

# Product manual



# Table of contents

<b>Introduction</b> Insight into time switch technology .....	6
Purpose of the Manual .....	6
History of Müller Time Switches .....	6
Definition and Function of Time Switches .....	7
Examples of Applications .....	7
<b>Features &amp; Differences</b> .....	8
Programming Options .....	8
Types of Time Switches .....	8
The Time Programs .....	9
Further Technical Differences .....	9
<b>Installation</b> .....	10
<b>Connection &amp; Notes</b> .....	10
Initial Operation .....	10
Mounting .....	10
<b>Overview of switch types</b> Description and examples .....	11
Overview .....	11
Table: Time switches and their switching types .....	12
Switching types: Weekly Timer .....	13
Switching types: Yearly Timer .....	15
Switching types: Astro Timer .....	16
Astro channel extension .....	16
<b>Programming with the app</b> Save'n carry 2.0 .....	17
<b>1. Introduction to the App</b> .....	18
Change Username .....	18
Change Password .....	18
Delete Profile .....	18
Log out .....	18
Change Language .....	19
Synchronize .....	19
Navigation .....	19
<b>2. Projects</b> .....	20
Create a new Project .....	20
Read an Existing Project from the Device .....	20
Import Project file .....	21
Add shared Project file .....	21
<b>Project Options</b> .....	21
Change Project Name and Description .....	21
Edit Project .....	21

Transfer Project to Timer.....	21
Copy Project.....	21
Delete Project.....	22
Share Project.....	22
Create PDF.....	22
Transfer Project to the Device.....	23
Bluetooth transmission.....	23
NFC Transmission.....	23
Open Project.....	24
Adjust device language.....	24
Set Summertime.....	24
Enable Random Function.....	24
Set External Input.....	25
Channel Function.....	25
Adjust Astro Position.....	25
Open Project.....	26
Create New Switching Time.....	26
Switching Type: Standard / Extra.....	26
Switching Type: Permanent.....	27
Switching Type: Extra.....	27
Switching Type: Astro.....	27
Switching Function: Pulse.....	28
Switching function: Cycle.....	28
Edit Switching Time.....	29
Delete Switching Time.....	29
Multi Delete of Switching Times.....	29
Duplicate Switching Times.....	29
Multiple add.....	30
Invert function – weekday selection.....	30
<b>3. Remote.....</b>	<b>31</b>
Use Device in Remote.....	31
Control the Device via Remote.....	31
Adjust Settings via Remote.....	31
Adjust Switching Program via Remote.....	31
<b>The Time Switch Display &amp; Operation.....</b>	<b>32</b>
<b>Explanation of the Display.....</b>	<b>32</b>
<b>Control buttons.....</b>	<b>33</b>
<b>Symbol Explanation.....</b>	<b>34</b>
<b>Menu Navigation.....</b>	<b>35</b>
<b>Function Overview.....</b>	<b>36</b>
<b>Programm the Time Switch.....</b>	<b>37</b>
<b>Create Program.....</b>	<b>37</b>
Create New Program.....	37

Create Standard / Extra Switching Time .....	37
Create Permanent Switching Time .....	38
Create Extra Switching Time .....	39
Create Astro Switching Time .....	39
Create Special Program .....	40
Activate Special Program .....	40
Create Pulse .....	40
Create Cycle Switching Time (see page 13) .....	41
<b>Additional Program Options .....</b>	<b>41</b>
Query Program .....	41
Modify / Edit Program .....	42
Delete Program .....	42
Simulate Program .....	43
<b>Settings .....</b>	<b>44</b>
Adjust Date and Time .....	44
Adjust Summertime .....	44
Activate Astro Channels .....	44
Set Astro Time .....	45
Change Language .....	45
Reset to Factory Defaults .....	45
Counter .....	46
Secure Timer with PIN Code .....	46
Activate Extra Switching Time .....	46
Set Up Cycles .....	47
Activate Random Switching Times .....	47
Activate Extra Switching Times for Astro Timers .....	47
Configure Input .....	48
Push-button .....	48
Switch .....	48
<b>Universal Control EA 36.22 pro4 .....</b>	<b>49</b>
<b>Remote .....</b>	<b>50</b>
Adding a Device in Remote Mode .....	50
Displaying Devices in Remote .....	50
Deleting Devices in the Remote .....	50
Adding Deleted / Configured Devices .....	50
Adding a Weekly Timer .....	51
Manually Controlling the Weekly Timer .....	51
Adjusting Switching Times .....	51
Settings for Weekly Timer .....	51
Adding an Astro Timer .....	52
Manually Controlling the Astro Timer .....	52
Adjusting Switching Times .....	52
Settings for Astro Timer .....	52

Adding a Shutter Controller. ....	53
Manually Controlling the Shutter Control. ....	53
Adjusting Switching Times. ....	54
Adjusting the Runtime. ....	54
Adjusting the Reverse impulse. ....	54
Change between Shutter / Blinds. ....	55
Settings for Shutter / Blind control. ....	55
Adjusting Device name. ....	55
Adjusting Device number. ....	55
Adjusting PIN-Code. ....	56
Updating devices. ....	56
Reset device to factory settings. ....	56
<b>Bluetooth Astro-Dimmer 872 413 pro4. ....</b>	<b>57</b>
<b>Programming in the App. ....</b>	<b>57</b>
<b>Settings in the App. ....</b>	<b>58</b>
Set Minimum and Maximum Dimming Value. ....	58
Activate Memory Function. ....	58
Define Switch-On Value. ....	58
Lock manual control. ....	58
<b>Twilight Switch 972 413 pro4. ....</b>	<b>59</b>
<b>Settings in the App. ....</b>	<b>60</b>
Set Treshold. ....	60
Set Hysteresis. ....	60
Set On and Off Delay. ....	60
Set Night Switching Times. ....	60
<b>Settings on the Device. ....</b>	<b>61</b>
Adjust Time. ....	61
Expert Settings. ....	61

# 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 tabletop 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 & 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:

4. Use the  /  buttons to choose between the options "Zone" or "Coordinates". Confirm your selection with  (Recommendation: Use "Zone" for position input).
5. In the next step, select the nearest zone using the  /  buttons or enter the exact coordinates of your location. Confirm your selection with .
6. 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  button.

## 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

Table: Time switches and their switching types

Overview of switch types  
Description and examples

Transmission		Switching types														Function							
NFC	BT	Standard				Permanent		Extra (Astro)				Astro				Extra		SP				Easter / Year	
		ON	OFF	Pulse	Cycle	ON	OFF	ON	OFF	Pulse	Cycle	Astro ON	Astro OFF	Night ON	Night OFF	ON	OFF	ON	OFF	Pulse	Cycle		Activation
✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	○	○	○	○	✗	✗	✗	✗	✗	✗	✗	✗
✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗
✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	○	○	○	○	✗	✗	✗	✗	✗	✗	✗	✗

## Switching types: Weekly Timer

### 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	<p>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].</p> <p>This cycle repeats until interrupted by another switching function.</p>	Monday to Friday from 01:00 PM, On-time 0:30:00 minutes, Pause 1:00:00 hour (cyclic repetition).

### Permanent

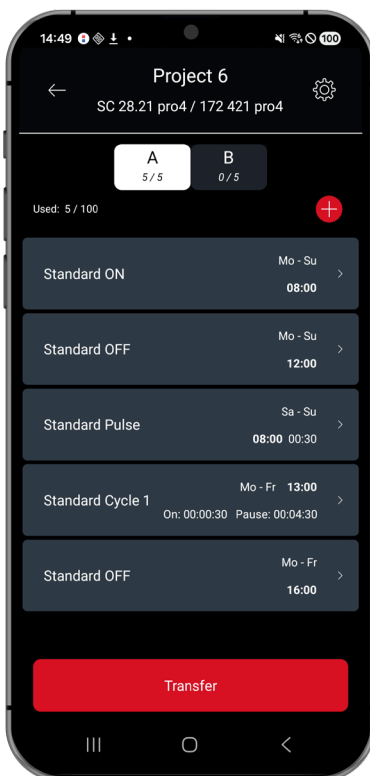
The switching type „Permanent“ allows setting a yearly program where a period can be defined with a start date and time up to a stop date and time.

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.

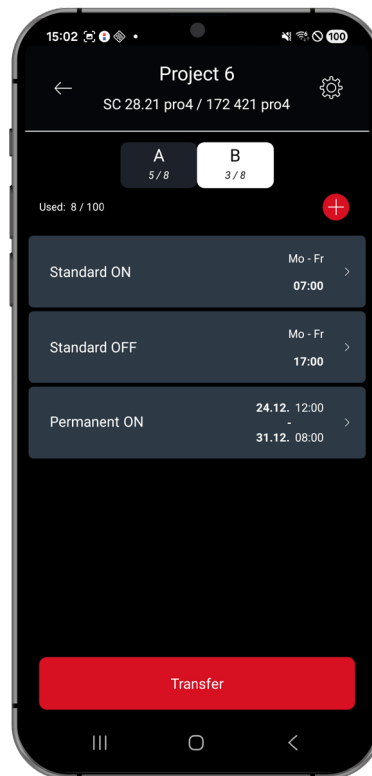
## Extra

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

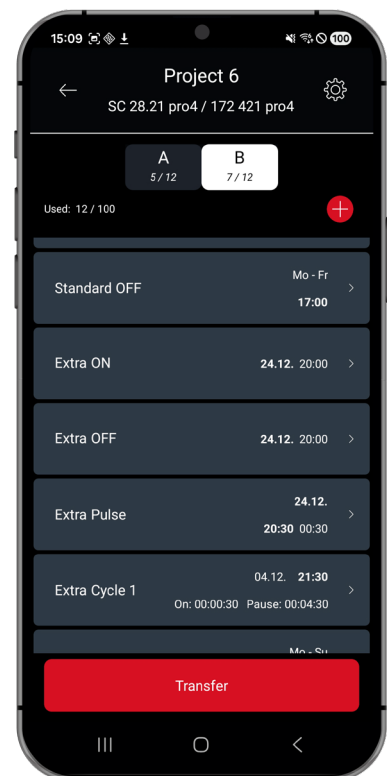
Function	Description	Examples
ON / OFF	Allows selecting a date and a switching time [hh:mm] to turn a device on or off.	On July 1st, at 06:00 PM ON.
Pulse	Allows selecting a date and a switching time [hh:mm] for turning a device on for a specific pulse duration [mm:ss].	On July 1st, at 08:30 PM, turn 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.
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 Timer

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.

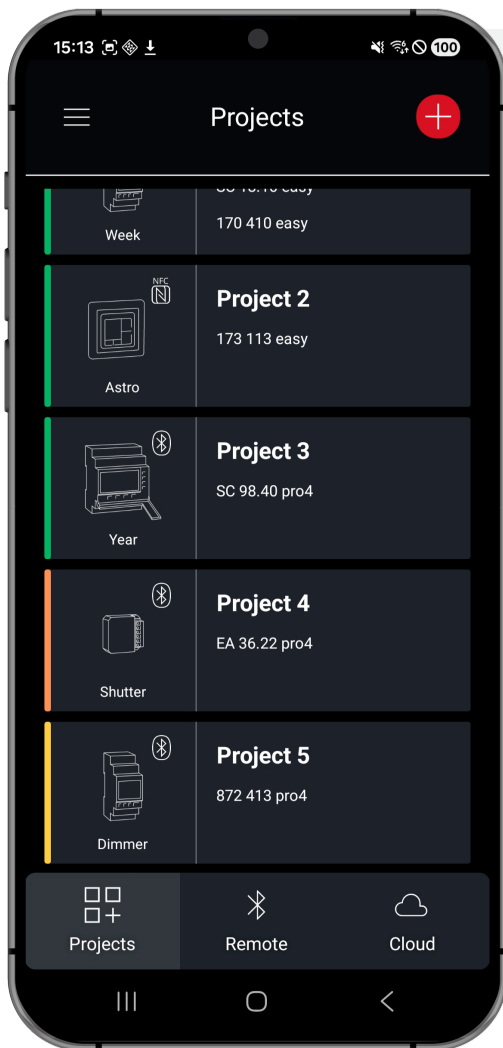
Models with additional Astro function: **SC 44.x1 pro4, SC 88.x0 pro4, SC 98.x0 pro4**



# 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

## User Profile

When you open the app for the first time, you will be taken to our login page. To use the app, you must have an account.

If you already have an account, you can sign in on this page using your existing profile details.

If not, you can create a new profile under **Sign Up** and then log in with your credentials.

### 1 Change Username

1. Open the side menu ☰ in the top left corner.
2. Click on your username or on "My Profile".
3. Select "Change User Data".
4. Adjust your username as desired.
5. Click "Save" to save your user details.

