







Table of Contents

	Safety Instructions.....	47
	Information about the device.....	48
	Description of the device	48
	Designated use.....	48
	Technical data	49
	Installation and mounting	50
	Mounting on DIN rail	50
	Connection diagram.....	50
	Operation and configuration	51
	Display and function keys	51
	Menu structure	54
	Commissioning – Select menu language	56



Set date and time	56
AM/PM – 12/24 hour display	57
Switchover summertime/wintertime	58
Create weekly program.....	59
Create yearly program	67
View and edit program.....	72
Delete program.....	73
Random switching program	74
Configuration	75
Automatic/Manual mode.....	83



Maintenance and repair..... 84

Battery change	84
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Disposal / Recycling 85



Safety Instructions



WARNING

Danger! Risk of electric shock!

▷ Connection and mounting must be realized by a professional electrician!

- To avoid injuries, the device must be connected and mounted by a skilled electrician only!
- Before changing the battery, the device must be disconnected from the power supply!
- Please observe the national regulations and safety instructions.
- Interferences and changes to the device will invalidate the warranty and guaranty rights.
- Minimum diameter of the flexible lines for the terminals: 1 mm².
Maximum diameter: 4 mm².

Read and observe these instructions to guarantee a perfect function of the device and a safe operation.



Information about the device

Description of the device

Universal digital timer

- 800 memory locations
- Date-based programming
- Pulse, cycle program
- PC-assisted program generation
- Extension to 8 channels through channel extension
- Powerline Communication (PLC)
- LAN, Internet communication



The timer talento 992 plus also has an antenna connection (GPS/DCF).

Designated use

- The timer is used for
 - lighting in private homes and commerce
 - advertising
 - street lighting
 - shop window lighting
 - controlling devices, motors and pumps
 - controlling shutters and blinds
 - Presence simulation
- Mounting only on DIN rail.
- Suitable for use in dry rooms only!
- Do not install in the vicinity of devices having inductive discharges (motors, transformers, etc.)



Technical data

Dimensions H x W x D (mm)	45 x 52.5 x 60
Weight g (approx.)	220
Main voltage	See rating plate
Protection class	II
Power consumption	5 VA
Switching capacity	
– Ohmic load (VDE, IEC)	16 A / 250 V AC
– Inductive load $\cos \varphi$ 0.6	10 A / 250 V AC
– Glow/halogen lamp load	2600W
– Fluorescent light	1000W
– Max. switching capacity AC1 / AC15	3700W / 750W
Switching contacts	Change-over contact
Ambient temperature	-10°C... + 55°C
Accuracy	Type \pm 1s/day at +20°C
Shortest switching interval	1 sec.
Switching state display	Yes
Sealable	Yes



Installation and mounting

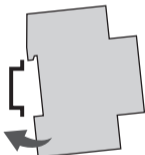


WARNING

Danger! Risk of electric shock!

▷ Connection and mounting must be realized by a professional electrician!

Mounting on DIN rail

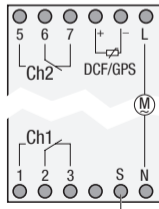


Put the device slightly inclined on top of the rail.
Then push it backwards until it engages.

Connection diagram

CH1 = channel 1

CH2 = channel 2



LAN module and timer must be operated in the same phase.
The distance between the two devices must not be more than 50 meters.



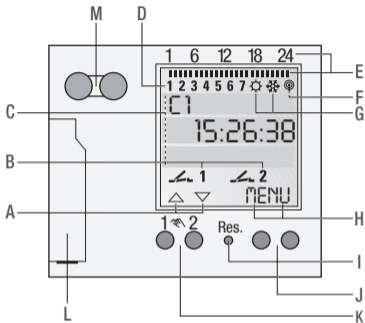
Operation and configuration



Switch-off commands have a higher priority than switch-on commands.

Display and function keys

- The central line of the display, in which the adjusted values and selected menu items are displayed, is displayed larger.
- Flashing means that an entry is required. If you do not enter anything within two minutes, the timer switches back to automatic operation.
- "MAINSOFF" appears on the display when the device is not supplied with power.
- "LOW BATT" appears on the display when a battery change is required within the next two weeks.
- The programs are maintained when resetting. You need to readjust date and time. Press the reset button using a blunt object (ballpoint pen).



