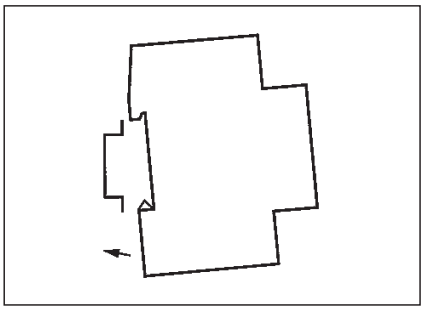
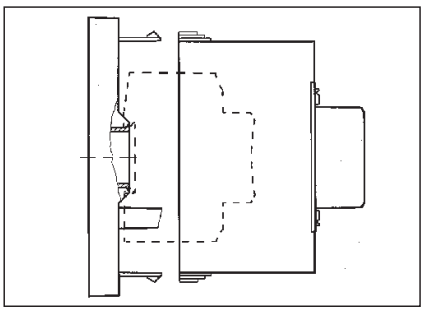
1. Contents

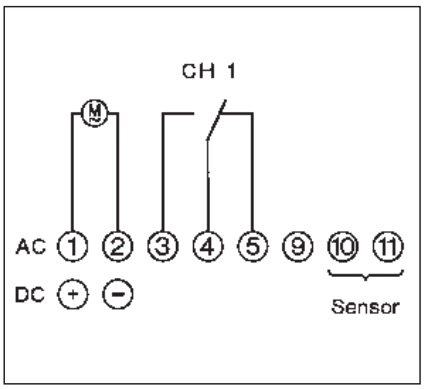


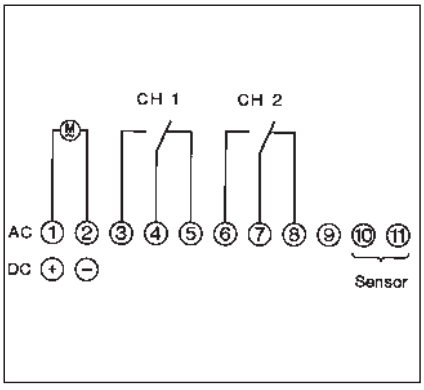


2.1 Assembly

Fit the time switch

- on a DIN rail
- optional wall surface-mounting
  Surface-mounting set for 2 and 3 module spacings
  Article No. 03.53.0083.2





2.2 Connection

See information on the unit!

Press any key to activate the time switch

- the time and date is displayed

Note:

If no key is pressed the time switch is automatically activated 1 - 2 minutes after power is connected.

Note:

When connecting the sensor to terminals 10 and 11, you must **also** insert a jumper between terminals 9 and 10.

When you operate several units with one sensor, this jumper may only be inserted **on one unit**.

See circuit diagrams.

2.3 Putting into operation

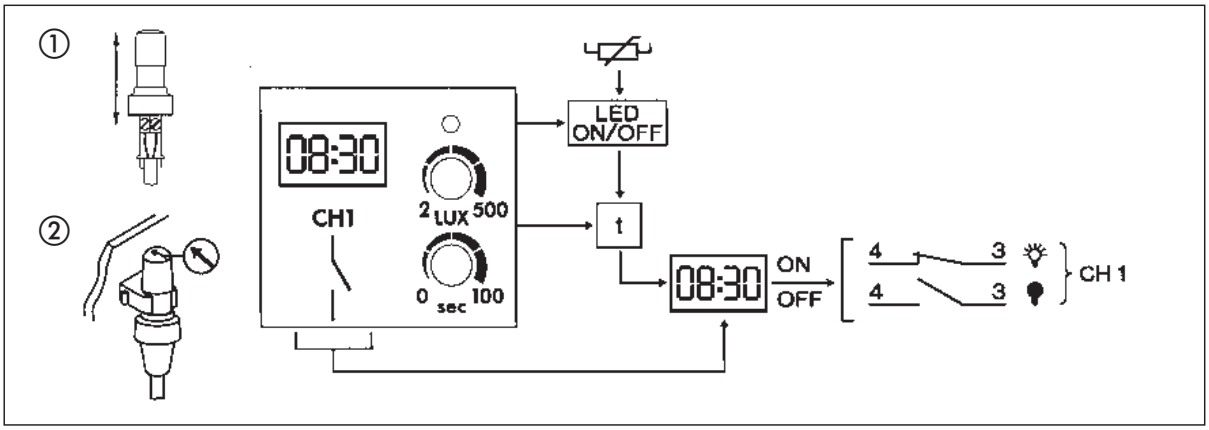
The date and time are set at the factory.
The unit is in power-save mode.
Only the colon flashes.

