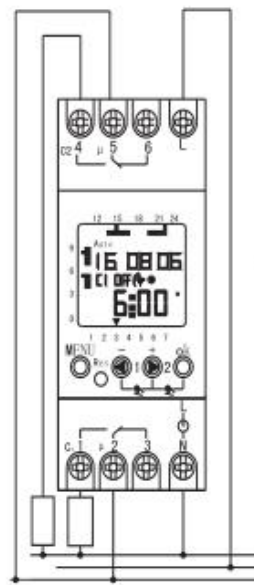


# 2 Channel Timer DNT2C16



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

## 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.

Overview per day of the Programmed switching times  
3=Wednesday

**Channel statuses**  
C1 or C2 are displayed alternately On/OFF

**Service voltage ok:**




Two flashing dots

**Power reserve mode:**

Three flashing dots

**Selection**

e.g: AutoProg  
Man, PulseCycle,  
Abort input

Display of special function:  
Permanent ON/OFF   
Random program active   
Holiday program active 

Displayed only when summer/winter time changeover is activated  
Summer time   
Winter time 

Current days of the week  
1=Monday, 2=Tuesday,...

The decision **Yes** confirms the selection or programming

Decision **No** mean continue

## Common technical specifications

**Rated voltage:** 230-240V~+6%-10%

**Frequency:** 50-60Hz

**Own consumption:** max. 7.5 VA

**Contact:** zero-potential, gap less than 3mm

**Switching power :** 16A, 250V~,  $\cos \phi = 1$ ;

10A, 250V~,  $\cos \phi = 0.6$

**Incandescent lamp load:** 2300 W

**Halogen lamp load:** 2300 W

**Timing basic:** quartz

**Working precision:** 1 sec./day at 20

**Shortest switching time:** 1 minute

**Display:** LCD display with text line

**Operating control elements:** 4 touch keys and

1 reset key

**Power reserve:** approx. 4 years with display with

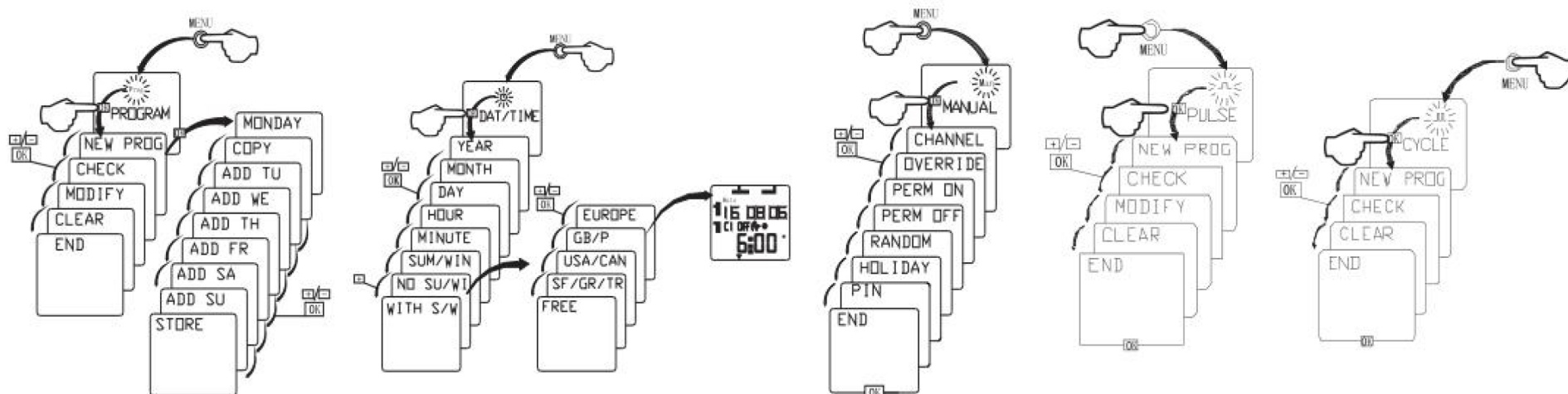
full controllability(temp. 20) by means of an

environmentally friendly lithium battery

**Permissible ambient temperature:**

-10 50

**Weight:** approx. 170 g



## Technical Data

230V 240V	10 50 60 Hz 6 14 50 60 Hz	16 10 A 250V min 100mA 24V AC DC	Degree of protection IEN 60730 IP 20 EN 60529	2300W	9x7 W 7x11W 7x15W 7x20W 7x23W	400W 42µF
120V	10 50 60 Hz	Type 1 BSTU IEC EN 60730 2 7	44 memory locations	AgSnO2	2300W	1000W