Display

- A** Function displays of the two left keys
- B** Switching state displays (ON/OFF/OVR/FIX)
- C** 3 display lines
- D** Weekdays
The assignment can be changed in the **DATETIME** menu, for example to 1 = Sunday.
- E** Programmed switching times
- F** Radio antenna
- G** Display of summer/winter time
- H** Function displays of the two right keys

Keys/Interfaces

- I** Reset
- J** Right keys
- K** Left keys with manual switch function in Automatic mode
- L** Battery
- M** Infrared interface



Function displays of the two left keys:

- △ Scroll upwards in the menu
- ▽ Scroll downwards in the menu
- ✓ Accept selection/proposal
- + Brief key press = +1 / long key press (about 2 sec) = fast forward
- Brief key press = -1 / long key press (about 2 sec) = fast forward

Function displays of the two right keys:

MENU Leaves Automatic mode and enters Programming mode

ESC Brief key press = one step backward
Long key press (about 2 sec) = Back to Automatic mode

OK Make a selection and accept

EDT Change programs in "Read mode"

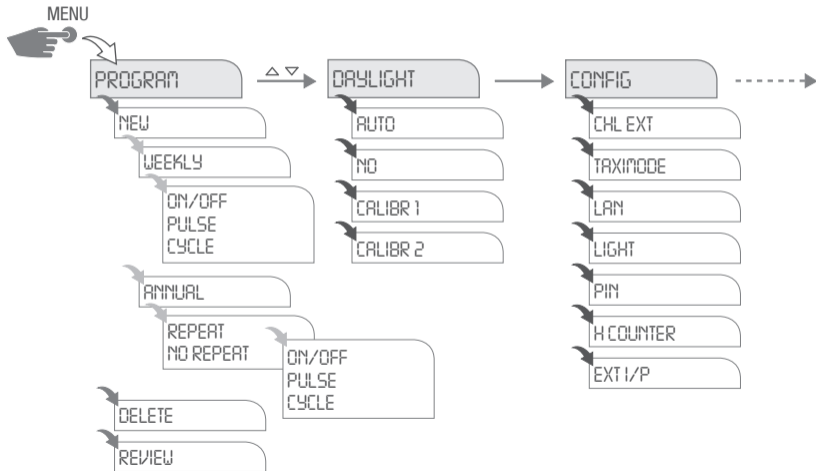
NO Do not execute command

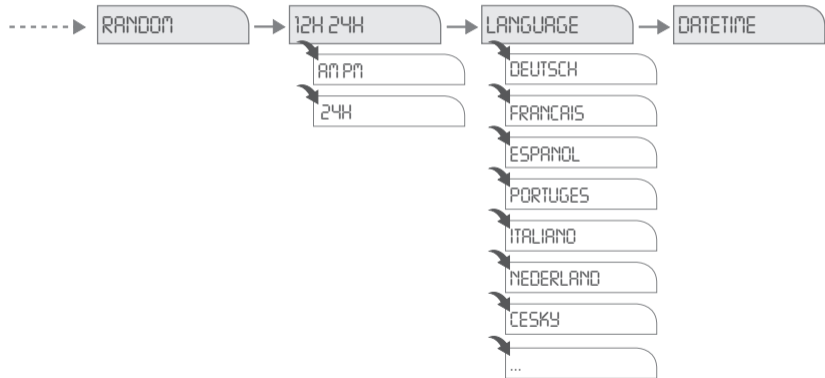
YES Execute command

DEL Delete



Menu structure

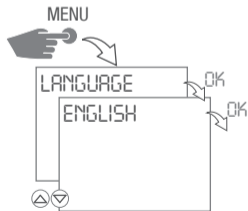




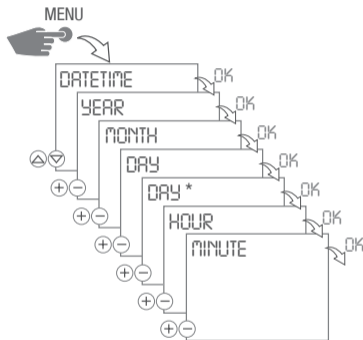


Commissioning – Select menu language

- i** When delivered, the timer is in automatic mode with preset time, date (CET) and menu in English. Press the Menu button to make settings. Then select the desired setting.