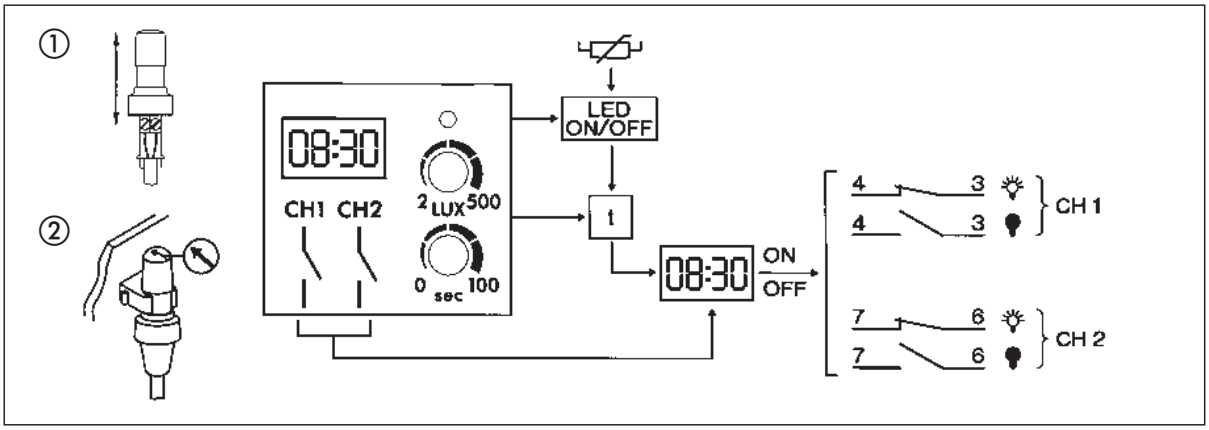
☞ Press any button:

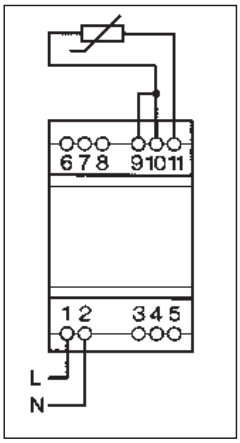
- The unit is active
- It shows the time (day of the week)

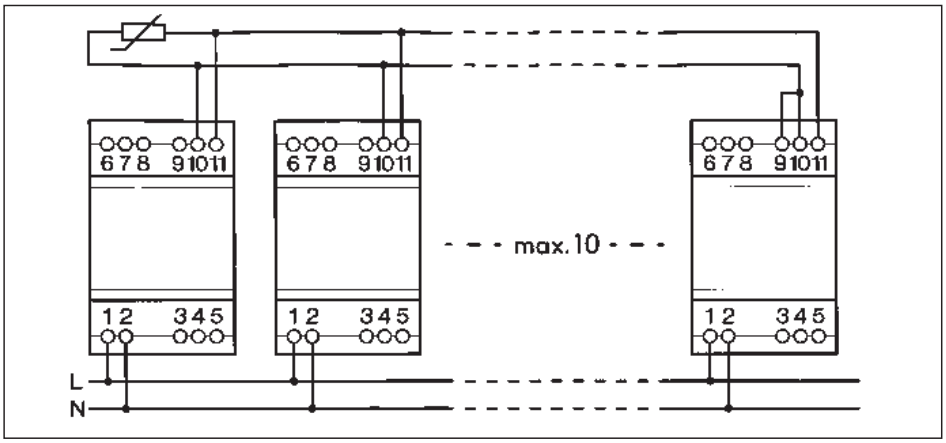
The unit twilight switch and time switch switches the output.
(Terminals 3 and 6) only active if all three conditions are met:

- The set brightness level is not reached
- The set delay time has expired
- The time switch is set to ◉ = ON

