

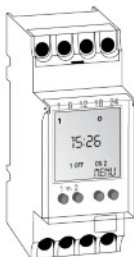
# GRÄSSLIN

YOUR SENSES. OUR SOLUTIONS.

talento 371/372 pro  
talento 751/752 pro

EN

Operating manual



80.10.1277.7/11/11/01

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## Safety Instructions



**WARNING**

**Danger! Risk of electric shock!**

- ▶ Installation must be carried out by a professional electrician!

- To avoid injuries, the device must be installed by a skilled electrician only!
- Before changing the battery, the device must be disconnected from the power supply!
- Please observe the national regulations and safety instructions.
- Interferences and changes to the device will invalidate the warranty and guaranty rights.
- Minimum diameter of the flexible lines for the terminals: 1 mm<sup>2</sup>.  
Maximum diameter: 4 mm<sup>2</sup>.

Read and observe these instructions to guarantee a perfect function of the device and a safe operation.



## Information about the device

### Description of the device

Universal digital timer

- 70 memory locations
- Date-based programming
- Weekly program <sup>1)</sup> / Holiday program <sup>1)</sup> / Astro program <sup>1)</sup>

### Designated use

- The timer is used for
  - lighting in private homes and commerce
  - advertising / street lighting / shop window lighting
  - controlling devices, motors and pumps
  - controlling shutters and blinds
  - Presence simulation
- Mounting only on DIN rail.
- Suitable for use in dry rooms only!
- Do not install in the vicinity of devices having inductive discharges (motors, transformers, etc.)

## Technical data

Dimensions H x W x D (mm)	45 x 35 x 60
Weight g (approx.)	220
Main voltage	See rating plate
Protection class	II
Power consumption	1 VA
Switching capacity	
– Ohmic load (VDE, IEC)	16 A / 250 V AC
– Inductive load $\cos \varphi$ 0.6	10 A / 250 V AC
– Incandescent-/Halogen lamp load	2600 W
– Fluorescent lamp	1000 W
– Rated load AC1 / AC15	3700 W / 750 W
Switching contacts	Change-over contact
Ambient temperature	-10°C ... + 55°C
Accuracy	Type $\pm$ 0,5 sec./day at +20°C
Shortest switching interval	1 min..
Switching state display	Yes
Sealable	Yes



## Installation and mounting



**WARNING**

**Danger! Risk of electric shock!**

- ▷ Installation must be carried out by a professional electrician!

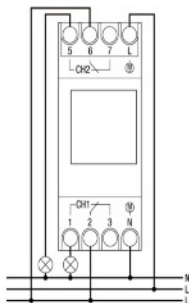
### Mounting on DIN rail

Put the device slightly inclined on top of the rail. Then push it backwards until it engages.

### Connection diagram

CH1 = channel 1

CH2 = channel 2 <sup>1)</sup>



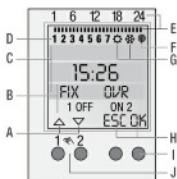
# Operation and configuration

## Display and function keys

- Switch-off commands have a higher priority than switch-on commands.
- The central line of the display, in which the adjusted values and selected menu items are displayed, is displayed larger.
- Flashing means that an entry is required. If you do not enter anything within two minutes, the timer switches back to automatic operation.
- "MAINSOFF" appears on the display when the device is not supplied with power.
- "LOW BATT" appears on the display when a battery change is required within the next two weeks.
- The programs are retained after a reset, although you will need to readjust date and time. Press all 4 buttons at the same time to reset the device.