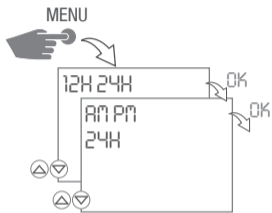
Set date and time



*) Set the weekday in accordance with the current date.

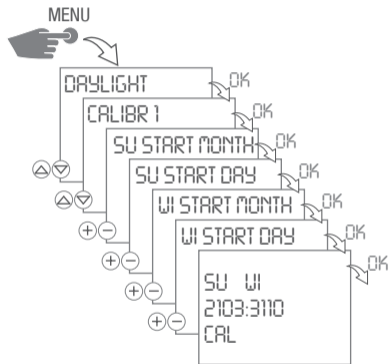


AM/PM – 12/24 hour display





Switchover summertime/wintertime



The following settings are possible:

AUTO

In-factory default setting as specified by law (USA or EU). It will be recalculated every year.

NO

No changeover.

CALIBR 1 (AUTO)

Manual Programming.

The programmed summer/winter time will be recalculated automatically for each year.

- The change-over always takes place on the **first Sunday** of the selected month, if the entered date lies between 1. and 15.
- The change-over always takes place on the **last Sunday** of the selected month, if the entered date lies between 16. and 31.



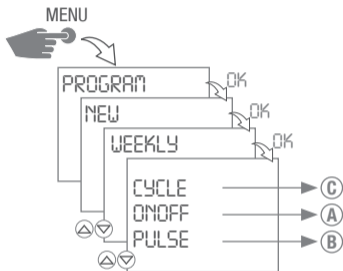
- The time change-over occurs on the respective Sunday from 2 to 3 o'clock (summertime) or from 3 to 2 o'clock (wintertime).

CALIBR 2 (FIX)

Manual Programming.

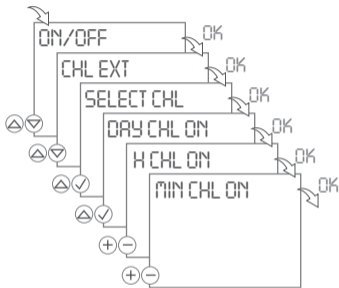
The change-over takes place every year always on the same date.

Create weekly program





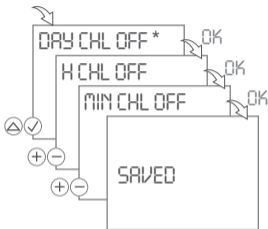
A ON/OFF programming



1. Confirm **ON/OFF** by pressing **OK**.
 - ▷ Free memory locations are briefly displayed.
2. Select number of channel extensions $\triangle \nabla$ and confirm by pressing **OK**.
3. When prompted, select channels \triangle and confirm by pressing \checkmark . \Rightarrow **OK**
 - ▷ The weekday display is flashing.

ON command:

4. Select the desired days \triangle and confirm by pressing \checkmark \Rightarrow **OK**
5. Enter hour (+/-) \Rightarrow **OK**
6. Enter minutes (+/-) \Rightarrow **OK**



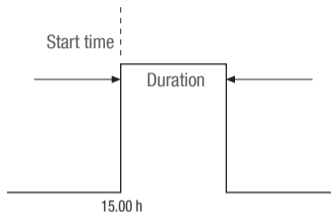
*) Available only if individual days have been selected for the ON command.

OFF command:

7. When prompted, select desired days \triangle and confirm by pressing \checkmark \rightarrow **OK**
8. Enter hour (+/-) \rightarrow **OK**
9. Enter minutes (+/-) \rightarrow **OK**
 - \triangleright The program is saved.



