

Product manual



Table of contents

Introduction. Insight into time switch technology.	5
Purpose of the Manual.	5
History of Müller Time Switches.	5
Definition and Function of Time Switches	6
Examples of Applications.	6
Features. and Differences.	7
Programming Options	7
Types of Time Switches	7
The Time Programs.	8
Further Technical Differences.	8
Installation. Connection & Notes.	9
Initial Operation	9
Mounting.	9
Overview of switch types. Description and examples.	10
Overview.	10
Table: Time switches and their switching types	11
Switching types: Weekly.	12
Switching types: Yearly Timer	14
Switching types: Astro	15
Astro channel extension	15
Programming with the app.Save 'n carry 2.0.	16
1. Introduction to the App	17
2. Adding Projects	17
Create a new project.	17
Read an Existing Project from the Device	18
Add Project File	18
3. Manual Operation & Update.	19
Manual Operation (pro4 Timers & Astro Dimmer).	19
Manual Operation (EA 36.22 pro4).	19
4. Project Options	20
Open Project	20
Transfer Project to Timer.	20
Copy Project.	20
Delete Project.	20
Share Project	20
Create PDF	20
5. Transfer Projects	21
Transfer Project to the Device.	21

Bluetooth Transfer	21
NFC Transfer	22
6. Project Setting	23
Open Project	23
Adjust Project Language.....	23
Summertime	23
Set Cycle	23
Enable Random Function.....	24
Set Up External Input	24
Channel Function	24
Adjust Astro Position	24
7. Create Switching Times	25
Open Project	25
Create New Switching Time	25
Switching Type: Standard / Extra	26
Switching Type: Permanent	26
Switching Type: Extra.....	26
Switching Type: Astro	27
Switch Function: Pulse	27
Switch Function: Cycle (page 23).....	27
8. Edit Switching Time.....	28
Edit Switching Time	28
Delete Switching Time	28
The Time Switch. Display & Operation.....	29
Explanation of the Display.....	29
Control buttons	30
Symbol Explanation	31
Menu Navigation	32
Function Overview	33
Programm the Timer. Create and Query Switching Times.....	34
1. Create Program	34
Create New Program	34
Create Standard / Extra Switching Time	34
Create Permanent Switching Time.....	35
Create Extra Switching Time	36
Create Astro Switching Time	36
Create Special Program	37
Activate Special Program	37
Create Pulse	37
Create Cycle Switching Time (see page 12).....	38
2. Additional Program Options	39
Query Program	39
Modify / Edit Program.....	39
Delete Program	40
Simulate Program	41

3. Settings	42
Adjust Date and Time	42
Adjust Summertime	42
Activate Astro Channels	42
Set Astro Time	43
Change Language	43
Reset to Factory Defaults	43
4. Options	44
Counter	44
Secure Timer with PIN Code	44
Activate Extra Switching Time	44
Set Up Cycles	45
Activate Random Switching Times	45
Activate Extra Switching Times for Astro Timers	45
Configure Input	46
Push-button	46
Switch	46
Universal Control. EA 36.22 pro4.	47
Shutter	48
Bluetooth Astro-Dimmer. 872 413 pro4.	51
Programming in the App	51
Settings in the App	52
Twilight.972 413 pro4.	53
Settings in the App	54
Settings on the Device	55

Introduction.

Insight into time switch technology.

Whether in building technology or other electrical installations, time switches enable time-dependent and reliable control, thereby ensuring the demand-based use of devices, which saves energy and increases efficiency.

One of the most common applications of time switches is lighting control—whether in buildings, outdoor areas, or shop windows. By using an astronomical time switch, the switching times are automatically adjusted to sunrise and sunset.

In industry, time switches are also frequently used to activate machines, systems, as well as door and gate controls, thereby optimizing the operational workflow.

Purpose of the Manual

Our goal is to make all our products as user-friendly as possible. Since ease of understanding depends on the users' prior experience, we have developed this manual to help newcomers navigate the world of time switches. It offers a tailored introduction to the topic, explains technical terms, and describes how the switches work. The manual is designed to be comprehensive, so that every reader can find the information they need.

If you find that a topic is missing from the manual, please feel free to contact us. We are continuously working to expand the manual to cover all relevant aspects.

History of Müller Time Switches

Starting with radios, speakers, and headphones, Hugo Müller expanded his product portfolio in the early 1950s. The master watchmaker and founder Hugo Müller specialized in time switches and soon brought the first universal time switch to market. The „Electro Boy“ was born. This analog timer, equipped with push pins for setting switch times and an integrated socket, was designed as a table-top timer. What is considered retro today was a groundbreaking innovation at the time.

The first fully electronic time switches were introduced in 1982. These so-called time computers, which are now associated with the abbreviation „SC,“ became a hallmark of our products. Our core area „Switching, Controlling, Counting“ became the company's slogan and has been with us ever since.

Thanks to the expertise passed down through generations in time switch technology and the loyalty of our dedicated employees, our portfolio has been continuously developed and now stands where it is today. It will continue to grow in the future—just as we will.

Definition and Function of Time Switches

A time switch or programmable timer is a device that turns an electrical contact or load on or off at preset times. The switching times are programmed in advance.

For example, if a door needs to be open from Monday to Friday between 6 AM and 8 PM, and remain closed outside these hours and on weekends, a time switch can achieve this. The time switch will open the door at 6 AM and close it again at 8 PM.

Examples of Time Switch Designs

There are various designs of time switches that differ in terms of programming or the type of programming. Daily time switches repeat every 24 hours. Weekly time switches allow for individual switching times for each day of the week. Annual time switches enable, in addition to weekly programming, the setting of switching times for holidays or recurring annual events. Astronomical time switches operate based on sunrise and sunset times.

In our portfolio, you will find both analog and digital time switches. Analog models offer daily and weekly programs and allow for switching devices on or off for specific time intervals, such as 30 minutes, by pulling out small pins.

Digital time switches from Müller can be programmed directly on the device using the display and control buttons. Alternatively, they can also be programmed via our app or Windows software and transferred to the device. They generally offer more extensive features and can be set with minute precision.

Examples of Applications



Ventilation



Door / Gate Control



Feed Automation



Industrial Facilities



Lighting



Shop Windows



Presence Simulation



Shutters



Irrigation



Aquaristics



Water Heaters



& many more

Features. and Differences.

Time switches have been one of our core competencies since the 1950s. Over time, our time switches, originally known as time computers, have not only evolved and been optimized but we have also developed an extensive range to offer the right timer for every application. In this chapter, we explain how the switches differ.

Programming Options

With the Smartphone App

With the Save'n carry 2.0 app for Android and iOS, you can flexibly create the switching program with your smartphone and transfer it to the time switch, as well as read out an existing program from the timer. The app is compatible with all pro4 and easy devices.

With the Windows Software

With the Save'n carry Windows software, the switching program can be created or read out on a PC. Depending on Bluetooth or NFC functionality, the program can also be sent to the app for transfer. Suitable for pro4 and easy time switches.

Directly on the Device

Programs can be created, edited, or settings adjusted directly on the time switch using the buttons and the display.

Types of Time Switches



pro4

The time switch includes a Bluetooth interface.



easy

The time switch includes an NFC interface.

The Time Programs

Week

A time switch with a weekly program includes preset switching times for specific days of the week that repeat weekly. Additionally, it allows for setting a permanent program with a start and stop date and time, or extra switching times for a specific date.

Year

The time switch with an annual program has the same functions as a weekly timer, but permanent and extra switching times can be repeated annually and automatically adjusted based on the Easter date. Predefined holidays can be selected via the Windows software.

Astro Day

The time switch operates based on sunrise and sunset times with an offset of up to +/- 90 minutes, as well as fixed on and off times for the night.

Astro Week

The Astro weekly time switch allows for selecting astro switching times with an offset of +/- 90 minutes, as well as fixed on/off times for night for any day of the week. Additionally, it enables setting a permanent program with a start and stop date and time. Besides the astro program, extra switching times can also be set, covering the standard on/off time functions of the weekly timer.

Further Technical Differences

Channels

Our digital time switches are available in variants with 1 to 4 channels, where each channel is designated for a specific device, except for, e.g., shutter controls. Each channel can be programmed individually.

Mounting Type

When selecting a time switch, it is important to consider the required mounting type. Our devices are available in various mounting types, including panel mounting, flush mounting, switchboard mounting, and surface mounting. The respective division units are specified for each device and range from 1 to 4 (17.5 - 70 cm).

Memory Slots

Our time switches have memory slots for switching times. Each switching time requires one memory slot. For example, turning a lamp on and off uses 2 memory slots. Ensure that the number of memory slots meets your requirements.

Power Supply

Please consider the specified voltage or your voltage requirements when selecting a time switch. If you do not find a suitable variant, feel free to make an inquiry. We also offer voltage variants that may not be listed on the website.

Installation.

Connection & Notes.








To connect the time switch, you should first consult the included operating manual or access it on our website. It contains the wiring diagram suitable for your time switch, along with additional installation information.

Safety Instructions








- Installation and mounting must be carried out by a qualified electrician! Otherwise, there is a risk of fire or electrical shock!
- Connect only to the voltage and frequency specified on the nameplate / time switch!
- Any modifications or alterations to the time switch will void the warranty!
- The time switch must be installed in such a way that exceptional levels of interference do not affect its operation!

Initial Operation

The time switch is delivered in power-fail mode. The display is off.

1. Press the  button. The display will appear.
2. Set the desired language using the  /  buttons and confirm with .
3. Set the date, time, and daylight saving time rule if necessary using the  /  buttons and confirm each setting with .

For Astro Time Switches Only:

1. Use the  /  buttons to choose between the options "Zone" or "Coordinates". Confirm your selection with  (Recommendation: Use "Zone" for position input).
2. In the next step, select the nearest zone using the  /  buttons or enter the exact coordinates of your location. Confirm your selection with .
3. Finally, decide whether you want to activate the astro switching times (without offset time) for the entire week immediately (select "Astro preprogrammed: yes") or if you prefer to program the astro function individually at a later time (select "Astro preprogrammed: no"). Complete the initial setup by confirming with the .

Mounting

Panel Mounting (DIN Rail)

The time switch is mounted onto a DIN rail in switch cabinets or distribution panels.

Switchboard Mounting

The time switch is installed from the front of the switchboard, so only the front panel and control elements are visible.

Flush Mounting

The time switch is installed in a flush-mounted box recessed into the wall.

Surface Mounting (Wall Mount)

For surface mounting, time switches are fixed directly to the wall surface.

Overview of switch types.

Description and examples.

Overview



Standard

Weekly program with fixed switching times.

e.g.

Monday to Friday, turn on at 08:00 AM



Astro

Switching time based on sunset and sunrise with offset.

e.g.

Monday to Friday, turn on 20 minutes after sunset



Permanent

Period with start date/time and stop date/time.

e.g.

Turn off from 01.01. at 08:00 AM to 06.01. at 04:30 PM



Extra (Astro)

Weekly program with fixed switching time for astronomical timers.

e.g.

Monday to Friday, turn on at 08:00 AM



Extra

Switching time on a specific date.

e.g.

Turn on on 13.01. at 09:00 AM

Switching types: Weekly

Standard

The switching type „Standard“ includes a weekly program with the ability to set fixed switching functions for different days of the week (Monday to Sunday).

Function	Description	Examples
ON / OFF	Allows selection of weekdays and fixed switching times [hh:mm] for turning a device on or off.	Monday to Friday at 08:00 AM ON.
Pulse	Allows setting of weekdays and switching times [hh:mm],for turning a device on for a specific pulse duration [mm:ss].	Saturday and Sunday, at 08:00 AM for 30 seconds.
Cycle	Allows setting of weekdays and switching times for turning a device on for a specified on-time duration [h:mm:ss] and off for a specified pause duration [h:mm:ss]. This cycle repeats until interrupted by another switching function.	Monday to Friday from 01:00 PM, On-time 0:30:00 minutes, Pause 1:00:00 hour (cyclic repetition).

Permanent

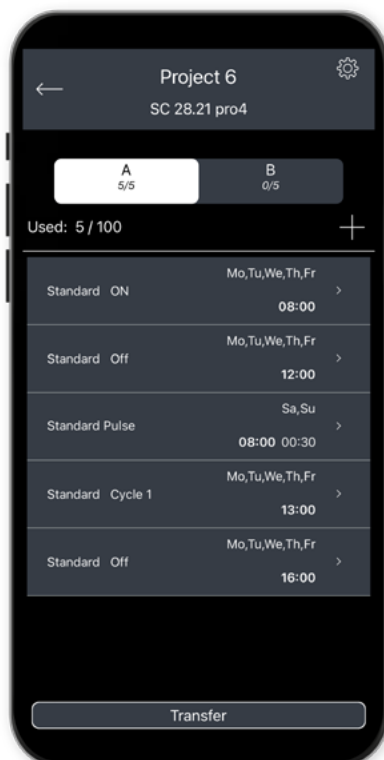
The switching type „Permanent“ allows setting a yearly program where a period can be defined with a start date and time up to a stop date and time.

