Dimmer time switch
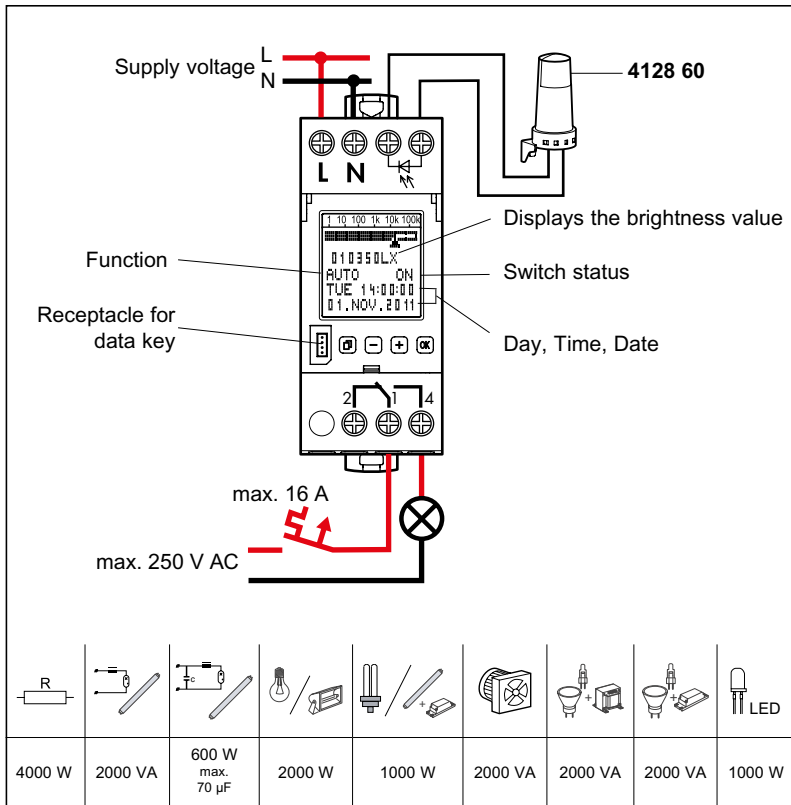**AlphaLux³ D21**

4126 26 / 27

L'legrand®

GB

⚠ **Safety notes**
This product should be installed in line with installation rules, preferably by a qualified electrician. Incorrect installation and use can lead to risk of electric shock or fire. Before carrying out the installation read the instructions and take account of the product's specific mounting location. Do not open up, dismantle, alter or modify the device except where specifically required to do so by the instructions. All Legrand products must be opened and repaired exclusively by personnel trained and approved by Legrand. Any unauthorised opening or repair completely cancels all liabilities and the rights to replacement and guarantees. Use only Legrand brand accessories.
The device contains a LiMnO$_2$ primary cell. When the product reaches the end of its life, this cell must be correctly removed and disposed of in accordance with national legislation and the requirements of environmental protection.

Supply voltage L / N

4128 60

Displays the brightness value

Function

Switch status

Receptacle for data key

Day, Time, Date

max. 16 A
max. 250 V AC

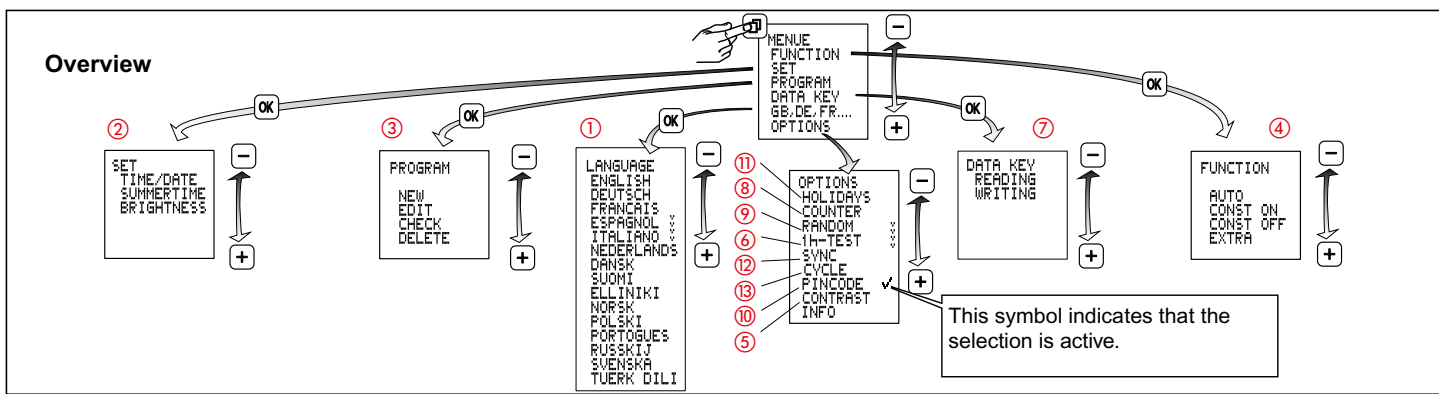| R									LED
4000 W	2000 VA	600 W max. 70 µF	2000 W	1000 W	2000 VA	2000 VA	2000 VA	1000 W

Operating principle: Typ 1.B. S. T.
IEC/EN 60730-1, IEC/EN 60730-2-7
Operation in a normal environment
Montage (time switch): in distribution panel, Degree of contamination: 2
Switch output, potential-free
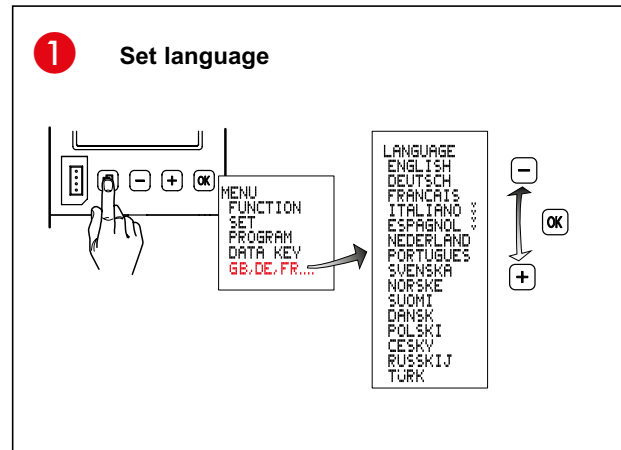Rated impulse voltage: 4 kV

General information
• **Start-up**: after applying the supply voltage, the time switch starts automatically with the last selected function. The relay position is set by the current program.

