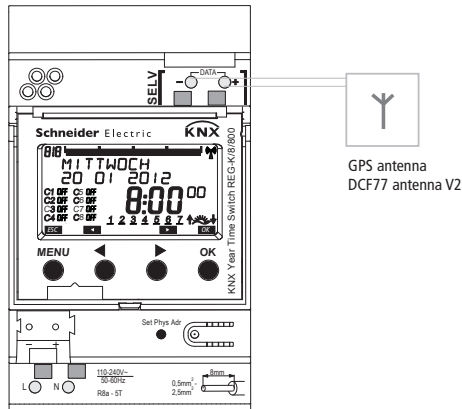**Schneider Electric**

**KNX Year Time Switch
REG-K/8/800
Art. no. MTN6606-0008**

**Installation and
operating instructions**
Digital time switch with annual and
astronomical program

GB **F**

D **E**

GPS antenna
DCF77 antenna V2

KNX Year Time Switch
REG-K/8/800

Contents

Basic safety instructions

> ⚠️ **WARNING**
>
> **Danger of death through electric shock or fire!**
> ➢ Installation should only be carried out by a qualified electrician!

- The device is designed for installation on DIN rails TH35 (in accordance with EN 60715) and corresponds to type 1 STU in accordance with IEC/EN 60730-2-7 resp. 60730-1
- The professional installation of bus lines and commissioning of devices requires compliance with the provisions of EN 50428 for switches or similar installation equipment for use in building construction technology. Tampering with, or making modifications to, the device invalidates the guarantee
- Safety clearance must be guaranteed as per DIN EN 60664-1. A distance of at least 4 mm must be maintained between individual cores of the 230 V cable and the bus line.
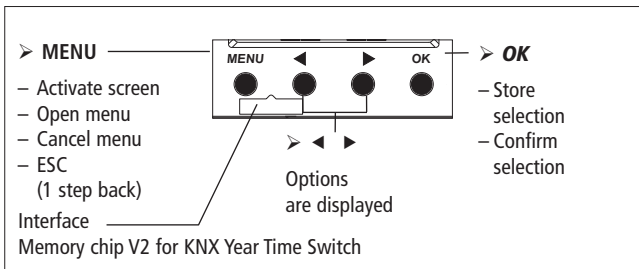
Designated use
- The time switch can be used for lighting, bell systems, ventilation etc.
- Only use in enclosed dry spaces (device); antenna is installed in the open-air

Disposal

Dispose of device and batteries separately in an environmentally sound manner

Screen and keys

Program display

Programmed switching times

Weekday and Date display

Channel status
ON = On
OFF = Off

DCF77 antenna V2/ GPS antenna connected display

Time display

Weekdays from 1 to 7

Astronomical program display

Display of the active keys with the relevant function

```
BIB [||||||||||||||||||||||||]  ((•))
    M I T T W O C H
    20  01  2012
C1 OFF  C5 OFF         8:00 00
C2 OFF  C6 OFF
C3 OFF  C7 OFF
C4 OFF  C8 OFF    1 2 3 4 5 6 7  ☀↓
ESC   ◄        ►       OK
```

➢ **MENU**

– Activate screen
– Open menu
– Cancel menu
– ESC (1 step back)

Interface

Memory chip V2 for KNX Year Time Switch

MENU ◄ ► OK

➢ ◄ ►

Options are displayed

➢ *OK*

– Store selection
– Confirm selection

Operating instructions

1. Read text lines
Text represents query

2. Make a decision

YES	NO
Confirmation	Amend/ change
Press ***OK***	Press ◄ ►

Connection/installation

⚠ **WARNING**

Warning, danger of death through electric shock!
➢ Must be installed by qualified electrician!
➢ Disconnect power source.
➢ Cover or shield any adjacent live components.
➢ Ensure device cannot be switched on!
➢ Check power supply is disconnected.
➢ Earth and bypass.
➢ Observe SELV on data bus.

Connect cable
➢Strip cable by 8 mm (max. 9 mm).
➢Insert cable at 45° in the open terminal
   (2 cables per terminal position possible).
➢Only with flexible wires: To open the plug-in
   screwless terminal, press screwdriver downwards.

45° cable

Plug-in terminal

Plug-im screwless terminal NC contact

Test tap

Connection

RC GPS

RC DCF

Data

KNX

L N

N
L
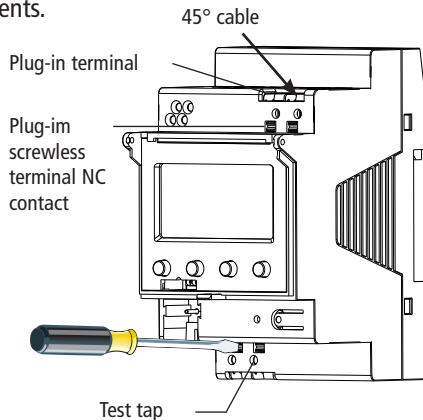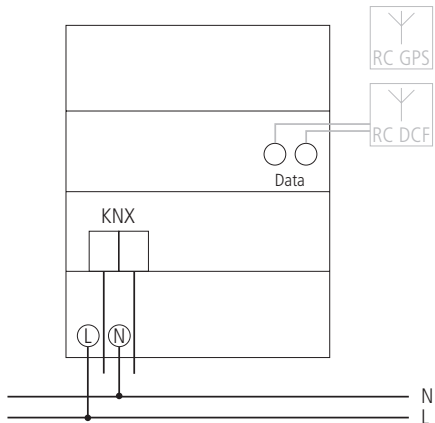
Bus connection

➤ Insert bus line in bus terminal on the front of the device.
➤ Ensure correct polarity.
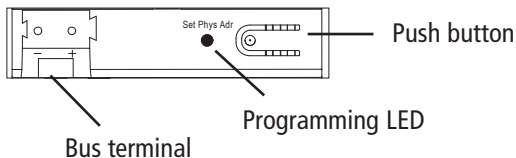
Program physical address

➤ Press push button on front of device.
 → The programming LED lights up.
 → The device is in program mode.