Ⓑ Pulse programming

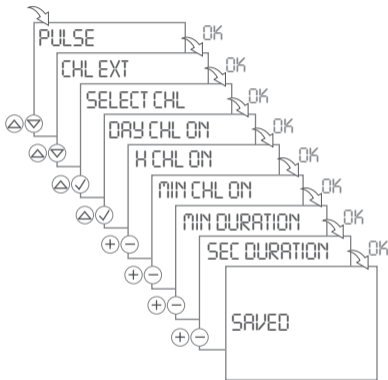


A pulse switching command consists of:

- Start time
- Duration = ON switching duration
shortest ON switching duration = 1 sec.
longest ON switching duration = 59 min., 59 sec.

Example:

ON command for channel 1 daily from Monday to Friday at 3.00 pm. ON switching duration 15 minutes.





1. Confirm **PULSE** by pressing **OK**.
 - ▷ Free memory locations are briefly displayed.
2. Select number of channel extensions \triangle ∇ and confirm by pressing **OK**.
3. When prompted, select channels \triangle and confirm by pressing \checkmark . \rightarrow **OK**
 - ▷ The weekday display is flashing.

ON command:

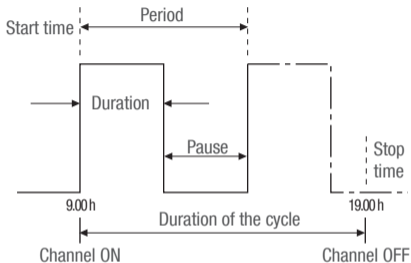
4. Select the desired days \triangle and confirm by pressing \checkmark \rightarrow **OK**
5. Enter hour (+/-) \rightarrow **OK**
6. Enter minutes (+/-) \rightarrow **OK**

Duration:

7. Enter minutes or seconds (+/-) and confirm by pressing **OK**.
 - ▷ The program is saved.



© Cycle programming



The cycle duration must not be less than the period.

No nesting of cycle programs is allowed.

A cycle switching command consists of:

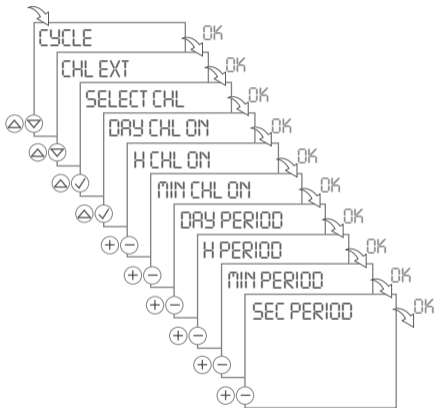
- Start time
- Duration = ON switching duration
- Period = ON switching duration + pause
- Cycle duration = time between channel ON and channel OFF
- Stop time

Example:

Channel 1 is switched on every 30 minutes for 10 minutes, starting on Monday 9.00 am.

The stop time is Friday 7.00 pm.

Start time Monday	09.00 am
Duration	10 min.
Period	30 min.
Stop time Friday	07.00 pm



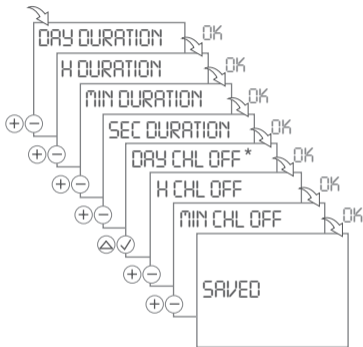
1. Confirm **CYCLE** by pressing **OK**.
 - ▷ Free memory locations are briefly displayed.
2. Select number of channel extensions \triangle ∇ and confirm by pressing **OK**.
3. When prompted, select channels \triangle and confirm by pressing \checkmark . \rightarrow **OK**
 - ▷ The weekday display is flashing.

ON command:

4. Select the desired days \triangle and confirm by pressing \checkmark \rightarrow **OK**
5. Enter hour (+/-) \rightarrow **OK**
6. Enter minutes (+/-) \rightarrow **OK**

Period:

7. Enter days, hours, minutes or seconds (+/-) and confirm by pressing **OK**.



Duration:

8. Enter days, hours, minutes or seconds (+/-) and confirm by pressing **OK**.

OFF command:

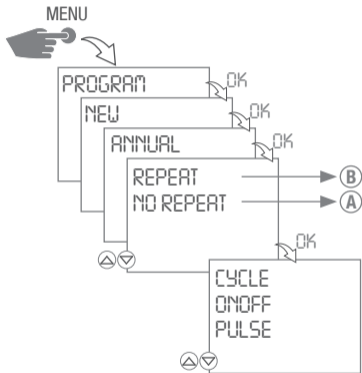
9. When prompted, select desired days Δ and confirm by pressing $\checkmark \rightarrow$ **OK**
10. Enter hour (+/-) \rightarrow **OK**
11. Enter minutes (+/-) \rightarrow **OK**
 - ▷ The program is saved.