## Display

- A** Function displays of the two left keys
- B** Switching state displays (ON/OFF/OVR/FIX)
- C** 3 display lines
- D** Weekdays  
The assignment can be changed in the **DATETIME** menu, for example to 1 = Sunday.  
Default setting 1 = Monday
- E** Programmed switching times
- F** Radio antenna
- G** Display of summer/winter time
- H** Function displays of the two right keys



## Keys/Interfaces

- I** Right keys
- J** Left keys with manual switch function in Automatic mode

## Function displays of the two left keys:

- △ Scroll upwards in the menu
- ▽ Scroll downwards in the menu
- ✓ Accept selection/proposal
- + Brief key press = +1 / long key press (about 2 sec) = fast forward
- Brief key press = -1 / long key press (about 2 sec) = fast forward

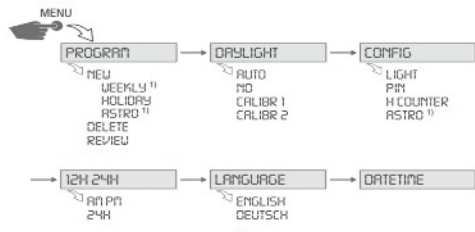
## Function displays of the two right keys:

- MENU** Leaves Automatic mode and enters Programming mode
- ESC** Brief key press = one step backward  
Long key press (about 2 sec) = Back to Automatic mode
- OK** Make a selection and accept
- EDT** Change programs in "Read mode"
- NO** Do not execute command
- YES** Execute command
- DEL** Delete

1) Function not available for all products.

2) Available only if individual days have been selected for the ON command.

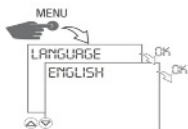
## Menu structure



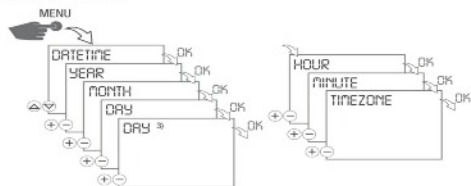
## Select menu language

When delivered, the timer is in automatic mode with preset time, date (CET) and menu in English.

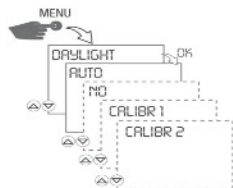
Press the Menu button to make settings. Then select the desired setting.



## Set date and time



## Switchover summertime/wintertime



The following settings are possible:

### AUTO

In-factory default setting as specified by law (USA or EU). It will be recalculated every year.

### NO

No changeover.

## CALIBR 1 (AUTO)

### Manual Programming.

The programmed summer/winter time will be recalculated automatically for each year.

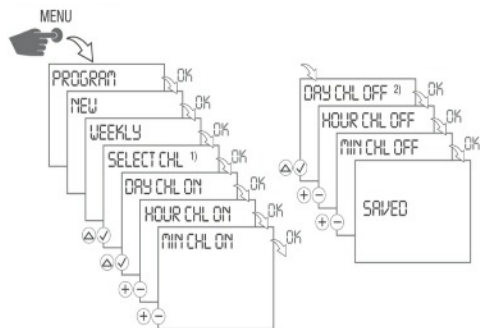
- The change-over always takes place on the **first Sunday** of the selected month, if the entered date lies between 1. and 15.
- The change-over always takes place on the **last Sunday** of the selected month, if the entered date lies between 16. and 31.
- The time change-over (summertime/wintertime) occurs on the respective Sunday at 1 o'clock UTC (Coordinated Universal Time).

## CALIBR 2 (FIX)

### Manual Programming.

The change-over takes place every year always on the same date.

## Create a weekly program <sup>1)</sup>



1. Press the **MENU KEY**.
2. Confirm **PROGRAM** by pressing **OK**.
3. Confirm **NEW** by pressing **OK**.
4. Confirm **WEEKLY** by pressing **OK**.
  - ▷ Free memory locations are briefly displayed.

<sup>3)</sup> Set the weekday in accordance with the current date.

1. <sup>4)</sup> Only appears when the Astro-settings are not set.

5. When prompted, select channels  $\Delta$  and confirm by pressing  $\checkmark$ .  
 → **OK**  
 ▷ The weekday display is flashing.