Start-up, diagnostics and configuration are handled by ETS 3 and 4 (KNX Tool Software).

Push button

Programming LED

Bus terminal

RESET

➤ Press the 4 keys simultaneously. **ENGLISH** is displayed.

➤ Then select **KEEP PROGRAM** or **DELETE PROGRAM**.

Overview of menu selection

MENU

PROGRAM ►

CHOOSE CHANNEL
C1

STANDARD
PROGRAM P0 ►

EXTRA
PROGRAM
P1–P16

NEW

CHECK–MODIFY–
DELETE

DELETE
P0 ALL

END

SIMULATION ►

CHOOSE CHANNEL
C1

START YEAR
2012

27 01 2012
START MONTH

27 01 2012
START DAY

27 01 2012
SWITCHING TIME

NEXT

TIME/DATE ►

TIME

DATE

SUMMER-
WINTER RULE

WEEKDAY
NUMBER

FORME DATE

FORME TIME

EASTER RULE

END

8

MANUAL ▶ OPTIONS ▶ END

CHOOSE CHANNEL
C1

PERMANENT ON

PERMANENT OFF

OVERRIDE ON

TIMER SHORT
TERM CIRCUIT

HOLIDAY

RANDOM

ACTIVATE EXTRA
PROGRAM

END

ASTRO

OPERATING
HOUR COUNTER

LANGUAGE

PIN

LCD-
ILLUMINATION

FACTORY
SETTINGS

INFO

END

Initial start-up
Set date, time and summer/ winter time rule

➤ Press required key and display follows on screen (see figure).

You can connect the DCF77 antenna V2 (MTN6606-0070) or the GPS antenna (MTN6606-0071) in order to synchronise the time switch via the DCF/GPS time signal.

Settings must be made via the ETS if the antenna is connected. The settings can be activated via the ETS on the KNX bus. Settings do not have to be made if the date and time were received via GPS/DCF or the KNX bus.
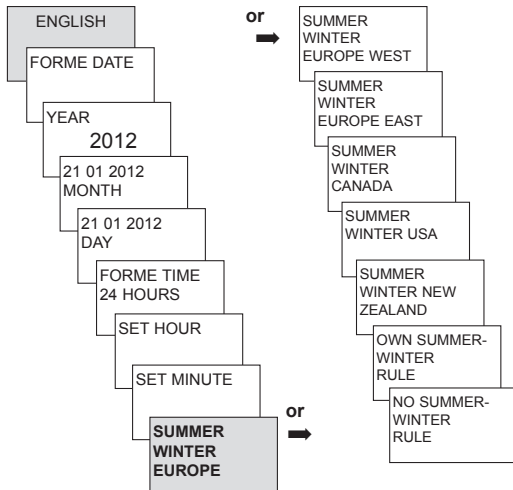
Time switch programs, astronomical programs

With the digital yearly time switch the switching programs or astro programs can be programmed and switched optionally for each channel.

Time switch programs	Astro programs
Time switch function	The astro function can be activated instead of the
– 1 **Standard program** P0 (Weekly program	time switch function for each channel
with switching times, pulse and cycle times)	– 1 **Astro standard program** P0 (with fixed on/
– 16 **Extra programs** consisting of:	off times, weekly program)
14 Extra programs P1–P14 (Weekly programs	– 16 **Extra programs** consisting of:
with switching times, pulse and cycle times with	14 Astro extra programs P1–P14 (with fixed on/
different adjustable date ranges (fixed date range,	off times, weekly program) with different adjusta-
date dependent on Easter etc.), with extra pro-	ble date ranges (fixed date range etc.), with extra
gram P15 (Fix ON) and extra program P16 (Fix	program P15 (Fix ON) and extra program P16 (Fix
Off) (with adjustable date ranges)	Off) (with adjustable date ranges)

A channel can be defined as an astro channel in: MENU → Options → Astro → Astro settings →
choose channel → change to astro program

Time switch program
Program switching time in the standard program P0

Example: Switch on sports hall lighting from Mon–Fri, 7:30 to 12:00 hrs

- ➢ Press **MENU**. **PROGRAM** is displayed.
- ➢ Confirm by pressing **OK**. **CHOOSE CHANNEL** is displayed.
- ➢ Confirm **CHANNEL 1** by pressing **OK**. **STANDARD PROGRAM P0** is displayed.
- ➢ Confirm by pressing **OK**. **NEW** is displayed.
- ➢ Confirm by pressing **OK**. **SWITCH TIME** is displayed.
- ➢ Confirm by pressing **OK**. Select **ON** (for switch-on times).
- ➢ Confirm by pressing **OK**. The display shows **SET HOUR**.
- ➢ Use the **+** or **–** keys to enter hour, minute, (07:30) and confirm by pressing **OK**.
  EVERY DAY is displayed. Press ▶to select **MONDAY**.
- ➢ Confirm by pressing **OK**. **COPY** is displayed.
- ➢ Confirm by pressing **OK**. **ADD TUESDAY** is displayed.
- ➢ Confirm by pressing **OK** and also confirm the days Wed, Thurs, Fri by pressing **OK**.
- ➢ Continue with ▶ to **SAVE** is displayed. Confirm by pressing **OK**.

Repeat all steps for the switch-off time however instead of selecting ON with ▶ select OFF and enter 12:00 for hour and minute.

