GRASSLIN Talento Smart Lan Relay 230v Ac Gateway Instruction Manual

Operating instructions
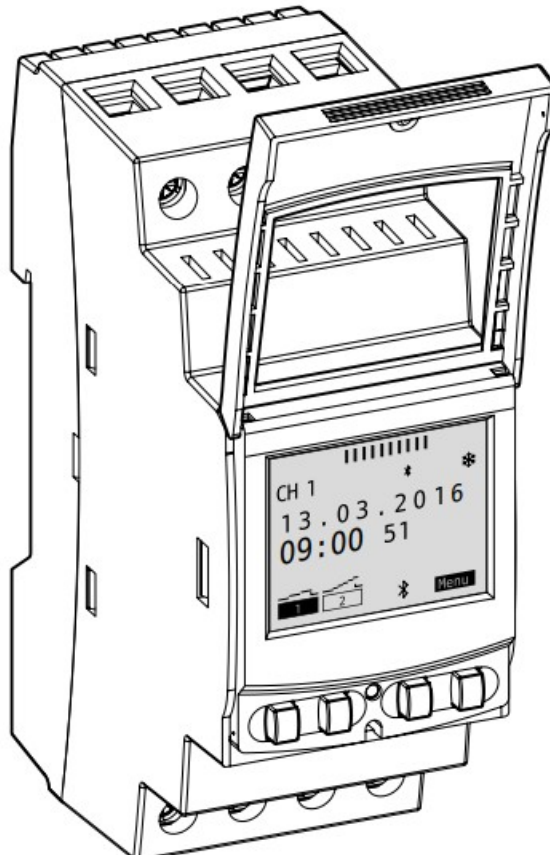
talento smart

Contents

Safety Information

 WARNING

Risk of death due to electrical shock!
Incorrect assembly and installation of the device can result in life-threatening electrical voltages .
▶This product should be installed by an electric specialist according to current installation standards .

Please note:

- National regulations and safety regulations

- Guarantee is invalidated if you tamper with the device or modify it

- Minimum diameter of the flexible lines for the connecting terminals: 1 mm²

- Maximum diameter of the flexible lines for the connecting terminals: 2,5 mm²

Read this manual and pay attention to its contents to ensure that the device works perfectly and that you can work safely with it .

Information about the device

Description of the device
Digital DIN-rail time switch

- Date-independent programming

- Date-dependent programming

- Pulse, cycle and random programming*

- Sunrise/sunset related programming

- Program creation by means of PC and mobile devices

- Bluetooth low energy interface

Intended Use

- The device is suitable for the following applications:

  – Lighting in private and commercial areas

  – Advertising signs

  – Street lighting

- Shop lighting

- Devices, motors and pumps control

- Roller blinds and sun blinds control

- Simulation of home presence

- Only suitable for use on dry premises

- Do not use close to devices with inductive discharge (motors, transformers, etc.)

- Install only on DIN-rails

Technical Data
You can find the technical data for the devices that are described in this manual at: **www.graesslin.de/technical-data**

Declaration of Conformity
You can find the declaration of conformity for the devices that are described in this manual at:
www.graesslin.de/doc

FCC certification
FCC ID: 2AHH7-DG
This device complies with part 15 of FCC Rules . Operation is subject to the following two conditions;
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Labelling Requirments
The Original Equipment Manufacturer (OEM) must ensure that FCC labelling requirements are met.
This includes a clearly visible label on the outside of the OEM enclosure specifying the appropriate
Grässlin GmbH FCC identifier for this product as well as the FCC Notice above.
The FCC identifiers is: 2AHH7-DG
This FCC identifier are valid for Talento Smart x15 and Talento Smart x25, for details. In any case the end product must be labelled exterior with: "Contains FCC: 2AHH7-DG"

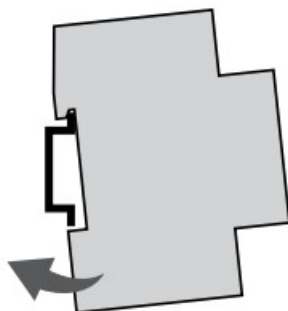## ⚙ Assembly and Installation

⚠ WARNING

Risk of death due to electrical shock!
Incorrect assembly and installation of the device can result in life-threatening electrical voltages .
▶ This product should be installed by an electric specialist according to current installation standards .
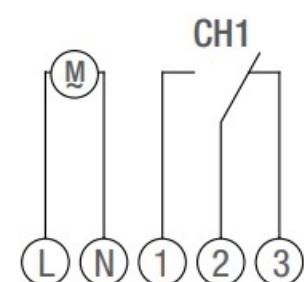
Installation on a DIN-rail

1.

Place the device onto the DIN-rail from the top at a slight angle .

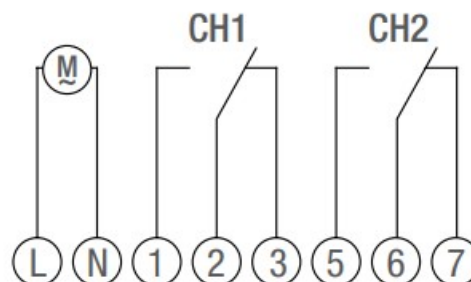2. Press it backwards until it clicks into place .

Circuit diagram
CH1 = Channel 1
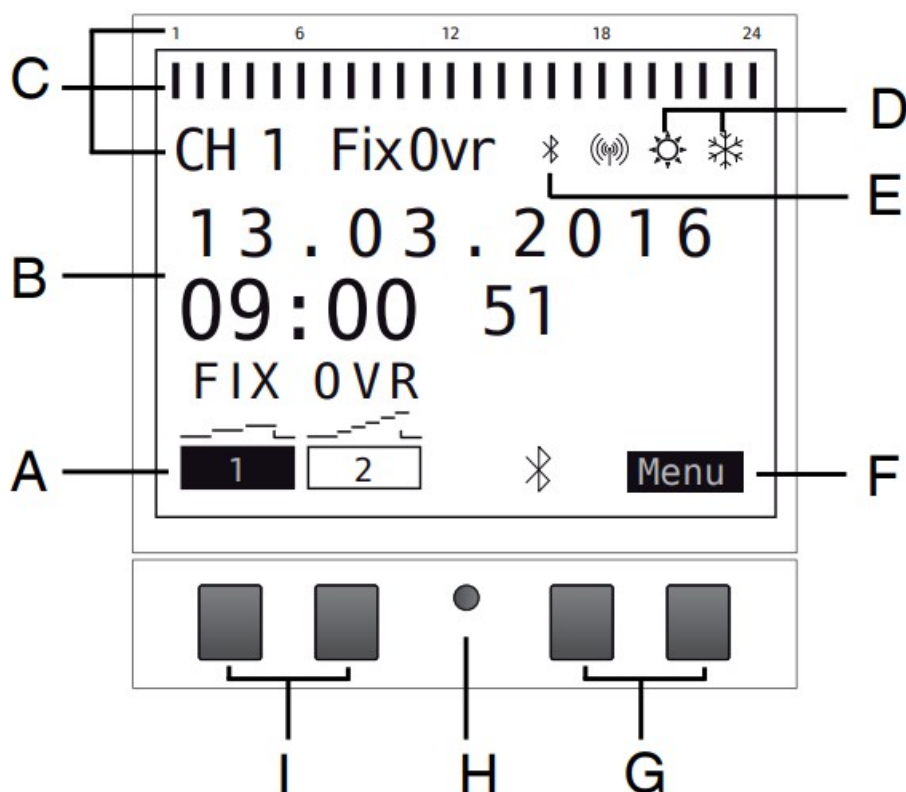CH2 = Channel 2

1 channel variant   2 channel variant

Install the device according to the circuit diagram (with one or two channels depending on the variant).

