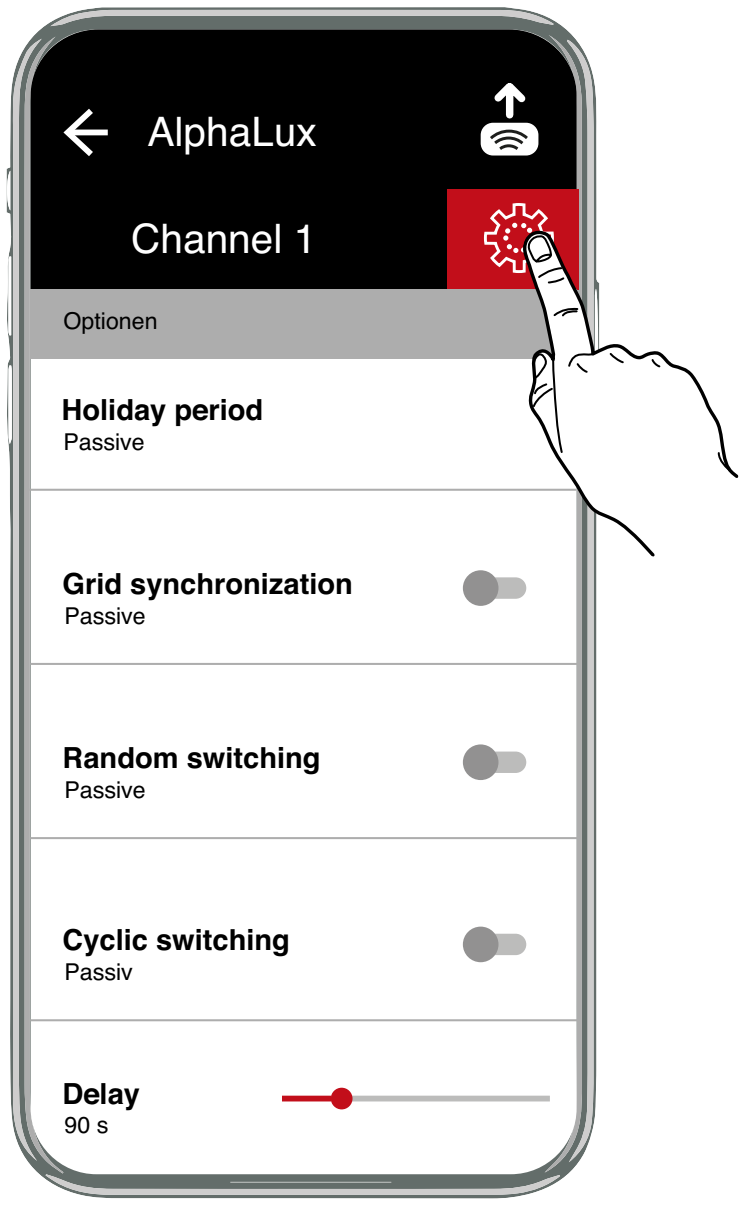
Switching on brightness-dependent, switching off time-controlled



Switching on time-controlled, switching off brightness-dependent



Options



Holiday period

After activation, the holiday program is executed between the start date 0:00 h and the end date 24:00 h (FIXED ON/OFF).
The holiday program must be reactivated after it has expired once.

Summertime

Daylight saving time: ±1h
Europe: Factory setting.
SPECIAL: Summer time changeover can be freely programmed by entering a start and end date and is always carried out on the same weekday, e.g. Sunday, in the following years.

Sychronisation

This function is available in expert mode.
PASSIVE is preset. To increase the long-term accuracy, it is preferable to activate synchronization in 50/60Hz networks with frequency adjustment.

Brightness

The delay time prevents switching back and forth when brightness and darkness change quickly (e.g. clouds passing by).
The default setting is 90 seconds. The setting range is from 30 to 300 seconds.

Switch-on and switch-off threshold

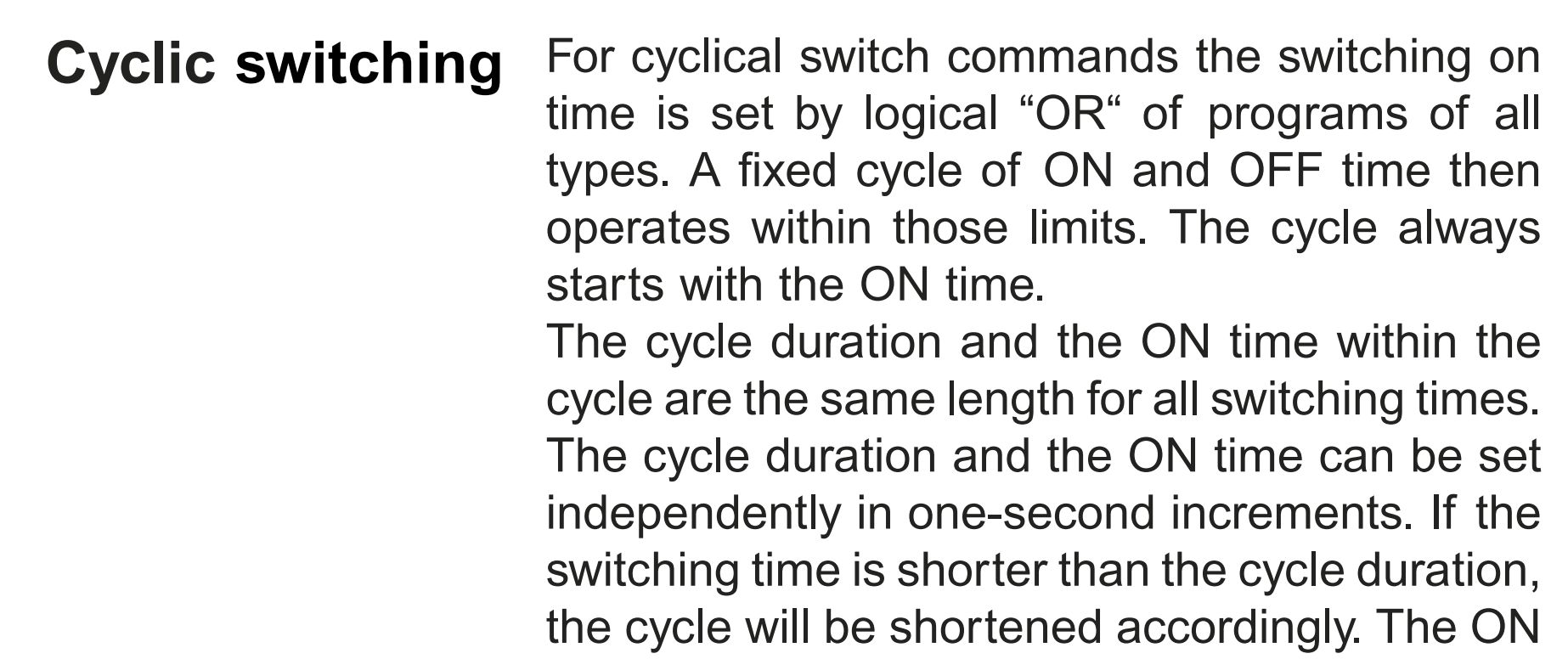
The time switch compares the brightness value measured at regular intervals to the set switch-on and switch-off threshold.
If the set brightness value drops below the set switching threshold, the time switch switches on the connected light sources.
If the set brightness value exceeds the set switching threshold, the time switch switches off the connected light sources.
The switching thresholds can be set separately between 1 lx and 100 klx.

