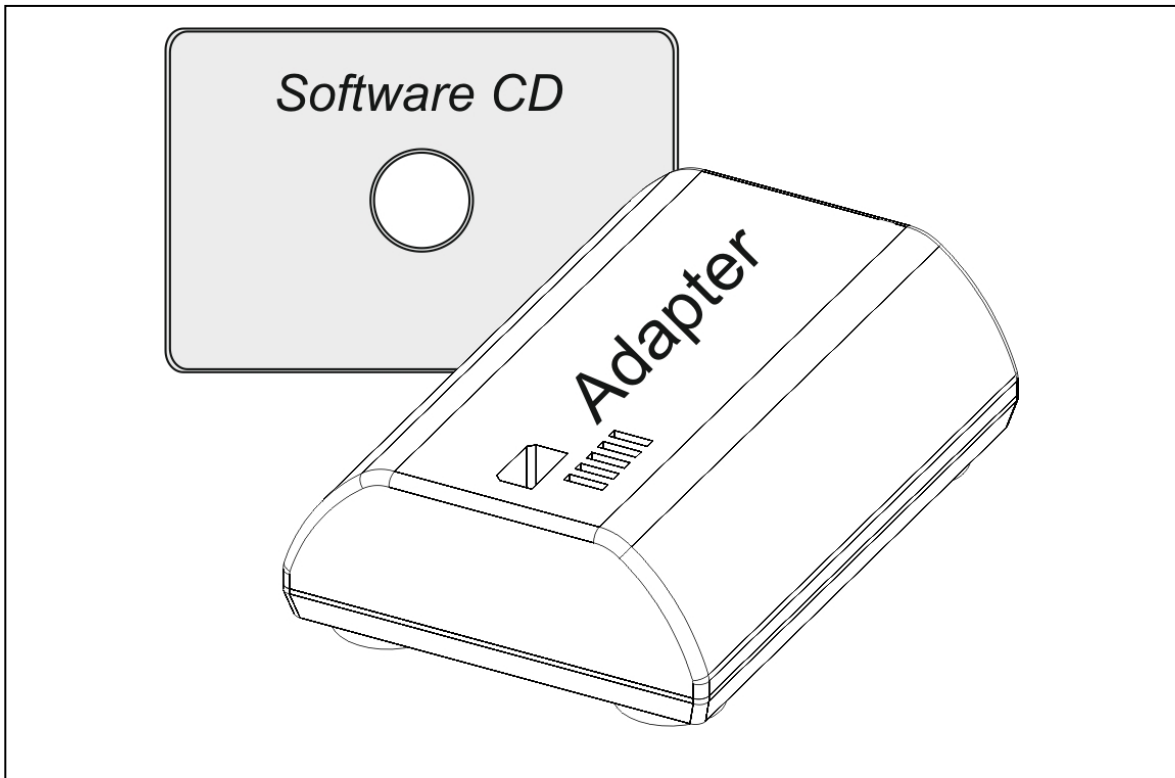


# Manual

PC-Software / Programming Software / Programming package



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## 2 Introduction

### 2.1 Product description

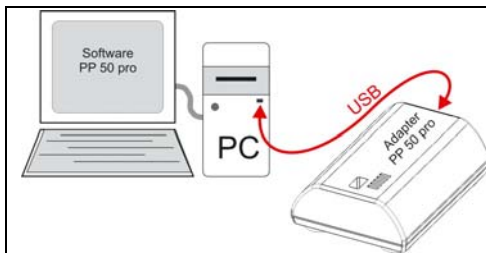
The PC-Software for the programming package is a tool for a quick and easy creation of a switching program. Via USB-adapter and data key the switching program can be transferred between the PC and the time switch.

### 2.2 Pictograms



Pictograms	Definition
	<b><u>Information</u></b> The pictogram offers helpful information.
	<b><u>Title of a handling sequence</u></b> The pictogram shows the handling sequence.
	<b><u>Elements of a handling sequence</u></b> The pictogram prompts the user to carry out an action!!

### 2.3 Software installation

Please carry out following instructions for installing the programming software successfully under Windows (2000 Service Pack 4, XP, VISTA):





#### **Software installation**

-  Insert CD into CD/DVD-drive.
-  Installation starts automatically, please carry-out advises of the routine.



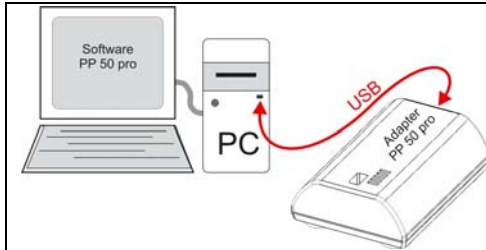
**The programming software** will add an icon on the desktop and will be added within the start menu

**If the installation does NOT start automatically please carry out following sequence:**

-  Open CD-directory and execute file Software-EXE
-  Follow the on screen instructions

## 2.4 Hardware installation

Please carry-out following instructions for installing the USB adapter successfully under Windows (2000 Service Pack 4, XP, VISTA):



### ➤ Step 1 – Connect USB-cable

- ☞ Connect B-USB-connector of the cable (included in delivery) to the adapter.
- ☞ Connect A-USB-connector of the cable with your computer



### ➤ Step 2 – Driver installation

After Step 1 the hardware installing tool of windows starts automatically:

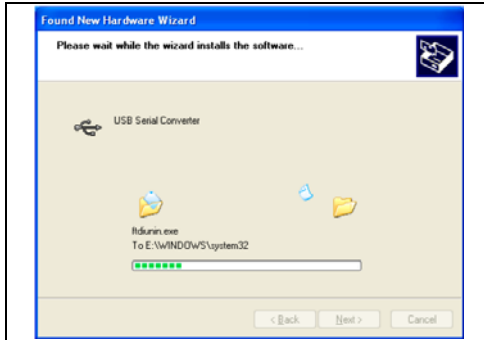
- ☞ Choose: „**No, ...**“
- ☞ Confirm with „**Next >**“



- ☞ Choose: „**Install from a list or specific location**“
- ☞ Confirm with „**Next >**“



- ☞ Confirm: „**Search for the best driver in these location**“
- ☞ Confirm: „**Include this location in the search**“
- ☞ Click „**Browse**“
- ☞ Enter the path to sub-folder „**treiber**“ on CD
- ☞ Confirm with „**Next >**“



**INFO** Windows copies driver



☞ Confirm security note with „**Continue Anyway**“.



☞ Complete the first part of the installation by clicking „**Finish**“.

**INFO** Further installation Steps required, the procedure will start automatically.

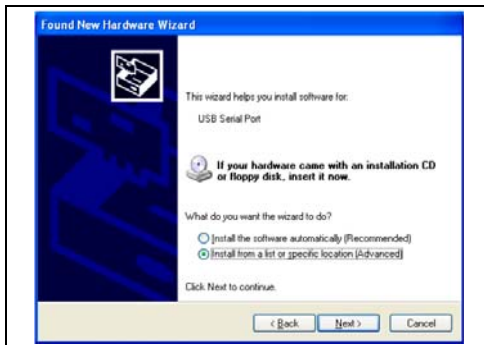


☞ Confirm again security note with „**Continue Anyway**“.



☞ Choose: „**No, ...**“

☞ Confirm with „**Next >**“



- ☞ Choose: „**Install from a list or specific location**“
- ☞ Confirm with „**Next >**“



- ☞ Confirm: „**Search for the best driver in these location**“
- ☞ Confirm: „**Include this location in the search**“
- ☞ Click „**Browse**“
- ☞ Enter the path to sub-folder „**treiber**“ on CD
- ☞ confirm with „**Next >**“

**INFO** Windows copies driver



- ☞ Complete the the installation by clicking „**Finish**“.

**INFO** The hardware is now ready to use

### 3 Program start and languages

#### 3.1 Start icon

- ☞ Start the PC-software by a double click of the start-symbol / start-icon

**OR**

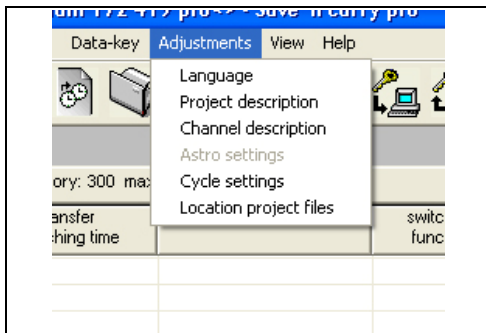
- ☞ Execute within "windows" start menu **Start -> Programs -> ...**

#### 3.2 Define type of time switch

The program starts with a welcome window.

- ☞ Choose the desired product type.
- ☞ Confirm with „**Next**“

#### 3.3 Adjustment of the language



##### ➤ Step 1

To change the languages please proceed as follows:

- ☞ Click menu „**Adjustment**“
- ☞ Click menu „**Language**“



##### ➤ Step 2

- ☞ Choose language
- ☞ Confirm with „**OK**“

##### ➤ Step 3

- ☞ Restart the program

**INFO** The new language configuration will be activated only after a restart of the software

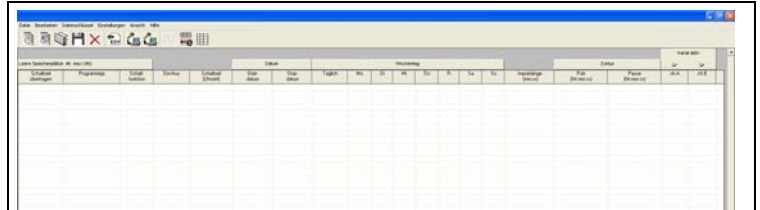
## 4 Overview, menu and symbols

### 4.1 Program overview

You have the choice between two different views of your switching program: **Table** and **chart**.

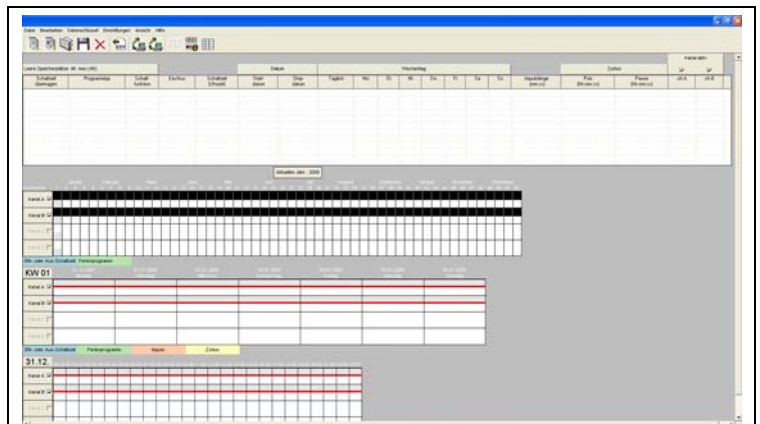
#### 4.1.1 Table

Default view is „table“ and the switching Steps are listed as lines.