Operation and Setting

Display and Function Keys

Display:
A Function displays of the buttons on the left
B Date and time or menu navigation
C Programmed switching times
D Display of summertime/wintertime
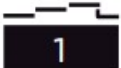E Bluetooth display
F Function displays of the buttons on the right
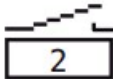
Buttons:
G Buttons on right
H Reset button
I Buttons on left

Function displays of the two buttons on the right (G):

Menu	Leave auto mode and enter programming Mode
ESC	Press briefly = Goes back one step Press for a long time (about 2 sec) = Goes back to auto mode
OK	Make the selection and apply it
<	Undo the last input, e.g. when entering the time

Function displays of the two buttons on the left (I):

1	Channel status for channel 1
2	Channel status for channel 2
∧	Page upwards in the menu
∨	Page downwards in the menu
−	Press briefly = The displayed value (hour, minute, etc.) is decremented by 1/ Press for a long time (about 2 sec) = fast scrolling
+	Press briefly = The displayed value (hour, minute, etc.) is incremented by 1/ Press for a long time (about 2 sec) = fast scrolling

Overview of menu structure

Menu

Program → Config → Date/Time ┄┄┄→
- New
- View/Edit
- Delete All

Config:
- Light
- Astro*
- Hour-Counter
- PIN
- Mode*
- Bluetooth

Date/Time:
- 24 Hours
- AM/PM

┄┄┄→ Su/Wi Time → Language

Su/Wi Time:
- Auto
- Calibr 1
- Calibr 2
- No

Language:
- English
- Deutsch
- Français
- Español
- Portuges
- Italiano
- ...
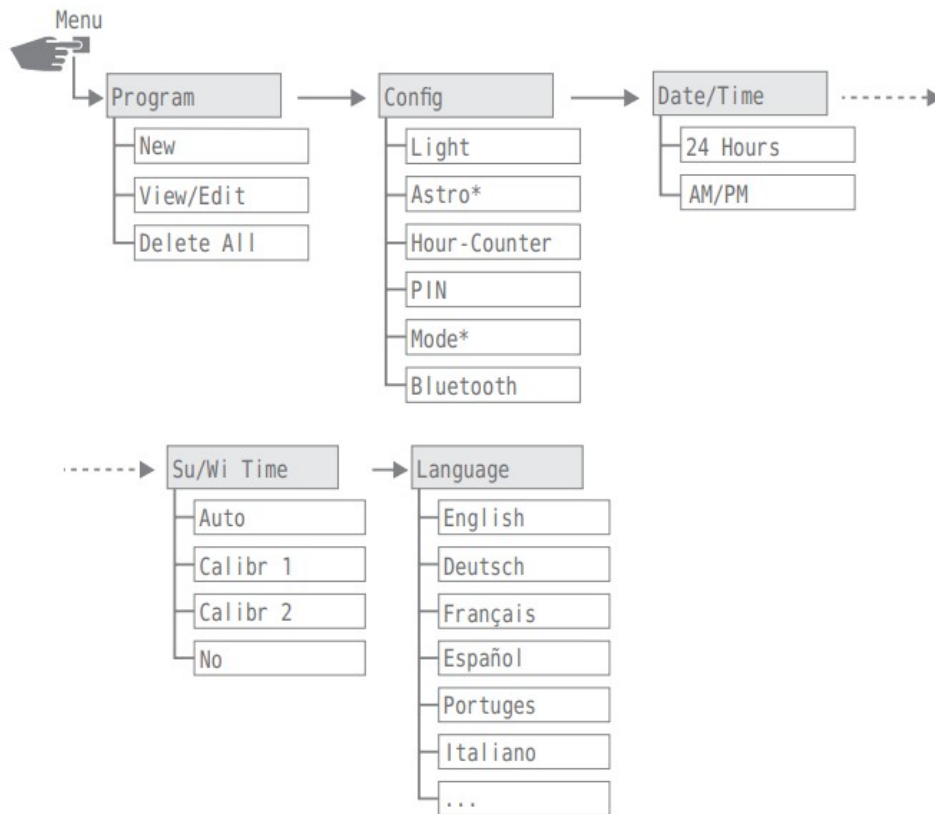
* These functions depend on variant.

Initial commissioning

When delivered, the device is in automatic mode with default settings for time, date and language(English).
When the menu buttons are first operated, a wizard walks you through the basic settings that you cancheck during initial commissioning and adjust if necessary .

Menu

Language ⤷OK
 *English ⤷OK
  Astro* ⤷OK
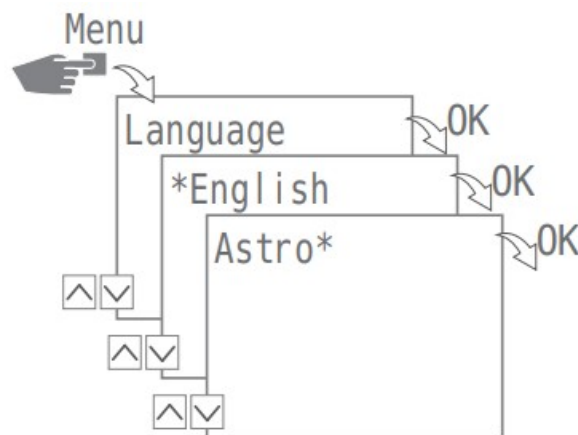
The following settings are queried during initial commissioning:

- Language; see „Language setting" on page 66
- Location information (country, coordinates) for astro calculation; see "Location information" on page 58

Programming

ℹ️ Switch-off commands have priority over switch-on commands .

INFORMATION FOR PROGRAM CREATION

The device is programmed in the following steps:

- Setting data or date range

In this menu, you can specify on which day and at what time (date from … to) the device is turned on or off .
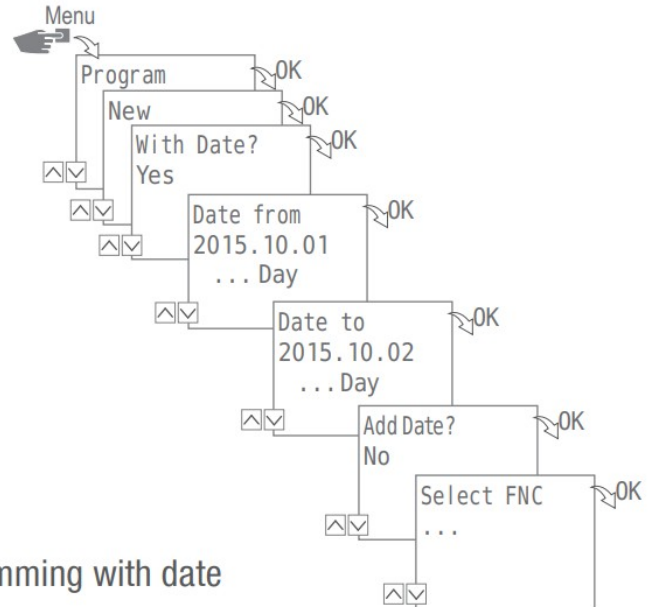
- Setting the function and switching time

Under this menu item, you specify which switching command is performed at which time (ON, OFF, pulse*, cycle*, random*). This can be specified per channel for different date ranges or date-independent .

CREATE NEW SWITCHING PROGRAM
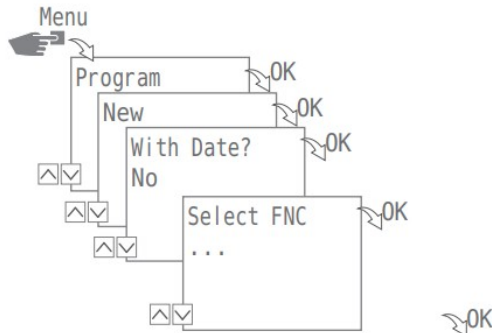
Programming without date

Programming with date

To create a new switching program, press the key Menu:

1. Select Program and confirm with OK.
2. Select New and confirm with OK.

   [i] The number of available program memory spaces is displayed briefly (PXXX). The number of available switching channel memory spaces (Dxxx) then appears.

   The available memory spaces depend on the variant of the device .

3. In step With date? specify with

   – No and OK , the device should be programmed without date range.

   The switching commands are valid date-independent .

   Proceed with action step to step 4 .

   – Specify Yes and OK so that the device will be programmed with a date range .

   The switching commands are valid for the dates and periods which are defined in the programming, also see page 46.

   You can define multiple date ranges. If the time periods have been determined, end the query after the last date range with No .

   [i] If you have configured the location information (astro function) in the device, you can choose when changing, whether the device should be switched directly to sunrise and sunset via the day limit.