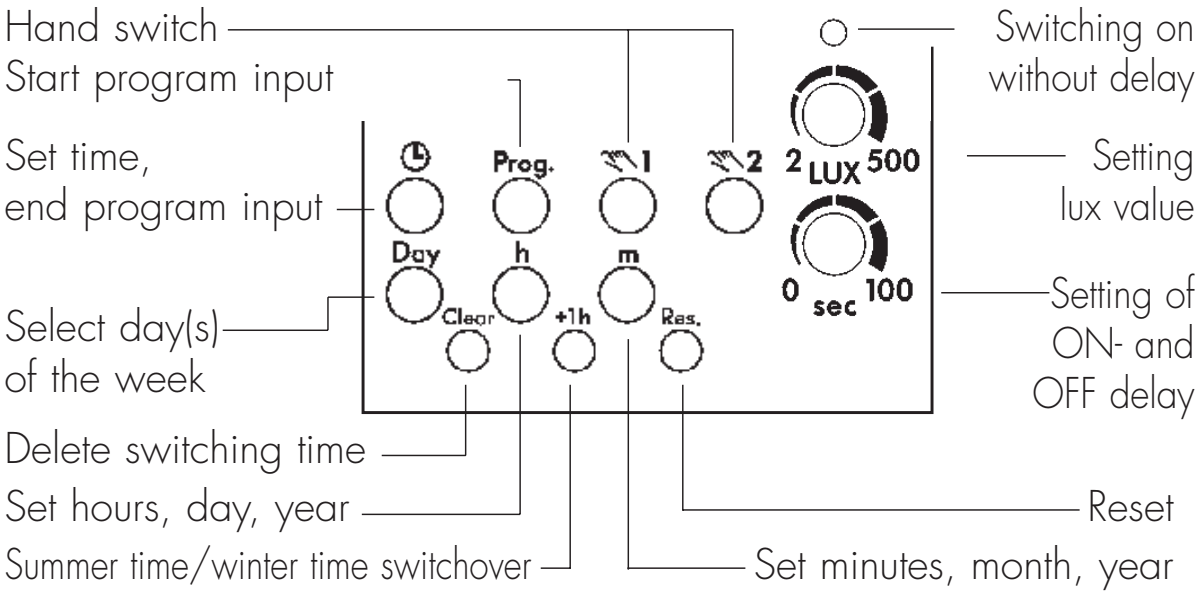




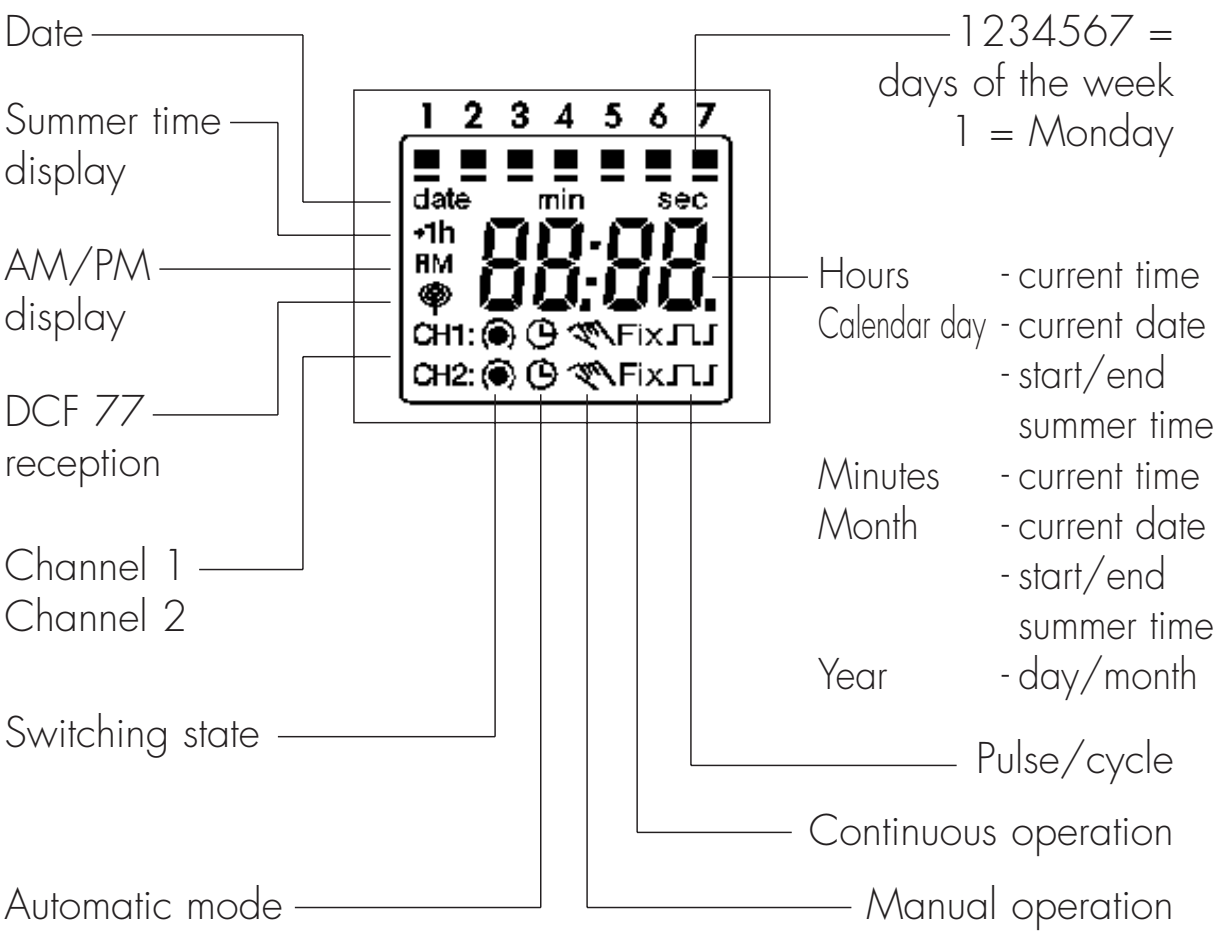

6 7 8 9 10 11
1 2 3 4 5
L
N


6 7 8 9 10 11
1 2 3 4 5
max. 10
L
N

3. Control elements



4. Display



5. Factory setting

The selections correspond to Central European Time. The time switch offers 3 Operating modes. The date and time, and also the Operating mode AU are set.

Operating modes:

- **AU** **Automatic summer time controller switchover see 6.2.1**
  The switchover occurs on the dates defined by the legislator.
- **cHA** **Weekday-related summer time controller switchover, see 6.2.2**
  You enter the start and end dates of summer time which applies to your location/country.
  e. g. The first Sunday in April of the current year (start of summer time)
  The last Sunday in October of the year (end of summer time)
  In the following years, changeover always occurs on the right day of the week in the correct calendar week.
- **no** **No changeover, see 6.2.3**

AM/PM switch-over
Switch clock is in current operating mode

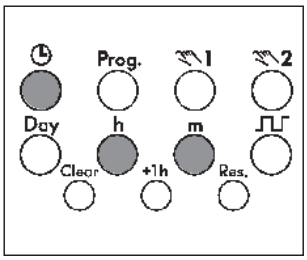
1. Press h and keep pressed
2. – Press Res once
   – all segments are displayed
   – after approx. 1 second the following appears:
   AM, 12.00 and 3 (Wednesday)

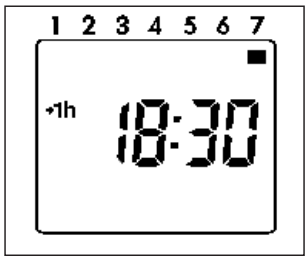
   Operating mode AU is active = works setting
3. Release h
4. Select operating mode as required, see 6.2.1 or 6.2.2 or 6.2.3
5. Set the current time of day and weekday, see 6.1

6. Changing settings

Note:
You can exit/conclude any adjustments, changes you make at any time with the key ⏲.