☞ **A program must be set in order for the device to function**

• **Battery backup**
 - **Backlighting** not active
 - **Data key** READ/WRITE only via the menu

Select menu, back to main menu, Hold down > 1s = operating display

OK Confirm selection or load parameters

Select menu options or set parameters
For operating indicator: Display of lux value.

Select menu options or set parameters.
For operating indicator: Display of next switch time

Overview

MENUE
FUNCTION
SET
PROGRAM
DATA KEY
GB.DE.FR....
OPTIONS

② SET / TIME/DATE / SUMMERTIME / BRIGHTNESS

③ PROGRAM / NEW / EDIT / CHECK / DELETE

① LANGUAGE / ENGLISH / DEUTSCH / FRANCAIS / ESPAGNOL / ITALIANO / NEDERLANDS / DANSK / SUOMI / ELLINIKI / NORSK / POLSKI / PORTOGUES / RUSSKIJ / SVENSKA / TUERK DILI

OPTIONS / ⑪ HOLIDAYS / ⑧ COUNTER / ⑨ RANDOM / ⑥ 1h-TEST / SYNC / ⑫ CYCLE / ⑬ PINCODE / ⑩ CONTRAST / ⑤ INFO

⑦ DATA KEY / READING / WRITING

④ FUNCTION / AUTO / CONST ON / CONST OFF / EXTRA

This symbol indicates that the selection is active.

Technical data

	4126 26	4126 27
Supply voltage:	230 V 50/60 Hz	120 V 50/60 Hz
Effective power consumption:	Approx. 1 W	
Contact rating:	1 changeover contact 16 A 250 V~µ cos φ = 1	
Parallel compensation:	600 W max. 70 µF	
Accuracy:	~ 0,1 s / day	
	single strand	multi strand
Terminal capacity:	1,5...4 mm²	1,5...2,5 mm²
Programmes :	56	
Battery reserve:	5 years	
Control line length:	max. 50 m	
Delay:	30 … 300 s	
Switching threshold:	1 lx … 100 klx	
Storage ambient:	-20° C … +60° C	-20° C ... +60° C
Working ambient:	-20° C … +55° C	-20° C ... +70° C
IP:	20	65

① **Set language**

MENU
FUNCTION
SET
PROGRAM
DATA KEY
GB.DE.FR....

LANGUAGE
ENGLISH
DEUTSCH
FRANCAIS
ITALIANO
ESPAGNOL
NEDERLAND
PORTUGUES
SVENSKA
NORSKE
SUOMI
DANSK
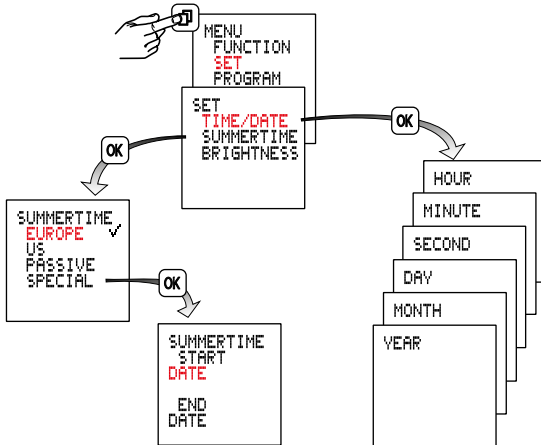POLSKI
CESKY
RUSSKIJ
TURK

N 292716/05

2

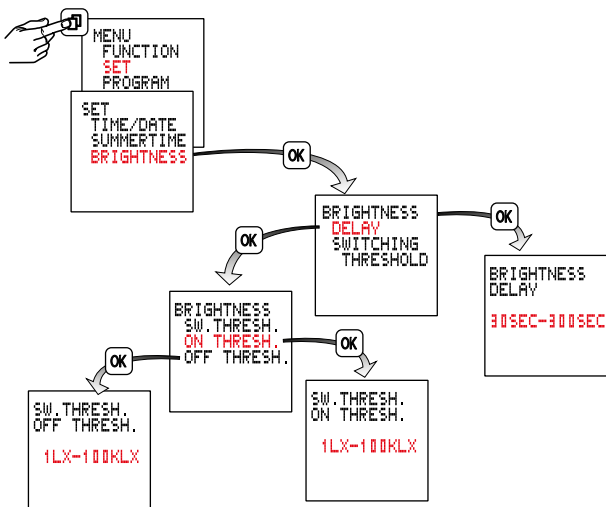### Set time/date, summertime/wintertime

Summertime: ± 1 hour
Europe: Factory set
SPECIAL: The switchover to/from
summertime can be freely programmed by entering a start date and end date and is then executed each year on the same day of the week, e.g. Sunday

```
            MENU
             FUNCTION
             SET
             PROGRAM
            SET
             TIME/DATE
             SUMMERTIME
             BRIGHTNESS
```

```
OK
HOUR
 MINUTE
  SECOND
   DAY
    MONTH
     YEAR
```

```
OK
SUMMERTIME
 EUROPE  ✓
 US
 PASSIVE
 SPECIAL
```

```
OK
SUMMERTIME
 START
 DATE

  END
  DATE
```

Settings for brightness-dependent switching

```
            MENU
             FUNCTION
             SET
             PROGRAM
            SET
             TIME/DATE
             SUMMERTIME
             BRIGHTNESS
```

```
OK
BRIGHTNESS
 DELAY
 SWITCHING
 THRESHOLD
```

```
OK
BRIGHTNESS
 DELAY

30SEC-300SEC
```