### 2 Change Password

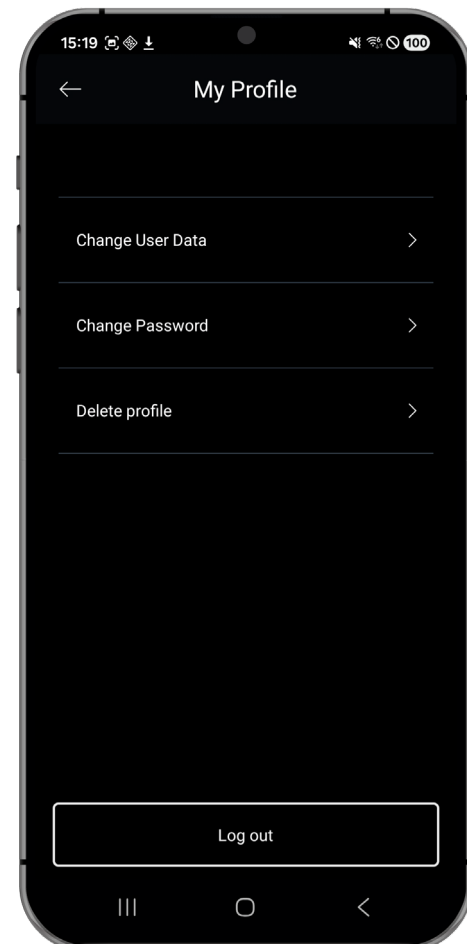
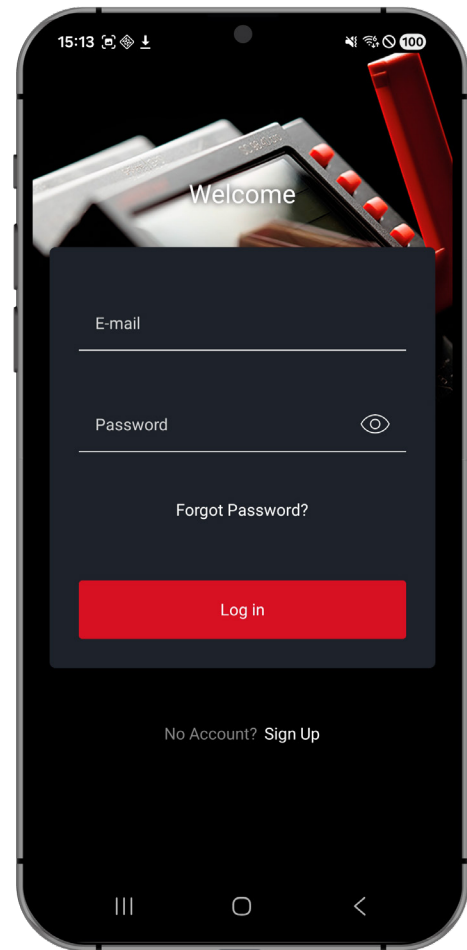
1. Open the side menu ☰ in the top left corner.
2. Click on your username or on "My Profile".
3. Select "Change Password".
4. Enter your current password.
5. Enter your new password and repeat the entry to confirm.
6. Click "Save" to apply the new password.

### 3 Delete Profile

1. Open the side menu ☰ in the top left corner.
2. Click on your username or on "My Profile".
3. Select "Delete profile".
4. Enter your current password.
5. Confirm by clicking "Delete" to permanently delete the profile.

### 4 Log out

1. Open the side menu ☰ in the top left corner.
2. Click on your username or on "My Profile".
3. Select "Delete profile".
4. Enter your current password.
5. Confirm by clicking "Delete" to permanently delete the profile.



## General

### 1 Change Language

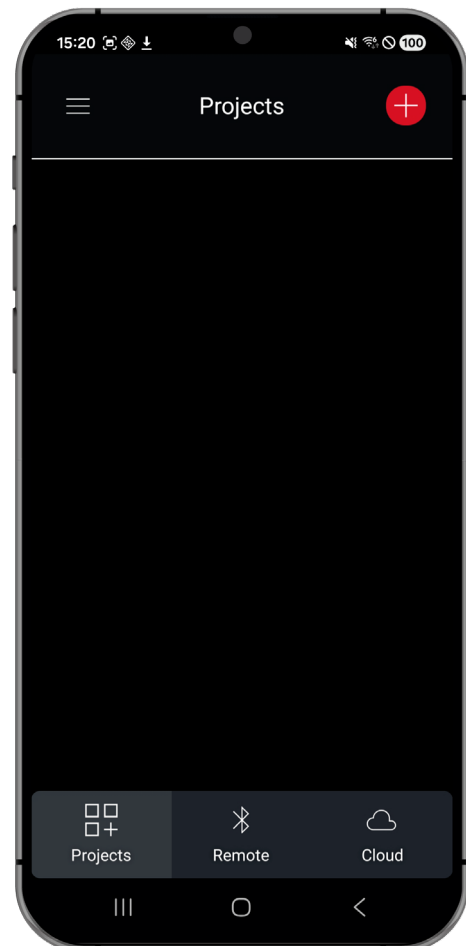
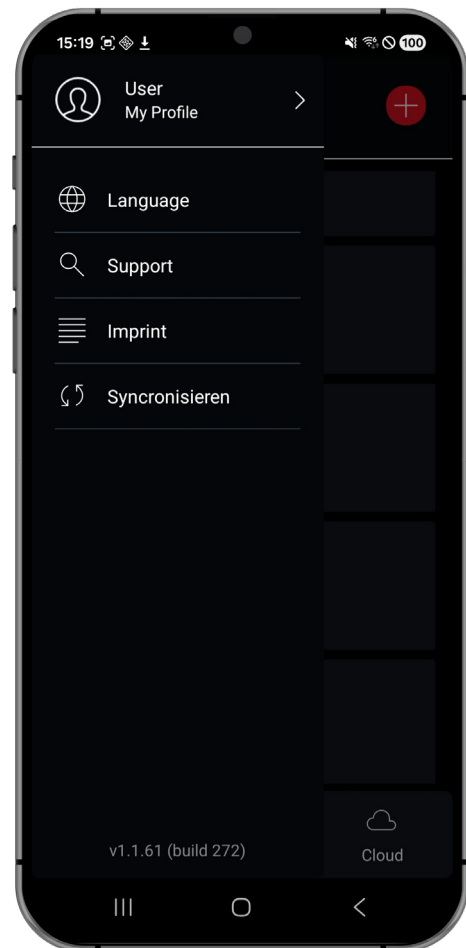
1. Open the side menu ☰ in the top left corner.
2. Click on "Language".
3. Select any language.
4. The app will close automatically.
5. When you reopen the app, it will be displayed in the selected language.

### 2 Synchronize

1. Open the side menu ☰ in the top left corner.
2. Click on "Synchronize".
3. Your projects will be matched with the database and synchronized.

### 3 Navigation

The app is divided into three sections. You can switch between the sections by selecting them via the bar at the bottom of the screen. The individual sections and their functions are explained on the following pages.




## 2. Projects


In the project area, projects can be created for different devices and switching times can be set. You then have the option to transfer your project with the saved switching times to different timers of the same device type.

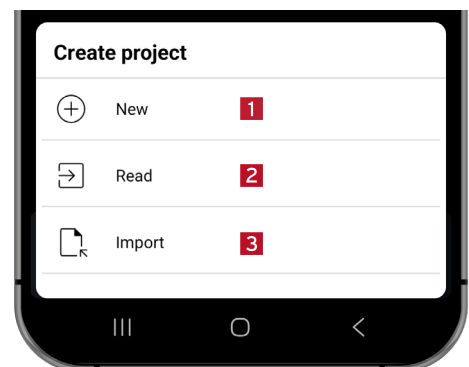
### Create a project

#### 1 Create a new Project

1. Click on the  icon in the top right corner.
2. Select "New" from the list.
3. Search for the identical device designation (e.g. SC 18.10 easy) of your timer. If needed, use the "Device selection" input field, the filter buttons below the search bar, or the filter function via the filter icon.
4. Click on the device designation to select it.
5. Give your project a name.
6. Optional: Add a description.
7. Select the appropriate settings.
8. Click "Create" to create your project.

#### 2 Read an Existing Project from the Device

1. Click on the  icon in the top right corner.
2. Select "Read" from the list.
3. Select the technology of your device (Bluetooth or NFC).
4. **Bluetooth (pro4):** Press the "OK" button on the timer until "BT" flashes on the display. In the app, select your device from the list under "Found devices".  
**NFC (easy):** Hold the smartphone against the device during the loading screen and wait until the smartphone recognizes the device.
5. Give your project a name.
6. Optional: Add a description.
7. Follow the menu and click "Create" to create your project.




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



NFC: Hold your smartphone with the NFC chip area at display level against the timer. Remove the phone case if necessary.

### 3 Import Project file


1. Click on the  icon in the top right corner.
2. Select "Import" from the list.
3. Then select a project from your saved files.
4. Give your project a name.
5. Click "Create" to create your project.

### 4 Add shared Project file

1. Open the message that contains the project file (e.g. in your email app or a messenger).
2. Tap on the project file (.snc\_prj or .db) to open it.
3. Select the "Save'n carry 2.0" app as the application to open the file.
4. Assign a project name and confirm by tapping "Create".

## Project Options

### 1 Change Project Name and Description

1. Click on a project in the project overview to open the project options.
2. Click on the  icon in the top right corner to adjust the project name and its description.
3. Click "Save" to apply your changes.

### 2 Edit Project

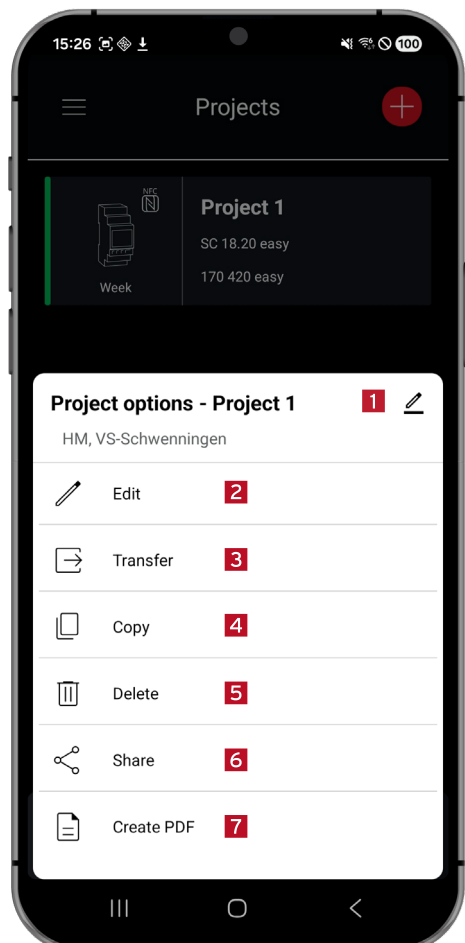
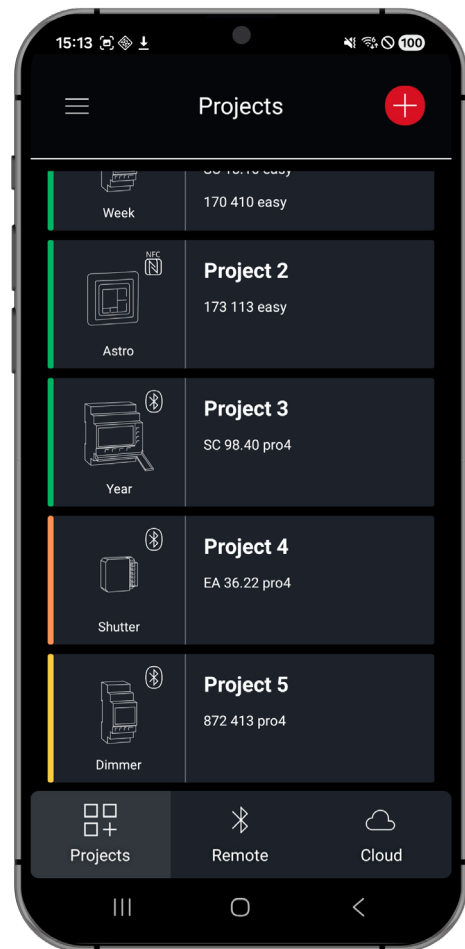
1. Click on a project in the project overview to open the project options.
2. Select „Edit“ to adjust the project, such as changing switching times.