Random switching

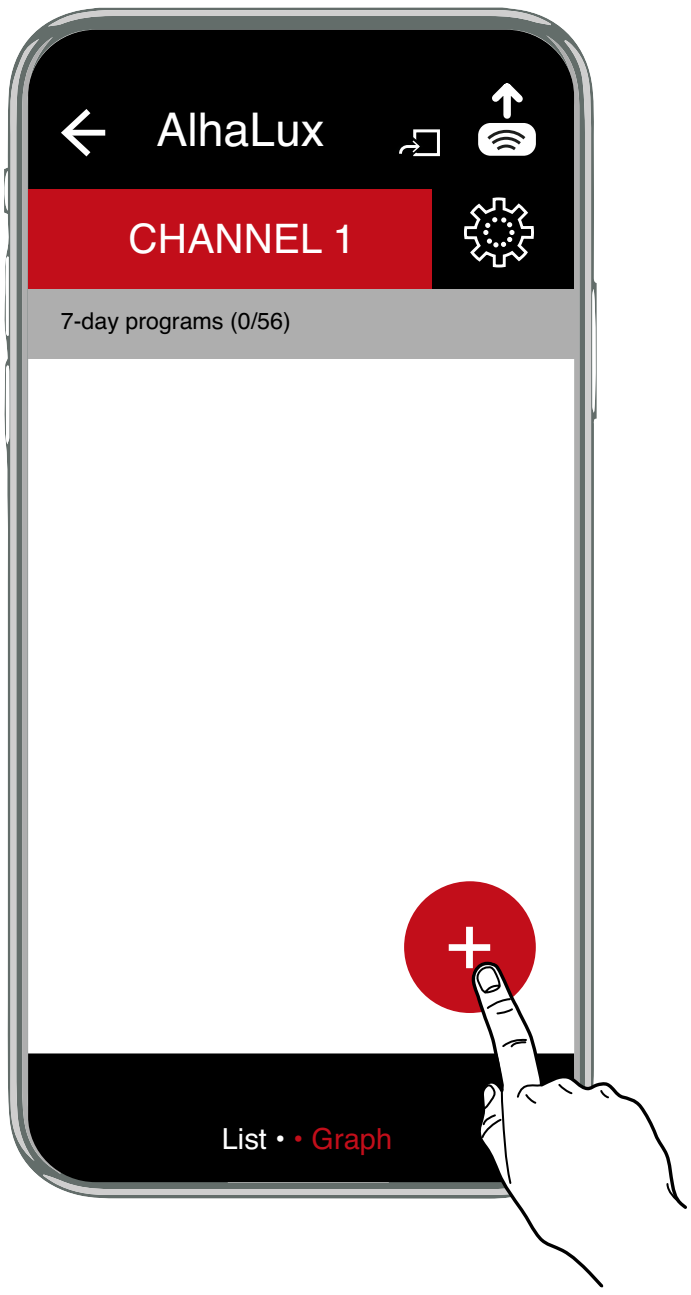
Function for presence simulation.
Function ACTIVE, the programmed switching cycles are randomly shifted in the range of ± 15 minutes.

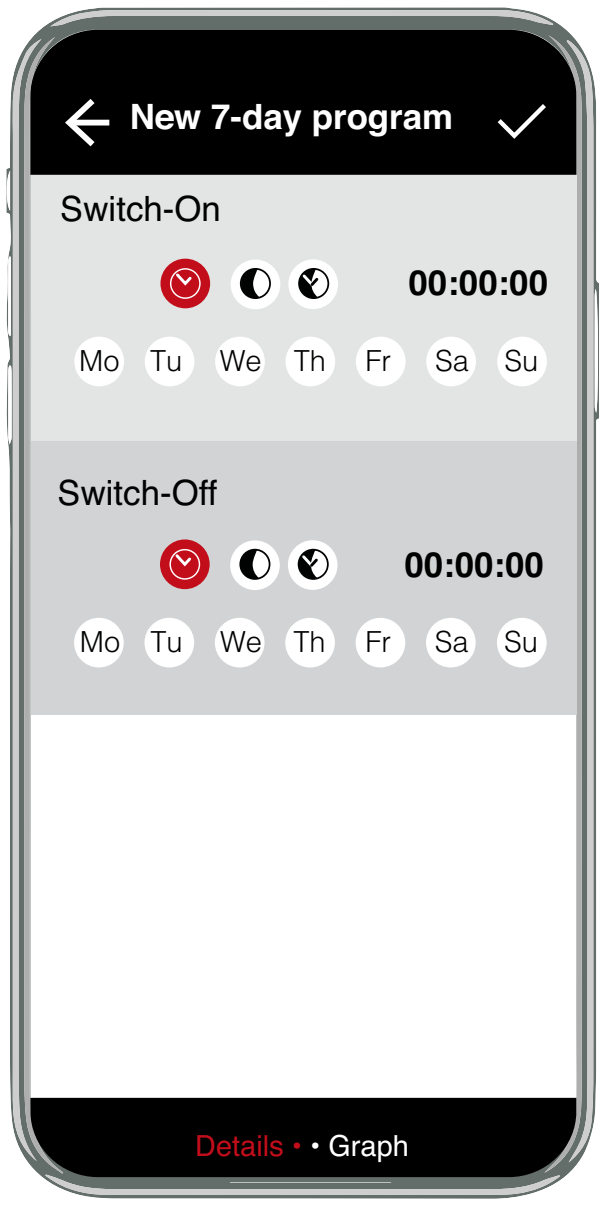
Cyclic switching

For cyclical switch commands the switching on time is set by logical “OR“ of programs of all types. A fixed cycle of ON and OFF time then operates within those limits. The cycle always starts with the ON time.
The cycle duration and the ON time within the cycle are the same length for all switching times.
The cycle duration and the ON time can be set independently in one-second increments. If the switching time is shorter than the cycle duration, the cycle will be shortened accordingly. The ON time will remain unchanged. If the switching time is actually shorter than the ON time, the ON time will be shortened accordingly.

