



## Low voltage time clock & Tradesman's Timer Unit Ref.Ktrade1.

This timer unit is fully programmed for auto-change summer/winter time change according to MEZ, GB, and USA. Or freely programmed rule, can alternatively been switch off.

### Functions.

Single channel digital time module with clean changeover 5amp on board relay.  
28 memory locations with free block formation with separate programming of switching ON and Off times.

21 memory locations with free block formation with separate programming of switching ON and Off times and pulse times. Pulse duration adjustable from 1 – 59 seconds.

10 memory locations, for programming of cycles. Pulse and break times adjustable from 1 second to 99 minutes and 59 seconds.

Combination of cycles, pulse and switching times possible.

Easy handling by integrated text line in the LCD display with the use of only 4 keys.

Switching override for manual switching ON/OFF, with out influencing the automatic program.

Switching status correction by review after programming or modifying the time or switching time.

Failure control for switching off the clock output in case of supply failure, leaving the display running on standby battery supply which is indicated by the minute /second pulse changing from 2 dots to 3 dots.

There is also a red led indication supply healthy.

Date related holiday switching (Off) for interruption of the automatic program.

### Display Lighting.

Has LED, back light display for when the unit is fitted in dark area.

Operating Voltage.  
12 to 18v Ac or Dc.

Power consumption  
12vdc 25ma 56ma quiescent  
18v dc 97ma 145ma quiescent

Time basis Quartz 32768hz. Accuracy  $\leq$  1sec/day at 20dec C.  
Shortest switching time, 1minute.

Reserve battery. Lithium 230ma 3v fixed with battery enable jumper plug. Battery life  
When running on standby display only 9000 hrs (one year)

Mains healthy and relay activated led indication. (Supply Red, Relay Green.)

Relay contacts. 5amps @ 24vt 8.Normal open, 7Common, 9 Normal closed.

Voltage supply. 1 and 2 ac, 1+ 2- Dc.

Control functions inputs. 3,4,5. Separate Data Sheet.

Fixing. Short din rail supplied.

Size. 90mm length x 55mm height x 60mmdepth



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## First contact

### Info

The timer is delivered in so-called sleep mode. To increase the power reserve the switch clock changes to the sleep mode after approx. 15 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

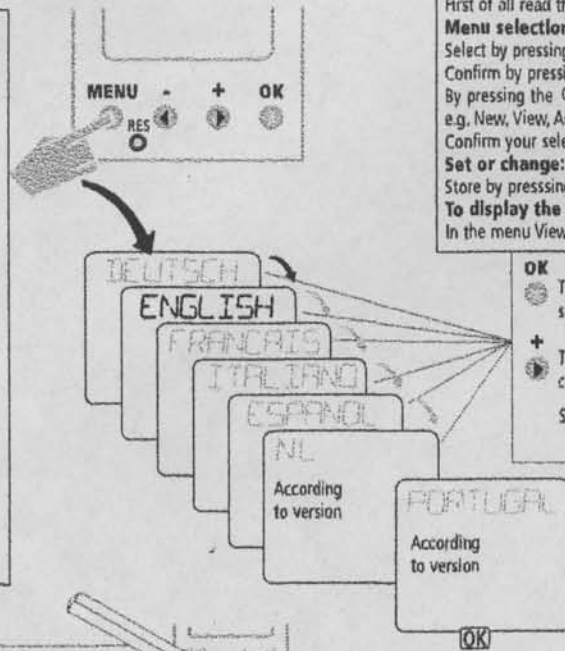
First select your National language and then enter the actual date and time.

#### Activate the clock, select the national language

By pressing the  $\oplus$  or  $\ominus$  key select your national language.

Store your selection by pressing the **OK** key.

**RESET** (only in case of emergency): If you perform a RESET of the timer, the individual settings will be deleted. The programmes switching times remain intact. Press the **RES** key with and a pointed object for approx. 1 second.



### 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  $\oplus$  key select the desired menu e.g. New, View, Amend or Delete.

Confirm your selection by pressing **OK**.

**Set or change:** by pressing  $\oplus$  or  $\ominus$ .

Store by pressing **OK**.