6.1 Time and day of the week





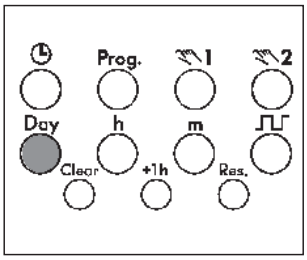
Press the ⏲ key once

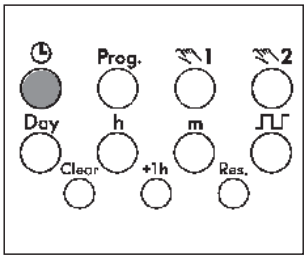
Set the time:
With the h key – hours
With the m key – minutes

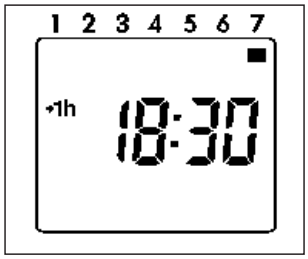
Note for weekly time switch:
If the Operating mode

no = no change - see 6.2.3

was selected, the day of the week must **now** be set.
With the Day key select:
1 - Monday
2 - Tuesday
3 - Wednesday
:
7 - Sunday

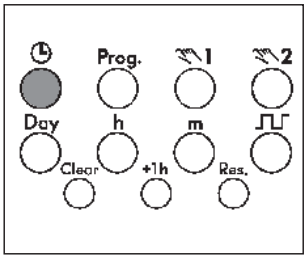


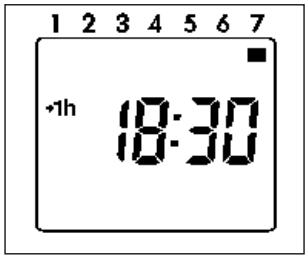




Press the ⏲ key once.
The clock is now set.

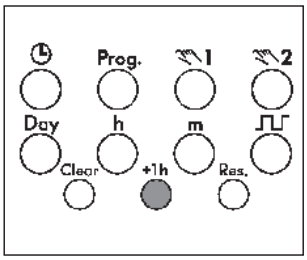
6.2 Calendar month and day – Select the Operating mode

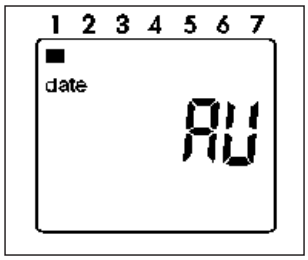




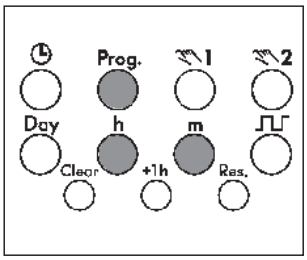
6.2.1 AU = Automatic changeover

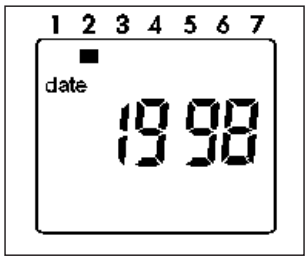
Press the key ⏲ once





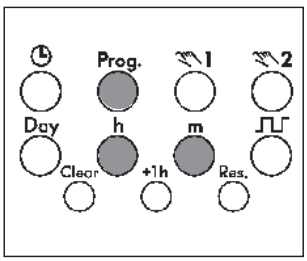
Press the + 1h key 1 once,
AU appears

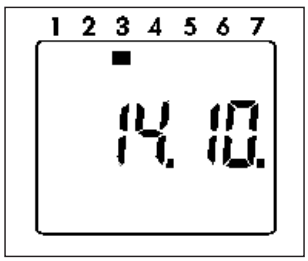




Press the Prog key once

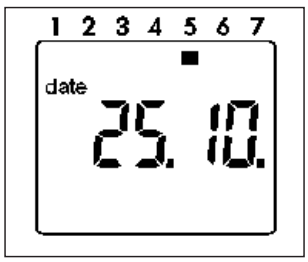
Set the current year:
With the m key or the h key



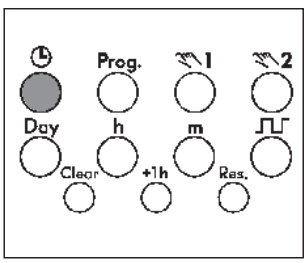


Confirm with the Prog key

Set the current month and day:
With the m key – calendar month
With the h key – calendar day

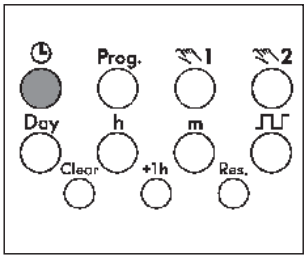


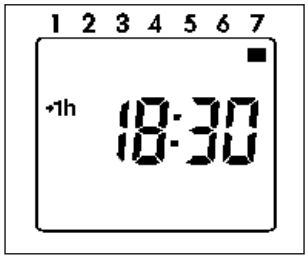
Note:
With the Prog key (press once or twice), read the date for the start e.g. 29.03. and end e.g. 25.10. of summer time.



