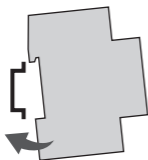## Safety precautions

· 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 mm² may be attached to the external terminal clips.
· Flexible cables with a cross-section ≤ 1 mm² 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.
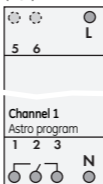· The whole display flashes the battery needs to be changed for up to 2 weeks to warn that.

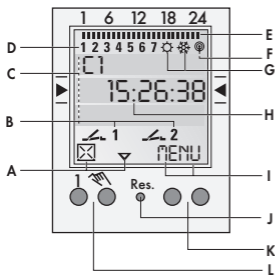**Installation on DIN rail**

Terminal diagram

(DCF)

| 5 | 6 | L |
| | | |

Channel 1
Astro program
| 1 | 2 | 3 | N |

C1

C2

| 5 | 6 | L |

Channel 2
Weekly program

Channel 1
Astro program
| 1 | 2 | 3 | N |

C1

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
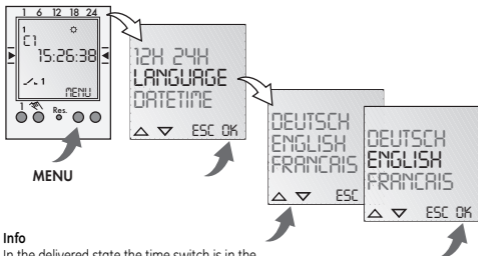
Function displays of the two left-hand buttons:

△	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:

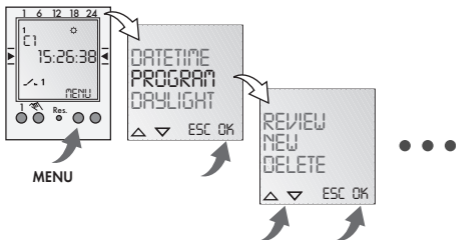|	
MENU	Exits the Automatic mode and enters the Programming mode
ESC	Pressing briefly = one step back Pressing long (approx. 2 sec) = return to Automatic mode
OK	Make selection and apply
EDT	Change request in Read mode
NO	Do not execute command
YES	Execute command
DEL	Delete

GB

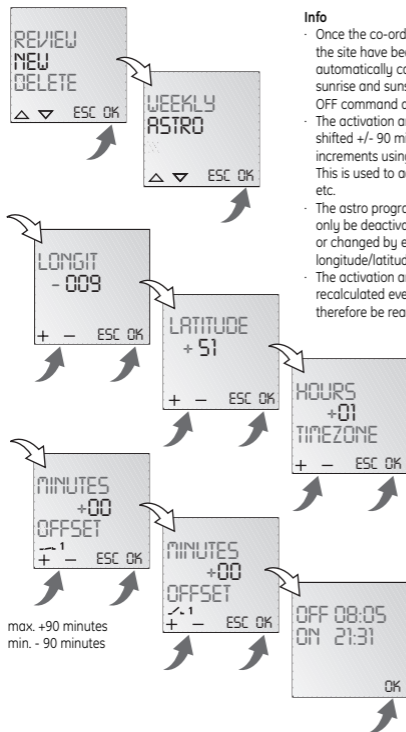**Initial start-up - selection of menu language**

MENU

Info

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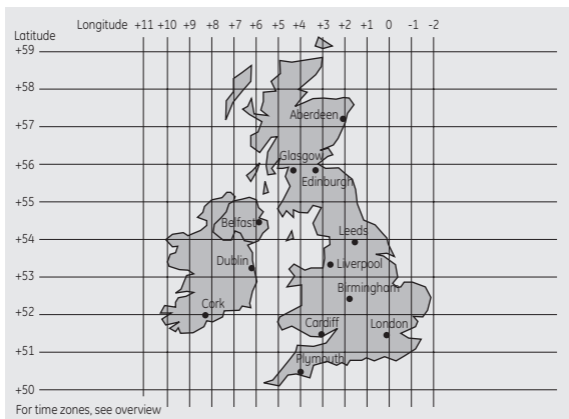
Prog.

MENU

Astro program

REVIEW
NEW
DELETE
△ ▽   ESC OK

WEEKLY
ASTRO
△ ▽   ESC OK

LONGIT
- 009
+ −   ESC OK

LATITUDE
+ 51
+ −   ESC OK

HOURS
+01
TIMEZONE
+ −   ESC OK

MINUTES
+00
OFFSET
+ −¹   ESC OK

MINUTES
+00
OFFSET
+ −¹   ESC OK

max. +90 minutes
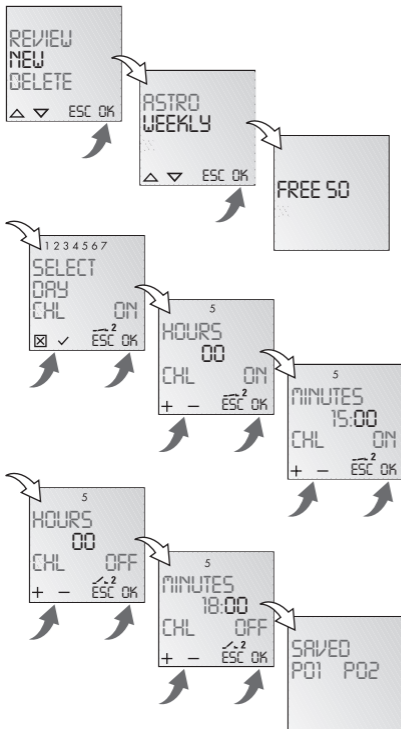min. - 90 minutes

OFF 08:05
ON 21:31

OK

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.