# Summer/winter time Setting/correcting the date and 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 **+** or **-**  
Store by pressing **OK**

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

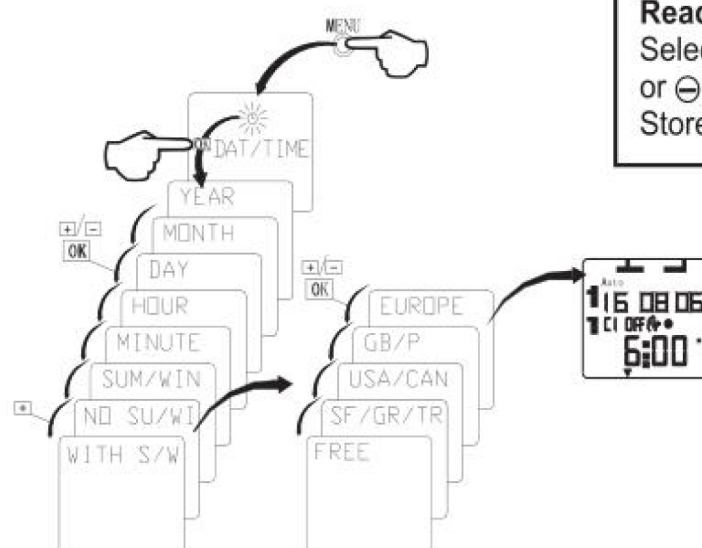
Select sum/win ,and after with sum/win.

Store with **OK**

Select rule FREE-with buttons **+** or **-**

Input month and weeks for sum/win.

Store with **OK**



### Read the text display first of all.

Select by pressing the **+** key  
or **-** 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.

# 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. 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.

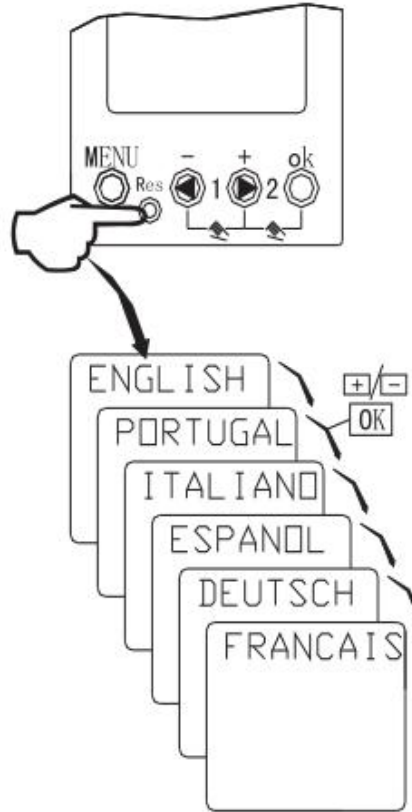
### If the timer is not pre-programmed

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

### Activate the clock, Select the national language

By pressing the **+/-** keys, select your national language.

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



**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.

**RESET** (only in case 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 a pointed object for approx. 1 second.

# Programming the switching time

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

### Formation of day groups

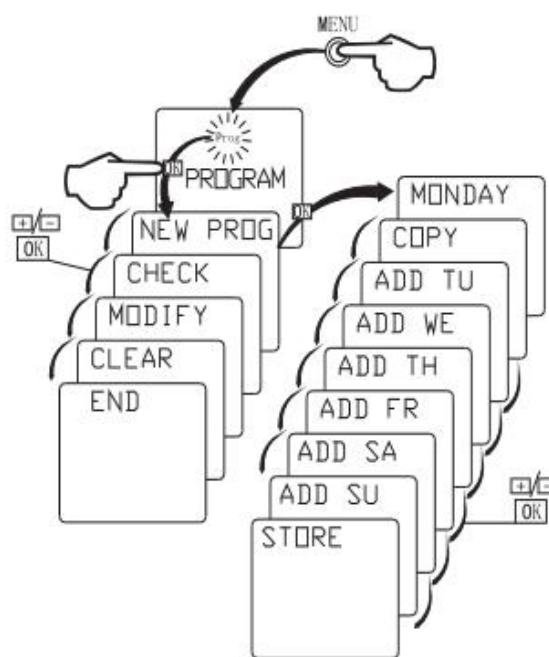
If the same switching times are active on several days of the week, they occupy just one memory location. 44 memory locations are available.