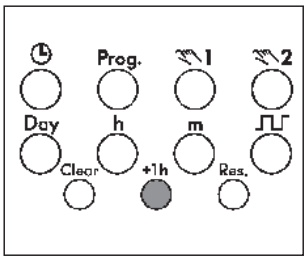
Press the ⏲ key once.
The input is complete.

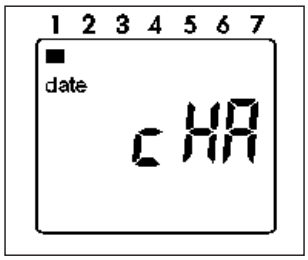
6.2.2 cHA = Weekday – related time change



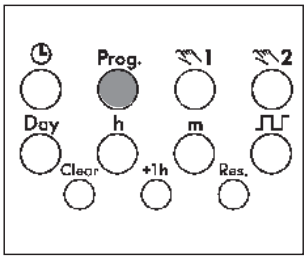


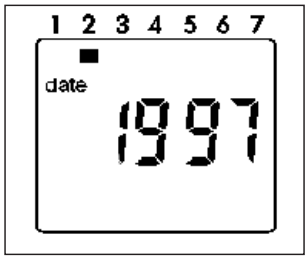
Press the ⏲ key once



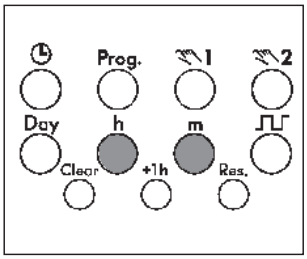


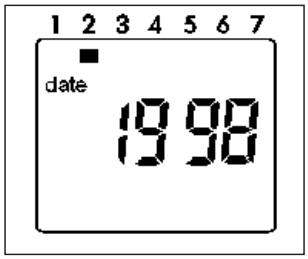
Press the + 1h key as often as necessary until **cHA** appears



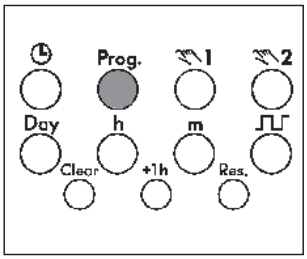


Press the Prog key once

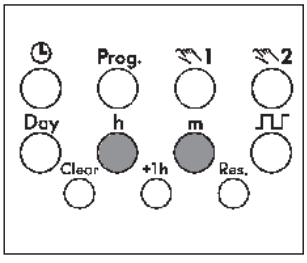


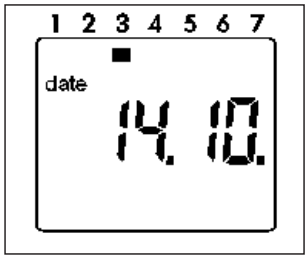


Set the current year:
With the m key or the h key

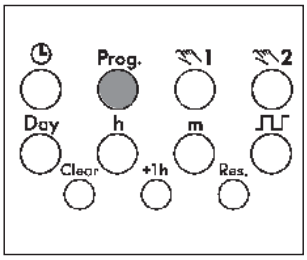


Confirm with the Prog key

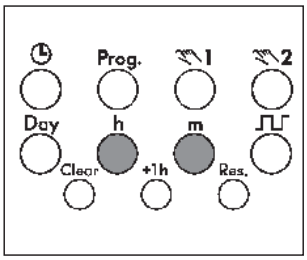




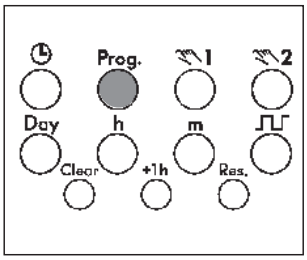
Set the current month and day:
With the m key – calendar month
With the h key – calendar day



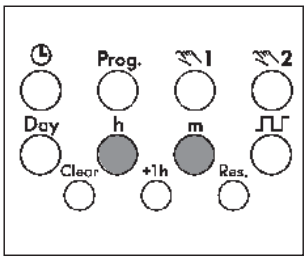
Confirm with the Prog key
The start of summer time is displayed.



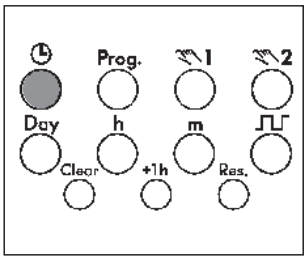
Set the individual summer time start:
With the m key – month
With the h key – day



Confirm with the Prog key

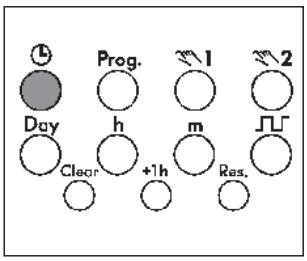


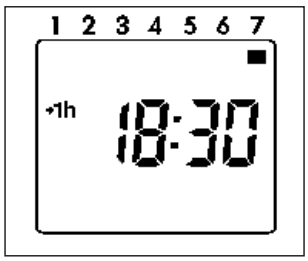
Set individual summer time end:
With the m key – month
With the h key – day



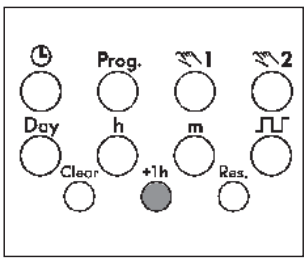
Press the ⏲ key once.
The input is complete.