#### To display the switching times:

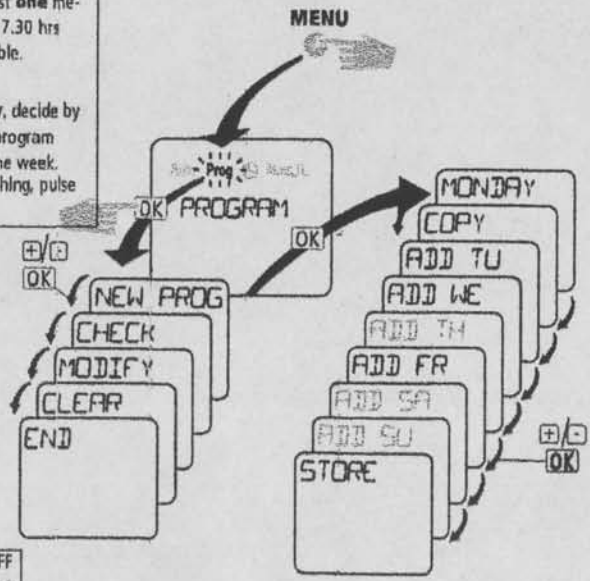
In the menu View, press the **OK** key several times.

# 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, e.g. Monday – Friday 7.30 hrs ON. 42 memory locations are available.

**Group formation**  
 In answer to the 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 AM, a switch-off at 9 AM always has priority.

**Program review**  
 Following programming the timer makes a program review back to midnight and then sets the correct switching status.

## Example

**Example:** Switching on the lighting of a sports hall on Mon., Tues., Thurs., Fri. from 7.30h until 12h.

**Programming example:**  
 Select **PROG** by pressing the **MENU** key.  
 Store your selection by pressing the **OK** key.  
 Select **NEW** by pressing the **+/-** or **OK**.  
 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 **OK** key.  
 Store selection by pressing **OK**.

**To store one day of the week only:**  
 Select weekday by pressing **+/-** or **OK**.  
 Select store by pressing **+**.  
 Store by pressing **OK**.

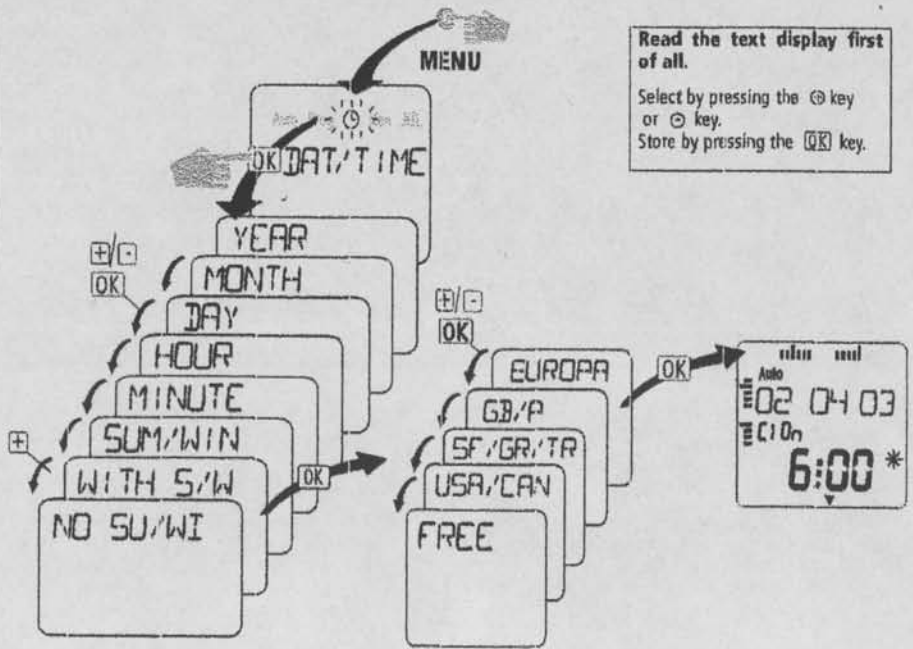
**To copy to other days of the week:**  
 Store **COPY** by pressing **OK**.  
 Select weekday by pressing **+/-** or **OK**.  
 Store by pressing **OK**.

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**.

# Setting/ correcting the date and time summer/winter time

**Automatic summer/winter time correction**  
 According to version the timer is preprogrammed ex-works complete with the change-over. Should you wish to switch off the automatic facility or wish to alter it, first of all read the text display.  
 Select by pressing  $\odot$  or  $\ominus$ .

**Free Prog to select sum/win changeover other than EUR-GB-USA.**  
 Select sum/win, and after with sum/win. Store with  $\text{OK}$ .  
 Select rule FREE - with buttons  $\odot$  or  $\ominus$ .  
 Input month and weeks for sum/win. Store with  $\text{OK}$ .  
 E.g. Month = March  
 Week 4 = fourth week  
 Week 5 = last week in month  
**Note:** In sum/win free Prog the time change is set automatically at sunday 2 AM.  
 Time change is not available.




