



TC7D2 Manual

Block 8 Hulbert Drive, Grazebrook
Industrial Estate, Dudley, West
Midlands, England, DY2 0BE

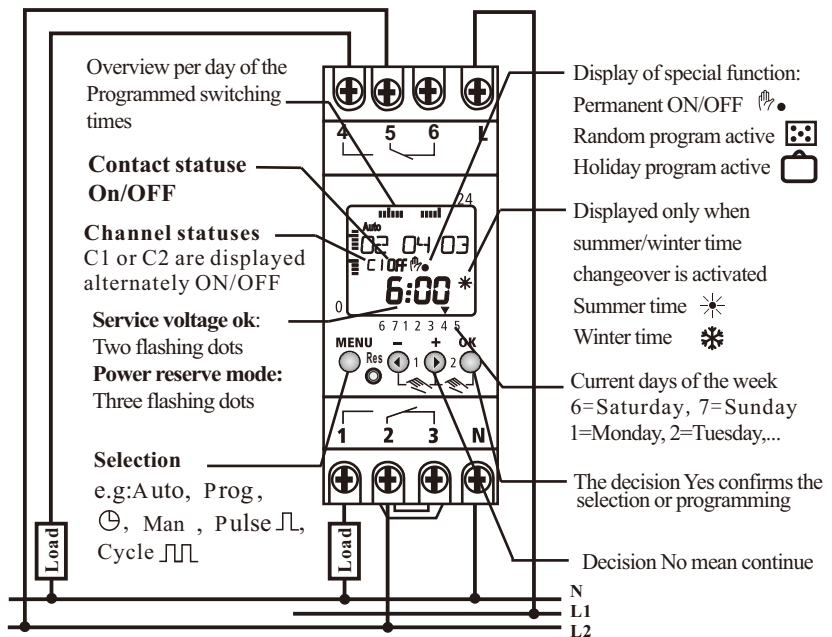
2-channel 7 day timers

Operating Instructions

Safety Information

The connection and installation of electrical must be performed by a skilled electrician only. Any intervention into or modifications to the appliance shall lead to the lapse of all warranty rights. Comply with your national regulations and all relevant safety stipulations

According to version preprogrammed with the current time and summer/winter norm time



Info

The timer is delivered in co-called sleep mode. To increase the power reserve the switch clock changes to the sleep mode after approx. 10 minutes.

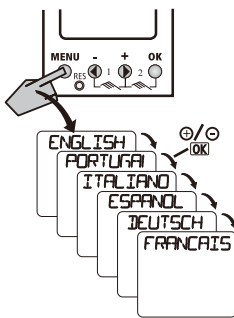
To activate without a service voltage
Briefly press the MENU key

Activate with mains voltage
If the timeswitch is already pre-programmed with the actual time, the weekday, and the changeover setting for Summer/Winter time, the actual time and status display appears after selection of the National language.

If the timer is not pre-programmed
first select your national language and then enter the actual date and time.

Activate the clock.
Select the national language
By pressing the ⊖ or ⊕ keys, select your national language.
Store your selection by pressing the OK key.

First contact



OK The decision Yes confirms the selection or programming.

+ The decision No means continue.

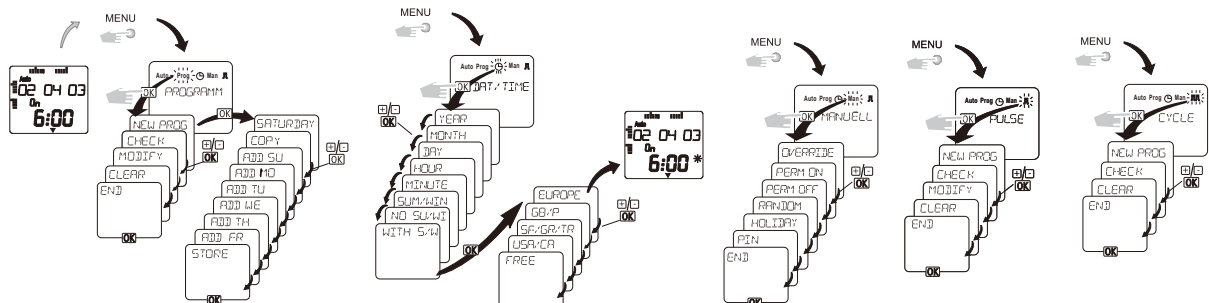
Set or amend by pressing the ⊕ or ⊖ keys.

For programming, viewing, amending or deleting
First of all read the text display.

Menu selection
Select by pressing the MENU Prog key. Confirm by pressing OK.
By pressing the ⊕ key select the desired menu.
e.g. New, View, Amend or Delete. Confirm your selection by pressing OK.
Set or change: by pressing ⊕ or ⊖
Store by pressing OK.