12

MENU	PROGRAM

CHOOSE
CHANNEL

STANDARD
PROGRAM ► EXTRA PROGRAM 1 ► EXTRA PROGRAM 2 ► DELETE CHANNEL 1 ALL

NEW

SWITCH TIME ► PULSE ► CYCLE

ON

SET
HOUR

ON 7.30 ➡

SET
MINUTE

EVERY DAY ► MONDAY ► TUESDAY ►

COPY ► SAVE

ADD TUESDAY SAVED

↓

SAVE

SAVED

13
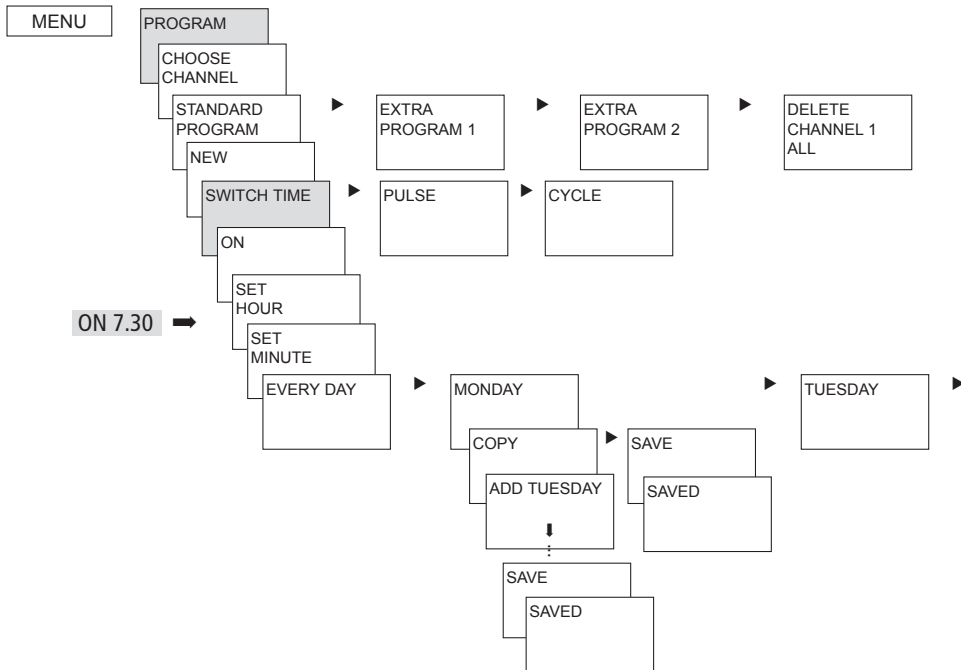
Request/change/ delete switching time

- ➢ Press **MENU**. **PROGRAM** is displayed.
- ➢ Confirm by pressing **OK**.
- ➢ Confirm **CHANNEL 1** by pressing **OK**.
- ➢ Confirm **STANDARD PROGRAM P0** by pressing **OK**.
- ➢ Use ▶ to select **CHECK-MODIFY-DELETE**.
- ➢ Confirm by pressing **OK**.
- ➢ Confirm **SWITCH TIME** by pressing **OK**. The first of the entered switching times is displayed.
- ➢ Confirm by pressing **OK**. **NEXT** is displayed.

Change or delete individual switching times

- ➢ Press ▶ to select **MODIFY** (or **DELETE)**.
- ➢ Confirm by pressing **OK**. The display shows **CHANGE HOUR**.
- ➢ Use the+ or – keys to enter hour and minute and confirm by pressing **OK**.

14
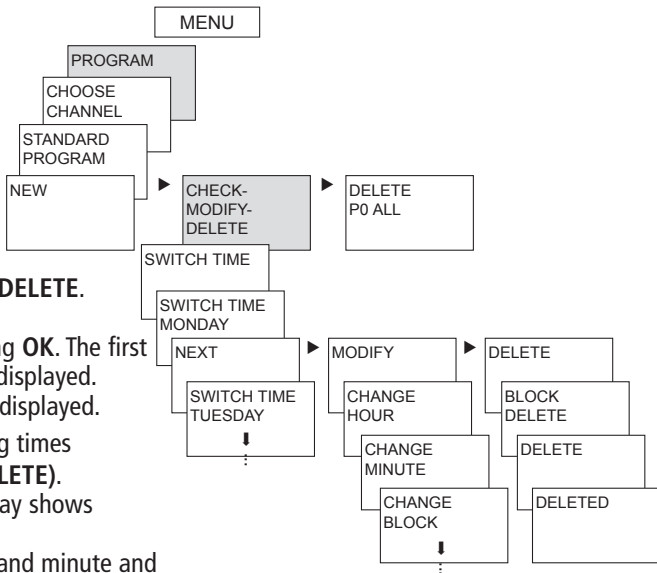
Delete all switching times in the standard program

➢ Press **MENU**. **PROGRAM** is displayed.
➢ Confirm by pressing **OK**.
➢ Confirm **CHANNEL 1** by pressing **OK**.
  STANDARD PROGRAM P0 is displayed.
➢ Confirm by pressing **OK**.
➢ Use ▶ to select **DELETE P0 ALL**.
➢ Confirm by pressing **OK**.
  The display shows **CONFIRM DELETE**.
➢ Confirm by pressing **OK**. The display shows
  DELETED.

```
         MENU
      PROGRAM
   CHOOSE
   CHANNEL
 STANDARD
 PROGRAM
NEW          ▶  CHECK-      ▶  DELETE
                MODIFY-         P0 ALL
                DELETE
                              CONFIRM
                              DELETE
                              DELETED
```