### 3 Transfer Project to Timer

1. Click on your project in the project overview.
2. Select „Transfer“. The further steps are explained on page 23.

### 4 Copy Project

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



## 5 Delete Project

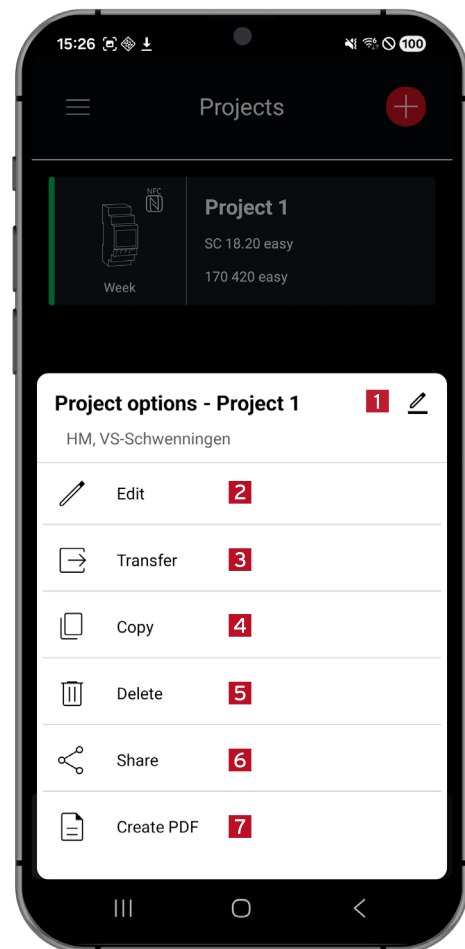
1. Click on your project in the project overview.
2. Select „Delete“. Confirm that you want to delete the project.

## 6 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.

## 7 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.



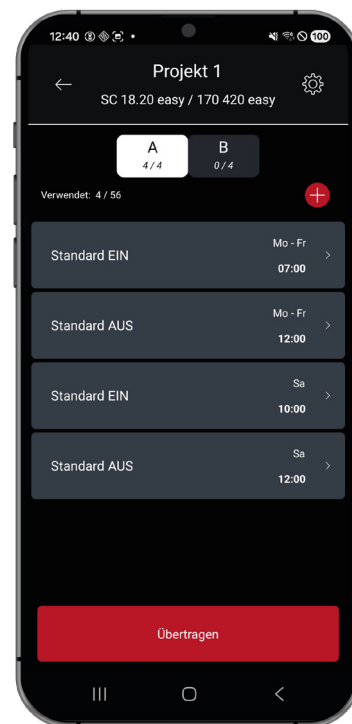
## Transfer Projects

### 1 Transfer Project to the Device

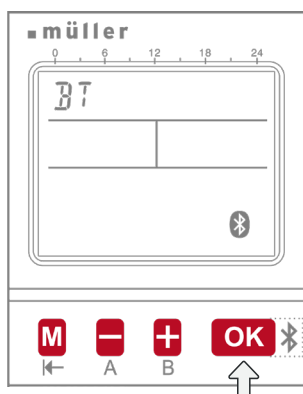
1. Click on or open the project that you want to transfer to the time switch.
  2. Select „Transfer“.
- **Bluetooth [pro4]**  
→ Follow the instructions under “Bluetooth transmission”.
  - **NFC [easy]**  
→ Follow the instructions under “NFC transmission”.

### Bluetooth transmission

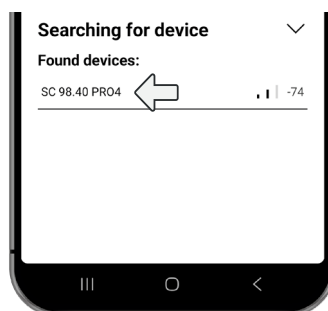
3. Press the „OK“ button or the button next to the Bluetooth symbol on your device, so that the Bluetooth symbol on the display starts blinking.
4. The device will appear in the app under „Searching for Device.“ Select the desired device from the list to connect and transfer the project.
5. On the device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



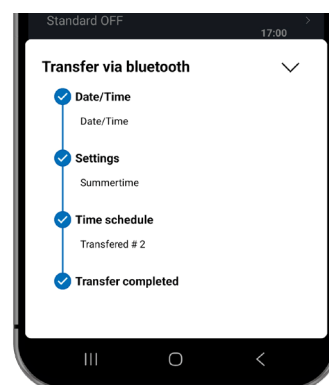
Please activate your location services and ensure that Bluetooth or NFC, depending on the technology used, is enabled.



1. Activate Bluetooth



2. Select Device



3. Data Transmission

### NFC Transmission

3. Hold the smartphone directly over the device display while searching for NFC devices, and after the NFC chip is detected, try not to move the smartphone until “Transfer complete” is displayed in the app.



**NFC:** Hold your smartphone with the NFC chip positioned at display level against the time switch. Remove the phone case if necessary.

## Project Settings

### 1 Open Project

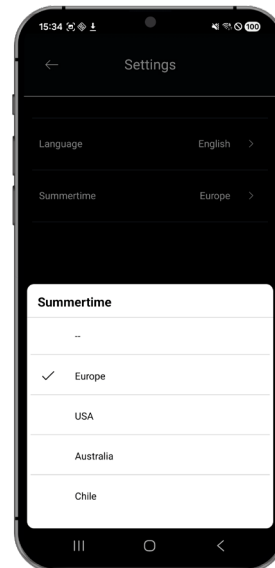
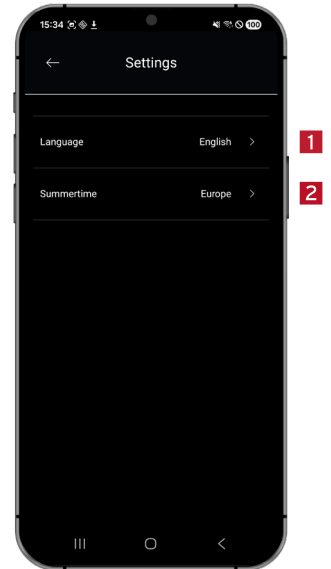
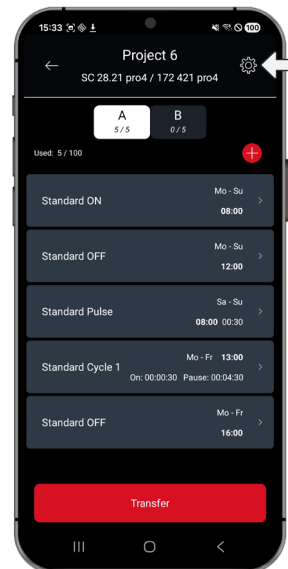
1. Click on your project in the project overview.
2. Select „Edit“ to open the switching program.

### 2 Adjust device 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 Set Summertime

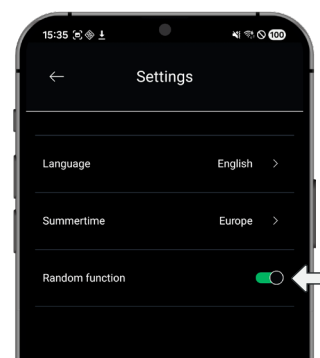
1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „Summertime.“
4. Select the desired summertime option to save it.



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

### 5 Enable Random Function

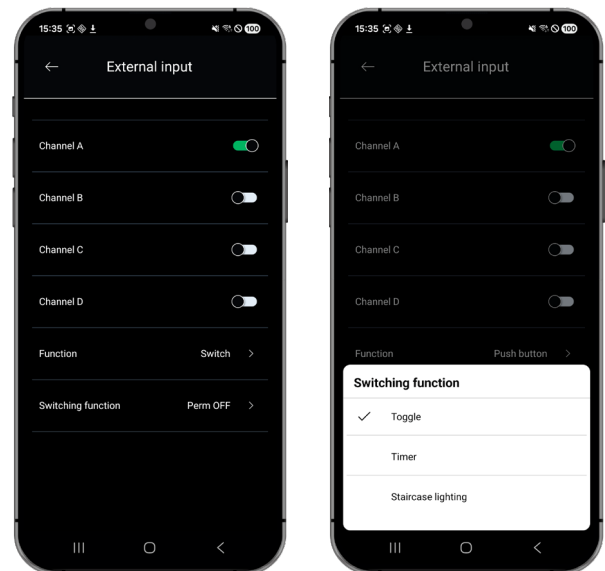
1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Activate the „Random Function“ slider (green = active) to randomly shift existing switching times, for example, to simulate presence.





## 5 Set 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 (green = active).
5. Choose the function type: „Push button“ or „Switch,“ depending on what is connected as the external input.
6. Select below what should happen when the push button or switch is actuated, e.g. PERM ON/OFF, stairwell lighting, timer, or changeover switch.



## 6 Channel Function

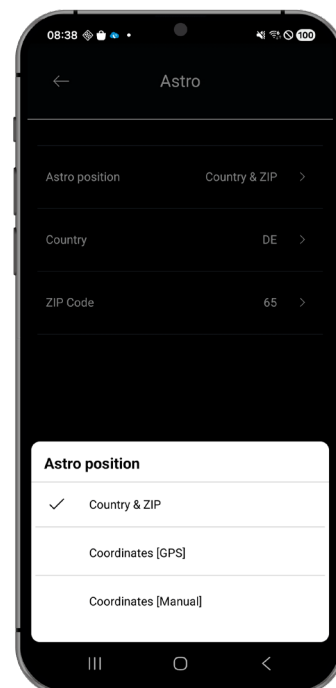
1. Open the project via „Edit.“
2. Click on the gear icon ⚙️ at the top right to open the settings.
3. Click on „Channel Function.“
4. Select for your channels whether you want to use weekly switching times for SC 44/88 (week), annual switching times for SC 98 (year), or astro switching times (astro).

i

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

## 7 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.




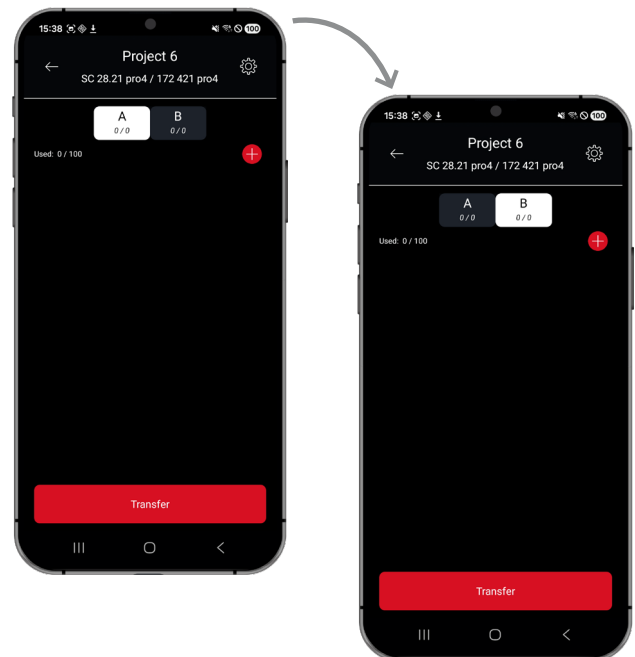
## Create Switching Times

### 1 Open Project


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

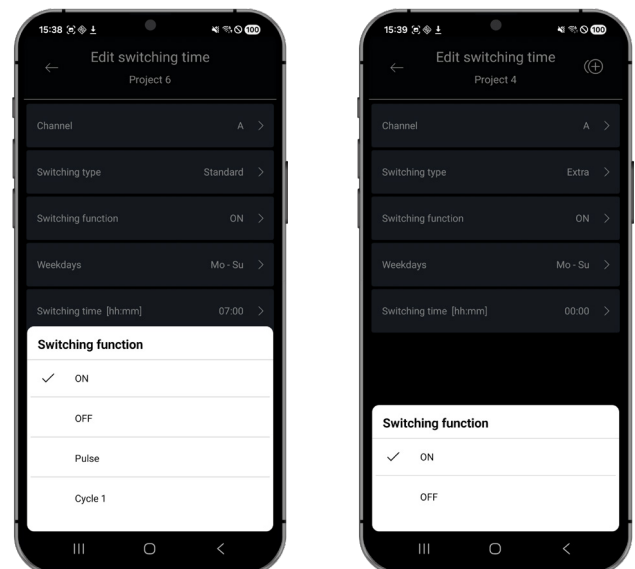
### 2 Create New Switching Time

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.



### 3 Switching Type: Standard / Extra

1. Open a project.
2. Click on the  icon.
3. Click on „Switching type“ in the second line and select „Standard“ or „Extra“ (for astro timers).
4. Select the desired switching function, e.g. ON, OFF, pulse, or cycle.
5. Click on „Weekdays“ to select the days of the week, e.g. Mo-Fr, and confirm your selection with „Save“.
6. Enter the switching time at which the switching function should be executed, e.g. 07:00.
7. Click on „Save“ to create the switching time.