Function	Description	Examples
ON / OFF	Allows specifying a period with a start date and start time, as well as a stop date and stop time, during which a device should be turned on or off.	From 13.05. at 12:00 PM to 20.05. at 08:00 AM OFF.

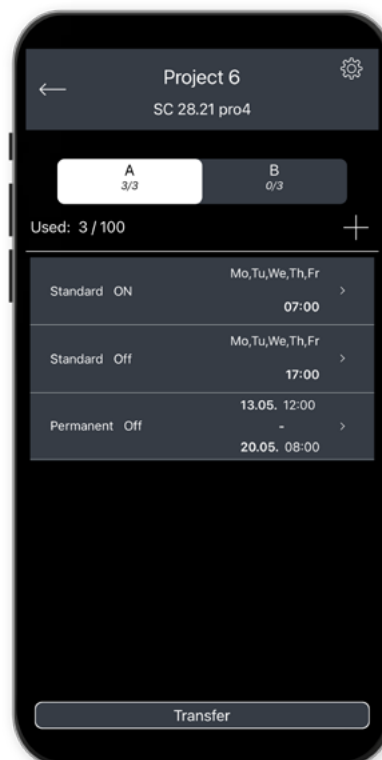
Extra

The switching type „Extra“ includes a yearly program with the ability to set fixed switching functions for a specific date.

Function	Description	Examples
ON / OFF	Allows selecting a date and a switching time [hh:mm] to turn a device on or off.	On July 1st, at 06:00 PM ON.
Pulse	Allows selecting a date and a switching time [hh:mm] for turning a device on for a specific pulse duration [mm:ss].	On July 1st, at 08:30 PM, turn on for 30:00 minutes.
Cycle	Allows selecting a date and a switching time [hh:mm], to turn a device on for a specified on-time duration [h:mm:ss] and off for a specified pause duration [h:mm:ss]. This cycle repeats until interrupted by another switching function.	On July 1st, from 09:30 PM, On-time 0:30:00 minutes, Pause 1:00:00 hour (cyclic repetition).



Standard



Permanent



Extra

Switching types: Yearly Timer

Yearly timers combine all the functions of the weekly timer and extend the permanent and extra functions with the ability to specify a particular year. They also allow for the annual, Easter-dependent shifting of dates or setting a fixed date.

Functions:

- **Easter:** Date dependent on Easter, varies each year
- **With Year:** Fixed date that does not recur annually
- **Standard:** Date without specifying a particular year, recurring annually

Special Programs (SP)

Special programs include all standard functions of the weekly timer, including ON/OFF, pulse, and cycle on a weekly basis. With the switching function „Activation,“ start date and time as well as stop date and time can be specified for when the program will be executed.

Function	Description	Examples
ON / OFF	Allows selecting weekdays and fixed switching times [hh:mm] at which a device is turned on or off.	Monday to Friday at 08:00 AM ON.
Pulse	Allows setting weekdays and switching times [hh:mm] at which a device is turned on for a specific pulse duration [mm:ss].	Saturday and Sunday, at 08:00 AM for 30 seconds.
Cycle	Allows setting weekdays and switching times [hh:mm] at which a device is turned on for a specified on-time duration [h:mm:ss] and off for a specified pause duration [h:mm:ss]. This cycle repeats until interrupted by another switching function.	Monday to Friday from 01:00 PM, On-time 0:30:00 hours, Pause 1:00:00 hour (cyclic repetition).
Activation	Allows specifying a period with a start date and start time, as well as a stop date and stop time, during which all defined switching times of the special program will be executed.	Special program activated from 13.05. at 12:00 PM to 20.05. at 08:00 AM.

Switching types: Astro

Astro timers switch depending on sunrise and sunset. In addition, it is possible to store any offset of up to +/- 90 minutes in order to adjust the switch-on/switch-off times. Fixed night on and off times can also be stored.

Astro

Function	Description	Examples
Astro On	Enables a device to be switched on depending on the sunset with offset.	Monday to Friday, switch on 20 minutes after sunset.
Astro Off	Enables a device to be switched off depending on the sunrise with offset.	Monday to Friday, switch off 20 minutes before sunrise.
Night Off	Fixed switching times that switch off if the Astro On switching time has not yet arrived.	Switch off every day at 10:00 PM.
Night On	Fixed switching times that switch on if the Astro Off switching time has not yet arrived.	Switch on every day at 05:00 AM.

Extra (Astro)

Function	Description	Examples
ON / OFF	Allows selection of weekdays and fixed switching times [hh:mm] for turning a device on or off.	Monday to Friday at 08:00 AM ON.

Astro channel extension

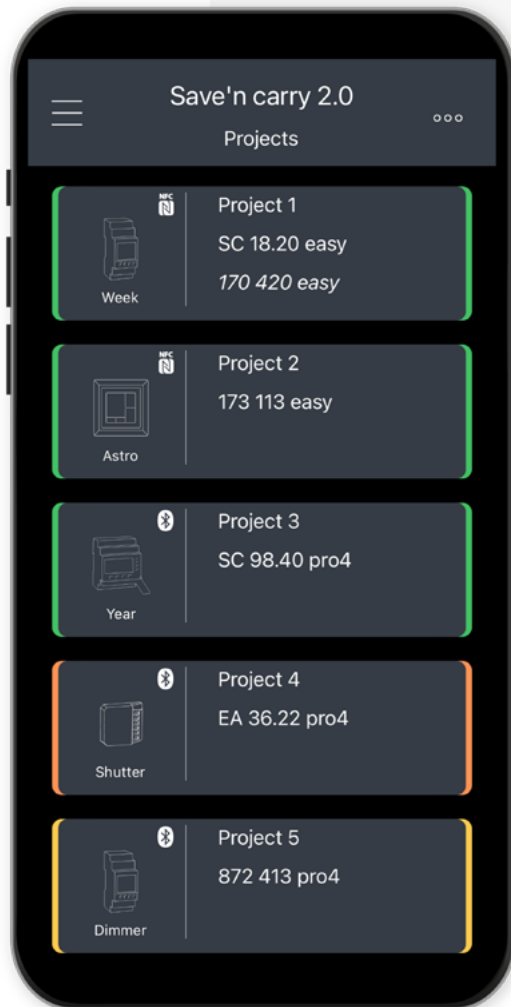
Some timers offer the option to set the switching function „Astro“ for one or more channels. This is defined in the settings. Once set, switching times can be created using the „Astro“ function.

Models with additional Astro function: **SC 44.x1 pro4, SC 88.x0 pro4, SC 98.x0 pro4**

Programming with the app.

Save 'n carry 2.0.

Although timers are technical products, they don't have to be complicated. With our app, we aim to ensure that users of timers have easy access to programming and are not tied to a fixed location. The app provides flexible and user-friendly operation, allowing programming to be done anytime and anywhere.



Projects

With our app, you can create projects directly or read existing projects from the device. Additionally, you have the option to email a project and then open it on another smartphone.

There are no restrictions—you can create switching times even before you have the timer in hand. For easy timers, you can transfer projects via NFC, and for pro4 timers, via Bluetooth. The transfer to the timer is also possible without mains power.

Free download

The Save ,n carry 2.0 app is available as a free download from the App Store and Google Play Store.



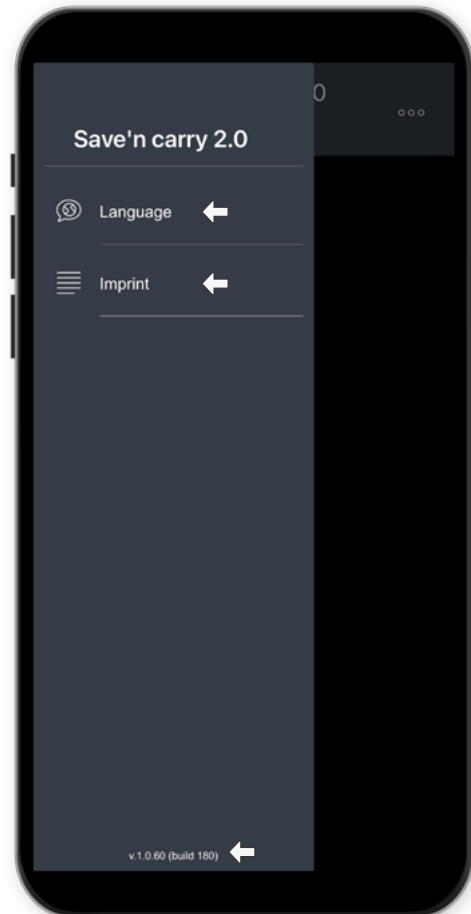
1. Introduction to the App

When you first open the app, you will be taken to the project overview, the home page where all your created projects are displayed. If you create a new project, it will be automatically added here.

On the left side of the app, you will find the menu ☰ where you can adjust the app's **Language** and find our contact information in the **Imprint**, as well as the app **Version number**. This is important if you need to contact our support.

At the top right, there is the menu icon ⋮ with three dots, which allows you to create new projects, read existing projects, and create new ones in the app, as well as manually turn pro4 timers on/off.

Lassen Sie uns zunächst mit den Grundlagen beginnen. Los geht's!

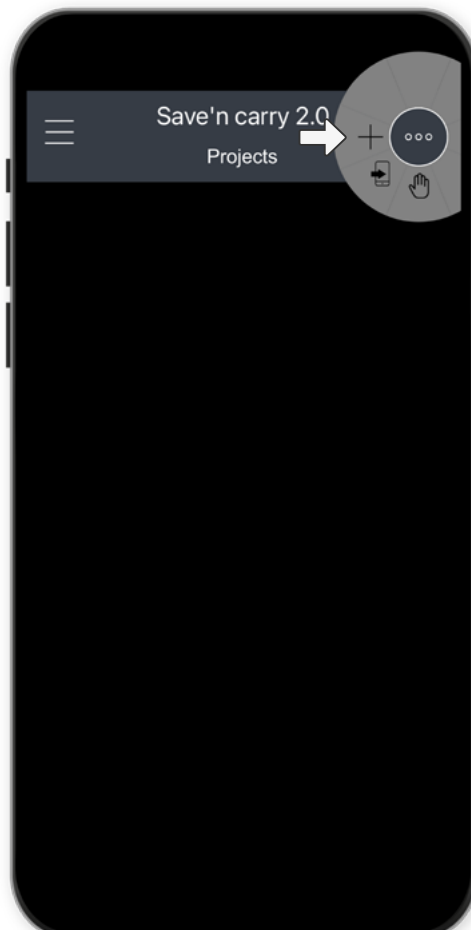


2. Adding Projects


In the Save 'n Carry 2.0 app, a project refers to the switching programs for any timer. Below, you will find everything you need to know about projects.

1 Create a new project

1. Click on the three-dot menu ⋮ to open the sub-menu.
2. Select the plus icon +.
3. Find your device by scrolling through or using the „Device Selection“ input field. Alternatively, you can use the filter function via the filter icon (🔍).
4. Click on your device to select it.
5. Give your project a name.
6. Choose the language and summertime for the device.
7. Click „Create“ to set up your project.



2 Read an Existing Project from the Device

1. Click on the three-dot menu \dots to open the sub-menu.
2. Select the read icon .
3. Choose the technology your device uses (Bluetooth or NFC).

Bluetooth:

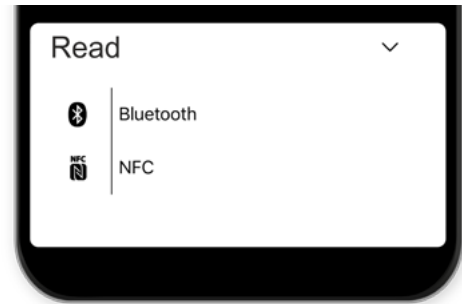
4. Press the „OK“ button on the device (the button next to the Bluetooth icon) and select your device from the list.
5. Give your project a name.
6. Follow the menu and click „Create“ to set up your project.

NFC:

4. Hold the smartphone near the device during the loading screen and wait until the smartphone recognizes the device.
5. Give your project a name.
6. Follow the menu and click „Create“ to set up your project.

3 Add Project File

1. Open the message with the .db file in your messenger or email app.
2. Click on the .db file to open it.
3. Select „Save'n Carry 2.0“ from the options to open the file.
4. Enter a project name and click „OK.“



i


Please enable your location services and ensure that Bluetooth or NFC is activated, depending on the technology used.

i



Ensure that you hold your smartphone close to the timer so that the NFC chip in the smartphone is approximately at display height. If necessary, remove the smartphone case.