The delay time prevents switching back and forth when brightness and darkness change quickly (e.g. clouds passing by).
The default setting is 90 seconds. The setting range is from 30 to 300 seconds.

```
OK
BRIGHTNESS
 SW.THRESH.
 ON THRESH.
 OFF THRESH.
```

```
OK
SW.THRESH.
 ON THRESH.

1LX-100KLX
```

```
OK
SW.THRESH.
 OFF THRESH.

1LX-100KLX
```
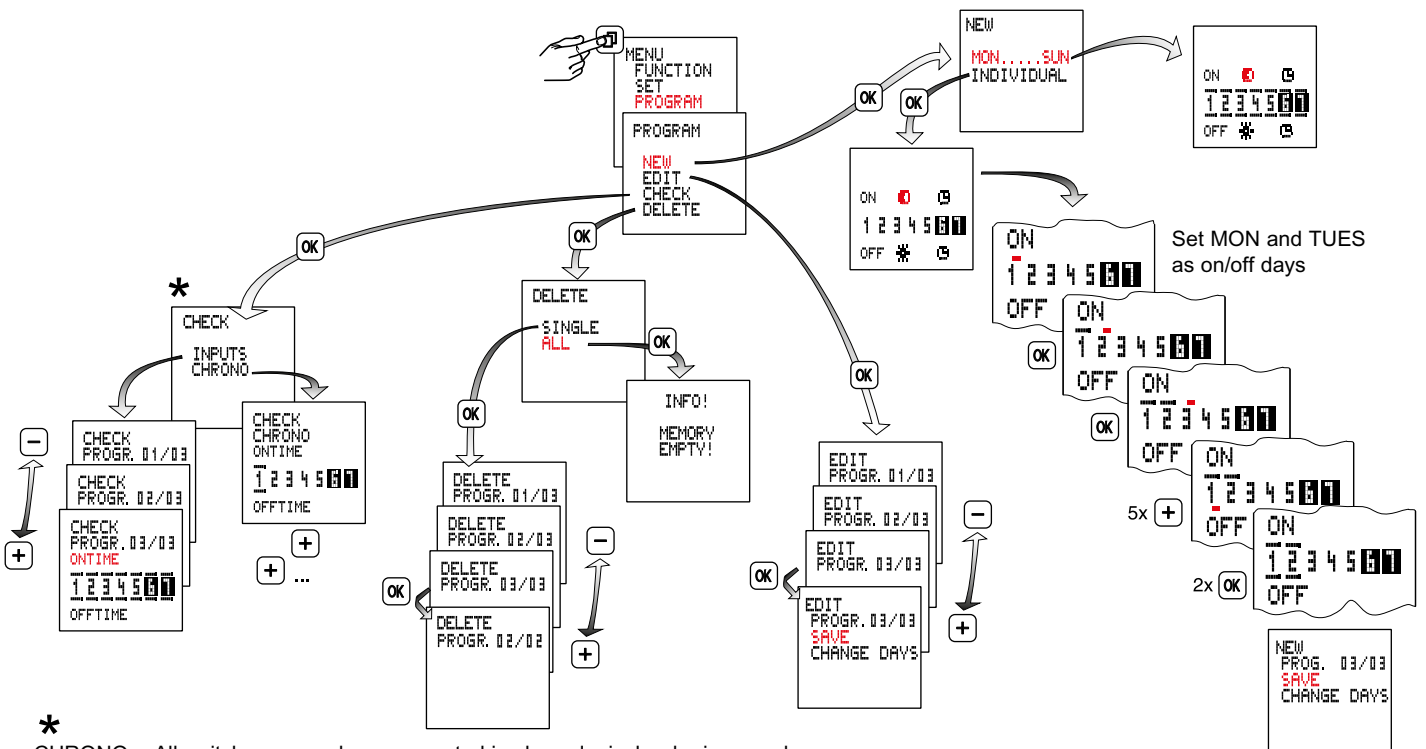
The time switch compares the brightness value measured at regular intervals to the set switch-on and switch-off threshold.
If the set brightness value drops below the set switching threshold, the time switch switches on the connected light sources.
If the set brightness value exceeds the set switching threshold, the time switch switches off the connected light sources.
The switching thresholds can be set separately between 1 lx and 100 klx.

3 **Programming**

☞ **A program must be set in order for the device to function.**

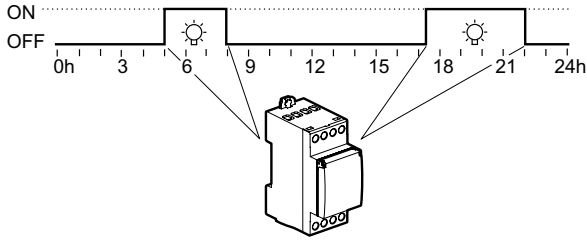|	Switching on	Switching off
1	Time 🕙	Time 🕙
2	Brightness ◑	Brightness ☀
3	Brightness + Time ◑ + 🕙	Brightness + Time ☀ + 🕙
4	Brightness ◑	Time 🕙
5	Time 🕙	Brightness ☀

A program consists of an ON time, OFF time and associated on and off days.
Programs with predefined on/off days Mon to Sun. For this program, you only need to set the switching times.
With the „INDIVIDUAL" option, you can allocate switching times to specific days of your choice.
The programs of a channel are combined with a logical OR.