Standard  
→ see page 13

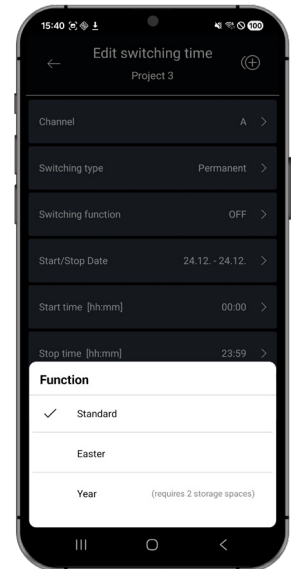
Extra  
→ see page 14

The following switching types depend on the timer type and are therefore not available on all timers. See the table on page 12.

#### 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. Select the desired switching function, e.g. ON or OFF.
5. Under "Start/Stop date," select the period in the calendar.
6. Under "Start time," enter the time on the start date at which the period should begin.
7. Under "Stop time," enter the time on the stop date at which the period should end.
8. For annual timers: Select a function (see page 15).
9. Click on "Save" to create the switching time.

→ More about Permanent on page 13.




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.

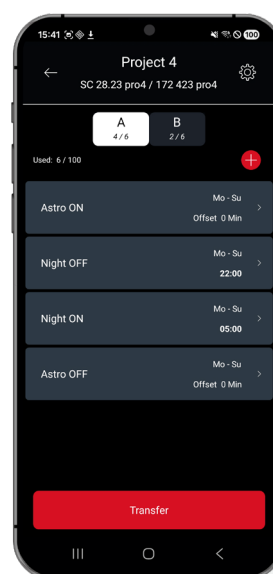
→ More about Extra on page 14.

#### 4 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. Select the desired switching function, e.g. ON, OFF, pulse or cycle.
5. Under "Start/Stop date," select the period in the calendar.
6. Under "Start time," enter the time on the start date at which the period should begin.
7. Under "Stop time," enter the time on the stop date at which the period should end.
8. For annual timers: Select a function (see page 15).
9. Click on "Save" to create the switching time.

#### 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 e.g. Astro ON, Night OFF, Night ON or Astro OFF.
5. Click on "Weekdays" to select the days of the week, e.g. Mo-Fr, and confirm your selection with "Save".
6. Optional: Enter an offset.
7. Click on "Save" to create the switching time.



i

The offset (time shift) can be set between -90 and +90 minutes. Negative values mean that the switching time is before sunrise or sunset, positive values after.

→ More about Astro on page 16.

## 7 Switching Function: Pulse

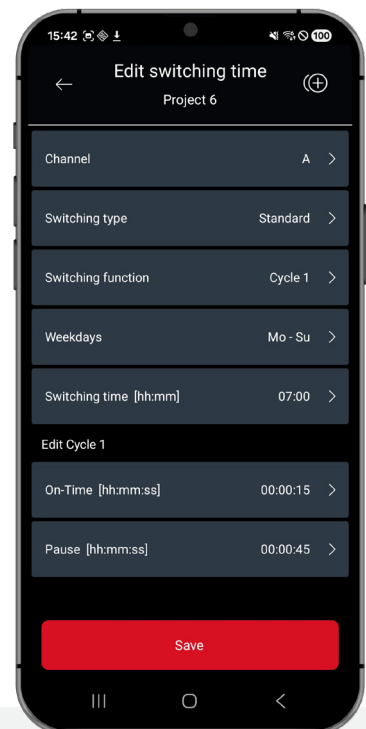
1. Open a project.
2. Click on the **+** icon.
3. Click on "Switching Type" in the second row and select Standard, Extra, or SP.
4. Choose the switching function "Pulse".
5. Enter the other values according to your switching type
6. Specify the switching time at which the pulse should occur.
7. Enter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

## 8 Switching function: Cycle

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. Select the desired cycle (cycle 1–4) under switching function.
5. Enter the remaining values according to your switching type.
6. Enter the switching time at which the cycle should be executed.
7. Define your cycle by setting an ON time and a pause time.
8. Click on "Save" to create the cycle switching time.

i

The pulse switching time does not require an OFF switching time and can be set in seconds. If you select a pulse of 5 minutes, the time switch will automatically switch OFF after 5 minutes. Pulse times are often used for: doorbell, door/gate control, etc.



i

Create a switching time to use the cycle, a cyclically repeating switching time, e.g. 15 min ON / 45 min pause / 15 min ON ...

i

If a cycle (e.g. cycle 1) is changed in one switching time, it will also be updated in all other switching times in which the same cycle is used.

## 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

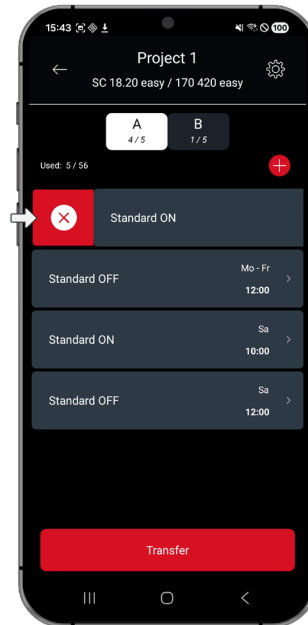
1. Open a project.
2. Swipe the switching time you want to delete to the right.
3. Click on the "x" to permanently remove the switching time.

### 3 Multi Delete of Switching Times

1. Open a project.
2. Press and hold the switching time you want to delete.
3. Select additional switching times you want to delete, either individually or by using the parent circle to select all.
4. Click „Delete“ to remove the selected switching times.
5. Confirm the deletion again by clicking "Delete."

### 4 Duplicate Switching Times

1. Open a project.
2. Press and hold the switching time you want to duplicate.
3. Select additional switching times you want to duplicate, either individually or by using the parent circle to select all.
4. In the top bar, select the channel into which you want to insert the selected switching times.
5. Click „Duplicate“ to duplicate the selected switching times.



i

If you have activated the multiple selection, you can exit it by clicking "Cancel".

i

When duplicating and deleting, switching times can be added to the selection across channels.

i

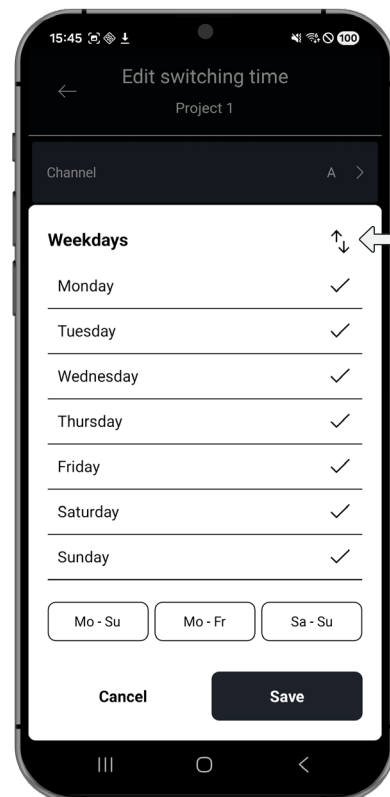
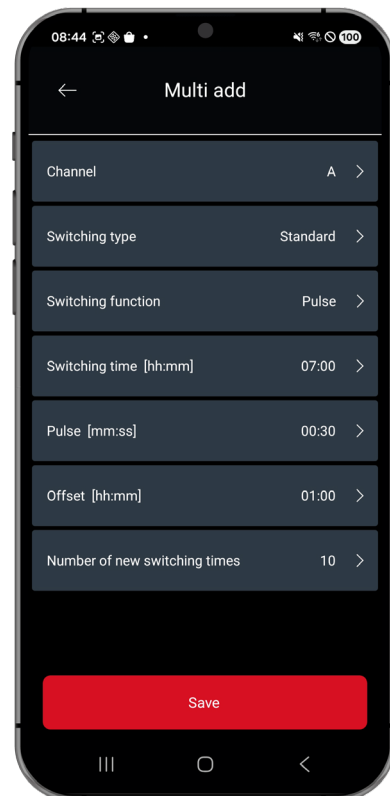
Astro switching times cannot be duplicated!

## 5 Multiple add

1. Open a project.
2. Click on the **+** icon.
3. Then click the „**⊕**“ icon in the top right for multiple create.
4. Make your desired settings by clicking the listed fields and selecting your options.
5. Click “Save” to create the switching time.

## 6 Invert function – weekday selection

1. Open a project.
2. Click on the switching time you want to edit.
3. Click on “Weekdays” to select the days of the week.
4. Click the „**↕**“ icon to invert the selection
5. Then click “Save” to apply the adjusted weekdays.




## 3. Remote

In the remote area, you have the option to connect to your pro4 devices via Bluetooth.

You can manually control your devices and adjust their switching times and settings.

### Time Switches


#### 1 Use Device in Remote

1. Switch to the remote area.
2. Click on the  icon in the top right.
3. Press the "OK" button on the time switch until "BT" flashes on the display.
4. Select your device in the app from the list under "Found devices".
5. Once the connection is successful, "Connected" will briefly appear on the device display.
6. Then switch in the app to the remote view of the connected device.


#### 2 Control the Device via Remote

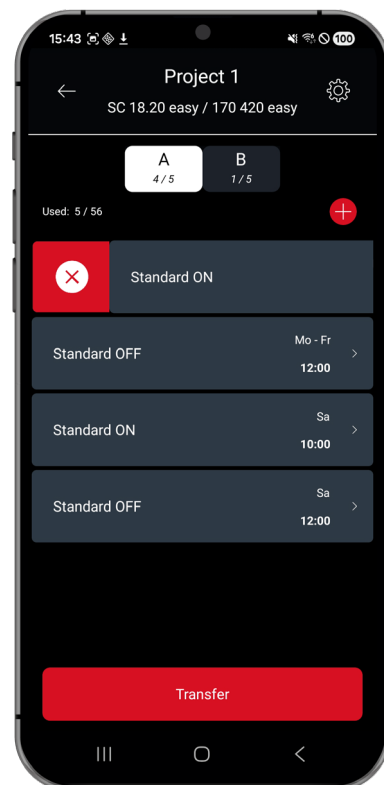
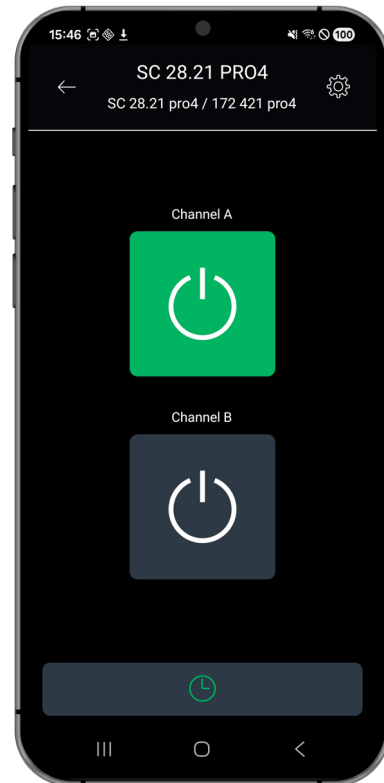
1. Follow step 1 to connect the device.
2. You can use the ON/OFF buttons to switch the device on or off.  
Further applications can be found from page 49 onwards.

#### 3 Adjust Settings via Remote

1. Follow step 1 to connect the device.
2. Click the gear icon  in the top right to open the settings and adjust them. More information on the settings can be found on page 24.

#### 4 Adjust Switching Program via Remote

1. Follow step 1 to connect the device.
2. Click the  icon to open the switching times.
3. Edit the switching times as required.
4. Click "Transfer" to transfer the changes to your device.