To display the switching times:
In the menu View, press the OK key several Times.

Press "Res" about 1 second, only delete it's date and time settings, password (if set) and program settings will still exist, if the wrong password is unable to enter the main screen, display language and summer/winter time will still function to the last change in the content set.



Technical Data

230V~+-10% 50-60 Hz 240V~+6% -14% 50-60 Hz	2x16(10)A 250V~ min.100mA 24V AC/DC	Degree of protection IEC/EN 60730 IP 20 IEC/EN 60529	2300W	9 x 7 W 7 x 11 W 7 x 15 W 7 x 20 W 7 x 23 W	400 W (42µF)
96 Pulse	Type 1 BSTU IEC/EN 60730-2-7	96 Memory Locations (45 ON/OFF)	AgSnO ₂	2300W	1000 W

Programming the switching time

Switching times for lighting systems, machines, ventilation systems, alarm systems etc.

Formation of day groups

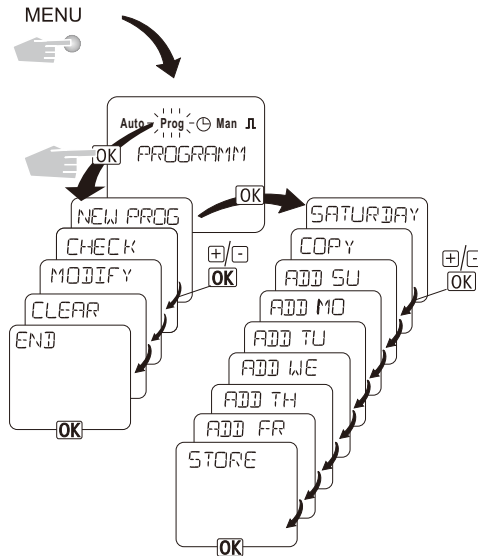
If the same switching times are active on several days of the week, they occupy just one memory location.

90 memory locations are available.

Group formation

In answer to text question Copy, decide by pressing the [OK] key that the day program should be copied to another day of the week. The Mixed programming of switching, pulse and cycle times is allowed.

When programming an ON and OFF switching time, e.g. Monday 9:00 AM, it is always the programme the last setting is executed.



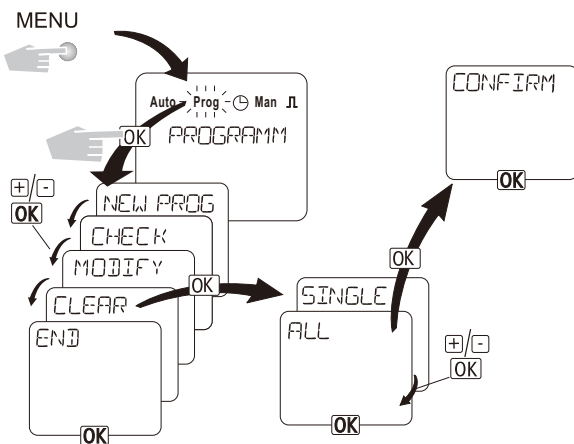
Example: Switching on the lighting of a sports hall on Mon, Tues, Fri. From 8.30h until 12h.

Programming example

Select **PROG** by pressing the [MENU] key.
Store your selection by pressing the [OK] key.
Select **NEW** by pressing ⊕ or ⊖.
Store your selection by pressing the [OK] key.
Select **ON** by pressing ⊕ or ⊖.
Store your selection by pressing [OK].
Set the hours and minutes by pressing the ⊕ or ⊖ key.
Store selection by pressing [OK].
To store one day of the week only
Select weekday by pressing ⊕ or ⊖.
Select store by pressing ⊕.
Store by pressing [OK].
To copy to other days of the week
Store **COPY** by pressing [OK].
Select weekday by pressing ⊕ or ⊖.
Store by pressing [OK].
To leave out a day of the week, skip by pressing the ⊖ key.
Finally select the **STORE** display by pressing ⊕.
Store your selection by pressing [OK].

Individual deletions

Via the automatic menu
Auto only



Channel
C1



Channel
C2

Press the two
Key for
approx.1s

Manual preselection:
Press keys simultaneously
Channel C1 switches
alternately ON or OFF.
Symbol appears.
Manual preselection is
corrected again by the
stored program.

Manual preselection:
Press keys simultaneously
Channel C2 switch
alternately ON or OFF.
Symbol appears.
Manual preselection is
corrected again by the
stored program.