15
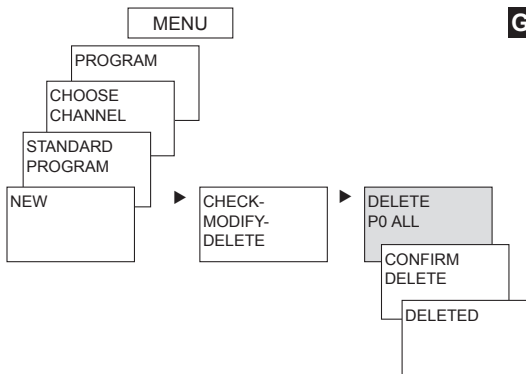
Pulse time programming

Example: Switch on pause signal on Monday 8:05 hrs for 5 sec

➢ Press **MENU**. **PROGRAM** is displayed.
➢ Confirm by pressing **OK**. **CHOOSE CHANNEL** is displayed.
➢ Confirm **CHANNEL 1** by pressing **OK**. **STANDARD PROGRAM P0** is displayed.
➢ Confirm by pressing **OK**. **NEW** is displayed.
➢ Confirm by pressing **OK**. **SWITCH TIME** is displayed.
➢ Select **PULSE** by pressing ▶.
➢ Confirm by pressing **OK**. **ON** is displayed.
➢ Confirm by pressing **OK**. The display shows **SET HOUR**.
➢ Use the **+** or **–** keys to enter hour, minute, second (8:05) and confirm by pressing **OK**. **PULSE LENGTH** is displayed.
➢ Use the **+** or **–** keys to enter the duration of the pulse in minutes and seconds (5 sec). **EVERY DAY** is displayed. Press ▶to select **MONDAY**.
➢ Confirm by pressing **OK**. **EVERY DAY** is displayed.
➢ Press ▶ to select **MONDAY**. Confirm by pressing **OK**.
➢ **COPY** is displayed. Press ▶ to select **SAVE**.
➢ Confirm by pressing **OK**.

MENU

PROGRAM

CHOOSE CHANNEL

STANDARD PROGRAM

NEW

SWITCH TIME ▶ PULSE ▶ CYCLE

ON

SET HOUR

ON 8.05 ➡ SET MINUTES

SET SECONDS

PULSE LENGTH IN MINUTES

Length 5 sec ➡ PULSE LENGTH IN SECONDS
⋮

⋮

EVERY DAY ▶ MONDAY

SAVE COPY ▶ SAVE

SAVED ADD TUESDAY SAVED

⋮

SAVE

SAVED
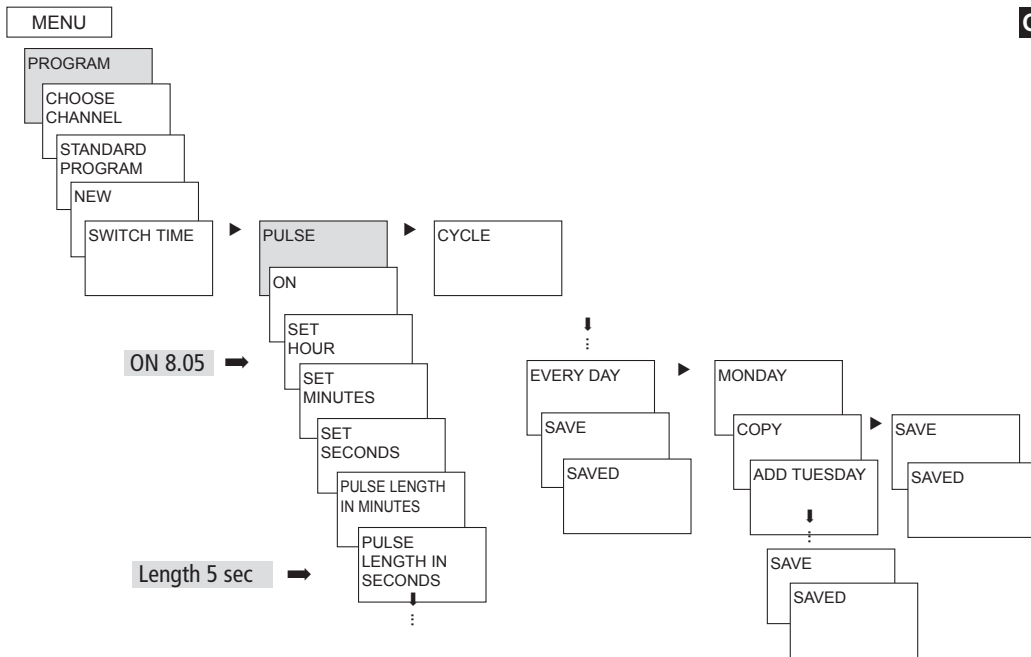
Programme cycle time

In addition to switch-on and switch-off times (switching time) and short time pulses (pulse) cycle times (cycle) can also be programmed. The pulse length (+ pulse pause) is limited to 17 hrs, 59 min, 59 sec

• Cycle times refers to cyclically repetitive time functions such as fan controls, urinal rinses etc.

Example: Switch on water rinsing Monday from 8:00 to 20:30 hrs every 15 min for 20 sec
($8:00^{00}$–$8:00^{20}$ On; $8:15^{00}$–$8:15^{20}$ On; $8:30^{00}$–$8:30^{20}$ On etc.)

Cycle programming
– Start cycle: Monday 8:00 hrs
– Pulse length: 20 sec
– Pause length: 14 min 40 sec
– Cycle end: Monday 20:30:00 hrs

Standard program and extra programs

- The standard program P0 (weekly program with switching times, pulse and cycle times or astronomical program) is always active however has the lowest priority and can be superimposed by the extra programmes P1–P16.

- In extra programs the following is valid: the higher the number the higher the priority. The extra program 16 has the highest, the extra program 1 the lowest priority.

- Each extra program has an arbitrary number of date ranges available. A extra program becomes active when at least one date range has been set and is not superimposed by another extra program with a higher priority during this period. At the start and end of each date range the hour can also be entered to ensure that the changeover to the respective extra program occurs on each complete hour.