#### 4.1.2 Chart

You always have the possibility to switch between table and chart. If you switch to chart, three different charts with time dependent switching status of all channels will appear.

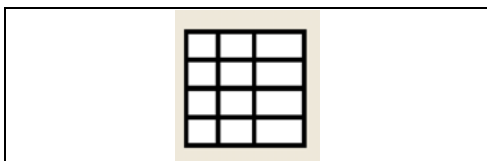


#### 4.1.3 Switch the mode of view



➡ **Show chart / Refresh chart**

☞ Click „**Refresh chart**“ symbol



➡ **Show table**

☞ Click „**Show table**“ symbol



#### 4.1.4 Refresh chart



If you are working with the chart, new switching times will only be shown if you refresh the chart by click „**Refresh chart**” symbol.

#### 🔄 Refresh chart

☞ Click „**Refresh chart**” symbol

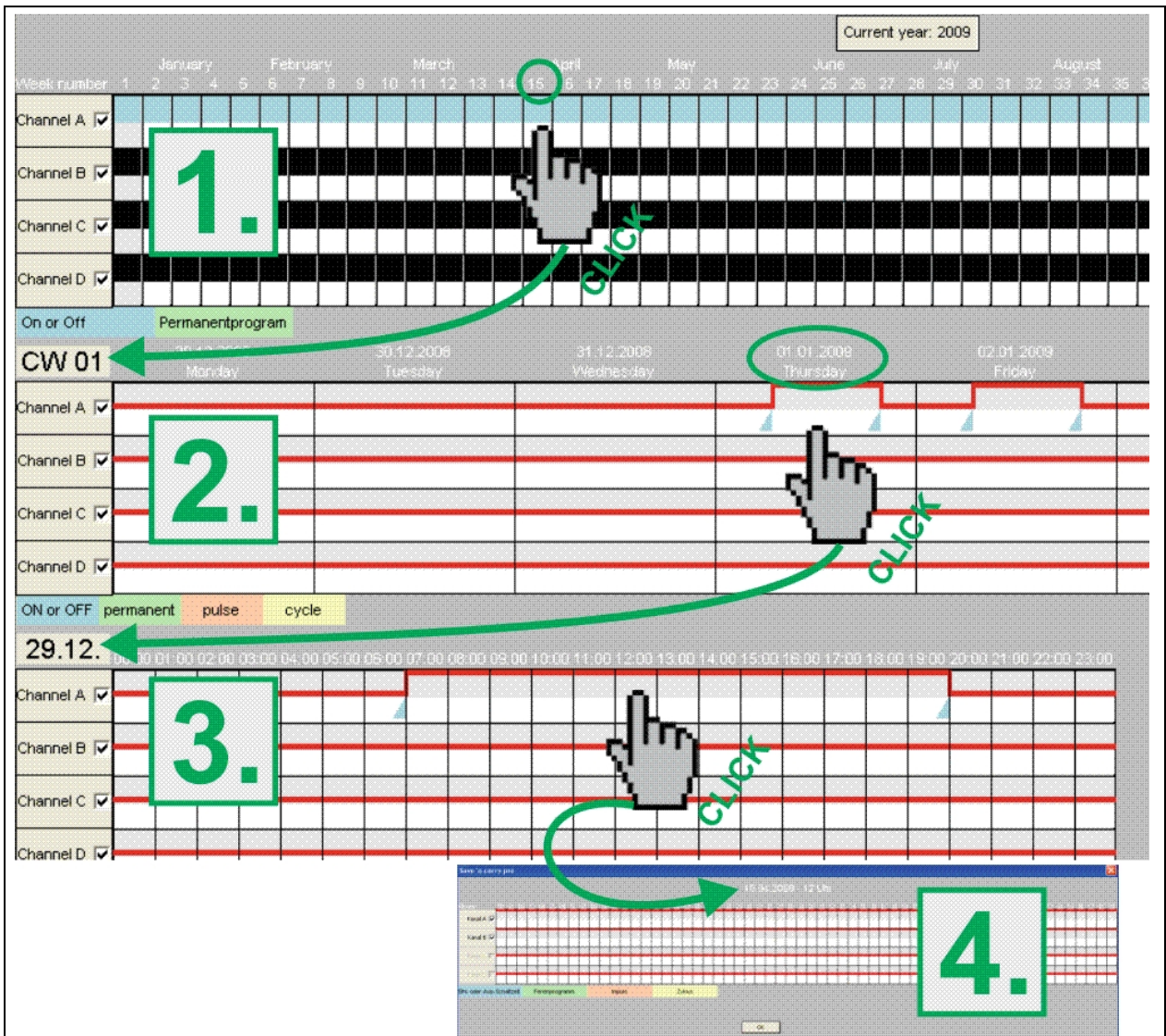


New switching Steps will only be shown after refreshing the chart.



The more memory locations you use, the longer it takes to refresh/show the chart. This can take up to 1 minute!