3. Manual Operation & Update

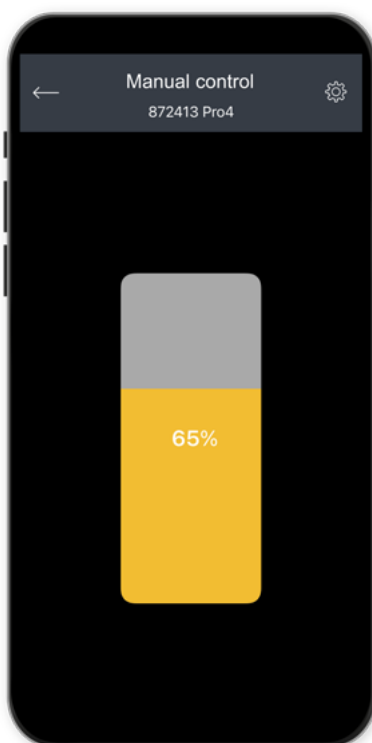
1 Manual Operation (pro4 Timers & Astro Dimmer)

1. Click on the three-dot menu \dots to open the sub-menu.
2. Select the manual operation icon .
3. Press the „OK“ button on the device (the button next to the Bluetooth icon).
4. Choose the device you want to control (available only for pro4 devices).
5. You can now manually control the device.

2 Manual Operation (EA 36.22 pro4)

1. Click on the three-dot menu \dots to open the sub-menu.
2. Select the manual operation icon .
3. Choose the device you want to control (EA 36.22 pro4).
4. Enter the PIN code for the device.
5. You can now manually control the device, view and change device settings via the gear icon  at the top right, or perform updates.

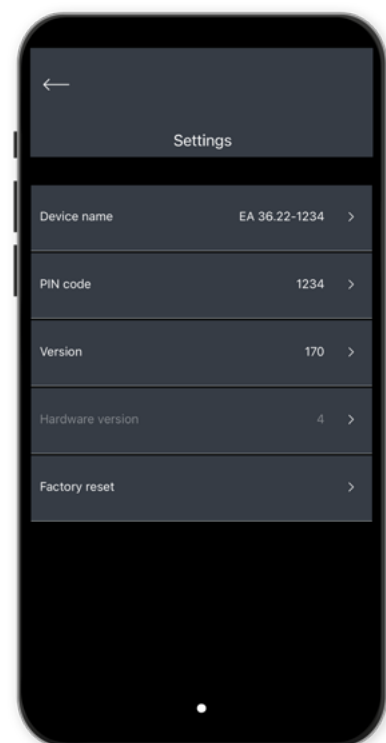
You can find more information about the EA 36.22 pro4 starting from page 47.



Astro-Dimmer



EA 36.22 pro4



EA 36.22 pro4

4. Project Options

1 Open Project

1. Click on your project in the project overview.
2. Select „Edit“ to adjust the project, such as changing switching times.

2 Transfer Project to Timer

1. Click on your project in the project overview.
2. Select „Transfer.“ The further steps are explained on page 21.

3 Copy Project

1. Click on your project in the project overview.
2. Select „Copy.“ Give the copied project a name and click „OK.“

4 Delete Project

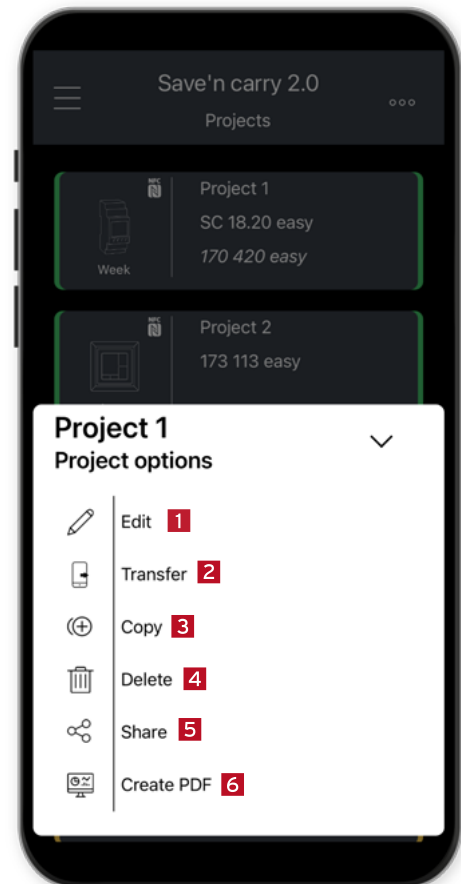
1. Click on your project in the project overview.
2. Select „Delete.“ Confirm that you want to delete the project.

5 Share Project

1. Click on your project in the project overview.
2. Select „Share.“
3. Click on the app where you want to share the project.
4. Follow the process in the selected app.

6 Create PDF

1. Click on your project in the project overview.
2. Select „Create PDF.“
3. Choose the app in which you want to open the PDF, e.g., PDF Viewer.



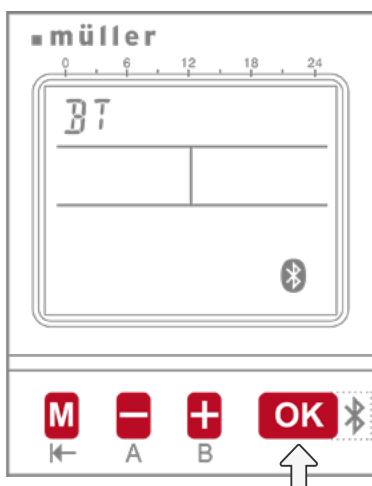
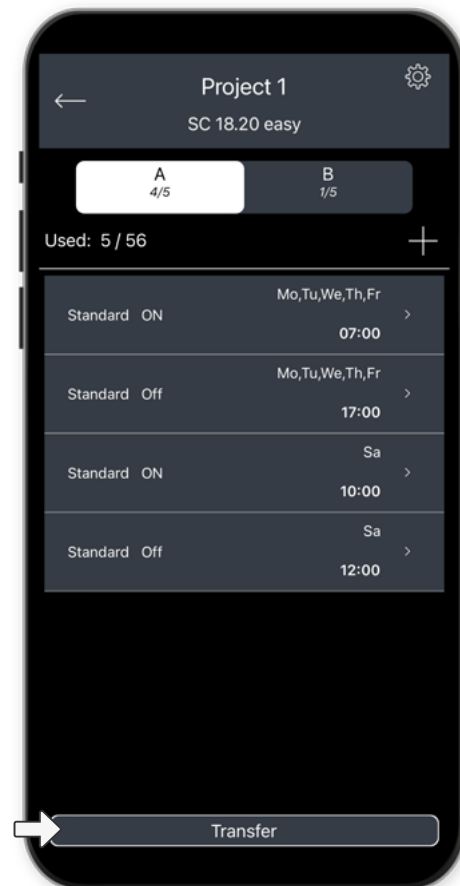
5. Transfer Projects

1 Transfer Project to the Device

1. Click on the project you want to transfer to the timer. Alternatively: If you have already opened the project via „Edit,“ you can transfer it directly.
2. Select „Transfer.“
Bluetooth [pro4]
→ Follow the instructions in **2**
NFC [easy]
→ Follow the instructions in **3**

2 Bluetooth Transfer

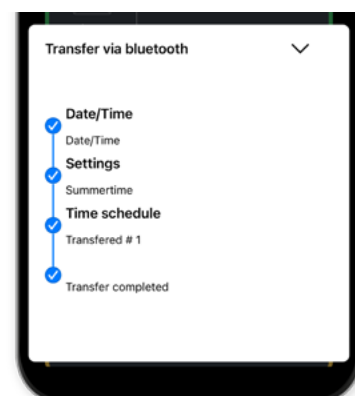
1. Press the „OK“ button or the button next to the Bluetooth symbol on your device, so that the Bluetooth symbol on the display starts blinking.
2. The device will appear in the app under „Searching for Device.“ Select the desired device from the list to connect and transfer the project.
3. On the device display appears „Connected“.
4. The app will simultaneously show the transfer progress. Wait until the data transfer is complete.



Activate Bluetooth



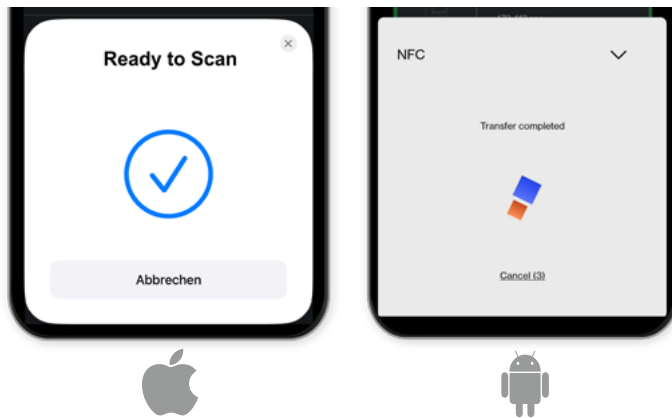
Select Device



Data Transfer

3 NFC Transfer

1. Hold the smartphone directly over the device's display while searching for NFC devices and try not to move the phone until „Transfer Complete“ is displayed in the app.



6. Project Setting

1 Open Project

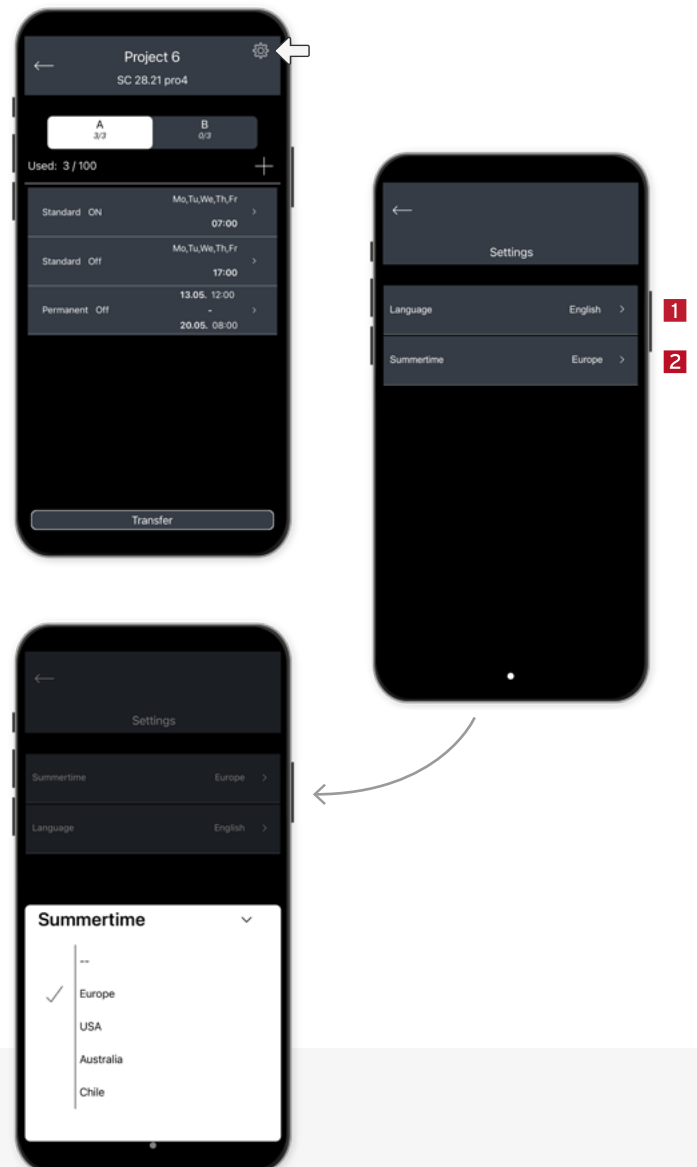
1. Click on your project in the project overview.
2. Select „Edit“ to open the switching program.

2 Adjust Project Language

1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „Language.“
4. Select the desired language to save it.

3 Summertime

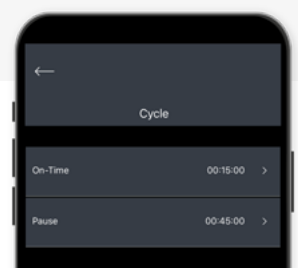
1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „Summertime.“
4. Select the desired summertime option to save it.



The following functions depend on the type of timer and may not be available on all timers.

4 Set Cycle

1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „Cycle.“
4. Enter the „On-Time“ and „Pause.“
5. The cycle is now selectable as a switching function and can be activated by creating a switching time (see page 27).



i

Create a new switching time to use the cycle as a cyclic repeating switching time, for example:
15 min ON / 45 min OFF / 15 min ON...
A cycle can also be set to the second range!