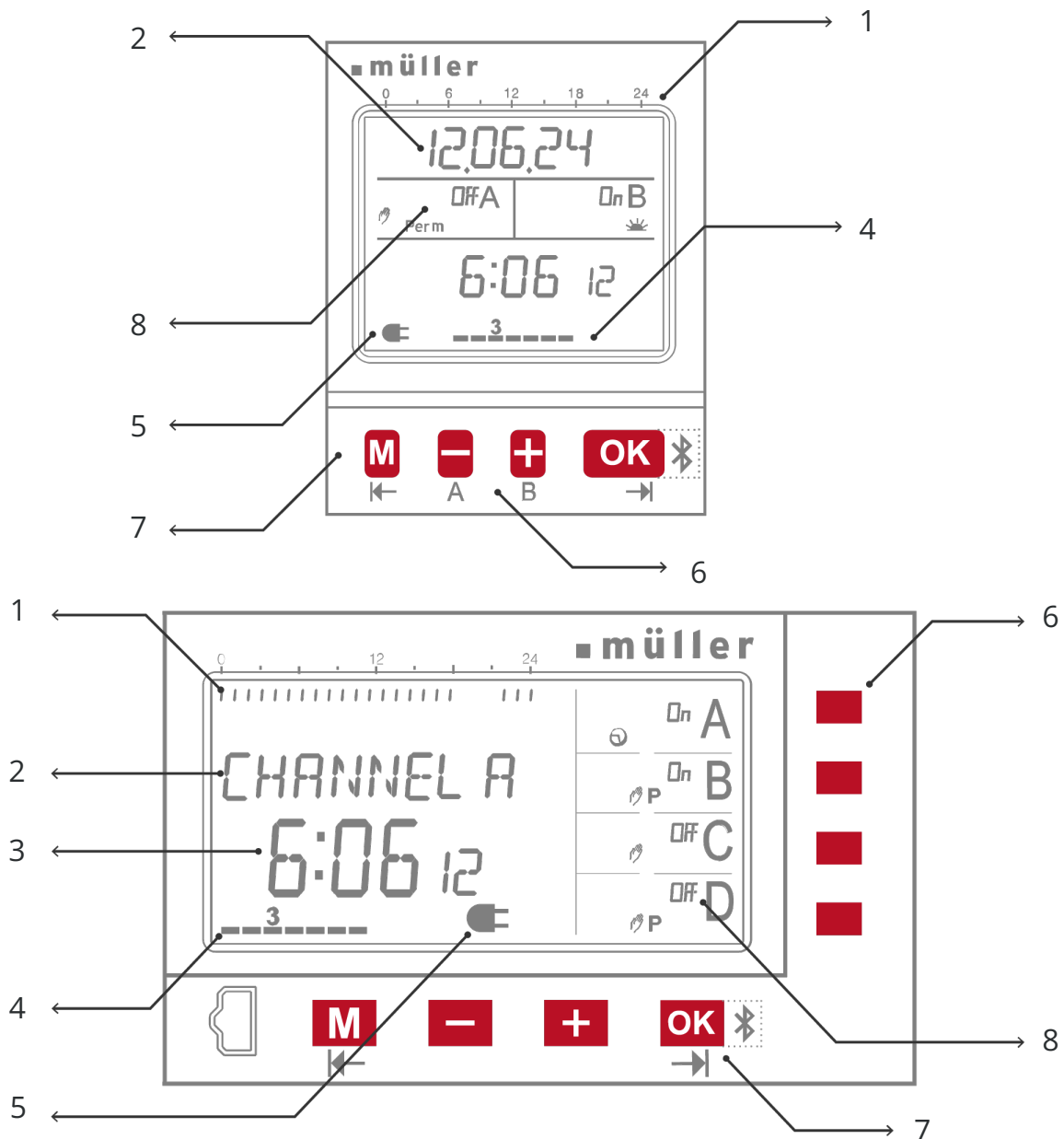


i

The project settings are automatically saved and transferred to the device.

# 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.



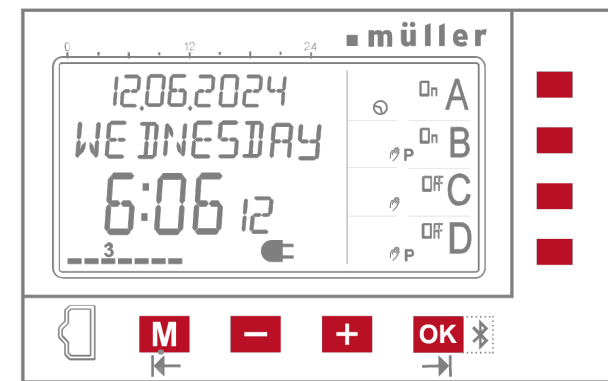
## Control buttons

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

## Symbol Explanation

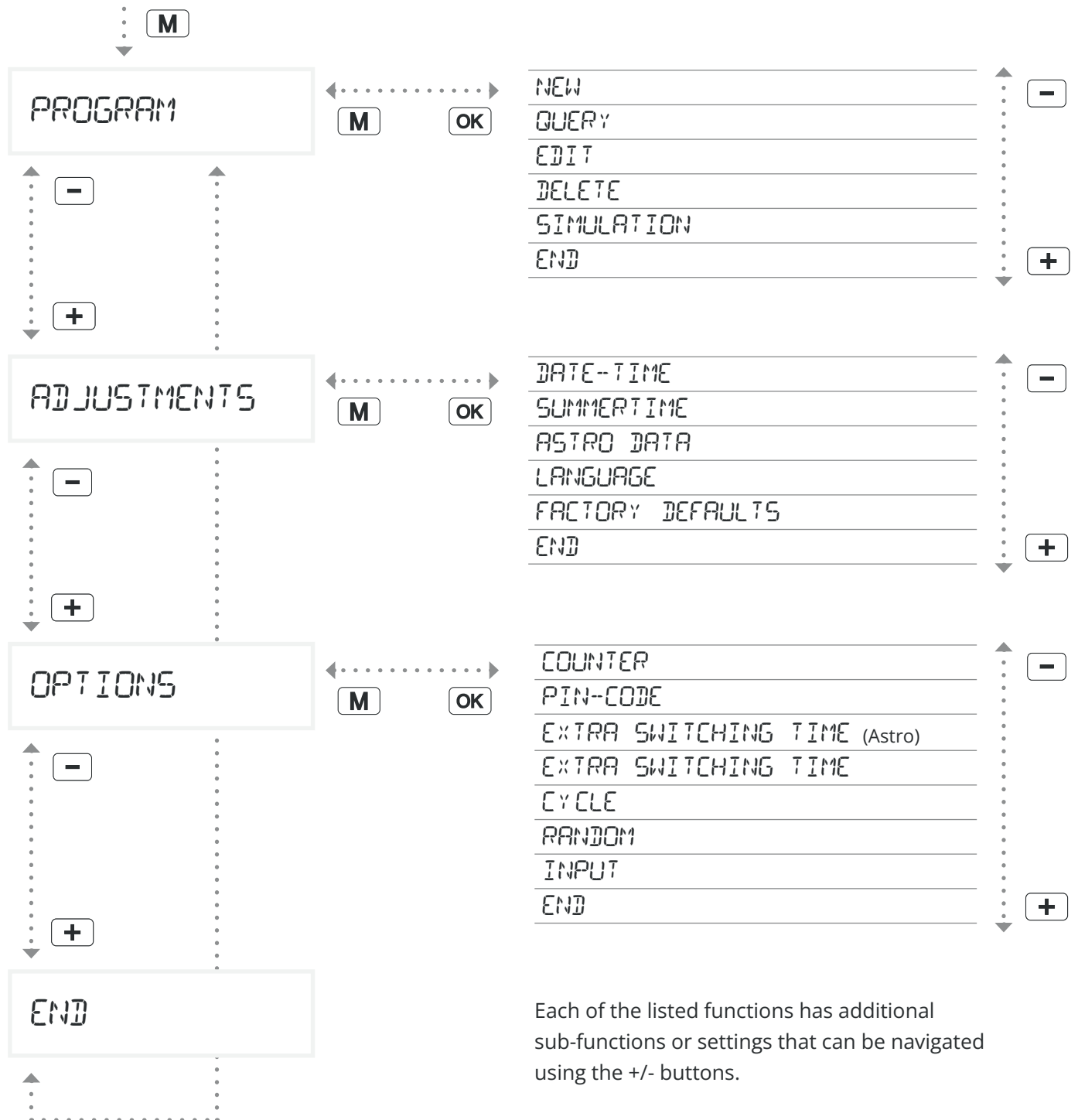
	<b>Channel is ON / Programming ON.</b> A short press of the channel button turns the channel on/off.
	<b>Channel is OFF / Programming OFF.</b> A short press of the channel button turns the channel on/off.
	<b>Days of the Week Mo (1) - Su (7).</b> In programming mode, underscores indicate which days of the week are activated. The current day is displayed on the start screen, e.g., 5 = Friday.
	<b>Current Switching State Based on a Programmed Standard Switching Time. (See page 13).</b>
	<b>Current Switching State Based on Manual Program Switching.</b> Changed by the stored program at the next switching time.
	<b>Current Switching State Based on Manual Switching and Remains Permanent Until Manually Reset.</b> Manual activation or reset by pressing the channel button for 3 seconds.
	<b>Current Switching State Based on a Permanent Switching Time Stored in the Switching Program.</b> Deactivated when the period of the stored permanent program has ended.
	<b>Current Switching State Based on Pulse Switching Time.</b>
	<b>Current Switching State Based on Cycle Switching Time (Timer Function).</b>
	<b>Current Switching State Based on Astro Times (Sunset or Sunrise) with Possible Programmed Offset.</b>
	<b>Displayed When „External Input“ is Activated.</b>
	<b>Displayed When „Delete Program“ is Selected.</b>
	<b>DCF / GPS: The switching computer receives the time signal via the radio receiver.</b>
	<b>Timer is Locked with PIN; PIN Entry Required.</b>
	<b>Switching Program / Switching Time with Easter Function Active.</b> 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.



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

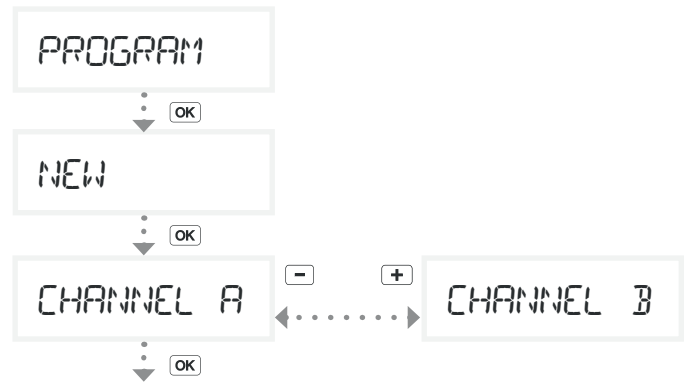
- + **Counter:** Counts the on-time duration and the number of switchings per channel, as well as the total time connected to the network.
- + **PIN-Code:** The timer can be locked with a PIN code to prevent unauthorized access.
- + **Extra Switching Time (Astro):** Enable (yes) or disable (no) extra 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 Time Switch

## 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.

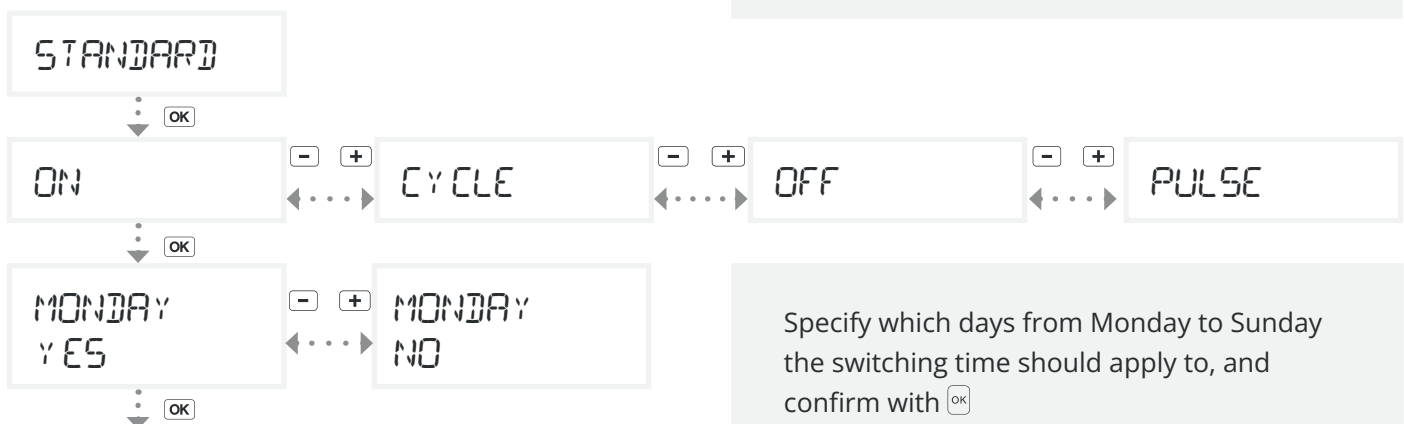
→ More about Standard Switching Time on page 13.

→ More about Extra Switching Time on page 16.  
Extra must be activated, see page 47.