#### 4.1.5 Choose the period you are interested in!



1. Yearly / 2. Weekly / 3. Daily / 4. Hourly

### 4.2 Menu bar - overview

File	Edit	Data-key / Adapter	Adjustments	View	Help
New project	New switching time	Reading	Language	Status bar	Manual
Open	Duplicate	Writing	Project description	Toolbar	About...
Open last project	Delete		Channel description	Show chart	
Close project			Astro settings	Show table	
Save project			Cycle settings		
Save project as...			Location project files		
Export file as CSV					

### 4.3 Toolbar

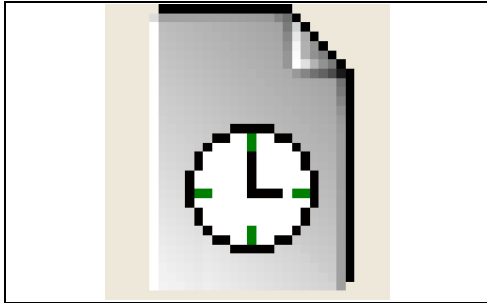
The toolbar of the programming software is as follows:



Icon	Name: Description
	<b>New switching time:</b> Enter new switching time
	<b>Duplicate:</b> Enter new standard switching time on the basis on an existing one
	<b>Open project:</b> Open existing project file
	<b>Save project</b>
	<b>Delete:</b> Delete marked switching Step
	<b>CSV export:</b> Export switching program as coma separated file
	<b>Reading:</b> Read memory of the data key / adapter into the PC
	<b>Writing:</b> Write switching program from the PC-program to the data key / adapter
	1. <b>Cycle settings (black):</b> Open cycle settings 2. <b>Cycle settings (gray):</b> Cycle function is not available for this time switch
	<b>Refresh chart:</b> Refreshes or shows charts of the time dependent switching functions
	<b>Show table:</b> Show switching program as table

## 5 Programming of a new switching time

### 5.1 Programming of a standard switching time



#### Step 1

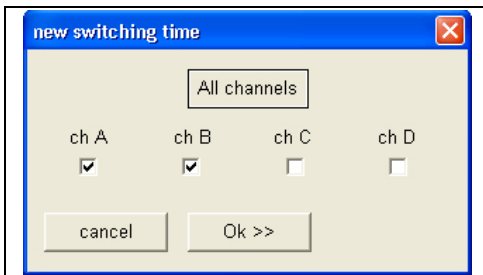
Click „**New switching time**“

OR

Double click an empty line within the table



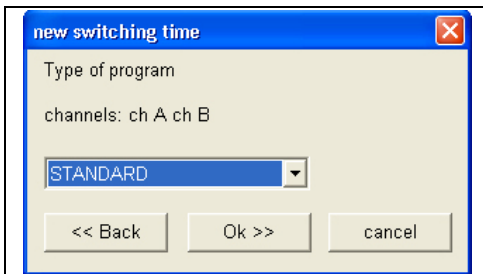
Window „**new switching time**“ opens!!



#### Step 2

Choose the channel / channels for which you would like to enter a switching time

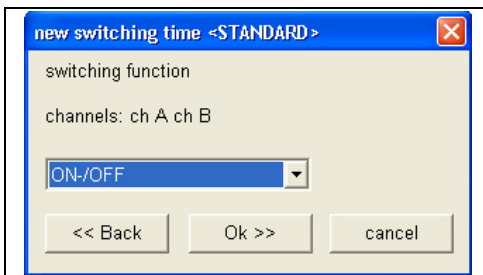
Confirm with „**OK >>**“



#### Step 3

Choose program type **STANDARD**

Confirm with „**OK >>**“



#### Step 4

Choose the desired **switching function**



Standard weekly time switch: **On-/Off** or **Pulse**

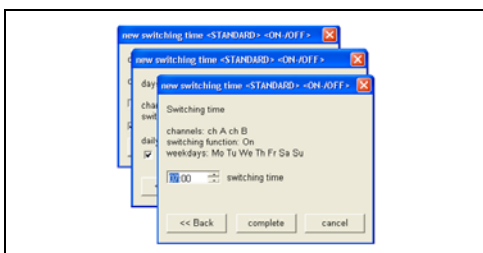
Astro timers: **ASTRO**, **NIGHT** or **EXTRA**

Weekly time switch with cycle function: **On-/Off**, **Pulse**, **Cycle\***

Yearly time switches: **On-/Off**, **Pulse**, **Cycle\***

\*Will only be offered after activation of Cycle(s)

Confirm „**OK >>**“



#### Further steps

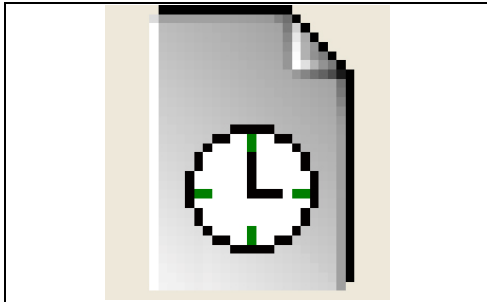


Further programming steps depend on the choice of the switching function (Step 4). Follow further advices within window „**new switching time**“

## 5.2 SP special program (yearly time switch)

The yearly function is fulfilled by the use of so called special (weekly) programs (SP) which are later activated (called up) by date as often as required. You can define up to 10 different special programs with arbitrary switching Steps (of course only within the total number of 300 memory locations).

The SP will only be applied if activated by date (SP Activation by date see point 5.2.1).