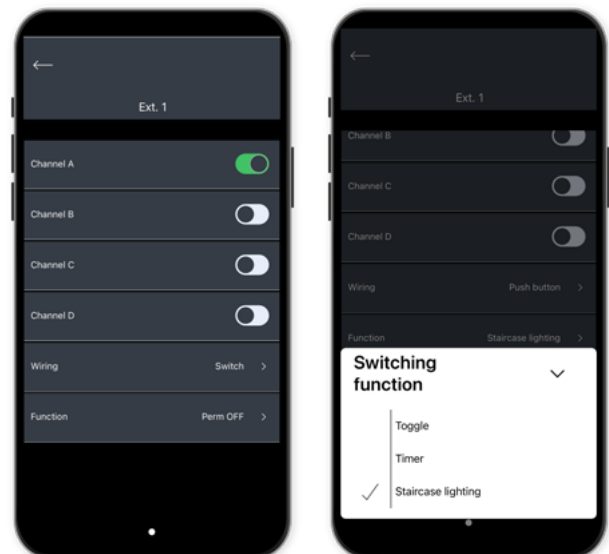
5 Enable Random Function

1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Activate the „Random Function“ slider to randomly shift existing switching times, for example, to simulate presence.



6 Set Up External Input

1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „External Input.“
4. Activate the channel(s) you want to control via the external input by clicking the slider.
5. Choose the function type: „Push button“ or „Switch,“ depending on what is connected as the external input.
6. Select what should happen when the button or switch is pressed, e.g., PERM OFF during holidays or stair light.



7 Channel Function

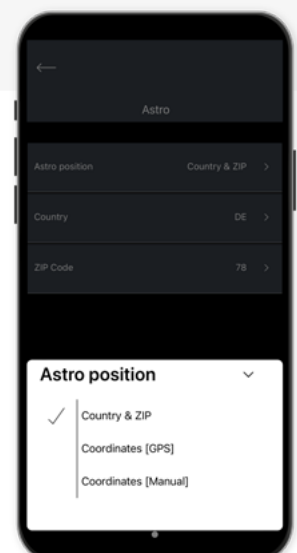
1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „Channel Function.“
4. Choose whether to use Annual Switching Times (Year) or Astro Switching Times (Astro) for your channels.

8 Adjust Astro Position

1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „Astro.“
4. Choose how you want to specify your location under „Astro Position.“
5. Adjust the associated values if needed.

i

If you have selected the Astro channel function for a channel, you have the option to set the Astro position.



7. Create Switching Times

1 Open Project

1. Click on your project in the project overview.
2. Select „Edit“ to open the switching program.

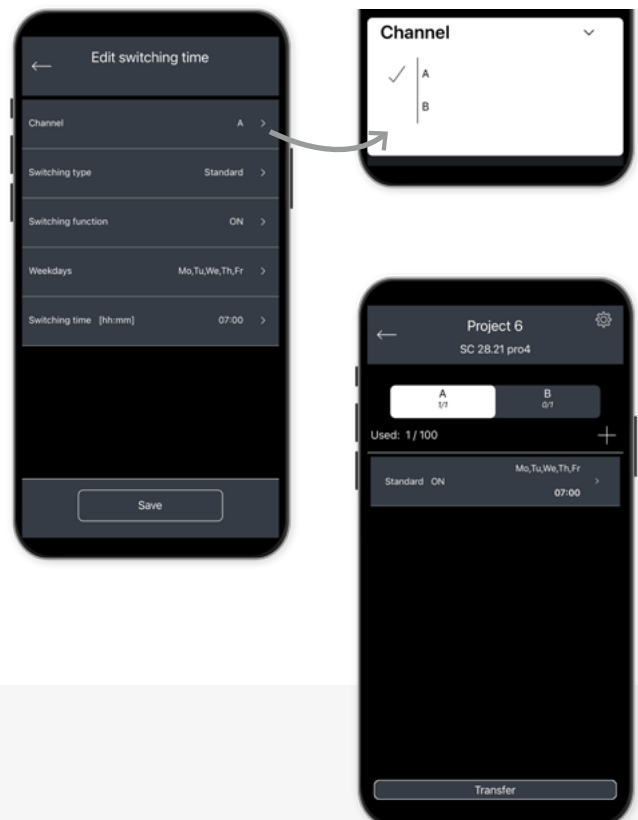
i

In the project, you will see the available channels and the switching times that have already been created. To switch channels, click on the desired channel above the switching program.



2 Create New Switching Time

1. Open a project.
2. Select the channel for which you want to create a switching time. Alternatively, you can change the channel when creating the switching time.
3. Click on the “+” icon.
4. Make your desired settings by clicking on the listed fields and making your selections.
5. Click „Save“ to create the switching time.
6. The switching time will now appear in the overview under the corresponding channel.



The following switching types depend on the timer type and are therefore not available on all timers. See the table on page 11.

3 Switching Type: Standard / Extra

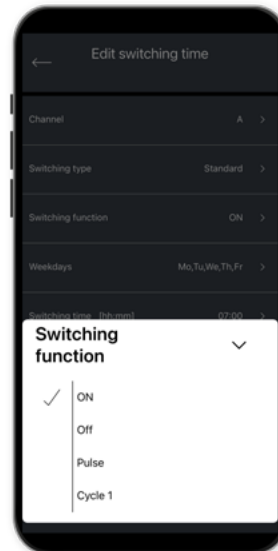
1. Open a project.
2. Click on the "+" icon.
3. Click on "Switching Type" in the second row and select "Standard" (default).
4. Choose the desired switching function.
5. Click on "Weekdays" to select the weekdays and confirm your selection by clicking "Save".
6. Specify the switching time at which the function should be executed.
7. Click on "Save" to create the switching time.

4 Switching Type: Permanent

1. Open a project.
2. Click on the "+" icon.
3. Click on "Switching Type" in the second row and select "Permanent".
4. Choose the desired switching function.
5. Enter the "Start Date" for the beginning of the period.
6. Enter the "End Date" for the end of the period.
7. Enter the "Start Time" for the time on the start date when the period should begin.
8. Enter the "End Time" for the time on the end date when the period should end.
9. For annual timers: Select a function (see page 14).
10. Click on "Save" to create the switching time.

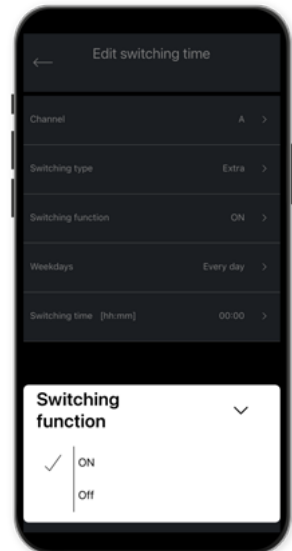
5 Switching Type: Extra

1. Open a project.
2. Click on the "+" icon.
3. Click on "Switching Type" in the second row and select "Extra".
4. Choose the desired switching function.
5. Enter the "Start Date".
6. Specify the switching time at which the function should be executed.
7. For annual timers: Select a function (see page 14).
8. Click on "Save" to create the switching time.



Standard

→ see page 12



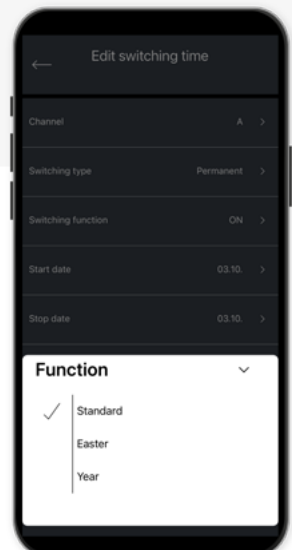
Extra

→ see page 15

i

The „Function: Easter“ refers to Easter-dependent holidays. These must always be set with the current year's date, regardless of whether the date is in the past.

→ More about Permanent-on page 12.



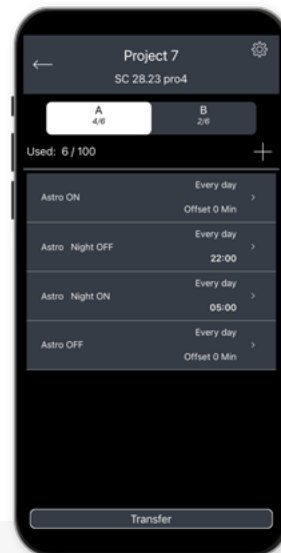
→ More about Extra on page 13.

i

Only for weekly and yearly timers.

6 Switching Type: Astro

1. Open a project.
2. Click on the "+" icon.
3. Click on "Switching Type" in the second row and select "Astro".
4. Choose the desired switching function.
5. Click on "Weekdays" to select the weekdays and then click on "Save".
6. Optional: Specify the offset using the slider. Negative values mean the switching time is before sunrise or sunset, positive values mean it is after.
7. Click on "Save" to create the switching time.



→ More about Astro on page 15.

i

The offset can be set between -90 minutes and +90 minutes.

7 Switch Function: Pulse

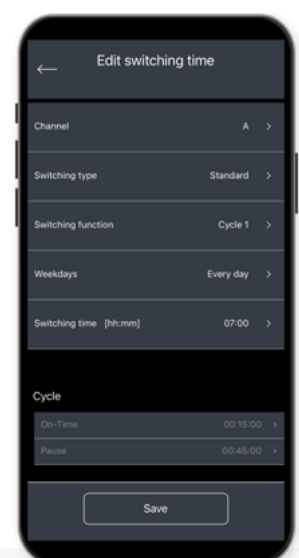
1. Open a project.
2. Click on the "+" icon.
3. Click on "Switching Type" in the second row and select Standard, Extra, or SP.
4. Choose the switching function "Pulse".
5. Click on "Weekdays" to select the weekdays and then click on "Save".
6. Specify the switching time at which the pulse should occur.
7. Enter the pulse duration [mm:ss] in the "Pulse" field.
8. Click on "Save" to create the pulse.

i

The pulse switching time does not require an OFF time. This can help you save on potential switching times.

8 Switch Function: Cycle (page 23)

1. Click on the "+" icon.
2. Click on "Switching Type" in the second row and select Standard, Extra, or SP.
3. Choose your cycle under the switching function.
4. Click on "Weekdays" to select the weekdays and then click on "Save".
5. Specify the switching time at which the cycle should start.
6. Click on "Save" to create the cycle.



i

The cycle must first be defined in the project settings.

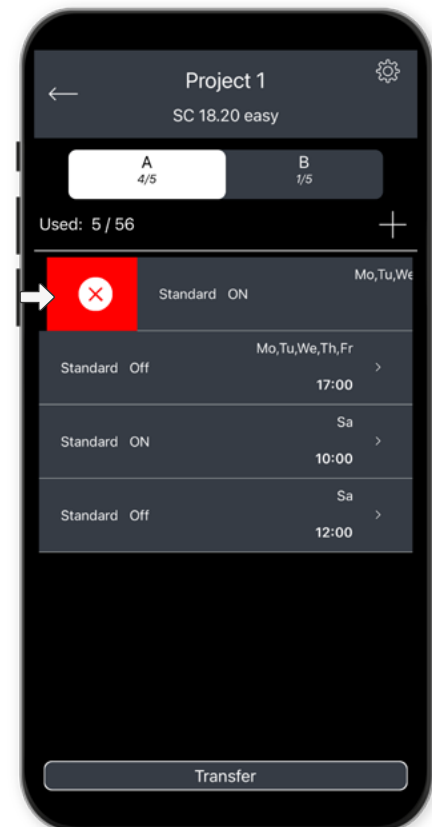
8. Edit Switching Time

1 Edit Switching Time

1. Open a project.
2. Click on the switching time you want to edit.
Switch between channels if necessary.
3. Edit the switching time as desired.
4. Click on "Save" to apply the changes.