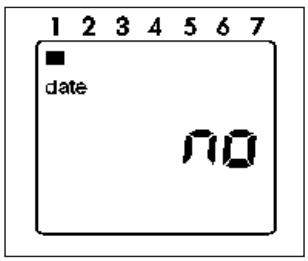
6.2.3 no = no changeover – only weekly time switch



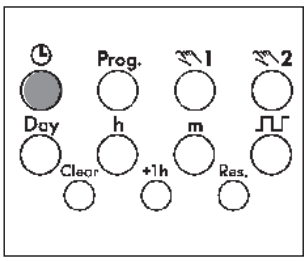


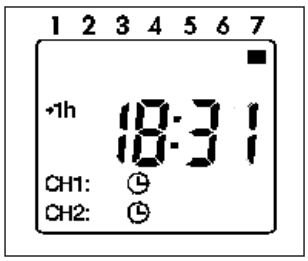
Press the ⏲ key once





Press the + 1h as often as necessary until **no** appears. The time switch has no programmed date reference!





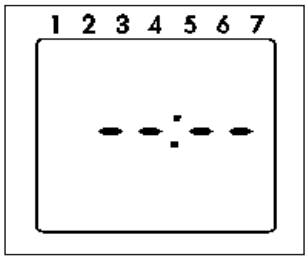
Press the ⏲ key once. The input is complete.

Note:

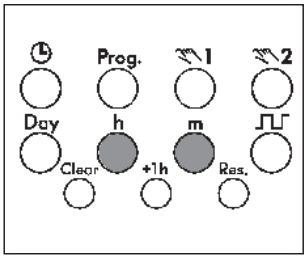
Select day of the week see 6.1

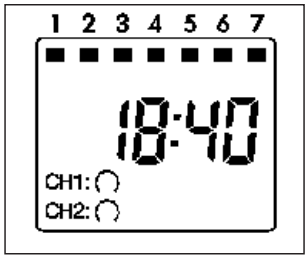
7. Standard switching commands

You determine the switching times and the switching state for the relevant switching output (channel.) Symbol: CH1: ◉ (ON) = Channel 1
CH2: ○ (OFF) = Channel 2



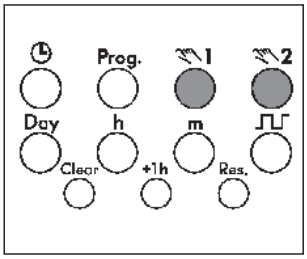
Select free memory location:
Press the Prog key as often as necessary until ––:–– appears.

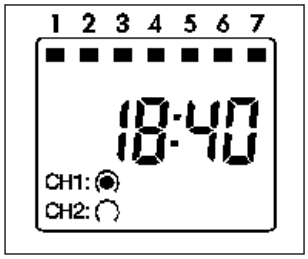




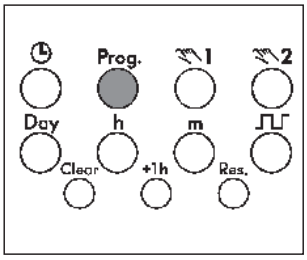
Set the switching times:
With the m key – minutes
With the h key – hours

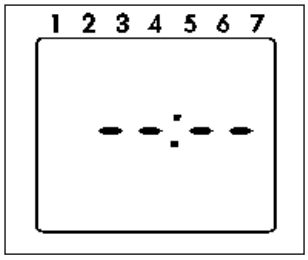
For weekday adjustment, see:
Block formation of weekdays, Point 8



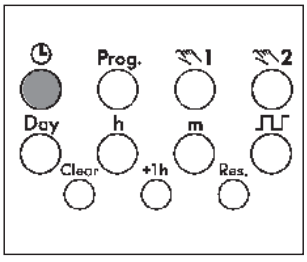


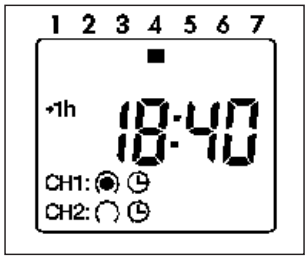
Set the switching state:
With the key
◉ (ON) or ○ (OFF)





Press the Prog key once.
The programmed entry is complete.
A free memory location is displayed – for further settings or





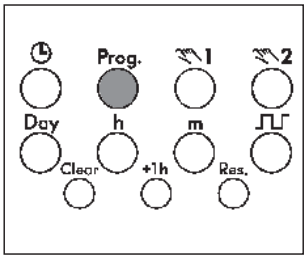
Press the key ◷ once.
The input is complete.
The display shows the current time.