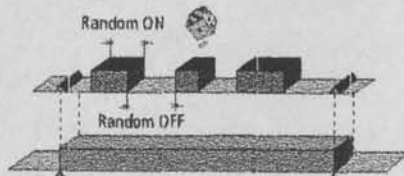
**Read the text display first of all.**  
 Select by pressing the  $\odot$  key or  $\ominus$  key.  
 Store by pressing the  $\text{OK}$  key.



## 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.

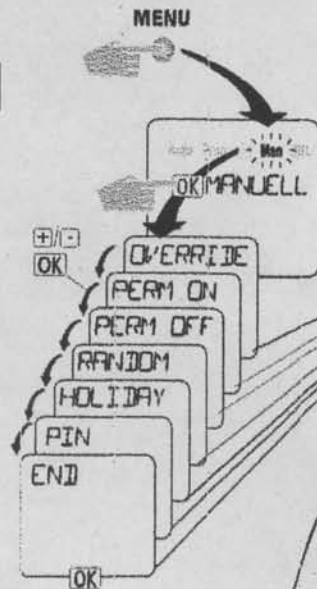





Example:  
Random start  
19.30 h ON


Example:  
Random finish  
6.00 h OFF

**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.




**Read the text display first of all**  
In the menu **Man**, select by pressing the   key the function manual, permanent, random or holiday. Confirm your selection by pressing the  key.

**To cancel a function:**  
Select the function clear.  
Store your selection by pressing .

Via the automatic menu **Auto** only



Press the two keys for approx. 1 s.

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

Press both keys for approx. 2 s.

**Permanent**  
OFF  ●  
OFF  ●

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

### PIN-Code

#### PIN

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

Select the **Manual** menu using  $\oplus$  oder  $\ominus$ .  
Confirm with the  $\text{OK}$  button.

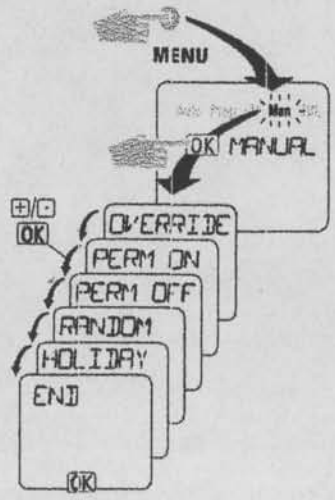
Select on **WITH PIN**

Select **WITH PIN** using  $\oplus$  oder  $\ominus$ .  
Confirm with the  $\text{OK}$  button. Make note of any desired 4-digits number.  
Select the first digit of your 4 digit code using  $\oplus$  or  $\ominus$ .  
Confirm the entered digit with  $\text{OK}$ .  
Select further digits as described using  $\oplus$  or  $\ominus$ .  
Confirm each selected digit with the  $\text{OK}$  button.

The device is locked 90 sec. after the last keystroke and can only be operated after the correct PIN code is entered.

Select on **WITHOUT PIN**

Select **WITHOUT PIN** using  $\oplus$  oder  $\ominus$ .  
Confirm with the  $\text{OK}$  button.




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

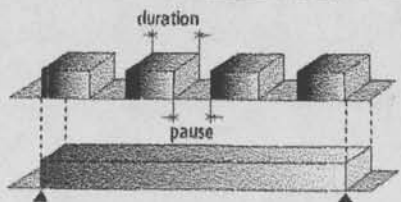
**The device must be sent in!**

### 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. 16 memory locations are available to you.

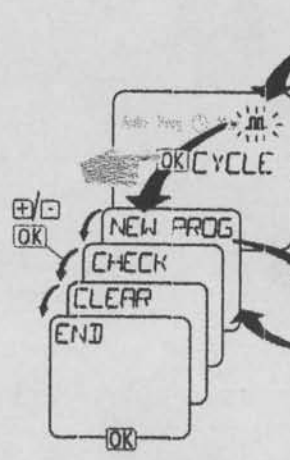
The symbol  flashes when the cycle program is active.



**Example cycle start:** Monday 7.30 h ON  
**Example cycle finish:** Friday 16.30 h OFF

**Viewing 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.  
**Example:** Cycle time 1, programmed from: Mo to Thu  
Cycle time 2, programmed from: Tue to Fri.  
Only cycle time 1 is effective, cycle time 2 is not accepted.

MENU



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 measures.


- Select by pressing the **MENU** key **Cycle**.
- 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.

