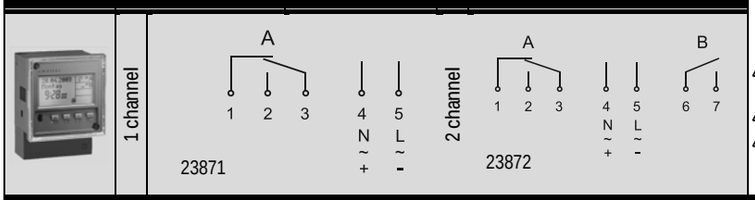
SANGAMO

Time switch

Connection diagram



1. Safety instructions

⚠ The installation and assembly of electrical equipment must be only carried out only by a skilled Person! Otherwise fire danger or danger of an electric shock exists!

⚠ Connect the supply voltage/frequency as stated on the product label!

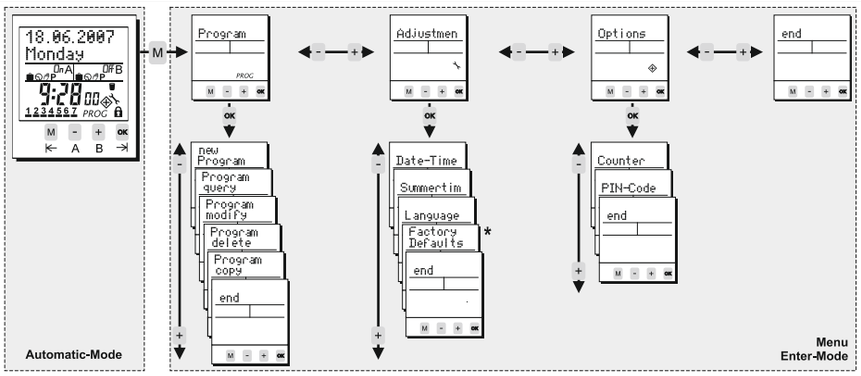
⚠ Warranty void if housing opened by unauthorised person!

⚠ The electronic circuit is protected against a wide range of external influences. Incorrect operating may occur if external influences exceed certain limits!

2. Initial operation

- The time switch is delivered in sleep-mode, the display is switched off.
- Press OK-button for 1 second.
- The current date and time is already programmed and European daylight savings time is activated.
- Select the desired language by pressing −+-buttons and confirm it by pressing OK. *(Remark: By pressing M you move one step backwards from the current position)*
- If required, date, time and daylight savings time mode can be adjusted also by pressing −+-buttons and a subsequent confirmation with OK.

3. Menu overview



4. Symbol legend

On	Channel is switched ON
Off	Channel is switched OFF
	For the current date the "holiday program" / "permanent by date" is activated
	Standard programming step
	Current state is based on a manual over-ride. The state will be cancelled with the next programming step.
P	Current state is based on a manual over-ride. The state is permanent until terminated manually (7).
1234567	Days of the week Monday, Tuesday, ... Sunday; The underscores indicate if the program is active for the days above.
I	Current state is based on a switching time with pulse function
	Element within sub-menu "program delete"
	The time switch is locked; to unlock the device the PIN has to be entered (12).

5. Key function

M ⇤	1. To access the Enter-mode (program, adjustments, options) from the automatic-mode. 2. To revert to the beginning of the current (sub-) menu.
−+	1. To adjust the flashing digit. 2. To scroll through a choice
A B	1. Automatic-mode: To switch the channel ON or OFF until the next programming step occurs. 2. Automatic-mode: A push longer than 3 sec. = Permanent switching status (7).
OK ⇥	1. To activate the time switch when operated without power supply. 2. To confirm the selection or the entered data.

6. Handling advice

- The time switch is programmable without external power supply after pressing the OK-button.
- To revert one step or one level back while in the Enter-Mode press M.
- After completion of a (sub-) menu confirming **end** will return the device into the automatic-mode.
- With −+ the choice changes from **end** to **continue**. By confirming **continue** the time switch returns to the beginning of the current (sub-) menu.
- When confirming **end** before completion, the time switch returns to the automatic-mode without saving the entered data.

7. Channel ON OFF / Permanent P

Channel **ON OFF**

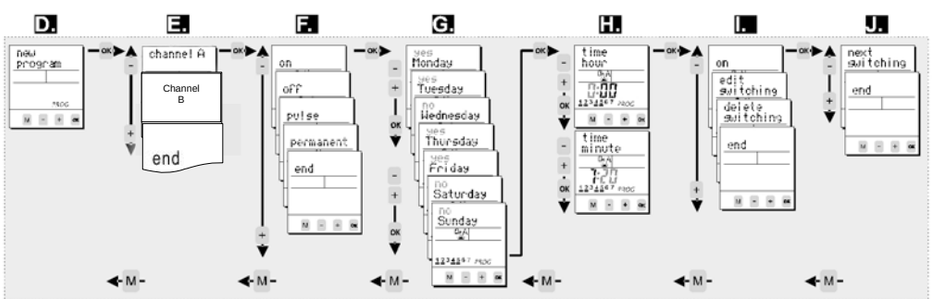
By pushing A B --buttons (−+-buttons) a manual switch of the channels take place. The resulting switching status is marked with the hand-symbol and remains until the next programming step occurs. (temporary over-ride)