- The following date ranges can be set in parallel:
  – Fixed date (once)
  – Fixed date each year
  – Easter rule or the Orthodox Church rule (81 days before ... 174 days after Easter)

– Chinese New Year (20 days before ... 20 days after the Chinese New Year)
– Date with serial pattern (Time limit series): Start and end are set and the start repeated
  according to an adjustable number of days (at the latest after 200 days)
– Weekday rule (e.g. every 3rd Wednesday in September)

Examples of calendar-dependent date ranges:

– **Fixed date range:**
  Start on 02.04.2012 at 16:00 hrs, End on 24.04.2012 at 10:00 hrs

– **Annually recurring date range**
  Christmas: Start every year on 24.12. at 18:00 hrs, End on 26.12. at 23:00 hrs

– **Easter-dependent date range**
  Whit Sunday and Monday: Start every year: 49 days after Easter at 0:00 hrs,
  End: 51 days after Easter at 0:00 hrs

– **Date range dependent on the Chinese New Year**
  Start each year 1 day before the Chinese New Year. New Year, End 5 days after

– Date with **serial pattern (Time limit series)**
as from November 2012 to be carried out successively every 2nd week
Start on Monday 01.11.2012 at 0:00 hrs; End on Monday 08.11.2012 at 0:00 hrs,
repeat start after 14 days

– **Date dependent on the weekday etc.**
each month on the 1st weekend from Saturday 06:00 hrs to Sunday 18:00 hrs;
start 1st Sunday each month at 06:00 hrs, duration 36 hours

– **Public holiday settings**
With the help of the Tool Software V2 for KNX Year Time Switch the public holidays in a country
in the set can be set together, individually processed and transferred to the time switch with the
memory chip V2 for the KNX Year Time Switch as date ranges.

• **Extra program P1-14   Time switch channel**
    – Active in the programmed date ranges
    – Switch timings, pulse and cycle times can be entered as week programs

• **Extra program P1-14   Astronomical channel**
    – Active in the programmed date ranges
    – Astronomical times are active (calculated sunrise and sunset times)

– Fixed switch-offs (e.g. nighttime interruption) and switch-ons can also be entered as weekly program in order to superimpose the astronomical times entirely or partially.

Example: The standard program switches on the street lighting in dependence of the astro times. A nighttime interruption is programmed from 23:00 hrs to 04:00 hrs.
Extra program 1 is active within the date range from April 30, 12:00 hrs until May 12:00 hrs. To ensure that the street lighting remains switched on all night no nighttime interruption is programmed in the extra program 1.

- **Extra program P15**
  – Function: **Fix ON**
  – Active in the programmed date ranges

- **Extra program P16**
  – Function: **Fix OFF**
  – Active in the programmed date ranges

Example: The car park lighting is switched on and off at fixed times or Monday to Friday according to astro times. The extra program P 16 Permanently Off ensures that the car park lighting is not switched on on any public holidays.

SIMULATION

During the simulation it is a channel-related total request. All channel switching entered (standard and special program, switching times, pulse and cycle programs) are displayed in the time sequence in which they are applied.

In the case of an astronomical channel all astronomical switch-ons and fixed switch-ons / switch-offs are displayed in their time sequence.

➢ Press **MENU** using ▶ select **SIMULATION** and follow the indications on the display in order to request all the switchings applied (see figure).

MENU

| PROGRAM | ▶ | SIMULATION |

CHOOSE
CHANNEL

START YEAR
2012

21 01 2012
START MONTH

21 01 2012
START DAY

1. Switching ➡ 21 01 2012
SWITCH TIME
On **10:00**

NEXT

⬇
⋮

23
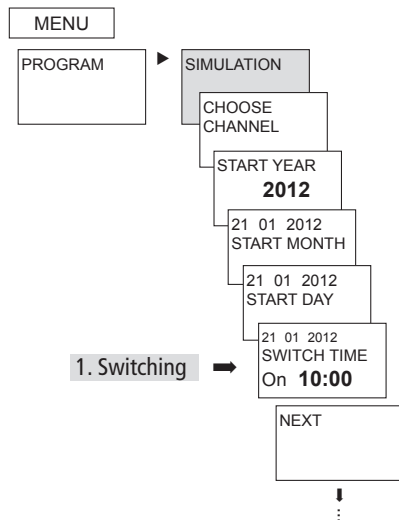
TIME/DATE

In the menu TIME/DATE the TIME, DATE, SUMMER WINTER RULE, WEEKDAY NUMBER, EASTER RULE etc. can be entered/changed in the submenus.

➢ Press **MENU** using ▶ select **DATE/TIME** and follow the indications on the display.

Settings do not have to be made if the date and time are received via GPS/DCF or the KNX bus.

MENU

TIME/DATE						
TIME ▶	DATE ▶	SUMMER-WINTER RULE ▶	WEEKDAY NUMBER ▶	FORME DATE ▶	FORME TIME ▶	EASTER RULE
HOUR SET **10:00**	YEAR **2012**	SUMMER-WINTER EUROPE	FRIDAY DAY 5 1 2 3 4 **5** 6 7	31 12 2012	TIME FORMAT 24 HOURS	STANDARD
MINUTE SET **10:15**	21 01 2012 MONTH	SUMMER-WINTER EUROPE WEST	FRIDAY DAY 6 1 2 3 4 5 **6** 7	12/31/2012	TIME FORMAT 12 HOURS AM PM	ORTHODOX CHURCH
	21 01 2012 DAY **21.01**	⁞		2012-12-31		
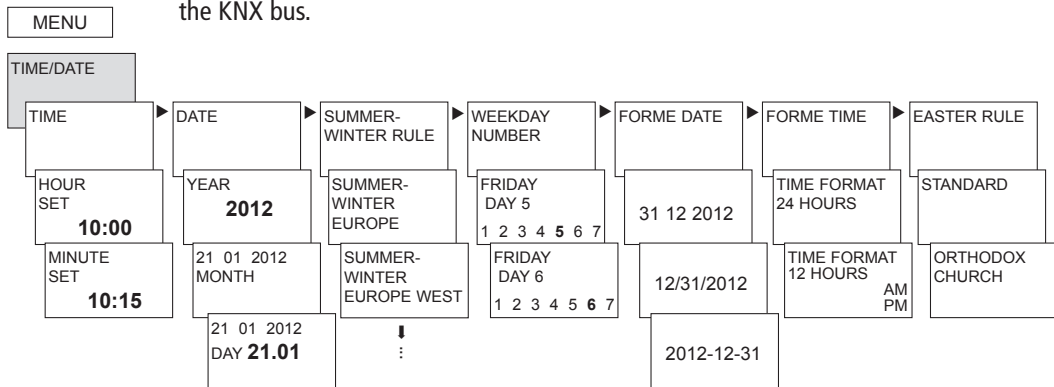
MANUAL

In the MANUAL menu manual switch functions are applied. In the submenus MANUAL, PERMANENT ON/OFF, TIMER SHORT TERM CIRCUIT, HOLIDAY, RANDOM as well as ACTIVATE EXTRA PROGRAM the manual switching can be activated/programmed.