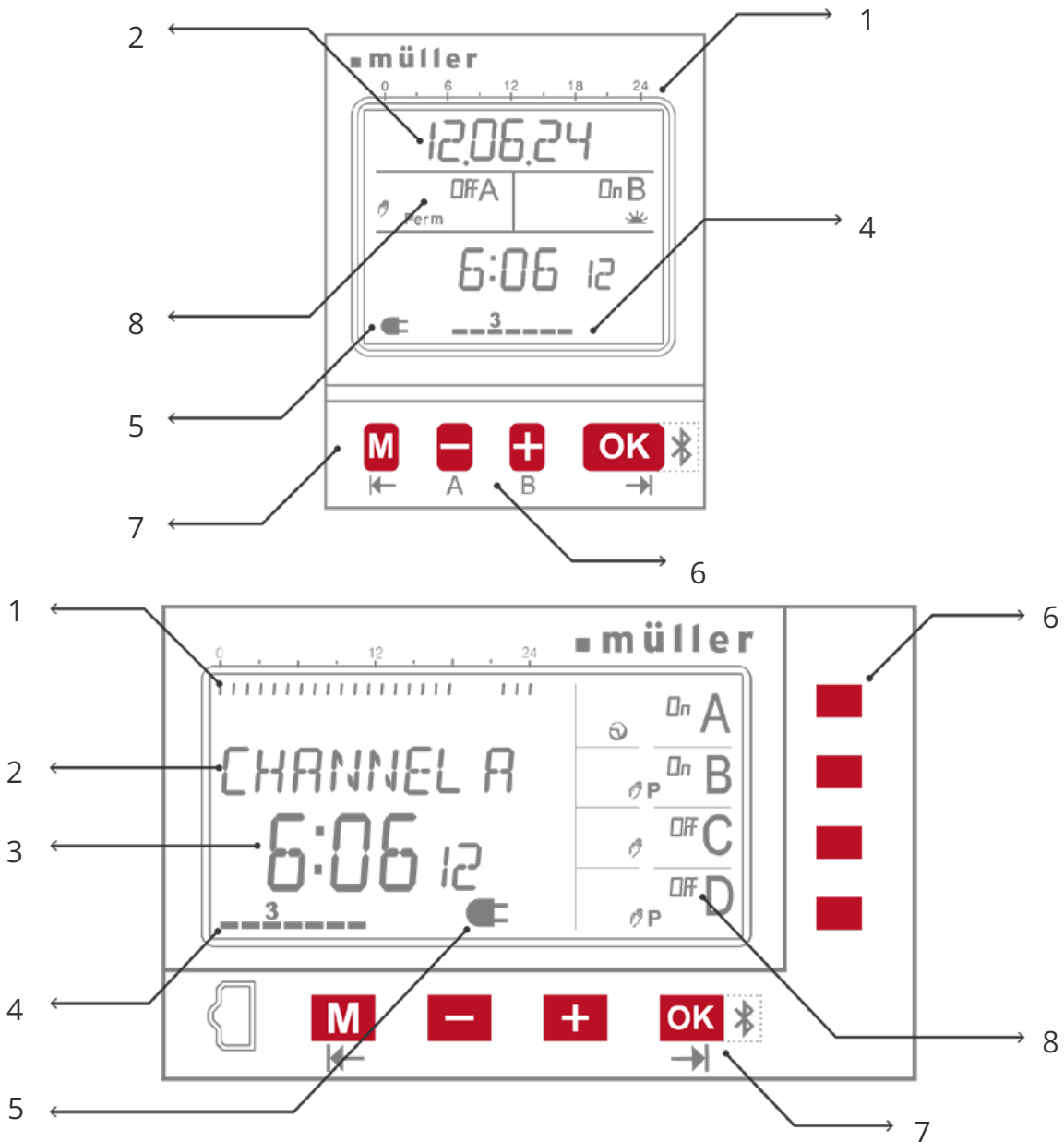
2 Delete Switching Time

1. Open a project.
2. Swipe the switching time you want to delete to the right.
3. Click on the "X" to permanently remove the switching time.



The Time Switch.

Display & Operation.


















Explanation of the Display

1. Graphical preview with timeline. Indicates when the timer is switched to ON.
2. Display of the current date / Display of the current channel, which switches automatically.
3. Current time.
4. Display of the current day of the week. 3 = Wednesday.
5. Plug symbol blinks when the timer is not powered.
6. Channel buttons for manually switching channels.
7. Control buttons for navigating through the timer menu and activating Bluetooth.
8. Current switching state per channel.

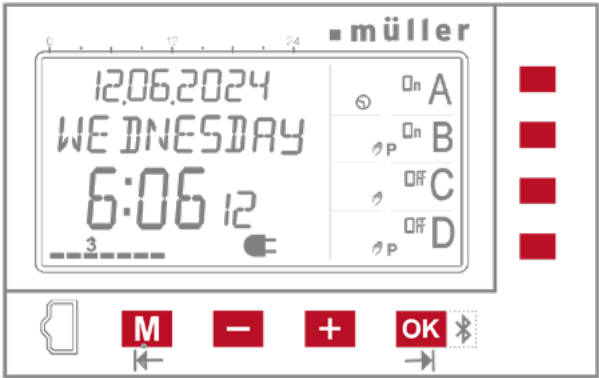
Control buttons

<p>M ←</p>	<ol style="list-style-type: none"> 1. Switch from automatic mode to input mode. 2. Back function (one level up).
<p>- A</p>	<ol style="list-style-type: none"> 1. Input mode: Option to select between different choices or change the blinking position (minus/ subtract). 2. Channel settings for timers with 1-2 channels.
<p>+ B</p>	<ol style="list-style-type: none"> 1. Input mode: Option to select between different choices or change the blinking position (plus/add). 2. Channel settings for timers with 1-2 channels.
<p>OK →</p>	<ol style="list-style-type: none"> 1. Activate the timer by pressing for more than 1 second (without mains power). 2. Confirm selection or programming (one level down). 3. Activates Bluetooth for transmission (only for pro4 devices).

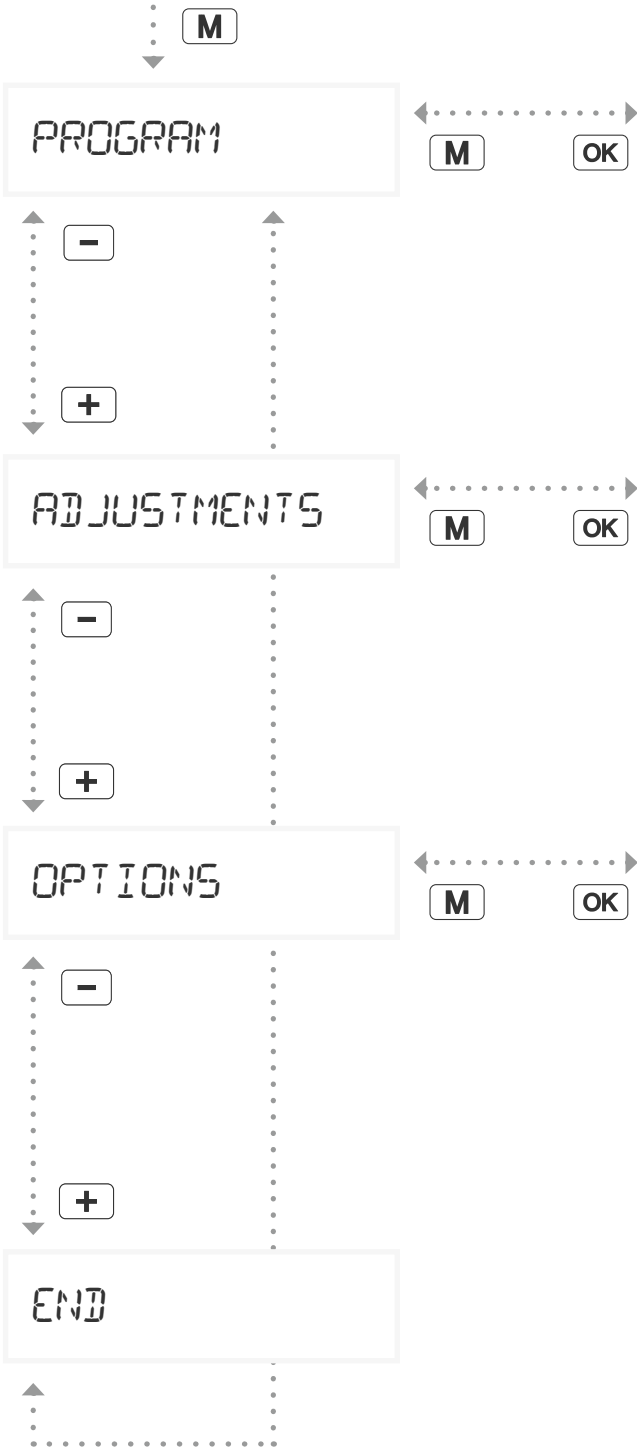
Symbol Explanation

	Channel is ON / Programming ON. A short press of the channel button turns the channel on/off.
	Channel is OFF / Programming OFF. A short press of the channel button turns the channel on/off.
	Days of the Week Mo (1) - Su (7). In programming mode, underscores indicate which days of the week are activated. The current day is displayed on the start screen, e.g., 5 = Friday.
	Current Switching State Based on a Programmed Standard Switching Time. (See page 12).
	Current Switching State Based on Manual Program Switching. Changed by the stored program at the next switching time.
	Current Switching State Based on Manual Switching and Remains Permanent Until Manually Reset. Manual activation or reset by pressing the channel button for 3 seconds.
	Current Switching State Based on a Permanent Switching Time Stored in the Switching Program. Deactivated when the period of the stored permanent program has ended.
	Current Switching State Based on Pulse Switching Time.
	Current Switching State Based on Cycle Switching Time (Timer Function).
	Current Switching State Based on Astro Times (Sunset or Sunrise) with Possible Programmed Offset.
	Displayed When „External Input“ is Activated.
	Displayed When „Delete Program“ is Selected.
	DCF / GPS: The switching computer receives the time signal via the radio receiver.
	Timer is Locked with PIN; PIN Entry Required.
	Switching Program / Switching Time with Easter Function Active. The switching program accounts for the annual shift of Easter and corrects the date of the switching times.

Menu Navigation



i Not every timer has all menu options. This overview is intended to provide a general guide.



- NEW
- QUERY
- EDIT
- DELETE
- SIMULATION
- END

- DATE-TIME
- SUMMERTIME
- ASTRO DATA
- LANGUAGE
- FACTORY DEFAULTS
- END

- COUNTER
- PIN-CODE
- EXTRA SWITCHING TIME (Astro)
- EXTRA SWITCHING TIME
- CYCLE
- RANDOM
- INPUT
- END

Each of the listed functions has additional sub-functions or settings that can be navigated using the +/- buttons.

Function Overview

PROGRAM

- + **New:** Program new switching times.
- + **Query:** Query the stored switching times.
- + **Edit:** Modify existing switching times.
- + **Delete:** Delete switching times.
- + **Simulation:** Graphical display to check the switching program.
- + **End:** Return to the previous level.

ADJUSTMENTS

- + **Date-Time:** Option to adjust the date and time.
- + **Summertime:** Adjust the time change for summer/winter according to local conditions.
- + **Astro (Data):** Adjust time zone or coordinates, or set Astro channels on annual timers.
- + **Language:** Adjust the language.
- + **Factory defaults:** Reset the timer to Factory Defaults.
- + **End:** Return to the previous level.

OPTIONS

- + **Counter:** Counts the on-time duration and the number of switchings per channel, as well as the total time connected to the network.
- + **PIN-Code:** The timer can be locked with a PIN code to prevent unauthorized access.
- + **Extra Switching Time (Astro):** Enable (yes) or disable (no) extra switching times to include or hide them in new programs.
- + **Extra Switching Time:** Enable (yes) or disable (no) extra switching times to include or hide them in new programs.
- + **Cycle:** Define cycles that can be selected in new programs after being set.
- + **Random:** When activated (yes), existing switching times are randomly shifted to simulate presence.
- + **Input:** Configure switches and buttons and assign functions such as "Permanent On" or "Off".
- + **End:** Return to the previous level.

Programm the Timer.

Create and Query Switching Times.

1. Create Program

1 Create New Program

1. Switch to input mode with **[M]**.
2. On the display, select "Program" and confirm with **[OK]**.
3. Select "New" and confirm again with **[OK]**.
4. For more than one channel: Switch between channels with **[-]** / **[+]** until the desired channel is displayed and confirm with **[OK]**.
5. Follow the steps below, depending on the type of switching time you want to set.



2 Create Standard / Extra Switching Time

1. Follow the steps in point **1**
2. Switch between switching types: Press **[-]** / **[+]** until "Standard" or "Extra" (for Astro timers) is displayed.
3. Select switching function: Choose the desired switching function (On / Off / Pulse / Cycle) with **[-]** / **[+]**.
4. Set days of the week: Choose the days for which the switching time should apply by selecting "Yes."
 - Switch between "Yes" and "No" with **[-]** / **[+]**.
5. Set time: Enter the time by adjusting the blinking positions with **[-]** / **[+]**.
6. The switching time will be saved.

i

Please note:

You must always confirm your entry with **[OK]** to proceed.

