



### Safety precautions

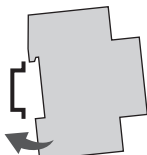
- The connection and installation of electrical devices may only be carried out by a qualified electrician.
- Interventions in and changes to the device result in the voiding of the warranty claim.
- Observe your national regulations and the respective safety provisions.
- Fixed and flexible conductors of up to 10 mm<sup>2</sup> may be attached to the external terminal clips.
- Flexible cables with a cross-section  $\leq 1 \text{ mm}^2$  should not be attached.

### General information

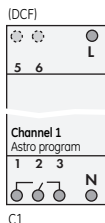
- Deactivation commands take priority over activation commands.
- If the power supply is correct, the dots shown between the hours and minutes (HH:MM) are displayed permanently. The dots flash if the power supply is interrupted.
- If there is no power supply, the position indicator display goes out after 2 minutes.
- The whole display flashes the battery needs to be changed for up to 2 weeks to warn that.

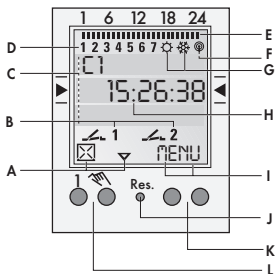


### Installation on DIN rail



### Terminal diagram





## Display

- A** Function displays of the two left-hand buttons
- B** Channel status displays
  - 1 = Channel 1 ON
  - 1 = Channel 1 OFF
  - Channel 1 = C1, Channel 2 = C2
- C** 3 communication lines for time display, menu items, entry prompts etc.
- D** Day-of-week display
- E** Overview of daily switching program
- F** Radio antenna
- G** Display of summer/winter time
- H** Operating voltage (permanently lit dots) Reserve power operation (dots flash)
- I** Function displays of the two right-hand buttons

## General information

- The middle communication line shows the selectable menu item. If confirmed with **OK**, this item is activated.
- Flashing texts or symbols require an entry.
- If no entries are made within the next 2 minutes, the clock reverts to Auto mode.

## Buttons

- J** Reset
  - The programs are retained in the case of a reset. The date and time must be set again. Press reset button with a blunt object (pen).
- K** Right-hand buttons
- L** Left-hand buttons with manual switch function in Automatic mode

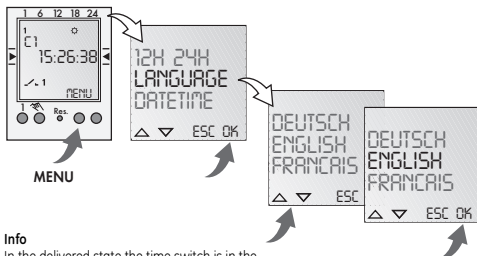
## Function displays of the two left-hand buttons:

- △ scroll up in menu
- ▽ scroll down in menu
- ☒ Select/reject suggestion
- ✓ Select/accept suggestion
- + Pressing briefly = +1  
Pressing long (approx. 2 sec) = +5
- Pressing briefly = -1  
Pressing long (approx. 2 sec) = -5

## Function displays of the two right-hand buttons:

- MENU** Exits the Automatic mode and enters the Programming mode
- ESC** Pressing briefly = one step back  
Pressing long (approx. 2 sec) = return to Automatic mode
- OK** Make selection and apply
- EDT** Change request in Read mode
- NO** Do not execute command
- YES** Execute command
- DEL** Delete

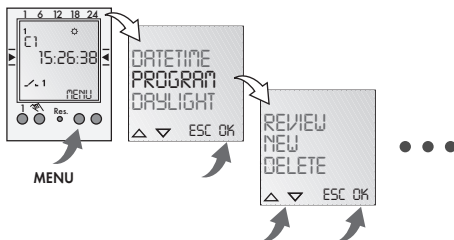
## Initial start-up - selection of menu language