Set MON and TUES as on/off days

*
CHRONO = All switch commands are executed in chronological order in a week
INPUT = Programs are executed in the order in which they are entered

Programming examples

Switching on and off exclusively time-controlled

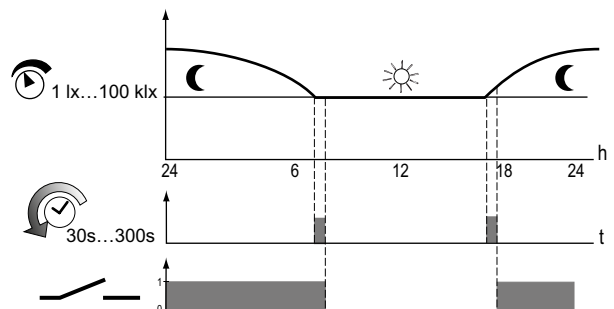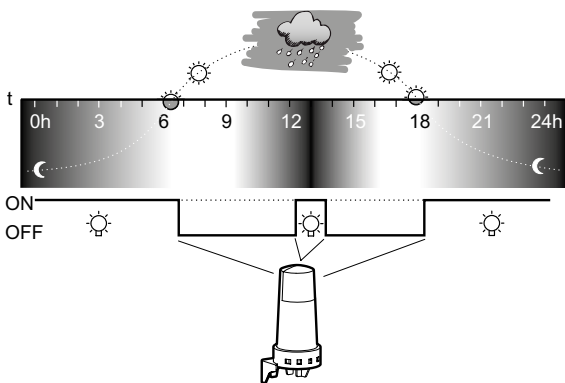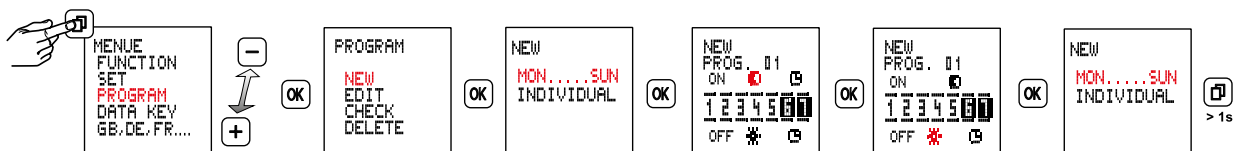

Select the appropriate symbol with the PLUS and MINUS keys:

Switching on in acc. with preset switch-on threshold

Switching off in acc. with preset switch-off threshold

ON/OFF at programmed time

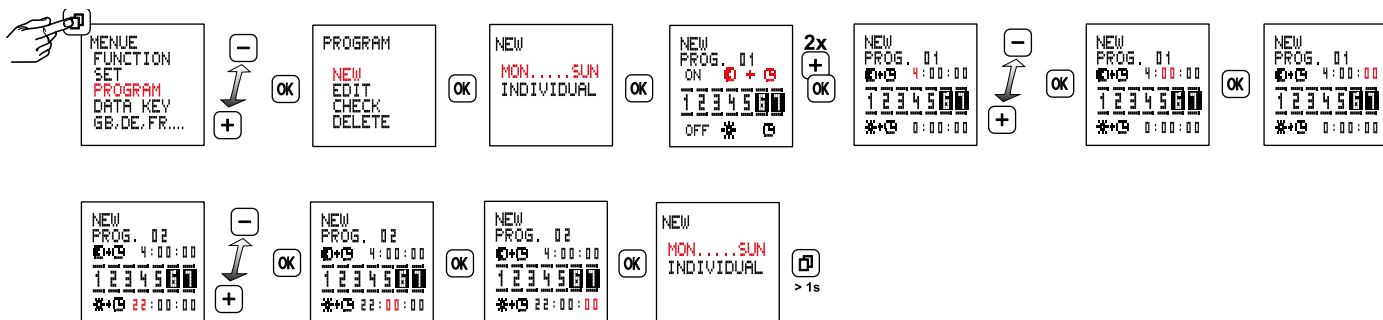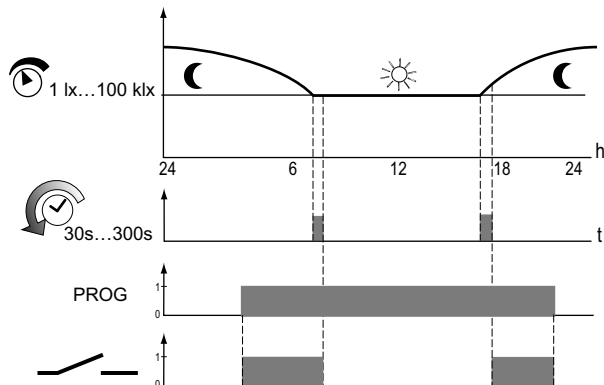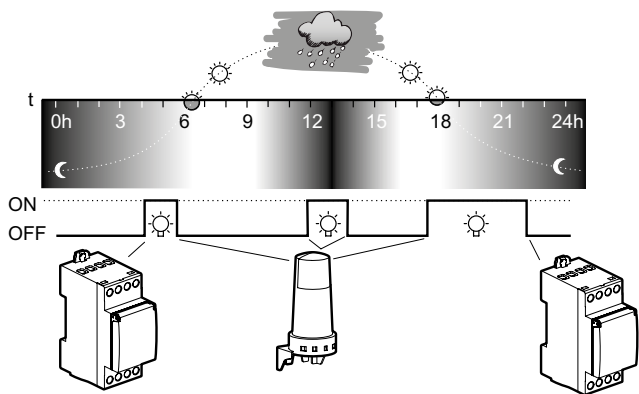Switching on / off in acc. with switch-on/off threshold in specified period
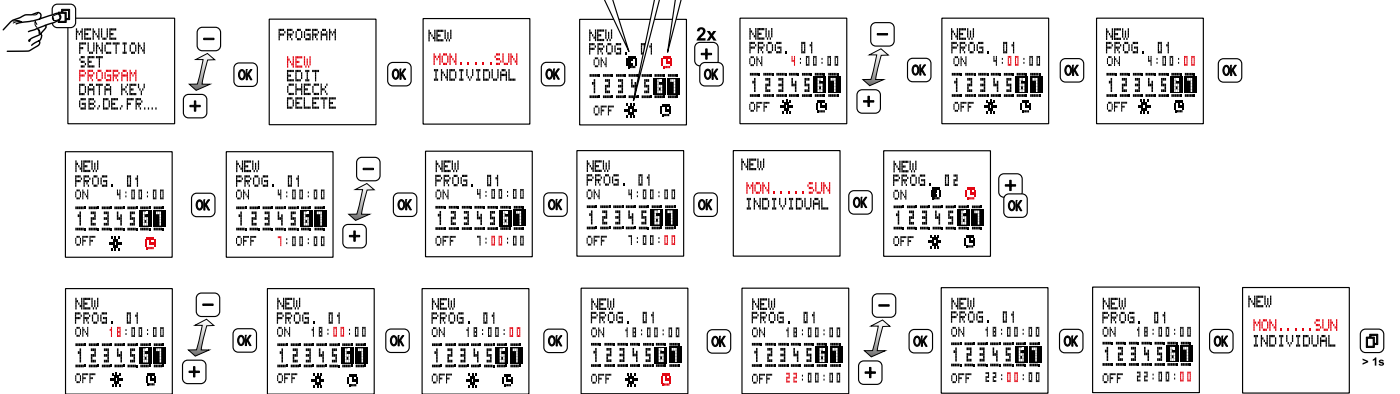
Switching on and off exclusively dependent on brightness

