

Help for the Kit LTS Software V3

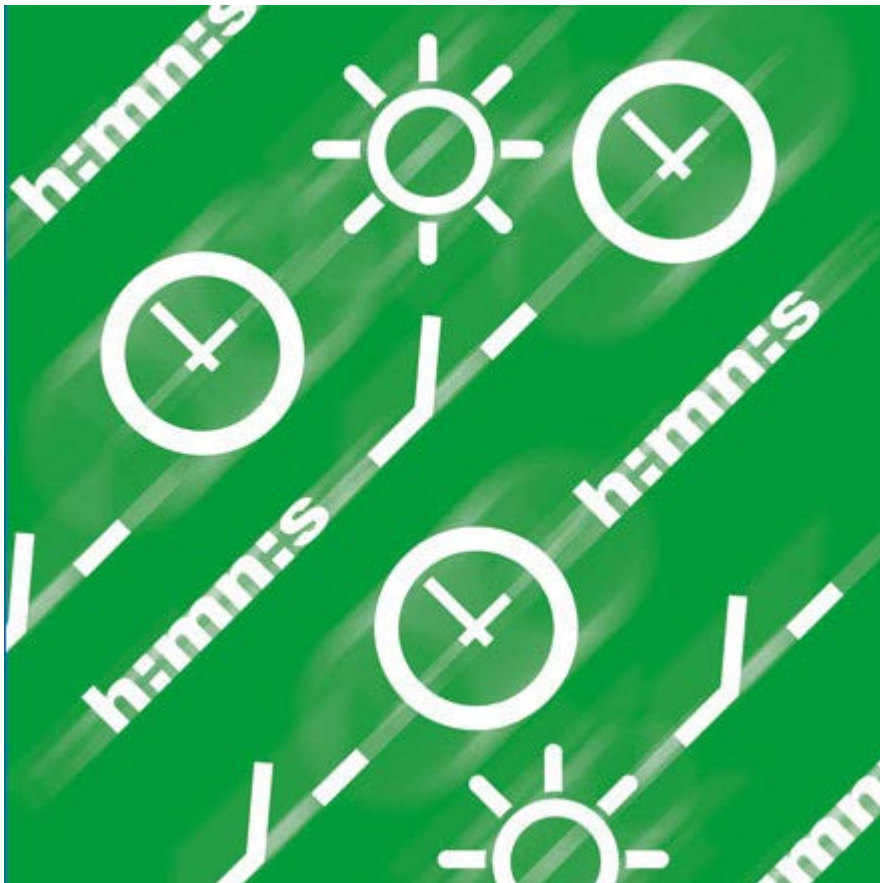


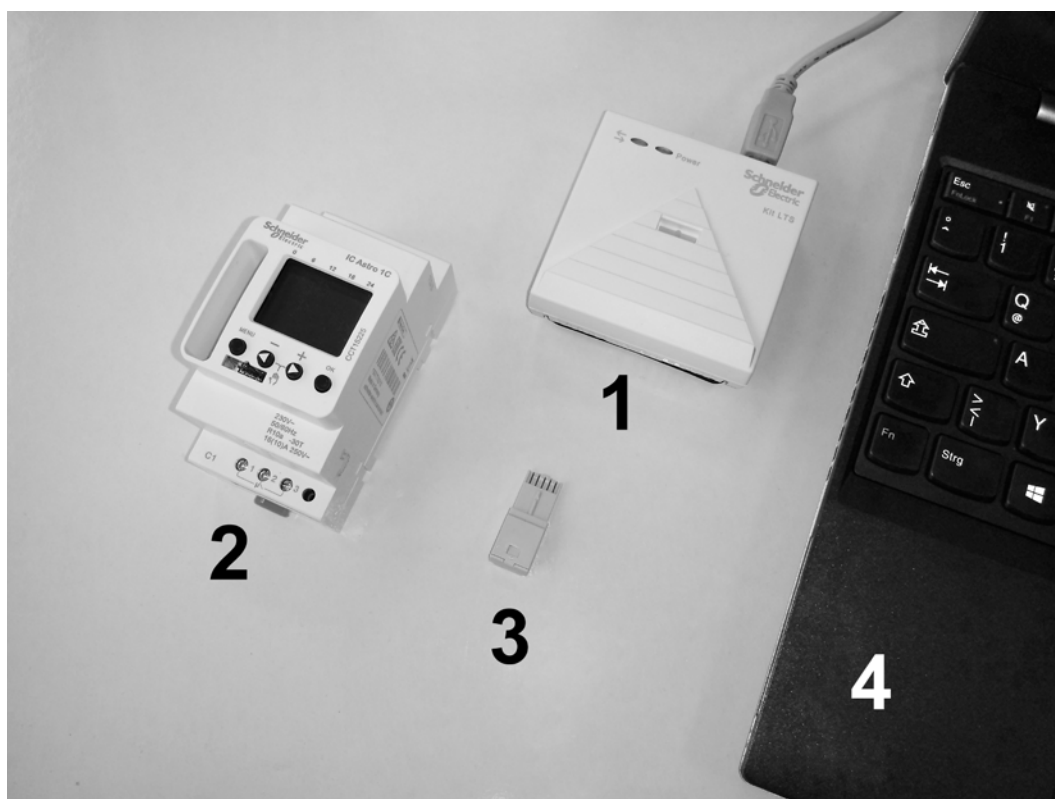
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1 Introduction

You can use the Kit LTS software to create programs and settings for your device on the PC, save these as a project, and transfer them to your device via the programming key. As long as the programming key is inserted in the device, you can use the programming key's switching program without deleting the switching program on the device.





1	Programming interface
2	Device
3	Programming key
4	PC

You can use the Kit LTS software for the following devices:

- IHP
- IC 100kp+
- IC Astro
- KNX year time switch REG-K/8/800

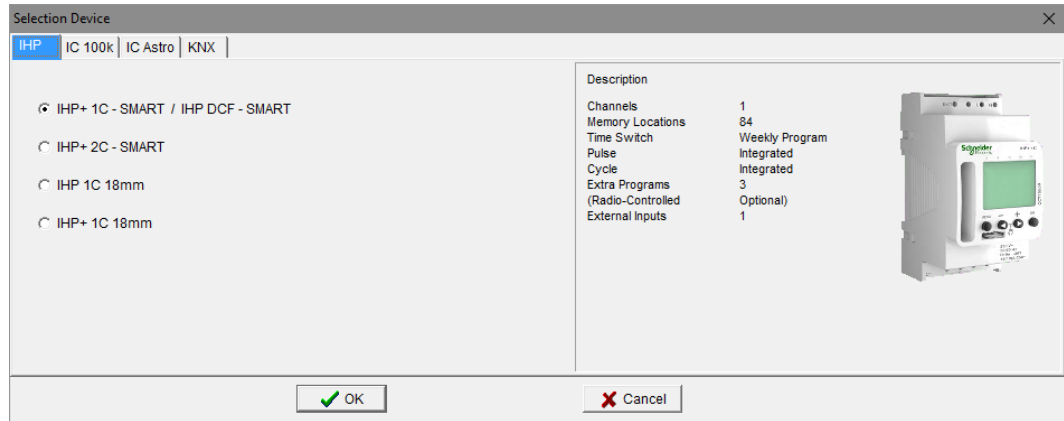
2 Manual information

The following symbols are used in this help manual:

Symbol	Meaning
	Information, comment or tip
	Important information which has to be observed
1)	Indicates that an action includes several steps
•	Indicates that an action includes only one step
→	The result of action

3 Start program

- 1) After calling the program select the radio button for the device type and confirm the input with OK.



→ A project for the selected device type is created.



Programs and device properties, which you transfer to the device with the programming key, are saved in projects.

4 User interface

The following menus, buttons and display fields appear after you have started the program:

4.1 Menu bar













File Edit Project Extras Help

Fig. 1: Menu bar

Menu	Command
File	Open, save or print project; read or program programming key
Edit	Undo action; copy, paste, delete times
Project	Sort or optimize project; set options
Extras	Create Language-KIT LTS ; set language and first day of the week, set public holidays
Help	Kit LTS help; program information

Chapter 14 "Menu commands" contains an explanation of the menu commands.

4.2 Toolbar

Button	Command	Short command
	Create new project	Ctrl + N
	Open project	Ctrl + O
	Save project	Ctrl + S
	Print project	Ctrl + P
	Retrieve print preview	
	Read programming key	
	Program programming key	
	Sort switching program	
	Optimize the switching program	
	Simulation	
	Evaluation	
IHP+ 2C - SMART	Create new project (button has the same name as the selected device)	Ctrl + N
Channel 1 	Select channel	

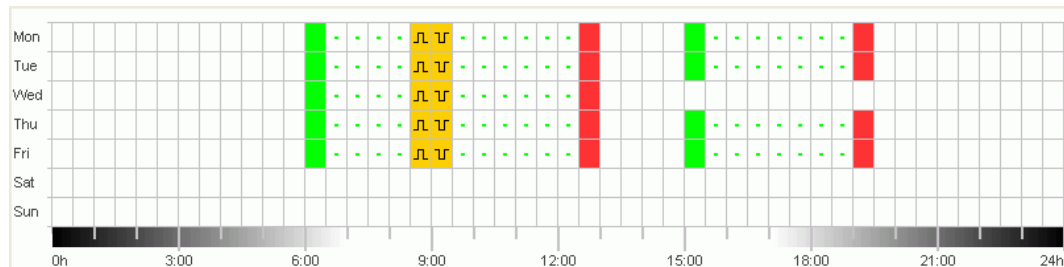
4.3 Tabs

As the device properties differ depending on the device group and device type, different tabs are displayed, see chapter 15 "Device properties".