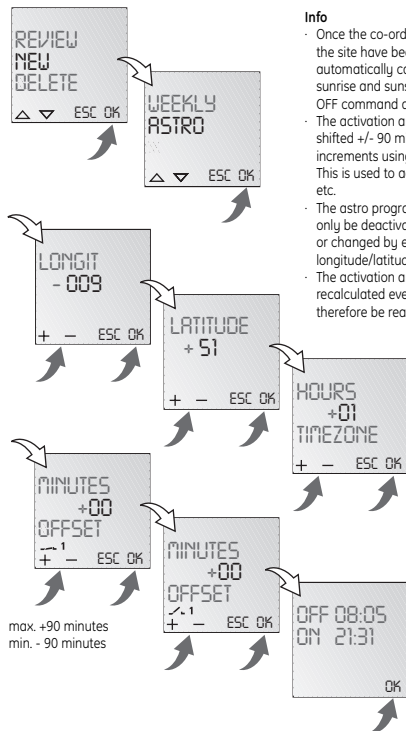


## Info

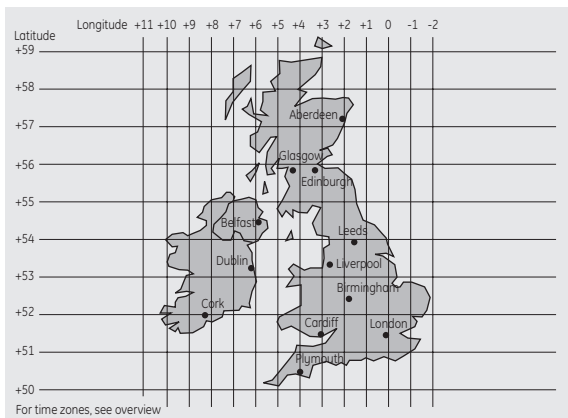
In the delivered state the time switch is in the Auto mode with a preset time, date and the menu language English.

## Prog.



**Astro program**

**Info**

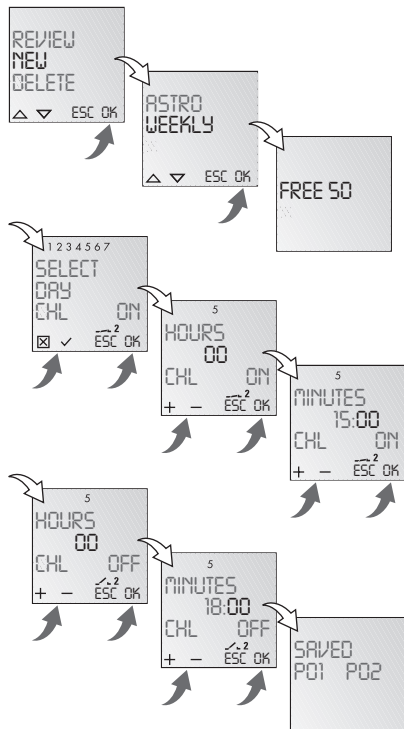
- Once the co-ordinates (longitude/latitude) of the site have been entered, the astro program automatically calculates the daily time of sunrise and sunset. ON command at sunset. OFF command at sunrise.
- The activation and deactivation times can be shifted +/- 90 minutes in one-minute increments using the OFFSET function. This is used to adapt to local circumstances etc.
- The astro program cannot be deleted. It can only be deactivated using the manual switch or changed by entering new coordinates for longitude/latitude etc.
- The activation and deactivation times are recalculated every day. The program cannot therefore be read.
- The activation and deactivation times can be read off from the overview of the daily switching program (D) or upon completion of programming and once confirmed by pressing OK.



Site	Longitude	Latitude	Site	Longitude	Latitude
Aberdeen	+2	+57	Limerick	+9	+53
Belfast	+6	+55	Liverpool	+3	+53
Birmingham	+2	+52	London	+0	+52
Brighton	+0	+51	Londonderry	+7	+55
Cardiff	+3	+51	Newcastle	+2	+55
Cork	+8	+52	Norwich	-1	+53
Coventry	+2	+52	Nottingham	+1	+53
Dublin	+6	+53	Oxford	+1	+52
Dundee	+3	+56	Plymouth	+4	+50
Edinburgh	+3	+56	Sheffield	+1	+53
Galway	+9	+53	Southampton	+1	+51
Glasgow	+4	+56	Southend	-1	+52
Inverness	+4	+57	Stoke	+2	+53
Ipswich	-1	+52	Swansea	+4	+52
Kilkenny	+7	+53	Waterford	+7	+52
Leeds	+2	+54	York	+1	+54

Definition of location: <http://www.multimap.com>

## Weekly program (only with 2-channel version)



### Info

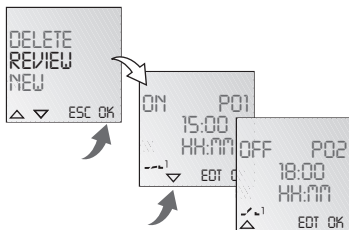
The time switch has 50 memory spaces.

### Example

ON command for channel 2 at 3 pm. OFF command at 6 pm.

- Select NEW program and confirm with **OK**.
- Select WEEKLY and confirm with **OK**.
- The free memory spaces are briefly displayed.
- Select day block or individual day (block formation as desired) and confirm with **OK**.
- Enter hour for ON command (+/-) and confirm with **OK**.
- Enter minute for ON command (+/-) and confirm with **OK**.
- Enter hour for OFF command (+/-) and confirm with **OK**.
- Enter minute for OFF command (+/-) and confirm with **OK**.
- Program is saved.
- Program jumps to selection REVIEW, NEW, DELETE. Now additional programs can be created.