1 lx…100 klx

30s…300s

The time switch compares the brightness value measured at regular intervals to the set switch-on and switch-off threshold.
If the set brightness value drops below the set switching threshold, the time switch switches on the connected light sources. If the set brightness value exceeds the set switching threshold, the time switch switches off the connected light sources.
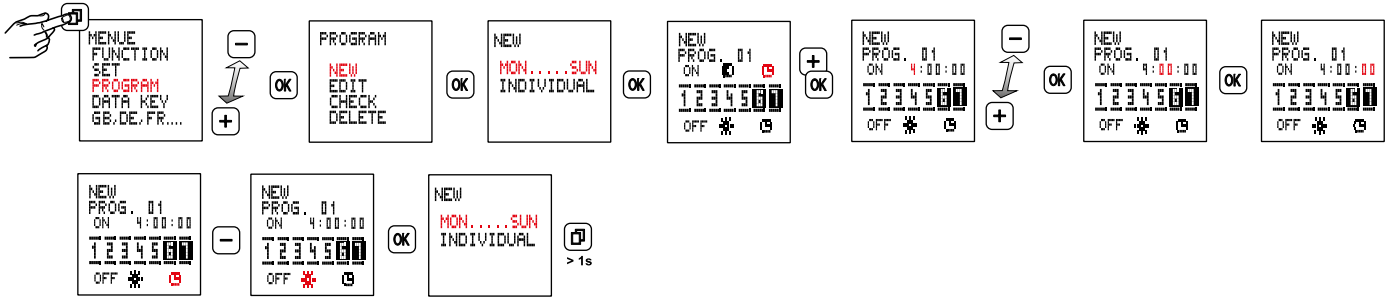The switching thresholds can be set separately between 1 lx and 100 klx.

Within a specified switch-on/off time, the brightness determines the switching times

t
0h 3 6 9 12 15 18 21 24h
ON
OFF

1 lx…100 klx
24 6 12 18 24 h

30s…300s t

PROG
1
0

1
0

MENUE
FUNCTION
SET
PROGRAM
DATA KEY
GB,DE,FR....

− / + OK

PROGRAM
NEW
EDIT
CHECK
DELETE

OK

NEW
MON.....SUN
INDIVIDUAL

OK

NEW
PROG. 01
ON
1234567
OFF

2x +
OK

NEW
PROG. 01
4:00:00
1234567
0:00:00

− / + OK

NEW
PROG. 01
4:00:00
1234567
0:00:00

OK

NEW
PROG. 01
4:00:00
1234567
0:00:00

NEW
PROG. 02
4:00:00
1234567
22:00:00

− / + OK

NEW
PROG. 02
4:00:00
1234567
22:00:00

OK

NEW
PROG. 02
4:00:00
1234567
22:00:00

OK

NEW
MON.....SUN
INDIVIDUAL

> 1s

Switching on brightness-dependent, switching off time-controlled

t
0h 3 6 9 12 15 18 21 24h
ON
OFF

MENUE
FUNCTION
SET
PROGRAM
DATA KEY
GB,DE,FR....

− / + OK

PROGRAM
NEW
EDIT
CHECK
DELETE

OK

NEW
MON.....SUN
INDIVIDUAL

OK

NEW
PROG. 01
ON
1234567
OFF

OK

NEW
PROG. 01
ON
1234567
OFF

+ OK

NEW
PROG. 01
ON
1234567
OFF 22:00:00

− / + OK

NEW
PROG. 01
ON
1234567
OFF 22:00:00

OK

NEW
PROG. 01
ON
1234567
OFF 22:00:00

OK

NEW
MON.....SUN
INDIVIDUAL

> 1s
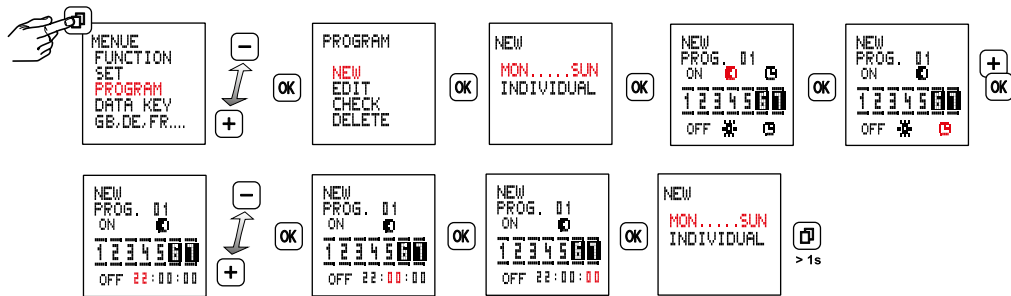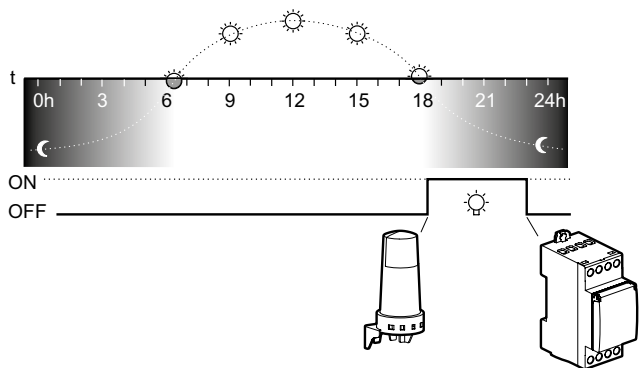
Switching on time-controlled, switching off brightness-dependent

t
0h   3   6   9   12   15   18   21   24h

ON
OFF

MENUE
FUNCTION
SET
PROGRAM
DATA KEV
GB,DE,FR....

