

Programming manual SC 98



Picture: SC 98.40

- 1 ⇒ Monday
- 2 ⇒ Tuesday
- 3 ⇒ Wednesday
- 4 ⇒ Thursday
- 5 ⇒ Friday
- 6 ⇒ Saturday
- 7 ⇒ Sunday
- J ⇒ Channel ON
- L ⇒ Channel OFF
- J L ⇒ Impulse

In mode AUTO manual switching possible by pressing relevant key.

Programming

Key functions

- [Menu]** Selection of programming modes
 AUTO → 1..7 → DATE → ? → S/W → S/W → S/W
- [CL]** Cancelling of inputs in modes
 1..7 → DATE → AUTO...
- [◆]** In modes 1..7, DATE, S/W, DATE:
 Change flashing digit resp. position.
 In mode ?:
 Change selected inputs.
- [▶]** In modes 1..7, DATE, S/W, DATE:
 Head for required position (forwards).
 In mode ?:
 Head for next switching time.
- [◀]** In modes 1..7, DATE, S/W, DATE:
 Return to required position (backwards).
 In mode ?:
 Return to switching time before.
- [A]** In mode AUTO:
[B] Press for manual overridden ON or OFF in relevant channel. Holding down key for 3 seconds, will switch ON or OFF PERM override. **Perm** will be displayed. Programmed function in relevant channel will be suppressed.
[C] Cancel permanent ON or OFF by holding down key for a further 3 seconds.
[D]

Programming advice

Programming possible also with time switch disconnected: Press **◆**, display appears, start programming.

Make inputs step by step. The appropriate position in the display is flashing and can be changed by pressing the key **◆**. Head for next position by using key **▶**, go backwards by using key **◀**.

Installation details

Caution: The installation and assembly of electrical equipment must be carried out only by a skilled person.

Connect to voltage and frequency according to type label only.

The high density electronic circuit is protected against a wide range of external influences. Incorrect operation may occur if external influences exceed certain limits.

Operating modes

- AUTO** Display of date, day of week, switch status of channel(s)
 Manual overriding possible (KEY A, B, C, D)
- 1..7** **Input of switching commands according to week day(s) and time (normal programme)**
 Use arrow keys **◀▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirming last input by pressing right arrow **▶** will enter into memory)
- DATE** **Input permanent ON or OFF, beginning and ending according to date.**
 Use arrow keys **◀▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirming last input by pressing right arrow **▶** will enter into memory)
- ?** **Displays number of free memory locations**
Show switching times for each channel
Alter switching time
Clear single or all switching times
 Use arrow keys to display switching times **▶** forwards or **◀** backwards. Use diamond key **◆** to change (alter) displayed switching time. Use key **CL** to cancelling the displayed switching time. Use key **CL** twice to cancelling all switching times if displayed number of memory locations available.
- ⊙** **Input of actual date and actual time**
 Use arrow keys **◀▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirming last input by pressing right arrow **▶** will enter into memory) (Automatic display of day of week)
- S/W** **Automatic summer/winter time change over**
 Use arrow keys **◀▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirming last input by pressing right arrow **▶** will enter into memory)
- SP 1..7** **Special programme(s): Input of switching commands according to number of special programme, week day(s) and time.**
 Use arrow keys **◀▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirming last input by pressing right arrow **▶** will enter into memory)
- SP DATE** **Special programme(s): Programming start and end dates**
 Use arrow keys **◀▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirming last input by pressing right arrow **▶** will enter into memory)

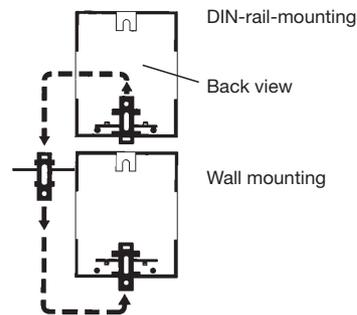
Reset

Pressing sunked key left side of channel A will clear real time and microprocessor. Switching programmes normally will not be affected. (Check by Read-Out; Mode "?")



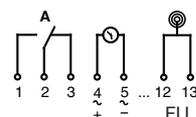
If connected to mains supply display will auto restore after 2 seconds.
 If not connected press diamond key **◆**.

Mounting advice

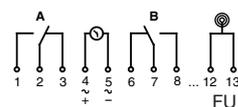


Wiring diagrams

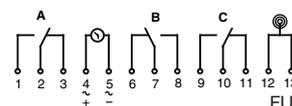
SC 98.10



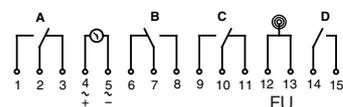
SC 98.20



SC 98.30



SC 98.40



Yearly function

Normal programme

In mode "1..7" program as week (no date function)
The weekly programmes will run continuously, week by week, as long as neither special programme nor perm ON or OFF is activated.