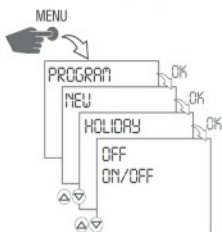
*ON command:*

6. Select the desired days  $\Delta$  and confirm by pressing  $\checkmark$  → **OK**
7. Enter hour (+/-) → **OK**
8. Enter minutes (+/-) → **OK**

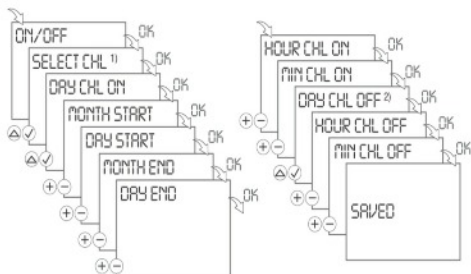
*OFF command:*

9. When prompted, select desired days  $\Delta$  and confirm by pressing  $\checkmark$  → **OK**
10. Enter hour (+/-) → **OK**
11. Enter minutes (+/-) → **OK**  
 ▷ The program is saved.

### Creating a holiday program

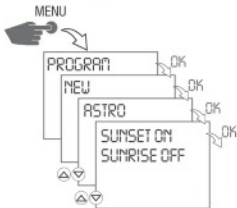


### ON/OFF programming



**i** If OFF is set, you can select the days of the week on which the time switch is switched off during holidays.  
 The procedure is the same as for creating a weekly program.

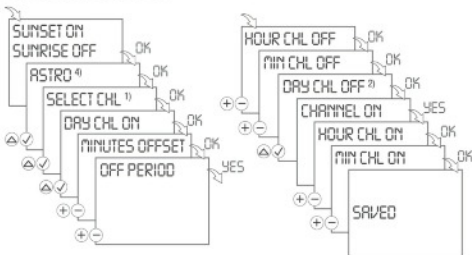
## Creating an ASTRO program <sup>1)</sup>



The following settings are possible:

SUNSET ON SUNRISE OFF	The time switch switches ON at sunset and switches OFF at sunrise
SUNSET OFF SUNRISE ON	The time switch switches OFF at sunset and switches ON at sunrise
SUNRISE PULSE	The time switch switches ON at sunrise for a certain time (pulse)
SUNSET PULSE	The time switch switches ON at sunset for a certain time (pulse))
SUNRISE SUNSET PULSE	The time switch switches ON at sunrise and sunset for a certain time (pulse)

## Sunset ON / Sunrise OFF



1. Confirm **SUNSET ON / SUNRISE OFF** by pressing **OK**.  
▷ Free memory locations are briefly displayed.
2. When prompted, select Astro-settings.
3. When prompted, select channels  $\Delta$  and confirm by pressing  $\checkmark$ .  
→ **OK**  
▷ The weekday display is flashing.
4. Select the desired days  $\Delta$  and confirm by pressing  $\checkmark$  → **OK**



5. Enter minutes for the **OFFSET (+/-) → OK**  
 Offset can be used to offset the ON and OFF switching times of the Astro program. This is done in order to adapt them to the local conditions.

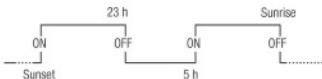
*Example* **SUNSET ON / SUNRISE OFF:**

Offset = + 00:15 The time switch switches ON 15 minutes after the calculated sunset and switches OFF 15 minutes after the calculated sunrise.

6. Select the **OFF PERIOD: YES** or **NO**
- ▶ Select **YES** to set the time period (hours and minutes) during which the time switch should switch off, e.g. night-time switch-off from 23 - 5 h.
  - ▶ Select **NO** to set no OFF period.

*OFF period: YES*

7. Enter hour and minute for the OFF command (+/-) → **OK**  
 8. When prompted, select desired days  $\Delta$  and confirm by pressing  $\checkmark$  → **OK**  
 9. Select **CHANNEL ON: YES** or **NO**
- ▶ Select **YES** to set the time period (hours and minutes) during which the time switch should switch on again.



- ▶ Select **NO** if the night-time switch-off should last to the next sunset.



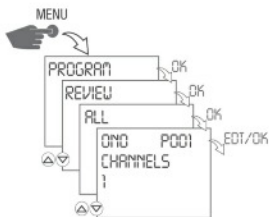
*Channel ON: YES*

10. Enter hour and minute for the **ON** command (+/-) → **OK**  
 ▷ The program is saved.

### View and edit program

Weekly, holiday and astro programs can be viewed and edited separately.