➢ Press **MENU** using ▶ select **MANUAL** and follow the indications on the display.

* (only if the channel is a time switch channel)
Interruptions: several random switch-ons and switch-offs during a programmed switch-on phase
Adjustments: random adjustment of the switch-on and switch-off time.

25
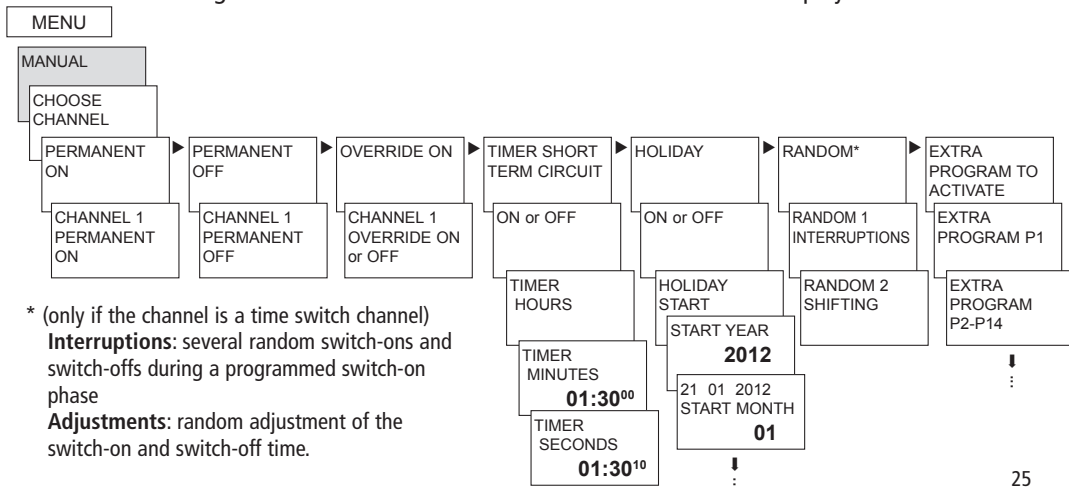
Manual and permanent switching

Manual and permanent switching can be set using the menu in **MANUAL.**

Manual switching
Reversing the channel status to the next automatic or programmed switching.

Permanent switching
As long as a permanent switching (on or off) is activated, the programmed switching times are ineffective.

OPTIONS

In the menu OPTIONS the submenus ASTRO, OPERATING HOUR, LANGUAGE, PIN, LCD ILLUMINATION, FACTORY SETTINGS as well as INFO can be requested.

➢ Press **MENU** using ▶ select **OPTIONS** and follow the indications on the display.

Set ASTRO program

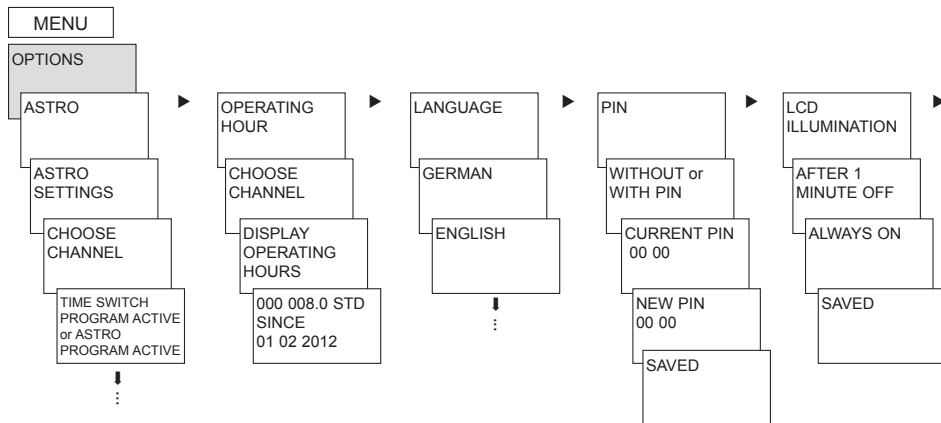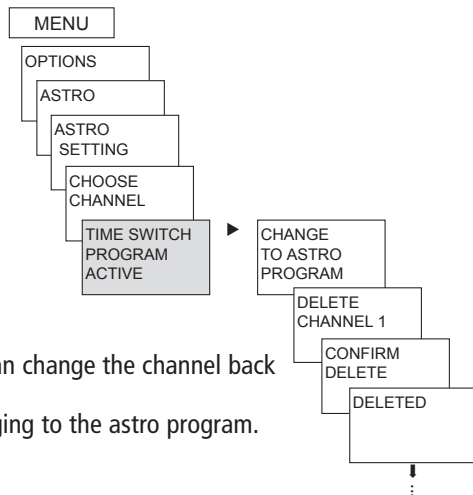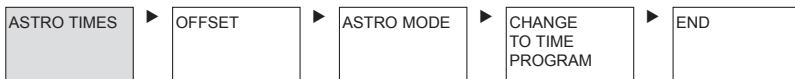... if a time switch program is active.

➢ Press **MENU** using ▶ select **OPTIONS** and
  follow the instructions on the display.

You will automatically be taken to the setting for
the POSITION data (COUNTRY or COORDINATES
input) and the ASTRO SETTINGS (OFFSET and ASTRO
MODE).