### Step 1

Click „**New switching time**“

OR

Double click an empty line within the table

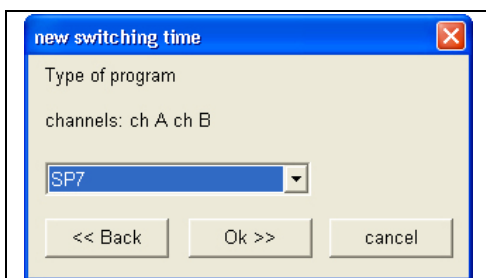
Window „**new switching time**“ opens!!



### Step 2

Choose the channel / channels for which you would like to enter a switching time

Confirm with „**OK >>**“



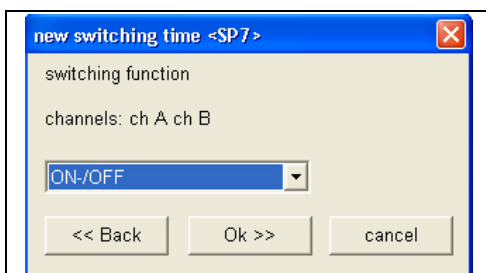
### Step 3

If you define a new switching time „**SP = special program**“, you have to choose a SP-Number **FIRST (SP 1 – SP 10)**.

You can enter within each special program (**SP 1 – SP 10**) as many switching Steps as required (limited only by the max. quantity of memory locations).

Choose program type **SP 1 – SP 10**

Confirm with „**OK >>**“



### Step 4

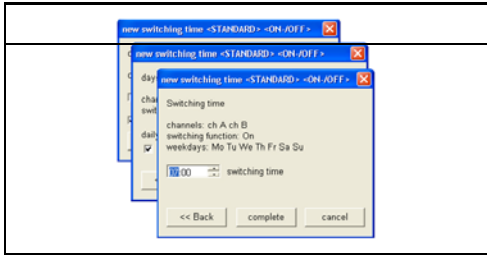
Choose the desired **switching function**

Within yearly time switches: **On/Off, Pulse, Cycle\*, (Activate SP\*\*)**

\*Will only be offered after activation of Cycle(s)

\*\*activation SP is NO switching function

Confirm with „**OK >>**“



➡ **Further steps**

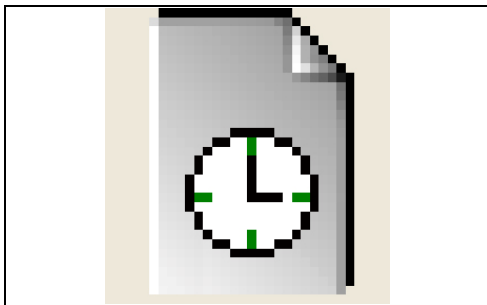
**INFO** Further programming steps depend on the choice of the switching function (Step 4). Follow further advices within window „**new switching time**“

**INFO** A **SP** will only be applied after **Activation** (call up by date) -> see point 5.2.1.

**5.2.1 Activation of a special program (yearly time switch)**

Special programs will only be applied if activated (called up) by date. SP can be called up as often as required (limited only by the max. quantity of memory locations).

The activation requires start date and end date of the date period.



➡ **Step 1**

☞ Click „**New switching time**“

OR

☞ Double click an empty line within the table

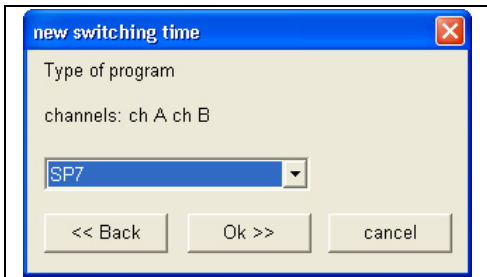
**INFO** Window „**new switching time**“ opens!!



➡ **Step 2**

☞ Choose the channel(s) for which you would like to activate a special program

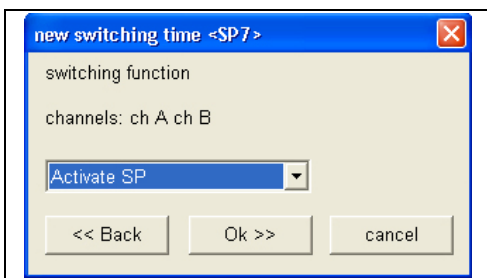
☞ Confirm with „**OK >>**“



➡ **Step 3**

☞ Choose the SP (**SP 1 – SP 10**) to be activated

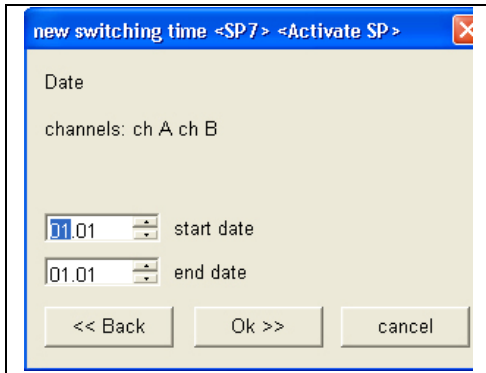
☞ Confirm with „**OK >>**“



➡ **Step 4**

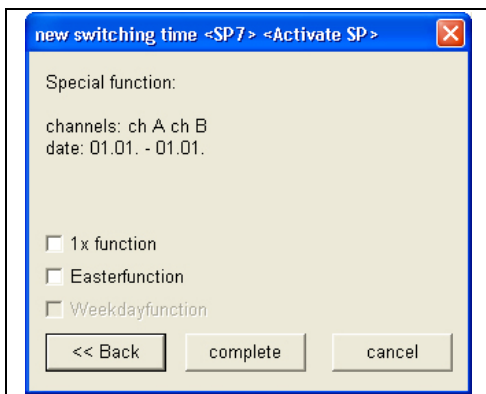
☞ Choose „**Activate SP**“ as switching function

☞ Confirm with „**OK >>**“



➡ **Step 5**

- ☞ Enter „**start date**“ and „**end date**“ of your special program
- ☞ Confirm with „**OK >>**“



➡ **Step 6**

- ☞ A „**Special function**“ can be activated optionally (standard is **NO** special function).
- ☞ Confirm with „**OK >>**“

**5.3 Add-Ons**



The following functions are NOT included in all types of time switches!!!