[−]
[OK]
[+]

PROGRAM
NEW
EDIT
CHECK
DELETE

[OK]

NEW
MON.....SUN
INDIVIDUAL

[OK]

NEW
PROG. 01
ON
1 2 3 4 5 6 7
OFF ❄ 🕐

[+]
[OK]

NEW
PROG. 01
ON   4:00:00
1 2 3 4 5 6 7
OFF ❄ 🕐

[OK]

[−]
[+]

NEW
PROG. 01
ON   4:00:00
1 2 3 4 5 6 7
OFF ❄ 🕐

[OK]

NEW
PROG. 01
ON   4:00:00
1 2 3 4 5 6 7
OFF ❄ 🕐

NEW
PROG. 01
ON   4:00:00
1 2 3 4 5 6 7
OFF ❄ 🕐

[−]

NEW
PROG. 01
ON   4:00:00
1 2 3 4 5 6 7
OFF ❄ 🕐

[OK]

NEW
MON.....SUN
INDIVIDUAL

[⧉]
> 1s
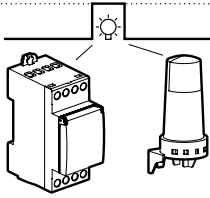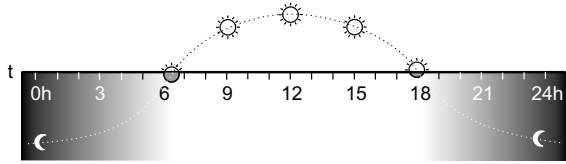
❹ Modes

- **Auto** - Automatic operation
- **Constant ON**
- **Constant OFF**
- **Extra**

  The switch status imposed by the program is inverted (manual override). With the next effective switch command, the time switch resumes control of on/off switching.
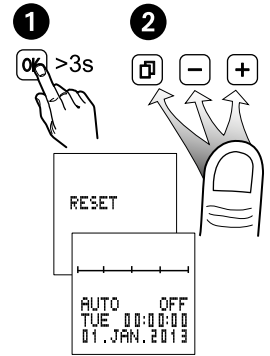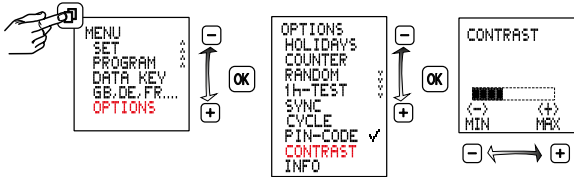
```
MENU
FUNCTION
SET
PROGRAM
DATA KEY
GB.DE.FR....
```
OK
```
FUNCTION
AUTO
CONST ON
CONST OFF
EXTRA
```
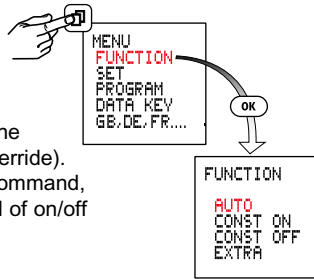
Reset

Warning!
The memory will be cleared, and all set data will be lost.

Hold down OK for more than 3 seconds and at the same time press and release 🗗 − + .

The language, time, date, summertime/wintertime, delay time, switching thresholds and switching times will have to be re-entered.

❶ OK >3s ❷ 🗗 − +
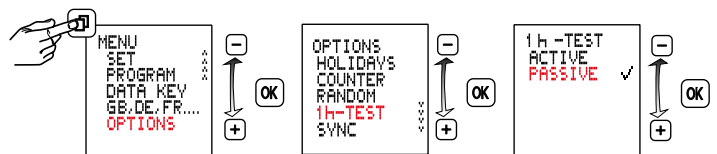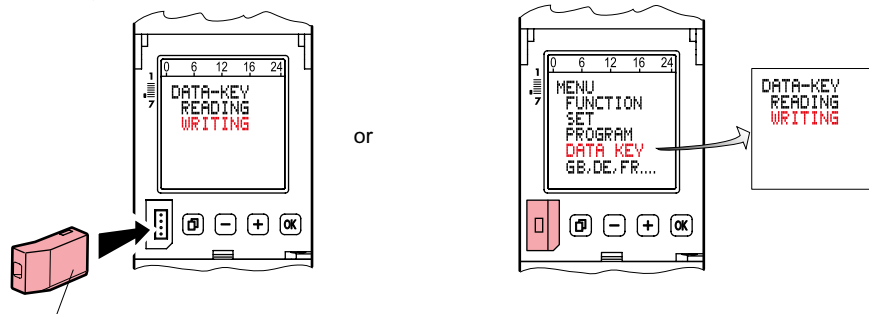
```
RESET

AUTO    OFF
TUE 00:00:00
01.JAN.2013
```

❺ Contrast adjustment

```
MENU
SET
PROGRAM
DATA KEY
GB.DE.FR....
OPTIONS
```
− OK +
```
OPTIONS
HOLIDAYS
COUNTER
RANDOM
1h-TEST
SYNC
CYCLE
PIN-CODE ✓
CONTRAST
INFO
```
− OK +
```
CONTRAST
▪▪▪▪
(-)        (+)
MIN      MAX
```
OK
− ⟷ +

❻ 1 h-Test

When this function is activated, the output is switched on for one hour.

```
MENU
SET
PROGRAM
DATA KEY
GB.DE.FR....
OPTIONS
```
− OK +
```
OPTIONS
HOLIDAYS
COUNTER
RANDOM
1h-TEST
SYNC
```
− OK +
```
1h-TEST
ACTIVE
PASSIVE ✓
```
− OK +

After one hour, the time switch returns automatically to the programmed mode.