Tab	Function
Light	- Settings for the light sensor (lux values, delay time) for the program/ standard program
Astro	<ul style="list-style-type: none"> - Settings for the astrotimes (offset, sunrise and sunset) for the Astro program - Setting of the position based on the list of towns or the coordinates - Set favourites
Program/ Standard program	- Weekly program settings
Extra program 1-16	<ul style="list-style-type: none"> - Additional program for defined date ranges (e.g. public holidays) - Extra programs take precedence over the standard program. The lowest numbered extra program has the lowest priority.
Device settings	- Settings that can be saved on the programming key and transferred to the device (e.g. time/date format, summer/winter time rule; holidays; options)
Astro settings	- See Astro register; position, coordinates, own Astro table etc.

4.4 Graphical presentation

In the graphical presentation it is possible to enter a switching program in a weekly plan. Different buttons (e.g. on, pulse) are displayed depending on the device type.



An explanation of the buttons for the graphical presentation can be found in the relevant chapters.

Chapter 6.5 "Change switching program" describes how you can copy, move or delete switching programs.

4.5 Tabular presentation

The tabular presentation allows direct input of the switching program in a table:

No.	Type	Status	Time hh:mm:ss	Weekday							Pulse Duration mm:ss	Cycle				Hint / Error
				Mon	Tue	Wed	Thu	Fri	Sat	Sun		Pulse hh:mm:ss	Pause hh:mm:ss	End hh:mm	End Weekday	
1	Switch	On	06:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
2	Switch	Off	12:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
3	Switch	On	15:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
4	Switch	Off	19:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
5	Pulse	On	09:00:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01:00					
6	Pulse	Off	09:30:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:01					
	New															

4.6 Status bar

The status bar contains the following information:

- Occupied and maximum possible memory locations
- Channel number (if there are several channels)
- Operating hours per channel and week (for IHP+ only)
- Error messages

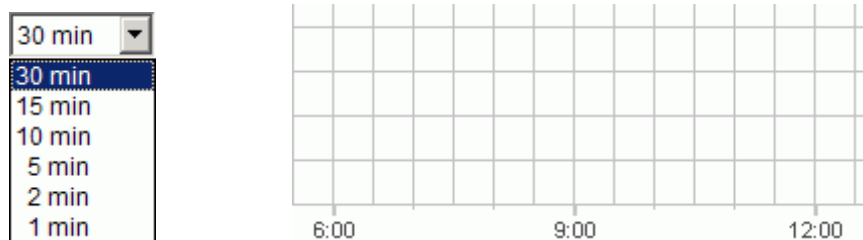
Memory 2/56 C1 On/Week: 131h 30m 00s

5 Program settings

If required, you make the following settings prior to programming the switching program:

5.1 Set grid

The grid for the graphical presentation can be adjusted using the following selection field:



5.2 Set language

Proceed as follows if you wish to change the language of the PC software:

- 1) Under Extras, click on PC Software Settings and select the Language tab.
- 2) Select a language and click on OK to confirm it.

5.3 Change display of PC software

The following factory settings are preset:

- First day of the week: Monday
- Date format: 31.12.00
- Currency: EUR



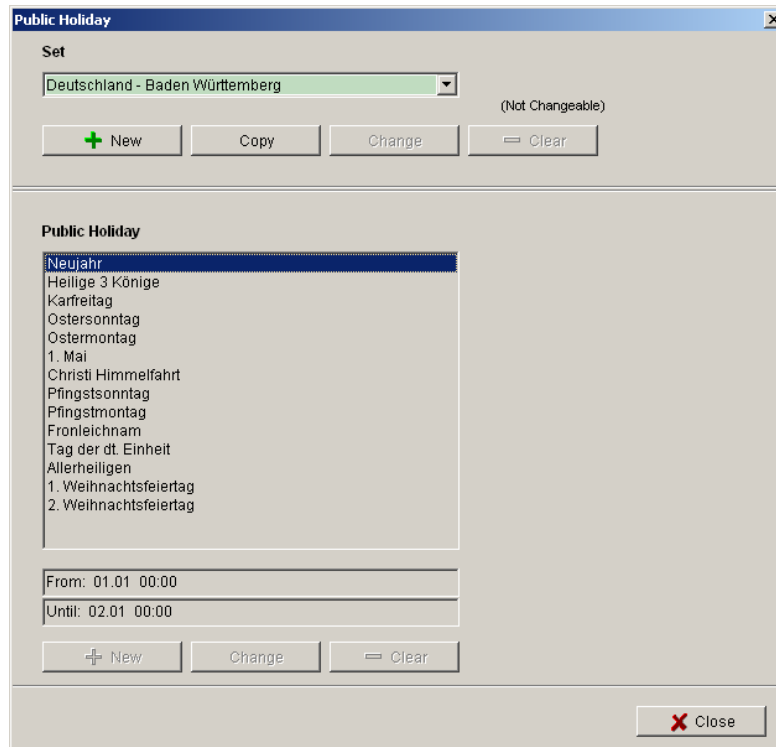
All changes that you make under Extras, PC Software Settings are only applied to the view of the PC software and are retained after you close the program. They are **not** transferred to the programming key or device. Only changes on the Device Settings tab are saved in the device after transfer, see chapter 7.5

Proceed as follows if you wish to change the view of the PC software:

- 1) Under Extras, click on PC Software Settings and select the Display tab.
- 2) Make the desired change.
- 3) Confirm your input with OK.

5.4 Public holidays

- Click on Public holiday in the Extras menu. The window opens

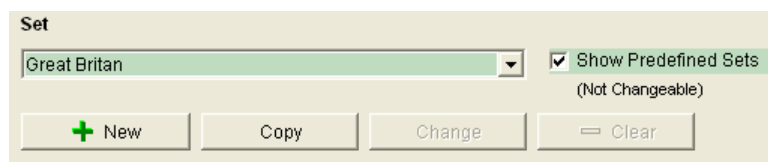


You can choose from predefined public holiday settings (green background). These settings cannot be changed.

5.4.1 Create your own settings

You can create your own public holiday settings (white background). If you want to enter new settings:

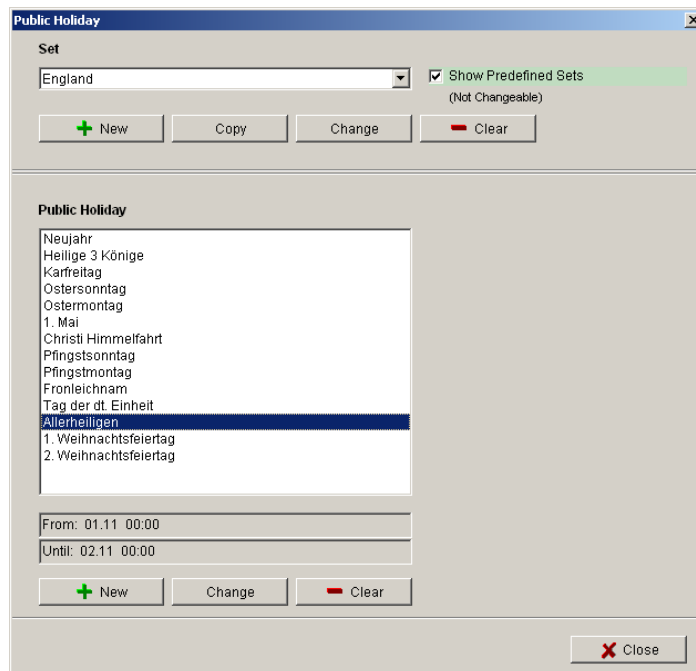
- 1) Click on New (in Settings window).
- 2) Enter a name for the new settings.



- 1) Select the required public holiday setting.
 - 2) Click on Copy (in Settings window).
 - 3) Enter a name for the new settings.
- Some public holiday settings can be deleted or renamed.

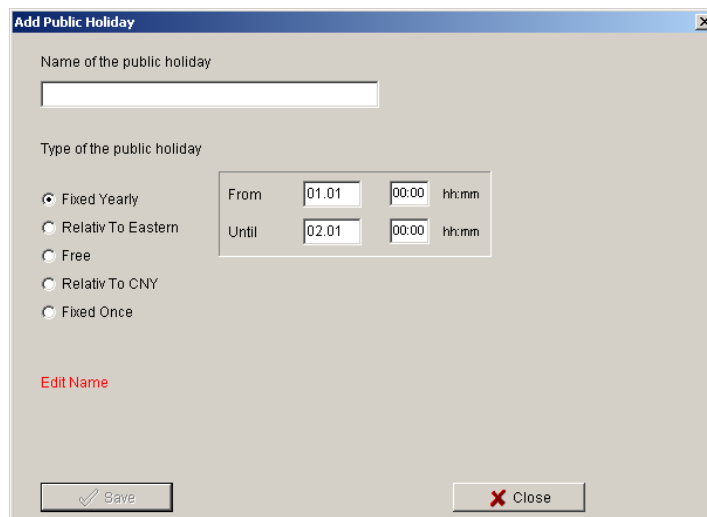
5.4.2 Edit own settings

You can only edit the settings you have entered.