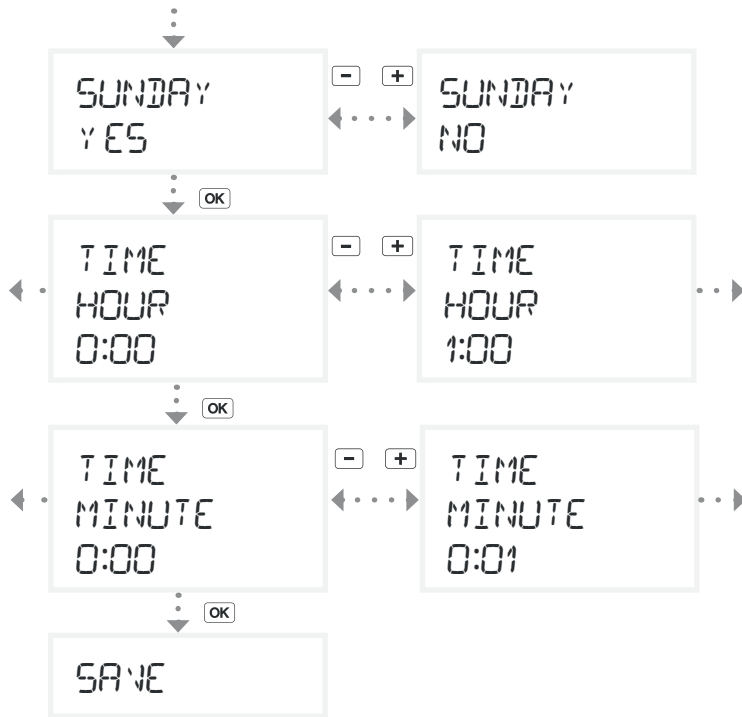
i

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

**1 2 3 4 5 6 7**



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  $\square$  or  $\square$ .

### 3 Create Permanent Switching Time

1. Follow the steps in point 1
2. Switch between programs: Press  $\square$  /  $\square$ , until the program "Permanent" is displayed.
3. Select switching function: Choose the desired switching function (On / Off) with  $\square$  /  $\square$ .
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 15) and confirm your selection.
6. The switching time will be saved.

→ More about the permanent switching time on page 13.



i

Only for Yearly Timers

FUNCTION  
YEAR

FUNCTION  
STANDARD

FUNCTION  
EASTER

SAVE

#### 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 15) and confirm your selection.
6. 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 47.

→ More about extra switching time on page 14.

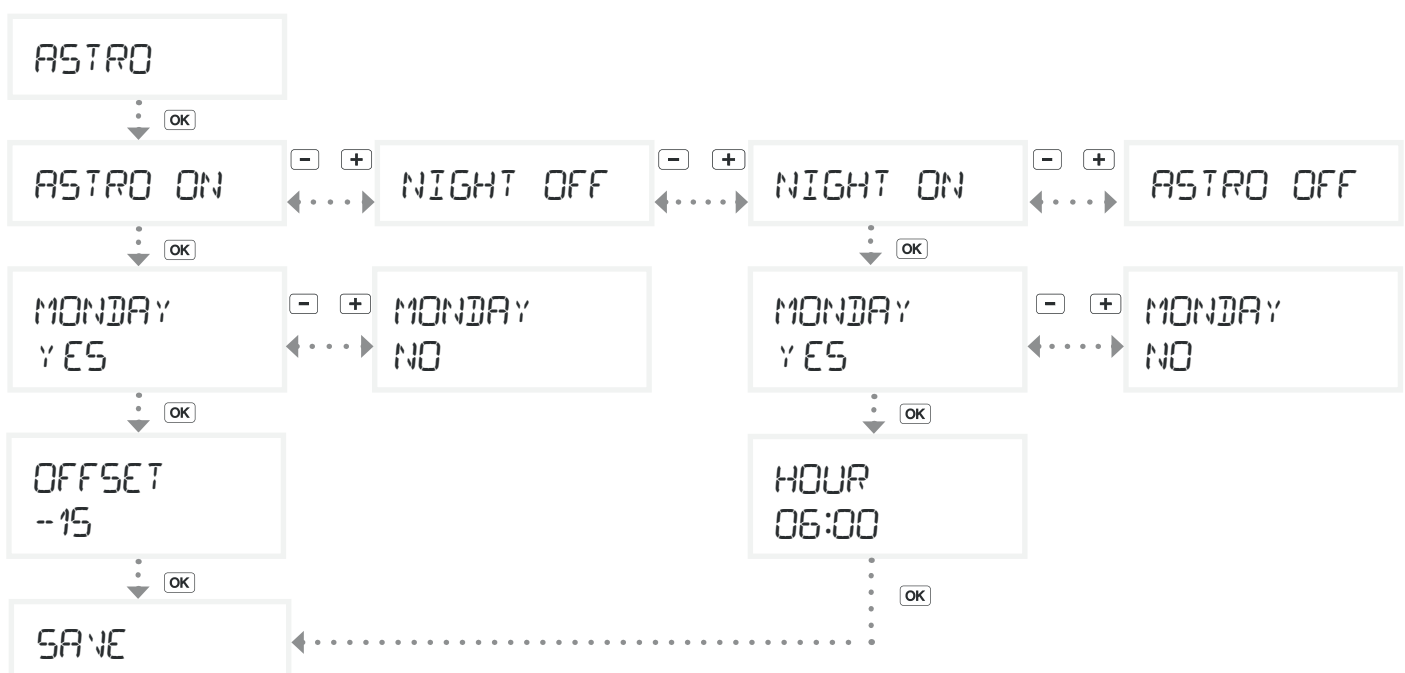
#### 5 Create Astro Switching Time

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

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 44.

→ More about Astro switching time on page 16.



## 6 Create Special Program

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

→ More about Special Program on page 15.

## 7 Activate Special Program

1. Follow the steps in point **1**
2. Switch between programs: Press  /  until "Special Program" is displayed.
3. Select special program: Press  /  to choose Special Program (SP) 1 to 10.
4. Switch to "Activation" with  /  and confirm with .
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 pageSeite 15).
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  / , until Standard, Additional, or Special Program is displayed.
3. Select switching function: Choose "Pulse" with  / .
4. Set days of the week: Choose the days for which the switching time applies by selecting "Yes".
  - Switch between "Yes" and "No" with  / .
5. Set time: Enter the time by adjusting the blinking positions.
6. Set pulse duration: Enter the minute with  /  and the seconds.
7. The switching time will be saved.



## 9 Create Cycle Switching Time (see page 13)

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 47.

## Additional Program Options

### 1 Query Program

1. Switch to input mode with  $\square$ .
2. On the display, select "Program" and confirm with  $\square$ .
3. Press  $\square / \square$  until "Program Query" is displayed and confirm with  $\square$ .
4. The number of total available memory slots will be shown.
  - Use  $\square$  to check the number of used memory slots for each channel. Switch between channels with  $\square / \square$ .
5. Display Switching Times: To get more detailed information about a channel, press  $\square$  on any channel.
  - Use  $\square / \square$  to select the desired switching type or choose "All" to query all switching times of the channel and confirm with  $\square$ .
  - You can now use  $\square / \square$  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 **[OK]** on the switching time you want to adjust to enter edit mode.
  - Use **[−] / [+]** to make the desired adjustments. Confirm each adjustment with **[OK]** until "SAVE" is displayed.
7. The modified switching time will be saved.

## 3 Delete Program

1. Switch to input mode with **[M]**.
2. On the display, select "Program" and confirm with **[OK]**.
3. Press **[−] / [+]** until "Delete Program" is displayed and confirm with **[OK]**.









### Delete All Switching Times of a Channel

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





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

- Select a channel with **[OK]** 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 **[OK]** when "(Switching Type) Delete All" is displayed.
- Confirm again with **[OK]**.












### 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

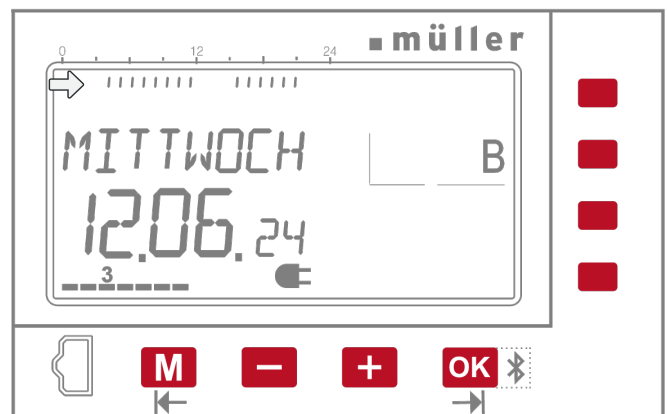
- Switch through the channels with  /  until "Delete All" is displayed at the end.
- Press .
- Confirm again with .

## 4 Simulate Program

1. Switch to input mode with .
2. On the display, select "Program" and confirm with .
3. Press  /  until "Simulation" is displayed and confirm with .
4. A channel and the number of stored switching times will be displayed. Use  /  to scroll through the channels and select a channel with .
5. Simulate Date: Enter the date by adjusting the blinking positions and confirm each with .
  - 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

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



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.

## 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  $\square$ .
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 10).

FACTORY DEFAULTS

## 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 39).

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 41).

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 39).

## 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 .



# Universal Control

## EA 36.22 pro4

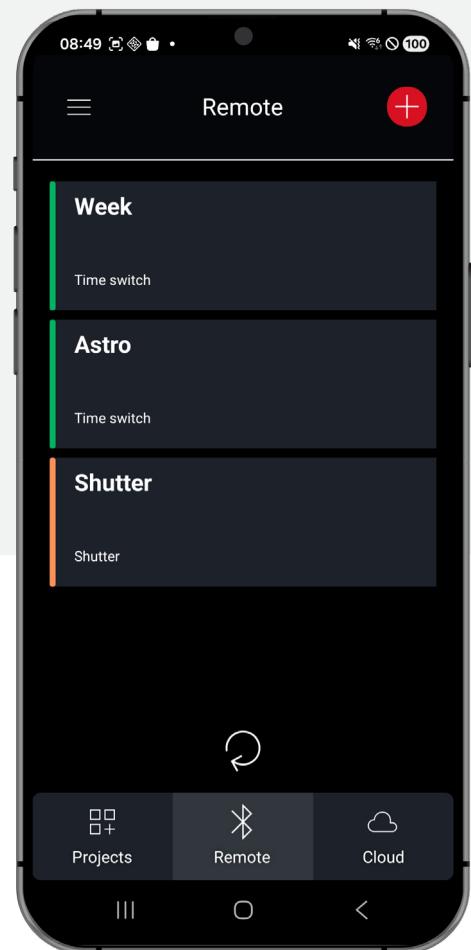
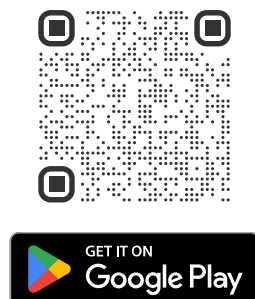
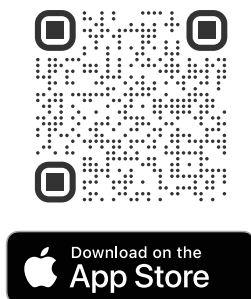
The EA 36.22 pro4 is a versatile device that can be used both as a timer (for weekly and astronomical programs) and as a shutter. The device is designed for flush mounting, allowing it to blend seamlessly into various applications.

### Programming

The EA 36.22 pro4 is programmed via the Save'n carry 2.0 smartphone app.

In the Remote area, the product can be configured and set up directly. The device is then displayed in the overview, allowing direct access so that it can be controlled immediately and settings can be adjusted right away.

Using the Project area of the app, switching programs can be read out, created, edited, and then transferred to the device.



### 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.

# Remote

## 1 Adding a Device in Remote Mode

1. Switch to Remote.
2. Click on the  in the top right.
3. Select your EA 36.22 pro4 from the list under "Found Devices."
4. Select your desired device type.
5. Then continue with Step 1 in Weekly Timer (page 51), Astro Timer (page 52) or Shutter (page 53).

## 2 Displaying Devices in Remote


To display devices permanently in the Remote section, they must be fully set up.

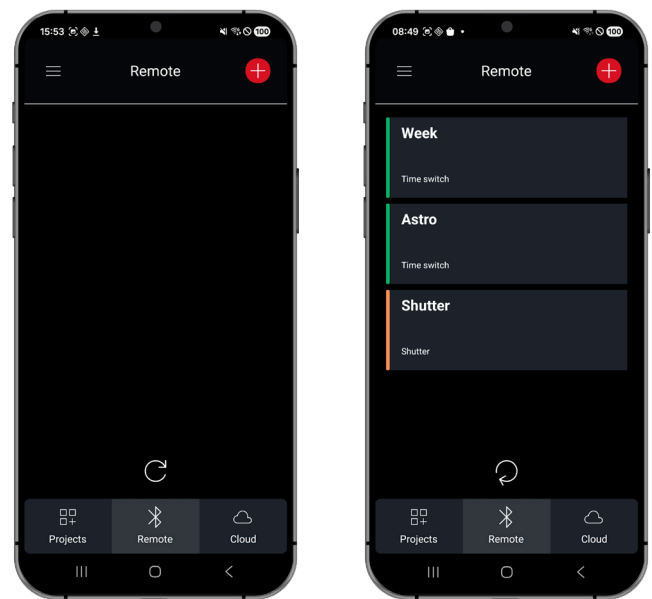
After successful setup, your device will appear in the overview with the assigned device name.