   The astro function is not available in all versions of the device, see also „Location information (Astro)" on page 58.

4. In step SELECT FCT (FCT = Function), specify the type of switching command:

   – ON

Select the times at which a channel should be switched on ➔ A .

– OFF

Select the times at which a channel should be switched off ➔ B .

– Pulse

Select the settings for pulse programming ➔ C .

– Cycle

Select the settings for cycle programming ➔ D .

– Random ON

Select the settings for random program ON ➔ E.

– Random OFF

Select the settings for random program OFF ➔ F .

5. Select the desired function and confirm with OK .

The number of available switching command memory spaces appears (CXXX).
The available memory spaces depend on the variant of the device .
USING WILDCARDS
You can use wildcards when entering the date . This allows you to program recurring switching times that are always to be carried out, for example, always the first of the month. Instead of annual or monthly numbers, choose the wildcards **** for the year and ** for the month.
Below you see how date entries appear and how you can use wildcards:

- 2016.03.13 – 2016.03.13

  The switching command is executed only on 13 March 2016.

  2016.03.13 – 2016.03.20

  The switching command is executed between 13 March 2016 and 20 March 2016.

- 2016.**.13 – 2016.**.13

  The switching command is executed the 13th of every month in 2016.

- ****.**.01 – ****.**.01

  The switching command is always executed annually on the first day of a month.

ℹ️ Die Wildcards für die Jahre finden Sie bei der Datumseingabe indem Sie vor die aktuelle Jahreszahl blättern. Die Wildcards für die Monate finden Sie zwischen Dezember und Januar.
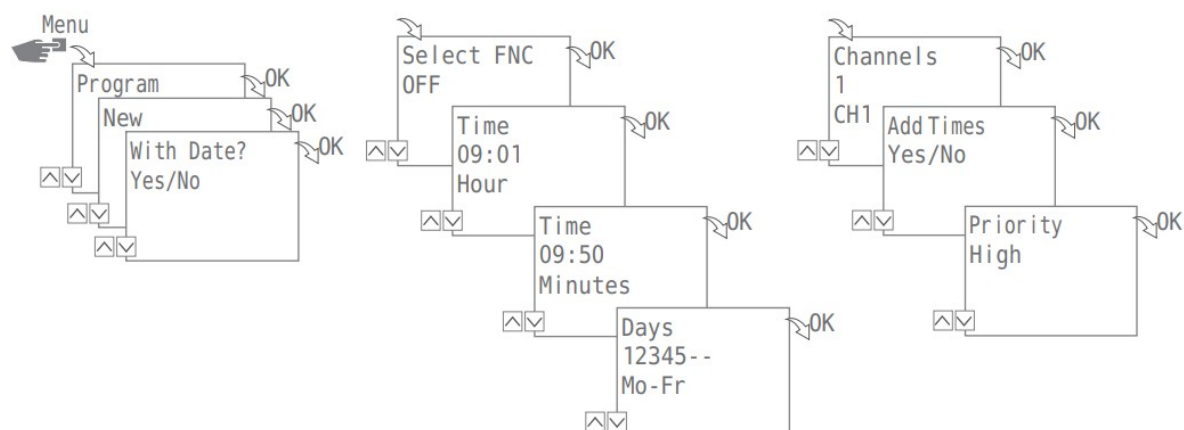

A Programming command ON
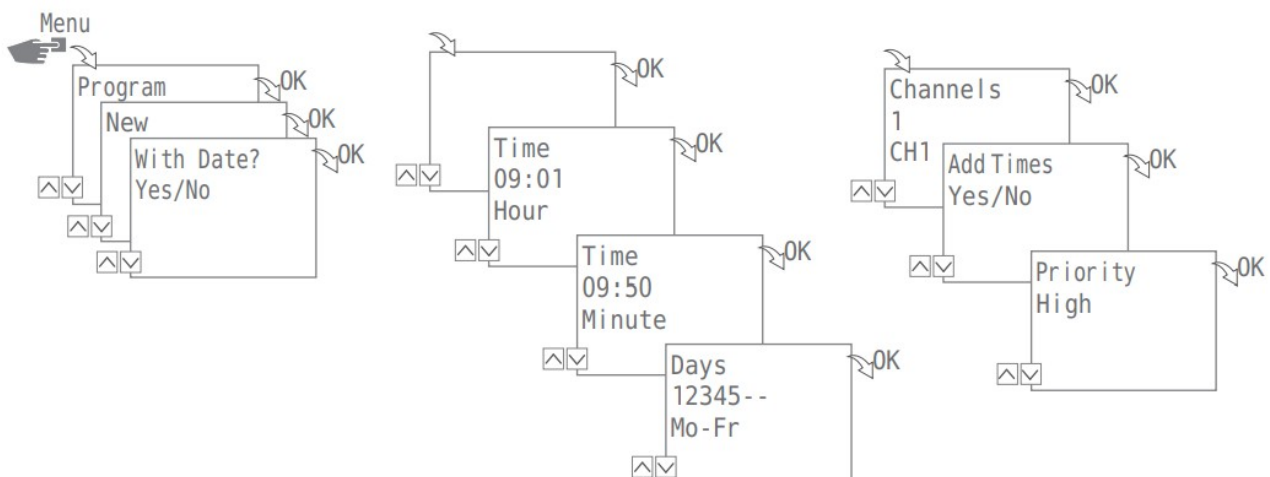
1. Press Menu button:
2. Select Program and confirm with OK .

    For clarification of the following action steps, see flow chart.
3. Select New and confirm with OK .
4. In step With Date? specify whether the device is to be activated on a certain date and – if yes – confirm with OK (see also page 45).
5. Select ON and confirm with OK .
6. Enter hour and minute of the switch-on time (+/-) and confirm each with OK .

    NOTE: The data for sunrise and sunset should be considered in connection with the astro-variant . The choice of these parameters is between 24:00 and 00:00 .
7. Set the weekday(s) (+/-) to which the switching time should apply, and confirm with OK .

    NOTE: The weekdays 1-5, 6-7 and 1-7 are preset. Individual weekdays can be set (+/-) under "Select days".
8. Select channel (+/-) for which the switching time should be set, and confirm with OK .

    NOTE: The plus sign stands for an active, the minus sign for an inactive channel.
9. Select Yes to create an additional switching time, or No to determine the possible priority .

    ℹ️ The choice of priority is possible in advanced mode only; see „Defining prioritisation of programs" on page 54 .

B Programming command OFF

1. Press Menu button:
2. Select Program and confirm with OK .

    For clarification of the following action steps, see flow chart.
3. Select New and confirm with OK .
4. In step With Date? specify whether the device is to be activated on a certain date and – if yes – confirm with OK (see also page 45).
5. Select OFF and confirm with OK .
6. Enter hour and minute of the switch-off time (+/-) and confirm each with OK .

    NOTE: The data for sunrise and sunset should be considered in connection with the astro-variant .

    The choice of these parameters is between 24:00 and 00:00 .
7. Set the weekday(s) (+/-) to which the switching time should apply, and confirm with OK .

    NOTE: The weekdays 1-5, 6-7 and 1-7 are preset. Individual weekdays can be set (+/-) under "Select days".
8. Select channel (+/-) for which the switching time should be set, and confirm with OK .
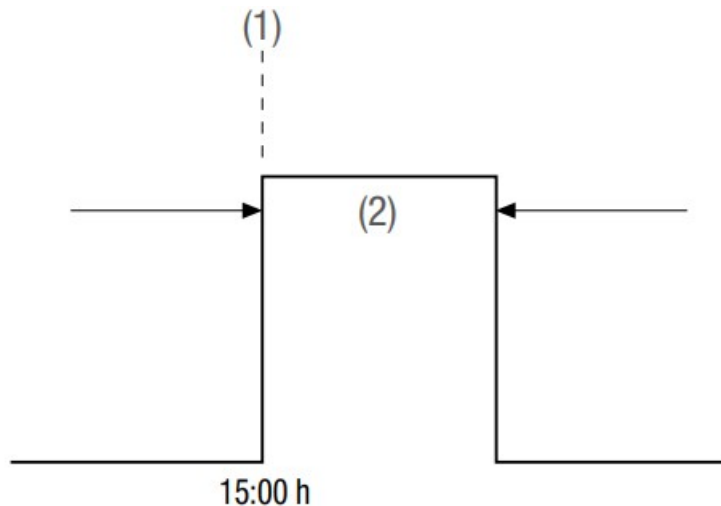
NOTE: The plus sign stands for an active, the minus sign for an inactive channel.