### 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 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**

# PIN-Code

## PIN

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.

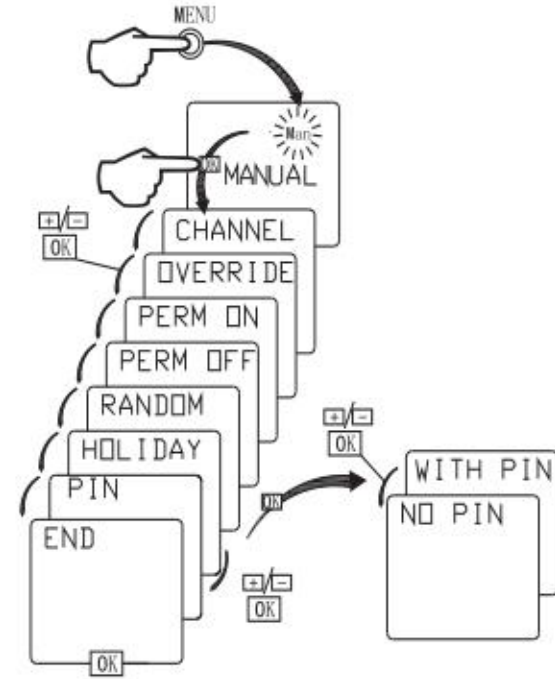
### Selection **WITH PIN**

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 **-**  
 Confirm 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**

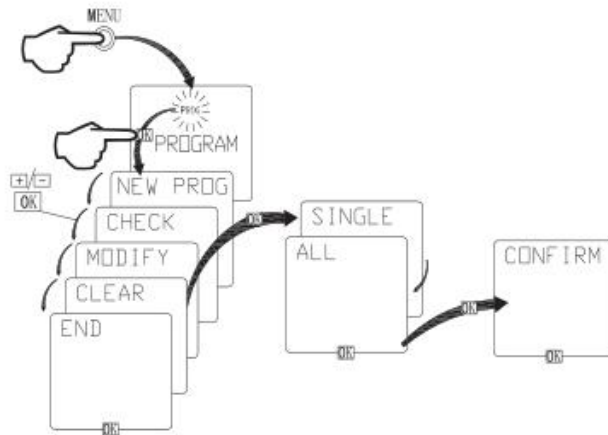
Select **WITHOUT PIN** using **+** or **-**  
 Confirm with the **OK** button.













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!**

## Individual deletions




### Override Permanent ON or OFF Via the automatic menu Auto only

	  Channel C1	  Channel C2
Press the two Key for <b>approx. 1 s.</b>	Manual preselection: Press keys simultaneously <b>Channel C1</b> switches alternately ON or OFF. Symbol  appears. Manual preselection is corrected again by the stored program.	Manual preselection: Press keys simultaneously <b>Channel C2</b> switches alternately ON or OFF. Symbol  appears. Manual preselection is corrected again by the stored program.
Press the two Key for <b>approx. 2 s.</b>	Permanent ON  OFF 	Permanent ON  OFF 
<b>Cancellation of manual preselection/permanent switching:</b> Briefly press the keys shown above.		

# Pulse program

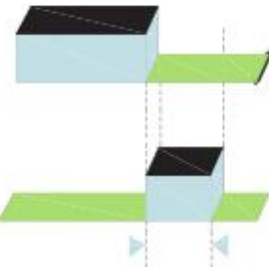
e.g.:for breaktime signals, ventilation systems, flushing systems, bell controls etc.

**Effect of the pulse program:**  
The pulse time can be set within the range 1 to 59 seconds.

Symbol  flashes as long as the pulse program is active.