1) Click on New (in public holiday window).

The window opens



2) Enter the name of the public holiday.

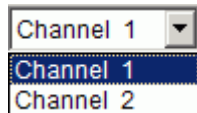
3) Select the type of public holiday (fixed annual date, relative to Easter, non-fixed date, relative to CNY (Chinese New Year), single fixed date) and the duration of the public holiday.

6 IHP

Depending on the device type, you have different device properties, see chapter 15 "Device properties", page 56.

6.1 Select channel

- For devices with several channels, first select one channel.



6.2 Program the switching program

Programs can be entered as a graph or table. Chapter 6.5 "Change switching program" describes how you can change, copy, move or delete switching programs.

6.2.1 Graph

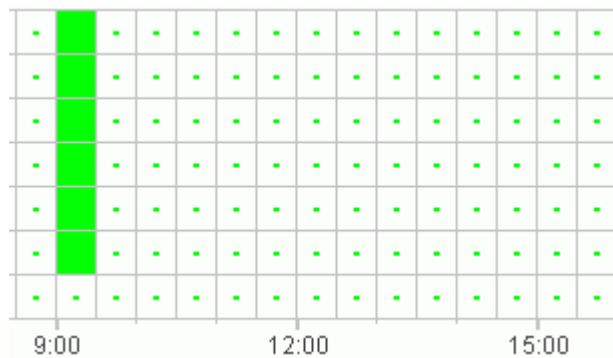
Graphical programming occurs via the following buttons:

Button	Command
	Cursor to select or move a switching program
	Set on times
	Set off times
	Set on and off times
Pulse	Set switch-on pulse
Pulse	Set switch-off pulse
	Set cycle

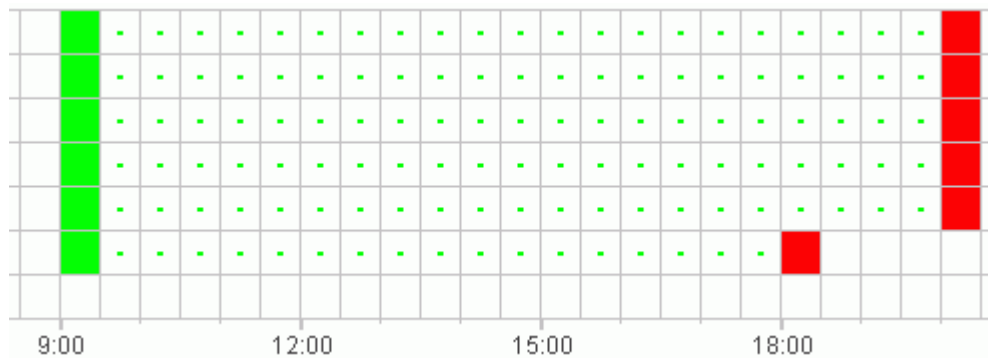
Example: Shop lighting

In order to switch on shop lighting during business hours (Monday to Friday 9am – 8pm, Saturday 9am – 6pm) program the Kit LTS software as follows:

- 1) Click on the On+Off button.
- 2) Press the left mouse button and drag the cursor from top to bottom in the 9:00 column (when shop opens) (Monday to Saturday). Each line represents a weekday.
- 3) Release the left mouse button.



- 4) Subsequently press the left mouse button and drag the cursor down the 20:00 column from Monday to Friday.
- 5) Click on the Off button and then click on the 18:00 column of the Saturday line.



If two switching programs are so close together that the symbols overlap (irrespective of the grid setting), the box with the two symbols is black.



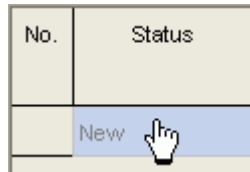
6.2.2 Table

A switching program can also be programmed as a table.

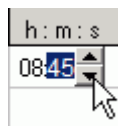
Example: Shop lighting for IHP+ 1C

Proceed as follows to program shop lighting Monday to Friday from 8.45am to 8.15pm:

- 1) Click on New in the table.



- 2) Select On or Switch.
- 3) Enter a switch-on time.



- 4) Select the weekdays.



- 5) Proceed in exactly the same way for the switch-off time.

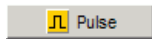


6.3 Program pulse

Pulses for pause signals, ventilation, etc. can be programmed as a graph or table. The pulse duration can only be entered as a table.

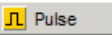
6.3.1 Graph

Graphical programming occurs via the following buttons:



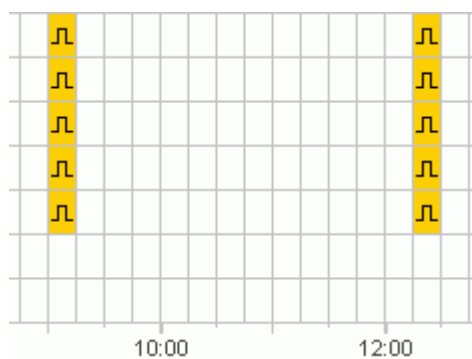
Example: Pause signal

The pulse start can be set to the second. Proceed as follows to switch on a pause signal at 9am and at 12.15pm Monday to Friday for 5 seconds:

- 1) Set the grid to 15 min.
- 2) Click on the  button.
- 3) Press the left mouse button and drag the cursor from top to bottom in the 9:00 column from Monday to Friday.



- 4) Repeat step 3 in the 12:15 column.



- 5) Enter the 5 s pulse duration via the table.

m : s
00:05
00:05

6.3.2 Table

Pulses can also be programmed as a table.

Example: Pause gong

Proceed as follows to program a pause gong Monday to Friday at 12.15pm:

- 1) Click on New in the table.

No.	Status
New	

- 2) Select Pulse.
- 3) Enter the time for the pulse.

h : m : s	Mo
09:00:00	<input checked="" type="checkbox"/>
12:15:00	<input checked="" type="checkbox"/>

- 4) Select the weekdays.

08:45	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------	-------------------------------------	-------------------------------------	-------------------------------------	-------------------------------------	-------------------------------------	--------------------------	--------------------------

- 5) Enter the pulse duration 5 s.

m : s
00:05
00:05

6.4 Cycle programming

Cycle programming is only available for certain types of device: See chapter 15 "Device properties".




The cycle can be programmed graphically or in tabular form. Always enter the cycle pulse and the cycle pause via the table.

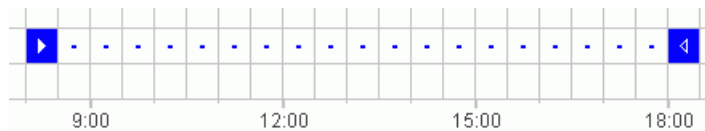
6.4.1 Graphical

Use the following button for graphical programming .

Example: Watering a garden

A garden is to be watered for 10 minutes each hour during the day. Proceed as follows to enter this cycle:

- 1) Click on the  button.
- 2) Click on the field for 8am and then on the field for 6pm in the Monday line of the graph.



- 3) Enter the cycle pulse (10 min) and the cycle pause (50 min) via the table.

h:m:s	h:m:s	h:m
00:10:00	00:50:00	18:00

- 4) Repeat steps 2 and 3 for other weekdays.

Continuous cycle

- In order to program a continuous cycle, click on the same box twice.



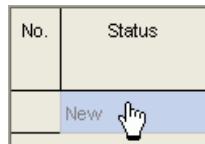
6.4.2 Tabular

A cycle can also be programmed as a table.

Example: Watering a garden

Proceed as follows to water a garden for 10 minutes each hour during the day:

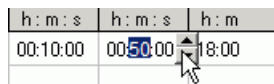
- 1) Click on New in the table.



- 2) Select cycle.
- 3) Enter the start time for the cycle.



- 4) Select a weekday for the start time.
- 5) Enter the cycle pulse (10 min) and the cycle pause (50 min).



- 6) Repeat steps 1 to 5 for other weekdays.

Continuous cycle

A continuous cycle can be set via the weekday column:

- Click on the column End Weekday and select Continuous.



6.5 Change switching program

It is possible to copy, move or delete a switching program in the graphical presentation. In the table, you can delete or overwrite a switching program.

6.5.1 Copy switching program

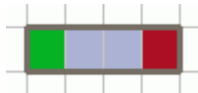
The switching program can be copied from one channel to another channel or from one project to another project for graphs and tables.



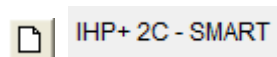
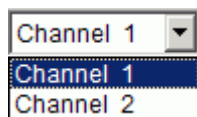
A switching program which is not possible in the new project cannot be copied.

Graph

- 1) Click on the  button and select the switch blocks.



- 2) Click on Copy under Edit.
- 3) Select a new channel or a new project.



- 4) Click on Paste under Edit.