9. Select Yes to create an additional switching time, or No to determine the possible priority .

   [i] The choice of priority is possible in advanced mode only; see „Defining prioritisation of programs" on page 54 .

C Pulse programming
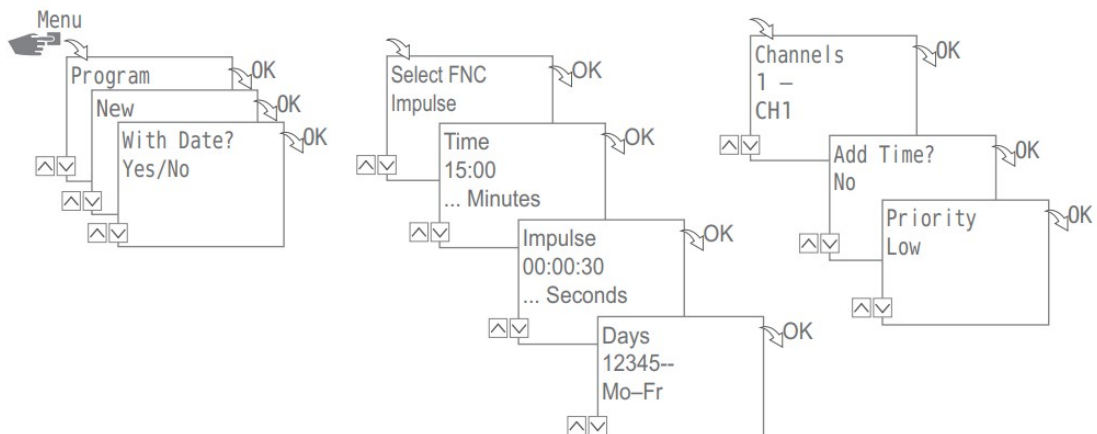

1. Start time
2. Duration

[i] This feature is not available in all variants of the device .
A pulse switching command consists of:

- Start time
- Duration = switching ON
  - shortest switching time ON = 1 second
  - longest switching time ON = max. 2 hours

Example:
Channel 1 will be switched daily from Monday to Friday at 15:00 for a duration of 30 seconds .

1. Press Menu button:

2. Select Program and confirm with OK .

    For clarification of the following action steps, see flow chart.

3. Select New and confirm with OK .

4. In step With Date? specify whether the device is to be activated on a certain date and – if yes – confirm with OK (see also page 45).

5. Select Pulse and confirm with OK .

6. Enter hour and minute of the start time (+/-) and confirm each with OK .

    NOTE: The data for sunrise and sunset should be considered in connection with the astro-variant . The choice of these parameters is between 24:00 and 00:00 .

7. Enter hour(s), minute(s) and second(s) of the pulse duration (+/-) and confirm with OK .

8. Set the weekday(s) (+/-) to which the switching time should apply, and confirm with OK .

    NOTE: The weekdays 1-5, 6-7 and 1-7 are preset. Individual weekdays can be set (+/-) under "Select days".

9. Select channel (+/-), for which the pulse is to be set, and confirm with OK .
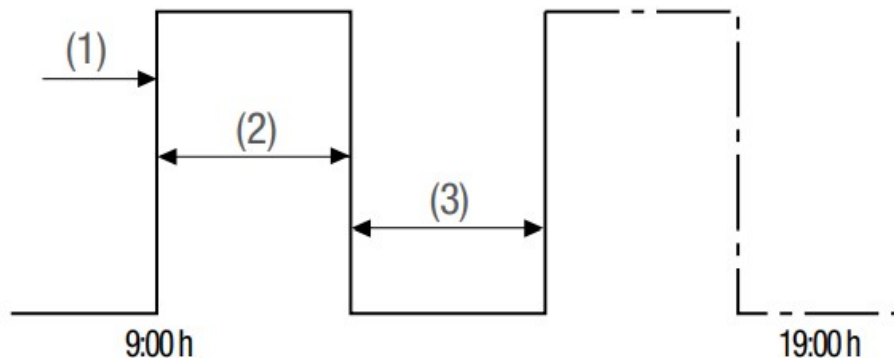
    NOTE: The plus sign stands for active, the minus sign for an inactive channel.

10. Select Yes to create an additional switching time, or No to determine the possible priority .

    ℹ️ The choice of priority is possible in advanced mode only; see „Defining prioritisation of programs" on page 54 .

D Cycle programming

9:00 h   19:00 h

1. Start time
2. Period ON
3. Period OFF

ℹ️ Cycle programming is possible in advanced mode only .

**A cycle switching command consists of:**

- Start time
- Period ON = Switching ON
- Period OFF = Switching OFF

Example:
Channel 1 is switched on from Monday 9:00 to Friday 19:00 every 30 minutes for 10 minutes .
Start time 9:00

Duration ON 10 minutes
Duration OFF 30 minutes
Separate OFF command 19:00

ℹ️ To end the cycle, an independent command Off must be set .
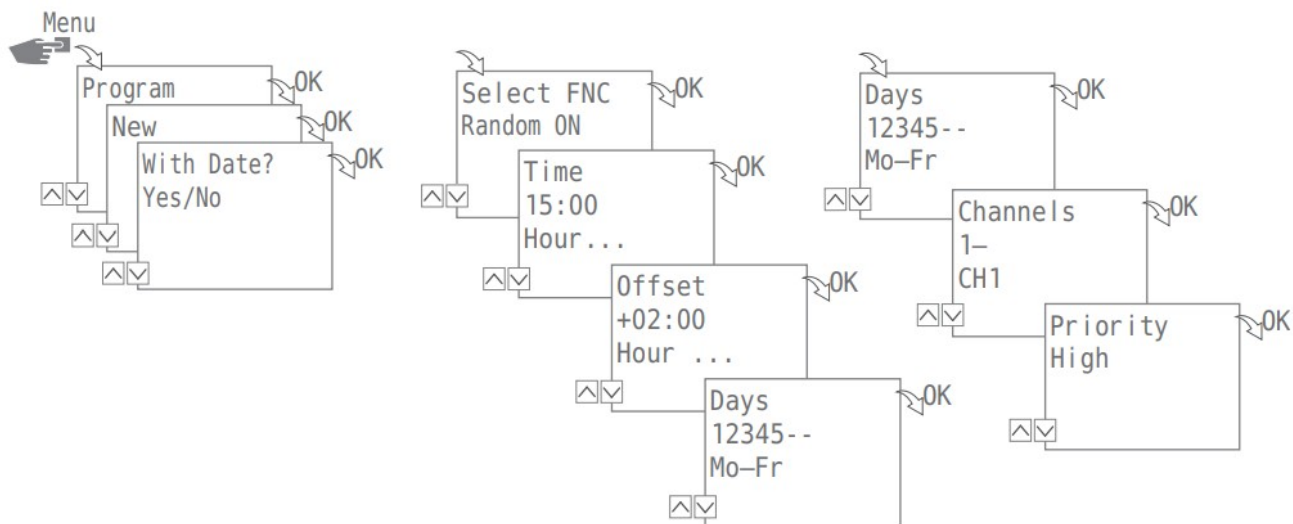A nesting of cycle programs is not allowed
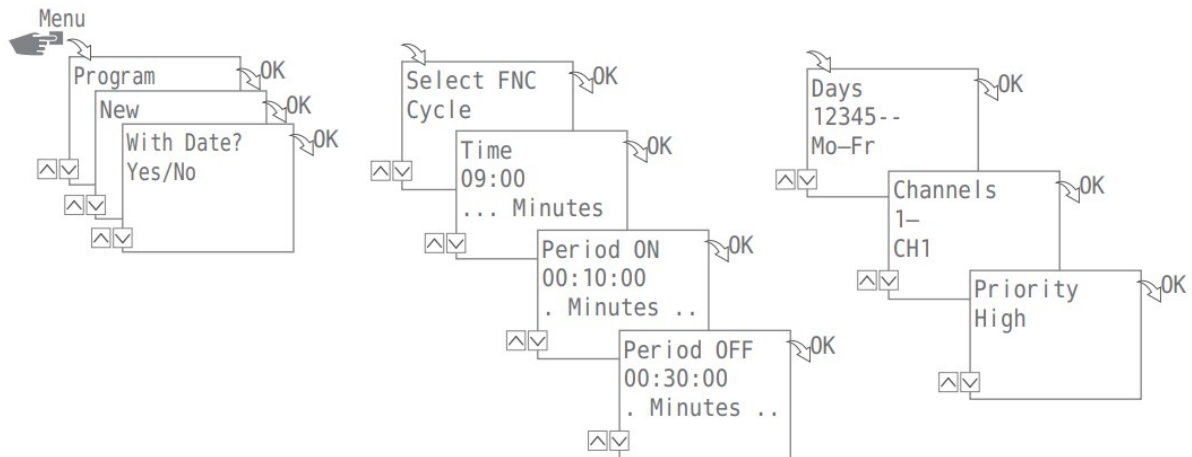
1. Press Menu button:

2. Select Program and confirm with OK .

   For clarification of the following action steps, see flow chart.