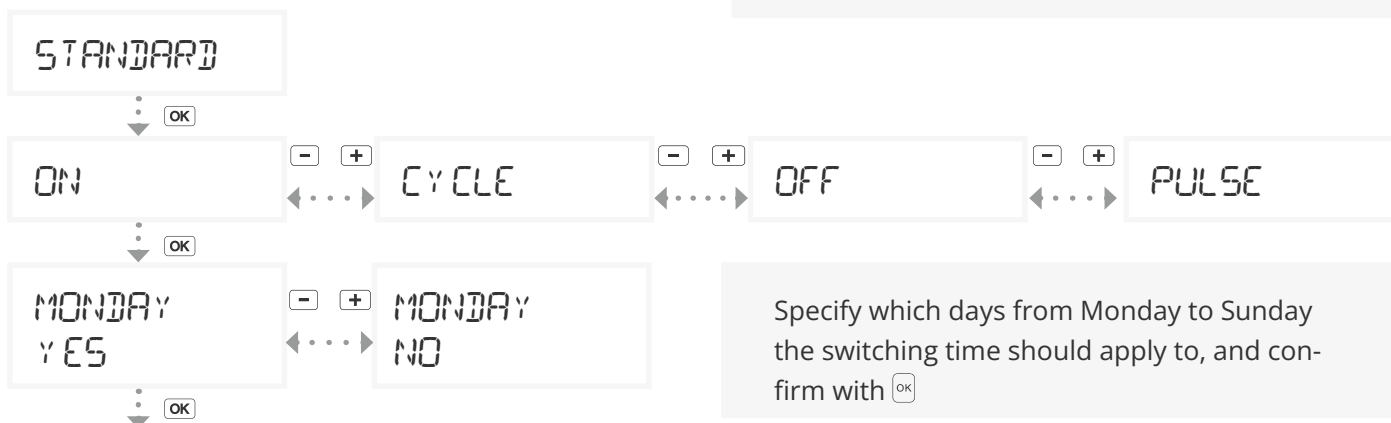
With **[M]**, you can return to the previous level at any time.

- More about Standard Switching Time on page 12.
 - More about Extra Switching Time on page 15.
- Extra must be activated in the options, see page 45.

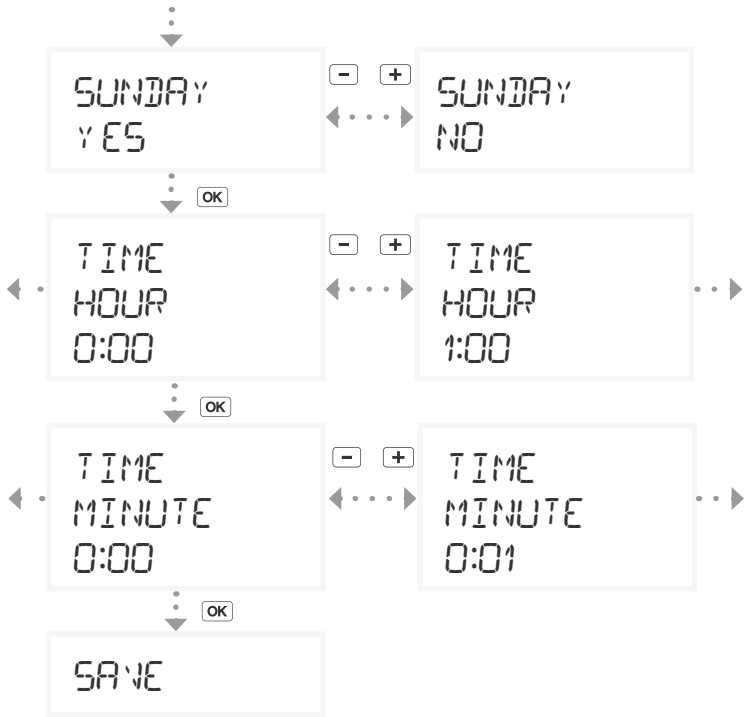
i

At the bottom of the display, a bar indicates which days the switching time is activated for (1 for Monday through 7 for Sunday).

1234567



Specify which days from Monday to Sunday the switching time should apply to, and confirm with **[OK]**



i Blinking values when entering time or date indicate the position that can be adjusted. You can change the values with **-** or **+**.

3 Create Permanent Switching Time

1. Follow the steps in point **1**
2. Switch between programs: Press **-** / **+**, until the program "Permanent" is displayed.
3. Select switching function: Choose the desired switching function (On / Off) with **-** / **+**.
4. Set time period: Enter the start date and time by adjusting the blinking positions. Repeat the steps for the stop date and time.
5. For Yearly Timers: Specify the desired function (see page 14) and confirm your selection.
6. The switching time will be saved.



→ More about the permanent switching time on page 12.

i Only for Yearly Timers

```

    graph TD
      A[FUNCTION YEAR] --> B[FUNCTION STANDARD]
      B --> C[FUNCTION EASTER]
  
```

4 Create Extra Switching Time

1. Follow the steps in point **1**
2. Switch between programs: Press \square / \square until the program "Extra Switching Time" is displayed.
3. Select switching function: Choose the desired switching function (ES ON / ES OFF) with \square / \square .
4. Set switching time:
 - Date: Enter the date by adjusting the blinking positions.
 - Time: Enter the time by adjusting the blinking positions.
5. For Yearly Timers: Specify the desired function (see page 14) and confirm your selection.
6. The switching time will be saved.

5 Create Astro Switching Time

1. Follow the steps in point **1**
2. Select switching function: Choose the desired Astro switching function (Astro On / Off or Night On / Off) with \square / \square .
3. Set days of the week: Choose the days for which the switching time applies by selecting "Yes."
 - Switch between "Yes" and "No" with \square / \square .
4. Set offset: Enter the offset by adjusting the value (-90 to +90) with \square / \square .
5. The switching time will be saved.

i

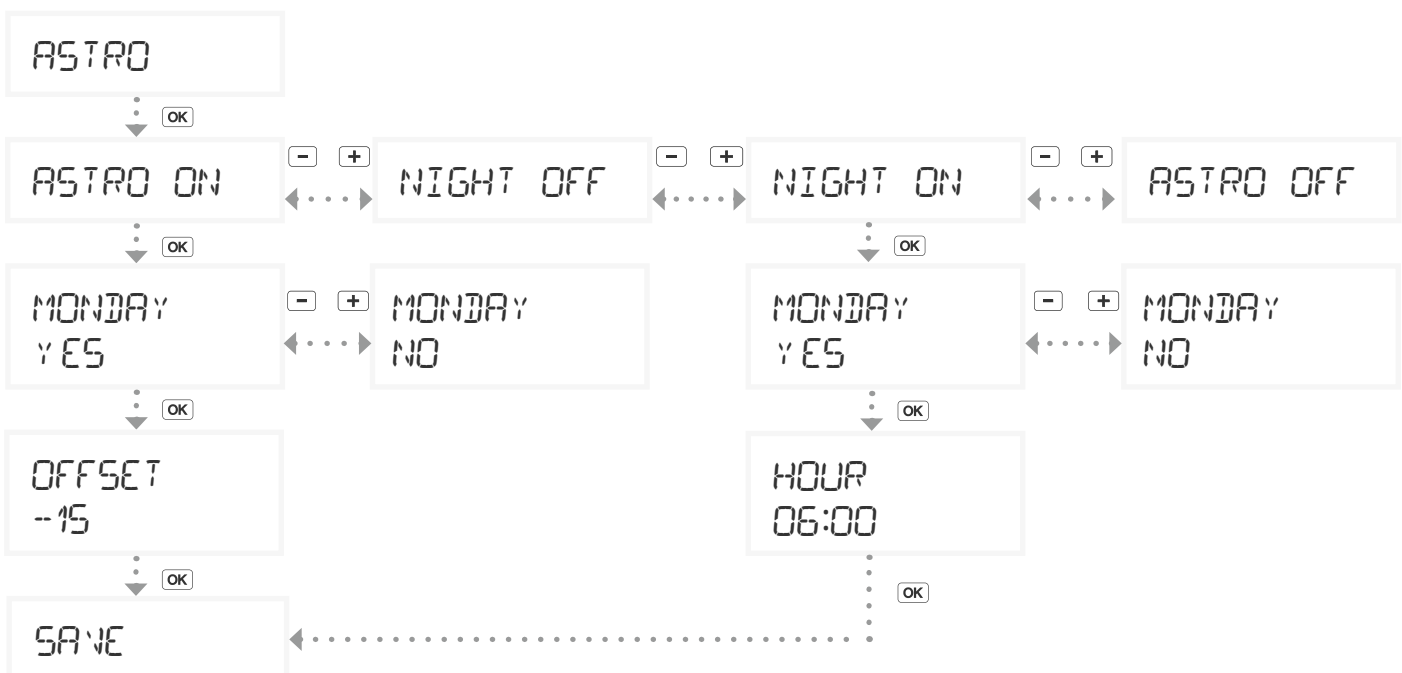
To select an extra switching time as a switching type, it must first be activated in the "Options" menu, see page 44.

→ More about extra switching time on page 13.

i

For SC 44.x1 pro4 / SC 88.x0 pro4 / SC 98.x0 pro4, the channel function "Astro" can be set in the settings under Astro Data, see page 42.

→ More about Astro switching time on page 15.



6 Create Special Program

1. Follow the steps in point **1**
2. Switch between programs: Press \square / \square until "Special Program" is displayed.
3. Select special program: Press \square / \square to choose Special Program (SP) 1 to 10.
4. Confirm "Input" with \square and set the switching times for your special program.
5. For activation, follow the steps in point **7**

→ More about Special Program on page 14.

7 Activate Special Program

1. Follow the steps in point **1**
2. Switch between programs: Press \square / \square until "Special Program" is displayed.
3. Select special program: Press \square / \square to choose Special Program (SP) 1 to 10.
4. Switch to "Activation" with \square / \square and confirm with \square .
5. Set time period: Enter the start date and time by adjusting the blinking positions. Repeat for the stop date and time.
6. For Yearly Timers: Specify the desired function (see page 14).
7. The special program will be activated for the specified period.

8 Create Pulse

1. Follow the steps in point **1**
2. Switch between programs: Press \square / \square , until Standard, Additional, or Special Program is displayed.
3. Select switching function: Choose "Pulse" with \square / \square .
4. Set days of the week: Choose the days for which the switching time applies by selecting "Yes".
 - Switch between "Yes" and "No" with \square / \square .
5. Set time: Enter the time by adjusting the blinking positions.
6. Set pulse duration: Enter the minute with \square / \square and the seconds.
7. The switching time will be saved.

9 Create Cycle Switching Time (see page 12)

1. Follow the steps in point **1**
2. Switch between programs: Press \square / \square , until Standard, Additional, or Special Program is displayed.
3. Select switching function: Choose "Cycle" with \square / \square .
4. Set days of the week: Choose the days for which the switching time applies by selecting "Yes."
 - Switch between "Yes" and "No" with \square / \square .
5. Set time: Enter the time at which the cycle should start by adjusting the blinking positions.
6. Click "Save" to activate the cycle.

i

To select a cycle as a switching type, it must first be defined in the "Options" menu, see page 45.





2. Additional Program Options

1 Query Program






1. Switch to input mode with **M**.
2. On the display, select "Program" and confirm with **OK**.
3. Press **-** / **+** until "Program Query" is displayed and confirm with **OK**.
4. The number of total available memory slots will be shown.
 - Use **OK** to check the number of used memory slots for each channel. Switch between channels with **-** / **+**.
5. Display Switching Times: To get more detailed information about a channel, press **OK** on any channel.
 - Use **-** / **+** to select the desired switching type or choose "All" to query all switching times of the channel and confirm with **OK**.
 - You can now use **-** / **+** to switch between the set switching times.

2 Modify / Edit Program

1. Switch to input mode with **M**.
2. On the display, select "Program" and confirm with **OK**.
3. Press **-** / **+** until "Modify Program" is displayed and confirm with **→ OK**.
4. The number of total available memory slots will be shown.
 - Use **OK** to check the number of used memory slots for each channel. Switch between channels with **-** / **+**.
5. Display Switching Times: To get more detailed information about a channel, press **OK**.
 - Use **-** / **+** to select the desired switching type or choose "All" to query all switching times of the channel and confirm with **OK**.
 - You can now use **-** / **+** to switch between the set switching times.




6. Edit Switching Time: Press  on the switching time you want to adjust to enter edit mode.
 - Use  /  to make the desired adjustments. Confirm each adjustment with  until "SAVE" is displayed.
7. The modified switching time will be saved.

Delete Program






1. Switch to input mode with .
2. On the display, select "Program" and confirm with .
3. Press  /  until "Delete Program" is displayed and confirm with .

Attention: Deleted switching times cannot be restored. If you have saved the program file, you can transfer it back to the timer.