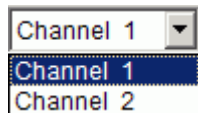
A switching program can also be graphically copied by selecting and then moving it with the Ctrl key pressed.

Table

- 1) Click on the number of the switching program you wish to copy.



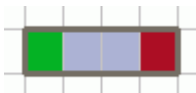
- 2) Click on Copy under Edit.
- 3) Select a new channel or a new project.



- 4) Click on Paste under Edit.

6.5.2 Move switching program

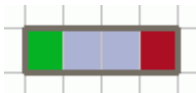
- 1) Click on the  button and select the switch block.



- 2) Click on the selected switching program and move it using the mouse.

6.5.3 Delete switching program

- 1) Click on the  button and select the switch block.




- 2) Click on Delete under Edit.

6.6 Sort and optimize the project

A switching program can be sorted according to the time, weekday, status or type.

6.6.1 Sort switching program

1) Click on the button for sorting the switching program .

→ The dialog window Sort appears.

2) Select the sort criteria (time, weekday, status) and the order (ascending/descending), and click on OK to confirm it.


6.6.2 Optimize switching program

The following occurs at all the channels:

- Identical switching programs on different weekdays are combined
- Duplicate switching programs are deleted
- Switching program is sorted according to the time and weekday

Initial status:

No.	Type	Status	Time	Weekday						
				h : m : s	Mon	Tus	Wed	Thu	Fri	Sat
1	Switch	On	09:00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Switch	Off	12:00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Switch	On	09:00	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Switch	Off	12:00	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Switch	On	09:00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Switch	Off	12:00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Switch	On	08:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Switch	Off	13:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Click on the button for optimizing the switching program  and confirm the message window with Yes.

No.	Type	Status	Time	Weekday						
				h : m : s	Mon	Tus	Wed	Thu	Fri	Sat
1	Switch	On	08:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Switch	On	09:00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Switch	Off	12:00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Switch	Off	13:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.7 Project options

You can enter the project title, customer data, creator data etc. under Project Options and save them in the project file.



Project options are only saved in the project file and are **not** transferred to the programming key.

- 1) Click on Options under Project.
- 2) Select a tab and enter the titles.
- 3) If you wish to name the channels, enter a new title on the Channel tab. This title appears in the toolbar for the channel selection.

6.8 Change device setting

The possible settings in the Device settings register vary according to the type of device, see chapter 15 "Device properties".



The settings in the Device settings register are stored in the project file and transferred to the device via the programming key. They do not effect the display in the PC software.

Time/date

The time/date format and the first day of the week can be adapted to individual countries.

The so-called Easter rule is used to calculate religious holidays, by which the date of Easter and all the religious holidays for the year (e.g. Whit sun, Ascension) that are dependent on the Easter date are calculated.

The setting of the Easter festival is made in the Easter rule selection field. There is a choice of the standard rule for the Catholic and Protestant churches as well as the Orthodox rule.

☐ Time/Date

Time Format	24h ▼
Date Format	31.12.00 ▼
First day of the week	Monday ▼
Easter Rule	Standard ▼

Summer/winter rule

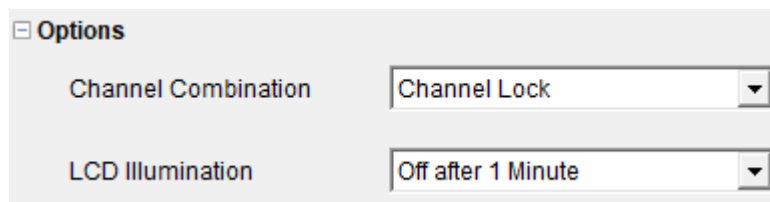
Various options are available for the summer/winter rule:



Summer/winter rule	Meaning
Without summer/winter	No summer/winter rule
Europe, Western Europe, Eastern Europe, Canada, USA, IRAN	Country specific rules are preset ex works
Free choice	Time changeovers always fall on the preset day of the week (e.g. fourth Sunday in October).
Fixed date	Time changeovers always fall on the set date (e. g. 01.04.).

Options (for IHP+ 2C - SMART)

Different conditions can be set for each channel.



The **channel combination** reduces maintenance for the wear of lamps and also allows energy to be saved.

The **channel lock** can prevent both channels from switching on at the same time. This prevents damages at consumers, e.g. forward and backward running of engines.

You can set the device's **LCD illumination**. You can choose between: Off after 1 minute or Always on.

Settings Channel

For each channel you can select a different status.

Holiday	Meaning
Not active	No holiday program active
Off	Channel always off
On	Channel always on
Random 1	setting random programs in different time periods
Random 2	setting random programs in different time periods



The settings in the Holidays have priority over all other programs.

- The Elapsed-time counter setting allows the service interval to be set for each channel. A message is displayed on the device screen once the set number of operating hours has been reached.
- Additional switching possibilities can be selected for the external inputs (see the following table for possible settings).

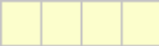
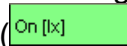
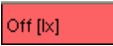
The possible external input settings Switch, Key or Inactive are explained in the table.

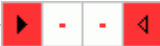



Keys or switches can be connected to the external switches. Depending on that, you can set various functions for the keys or switches.

External output		Meaning
Switch	Permanently on	Switch on: Channel always on Switch off: Programs/light function active
	Permanently off	Switch on: Channel always off Switch off: Programs/light function active
Push button	Manual	Channel is switched over to the next regular switch
	Timer	Timer on/off: Set on/off switching condition for set period
Inactive	–	External input without function

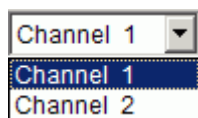
7 IC 100kp+

All devices in the IC 100kp+ product group have a light sensor. In the factory settings, the light function of the light sensor is always activated (Light function active ). You can freely define the lux values for switching the connected devices on and off. If the defined lux value () is not reached, the device switches on after the delay time has passed. If the defined lux value () is exceeded, the device switches off after the delay time has passed.

The Off period () button can be used to switch the device off irrespective of the defined lux values for a defined period. The On period () button can be used to switch the device on irrespective of the defined lux values for a defined period.

7.1 Select channel

- For devices with several channels, first select one channel.



7.2 Set lux value of the light sensor

Setting the lux values differs depending on the device type, see chapter 15 "Device properties".

Because the eye is already accustomed to the darkness when e.g. street lighting is turned off, the lux value for switching off can be set to a lower value than the value for switching on. As a result, earlier switching off is possible (e.g. switching on in the evenings at 25 lux, switching off in the mornings at 15 lux).

- 1) Select the Light tab.
- 2) Enter a lux value for switching on and off.

Lux Values		
	On [lx]	Off [lx]
	15	12

- 3) In order to avoid the device being switched back off or on unintentionally, you set delay times for the existing conditions.

Delay Time		
On	<input type="text" value="02:00"/>	mm:ss
Off	<input type="text" value="02:00"/>	mm:ss



The delay times and lux values of the switching program, which you enter on the Light tab, apply for the program.

7.3 Configure program

On the Standard Program tab, you configure the switching program, which is repeated weekly.

- Select the Standard Program tab.

7.3.1 Graph

Graphical programming of the switching program occurs via the following buttons:

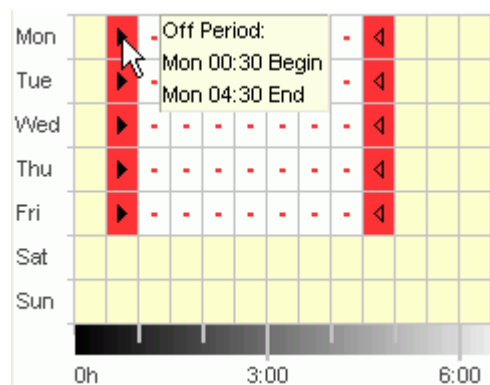
Button	Command
	Cursor to select or move a switching program
	Set off period
	Set on period

Chapter 6.5 "Change switching program" describes how you can change, copy, move or delete switching programs.

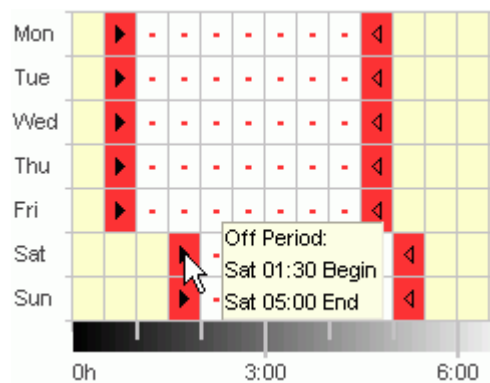
Example: Street lighting

In order to switch off street lighting in the night (Monday to Friday 0:30am – 4:30am, Saturday and Sunday 1:30am – 5 am) program the Kit LTS software as follows:

- 1) Select the Program tab.
- 2) Click on the Off period button.
- 3) In the column for 0:30 (street lighting switched off), press the left mouse button and drag the cursor from top to bottom (Monday to Friday) and to the right to the column for 4:30 (switching off ends).
- 4) Release the left mouse button.



- 5) In the column for 1:30 (street lighting switched off), press the left mouse button and drag the cursor from top to bottom (Saturday to Sunday) and to the right to the column for 5:00 (switching off ends).
- 6) Release the left mouse button.