**5.3.1 Extra switching time**

Extra switching time is one single additional switching time that can be programmed by date. This switching time is executed additionally to the active switching program.

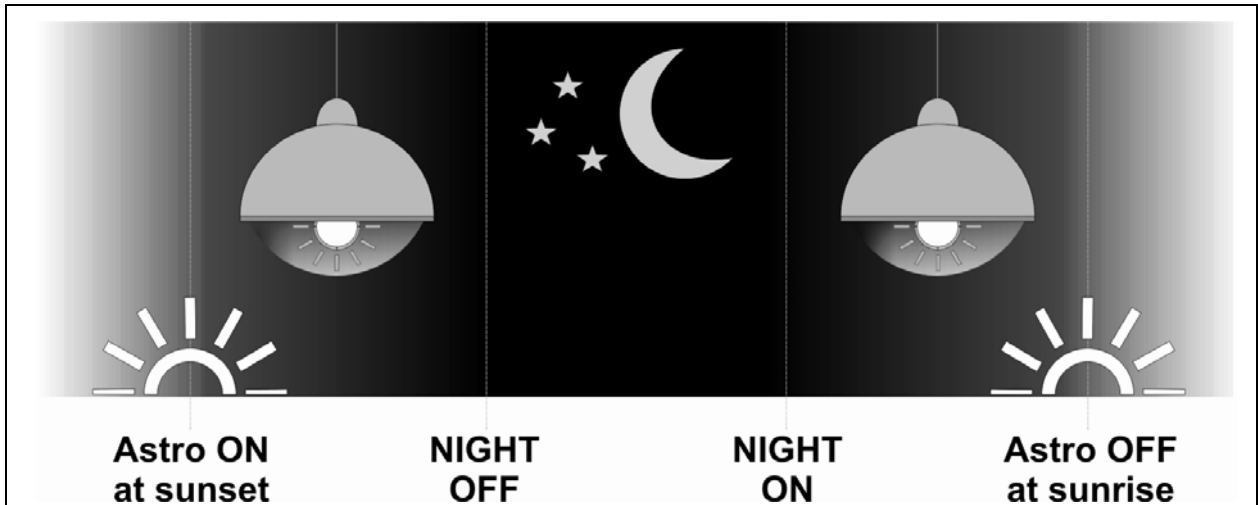
If you like to program an extra switching time choose “**EXTRA**” as program type.

**5.3.2 Permanent program**

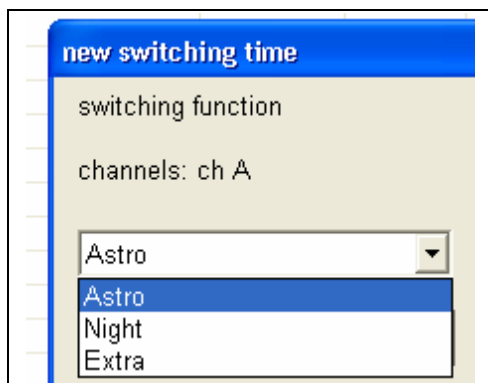
The program type permanent (permanent by date, holiday program) is a permanent On or Off status for the desired channel and activated by date (start date till end date). A permanent switching program can be called up as often as required (limited only by the max. quantity of memory locations).

If you like to program an extra switching time choose „**PERMANENT**“ as program type.

## 6 ASTROPROGRAM / SOLARPROGRAM



### 6.1 Programming of a Astro time switch / Solar time switch



The programming of an Astro time switch / Solar time switch is similar to the programming of a standard weekly time switch (See point 5).

The essential different is the selection of the switching function during the programming. Following switching functions will be offered within the programming:

=> **ASTRO** (See point 6.1.1)

=> **NIGHT** (See point 6.1.2)

=> **EXTRA** (See point 6.1.3)

#### 6.1.1 ASTRO switching times [ASTRO]

Astronomical or solar time switches can be used as an alternative to twilight switches (also known as photo-electric or day/night switch). When using an astro time switch NO light sensor is needed. By means of "astro switching times" the time switch automatically calculates the start of dusk in the evening or the beginning of dawn in the morning and calculates the time for sunset and sunrise respectively.

**Two Astro switching times will be offered for each day:**

**ON** = Astro ON at sunset

**OFF** = Astro OFF at sunrise

**Offset:** A chronological offset can be entered. This offset customises the astro switching times. Therefore the time switch can execute an astro switching time either before or after sunset/sunrise or, if the offset is left at zero, exactly at sunrise/sunset.