Delete All Switching Times of a Channel

- Select a channel with  from which you want to delete all switching times.
- Press  when "(Channel) Delete All" is displayed.
- Confirm again with .





Delete All Switching Times of a Channel with a Specific Switching Type

- Select a channel with  from which you want to delete a switching type.
- Use  /  to navigate through the switching types and select the one you want to delete.
- Press  when "(Switching Type) Delete All" is displayed.
- Confirm again with .

Delete Individual Switching Times

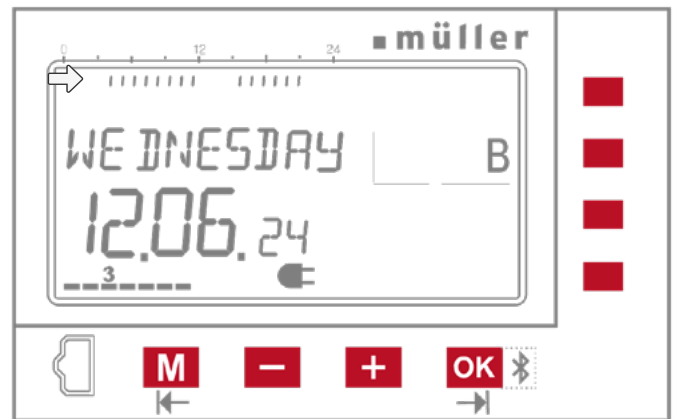
- Select a channel with  from which you want to delete individual switching times.
- Use  /  to navigate through the switching types and select the type from which you want to delete a switching time. Confirm with .
- Use  /  to navigate through the individual switching times and select the one you want to delete. Confirm with .
- Press .

Delete All Switching Times

- Switch through the channels with  /  until "Delete All" is displayed at the end.
- Press .
- Confirm again with .

4 Simulate Program

1. Switch to input mode with **M**.
2. On the display, select "Program" and confirm with **OK**.
3. Press **-** / **+** until "Simulation" is displayed and confirm with **OK**.
4. A channel and the number of stored switching times will be displayed. Use **-** / **+** to scroll through the channels and select a channel with **OK**.
5. Simulate Date: Enter the date by adjusting the blinking positions and confirm each with **OK**.
 - You can now use **-** / **+** to change the date.
6. Graphical Representation: Each device has a timeline from 0 to 24 hours. In the simulation, you will see lines under this timeline showing when the device is switched on according to the stored switching program.



i

In this example, we simulate Channel B. The graphical representation shows that switching times are active from 5-12 AM and from 4-9 PM.

3. Settings

1. Switch to Input Mode with **M**.
2. On the display, select "Program" and switch to the "Settings" tab using **+**. Confirm with **OK** to enter the settings.

1 Adjust Date and Time

1. Press **-** / **+** until "Date-Time" is displayed and confirm with **OK**.
2. Set Date and Time
 - Date: Enter the date by adjusting the blinking positions with **-** / **+** and confirm with **OK**.
 - Time: Enter the time by adjusting the blinking positions with **-** / **+** and confirm with **OK**.
3. Your changes will be saved as soon as "Save" appears on the display.

DATE-TIME

2 Adjust Summertime

1. Press **-** / **+** until "Summertime" is displayed and confirm with **OK**.
2. Set Summertime
 - Switch through the options with **-** / **+** and confirm your adjustments with **OK**.
3. Your changes will be saved as soon as "Save" appears on the display.

SUMMERTIME

3 Activate Astro Channels

1. Press **-** / **+** until "Astro Data" is displayed and confirm with **OK**.
2. Set Astro Channels
 - Channels will be displayed. Switch between "Yes" to activate the channel as an Astro channel and "No" to not set the channel as an Astro channel using **-** / **+**. Confirm each channel with **OK**.
3. Attention: If you have created switching times for the channel, they will be deleted when switching to the Astro channel. If you still wish to proceed, confirm with **OK**.
4. Follow the steps from point **4**, starting from step 2.

ASTRO-DATA

i

Only on SC 44.x1 pro4 / SC 88.x0 pro4 / SC 98.x0 pro4 can the channel function "Astro" be set.

4 Set Astro Time

1. Press \square / \square until "Astro" is displayed and confirm with.
2. Set Astro Time by Zone (Recommended)
 - Switch between country codes until you find the desired target country (e.g., "DE" for Germany) and confirm with \square .
 - Enter the first two digits of the target zip code by adjusting the value with \square / \square and confirm with \square .
3. Set Astro Time by Coordinates
 - Enter the target latitude by adjusting the value with \square / \square and confirm with \square .
 - Enter the target longitude by adjusting the value with \square / \square and confirm with \square .
 - Enter the target time zone by adjusting the value with \square / \square and confirm with \square .
4. Your changes will be saved as soon as "Save" appears on the display.

ASTRO

5 Change Language

1. Press \square / \square until "Language" is displayed and confirm with \square .
2. Set Language
 - Switch through the options with \square / \square and confirm your selection with \square .
3. Your changes will be saved as soon as "Save" appears on the display.

LANGUAGE

6 Reset to Factory Defaults

1. Press \square / \square until "Factory Defaults" is displayed and confirm with \square .
2. Warning: Resetting the timer to Factory Defaults will erase all switching times and settings. Confirm with \square .
3. Your timer has been reset when "Memory Empty" appears on the display.
4. You can now begin the initial setup again (see page 9).

FACTORY DEFAULTS

4. Options

1. Switch to the input mode with **M**.
2. The display will show the "Program" option. Use the **+** to navigate to the "Options" tab. Confirm with **OK** to enter the settings.

1 Counter


1. Press **-** / **+** until "Counter" is displayed and confirm with **OK**.
2. Switch between the channels with **-** / **+** to display the on-time duration, the number of switchings per channel, and the total duration on the network.



COUNTER

2 Secure Timer with PIN Code

1. Press **-** / **+** until "PIN Code" is displayed and confirm with **OK**.
2. Switch to "Yes" with **-** / **+** if you want to create a PIN code and confirm with **OK**.
 - Select "No" if you want to remove the PIN.
3. Enter your 4-digit PIN by adjusting the value with **-** / **+** and confirm each digit with **OK**.
4. Your PIN will be saved as soon as "Save" appears on the display. A lock symbol will now be visible on the display.



PIN-CODE

i

After the PIN is created, the timer can only be operated by entering the PIN code.

3 Activate Extra Switching Time

1. Press **-** / **+** until "Extra Switching Time" is displayed and confirm with **OK**.
2. Switch to "Yes" with **-** / **+** if you want to activate Extra Switching Times, and confirm with **OK**.
 - Select "No" if you want to remove extra switching times.
3. Your change will be saved as soon as "Save" appears on the display. You will find extra switching times when creating a new program (see page 36).



EXTRA SWITCHING TIME

4 Set Up Cycles

1. Press \square / \square until "Cycle" is displayed and confirm with \square .
2. If your timer has multiple slots for cycles, switch to the desired cycle (1-4) with \square / \square and confirm with \square .
3. Switch to "Yes" with \square / \square if you want to activate the cycle and confirm with \square .
 - Select "No" if you want to deactivate the cycle.
4. Set the ON-Time by adjusting hours, minutes, and seconds with \square / \square and confirm each with \square .
5. Repeat this step for the OFF-Time.
6. Your changes will be saved as soon as "Save" appears on the display. You will find the cycle when creating a new program (see page 38).

CYCLE

5 Activate Random Switching Times

1. Press \square / \square until "Random" is displayed and confirm with \square .
2. Switch to "Yes" with \square / \square if you want to activate random shifting of switching times and confirm with \square .
 - Select "No" if you want to deactivate random switching.
3. Your changes will be saved as soon as "Save" appears on the display.

RANDOM

i

Random: When activated (Yes), existing switching times will be randomly shifted to simulate presence.

6 Activate Extra Switching Times for Astro Timers

1. Press \square / \square until „Extra Switching Time“ is displayed and confirm with \square .
2. Switch to "Yes" with \square / \square if you want to activate Extra Switching Times and confirm with \square .
 - Switch to „No“ with / if you want to deactivate extra switching times.
3. Your changes will be applied once „Save“ appears on the display.
4. You can find the extra switching times when creating a new program (see page 34).

7 Configure Input

1. Press / until „Input“ is displayed and confirm with .
2. Activate the channel(s) with (yes) or deactivate with (no) and confirm each with .
3. Select between push button and switch with / depending on what is connected as an external input and confirm with .

Push-button

4. Switch between change function, timer function, and staircase lighting with / .
5. **Timer Function:** Enter the hour, minute, and second with / and confirm with .
6. **Change Function.**
7. **Staircase Lighting:**
 - Use / to change whether you want to switch downstream or switch off by pressing the button and confirm with .
 - Use / to change whether a switch-off pre-warning should be executed and confirm with .
 - Enter the switch-on time (minute) with / and confirm with .

Switch

4. Switch between Permanent On, Permanent Off, and SP Activation with / . Confirm your selection with .

i

Permanent Off e.g. for vacations.

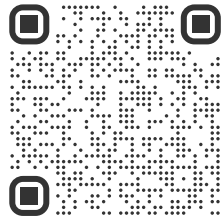
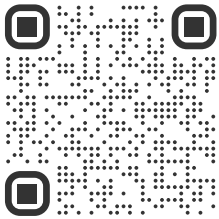
Universal Control.

EA 36.22 pro4.

The EA 36.22 pro4 is a versatile device that can be used both as a timer (for weekly and astronomical programs) and as a shutter. The device is designed for flush mounting, allowing it to blend seamlessly into various applications.

Programming

The EA 36.22 pro4 is programmed via the smart-phone app „Save n Carry 2.0.“ In addition to setting up time programs, the device can also be operated manually.



Applications

To create a project, you first need to decide how you want to use the EA 36.22 pro4. You have the option to program it as a weekly timer, astro timer, or shutter.



Weekly Timer

Weekly Timer with the option to set standard, permanent, and extra switching times.



Astro Timer

Astro Timer with astronomical switching times (night & astro), as well as permanent and extra switching times.



Shutter

Up and Down Times can be specified with astro and weekly switching times.

The following section explains the roller shutter control. If the EA 36.22 pro4 is to be used as a weekly timer or astronomical timer, setting up switching times is similar to the procedure for weekly and astro timers. Please refer to page 15 for more details.

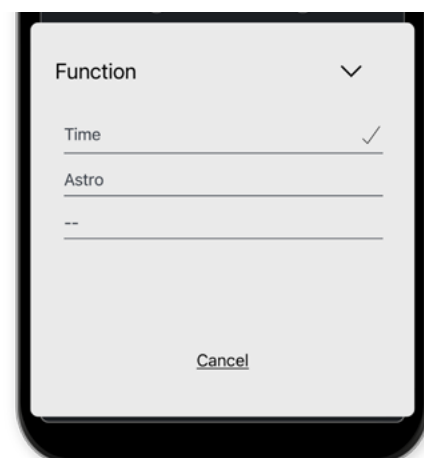
Shutter

1 Create Project

1. Select the EA 36.22 pro4 as a shutter.
2. Give the project a name and adjust the daylight saving time if necessary.
3. Enter your astro location; we recommend using GPS for this.
4. Specify when the shutter should not operate:
 - Not earlier than 4:00 AM
 - Not later than 10:00 PM
5. You will then be taken to the overview of switching times with the default values.

2 Adjust Switching Times

1. Click on a day of the week and the corresponding column for up or down operation, or use the arrow symbols at the top (up and down).
2. Next, select the days of the week for which you want to adjust the switching times and confirm your selection with "Save."
3. Choose a function:
 - **Time:** At a fixed time.
 - **Astro:** Based on sunrise and sunset with an offset.
 - **None:** The roller shutter does not operate automatically.
4. Enter the desired time or, for the Astro function, the offset, and click "Save."
5. The operation times will be updated in the overview.



3 Adjust Shutter Run Time

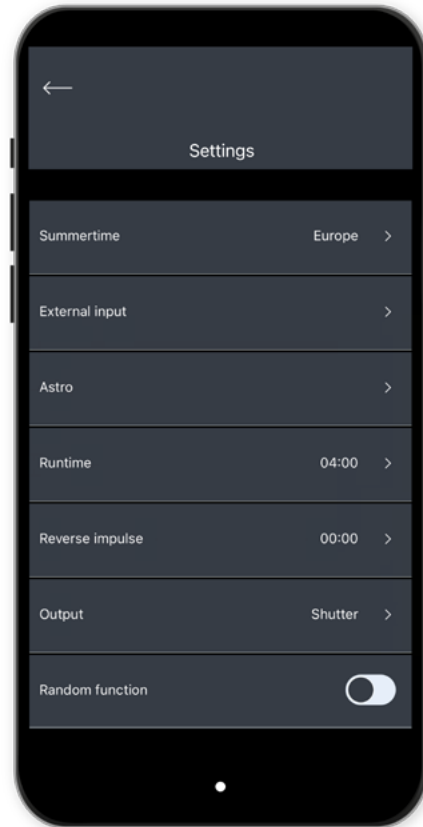
1. Click on the gear icon ⚙️ to access the settings.
2. Click on the „Runtime“ field.
3. Adjust the run time using the slider or the - / + symbols.
4. Click „Save“ or the ✓- symbol to apply the value.