7.3.2 Table

A switching program can also be configured as a table.

Example: Street lighting (see chapter 7.3.1 Graph)

- 1) Select the Program tab.
- 2) Click on New in the table.

No.	Status
	New

- 3) Select Off period.
- 4) Enter the start time (0:30).

No.	Status	Start Time							Duration Until								
		hh:mm	Mon	Tue	Wed	Thu	Fri	Sat	Sun	hh:mm	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	Off Period	00:30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	New																

- 5) Select the weekdays (Monday to Friday).
- 6) Enter the duration until (4:30).

No.	Status	Start Time							Duration Until								
		hh:mm	Mon	Tue	Wed	Thu	Fri	Sat	Sun	hh:mm	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	Off Period	00:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	New																

- 7) Repeat steps 1 to 5 for the switching program for the weekend.

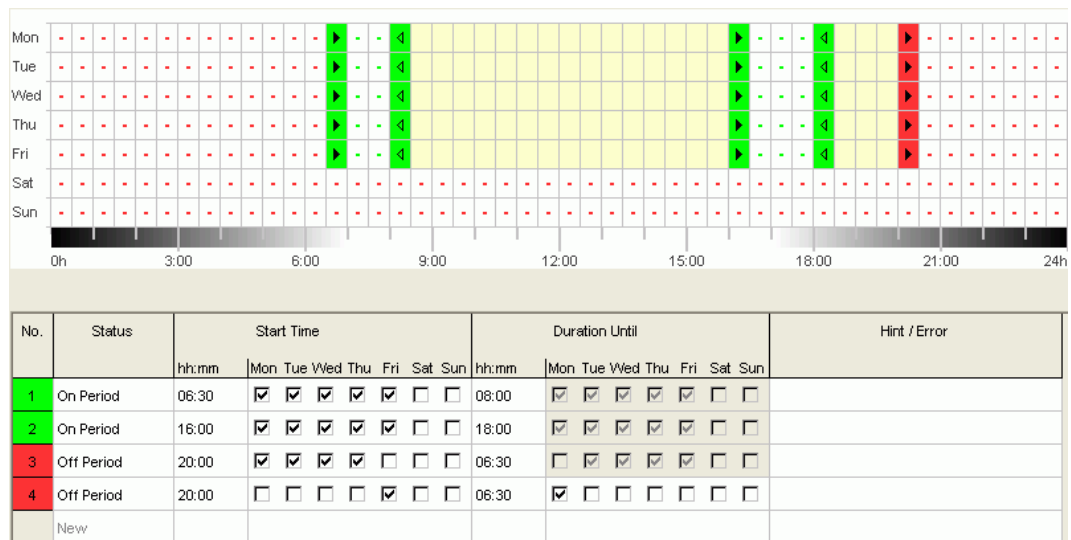
No.	Status	Start Time							Duration Until								
		hh:mm	Mon	Tue	Wed	Thu	Fri	Sat	Sun	hh:mm	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	Off Period	00:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Off Period	01:30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	05:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

7.3.3 Off period and on period

The following example contains one off period and one on period. The remaining time is controlled by the light sensor.

Example: Shop window lighting

Shop window lighting should be switched on from 6:30am to 8am and 4pm to 6pm on working days. It should be switched off overnight from 8pm to 6:30am on working days. On the weekend (from Friday 8pm to Monday 6:30am), the lighting should also be switched off. At the other times, the light function is active, which means the lighting is switched on and off depending on the defined lux values.



Chapter 6.5 "Change switching program" and chapter 6.6 "Sort and optimize project" explain how you change, sort and optimize switching programs.

7.4 Extra program

Extra programs 1 and 2 offer programs that differ from the standard program by defining a date range, e.g. for bank holidays, holidays etc. And variable lux settings can be set in addition to the switching times.

The extra programs have priority over the standard program and extra program 2 has priority over extra program 1. The settings for the extra program are entered in tabular form. It is possible to make entries for a Fix date, Fix date every year, Easter rule or Apply Public holiday.

See chapter 5.4 for creating and editing public holiday settings.

7.4.1 Setting the extra program without night switch-off

In the following program, the night switch-off in the standard program is left out. Exterior lighting is therefore exclusively controlled by the light sensor.

Example: External lighting of a church

On the Easter weekend and at Christmas the external lighting is switched on earlier and stays on throughout the night.

1) Select the Extra program register.

2) Enter lux values Lux On and Lux Off.

Lux Values	
Lux On	15 lx
Lux Off	20 lx

3) Click on the New selection field and select Easter rule.

No.	Type
1	Easter Rule
	New
	Fix Date
	Easter Rule

4) Click on the Easter Sunday selection field selection field and select the start of the first date range (e.g. "3 days before Easter Sunday").

No.	Type	Every Year	Date	Start	Hour hh:mm
1	Easter Rule	<input checked="" type="checkbox"/>	3 day(s) before Easter Sunday		00:00
	New		3 day(s) before Easter Sunday		
			2 day(s) before Easter Sunday		
			1 day(s) before Easter Sunday		
			Easter Sunday		
			1 day(s) after Easter Sunday		
			2 day(s) after Easter Sunday		
			3 day(s) after Easter Sunday		
			4 day(s) after Easter Sunday		

5) Enter the starting time(Hour).

No.	Type	Every Year	Date	Start	Hour hh:mm
1	Easter Rule	<input checked="" type="checkbox"/>	3 day(s) before Easter Sunday		17:00
	New				

6) Repeat steps 4 and 5 in the same way for the end of the date range.

No.	Type	Every Year	Date	Start	Hour hh:mm	Date	End	Hour hh:mm	Duration Days Hours
1	Easter Rule	<input checked="" type="checkbox"/>	3 day(s) before Easter Sunday		17:00	1 day(s) after Easter Sunday		20:00	4d 03h
	New								

7) Click on the New selection field and select Fixed date.

No.	Type
1	Easter Rule
	New
	Fix Date
	Easter Rule

8) Fill in the Every year, Start Date/Hour and End Date/Hour columns in the same way.

No.	Type	Every Year	Date	Start	Hour hh:mm	Date	End	Hour hh:mm	Duration Days Hours
1	Easter Rule	<input checked="" type="checkbox"/>	3 day(s) before Easter Sunday		17:00	1 day(s) after Easter Sunday		20:00	4d 03h
2	Fix Date	<input checked="" type="checkbox"/>	24.12.		12:00	26.12.		22:00	2d 10h
	New								

7.4.2 Setting the extra program with night switch-off

In the following extra program the night switch-off for the defined period of time begins 2 hours earlier than in the standard program.

Example: Street lighting during a town festival

During a two day town festival the street lighting is not switched off until 3 am and switched on again at 5 am at the earliest depending on the set lux values and the prevailing daylight.

Night Break		Light On	
Start Time	03:00 hh:mm	Start Time	--:-- hh:mm
Duration Until	05:00 hh:mm	Duration Until	hh:mm

Date Range								
No.	Type	Every Year	Date	Start	Hour	End	Duration	
					hh:mm		Days Hours	
1	Fix Date	<input type="checkbox"/>	14.09.2007		20:00	16.09.2007	12:00	1d 16h
	New							

7.5 Change device settings

The setting options on the Device settings tab differ depending on the device type, see chapter 15 "Device properties".



The settings on the Device settings tab are saved in the project file and transferred to the device with the programming key. They do not affect the display in the PC software.

Time/date

You can adjust the time/date format and the day for the start of the week on a country-specific basis.

Summer/winter rule

You have several options for the summer/winter rule:

Summer/winter rule	Meaning
No Su/Wi	No summer/winter rule
Europe, Europe West, Europe East, Canada	Country-specific rules preset in the factory
Free Rule	The clocks are always changed on the defined weekday (e.g. Sunday in the 4th week of October)
Fix Date	The clocks are always changed on the defined date (e.g. 01.04.)

Options

You have the following selection fields in the Options area:

- For the external inputs, you can select additional switching options (see the table below for the configuration options).
- **Channel combination** with the selection inactive, channel lock, program changeover. The channel combination reduces maintenance for the wear of lamps and also allows energy to be saved.
Channel lock: The channel lock can prevent both channels from switching on at the same time. This prevents damages at consumers, e.g. forward and backward running of engines.
- You can set the device's LCD illumination. You can choose between: Off after 1 minute or Always on.

The table explains the configuration options for the external inputs switch button, push button and not active.



You can connect push buttons or switches to the external inputs. Depending on this, you set different functions for push buttons and switches.

External input		Meaning
Switch button	Permanent on	Switch on: Channel always on Switch off: Programs/light function active
	Permanent off	Switch on: Channel always off Switch off: Programs/light function active
	Only Lux	Switch on: Light function active, programs inactive Switch off: Programs, light function active
Push button	Override	Channel switched over until next regular switching
	Timer Short-Term Circuit	Timer on/off: Set switching status on/off for a particular time
	Staircase Light	Channel on for the set time Resetable: The second time the button is pressed, the set time is restarted Early cutout: The second time the button is pressed, the time ends immediately
Not active	—	No function for external input

Holiday

You can define different statuses for each channel.