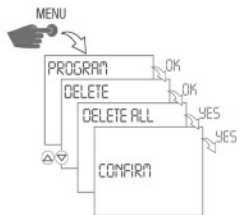
- Press  $\Delta$   $\nabla$  to scroll through the different program steps.
- Press **EDT** to edit a program. This procedure is similar to creating a new program.



## Delete program

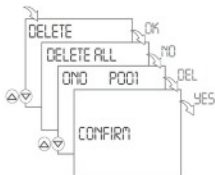
Delete all programs

- Press **YES** to delete all programs.
- Press **NO** to delete individual programs.

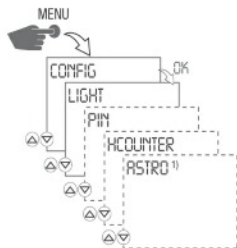


Delete individual programs

- Press  $\Delta$   $\nabla$  to scroll through the different program steps.



## Configuration



## ASTRO – Astro settings <sup>1)</sup>

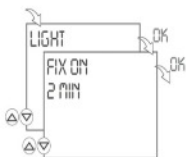


Click the **COUNTRY** menu item to select the desired country and city. The longitudes and latitudes are generated automatically.

If the desired city is not included in the list, you can manually set the longitudes and latitudes via the **LAT/LON** menu item.

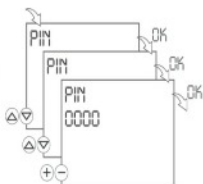
## LIGHT – Background illumination

- Select **FIX ON** to set the background lighting permanently.
- Select **2 MIN** if you want the background lighting to be automatically switched off 2 minutes after your last input.



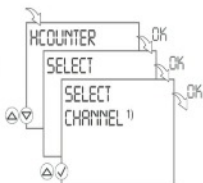
## PIN – Set PIN

- Press **+ -** to set a numeric value.
- Press **OK** to set the next number.
- Select **NO PIN**, to remove the PIN.



## HOUNTER – Set hour counter

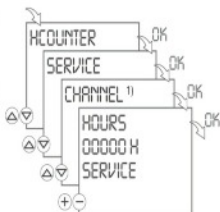
- Press **△ √** to select the channels.
- Select **REVIEW** to check the hour counter.
- Press **△ ▽** to scroll through the different program steps
- Press **RES** to reset the hour counter for this channel.



## HOUNTER – Set service counter

You can set the number of operating hours after which a service message is to appear. It will be shown on the display as soon as the counter has reached the number of hours set by you.

- Press **△ ▽** to select the channels.
- Press **+ -** to set a numeric value.



### Automatic/Manual mode

- Manual switch: Duration ON / Duration OFF / OVR / Automatic mode
- Left button = channel 1 / Right button = channel 2

Press 1x = FIX ON = Duration ON

Press 2x = FIX OFF = Duration OFF

Press 3x = OVR = Override mode

Press 4x = Automatic mode



### Override mode

The Override function (temporary program overwrite) allows the user to switch ON or OFF early. This depends on the current channel status. The Override function applies only to the current program and remains active until the next program change. After that, the timer returns to Automatic mode.



## Maintenance and repair

### Battery change

Before changing the battery, the device must be disconnected from the power supply! Date and time will be lost!

1. Lift the battery compartment using a screwdriver.
2. Take the battery out of the support.
3. Insert new (Lithium battery type CR2032) battery into support.  
Observe polarity of the battery!
4. Push battery support downward until it engages.
5. Dispose of the battery in an environmentally friendly manner.



## Disposal / Recycling

Dispose of the packing material correctly according to legal requirements and regulations.

Observe the following notes for disposing of defective system components or the system after its service life:

- Dispose of appropriately, i.e. separating the parts to be disposed of according to material groups.
- Do not throw electrical and electronic components in the bin. Bring these parts to the recycling centers.
- Always ensure the environmentally sound disposal conform to the state-of-the-art environment protection, recycling and disposal engineering.