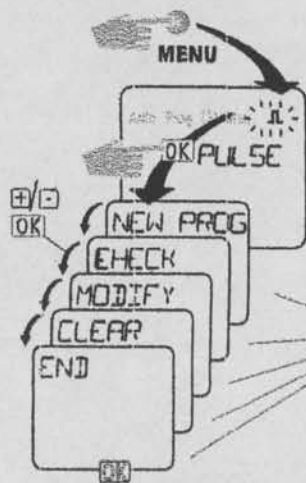
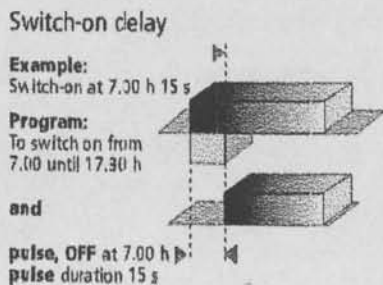
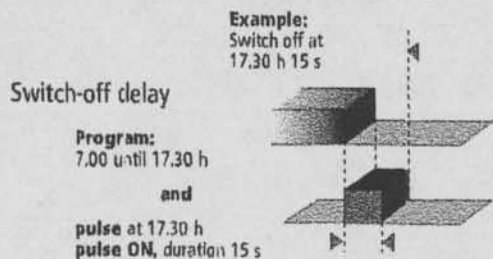



### Pulse program

e. g.: for breaktime 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.

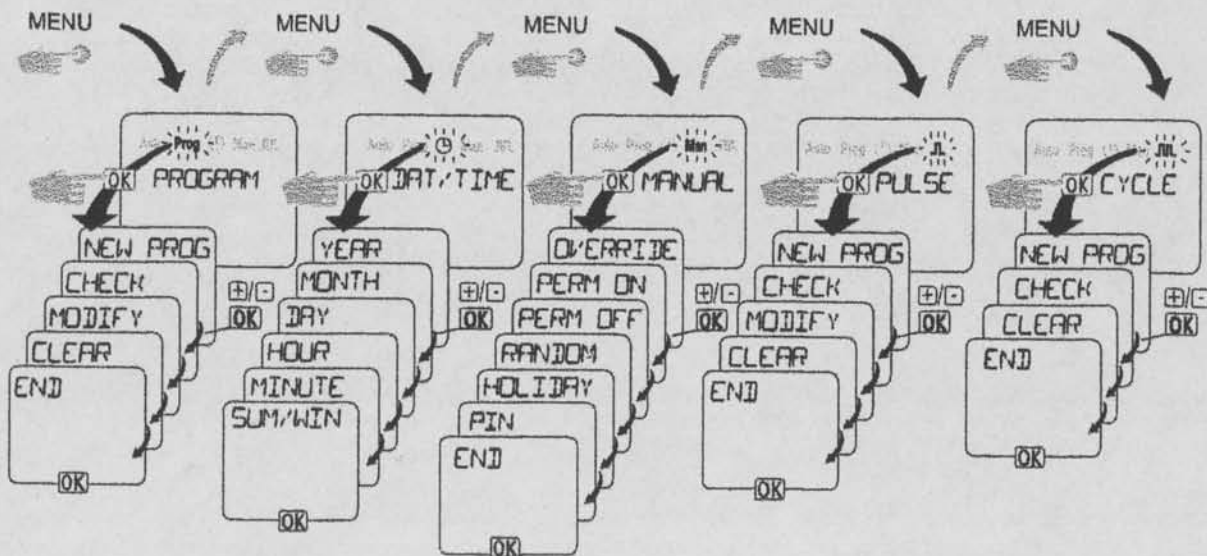


Always read the text display first of all. You will be provided with programming help. Confirm your selection by pressing the  key.



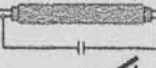
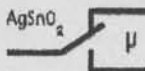
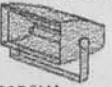
#### info

**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., Wed., Fri., pulse time 7.30 h. 32 memory locations are available for pulse programming.



### Technical Data

<p><b>TR 611 0 xxx</b>            230V~ +/- 10% 50-60 Hz            240V~ +6%-14% 50-60 Hz</p>	<p><b>16(10)A</b> 250 V~            min. 100 mA 24V AC/ DC</p>	<p>Degree of protection            II EN 60730            IP 20 EN 60529</p>	 2300W	<p>9 x 7 W            7 x 11 W            7 x 16 W            7 x 20 W            7 x 23 W</p> 	<p>400W (42µF)</p> 
<p><b>TR 611 1 xxx</b>            120V~ +/- 10% 50-60 Hz</p>	<p>Type 1 BSTU            IEC/EN 60730-2-7</p>	<p><b>42</b> memory locations</p>		 2300W	<p>1000 W</p> 