☐ Settings Channel

Channel 1



Holiday	Status	Begin Date	Hour	End Date	Hour
	On	28.11.2018	00:00	29.11.2018	00:00

Holidays	Meaning
Inactive	No holiday program active
Off	Channel always off
On	Channel always on
Lux only	Light function active, programs inactive



The settings in the Holidays area take priority over all programs.

8 IC Astro

The devices in the IC Astro product group are astronomical twilight switches. They calculate the exact switching program for sunrise and sunset depending on location and time zone. The Off period () button can be used to switch the device off irrespective of the astronomical functions for a defined period. The On period () button can be used to switch the device on irrespective of the astronomical functions for a defined period.

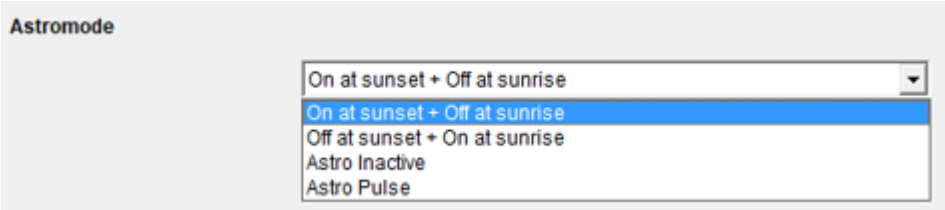
8.1 Set astronomical function

The data relevant for determining the astrotime is set on the Astro tab. This data relates to the offset, astromode and position.

- 1) Select the Astro tab.
- 2) If necessary, enter the offset values for sunrise and sunset.



- 3) Under Astromode, you can choose between
 - On at sunset + Off at sunrise,
 - Off at sunset + On at sunrise
 - Astro Inactive
 - Astro Pulse (*IC Astro 2C only*)



- 4) Define your position: Either by selecting the country and city/town or directly entering the degree of longitude/latitude and the time zone.

Location

Countrylist

Country

City

Coordinates

Latitude ° North

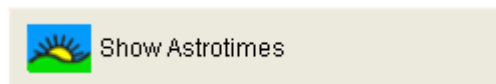
Longitude ° East

Timezone

Summer/Winter Rule

It is essential that you enter the position so that the astrotime can be calculated exactly.

You can use the [Show Astrotimes](#) button to read all astrotimes for the selected location. You can print these times or export them as a CSV file.



Edit favourites

By clicking on this button, you can create up to 10 preferred cities/towns (known as "favourites"). You must enter the town's name, longitude, latitude and time zone. These towns then appear under Favourites in the list of towns.

8.2 Configure program

On the Program tab, you can enter additional switching programs (on period, off period) irrespective of the astrotimes. This switching program is repeated weekly.

- Select the Standard Program tab.

For information on configuring the switching program, see chapter 7.3

No.	Status	Start Time							Duration Until							Hint / Error		
		hh:mm	Mon	Tue	Wed	Thu	Fri	Sat	Sun	hh:mm	Mon	Tue	Wed	Thu	Fri		Sat	Sun
1	New																	

8.3 Setting extra programs

For IC Astro 2C, in extra programs 1, 2 and 3 you can define programs varying from the standard program for one or more date ranges, e. g. for public holidays, holidays etc.

The extra programs have priority over the standard program. The lowest numbered extra program has the lowest priority.

extra program 1 = astro function

extra program 2 = continuous ON function

extra program 3 = continuous OFF function

The settings for the extra program are entered in tabular form. The date range allows you to define the scope of the extra program. It is possible to make entries for a Fixed date, Fixed date each year, the Easter rule or Transfer public holiday settings.

See chapter 7.4 for entering date range in extra programs;

See chapter 5.4 for information on creating and editing public holiday settings.

8.3.1 Transfer public holiday settings

- 1) Select the required public holiday setting.
- 2) Click on Apply. The dates are transferred to the extra program.

Apply Public Holidays

Set: Great Britain Edit Set

Public Holiday

- New Years Day
- Good Friday
- Easter Sunday
- Easter Monday
- May Day. Apply Until 2020
- Spring Bank Holiday. Apply Until 2020
- Summer Bank Holiday. Apply Until 2020
- Christmas Day
- Boxing Day

Free Rule ...

Apply Until: 2020

+ Apply X Cancel

Individual changes can be made here.

No.	Type	Date	Start	Hour	Date	End	Hour	Duration	Hint / Error
				hh:mm			hh:mm	Days Hours	
1	Fix Date Every Year	01.01	New Years Day	00:00	02.01		00:00	1d 00h	
2	Easter Rule	Good Friday		00:00	1 day(s) before Easter Sunday		00:00	1d 00h	
3	Easter Rule	Easter Sunday		00:00	Easter Monday		00:00	1d 00h	
4	Easter Rule	Easter Monday		00:00	2 day(s) after Easter Sunday		00:00	1d 00h	
5	Fix Date	25.04.2010	May Day	00:00	26.04.2010		00:00	1d 00h	
6	Fix Date	24.04.2011	Easter Sunday	00:00	25.04.2011	Easter Monday	00:00	1d 00h	
7	Fix Date	29.04.2012	May Day	00:00	30.04.2012		00:00	1d 00h	
8	Fix Date	28.04.2013	May Day	00:00	29.04.2013		00:00	1d 00h	
9	Fix Date	27.04.2014	May Day	00:00	28.04.2014		00:00	1d 00h	
10	Fix Date	26.04.2015	May Day	00:00	27.04.2015		00:00	1d 00h	
11	Fix Date	24.04.2016	May Day	00:00	25.04.2016		00:00	1d 00h	
12	Fix Date	23.04.2017	May Day	00:00	24.04.2017		00:00	1d 00h	
13	Fix Date	29.04.2018	May Day	00:00	30.04.2018		00:00	1d 00h	
14	Fix Date	28.04.2019	May Day	00:00	29.04.2019		00:00	1d 00h	
15	Fix Date	26.04.2020	May Day	00:00	27.04.2020		00:00	1d 00h	
16	Fix Date	31.05.2010	Spring Bank Holiday	00:00	01.06.2010		00:00	1d 00h	
17	Fix Date	30.05.2011	Spring Bank Holiday	00:00	31.05.2011		00:00	1d 00h	
18	Fix Date	28.05.2012	Spring Bank Holiday	00:00	29.05.2012		00:00	1d 00h	
19	Fix Date	27.05.2013	Spring Bank Holiday	00:00	28.05.2013		00:00	1d 00h	
20	Fix Date	26.05.2014	Spring Bank Holiday	00:00	27.05.2014		00:00	1d 00h	
21	Fix Date	25.05.2015	Spring Bank Holiday	00:00	26.05.2015		00:00	1d 00h	
22	Fix Date	30.05.2016	Spring Bank Holiday	00:00	31.05.2016		00:00	1d 00h	
23	Fix Date	29.05.2017	Spring Bank Holiday	00:00	30.05.2017		00:00	1d 00h	

8.3.2 Edit public holiday settings

In the open “Transfer public holiday setting” window you can create new settings and allocate a name, and copy, amend or delete it; see chapter 5.4

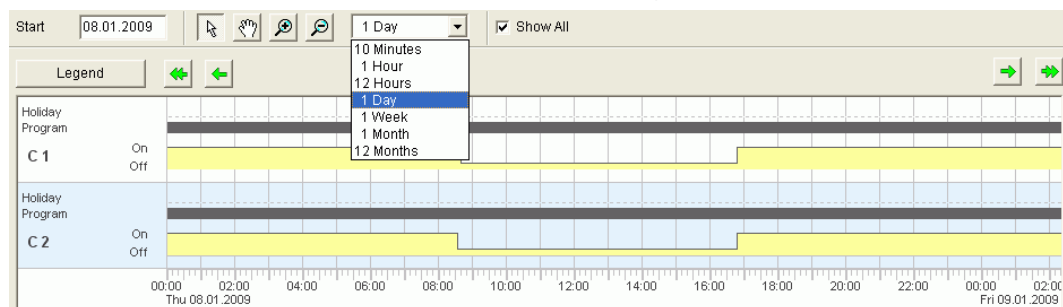
8.4 Change device settings

The setting options on the Device Settings tab differ depending on the device type. For information on changing the settings, see chapter 7.5

8.5 Simulation

All switching operations can be graphically displayed in the simulation. This shows which switching program causes a change to the switching status.


1) Click the Simulation button . The dialog window appears.



2) Select the start time and resolution.

8.6 Analysis

In the analysis, you can calculate the energy costs for a defined period.

- 1) Click the Analysis button .
→ The dialog window Analysis appears.
- 2) Select the analysis period: Start and end.
- 3) Under Energy costs, enter the price for one kWh. You can enter a second tariff (e.g. for day and night). In this case, different times must be specified for tariff 1.
- 4) Enter the consumer's power.

Period	Start	End	Total	
	01.01.2008 00:00	01.01.2009 24:00	367 d 0 h	<input type="button" value="Print"/>
Energy Costs	EUR/kWh	From	Until	<input type="button" value="Export"/>
Tariff 1	0,20	06:00	22:00	
Tariff 2	0,15	22:00	06:00	
Electrical Power	Channel 1	Channel 2		
	1000 W	120 W		
Analysis	Channel 1	Channel 2		
On-Time Total	181 d 0 h 23 min	179 d 17 h 48 min		
Number of On Switching	368	368		
Power Consumption	4.344,383 kWh	517,656 kWh		
Energy Costs	723,51 EUR	86,13 EUR		

- 5) You can print the data or export it as a CSV file.