Special programme(s)

Special programmes must be programmed in function "SP 1..7" (as per week programme).
Special programmes can be selected (START/STOP Times) in "SP Date" function.
According to the "SP date" inputs the time switch changes from the normal weekly programme to the required No. of the special programme.

Some rules for the programming of SP-special programmes

- Each special programme can be activated as often as required, but only within the available storage capacity.
- If, by mistake several special programmes are activated within the same dates, only the special programme with the highest priority (between SP1 and SP 15) will be carried out. The other special programmes will be ignored.
- A special programme primarily programmed for several channels can be activated to overwrite one, two, three or four channels.
The remaining channel will continue with the normal programme or carry out other activated special programmes.
- When a special programme is activated it will take priority over the normal programme.

Priority in switching

Highest priority	Permanent ON or OFF, (Programming mode "Date") P15 Special programme "SP 1..7" • and "SP DATE"
↑	•
↑	P01
↑	•
Lowest priority	Normal programme (Mode 1..7)

Additional module: Data Storage Key

- To store and save the programme of the time switch.
- To transfer the programme from the "Data key" to the time switch.
- To duplicate the programme in another adequate time switch.

The "Data key" can be used in all function modes of the time switch.

Store and save the programme in the "Data key":

1. Insert "Data key" (Drawing 1). "CARD" is displayed.
2. Press key **◆** 1x "SAVE" is displayed.
3. Press key **▶** - programme transfer starts, "Pr" displayed until programme is saved.
4. "Data key" can be removed out. (pulled out) (Time switch is in mode AUTO)

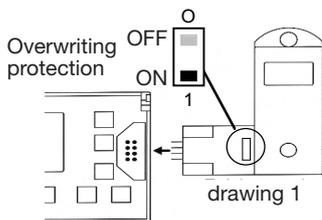
If "Er" is displayed data storage was unsuccessful due to the "Data key" being write protected. Move switch to the "0" position and repeat process. If programme is to be kept use new "Data key" for new programme.

Transfer programme from "Data key" to the time switch:

1. Insert "Data key" (Drawing 1). "CARD" is displayed.
2. Press key **◆** 2x "LOAD" is displayed.
3. Press key **◀** - programme transfer starts, "Pr" displayed until programme is saved.
4. "Data key" can be removed out. (Time switch is in mode AUTO)

Failure: "EP" is displayed,

when "Data key" is not compatible. (e.g. trying to load a yearly programme into a week time switch)



Mode S/W summertime changes

Beginning/end of summertime:

Mode 0:

4th Sunday, each March and October

Mode 1:

Current Central European Regulation
last Sunday, each March and October (installed)

Mode 2:

input of individual dates possible
(dates from mode 1 can be over written)

Mode 3:

no summertime change

Mode 4:

Last Sunday, each March and September

Mode 5:

1st Sunday in April, last Sunday in October (USA)

DCF 77 time signal receiver Time switch can be connected to a receiver of DCF 77 time signal

- Disconnect time switch from main.
- Connect receiver according to wiring diagram.
- Reconnect time switch to mains.
- Radio symbol flashing in display for approx 3 minutes.
- If symbol continues to flash after 3 minutes there is a fault or the time signal cannot be received.
- With receiver disconnected, no indication of radio symbol.
In both cases the time switch is running quartz-controlled.

DCF 77 is an european generated signal and is not available in the UK.

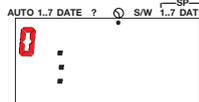
Examples

RED: Flashing symbol in display

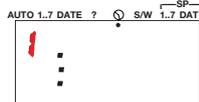
Mode **⊙** Current date and real time input or change

Example: Date 14.07.1999
Time 14:30
Initial form: Mode AUTO

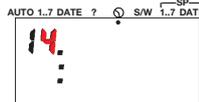
Press **⊙** 4x



◆ 1x



▶ 1x
◆ 4x



▶ 2x
◆ 6x



▶ 2x
◆ 9x



▶ 1x
◆ 1x



▶ 1x
◆ 4x



▶ 1x
◆ 3x



▶ 2x



Mode 1..7

Programming normal weekly programmes

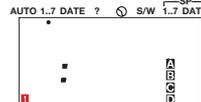
Several possibilities:

1. Single day, one channel
2. Several days, one channel
3. Single day, several channels
4. Several days, several channels

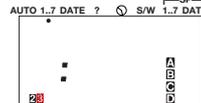
Example: Tuesday (2) and Thursday (4), switching time 19:00 h; Channel A ON, channel B IMPULSE 10 sec.