Longitude +11 +10 +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2

Latitude
+59
+58
+57 · Aberdeen
+56 Glasgow · Edinburgh
+55
+54 Belfast · Leeds
+53 Dublin · Liverpool
+52 Cork · Birmingham
+51 Cardiff · London
+50 Plymouth

For time zones, see overview

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)

REVIEW
NEW
DELETE
△ ▽ ESC OK

ASTRO
WEEKLY
△ ▽ ESC OK

FREE 50

1234567
SELECT
DAY
CHL ON
☒ ✓ ESC OK

5
HOURS
00
CHL ON
+ − ESC OK

5
MINUTES
15:00
CHL ON
+ − ESC OK

5
HOURS
00
CHL OFF
+ − ESC OK

5
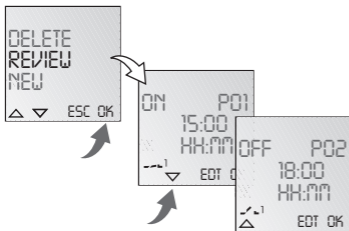MINUTES
18:00
CHL OFF
+ − ESC OK

SAVED
P01 P02

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
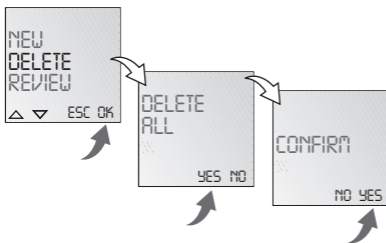 programs can be
  created.

GB

View, edit program

Info

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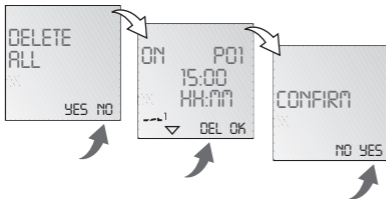The procedure is the same as when creating a new program.

Delete all programs

Info

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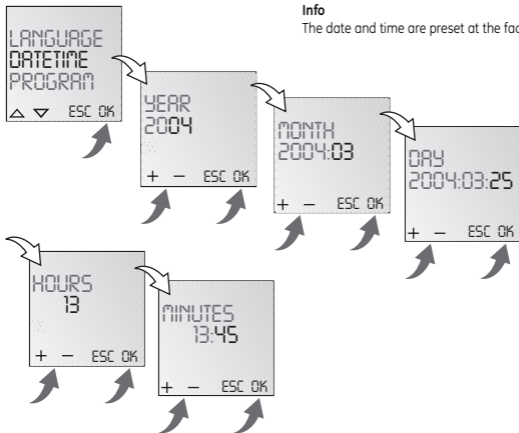· By pressing **NO**, individual programs can be deleted.

Delete individual programs

Info

When deleting individual programs, all associated program steps are deleted (e.g. P01 ON and P02 OFF).
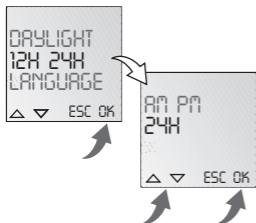
Set date and time
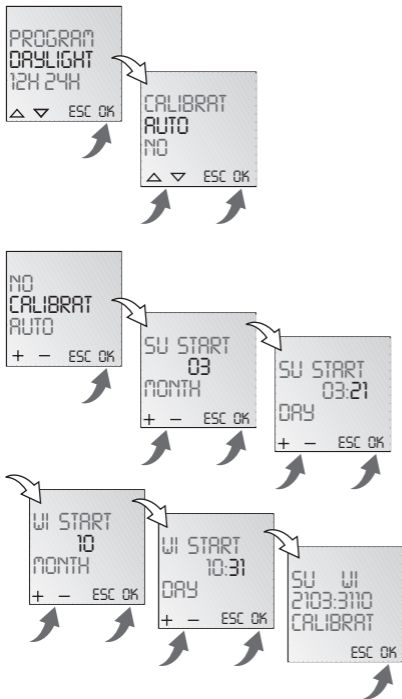
Info
The date and time are preset at the factory.

LANGUAGE
DATETIME
PROGRAM
△ ▽ ESC OK

YEAR
2004
+ − ESC OK

MONTH
2004:03
+ − ESC OK

DAY
2004:03:25
+ − ESC OK

HOURS
13
+ − ESC OK

MINUTES
13:45
+ − ESC OK

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

DAYLIGHT
12H 24H
LANGUAGE
△ ▽ ESC OK

AM PM
24H
△ ▽ ESC OK

GB

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.

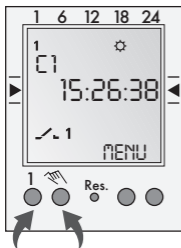**NO**
No switchover

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

GB