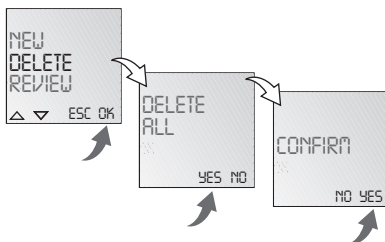
## View, edit program



### Info

- The program steps can be scrolled through with **▼▲**.
- The respective program can be edited by pressing **EDT**. The procedure is the same as when creating a new program.

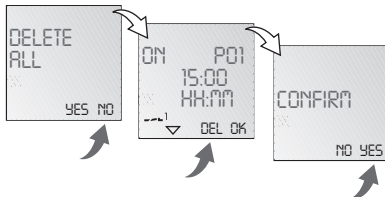
## Delete all programs



### Info

- It is possible to delete all programs with **YES**.
- By pressing **NO**, individual programs can be deleted.

## Delete individual programs

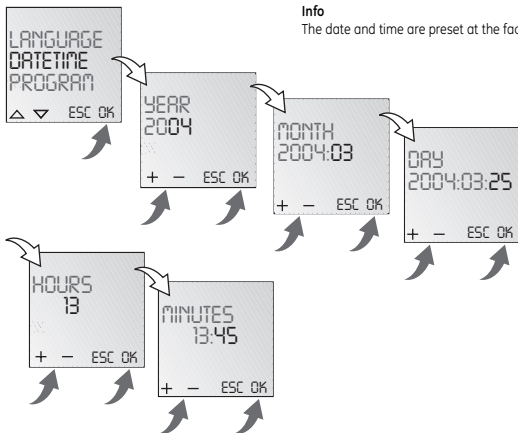


### Info

When deleting individual programs, all associated program steps are deleted (e.g. P01 ON and P02 OFF).



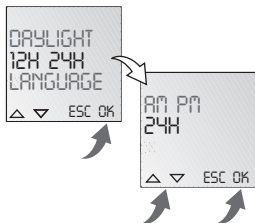
## Set date and time



### Info

The date and time are preset at the factory.

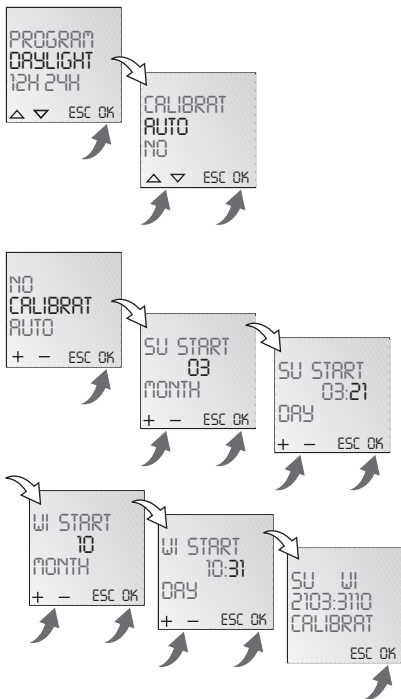
## Set AM/PM (12-hour-) or 24-hour display







## Switchover for summer/winter time



### Info

The following settings are possible:

### AUTO

Factory presetting of the published calendar dates. This is automatically recalculated for each year.

### NO

No switchover

### CALIBRAT

Programming. The start date of the summer time and winter time must be entered for this purpose. The factory presetting is overwritten.

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

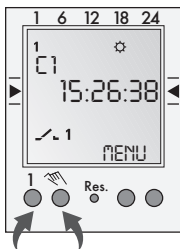
The changeover takes place on the same specified day of the week in the same week of each month.

### Example

03/21 Start summer time  
10/31 Start winter time



## Operating mode



### Info

Left-hand button = Channel 1  
Right-hand button = Channel 2 (only with 2-channel version)

Press 1 x = FIX ON = continuous ON  
Press 2 x = FIX OFF = continuous OFF  
Press 3 x = return to Auto mode

FIX ON: FIX

FIX OFF: FIX

AUTO: (no display) programmed switching times



## Technical Data

Dimensions H x W x D	45 x 35 x 60 mm	Ambient temperature	-13°F to 131°F (25°C to +55°C)
Weight g (approx.)	170	Protection class	II
Supply voltage	see imprint on device	Accuracy	typ. ±2.5 s/day at 68°F (20°C)
Power consumption	5 VA	Reserve power	3 years from factory at +20°C (20°C)
Switching capacity		Shortest switching time	1 min.
- ohmic load (VDE, IEC)	16 A/250 VAC	Memory spaces	50
- inductive load cos φ 0.6	8 A/250 VAC	Block formation of day of the week	fixed/free selection
- Incandescent lamp load	1,000 W	Switching status display	yes
Switching output	potential-free	Sealable	yes
Switch contacts	1 or 2 changeover contact(s)		