## 3 Deleting Devices in the Remote

1. In the overview, swipe the desired device to the right until an "X" appears.
2. Click the "X."
3. Confirm by tapping "Delete" to remove the device.

## 4 Adding Deleted / Configured Devices

1. Click on the  in the top right.
2. Select your configured EA 36.22 pro4 from the list under "Found Devices."
3. Enter your PIN code.
4. The device is now added again and ready for use.



### i

When deleting the device, it remains fully configured and continues to execute the specified switching times.

If you want to completely reset the device, you must restore it to the factory settings (see page 56).

### i

In the same way, other users can also access the device. To do so, they must receive the device PIN in order to add the product to their own app.

## Weekly Timer

### 1 Adding a Weekly Timer

1. Select the device type “Weekly Timer” and tap “Next”.
2. Assign a device name, any device number, and a PIN code, then confirm with “Next”.
3. Select the appropriate daylight saving time setting.
4. Tap “Create” to create the device.

### 2 Manually Controlling the Weekly Timer

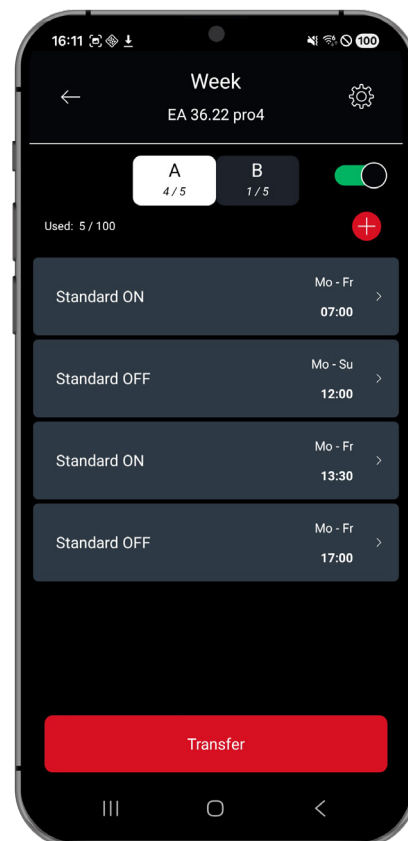
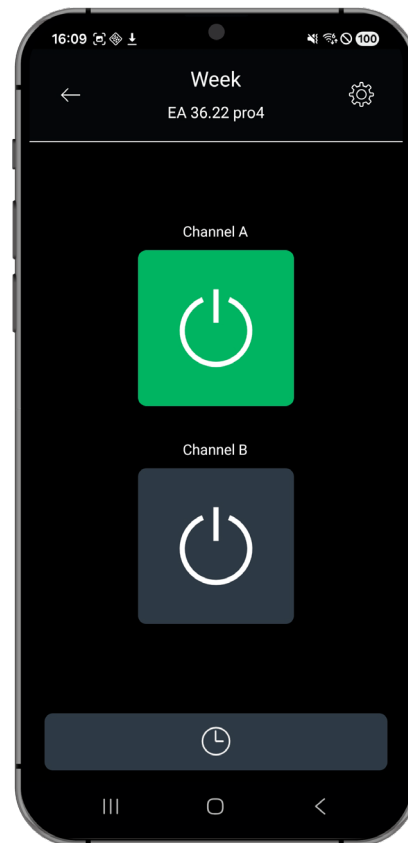
1. Select your device by tapping it in the Remote section.
2. Tap the desired channel button to manually switch it ON or OFF.

### 3 Adjusting Switching Times

1. Select your device by tapping it in the Remote section.
2. Click on the “⌚” icon.
3. The switching program is inactive by default. Activate it using the toggle switch.
4. Add the desired switching times.  
If you need further assistance, additional information can be found from page 29 onwards.
5. Tap “Transfer” to send the switching times to your device.

### 4 Settings for Weekly Timer

- Summertime page 24
- Random function page 24
- External Input page 25



## Astro Timer

### 1 Adding an Astro Timer

1. Select the device type "Astro Timer" and tap "Next".
2. Assign a device name, any device number, and a PIN code, then confirm with "Next".
3. Select the appropriate daylight saving time setting and tap "Next" again.
4. Enter your astro position manually or select "GPS" to determine the position automatically. Confirm with "Next".
5. Tap "Create" to create the device.

### 2 Manually Controlling the Astro Timer

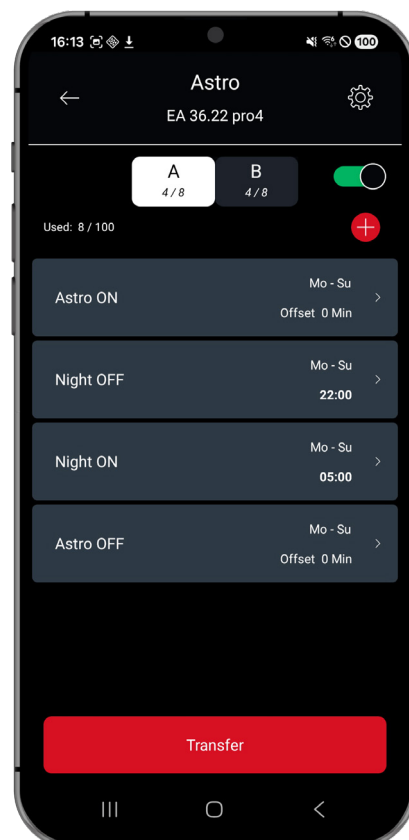
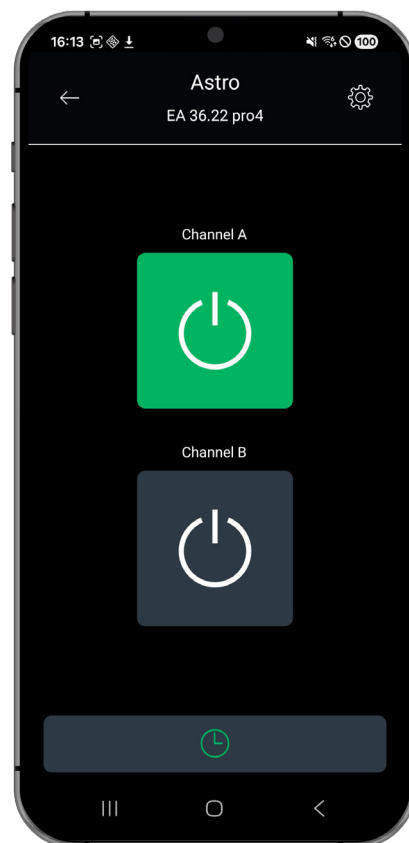
1. Select your device by tapping it in the Remote section.
2. Tap the desired channel button to manually switch it ON or OFF.

### 3 Adjusting Switching Times

1. Select your device by clicking on it in the Remote list.
2. Click on the "⌚" icon.
3. The switching program is inactive by default. Activate it using the toggle switch.
4. Add the desired switching times.  
If you need further assistance, additional information can be found from page 26
5. Tap "Transfer" to send the switching times to your device.

### 4 Settings for Astro Timer

- Summertime page 24
- Astro page 25
- External Input page 25



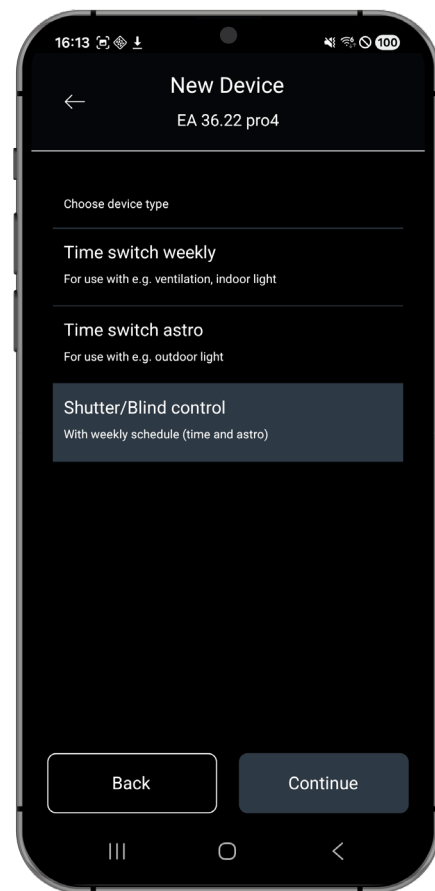
## Shutter

### 1 Adding a Shutter Controller

1. Select the device type "Shutter/Blind control" and tap "Next".
2. Assign a device name, any device number, and a PIN code, then confirm with "Next".
3. Select the appropriate daylight saving time setting and tap "Next" again.
4. Enter your astro position manually or select "GPS" to determine the position automatically. Confirm with "Next".
5. Set the lockout times during which the shutter should not operate. You can use the existing presets for this.
6. Tap "Create" to create the device.

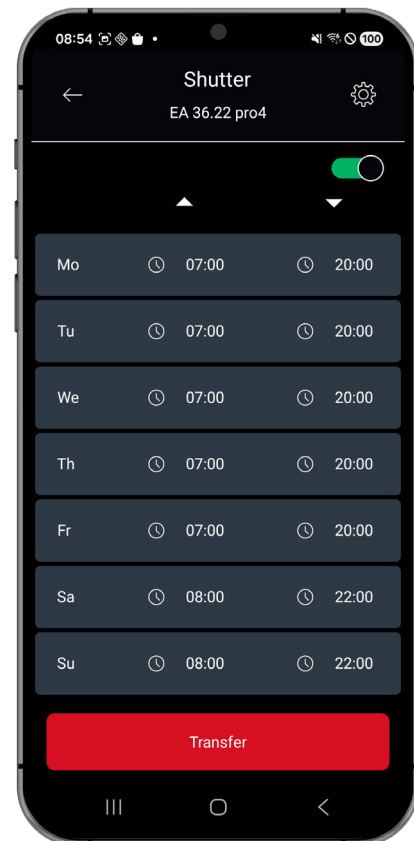
### 2 Manually Controlling the Shutter Control

1. Select your device by clicking on it in the Remote list.
2. Control the shutter manually by
  - clicking the upper arrow to raise it and
  - clicking the lower arrow to lower it.
3. The roller shutter runs for the duration specified by the set runtime.
4. Pressing an arrow again interrupts the runtime.



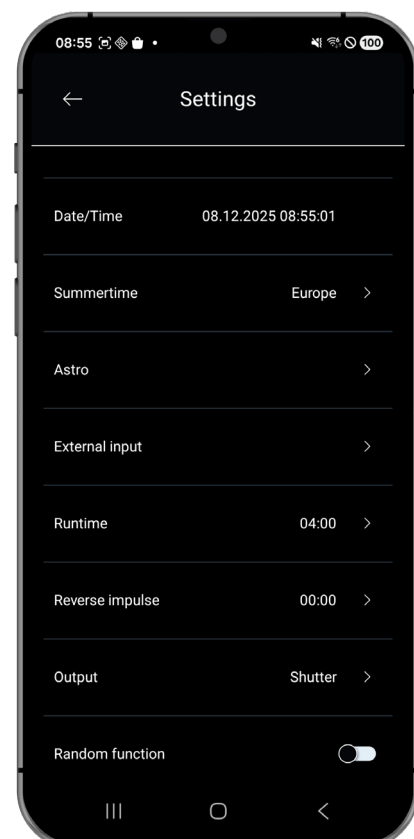
### 3 Adjusting Switching Times

1. Select your device by clicking on it in the Remote list.
2. Click on the “⌚” icon.
3. The switching program is inactive by default. Activate it using the toggle switch.
4. Click on a row or a weekday and on the corresponding column for raising or lowering (see arrows).
5. If necessary, adjust the weekdays to which the new switching time should apply and confirm with “Save”.
6. Select the function:  
**Time:** At a fixed time  
**Astro:** At sunrise or sunset with offset  
**None:** The roller shutter does not move
7. Enter the desired time or, for the Astro function, the offset, and click “Save” to apply the entry.
8. Click “Transfer” to send the switching times to your device.



### 4 Adjusting the Runtime

1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select “Settings”.
4. Click on “Runtime”.
5. Adjust the runtime either using the slider or the +/- icons.
6. Confirm the changes by clicking “Save”.