9 REG-K/8/800

With the year time switches REG-K/8/800 (1-8 channel time switches) you have the option of programming and switching time or Astro programs for each channel.

9.1 Time switch programs

The time switch programs allow you to choose between standard and extra programs:

- 1 standard program (weekly program with switching times, pulse and cycle times)
- 16 extra programs consisting of:
 - 14 extra programs P1-P14 (weekly programs with switching times, pulse and cycle times, with variable date ranges (fixed date range, date depending on Easter etc.), plus
 - extra program P15 (Continuous On) and
 - extra program P16 (Continuous Off) (with adjustable date ranges)

9.2 Astro programs

The time switch function can be activated for each channel instead of the Astro function. The Astro programs allow you to select from:

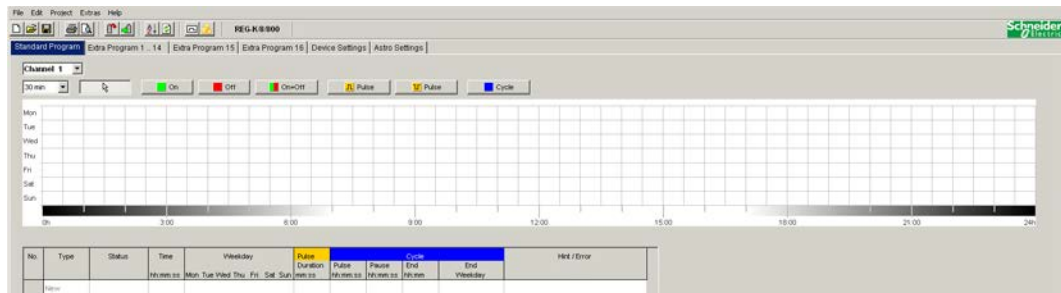
- 1 Astro standard program (weekly program with fixed On/ fixed Off times)
- 16 extra programs consisting of:
 - 14 Astro extra programs P1-P14 (weekly program with Fixed On / Fixed Off times) with variable date ranges (fixed date range, date dependant on Easter etc.), with
 - extra program P15 (Continuous On) and
 - extra program P16 (Continuous Off) (with adjustable date ranges)

9.3 Setting a standard program

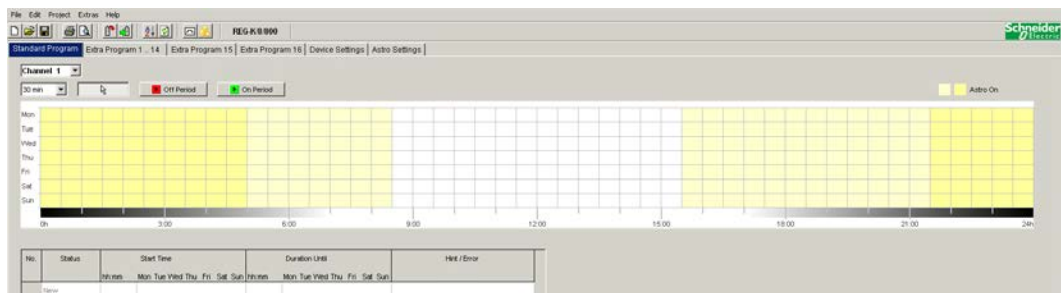
The standard program is always active but has the lowest priority and can be overridden by extra programs P1-P16.

- Select the Standard program register.

See chapter 6.2 for programming switching times.



If an Astro program is set (in the Settings device/channel function), the following appears



See chapter 7.3 for setting switching times.

9.4 Setting extra programs (extra programs 1-14)

Extra programs 1-14 allows you to choose programs that differ from the standard programming for one or more date ranges, e.g public holidays, holidays etc.

The following applies to the extra programs: The higher the number, the higher the priority. Extra program 16 has the highest, extra program 1 the lowest, priority. A extra program becomes active if at least one date range is set and it is not overridden by another extra program with a higher priority in this time range.

The following calendar-dependent date ranges can be set:

Fixed date (once, example: Start on 02.04.2010 at 4pm, end on 24.04.2010 at 10am)

Fixed date each year (Example: Christmas every year: Start on 24.12. at 6pm, end on 26.04. at 11pm)

Easter rule (Easter-dependent date range: 81 days before and 174 days after Easter, example: Whit Sunday and Whit Monday each year: Start 49 days after Easter at midnight, end 51 days after Easter at midnight)

Specimens (Date series, example: Every 2 weeks from November 2010: Start on Monday 01.11.2010 at midnight, end on Monday 08.11.2010 at midnight, repeat start after 14 days)

Day of the week rule (Example: Every month on the first weekend from Saturday 6am until Sunday 6pm: Start on the first Sunday each month at 6am, duration 36 hours)

Chinese New Year (date range dependent on Chinese New Year: 20 days before and 20 days after Chinese New Year)

Transfer public holiday settings: The public holidays entered in the public holiday setting can be transferred to the date range.

Example of programming standard and extra programs

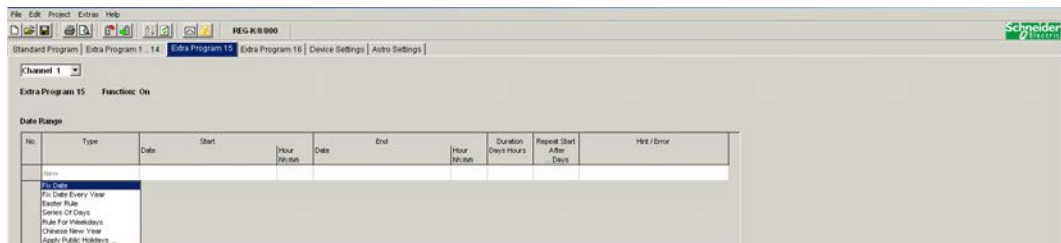
Switch on street lighting at midday 30 April to midday 1 May

The **standard program** switches on street lighting depending on Astro times. A night-time interruption is programmed from 11pm to 4am.

The **extra program 1** is active in the date range from midday 30 April to midday 1 May. Night-time interruption is not programmed so that the street lighting is not on all night.

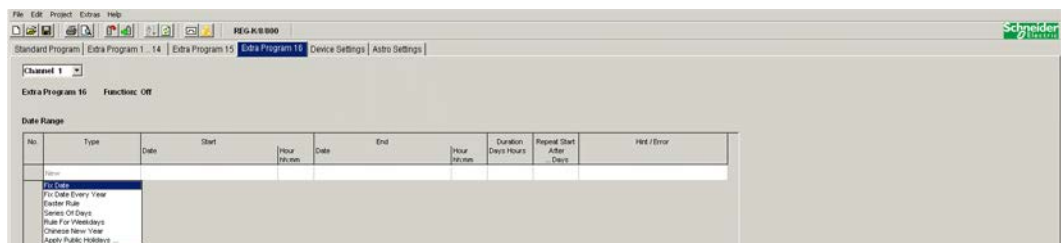
9.5 Set extra program 15 (On)

Extra program 15 (continuous On function) allows you to set a date range where the channel is always switched on.



9.6 Set extra program 16 (Off)

Extra program 16 (continuous Off function) allows you to set a date range where the channel is always switched off.



Example: Car park lighting

The standard program switches on the car park lighting at set times from Monday to Friday according to Astro times. The extra program ensures that the lighting is not switched on every public holiday.

9.7 Change device settings

The possible settings in the Device settings vary according to the type of device.

See chapters 6.8 and 7.5 for changing settings (Time/date, summer/winter time, options).

You can also use **Channel settings** to make other changes.

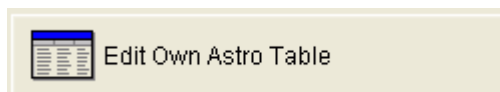
1. **Upgrade module:** You can choose whether an upgrade module should be active. Channels 5-8 are also available for this purpose.
2. **Channel function:** This allows you to choose between time switch program or Astro program. Changing the channel function deletes the entered program.
3. **Overview:** The Overview button allows you to review the entered data.

9.8 Change Astro settings

This menu only appears if at least one channel is set to Astro program.

The screenshot shows the 'Astro Settings' window. The 'Channel' dropdown is set to 'Channel 1'. Under 'Offset', both 'Offset Sunrise' and 'Offset Sunset' are set to '0 min'. The 'Astromode' dropdown is set to 'On at sunset + Off at sunrise'. In the 'Location' section, 'Country' is 'Great Britain' and 'City' is 'Aberdeen'. Under 'Coordinates', 'Latitude' is '57 ° North', 'Longitude' is '-2 ° West', 'Timezone' is 'UTC', and 'Summer/Winter Rule' is 'Europe'. The 'Own Astro Table' checkbox is unchecked. Buttons for 'Show Astrotimes', 'Edit Favourites', and 'Edit Own Astro Table' are present.

You can enter the relevant data for entering the Astro time described in chapter 8.1 or create your own Astro table.