4 Set Reverse Impulse

1. Click on the gear icon ⚙️ to access the settings.
2. Click on the „Reverse Impulse“ field.
3. Adjust the reverse impulse duration using the slider or the - / + symbols.
4. Click „Save“ or the ✓- symbol to apply the value.

5 Set Blinds



1. Click on the gear icon ⚙️ to access the settings.
2. Click on the „Output“ field.
3. Select „Blinds.“
4. Click „Save“ or the ✓- symbol to apply the value.



Transfer

1. Click on the project you want to transfer to the timer.
 - Alternatively, if you have already opened the project via „Edit,“ you can transfer it directly.
2. Select „Transfer.“
3. Choose your device: If it is not configured, it will be displayed as „EA36.22-0000-unconfigured.“ Otherwise, it will be shown with the designation and the specified number. Only already configured devices with the device type „Roller Shutter“ will be displayed.
4. Enter a PIN for your device.

Manual Control

1. Click on the 3-dot menu \dots to open the submenu.
2. Select the hand icon  aus.
3. Choose the device you want to control (EA 36.22 pro4).
4. Enter the PIN code for the device.
5. You can now manually control the device, view and change device settings via the gear icon  at the top right, or update the device.



Bluetooth Astro-Dimmer.

872 413 pro4.

The LED Astro-Dimmer allows you to create time programs with various dimming values, enabling the lighting to be adjusted to the natural position of the sun. Additionally, switching times for the night can be set, along with functions such as Extra and Permanent, which extend the astronomical switching times through weekly and yearly programs.

Example of a Time Program with the Astro-Dimmer:



Minimum & Maximum Dimming Value

The minimum dimming value is the lowest setting you can manually adjust, e.g., 15%. The maximum dimming value is the highest setting you can manually adjust, e.g. 80%.

Values outside these ranges can only be achieved through programmed switching times.

Memory-Function

When the memory function is activated, the set power-on value is no longer applicable. The light will then turn on with the last used dimming value.

Switch-On Value

The switch-on value describes the dimming value with which the dimmer turns on. The memory function must be deactivated for this to take effect.

Programming in the App

The Astro-Dimmer is programmed like other digital timers and offers the switching types Astro, Extra, and Permanent. Since the programming of the schedule is similar to that of other timers, please refer to the corresponding sections in the Time Switch chapter. **For Astro and Extra switching times, the dimming value must also be specified.**

Astro

- Explanation of the switching type on page 15
- Setting switching time in the app on page 27
- Setting switching time on the device on page 36

Extra

- Explanation of the switching type on page 13
- Setting switching time in the app on page 26
- Setting switching time on the device on page 36

Permanent

- Explanation of the switching type on page 12
- Setting switching time in the app on page 26
- Setting switching time on the device on page 35

Settings in the App

1 Set Minimum and Maximum Dimming Value

1. Click on the gear icon ⚙️ to access the settings.
2. Click on the „Dimming“ field.
3. Select „Minimum Dimming Value“ or „Maximum Dimming Value“ to open the settings window.
4. Adjust the dimming value using the slider or the -/+ symbols.
5. Click „Save“ or the ✓-symbol to apply the value.

2 Activate Memory Function

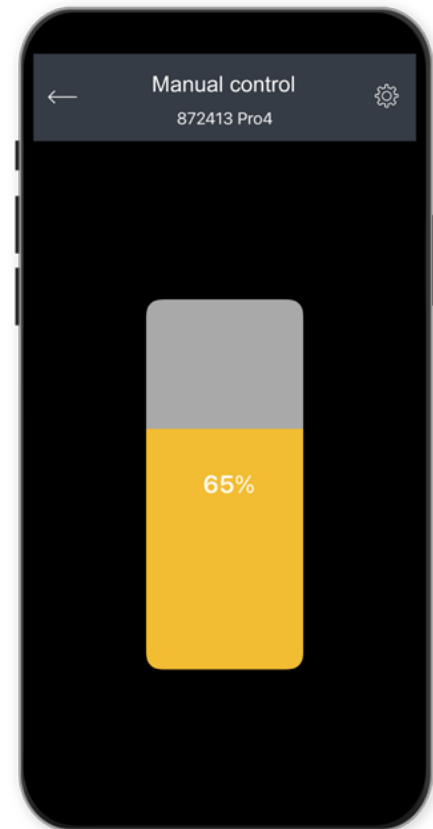
1. Click on the gear icon ⚙️ to access the settings.
2. Click on the „Dimming“ field.
3. Activate the slider in the “Memory Function” field to enable it.
4. When turned on, the last used dimming value will be applied.

3 Define Switch-On Value

1. Click on the gear icon ⚙️ to access the settings.
2. Click on the „Dimming“ field.
3. Select “Switch-On value” to open the settings window.
4. Adjust the switch-on value using the slider or the -/+ symbols.
5. Click “Save” or the ✓ symbol to apply the value.

4 Lock manual control

1. Click on the gear icon ⚙️ to access the settings.
2. Activate the slider in the “Lock Manual Control” field to enable it.
3. The setting will be applied automatically.



i

The memory function must be deactivated for this to take effect.

i

When manual operation is locked, the dimmer can no longer be operated or adjusted via a switch or push-button.

Twilight.

972 413 pro4.

The twilight switch operates with a light sensor that measures brightness and turns on the light at a certain threshold. It offers options for On and Off delay as well as hysteresis. Additionally, two switching times can be adjusted for the night to prevent the light from turning on during the night.

Threshold

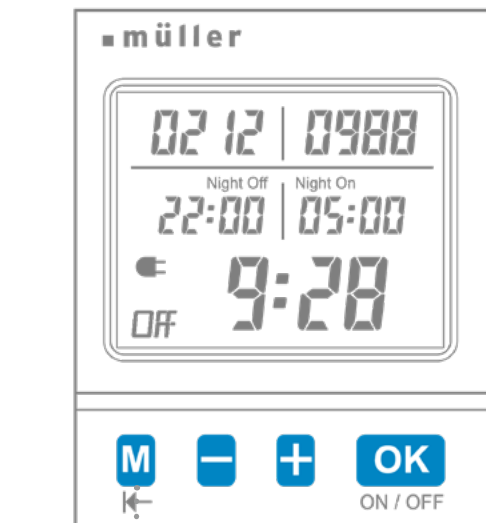
The sensor connected to the twilight switch measures the brightness. If the measured value falls below the threshold set in the twilight switch, the light will turn on. Example: The sensor detects a brightness value below the threshold of 100 lux - the twilight switch turns ON.

On and Off Delay

With a switch-on delay, the device will turn on, for example, 5 minutes after the threshold is exceeded.

Hysteresis


Hysteresis ensures that the device does not constantly switch between on and off when the measurement value is close to the threshold. For example, a hysteresis of 10 lux means: The device turns on at a brightness value below 100 lux and only turns off when the brightness value rises above 110 lux.




Manual Switching

- A short press on **OK** will turn the device on or off or toggle between On and Off.
- Pressing **OK** for 3 seconds while in the On state will switch the device to Permanent Off.
- Pressing **OK** for 3 seconds while in the Off state will switch the device to Permanent On.
- To exit Permanent Mode, the **OK**-button must be pressed again for 3 seconds.


Settings in the App

1. Click on the gear icon  to access the settings.
2. Click on the „Light Settings“ field.


1 Set Threshold

1. Select „Threshold“ to open the settings window.
2. Adjust the threshold using the slider or the -/+ symbols.
3. Click „Save“ or the -symbol to apply the value.

2 Set Hysteresis

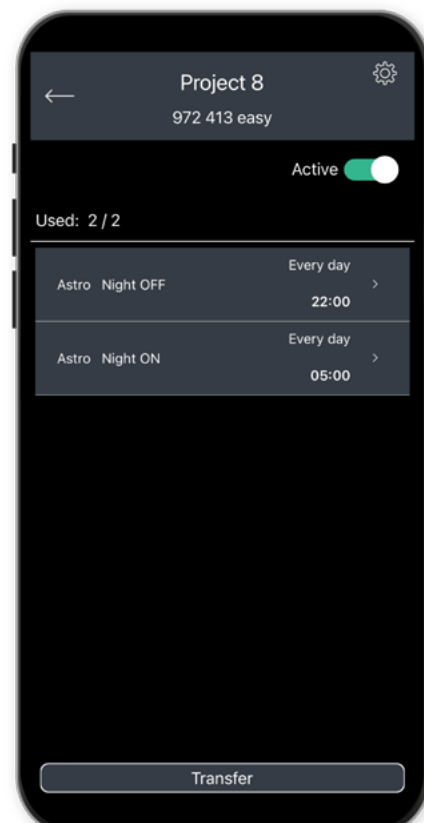
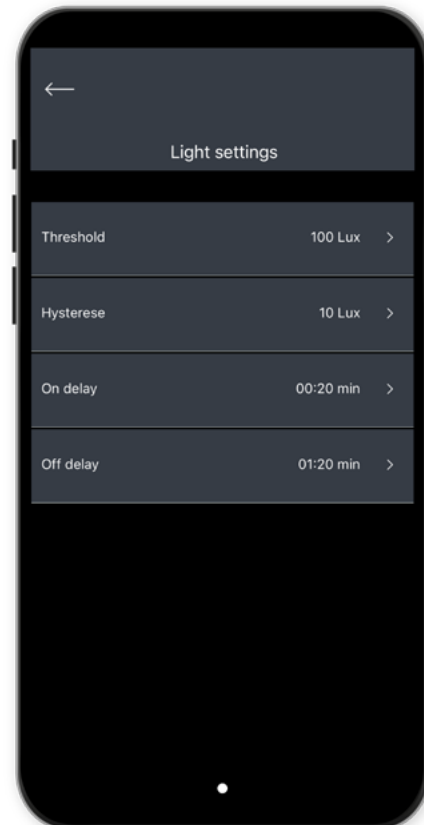
1. Select „Hysteresis“ to open the settings window.
2. Adjust the hysteresis using the slider or the -/+ symbols.
3. Click „Save“ or the -symbol to apply the value.

3 Set On and Off Delay

1. Select „On Delay“ or „Off Delay“ to open the settings window.
2. Adjust the desired delay [m:ss] for switching on and off.
3. Click the -symbol to apply the value.

4 Set Night Switching Times

1. Open the project.
2. Select one of the two switching times „Night Off“ or „Night On“:
 - Night Off: Set the time from which the light will be permanently off.
 - Night On: Set the time when the light should turn on again based on brightness value.
3. Click „Save“ to apply the value.



Settings on the Device

1 Adjust Program

1. Enter the input mode with **M**.
2. The display will show the option „Prog“ for Program. Confirm this with **OK**.
3. Threshold: Adjust the threshold using the **-** / **+** buttons and confirm with **OK**.
4. Night Off: Adjust the night off time using the **-** / **+** buttons and confirm with **OK**.
5. Night On: Adjust the night on time using the **-** / **+** buttons and confirm with **OK**.
6. Your adjustments will be saved.

2 Adjust Time

1. Enter the input mode with **M**.
2. Use **-** / **+** to navigate until „TIME“ appears on the display. Confirm with **OK**.
3. Adjust the blinking values using the **-** / **+** buttons and confirm each with **OK**.

3 Expert Settings

1. Enter the input mode with **M**.
2. Use **-** / **+** to navigate until „EXP“ for Expert Menu appears on the display. Confirm with **OK**.
3. Summertime: Use **-** / **+** to switch between EU or OFF to set daylight saving time and confirm with **OK**.
4. PIN: Use **-** / **+** to choose whether to use a PIN (YES) or not (NO). Enter the PIN with **-** / **+** and confirm each digit with **OK**.
5. Hysterese: Set the hysteresis (Hyst) with **-** / **+** and confirm with **OK**.
6. On Delay: Set the switch-on delay [m:ss] with **-** / **+** and confirm with **OK**.
7. Off Delay: Set the switch-off delay **-** / **+** with **OK** and confirm with.



Hugo Müller GmbH & Co KG

Karlstraße 90
D-78054 VS-Schwenningen

Tel.: +49 (0) 7720 80 83 6
E-Mail: info@hugo-mueller.de
www.hugo-mueller.de