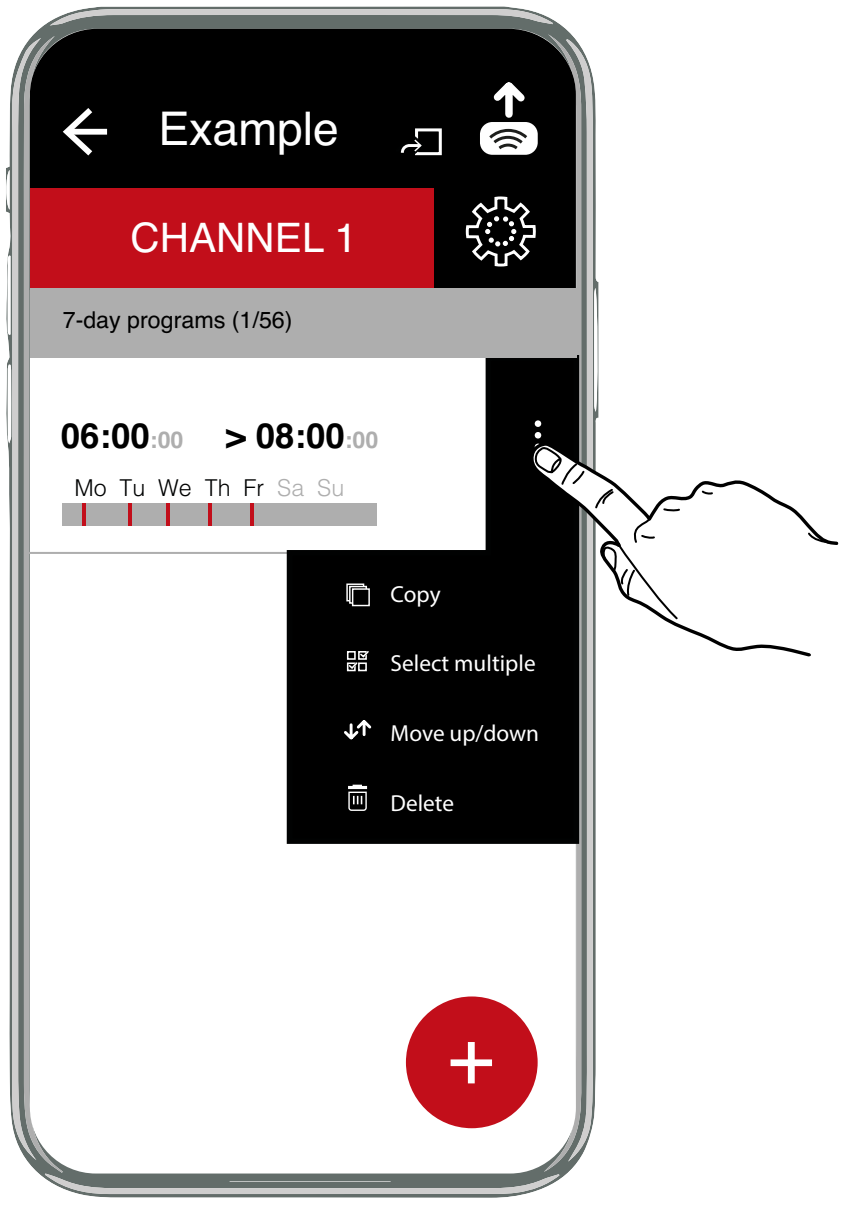


	min	max
Period	2 s	2 h
Pulse	1 s	1 h 59 min 59 s

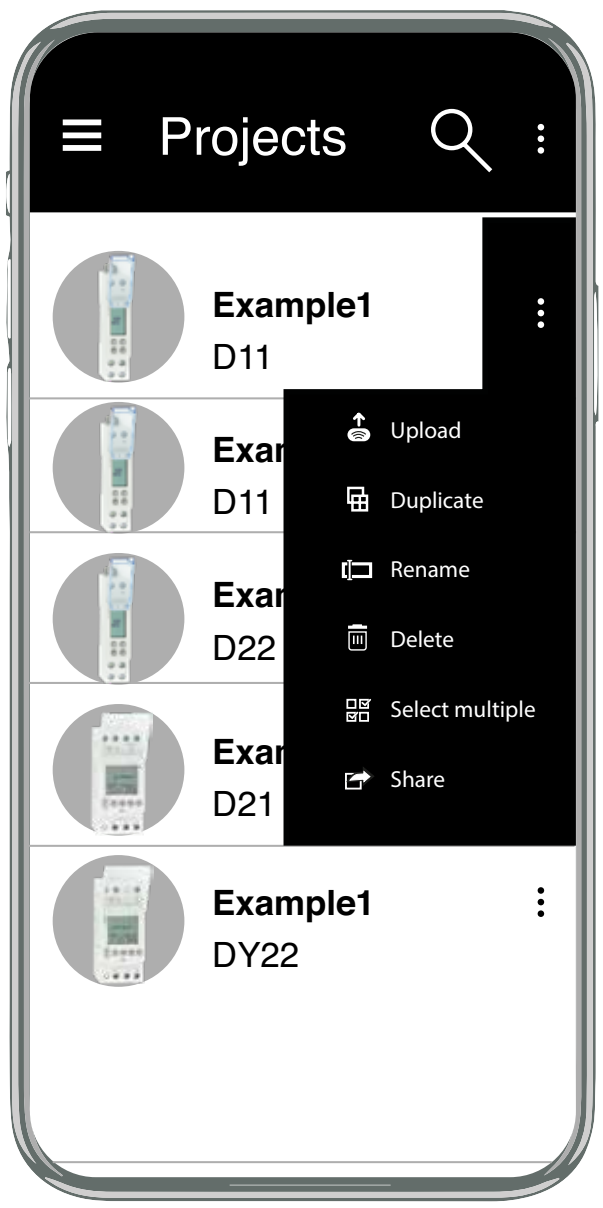

AlhaLux
CHANNEL 1
7-day programs (0/56)
List • • Graph


New 7-day program
Switch-On
00:00:00
Mo Tu We Th Fr Sa Su
Switch-Off
00:00:00
Mo Tu We Th Fr Sa Su
Details • • Graph