You can enter your own time for sunrise and sunset for every day of the year. These times must be entered as winter time for the whole year. If the **Own Astro table** function is selected then the sunrise and sunset times in the table are used.

These times are corrected according to the summer/winter time rule for the switching time of the relay. Functions are available to complete this table automatically.

9.9 KNX settings

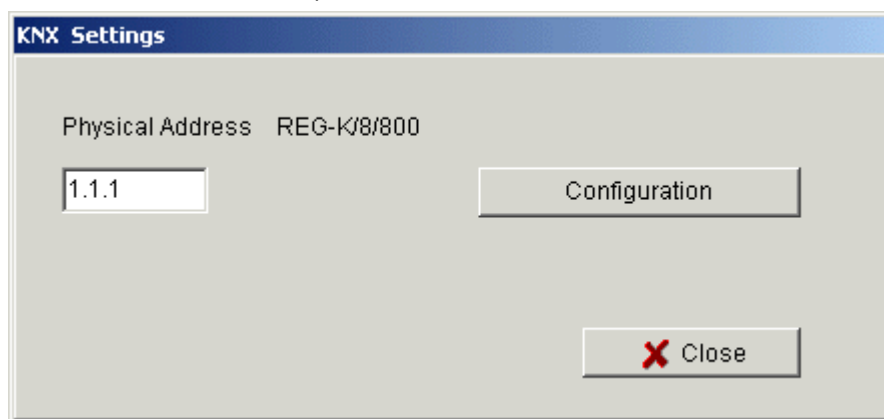
With the year time switch, the **KNX sub menu appears in the main menu** with the following setting options:

Settings – Read – Send Program– Send All



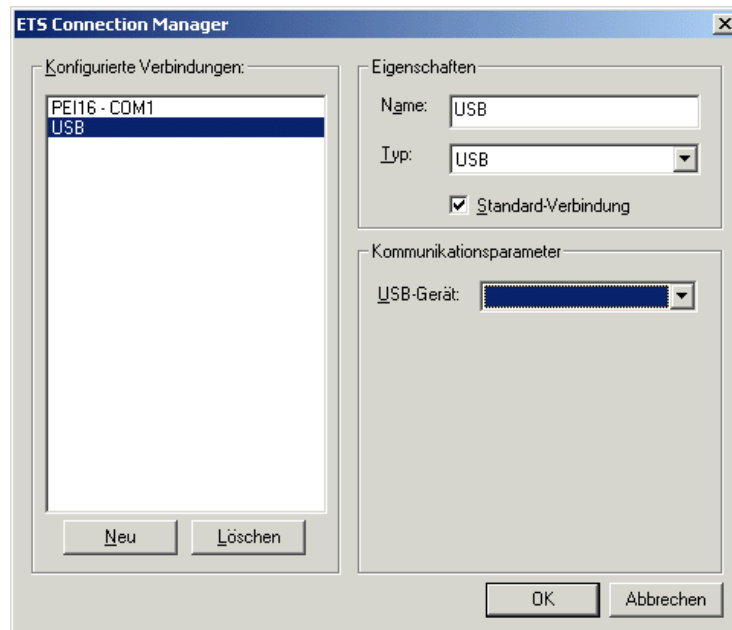
Settings

1. Enter the **Physical address** of the year time switch (e.g. evident in the ETS software etc.).



2. Connect USB interface to computer.
3. Then click on Configuration.
4. Select USB in Configured connections. for example .
5. Select the USB Type in Features plus the standard connection.
KNX USB interface now appears on connection field (if connected).

6. Confirm your selection and close the window.



Read

The entered switching times and programmes, which are programmed on the time switch, are transferred to the Kit LTS computer program. "KNX access" appears on screen.

Send program

The switching times and programs produced with the Kit LTS software are sent to the year time switch. "KNX access" appears on screen.

Send all

Switching times, programs and settings (Date/time, holidays, summer/winter time etc.) are sent to the year time switch.

Requirements for KNX program transmission

For bus communication, the Falcon driver (*FalconRuntime_V20_ObeliskKNX.msi*) must be installed. This program is installed on the Kit LTS CD in the "Driver" directory.

➤ Windows 7 and Vista

No further software required.

➤ Windows XP

Absolutely essential to the Falcon driver installation under Windows XP is a **Microsoft .NET Framework 2.0 SP2*** or **.NET Framework 3.5 SP1** (see Settings à System control à Software).

If neither software is available, install Version 3.5 Service Pack 1 (see below). Version 4 and higher are not suitable.

Download Links

.NET Framework 3.5 Service Pack 1 Download (Internet setup German 2.8 MB):

<http://www.microsoft.com/de-de/download/details.aspx?id=22>

or:

.NET Framework 3.5 Service Pack 1 Download (Internet Setup English 2.8 MB):

<http://www.microsoft.com/en-us/download/details.aspx?id=22>

Please read the **instructions** on the aforementioned websites carefully. The installation file is available as a **complete package** (231 MB) for download.

*.NET Framework 2.0 SP2 is automatically installed with the ETS 4.

10 Program programming key


When you program the programming key, the project you configured (programs and settings) is saved on the programming key. All switching programs are automatically optimized.



The programs and settings for all channels are saved on the programming key, and the existing data on the programming key is deleted.


The entries for the project options are not saved on the programming key.

Proceed as follows to program the programming key:

- 1) Insert the programming key into the programming interface and then insert the interface into your PC's USB port.
 - 2) Click on the button for programming Kit LTS .
 - 3) Confirm the message window with Yes.
- The programs and settings are saved on the programming key and can then be transferred to the device.

11 Read programming key

Programs and settings saved on the programming key are transferred to the Kit LTS software.

- 1) Insert the programming key into the programming interface and then insert the interface into your PC's USB port.
 - 2) Click on the button for reading Kit LTS .
- The programs and settings on the programming key are transferred to the software.

12 Export


Project data, programs and settings can be saved in a CSV file and opened and edited with a spreadsheet program or another program (e.g. Editor).

- 1) Click on Export under File.
- The dialog window Export CSV file appears.
- 2) Select a file location and enter a file name.
 - 3) Click on Save.

13 Language Kit LTS

It is possible to transfer an additional language to your device via the programming key.

- 1) Insert the programming key into the programming interface and then insert the interface into your PC's USB port.
- 2) Click on Create Language Kit LTS under Extras.
→ The dialog window Create Language Kit LTS appears.

- 3) Click on  next to the field File name.

- 4) First, select a language folder and then the appropriate TXS file for your device.

- 5) Click on the  **Program Kit LTS** button.

- The language file is saved on the programming key and can then be transferred to the device.

14 Menu commands

This chapter contains short explanations of all the menu commands.

Menu	Command	Meaning
File	New	Create new project
	Open	Open existing project
	Save	Save project
	Save As	Save project as new name
	Read Kit LTS	Transfer programs and settings from the programming key
	Program Kit LTS	Save programs and settings on the programming key
	Export	Save programs and settings in a CSV file
	Printer Setup	Change printer settings
	Print	Print project
	Print Preview	Display the print preview
	Exit	Exit software
Edit	Undo	Undo most recent actions on the current tab (max. 10)
	Redo	Redo undone actions
	Cut	Move selected data to the intermediate memory
	Copy	Copy selected data
	Paste	Insert cut/copied data
	Select All	Select all data or date ranges
	Delete	Delete selected data
Project	Simulation	Simulate data
	Analysis	Analyze data
	Sort	Sort data
	Optimize	Optimize data
	Options	Enter further data for the project (title, customer, etc.)
Extras	Create Language Kit LTS	Save additional language on the programming key
	PC software settings	Set the language and the first day of the week
Help	Kit LTS help	Open the software help
	About...	Open information about the software

15 Device properties

There are different properties depending on the product group and device type.

15.1 IHP

Properties	IHP+ 1C	IHP+ 2C	IHP 1C 18mm	IHP+ 1C 18mm	IHP+ DCF 1C
Channels	1	2	1	1	1
Memory locations	84	84	56	84	94
Switching program on/off	•	•	•	•	•
Pulse	•	•		•	•
Cycle				•	•
External inputs	1	2		1	1
External remote controlled antenna (DCF)					•

15.2 IC 100k

Properties	IC100kp+ 1C	IC100kp+ 2C
Channels	1	2
Memory locations	84	84
Light sensor	•	•
Program switching program	•	•
Set lux values	• ¹⁾	• ¹⁾
Programs	•	•
External inputs	1	2

x ¹⁾ Different lux values possible for each day of the week

15.3 IC Astro

Properties	IC Astro 1C	IC Astro 2C
Channels	1	2
Memory locations	84	84
Program switching program	•	•
External inputs	1	2

15.4 KNX year time switch REG-K/8/800

Features	REG-K/8/800
Channels	8
Memory locations	800
Program switching times	•
Programming Astro times	•
Pulse	•
Cycle	•
Extra programs	16
External, remote-controlled antenna	•
External outputs	-

16 Imprint

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Kit LTS V3

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If you have technical questions, please contact the central customer support in your country.

schneider-electric.com/contact

Because standards and materials are continuously developed, the technical data and information relating to dimensions is only valid after confirmation from our technical departments.

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