If an ASTRO program is activated on a channel you can change the channel back
to the time switch program.
Programmed switching times are deleted when changing to the astro program.

```
┌──────────┐
│ MENU     │
└──────────┘
  ┌──────────┐
  │ OPTIONS  │
  └──────────┘
    ┌──────────┐
    │ ASTRO    │
    └──────────┘
      ┌──────────┐
      │ ASTRO    │
      │ SETTING  │
      └──────────┘
        ┌──────────┐
        │ CHOOSE   │
        │ CHANNEL  │
        └──────────┘
          ┌──────────────┐      ┌──────────────┐
          │ TIME SWITCH  │  ▶   │ CHANGE       │
          │ PROGRAM      │      │ TO ASTRO     │
          │ ACTIVE       │      │ PROGRAM      │
          └──────────────┘      └──────────────┘
                                  ┌──────────────┐
                                  │ DELETE       │
                                  │ CHANNEL 1    │
                                  └──────────────┘
                                    ┌──────────────┐
                                    │ CONFIRM      │
                                    │ DELETE       │
                                    └──────────────┘
                                      ┌──────────┐
                                      │ DELETED  │
                                      └──────────┘
                                          ⋮
```

... if astro times are active.

ASTRO TIMES	▶	OFFSET	▶	ASTRO MODE	▶	CHANGE TO TIME PROGRAM	▶	END

In the **OPTIONS** submenu **ASTRO** it is possible – after a channel has been changed to astro program – to request or change astro times, offset, astro mode as well as position (location). If a channel is set as an astro channel the symbol is displayed ↑☼↓ and the astro times are accessed after the channel selection.

• **ASTRO TIMES**
  Astro time display (sun rise and sunset as well as offset) for the current day

• **OFFSET**
  With the offset (adjustment value) the calculated astro times can be adjusted by max. +/– 2 hrs. This means that the astro on and off switching time can be adapted to local conditions (e.g. mountains, high buildings etc.) or to personal requirements.

• **ASTRO MODE**
  – Evenings **on,** mornings **off**

At sunset it switches **on**, at sunrise it switches **off** (e.g.: street lighting)
  – Evenings **off**, mornings **on**
    At sunset it switches **off**, at sunrise it switches **on** (e.g.: Terrarium)
  – **Astro pulse**: Evenings and mornings, only mornings or only evenings; pulse duration max. 59 min, 59 sec)

• **POSITION**
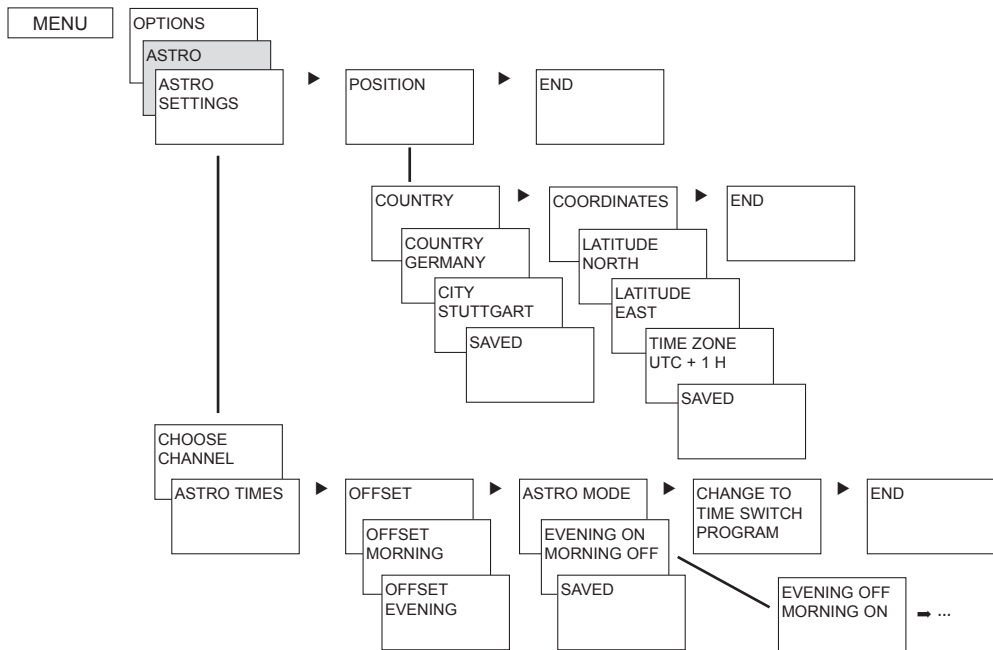 – setting of the location using **coordinates** (longitude/latitude, time zone) or **country/city**
  – With the memory chip V2 for KNX Year Time Switch up to 10 more cities (= **Favourites**) can be added
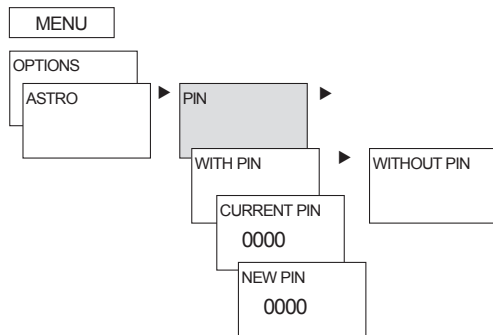 – Own Astro table (with Tool Software V2 for KNX Year Time Switch)
  – Automatic setting if GPS antenna is connected (settings must be made via the ETS if the antenna is connected)

```
MENU    OPTIONS
        ASTRO
        ASTRO
        SETTINGS    ▶    POSITION    ▶    END


                          COUNTRY    ▶    COORDINATES    ▶    END

                             COUNTRY              LATITUDE
                             GERMANY              NORTH

                                CITY                 LATITUDE
                                STUTTGART            EAST

                                   SAVED               TIME ZONE
                                                       UTC + 1 H

                                                          SAVED

        CHOOSE
        CHANNEL

           ASTRO TIMES    ▶    OFFSET    ▶    ASTRO MODE    ▶    CHANGE TO    ▶    END
                                                                 TIME SWITCH
                             OFFSET              EVENING ON       PROGRAM
                             MORNING             MORNING OFF

                                OFFSET              SAVED
                                EVENING
                                                                 EVENING OFF
                                                                 MORNING ON    ➡ ...
```