Options
Copy, Select multiple, Move up/down, Delete



Project options
Upload, Duplicate, Rename, Delete, Select multiple, Share

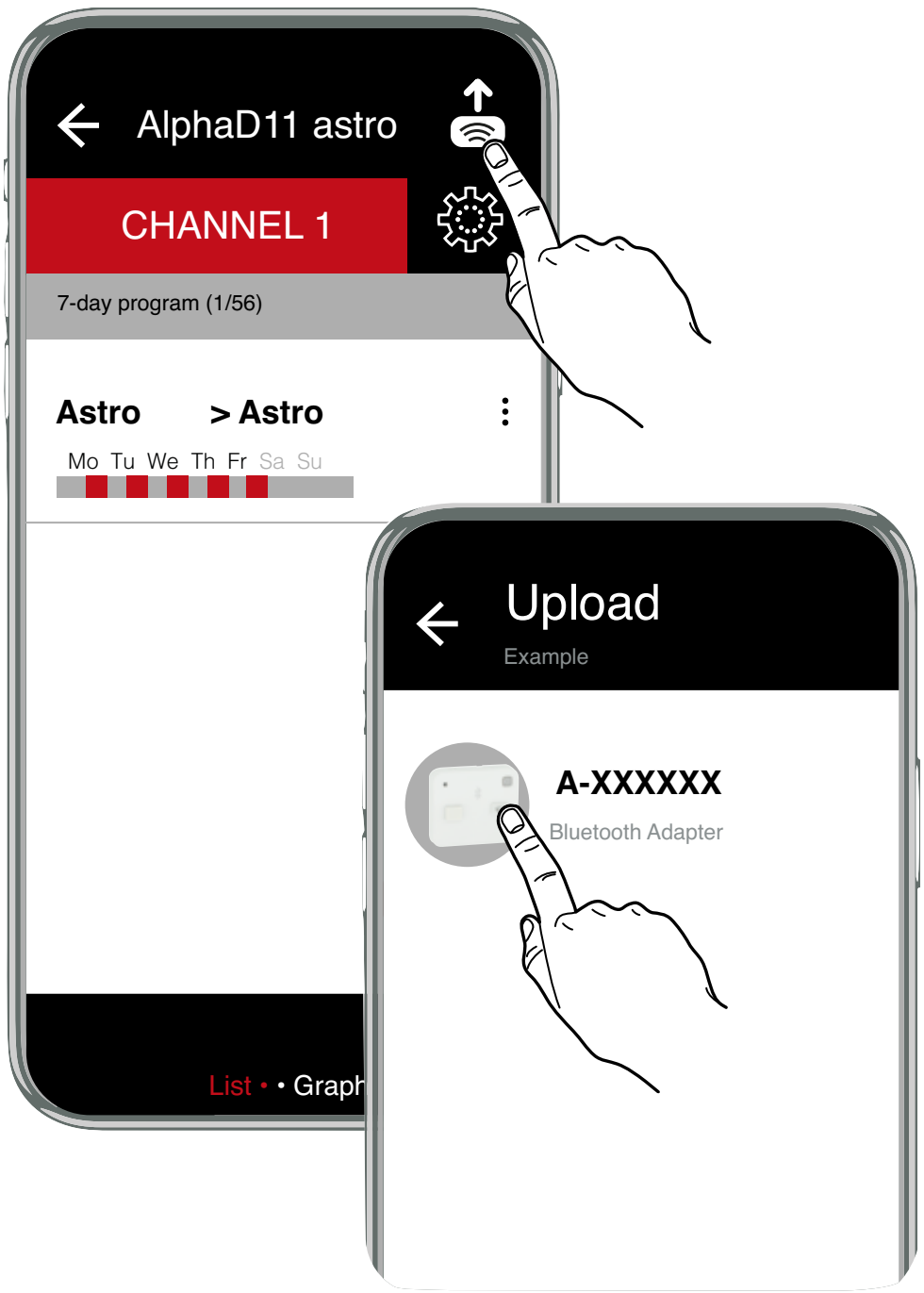


Pairing of mobile phone and bluetooth adapter

Here you will find the basic instructions for pairing of a mobile phone with your programming adapter.

1. Go to the bluetooth section of your mobile phone, usually under Settings.
2. Make sure bluetooth is turned on.
3. The mobile phone searches for devices
4. Press the bluetooth pairing button on the programming adapter.
   Select the programming adapter in the list of devices (**A**-XXXXXX).
   The pin code for the programming address is 123123.
7. Enter the PIN.
8. The programming adapter is now paired.