Press both
keys for
approx.2s

Permanent
ON ●
OFF ●

Permanent
ON ●
OFF ●

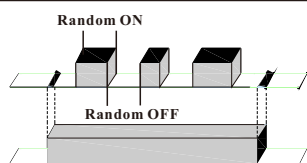
Cancellation of manual preselection/permanent switching: Briefly press the keys shown above

Permanent ON or OFF Random or Holiday program

Effect of the random program:

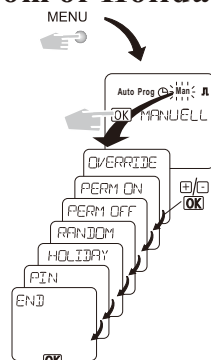
The random program causes the timer to switch between programmed pairs of switches (ON and OFF). The random on and off times range between approx. 10 mins. and 120 min. The random time always begins with OFF.

Symbol flashes when the random program is effective.



Example:
Random start
19:30 h ON

Example:
Random finish
6:00 h OFF



Read the text display first of all

In the menu Man, select by pressing the ⊕ or ⊖ key the function manual, permanent, random or holiday.
Confirm your selection by pressing the [OK] Key.

To cancel a function:

Select the function clear.
Store your selection by pressing [OK].

Effect of the holiday program: The holiday program has the effect that the timer does not switch on the connected consumer unit between the programmed start and finish (stipulation of year, month, day). **Start and finish** of the program is always **midnight** on the day that is programmed.

Example: 25.3.national holiday.

Programming: start 25.3. finish 25.3.


If the holiday program is active, the corresponding channel and holiday symbol are displayed flashing on the automatic menu.

Pulse program

e.g.:for bereaktimes signals,ventilation systems, flushing systems,bell controls etc.

Effect of the pulse program:

The pulse times can be set within the range 1 to 59 seconds.

Symbol  flashes as long as the pulse program is active.

Switch-off delay

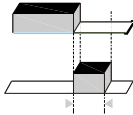
Program:
7.00 until 17.30h

and

Pulse at 17.30 h
Pulse ON,duration 15 s

Example:

Switch off at
17.30 h 15s



Switch-on delay

Example:

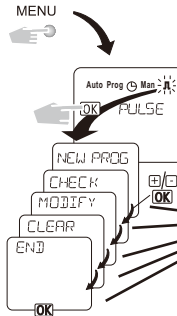
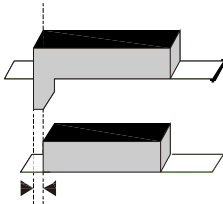
Switch-on at 7.00 h 15 s

Program

To switch on from 7.00h
until 17.30 h

and

pulse,OFF at 7.00h
pulse duration 15 s



Always read the text display first of all. You will be provided with programming help. Confirm your selection by pressing the [OK] key.

info

Viewing the pulse times

Only possible in the menu PULSE.

Day group formation

If the same pulse switching times are effective on several days of the week,they occupy one pulse memory location only,e.g.:Mon,Tues, Fri,pulse time 7.30 h. 96 memory location are for pulse programming

Cycle program

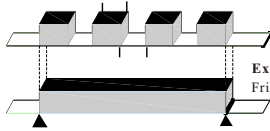
Cyclically recurring time functions within the scope of a timer,
e.g. slow flashing indicator, water treatment,
advertisement lighting

Effect of the cycle program:

The Clocking and pause times can be set separately. The settable times are Max. 99 Minutes and 59 Seconds. The cycle program has the effect that between two programmed times, day of week start and day of week finish, the cycle program is active. The cycle program always begins with a switch on.

The symbol  flashes when the cycle program is active.

duration



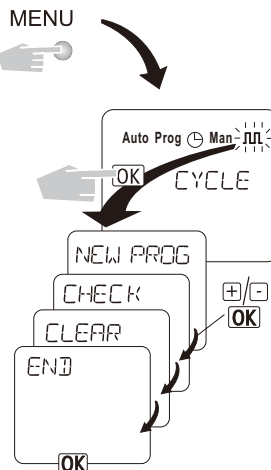
Example cycle finish:
Friday 16.30 h OFF

Example cycle start:
Monday 7.30 h ON

View the cycle times:

Possible in the menu Cycle only!

N.B.: If two cycle times are programmed in which the start and finish times overlap, it is always the cycle time that starts first that is executed.



Brightness variations at lighting installations may arise in the cycling mode. In this case actions to reduce these effects have to be taken (for example reduction of the load or extension of the cycle time). More than five switching operations per minute are not admissible Without additional EMC interference measure.