3. Select New and confirm with OK .

4. Specify in step With DATE? whether the device should be activated on a certain date and – if yes – confirm with OK (see also page 45).

5. Select Cycle and confirm with OK .

6. Enter hour and minute of the start time (+/-) and confirm each with OK .

7. Enter period ON (+/-) and confirm each with OK .

8. Enter period OFF (+/-) and confirm each with OK .

9. Select weekdays (+/-) on which the cycle should be started and confirm with OK .
   NOTE: The weekdays 1-5, 6-7 and 1-7 are preset. Individual weekdays can be set (+/-) under „Select days" .

10. Select channel (+/-) for which the cycle should be set, and confirm with OK .
    NOTE: The plus sign stands for active, the minus sign for an inactive channel.

11. And choose possible Priority .

    ℹ️ The choice of priority is possible in advanced mode only; see „Defining prioritisation of programs" on page 54 .

    You program the command OFF in the Select FCT menu to end the cycle switching command.

E Random programming

Menu

```
Program ⤷OK          Select FNC ⤷OK        Days          ⤷OK
New     ⤷OK          Random ON             12345--
  With Date? ⤷OK       Time      ⤷OK       Mo–Fr
  Yes/No               15:00                  Channels   ⤷OK
                       Hour...                1–
                          Offset   ⤷OK        CH1
                          +02:00                  Priority  ⤷OK
                          Hour ...                 High
                             Days     ⤷OK
                             12345--
                             Mo–Fr
```

ℹ️ Random programming is possible in advanced mode only .

Example: Random ➔ 15:00 ➔ +02:00 ➔ 1 2 3 4 5 ➔ 1
Channel 1 is switched on Monday to Friday between 15:00 and 17:00. The exact switch-on time point is random in this range .

1. Press Menu button:
2. Select Program and confirm with OK .

   For clarification of the following action steps, see flow chart.
3. Select New and confirm with OK .
4. Specify in step With Date whether the device should be activated on a certain date and – if yes confirm with OK (see also page 45).
5. Select Random ON or Random OFF and confirm with Ok .

   NOTE: The period of the random switching is defined with ± 2 hours.
6. Enter hour and minute of start (+/-) and confirm each with Ok .
7. Enter hour and minute of the range of the random programming (+/-) and confirm each with Ok .

   NOTE: The weekdays 1-5, 6-7 and 1-7 are preset. Individual weekdays can be set (+/-) under „Select days" .
8. Set weekday on which the device should randomly switch and confirm with Ok .
9. Select channel (+/-) which is to be programmed, and confirm with Ok .

   NOTE: The plus sign stands for active, the minus sign for an inactive channel.
10. And choose possible Priority .

    ℹ️ The choice of priority is possible in advanced mode only; see „Defining prioritisation of programs" on page 54 .

DEFINING PRIORITISATION OF PROGRAMS
You specify the order in which the programs of the device should be run using prioritisation . You can thus execute a daily switching command, but can define via a higher priority, that, for example, other switching times of the device are valid during holidays .

ℹ️ The choice of priority is only possible in advanced mode .

By default, the priority is specified as follows:

- Without date ➔ very low
- With date reference ➔ medium

- With individual date ➜ high

The following priorities can be set:

- Very Low
- Low
- Medium
- High
- Very High

Example:
A daily program switches on the device every day from morning 08:00 to 17:00 in the afternoon. If, for example, you do not want the device to switch on on weekends of a holiday, create a program with a higher priority for these days . This program takes precedence over the other settings .

VIEW, EDIT OR DELETE PROGRAM
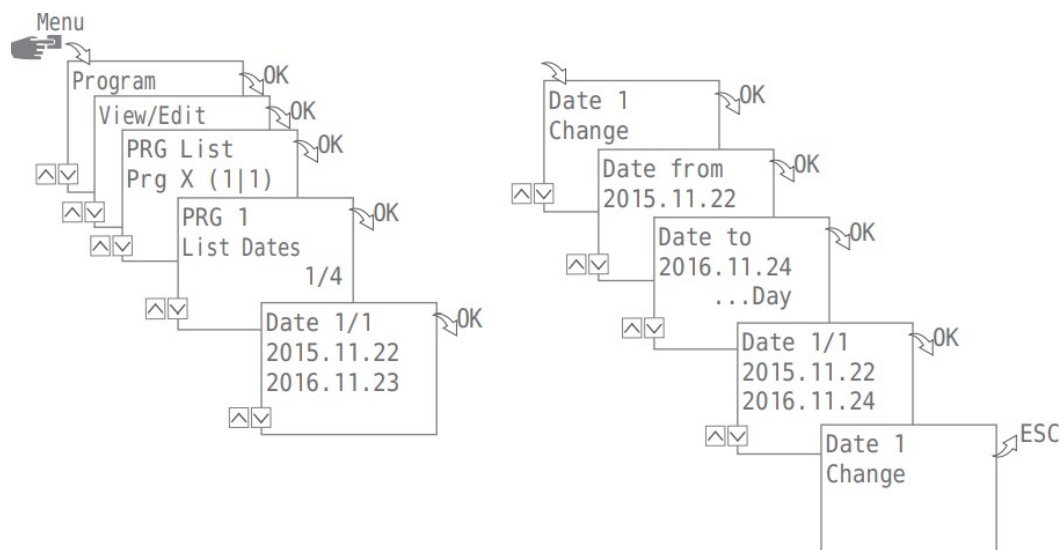
In order to view, edit or delete a program, press the Menu key:

1. Select Program and confirm with OK .
2. Select Read/Change and confirm with OK .
3. Select program and confirm with OK .
4. Select List (date entries, switching times, priority) that you want to view or edit yourself, or select Delete program to delete the selected program .

   ℹ️ The choice of priority is only possible in advanced mode .
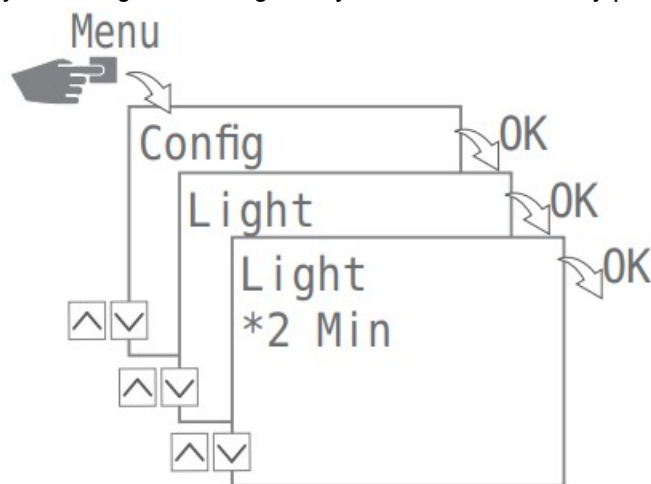
DELETE ALL PROGRAMS
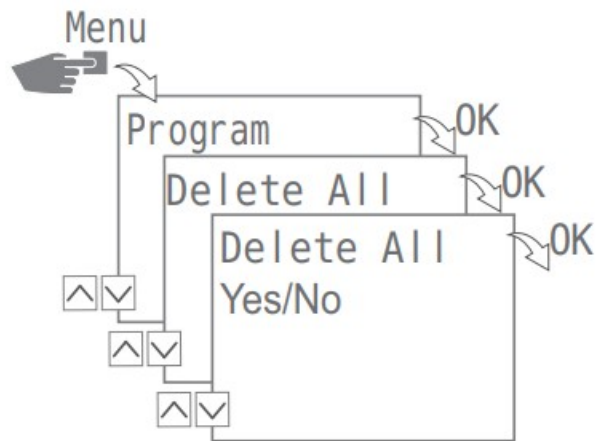
1. Press Menu button .