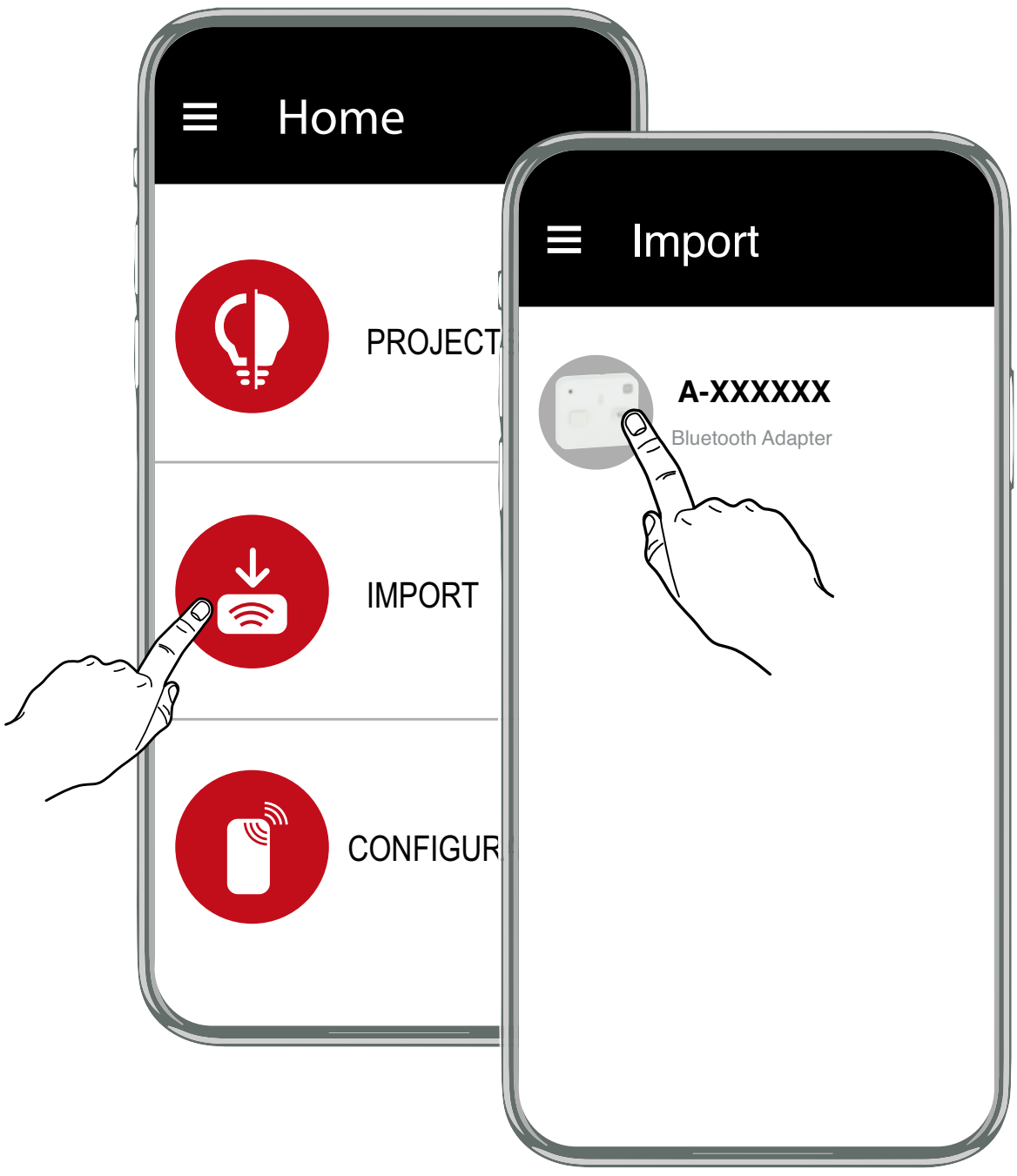
Transfer



1. Set up a connection to the programming adapter.
2. Open a project
3. Press the
4. Select the displayed adapter (A-XXXXXX).
5. The transmission starts automatically

Troubleshooting:
In case of error message *timeout* the programming adapter switched off.