Select Cycle by pressing the [MENU] key .
Store your selection by pressing the [OK] key.
Set cycle **start** by pressing the keys ⊕ or ⊖.
Store your selection by pressing the [OK] key.
Set cycle duration (Min./sec.) by pressing the keys ⊕ or ⊖.
Store your selection by pressing the [OK] key.
Set cycle pause (Min./sec.) by pressing the keys ⊕ or ⊖.
Store your selection by pressing the [OK] key.
Set cycle finish by pressing the keys ⊕ or ⊖.
Store your selection by pressing the [OK] key.

PIN

PIN-Code

The device can be locked against unauthorized use with a 4 digit code number.

Select the Manual menu using ⊕ or ⊖.
Confirm with the [OK] button.

Selection WITH PIN

Select **WITH PIN** using ⊕ or ⊖

Confirm with the [OK] button. Make note of any desired 4-digits number.

Select the first digit of your 4 digit code using ⊕ or ⊖.

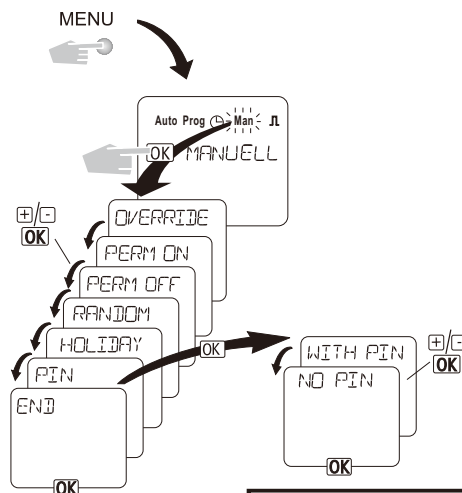
Confire the entered digit with [OK] .

Select further digits as described using ⊕ or ⊖
Confirm each selected digit with the [OK] button.

The device is locked 60 sec. after the last keystroke and can only be operated after the correct PIN code is entered.

Selection WITHOUT PIN

Select **WITHOUT PIN** using ⊕ or ⊖ .
Confirm with the [OK] button.



If a PIN code has been activated, the timer can no longer be activated without a valid PIN code after a RESET.

The device must be sent in!

Setting/correcting the date and time Summer/winter time

Automatic summer/winter time correction

According to version the timer is pre-programmed ex-works complete with the change-over. Should you switch off the automatic facility or wish to alter it, first of all read the text display.

Select by pressing \oplus or \ominus

Store by pressing OK .

Free Prog to select sum/win change-over other than EUR-GB-USA.

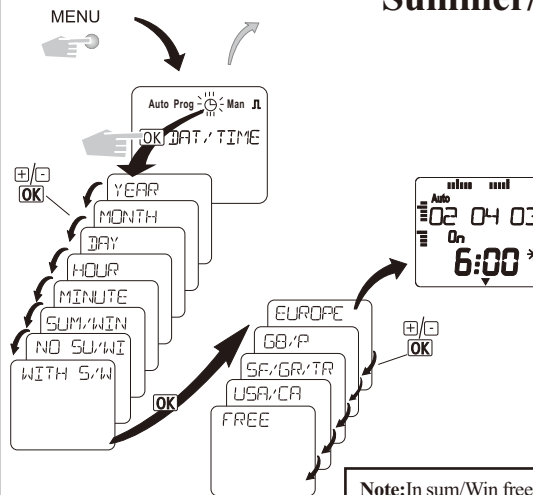
Select sum/win, and after with sum/win.

Store with OK .

Select rule FREE-with buttons \oplus or \ominus .

Input month and weeks for sum/win.

Store with OK .



Read the text display first of all.

Select by pressing the \oplus key or \ominus keys.

Store by pressing the OK key.

Note: In sum/Win free Prog the time change is set automatically at Sunday 2 AM.
Time change is not available.

Common technical specifications

Rated voltage: 230-240V \sim +6%-10%

Frequency: 50-60Hz

Own consumption: max. 7.5 VA

Contact: zero-potential, gap less than 3mm

Switching power : 16A, 250V \sim , $\cos\phi=1$;
10A, 250V \sim , $\cos\phi=0.6$

Incandescent lamp load: 2300 W

Halogen lamp load: 2300 W

Timing basic: quartz

Working precision: $\leq \pm 1$ sec./day at 20 $^{\circ}\text{C}$

Shortest switching time: 1 minute

Display: LCD display with text line

Power reserve: approx. 4 years with display with full controllability(temp. 20 $^{\circ}\text{C}$) by means of an

Operating control elements: 4 touch keys and 1 reset key

environmentally friendly lithium battery

Permissible ambient temperature: -10 $^{\circ}\text{C}$...+ 50 $^{\circ}\text{C}$

Weight: approx. 140 g

Dimension drawings