### 6.1.2 Night switching times [NIGHT]

You can see the **Night switching times** as an additional part of the Astro switching times. If you need, the **Night switching times** work between the Astro switching:

**Two Night switching times will be offered for each day:**

**Night OFF** = CUTOFF in the Night after ASTRO ON

**Night ON** = ACTIVATION in the Night before ASTRO OFF

### 6.1.3 Extra program / Extra switching times [EXTRA]

You can program further “extra” switching times e.g. if you like to use a channel of the time switch for a non-“Astro lighting-application”. The “extra switching times” works like a standard weekly program (ON / OFF).

## 6.2 Enter your date

The shift of the astro switching times over the course of the year is not included in the software graphic. ***PLEASE NOTE:*** Modify the astro date of the table to the date you are interested in and refresh the graph.

## 6.3 Astro settings / Position / Location

To guarantee exact calculation of local sunset and sunrise times, you can easily enter your approximate geographical position by choosing one of the pre-defined cities.

You find the menu „Astro settings“ within the main menu „Adjustments“.



***Please note: Your amendments within the menu „Astro settings“ will not be carried over to the time switch!!***



## 7 Data key functions / Adapter functions



For a successful data transfer the time switch and the type of time switch of the PC project must be identical!!!

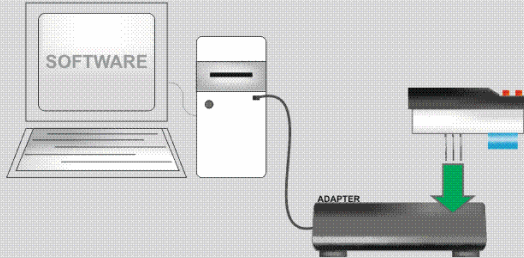
### 7.1 35mm / 70mm TIME SWITCHES



## 7.2 17,5mm TIME SWITCHES

### LESEN / READ / LEGGERE / LECTURE / LEER

#### 1 CONNECT



#### 2 CONFIRM

- (CZ) ▶ VYMEN DAT
- (DK) ▶ DATAUVEKSLING
- (D) ▶ DATENAUSTAUSCH
- (GB) ▶ DATA EXCHANGE
- (E) ▶ INTERCAMBIO DE DATOS
- (F) ▶ ECHANGE DE DONNEES
- (I) ▶ SCAMBIO DI DATI
- (NL) ▶ GEGEVENSUITWISSELING
- (N) ▶ DATAUTVEKSLING
- (PL) ▶ WYMIANY DANYCH
- (P) ▶ INTERCAMBIO DE DADOS
- (RO) ▶ SCHIMBUL DE DATE
- (FIN) ▶ DATA VAIHTAA
- (S) ▶ DATAUTBYTE



#### 3 CHOOSE



- (CZ) ▶ ADAPTER PROGRAMOVAT
- (DK) ▶ INDSTI ADAPTER
- (D) ▶ ADAPTER PROGRAMMIEREN
- (GB) ▶ PROG ADAPTER
- (E) ▶ PROG ADAPTADOR
- (F) ▶ ADAPTATEUR PROGRAMMER
- (I) ▶ ADATTATOR PROGRAMMARE
- (NL) ▶ ADAPTER PROGRAMMERE
- (N) ▶ ADAPTER PROGRAMMERE
- (PL) ▶ PROG ADAPTER
- (P) ▶ PROG ADAPTADOR
- (RO) ▶ PROG ADAPTER
- (FIN) ▶ OHJELM ADAPTERI
- (S) ▶ ADAPTE PROGRAMMERA

CONFIRM WITH OK

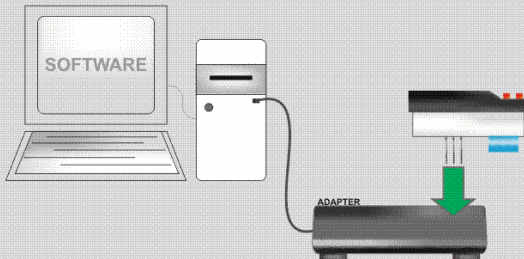


#### 4 READ (ADAPTER => PC)



### SCHREIBEN / WRITE / SCRIVERE / CHARGER / ESCRIBIR

#### 1 CONNECT



#### 2 CONFIRM

- (CZ) ▶ VYMEN DAT
- (DK) ▶ DATAUVEKSLING
- (D) ▶ DATENAUSTAUSCH
- (GB) ▶ DATA EXCHANGE
- (E) ▶ INTERCAMBIO DE DATOS
- (F) ▶ ECHANGE DE DONNEES
- (I) ▶ SCAMBIO DI DATI
- (NL) ▶ GEGEVENSUITWISSELING
- (N) ▶ DATAUTVEKSLING
- (PL) ▶ WYMIANY DANYCH
- (P) ▶ INTERCAMBIO DE DADOS
- (RO) ▶ SCHIMBUL DE DATE
- (FIN) ▶ DATA VAIHTAA
- (S) ▶ DATAUTBYTE



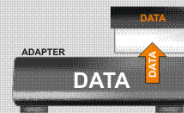
#### 3 WRITE (PC => ADAPTER)



#### 4 CHOOSE

- (CZ) ▶ HODINY PROGRAMOVAT
- (DK) ▶ INDSTI UR
- (D) ▶ UHR PROGRAMMIEREN
- (GB) ▶ PROG TIMESWITCH
- (E) ▶ PROG INTERRUPTOR HORARIO
- (F) ▶ HORLOGE PROGRAMMER
- (I) ▶ OROLOGIO PROGRAMMARE
- (NL) ▶ KLOK PROGRAMMERE
- (N) ▶ UR PROGRAMMERE
- (PL) ▶ PROG TIME
- (P) ▶ PROG INTERRUPTOR
- (RO) ▶ PROG CEAS
- (FIN) ▶ OHJELM AIKAKYTKIN
- (S) ▶ UR PROGRAMMERA