2. Select Program and confirm with OK .

3. Select Delete all and confirm with OK .

4. Select Yes and confirm with OK .

Configuration
BACKLIGHT
In the Light menu, you specify how long the backlight stays on after the last key press.

The following settings are possible:

- Fix ON

 The backlight of the display remains on continuously .

- 2 Min

The backlight of the display is automatically switched off two minutes after the last keystroke .

1. Press Menu button .

2. Select Config and confirm with OK .

3. Select Light and confirm with OK .

4. Select the desired setting and confirm with OK .

LOCATION INFORMATION (ASTRO)
You define the location information in the Astro menu .

ⓘ This feature is not available in all variants of the device .
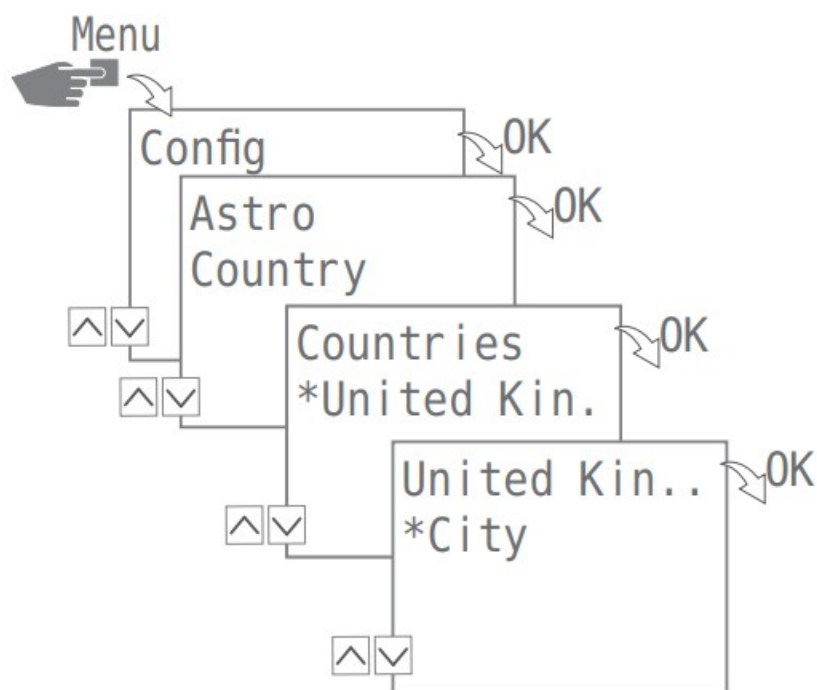
The following settings are possible:

- Country

  Country name and city of the location .
- Coordinates

Latitude and longitude of the location .

1. Press Menu button .
2. Select Config and confirm with OK .
3. Select Astro menu and confirm with OK .
4. Select submenu COUNTRY or Coordinates and confirm with OK .
5. Make settings and confirm with OK .

HOUR METER
Reading hour meter
You can see how many operating hours your DIN-rail time switches is switched on in the Read hour counter menu
.

Menu

Config   OK

Hour-Counter   OK
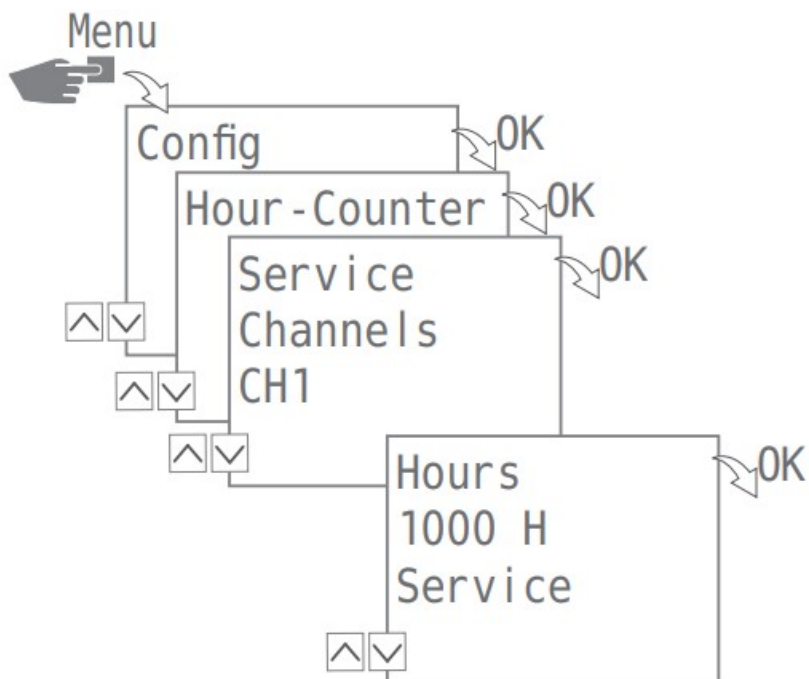
Service
Channels
CH1   OK

Hours
1000 H
Service   OK
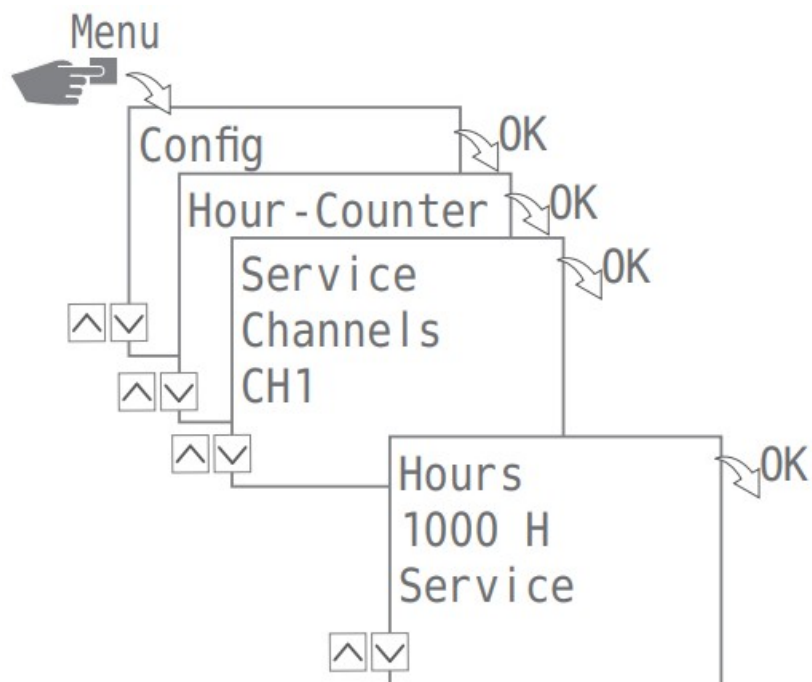
1. Press Menu button .
2. Select Config and confirm with OK .
3. Select Hour counter and confirm with OK .
4. Select Read and confirm with OK .
5. Select the desired channel .

Service meter

You specify the number of operating hours that will pass for a service message to be displayed for a channel in the Hour meter service menu . This is shown in the display as soon as the counter has reached the hour value set by you .

Menu

Config   OK

Hour-Counter   OK

Service
Channels
CH1   OK

Hours
1000 H
Service   OK

6. Press Menu button .
7. Select Config and confirm with OK .
8. Select Hour counter and confirm with OK .
9. Select Service and confirm with OK .

10. Select the channel and confirm with OK .

11. Set count value and confirm with OK .

PIN
You specify whether a PIN entry is required for setting the device in the PIN menu .
The following settings are possible:

- No PIN

    Entering a PIN is not required to change settings of the device .