❼ Data key

```
DATA-KEY
READING
WRITING
```
or
```
MENU
FUNCTION
SET
PROGRAM
DATA KEY
GB.DE.FR....
```
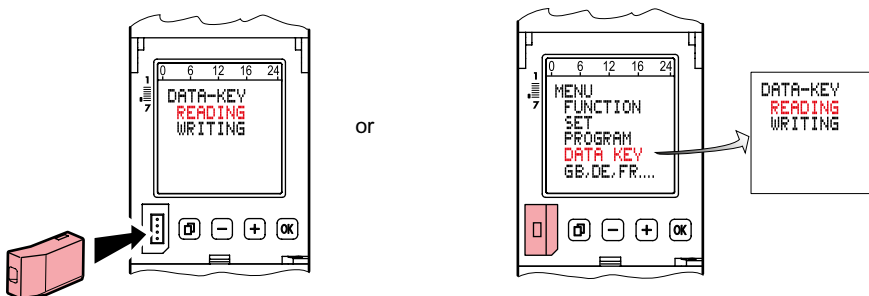→
```
DATA-KEY
READING
WRITING
```

4 128 72/73

Load the programs of the time switch on to a data key (WRITE KEY)
Warning! all programs stored on the data key will be overwritten.

```
DATA-KEY
READING
WRITING
```
or
```
MENU
FUNCTION
SET
PROGRAM
DATA KEY
GB.DE.FR....
```
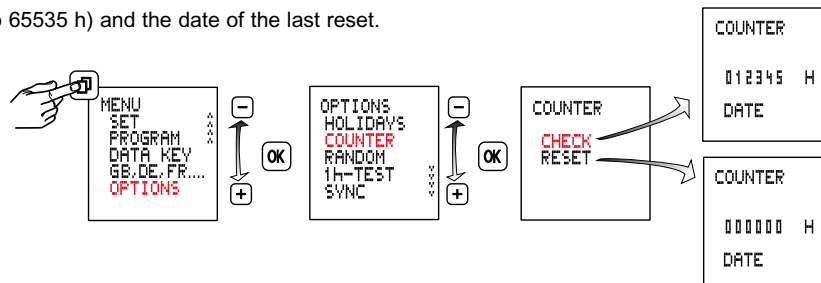→
```
DATA-KEY
READING
WRITING
```

Load the programs from the data key to the time switch (READ KEY)
Warning! all programs programmed in the time switch will be overwritten.

❽ Hour counter

Displays the total relay ON time, (0 to 65535 h) and the date of the last reset.

```
MENU
SET
PROGRAM
DATA KEY
GB.DE.FR....
OPTIONS
```
− OK +
```
OPTIONS
HOLIDAYS
COUNTER
RANDOM
1h-TEST
SYNC
```
− OK +
```
COUNTER
CHECK
RESET
```
```
COUNTER

012345  H

DATE
```
```
COUNTER

000000  H

DATE
```

❾ Random function

Function to simulate presence.
Function active: the programmed switching cycles are shifted at random within the range of ± 15 minutes.

```
MENU              OPTIONS           RANDOM
SET               HOLIDAYS          ACTIVE
PROGRAM           COUNTER           PASSIVE  ✓
DATA KEY          RANDOM
GB.DE.FR....      1h-TEST
OPTIONS           PIN-CODE
```
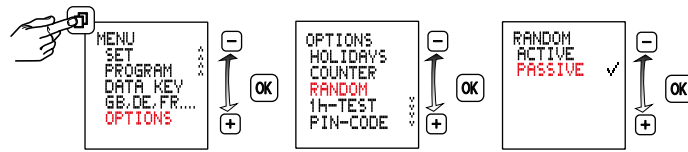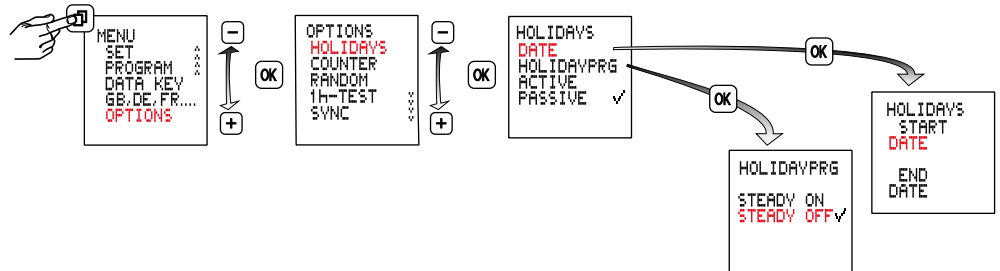
❿ Pincode

PIN CODE active: The menus of the time switch will not be accessible unless the PIN CODE has been entered. When the pin code is active, access to the button and key functions is disabled 1 minute after the last button press.
PIN free access can be re-enabled by selecting PASSIVE or by resetting the device.

Example
1234

```
MENU          OPTIONS       PINCODE      PINCODE      PINCODE      PINCODE
SET           RANDOM        ACTIVE       ACTIVE       0000         ACTIVE
PROGRAM       1h-TEST       PASSIVE  ✓   PASSIVE  ✓                PASSIVE  ✓
DATA KEY      SYNC                                    CODE
GB.DE.FR....  CYCLE                                   1000
OPTIONS       PINCODE                                 CODE
                                                      1200
                                                      CODE
                                                      1234
```
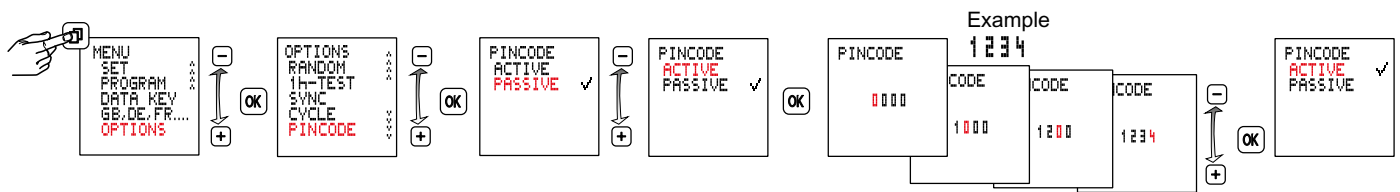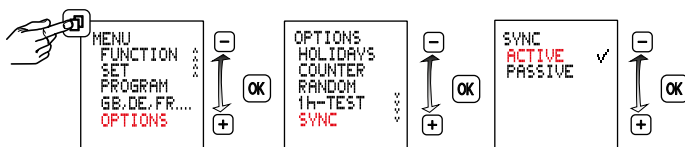
⓫ Holiday