CONFIRM WITH OK



### 7.3 Read data-key / adapter



#### Step 1

Click symbol „**Read**“

**INFO** Window opens if project is empty!!



#### Step 2

Click „**Read**“ (from data key or from adapter)

**INFO** Data is now read from the data key!!



#### Step 3

Confirm with „**OK**“

**INFO** All switching times will be shown on the screen of the PC!!

### 7.4 Write data-key / adapter



#### Step 1

Click symbol „**Writing**“ (to data key or to adapter)

**INFO** Window opens!!



#### Step 2

Click „**WRITE**“ (to data key or to adapter)

**INFO** Data is now written to the data-key / adapter!!

**INFO** Existing data on the data-key / adapter will be lost



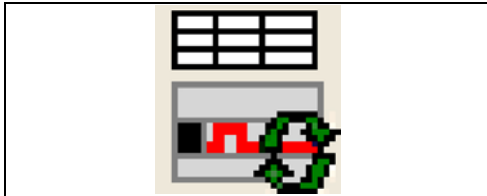
#### Step 3

Confirm with „**OK**“

**INFO** All switching times which are marked for transfer are written to the data-key / adapter and can be copied to the time switch of the same type. If you do so, the existing switching program of the time switch will be over written.

## 8 Further information

### 8.1 Refreshing the chart



#### ↻ Refresh chart

☞ click „**Refresh chart**“ symbol



New switching Steps will only be shown after refreshing the chart.



The more memory locations you use, the longer it takes to refresh/show the chart.

This can take up to 1 minute!

### 8.2 Duplicate

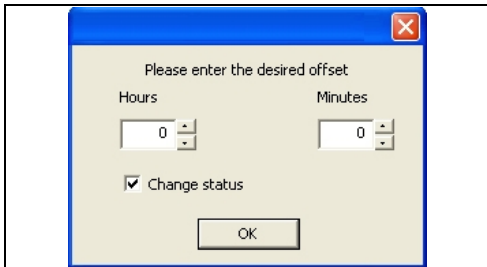


#### ↻ Step 1

☞ Click symbol „**duplicate**“



Window opens!!



#### ↻ Step 2

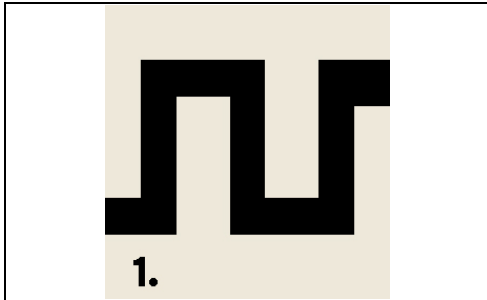
☞ This offset value is added to the switching time chosen for copy

☞ Confirm with „**OK**“

## 8.3 Cycle function

The cycle is not offered as switching function until you have defined a cycle. You have to define the cycle you would like to use first as follows:

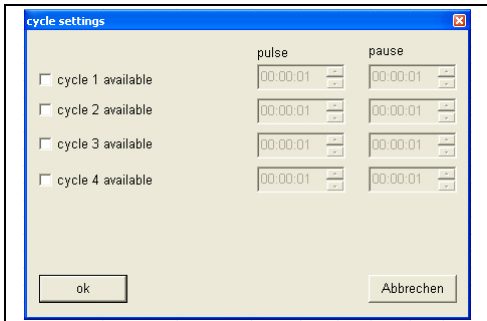
### 8.3.1 Cycle activation and definition



#### ➤ Step 1

- ☞ click symbol „cycle-settings“

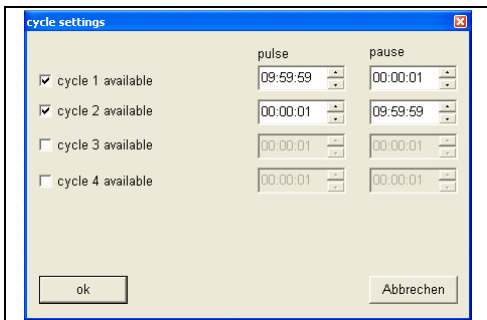
**INFO** Window „*cycle settings*“ opens!!



#### ➤ Step 2

Up to 4 different cycles can be activated and defined within this window.

- ☞ Activate the desired **cycle** number (click)

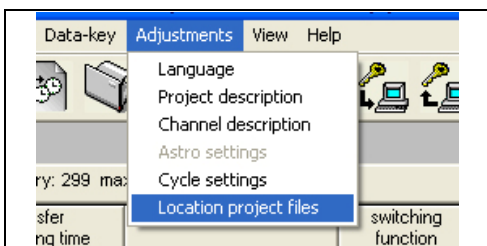


#### ➤ Step 3

The max. **pulse** and **pause** length is 9:59:59 (h:mm:ss) each

- ☞ Define Pulse and Pause length
- ☞ Confirm with „**OK**“

## 8.4 Saving / Location project files



#### ➤ Location of project files

- ☞ Click „**Adjustments**“
- ☞ Click sub-menu „**Location project files**“
- ☞ Define a project directory