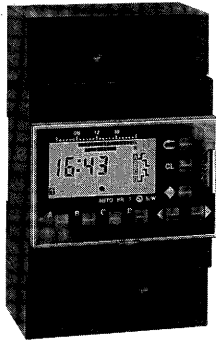


Programming manual (179410 - 440)



- 1 ⇒ Monday
- 2 ⇒ Tuesday
- 3 ⇒ Wednesday
- 4 ⇒ Thursday
- 5 ⇒ Friday
- 6 ⇒ Saturday
- 7 ⇒ Sunday
- J ⇒ Channel ON
- L ⇒ Channel OFF
- J L ⇒ Impulse 01...59 sec.

In mode AUTO manual switching possible by pressing relevant key.

Programming

Key functions

- [Menu]** Selection of programming modes
AUTO → PR → ? → S/W → AUTO ...
- [CL]** Cancelling of inputs in modes PR, ?, S/W
- ◆** In modes PR, ?; S/W:
Change flashing digit resp. position.
In mode ?:
Change selected inputs.
In mode AUTO:
Change indication of actual programme (full hours) from channels A and B to channels C and D (if available).
- ▶** In modes PR, ?; S/W:
Head for required position. (forwards)
In mode ?:
Head for next switching time.
- ◀** In modes PR, ?; S/W:
Return to required position. (backwards)
In mode PR:
Head for holiday programme **Ⓢ** when **■** (Monday) is flashing.
In mode ?:
Return to switching time before.
- [A]** In mode AUTO:
Press for manual overrided ON or OFF in relevant channel. Holding down key for 3 seconds, will switch ON or OFF PERM override. **Ⓢ** will be displayed. Programmed function in relevant channel will be suppressed. Cancel permanent ON or OFF by holding down key for a further 3 seconds, **Ⓢ** will disappear.
- [B]**
- [C]**
- [D]**

Operating modes

- AUTO** Display of time, day of week, switch status of channel(s). Also indication of actual day's programme in full hours.
Manual overriding possible (KEY A, B, C, D)
- PR** **Input of switching commands according to week day(s) and time**
Use arrow keys **◀ ▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirm last input with right arrow key **▶**, will enter into memory)
If monday **■** is flashing, use the key **◀** to select the holiday programming **Ⓢ**.
- ?** **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 time and actual weekday**
Use arrow keys **◀ ▶** to alter flashing digit. Use diamond key **◆** to increase value. (Confirm last input with right arrow key **▶**, will enter into memory)
- S/W** **Input of actual date (with year) = activates automatic changeover from/to summertime**
(According to EUROPEAN REGULATION last Sunday in March and October)
For inputs of date use keys us mentioned under **○**

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 **◀**. Inputs are terminated when flashing finishes.

Installation details

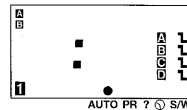
Caution: The installation and assembly of electrical equipment must be carried out only by a skilled person.

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 operating may occur if external influences exceed certain limits.

Reset

Pressing sinked 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 **◆**.

Additional modul: 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 an 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":

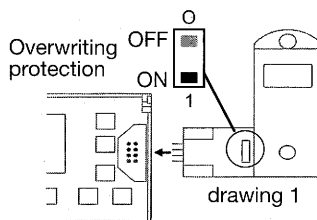
1. Insert "Data key" (Drawing 1). "CARD" is displayed.
2. Press key **◆** 1x "SAVE" is displayed.
3. Press key **▶** - program transfer starts, "Pr" displayed until program is saved.
4. "Data key" can be removed out (pulled out). (Time switch is in mode AUTO)

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.

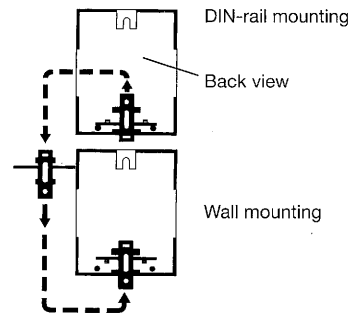
Transfer programme from "Data key" to the time switch

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

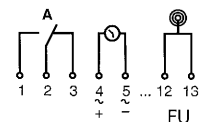


Mounting advice

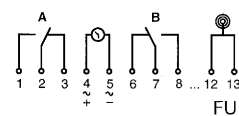


Wiring diagrams

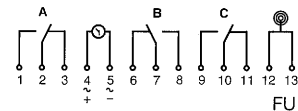
1 channel



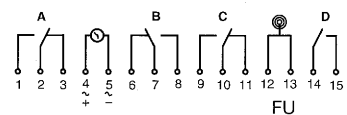
2 channel



3 channel



4 channel



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.

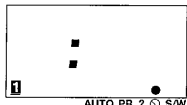
Examples

Mode \odot Current date and time input or change

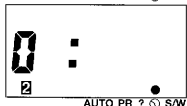
Example: Date 14.07.1999
Time 14:30

Initial form: Mode AUTO

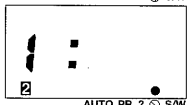
Press
 \odot 3x



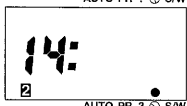
▶ 1x
◆ 1x



◆ 1x



▶ 1x
◆ 4x



▶ 1x
◆ 3x



▶ 2x

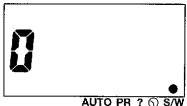


Mode S/W Activate automatic summertime changes (daylight saving)

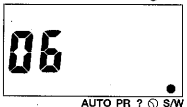
Example: Programme current date
06.07.99

Initial form: Mode AUTO

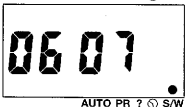
Press
 \odot 4x



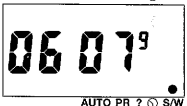
▶ 1x
◆ 5x



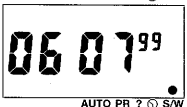
▶ 2x
◆ 6x



▶ 1x



▶ 1x
◆ 9x



▶ 1x



If changeover is not required, cancel
displayed (actual) date in Mode S/W
using key CL.