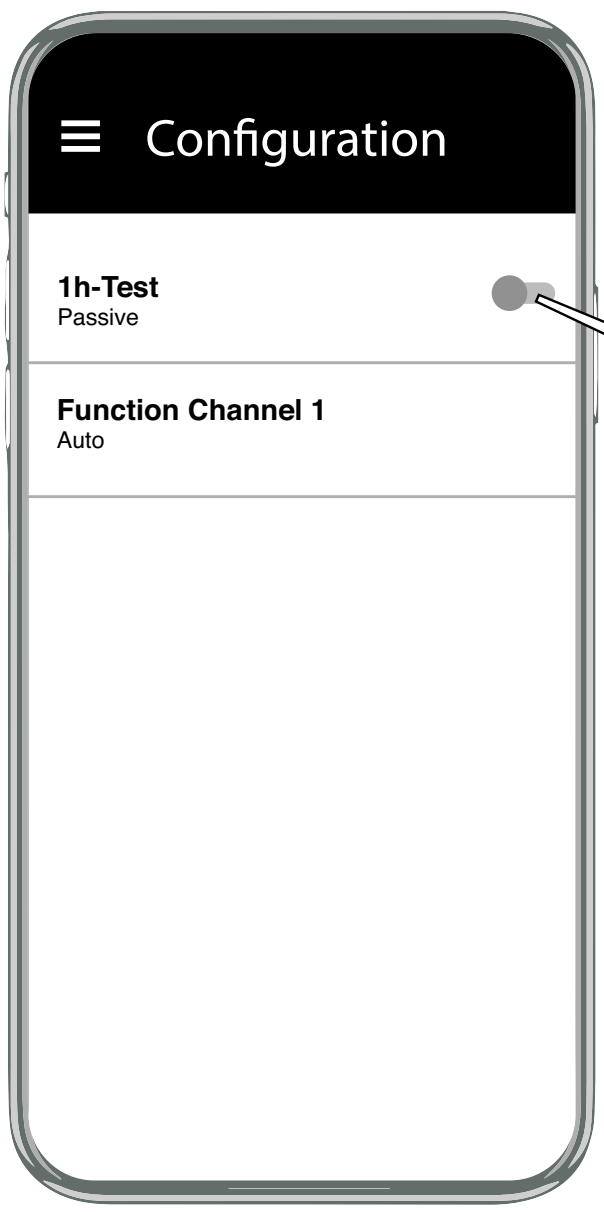
Import



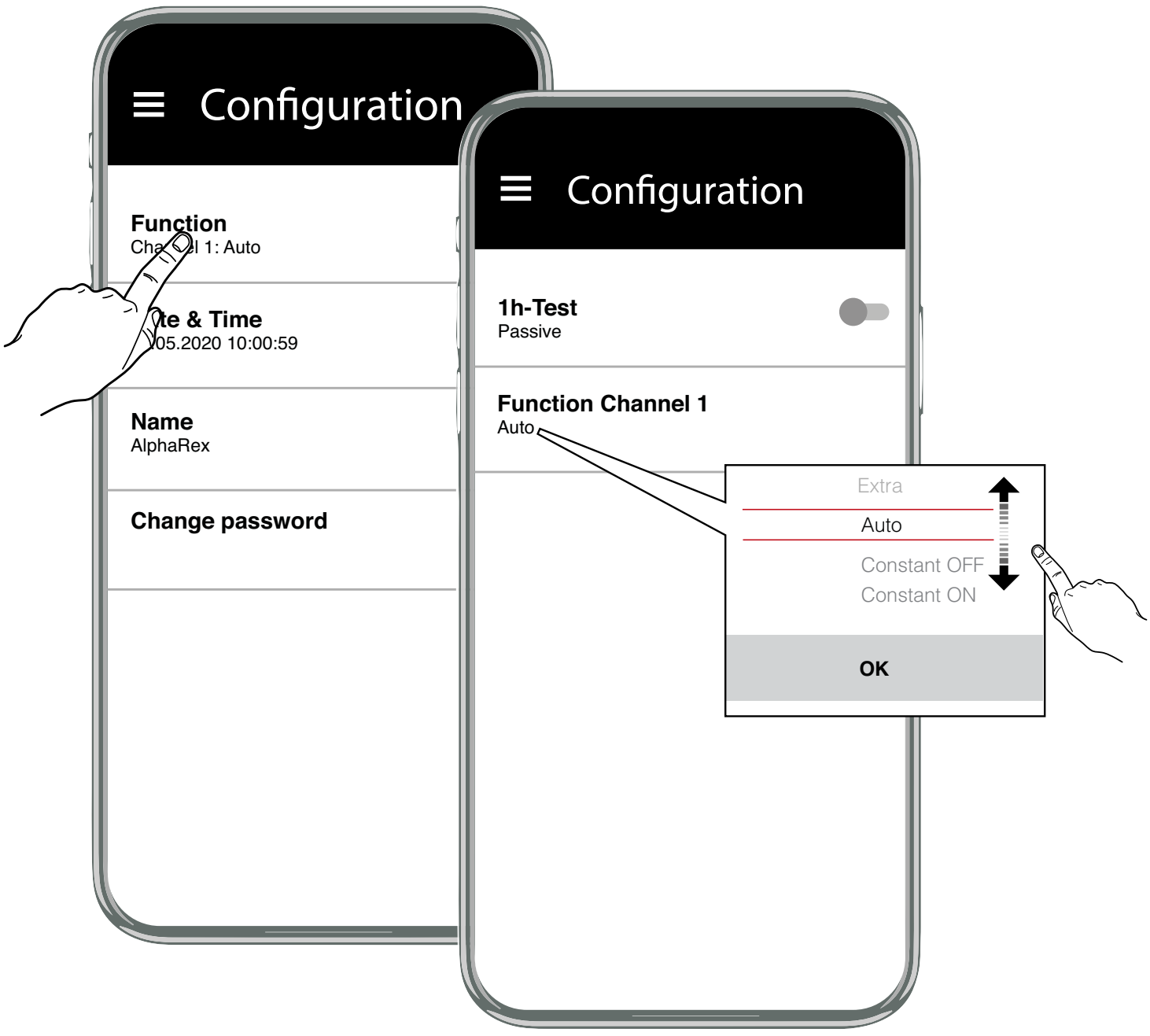
1. Set up a connection to the programming adapter.
2. Make sure there‘s a key in the programming adapter.
3. Select the programming adapter (A-XXXXXX), from which the data should be imported.
4. The transmission starts automatically
5. Save the project.

Troubleshooting:
In case of error message *timeout* the programming adapter switched off.

Configuration



When this function is activated, the output is switched on for one hour.
After one hour, the time switch returns automatically to the programmed mode.

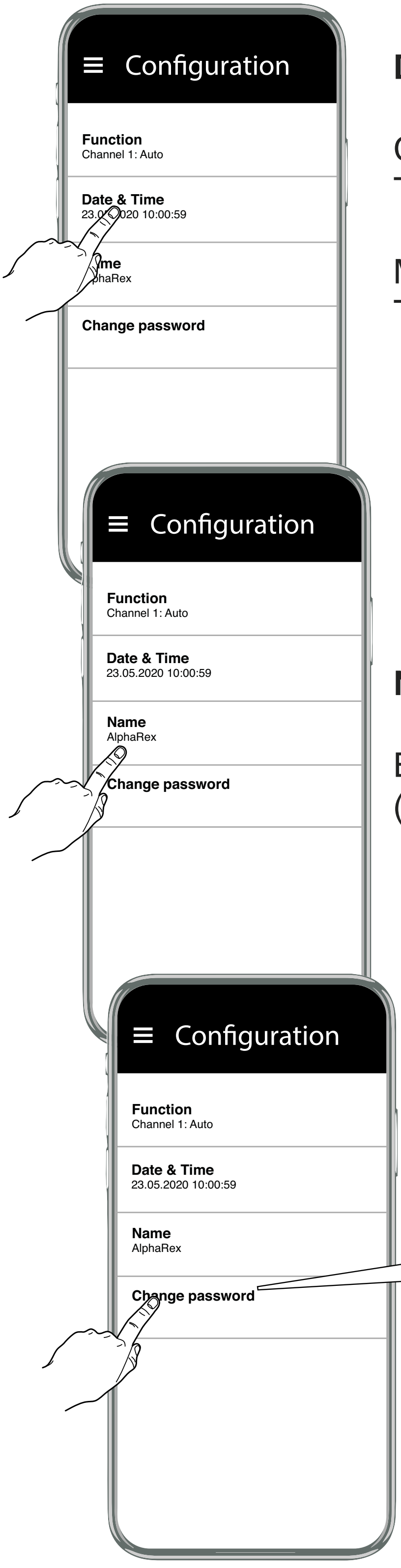


- **Auto** - Automatic operation
- **Constant ON**
- **Constant OFF**

  Note: The output is switched on if a control input signal is present.
- **Extra**

The switch status imposed by the program is inverted (manual override).

With the next effective switch command, the time switch resumes control of on/off switching.



Date & Time

Current:
Transfers current date & time.

Manual:
Transfers adjustable date & time

Name

Enter a new device name
(max. 8 characters)

Change password

Enter a new 6 digit password.