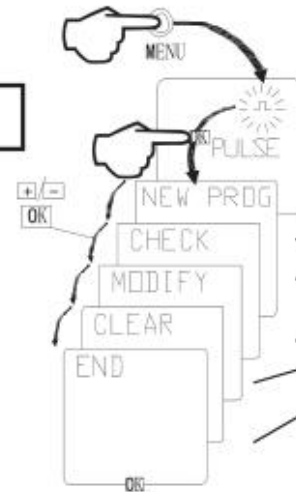
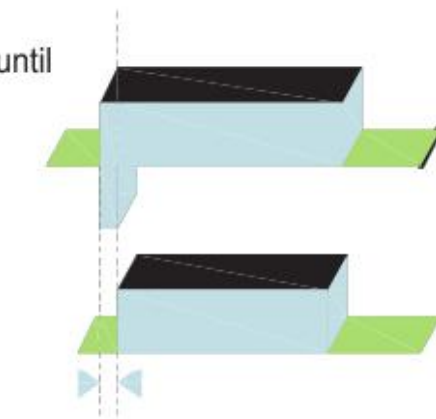
Switch-off delay  
**Program:**  
7.00 until 17.30 and  
pulse at 17.30 h  
pulse ON, duration 15 s

**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 7.00 h until  
17.30 h and  
pulse, OFF at 7.00 h  
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

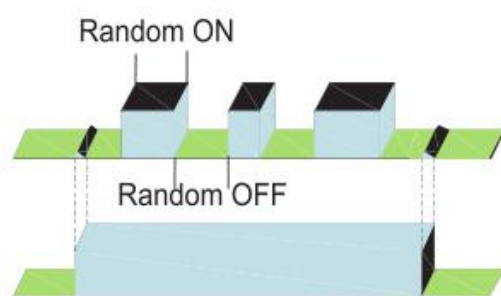
**Viewing the pulse times**  
Only possible in the menu PULSE.

**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. 44 memory location are for pulse programming.

# Permanent ON or OFF Random or Holiday program

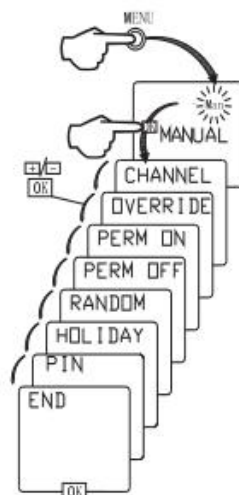
**Effect of the random program:**  
The random program causes the timer to switch between programmed pairs of switches (ON and OFF). The random on and off times range between approx. 10 mins. and 120 min. The random time always begins with OFF.

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 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.

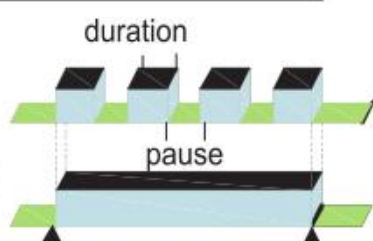
# Cycle program

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.



**Example cycle start:**  
Monday 7.30 h ON

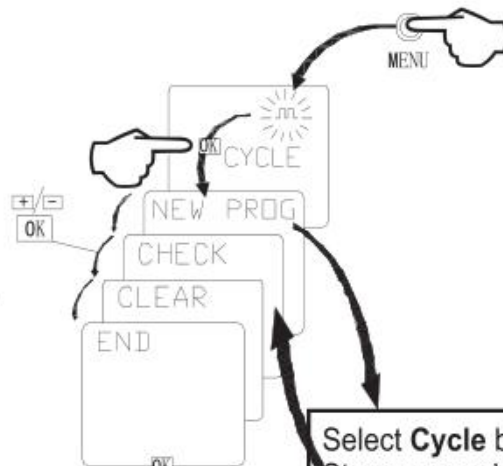
**Example cycle finish:**  
Friday 16.30 h OFF

## 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.

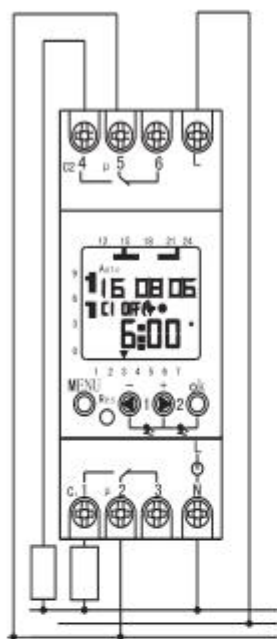
Set cycle **pause** (Min./sec.) by pressing the keys **+ or -**

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

Set cycle **finish** by pressing the keys **+ or -**

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

## Dimension drawings



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

## Safety Information

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