The time changeover is executed
automatically according to the
"European Regulation".

Start: Last Sunday in March
End: Last Sunday in October

Red: Flashing symbol in display.

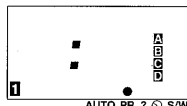
Mode PR Programming week programme

Several possibilities.

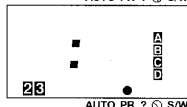
1. Single day, one channel
2. Several days, one channel
3. Single day, several channels
4. Several days, several channels

Example: Tues. (2) and Thurs. (4);
switching time 19:00;
Channel A ON
Channel B IMPULSE 10 sec.
Initial form: Mode AUTO

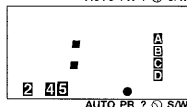
Press
 \odot 1x



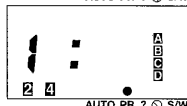
▶ 1x
◆ 1x



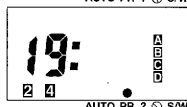
▶ 1x
◆ 1x



▶ 3x
◆ 1x



▶ 1x
◆ 9x



▶ 3x
◆ 1x



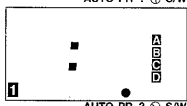
▶ 1x
◆ 3x



▶ 3x
◆ 1x



▶ 2x

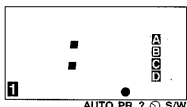


Continue with input of further dates/
functions or press key \odot 4x to
return to mode AUTO.

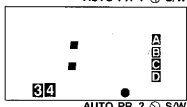
Example: Wednesday (3); Time 14.00;
Channel D OFF

Initial form: Mode AUTO

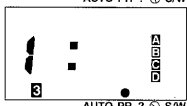
Press
 \odot 1x



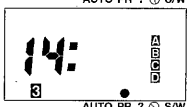
▶ 2x
◆ 1x



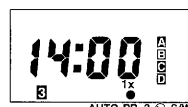
▶ 4x
◆ 1x



▶ 1x
◆ 4x



▶ 3x

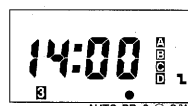


If 1x (once through) is required (one
day of the week only) press key \blacklozenge to
confirm 1x.

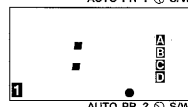
Input will be cancelled automatically af-
ter execution.

Example is without 1x.

▶ 4x
◆ 2x



▶ 1x



After appr.
3 sec.

Continue with input of further dates/
functions or press \odot 4x to return to
mode AUTO.

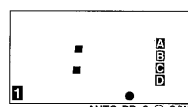
Mode PR Holiday programming (01-99 days)

Programming for certain channels
(permanently ON/OFF), while others
carry out the week programme.

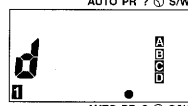
Example: 85 days
Starting day 7 (Sunday)
channel B OFF (permanent)

Initial form: Mode AUTO

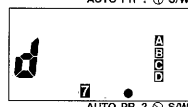
Press
 \odot 1x



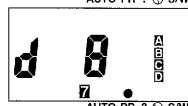
◀ 1x



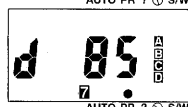
◆ 1x
◆ 6x



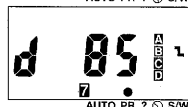
◆ 1x
◆ 8x



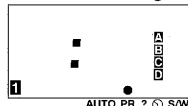
▶ 1x
◆ 5x



▶ 2x
◆ 2x



▶ 3x



**The holiday programme does not
occupy a storage location.**
Continue with input of further dates/
functions or press key \odot 4x to
return to AUTO.

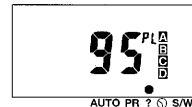
Mode ? Display or alter switching times

Example: Alter Tuesday + Thursday, 19:00
Channel A ON;
Channel B IMPULSE

into Wednesday + Thursday, 19:30
Channel A ON; Channel B ON

Initial form: Mode AUTO

\odot 2x



Number of storage
locations
available

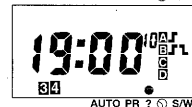
▶ 3x
◆ 1x



▶ 1x
◆ 1x



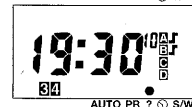
◆ 1x



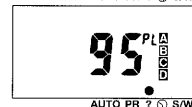
▶ 6x
◆ 3x



▶ 3x
◆ 2x



▶ 3x
wait 3 sec.



Number of storage
locations
available

▶ 2x



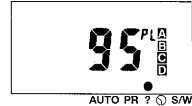
The holiday programme does not
occupy a storage location.

Mode ? Cancel function

Example: Cancelling holiday programme
85 days, starting Sunday (7)

Initial form: Mode AUTO

Press
 \odot 2x

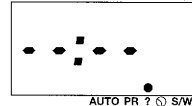


Number of storage
locations
available

▶ 2x



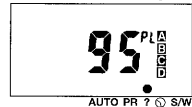
CL 1x



After appr.
3 sec.



▶ 2x



Number of storage
locations
available

\odot 3x



If key CL is pressed twice while storage