- PIN Enter

   Entering a PIN is required to change settings of the device .
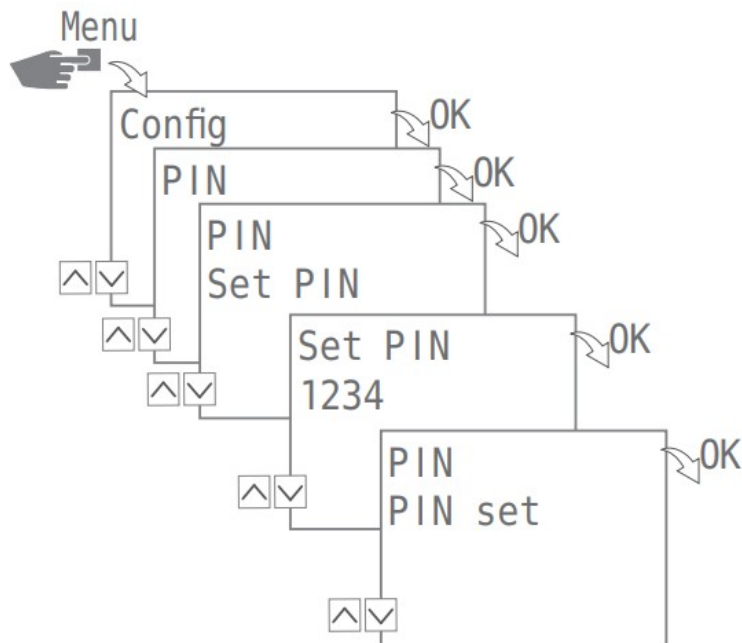
SET PIN

1. Press Menu button .

2. Select Config and confirm with OK .

3. Select PIN and confirm with OK .

4. Select Enter No PIN or PIN and confirm with OK .

5. For selection PIN Enter enter (+/-) the PIN and confirm with OK .

MODE
You specify whether you want to only use the standard functions or the advanced functions of the device in the
Mode menu .
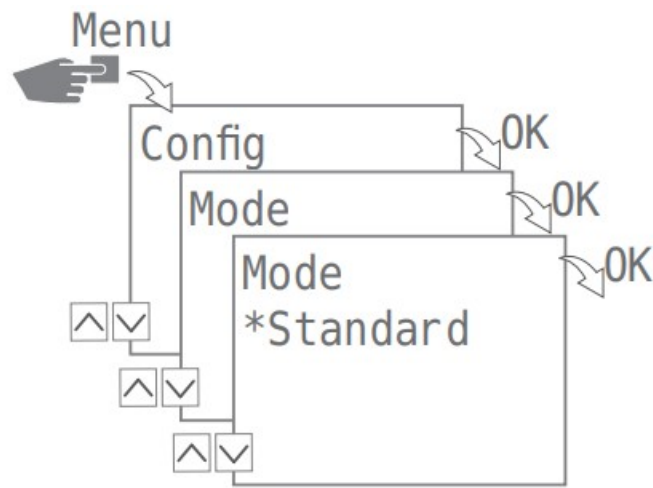
The following settings are possible:

- Standard

  The following functions are available:

  – ON/OFF command

  – Sunrise and sunset related programming (only for devices with astro function)

  – Automatic prioritisation

- Advanced

  The following functions are available:

  – ON/OFF command

  – Sunrise and sunset related programming (only for devices with astro function)

  – Automatic prioritisation

  – Pulse programming

  – Cycle programming

  – Random programming

  – User-defined prioritization

SET MODE

1. Press Menu button .
2. Select Config and confirm with OK .
3. Select Mode and confirm with OK .
4. Select Standard or Advanced setting and confirm with OK .

BLUETOOTH
Certain functions of the device can be controlled by Bluetooth via the Bluetooth menu (smart phone, tablet, etc.).
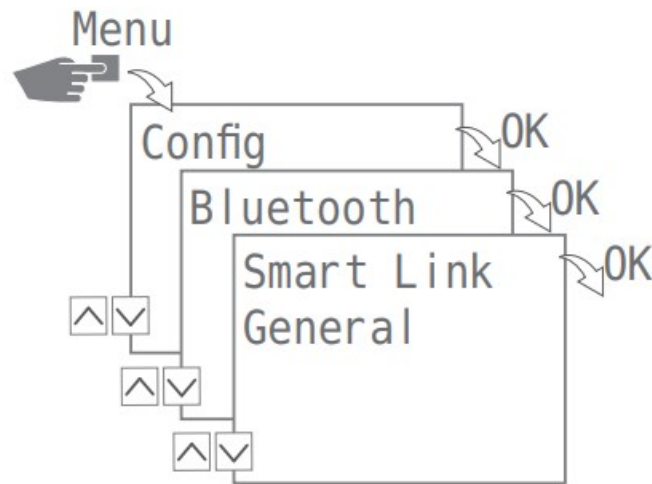
The following settings are possible:

- Smart Link
  - MAC address
  - Device name
- General
  - Version number of software
  - Serial number of device

CREATING BLUETOOTH CONNECTION

1. Press the Bluetooth button on the device (DIN-rail time switch).

   The Bluetooth icon will flash for two minutes. If a mobile device or a PC connects, the Bluetooth icon remains continually visible .

2. Searching the app for new devices .

   If the device is found, it is displayed in the app in the list of available devices.

[i] If a connection is established for the first time, the device connects automatically as soon as the range of the Bluetooth connection has been reached . You can then control the time switch with themobile device; see operating instructions for the app .
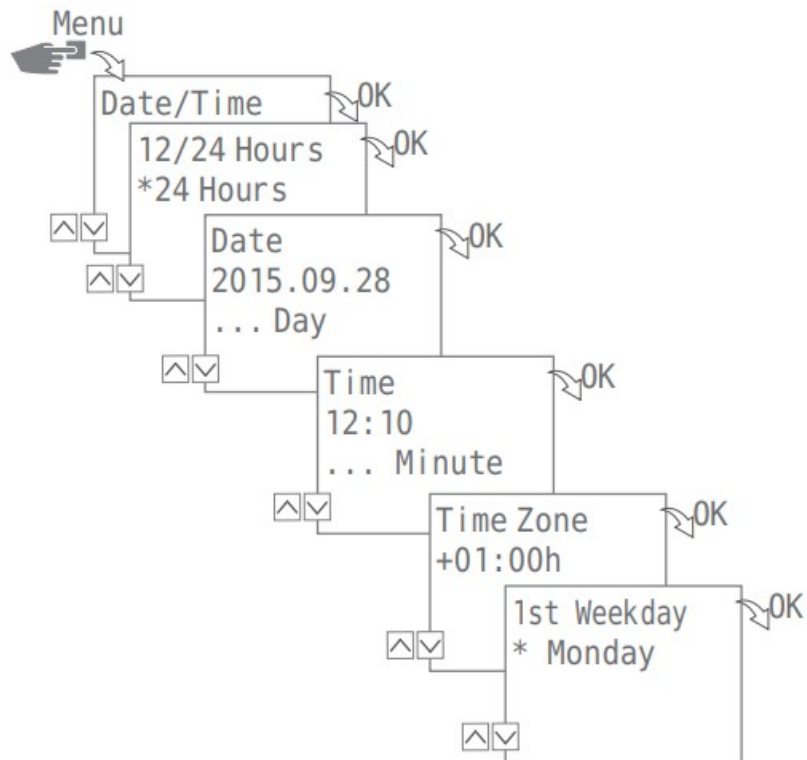If the time switch is protected via a PIN, this must be entered on the mobile device.