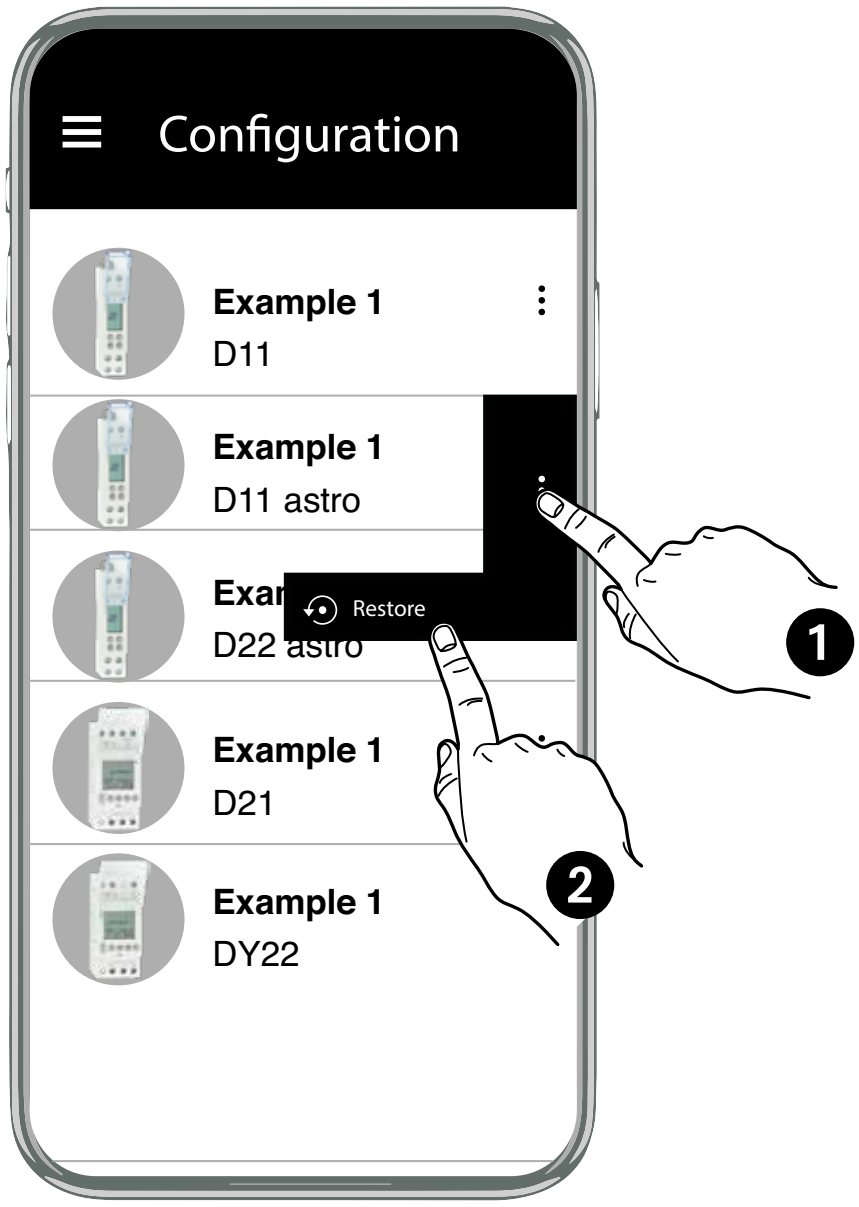
_____

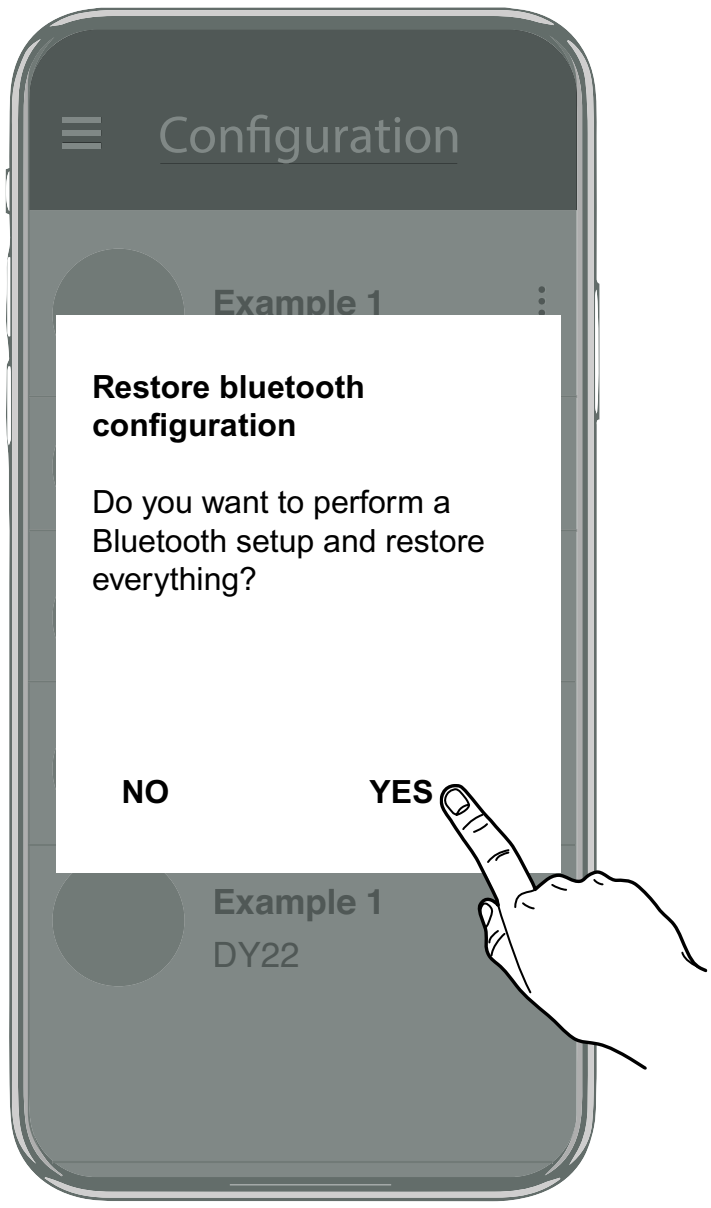
Repeat password:

_____

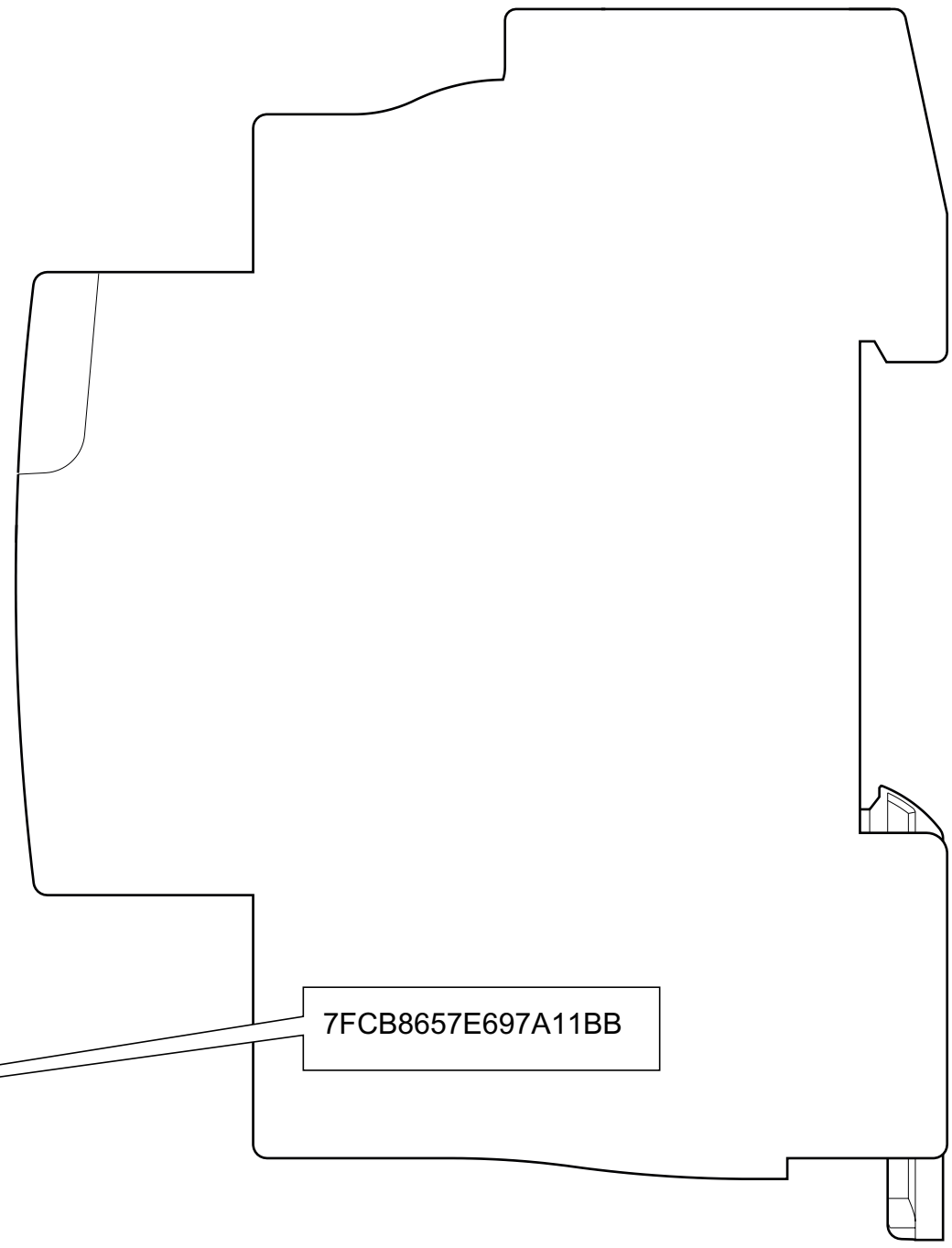
Password reset

Reset lost activation code to the delivery status.

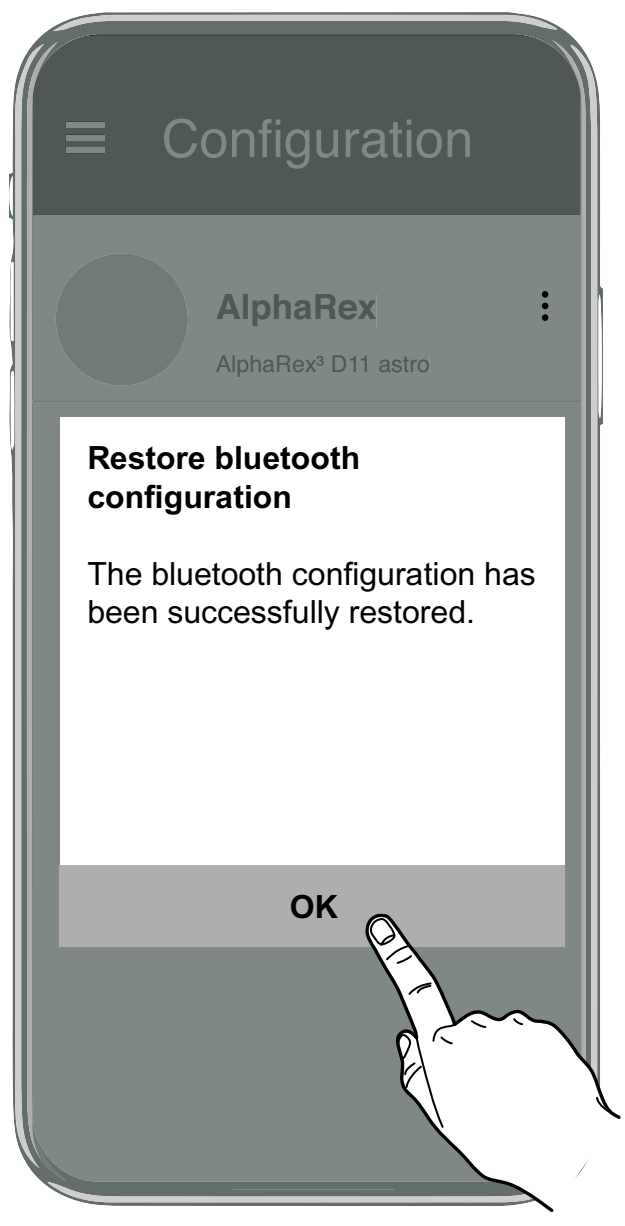





Configuration
Restore bluetooth configuration
Please enter the restore token. It is usually located at the side of the device.
Warning: The bluetooth name, password and configuration will be restored to their defaults.
Q W E R T Z U I O P
A S D F G H J K L
↑ Y X C V B N M ←
123!? , . ↵


7FCB8657E697A11BB


Configuration
Restore bluetooth configuration
Please enter the restore token. It is usually located at the side of the device.
Warning: The bluetooth name, password and configuration will be restored to their defaults.
7FCB8657E697A11BB
CANCEL
RESTORE
Example 1
DY22


Configuration
AlphaRex
AlphaRex³ D11 astro
Restore bluetooth configuration
The bluetooth configuration has been successfully restored.
OK