### 5 Adjusting the Reverse impulse

1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select “Settings”.
4. Click on “Reverse impulse”.
5. Adjust the reverse impulse either using the slider or the +/- icons.
6. Confirm the changes by clicking “Save”.

## 6 Change between Shutter / Blinds

1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select "Settings".
4. Click on "Output".
5. Choose between Shutter and Blinds.

## 7 Settings for Shutter / Blind control

- Summertime page 24
- Astro page 25
- External Input page 25
- Random function page 24

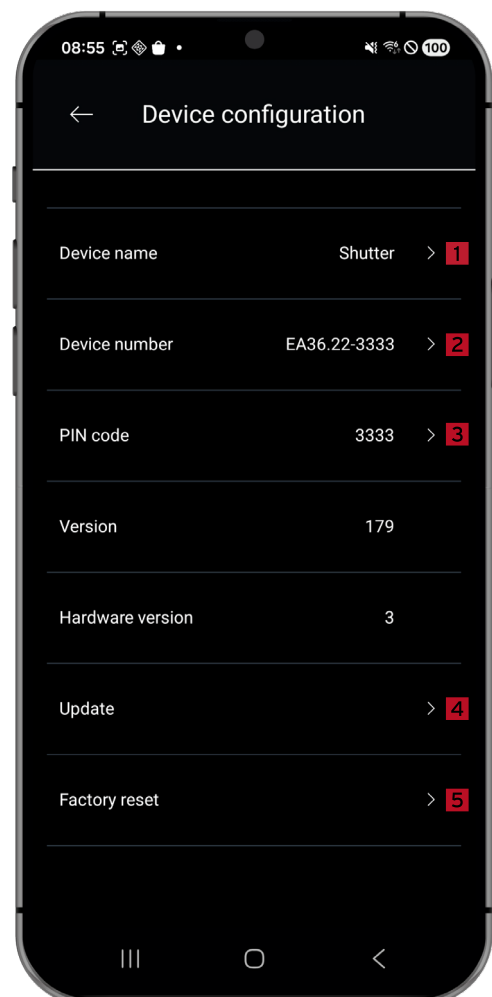
## Device configuration

### 1 Adjusting Device name

1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select "Device configuration".
4. Click on "Device name".
5. Enter the desired name or change it as required.
6. Confirm the changes by clicking "Save".

### 2 Adjusting Device number

1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select "Device configuration".
4. Click on "Device number".
5. Enter the desired number or change it as required.
6. Confirm the changes by clicking "Save".



### 3 Adjusting PIN-Code

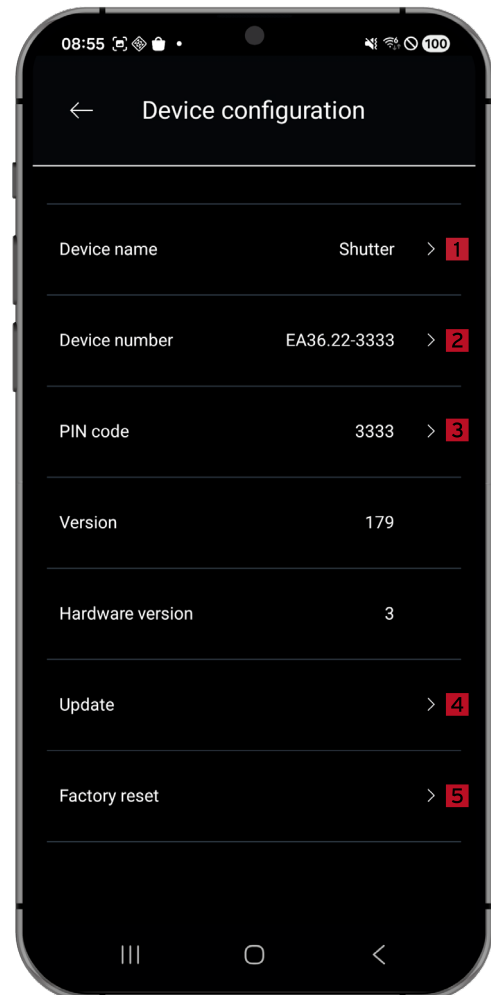
1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select "Device configuration".
4. Click on "PIN code".
5. Enter the desired PIN code.
6. Confirm the changes by clicking "OK".

### 4 Updating devices

1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select "Device configuration".
4. Click on "Update".
5. If no update is available, you can close the window by clicking "OK".
6. If an update is available, click "Install".
7. Wait until the update has been fully completed.

### 5 Reset device to factory settings

1. Connect to a device in the Remote section.
2. Click the gear icon ⚙️ in the top right to open the settings.
3. Select "Device configuration".
4. Click on "Factory reset".
5. Select "Reset" to restore the device to factory settings.
4. After the process, you will be disconnected from the device and returned to the Remote overview.
5. The device will then appear as unconfigured and can be added and set up again.





# 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 16
- Setting switching time in the app on page 27
- Setting switching time on the device on page 39

### Permanent

- Explanation of the switching type on page 13
- Setting switching time in the app on page 27
- Setting switching time on the device on page 38

### Extra

- Explanation of the switching type on page 16
- Setting switching time in the app page 26
- Setting switching time on the device on page 37

# 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 on "Save" to apply the value.

## 2 Activate Memory Function

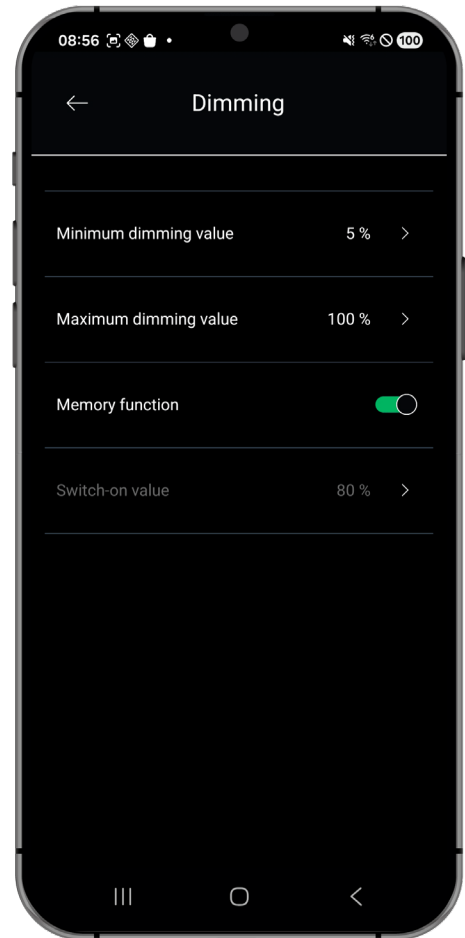
1. Click on the gear icon ⚙️ to access the settings.
2. Click on the "Dimming" field.
3. Activate the slider in the "Memory Function" field to enable it.
4. When turned on, the last used dimming value will be applied.

## 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 dimming value using the slider or the -/+ symbols.
5. Click on "Save" 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.



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 Switch

## 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

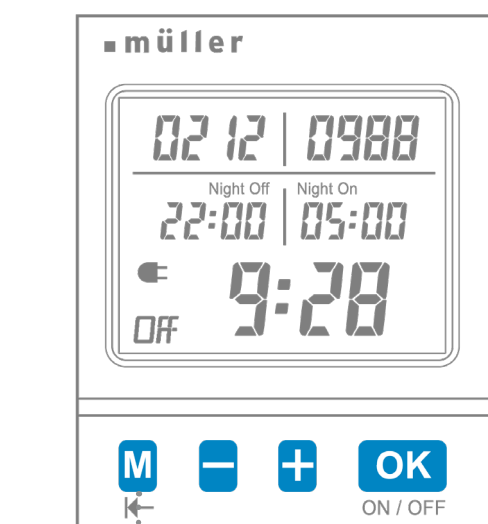
The sensor connected to the twilight switch measures the brightness. If the measured value falls below the threshold set in the twilight switch, the light will turn on. Example: The sensor detects a brightness value below the threshold of 100 lux - the twilight switch turns ON.

### 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.

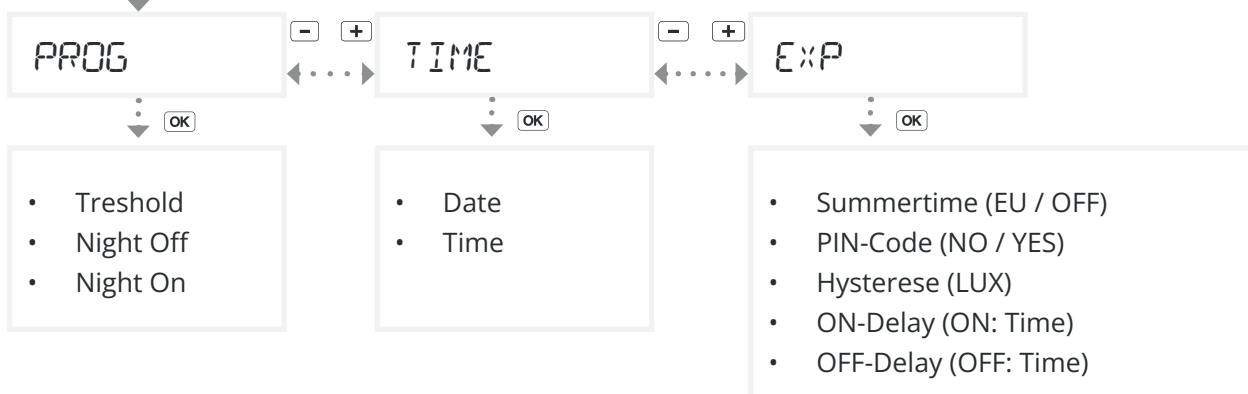
### On and Off Delay

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



### Manual Switching

- A short press on will turn the device on or off or toggle between On and Off.
- Pressing for 3 seconds while in the On state will switch the device to Permanent Off.
- Pressing for 3 seconds while in the Off state will switch the device to Permanent On.
- To exit Permanent Mode, the -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 Treshold

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

## 2 Set Hysteresese

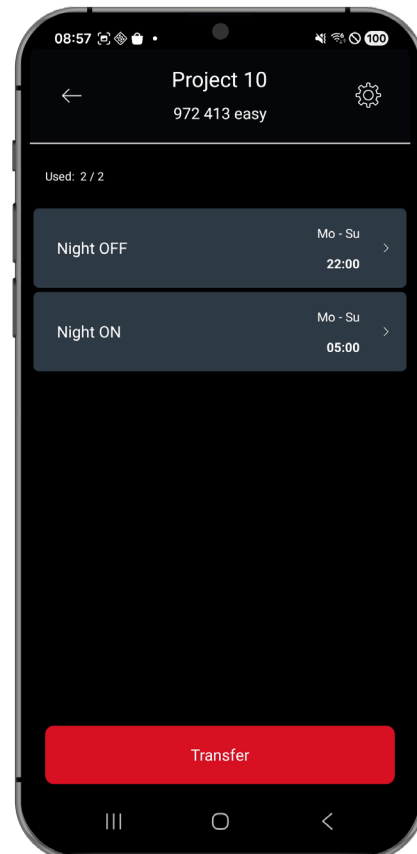
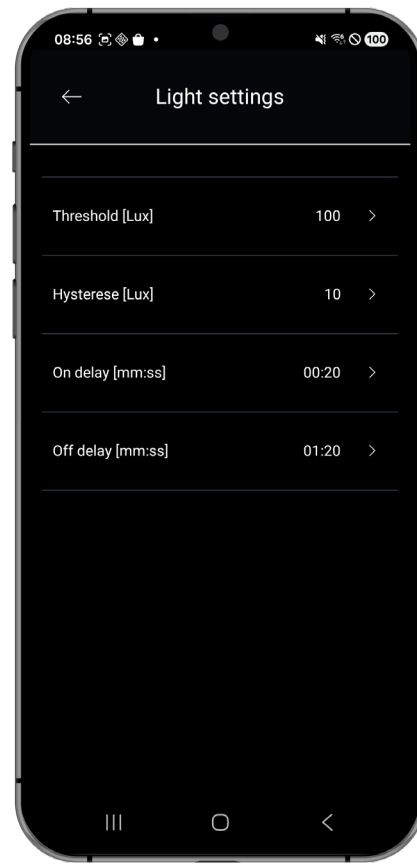
1. Select „Hysteresese“ to open the settings window.
2. Adjust the hysteresis using the slider or the -/+ symbols.
3. Click „Save“ to apply the value.

## 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 "Save" 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. Hysteresis: 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.



**Hugo Müller GmbH & Co KG**

Karlstraße 90  
D-78054 VS-Schwenningen

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