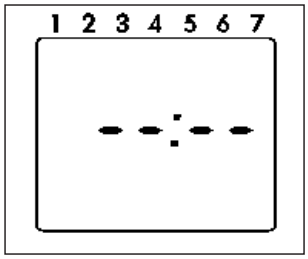
8. Fixed weekday block formation – only weekly time switch

Defined combinations of weekdays or individual days

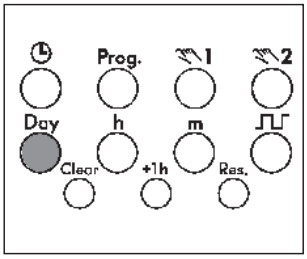
You determine the weekdays for your switching program.
1 - Monday, 2 - Tuesday, 3 - Wednesday ..., 7 - Sunday

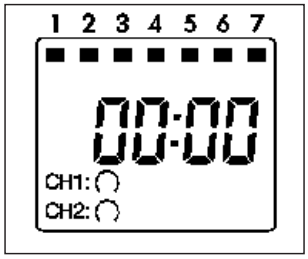
Example: Monday ... Friday (8:00 ON; 22:00 OFF)



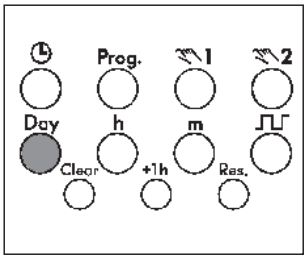


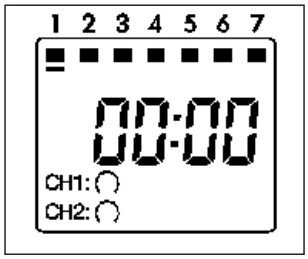
Select free memory location:
Press Prog key as often as necessary until ––:–– appears



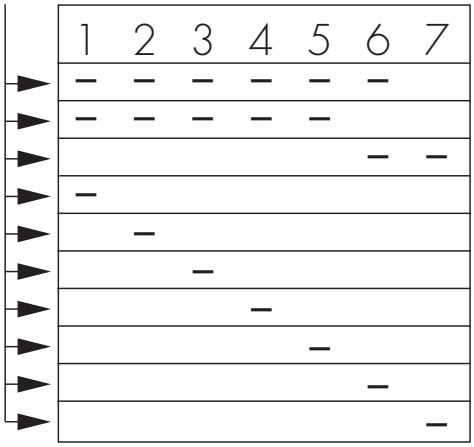


Press the Day key once
All 7 days of the week are activated

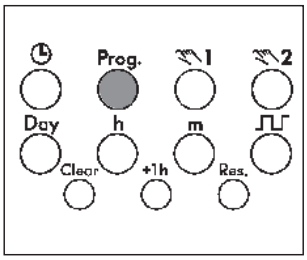


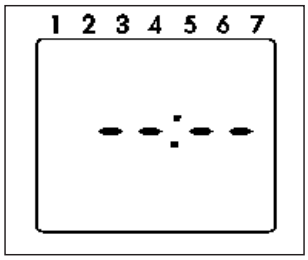


Activating/deactivating days of the week:
Press the Day key stepwise

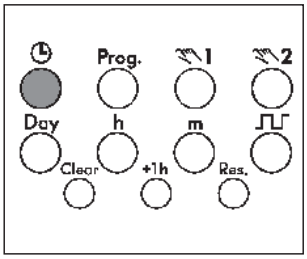


Note:
Enter the switching times and the switching state ◉ = ON; ○ = OFF for the switching state (channel). For standard switching commands, see 7.





Press the Prog key once.
The input is complete.
A free memory location is displayed - for further settings
or



press the ⏲ key 1once.
The input is complete.
The display shows the current time.

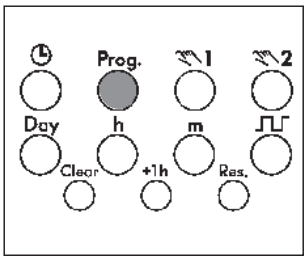
Note:
After the procedures

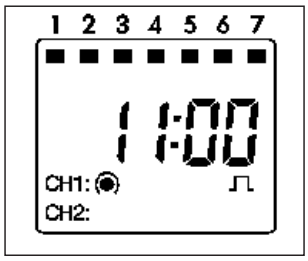
- read, modify or delete the time, date, switching program
- DCF synchronisation
- restoration of mains power

the switching state of the time switch is updated automatically.

9. Read – change – delete – reset

- You can read the program contents stepwise
- You can change or overtype the program contents
- You can delete the program contents
- You can delete the date and time

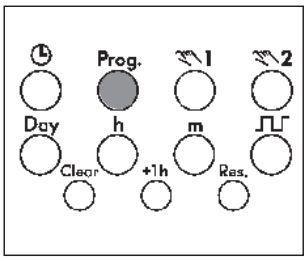


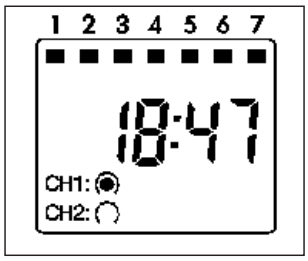


Read

Press the Prog key step by step
Each individual content is displayed until the end of the program.
Then:

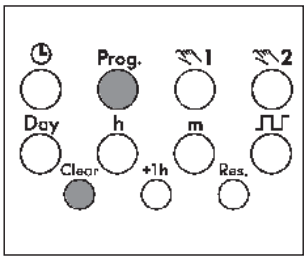
- One free memory location
  ––:––
- One digit (free memory locations) (ex. Fr 10)

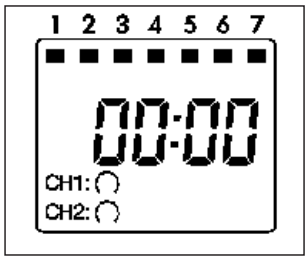




Change

Press the Prog key step by step as far as the switching command/contents which you want to change/overtype.
Change the switching command/contents:
As described in
8. Weekday block formation

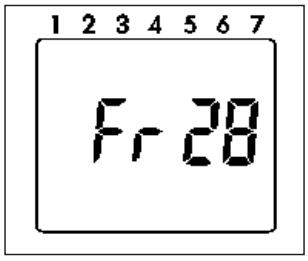




Delete - individual switching commands

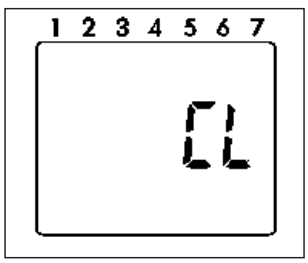
Press the Prog key step by step as far as the switching command/contents which you want to delete.

Press the Clear key once.
This switching command is deleted.

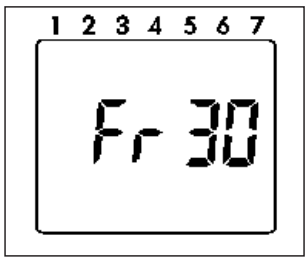


Delete - All switching commands

Press the Prog key as often as necessary until FRxx appears

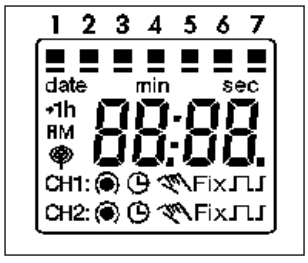


Press the Clear key once.
CL is in the display



Press the Clear key and hold it down.
All memory locations are deleted!

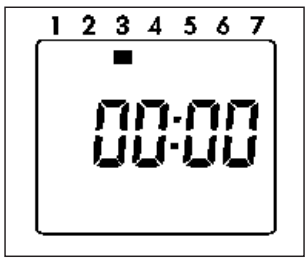
The display shows the number of the max. memory locations.



Reset

Press the Reset key once

The set date and time are reset.



The factory setting
AU = automatic s/w-time changeover is active
(31.12.1997, 00:00)

All segments are visible for approx. 2 seconds, then 00:00 appears.

AU = automatic s/w time changeover
See point 5 and 6 for setting the current date.

10. Manual switch

The switching output condition (terminals 3 and 6) can always be seen by reference to the output function display symbols.

= Automatic	= Manual	FIX = Continuous operation
= OFF	= ON	FIX = Continuous ON
= ON	= OFF	FIX = Continuous OFF
The state of the clock correspond to the entered program.	You have changed – m a n u a l l y – the current state of the clock. The next command in the program is executed again automatically.	You have changed – m a n u a l l y – the current state of the clock. The output will remain fixed ON of OFF until you restore Automatic function by pressing the key.

11. Technical data

Dimensions (H x W x D) mm	45 x 54 x 60
Distributor cut-out mm	46 x 54
Weight g (approx.)	250 and 285
Connection	See unit imprint
Power consumption	
at 230 V~ (AC)	Approx. 2.5 VA
Switching output	Potential-free
Switching contact	1 or 2 changeover contacts
Switching capacity AC	
– ohmic load (VDE, IEC)	16 or 10 A/250 V AC
– inductive load cos φ 0,6	8 A/250 V AC
– Incandescent lamp load	2000 W
Switching capacity DC	
24 V-/60 V-/220 V-	Approx. 800 mA/300 mA/150 mA
Method of operation	Electronic
Ambient temperature:	–20 °C to +55 °C
– Control unit	–30 °C to +70 °C
– Brightness sensor	
Protection class:	
– Control unit	II in accordance with EN 60 669-1 and Parts and EN 60 730-1 and Parts
– Brightness sensor	II in accordance with EN 60 669-1 and Parts and EN 60 730-1 and Parts
Protection Type:	
– Control unit	IP 20
– Brightness sensor	IP 65
Brightness sensor:	Potential-free
– Connecting cable length	Max. 100 m
– Line cross section	Min. 0.75 mm^2
Connection type	captive ± screw terminals
Can be lead sealed	yes

Twilight switch:

– Adjustment range	2 lx – 500 lx
– Hysteresis	Approx. factor 1.3 of the ON value
– Switching delay	Adjustable: Approx. 0-100 s ON/0-100 s OFF
– Switching state display	Without delay

Time switch:

– Memory locations	20 or 30
– Minimum switching time	1 minute
– Programmable every	Minute
– Block formation of weekdays	Fixed default
– Switching state display	Yes
– Summer time/winter time switchover	Automatic
– Manual switch	Automatic/preselection FIXED ON/FIXED OFF
– Running accuracy	Typ. ± 2,5 s/day at +20° C
– Running reserve	3 years from the factory