After activation the holiday program is executed between 0:00h on the start date and 24:00h on the end date (Constant ON/OFF). After the holiday program has run once, it must be reactivated.

```
MENU          OPTIONS       HOLIDAYS            HOLIDAYS
SET           HOLIDAYS      DATE                START
PROGRAM       COUNTER       HOLIDAYPRG          DATE
DATA KEY      RANDOM        ACTIVE
GB.DE.FR....  1h-TEST       PASSIVE  ✓          END
OPTIONS       SYNC                              DATE

                            HOLIDAYPRG

                            STEADY ON
                            STEADY OFF ✓
```

⓬ Activating and deactivating grid synchronisation

Only available in EXPERT mode.
The default setting is PASSIVE. In order to improve the long-term accuracy, it is advisable to activate synchronisation if the time switch is supplied from a on 50/60 Hz grid with frequency adjustment.

```
MENU          OPTIONS       SYNC
FUNCTION      HOLIDAYS      ACTIVE
SET           COUNTER       PASSIVE  ✓
PROGRAM       RANDOM
GB.DE.FR....  1h-TEST
OPTIONS       SYNC
```

```
1 10 100 1k 10k 100k
████████████
ERROR
AUTO      ON
TUE 14:00:00
01.NOV.2011
```

No sensor connected, cable break or short circuit

13 Cycle function
Only available in EXPERT mode

For cyclical switch commands the switching on time is set by logical "OR" of programs of all types. A fixed cycle of ON and OFF time then operates within those limits. The cycle always starts with the ON time.

The cycle duration and the ON time within the cycle are the same length for all switching times. The cycle duration and the ON time can be set independently in one-second increments. If the switching time is shorter than the cycle duration, the cycle will be shortened accordingly. The ON time will remain unchanged. If the switching time is actually shorter than the ON time, the ON time will be shortened accordingly.

	min	max
Period	2s	2h
Pulse	1s	1h 59min 59s
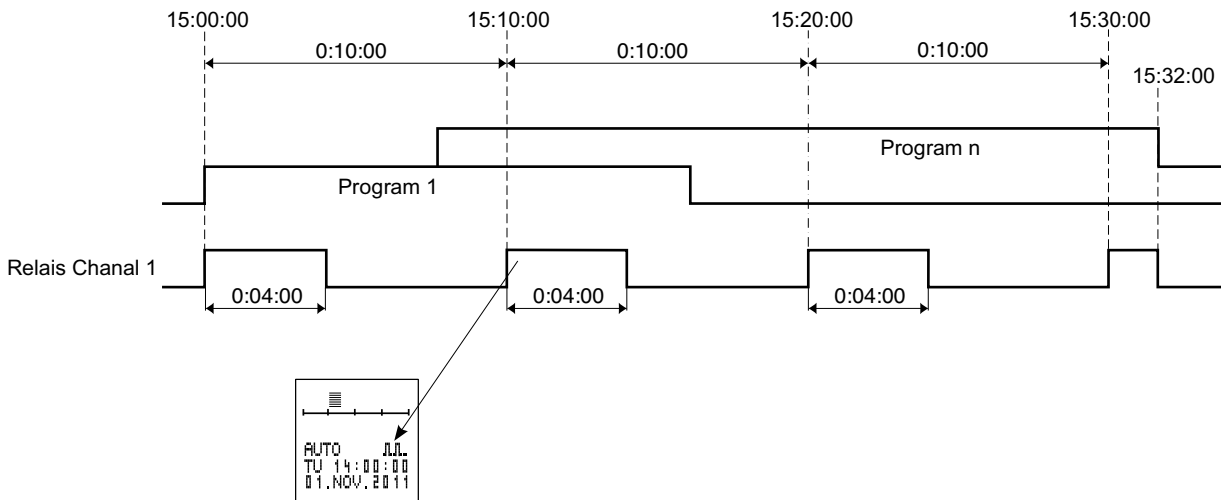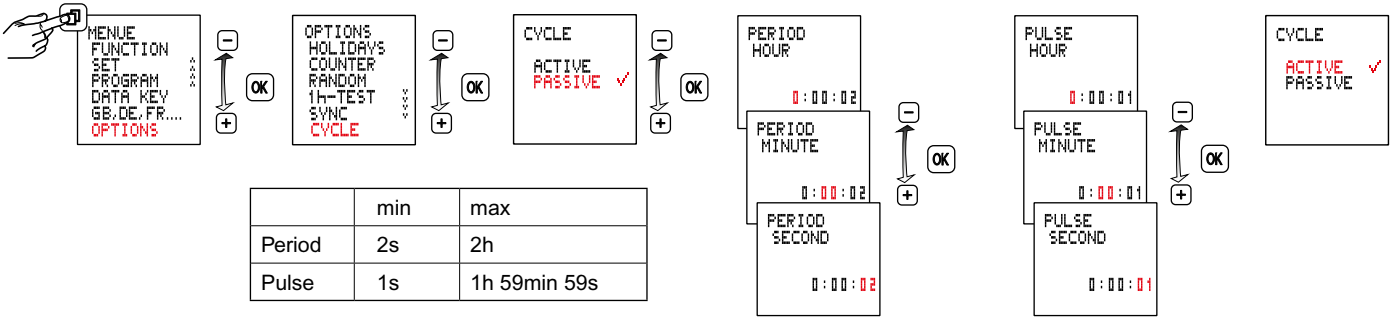
Warning: Elektrical shock - Disconnect all power from the device before dismantling the module and replacing the battery.
Always use a Li cell type battery (LiMnO$_2$) CR2477, 3V high temperature type min +85 °C