DISPLAY DURING DATA TRANSMISSION
The following appears on the display of the time switch during the transmission of programs or configuration from a mobile device:
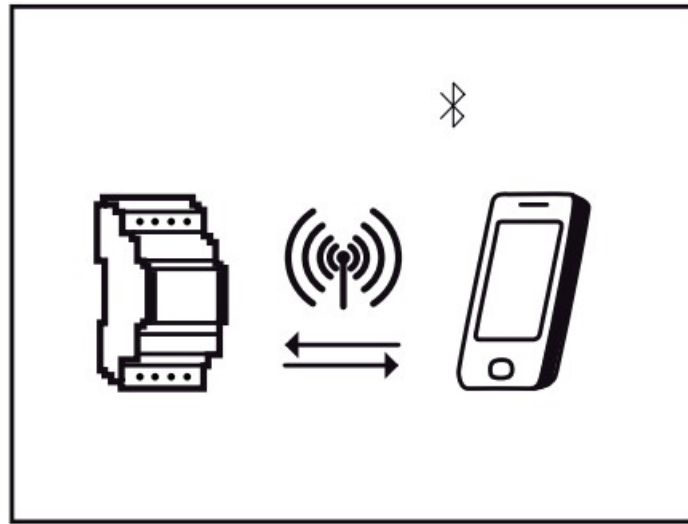
Set date and time

You specify the format for the display of the time in the Date/Time menu .

The following settings are possible:

- 24 Hours

  The time is displayed in 24-hour format .

- AM/PM

  The time is displayed in 12-hour format:

  – AM = morning

  – PM = afternoon

1. Press Menu button .

2. Select Date/Time and confirm with OK .

3. Select (˅/^) setting and confirm with OK .

4. Enter data according to the setting 24 Hours or AM/PM:

   – Date

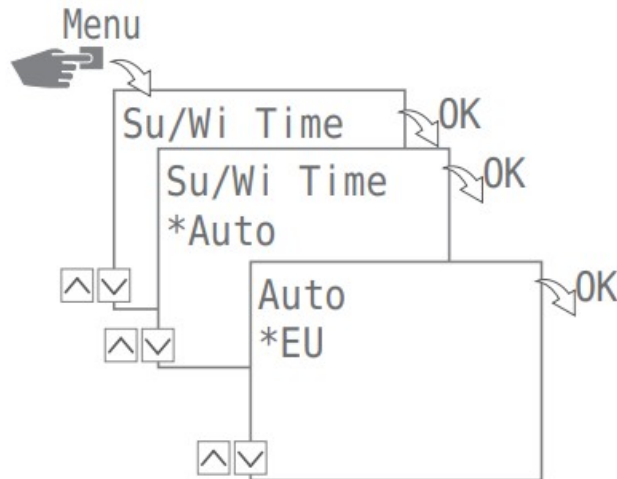   – Clock

– Time Zone

– First weekday

Example:

1st day = Sunday … 1 – 5 = Su – Th

1st day = Monday … 1 – 5 = Mo – Fr

Switch summer / winter time

You specify the variants for switching from summer to winter time in the Su/Wimenu .

The following settings are possible:

- Auto

  Factory setting of the legal requirement (USA or EU). This is recalculated each year.

  Adjust 1

  Automatic programming:

  The summer/winter time is automatically recalculated for each year .

  – The switchover takes place on the first Sunday of the selected month if the entered date is between the 1st and 15th .

  – The switchover takes place on the last Sunday of the selected month if the entered date is between the 16st and 31st .

  – The changeover takes place on the respective Sunday from 2 to 3 am (summertime) or from 3 to 2 am (wintertime).

- Adjust 2

  Automatic programming:

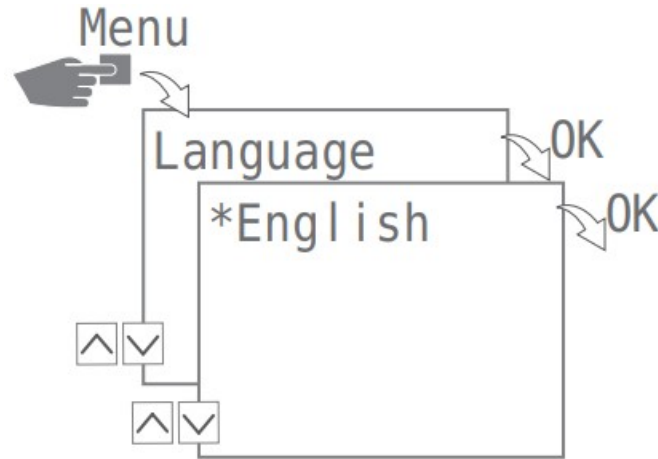 Switching always takes place every year on the same date entered .

- No

  No switching .

1. Press Menu button .

2. Select Su/Wi Time and confirm with OK .

3. Make the desired setting and confirm with OK .

   • For selection of Adjust 1 or Adjust 2, enter the data for month and day and confirm with OK .
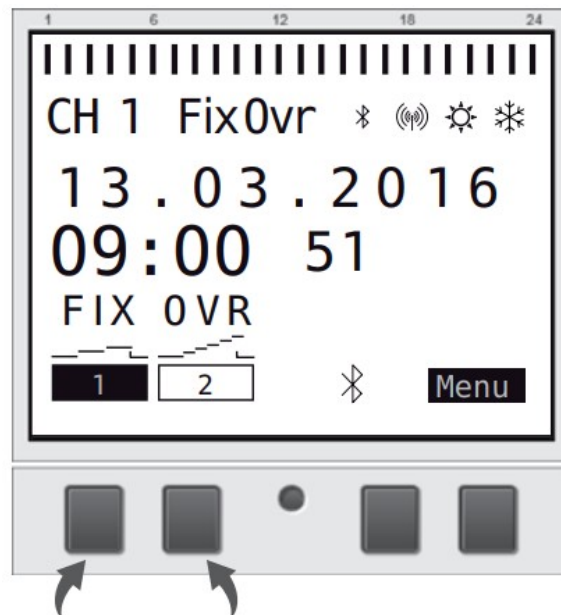
Language setting

You specify the language of the display texts in the Language menu .

1. Press Menu button .

2. Select Language and confirm with OK .

3. Select the desired language and confirm with OK .

Automatic / manual operation
Set the operating mode in which the device is to be operated via the left function key:

The following settings are possible:

- Permanently ON (FIX)
- Permanently OFF (FIX)
- Override mode (OVR)
- Automatic mode

To adjust the channel state for channel 1 or channel 2, press the appropriate left function button until the desired mode is selected .
OVERRIDE MODE
The override mode (temporarily overrides a running program) allows the user to terminate the running program early or to start a later start-up program prematurely . This depends on the current channel status. The override function is valid only for the current program and is retained until the next program change .
Then the device will return to automatic mode.

SWITCHING STATE DISPLAY

As an example for channel 1, the switching status display appears as follows:

| FIX | Channel Fix OFF | FIX | Channel Fix ON | OVR | Override ON |

There is no display over the icon for the channel in automatic mode .
From the automatic mode, you can make the following settings using the corresponding function key for channel 1 or channel 2, taking into account the starting point:

- ON
  – Press 1x = Override OFF
  – Press 2x = Channel Fix OFF
  – Press 3x = Channel Fix ON
- OFF
  – Press 1x = Override ON
  – Press 2x = Channel Fix ON
  – Press 3x = Channel Fix OFF

Maintenance and Service

Distribution partners
You can find our distributor partners at the following address: **www.graesslin.de/distributors**

Software update
You can find current software updates at the following address via the search function: **www.graesslin.de**
For the installed version under the Bluetooth settings, see „Bluetooth" on page 62.

Disposal and Recycling

You must correctly dispose of devices, batteries/rechargeable batteries or packaging materials according to legal provisions and ordinances .
Please pay attention to the information below relating to the disposal of defective system components orof the system itself according to the useful product life:

- Carry out disposal correctly, i.e. separated according to the material groups of the parts to be disposed of .
- Never put batteries/rechargeable batteries (Directive 2006/66/EC), electrical or electronic scrap in with domestic refuse . Use appropriate depots .
- Always carry out disposal in an environmentally friendly way and in accordance with any local statutes or laws .

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Documents / Resources

GRASSLIN Talento Smart Lan Relay 230v Ac Gateway [pdf] Instruction Manual
Talento Smart Lan Relay 230v Ac Gateway, Talento, Smart Lan Relay 230v Ac Gateway, Relay
230v Ac Gateway, 230v Ac Gateway, Ac Gateway, Gateway

References

- Ⓜ **Manual-Hub.com - Free PDF manuals!**
- Ⓖ **Home - Grässlin Zeitschalttechnik GmbH**
- **User Manual**