30

Enter PIN code

The **PIN-Code** is set in **OPTIONS** via the menu.
If you have lost your PIN please contact the Customer Care Centre in your country.

```
      ┌──────────┐
      │ MENU     │
      └──────────┘
┌──────────┐
│ OPTIONS  │
│ ┌──────────┐           ┌──────────┐
│ │ ASTRO    │  ►        │ PIN      │  ►
└─┤          │           │          │
  └──────────┘           └──────────┘
                  ┌──────────┐           ┌──────────┐
                  │ WITH PIN │  ►        │ WITHOUT PIN │
                  │          │           │          │
                  └──────────┘           └──────────┘
                    ┌──────────────┐
                    │ CURRENT PIN  │
                    │   0000       │
                    └──────────────┘
                      ┌──────────────┐
                      │ NEW PIN      │
                      │   0000       │
                      └──────────────┘
```

Time signal received with DCF77 antenna V2 or GPS antenna

- The time signal can be received via the antenna or the KNX bus. Settings must be made via the ETS if antennas are connected.

- Suitable antenna: DCF77 antenna V2 (art no. MTN6606-0070) or GPS antenna (art no. MTN6606-0071).

- By connecting the DCF77 antenna V2 / GPS antenna the time switch can be automatically synchronised via the DCF or GPS time signal. The time zone can be individually set. Upon receipt of GPS data the GPS coordinates are also transferred to the time switch.

- After connection to the power supply or resetting there is change to the automatic display after 70 sec, as soon as the DCF or GPS time signal has been received.

- Align DCF77 antenna V2 in the direction of Frankfurt am Main (best reception is achieved by installing on the outside of the building).

- **Follow advice in the DCF77 antenna V2 / GPS antenna operating instructions.**

NOTE	➢ When connecting ensure correct polarity.
	➢ Observe maximum cable length of 100 m.
	➢ Align the radio antenna so that the green LED flashes once a second.
	➢ A maximum of 5 KNX Yaer Time Switches can be connected to one antenna.

Setting time zones

After successful synchronisation, the time zone can be altered in the TIME/DATE menu option.

➢ In the submenu TIME (display: SET HOUR) correct the applicable local time (time zone).

Reception of the DCF-/GPS time signal:
Display: RC (Radio Control) + Ƴ

No reception of the DCF-/GPS time signal:
Display: Ƴ

**No connection to antenna:**
Display: no RC, Ƴ

max.100 m
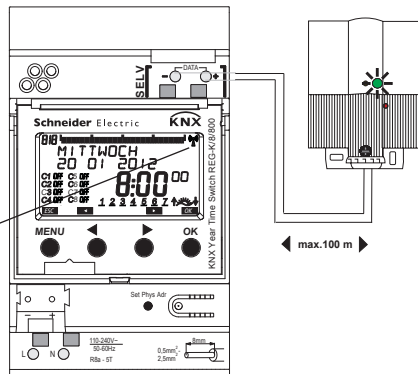
Memory chip V2 for KNX Year Time Switch (art. no. CCT15861)

Use memory chip (see fig.)

➢ Insert memory chip in the time switch.
➢ Read / read out saved switching times and device settings in the time switch or start Tool Software V2.

➢ Remove memory chip after copying and store in the cover.

Avoid mechanical stress or dirtying with other storage/transport methods.
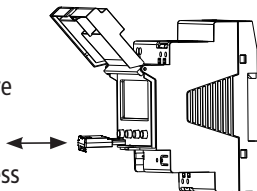
Copy OBELISK → TIME SWITCH
This copies the switching program (all standard and special programs) and optionally all time switch (e.g. Position, offset, external input, time format etc.) from the memory chip in the time switch.

Copy TIME SWITCH → OBELISK
This copies all switching programs and settings from the time switch to the memory chip
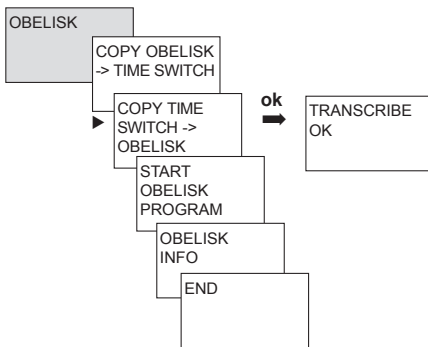
Technical data

- Operating voltage: 110–240 V AC, –15 %/+10 %
- Frequency: 50–60 Hz
- Power consumption: 2,5 W (+ 1 GPS antenna)
- Standby min.: 0,2 W
- Protection class: II in accordance with EN 60730-1 subject to designated installation
- Power supply on the DATA bus: 100 mA (maximum power on the DATA bus: 500 mA)
- Rated impulse withstand voltage: 4 kV
- Data output: Safety Extra-Low Voltage (SELV) 15,6 V
- Permissible ambient temperature: –5 °C ... +45 °C
- Protection rating: IP 20 in accordance with EN 60529

- Time accuracy: ≤ 0,5 s/day at 25 °C
- Power reserve: 8 years (lithium cell) at +20 °C
- Pollution degree: 2
- Max. cable cross-section: 2,5 mm^2
- Operating voltage KNX: bus voltage ≤ 12 mA
- Cable length: 100 m (YCYM 2 x 2 x 0.8 mm 2 pairs for DATA bus) 50 m (YCYM 2 x 2 x 0.8 mm 1 pair each for KNX and DATA bus)