Permanent switching status P

By pressing the corresponding channel button A B for more than 3 sec. the channel is permanently switched ON or OFF. The status remains until the next manual switching occurs (> 3 sec.). (permanent over-ride)

8. New Program (See also the example (9))

Step A. to C. please refer to point 9. (Example "New Program")



9. Example „New Program" (For a regular switching time)

A. If power supply is disconnected press OK for one second. The display appears in Automatic-Mode.

B. Press M, the time switch is now in the Enter-Mode.

C. Confirm **Program** with OK.

D. Confirm **new program** with OK.

E. Choose the desired channel with −+ and confirm with OK.

F. For regular switching times choose **on** or **off** with −+-buttons and confirm with OK.

G. Within this level you activate the days of the week (1...7) on which the switching time should happen. With −+ you activate "yes" or deactivate "no" the corresponding date. Confirm each day with OK.

H. Adjustment of the time: Hours −+ and OK. Minutes −+ and OK.

I. Verify the entered switching time: If the flashing summary of the programming step is correct, verify **on** or **off** with OK. After verification you have the choice between **edit/delete** and **end** with −+.

J. If you want to proceed with programming, confirm **next switching** with OK. To leave the programming menu confirm **end**.

10. Pulse

Program -> **New program** -> **Channel A / B** -> **...**

The pulse function provides you the opportunity of programming a switching time with a defined duration.
As soon as the pulse-duration has expired the time switch switches OFF automatically (the duration of the pulse is up to 59:59 mm:ss).
The programming is carried out like a standard switching time (see point 8 / 9) with following differences

- Choose **Pulse** function (9F).
- Define the duration of the pulse (**pulse time minute** / **pulse time second**).
- Program the days of the week
- Program the switching time (**time hour** / **time minute**)

Validation: Confirm the blinking summary of the pulse program

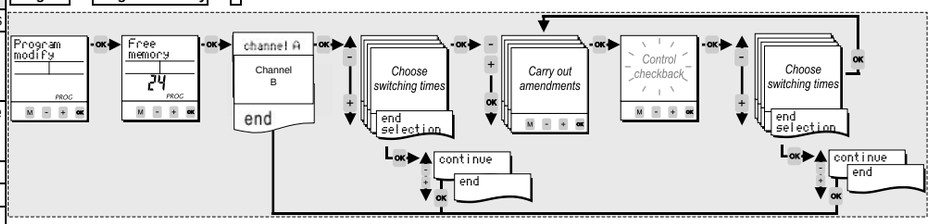
11. Program permanent

Program -> **new program** -> **channel A / B** -> **permanent** -> **...**

- One permanent by date programming step (holiday function) for each channel is possible. During the desired period (The function is valid for the whole days) the channel can be switched off (**permanent off**) or on (**permanent on**).
- The programming of this function is as described in (8 / 9).
- The choice **permanent** will not be offered anymore within the menu **new program** when already in use. The switching time can be modified and deleted within **Program modify** (13) and **Program delete** (12) respectively.

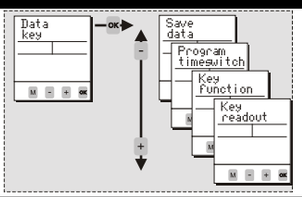
Menu	Main menu	Application
Program query	Program	To query the programming steps and remaining memory locations
Program copy	Program	Copy from one channel to another. Memory of the channel won't be overwritten; the copied switching steps appear additionally. ⚠ Permanent by date function is not copied!
Program delete	Program	Deletion of switching time(s). The program for all channels, single channels and single programming steps within on channel can be deleted.
Date-Time	Adjustment	Adjustment of date and time
Summertime	Adjustment	Adjustment of the daylight saving time mode (ON/OFF)
Language	Adjustment	Choice of languages
Factory Defaults*	Adjustment	Reset to the state of delivery. ⚠ Date, time and switching program will be lost!
Counter	Options	Displays the hour counter and pulse counter for each channel and the time switch itself.
PIN-Code	Options	The time switch can be locked with a 4-digit PIN-Code. The code can be adjusted, activated and deactivated. If you have forgotten the Code please call customer service.
Reset-Function	Press all front keys for 2 seconds. The time switch is reset. The values for date and time will be deleted and have to be re-entered. The switching program has not been deleted!	

Program -> **Program modify** -> **...**



Within **Program modify** each single switching time can be modified.

14. Data-key*

With a Data-key following activities are possible:

- **Save data**: Writes the data from the time switch into the memory of the Data-key.
- **Program timeswitch**: Writes the data located inside the Key into the memory.
- **Key function**: The time switch will solely apply programming steps from the Data-key. The switching program of the time switch is suppressed.
- **Key readout**: To query the switching program of the Data-key.