Initial form: Mode AUTO

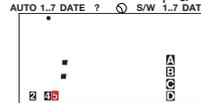
PRESS **⊙** 1x



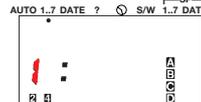
▶ 1x
◆ 1x



▶ 1x
◆ 1x



▶ 3x
◆ 1x



▶ 1x
◆ 9x



▶ 3x
◆ 1x



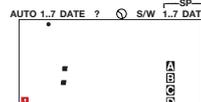
▶ 1x
◆ 3x



▶ 3x
◆ 1x



▶ 2x



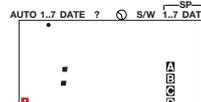
After approx. 3 sec.:

Continue with input of further dates/functions or press key **⊙** 7x to return to mode AUTO

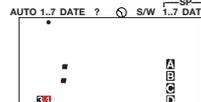
Example: Wednesday (3); Time 14:00
Channel D OFF

Initial form: Mode AUTO

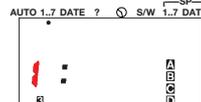
PRESS **⊙** 1x



▶ 2x
◆ 1x



▶ 4x
◆ 1x



▶ 1x
◆ 4x

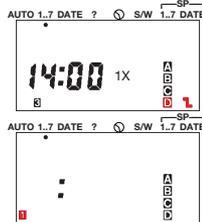


▶ 3x



If 1x (once through) is required (one day of the week only) press key **◆** to confirm 1x.
Input will be cancelled automatically after execution.
Example without 1x.

- ▶ 4x
- ◆ 2x



- ▶ 1x

After approx. 3 sec.:

Continue with input of further dates/functions or press key ○ 7x to return to mode AUTO.

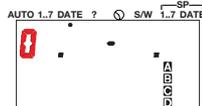
Mode DATE
Holiday programming (Perm ON or OFF by date)

Programming for certain channels (permanently ON/OFF), while others carry out normal or active special programmes.

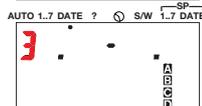
Example: From 30.07 until 30.08, channel B OFF
As 1x input to be cancelled automatically when carried out

Initial form: Mode AUTO

Press ○ 2x



- ◆ 3x



- ▶ 3x
- ◆ 5x



- ▶ 1x
- ◆ 3x



- ▶ 3x
- ◆ 6x



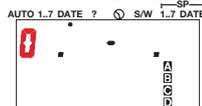
- ▶ 1x
- ◆ 1x



- ▶ 1x
- ◆ 2x



- ▶ 3x



After approx. 3 sec.:

Continue with input of further dates/functions or press key ○ 6x to return to AUTO.

Mode ?
Display or alter switching times

Example: Alter Tuesday and Thursday 19:00; Channel A ON; Channel B IMPULSE into:

Wednesday and Thursday 19:30; Channel A ON; Channel B ON

Initial form: Mode AUTO

Press ○ 3x



Number of storage locations available

- ▶ 1x
- ◆ 1x



- ▶ 1x
- ◆ 1x



- ◆ 1x



- ▶ 6x
- ◆ 3x



- ▶ 3x
- ◆ 2x



- ▶ 7x



Number of storage locations available

- 5x



Mode ?
Cancel function

Example: Cancel DATE 30.07. until 30.08. Channel B OFF

Initial form: Mode AUTO

Press ○ 3x

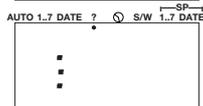


Number of storage locations available

- ▶ 3x



- CL 1x



After approx. 3 sec.



- ▶ 1x



Number of storage locations available

- 5x



If key CL is pressed twice while storage locations available are displayed, all inputs are cancelled. (Total clearing).

Mode SP 1..7
Programming special programme

Same programming as for normal week programme possible:

1. Single day, one channel
2. Several days, one channel
3. Single day, several channels
4. Several days, several channels

Example: Special programme No. 02 Monday (1) until Friday (5) switching time 12:00 h channels A and C ON

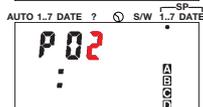
Initial form: Mode AUTO

Press ○ 6x



P = No. of special programme

- ◆ 1x



- ▶ 1x
- ◆ 5x



- ▶ 2x
- ◆ 1x



- ▶ 1x
- ◆ 2x



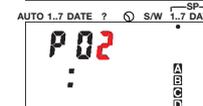
- ▶ 3x
- ◆ 1x



- ▶ 2x
- ◆ 1x



- ▶ 2x



After approx. 3 sec.:

Continue with input of further dates/functions or press ○ 2x to return to AUTO.

Mode SP Date
Activating a special programme, date for beginning and ending

Activating for certain channels possible, while others carry out normal or other activated special programmes.

Example: From 24.12. until 01.01. special programme 02 active for channel C

Initial form: Mode AUTO

Press ○ 7x



P = No. of special programme

- ◆ 1x



- ▶ 1x
- ◆ 2x



- ▶ 1x
- ◆ 4x



- ▶ 1x
- ◆ 1x



- ▶ 1x
- ◆ 2x



- ▶ 4x



- ▶ 4x
- ◆ 1x



- ▶ 2x



After approx. 3 sec.:

Continue with input of further dates or press key ○ 1x to return to mode AUTO.