*) Available only if individual days have been selected for the ON command.



Create yearly program



Ⓐ NO REPEAT

Switching once.

Start and stop date (year, month, day,) are set by you.

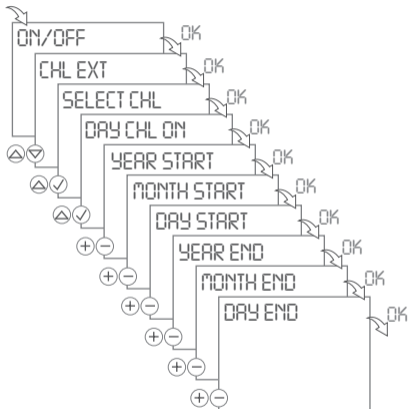
Ⓑ REPEAT

Recurring program.

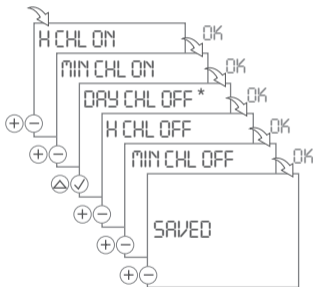
This is done each year at the same time until you remove the program in the menu under **Program** → **Delete**.



Ⓐ NO REPEAT - ON/OFF programming



For CYCLE and PULSE, you also have to set the duration and/or period. The procedure is the same as for creating a weekly program.



*) Available only if individual days have been selected for the ON command.



1. Confirm **ON/OFF** by pressing **OK**.
 - ▷ Free memory locations are briefly displayed.
2. Select number of channel extensions \triangle ∇ and confirm by pressing **OK**.
3. When prompted, select channels \triangle and confirm by pressing \checkmark . \rightarrow **OK**
 - ▷ The weekday display is flashing.

ON command:

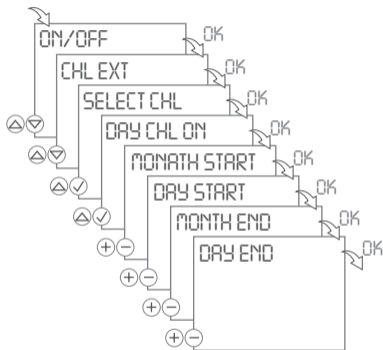
4. Select the desired days \triangle and confirm by pressing \checkmark \rightarrow **OK**
5. Enter start date (year, month and day) in the relevant box (+/-) \rightarrow **OK**
6. Enter stop date (year, month and day) in the relevant box (+/-) \rightarrow **OK**
7. Enter hour (+/-) \rightarrow **OK**
8. Enter minutes (+/-) \rightarrow **OK**

OFF command:

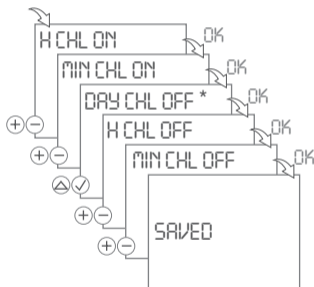
9. When prompted, select desired days \triangle and confirm by pressing \checkmark \rightarrow **OK**
10. Enter hour (+/-) \rightarrow **OK**
11. Enter minutes (+/-) \rightarrow **OK**
 - ▷ The program is saved.



Ⓑ REPEAT - ON/OFF programming



For CYCLE and PULSE, you also have to set the duration and/or period. The procedure is the same as for creating a weekly program.



*) Available only if individual days have been selected for the ON command.



1. Confirm **ON/OFF** by pressing **OK**.
 - ▷ Free memory locations are briefly displayed.
2. Select number of channel extensions \triangle ∇ and confirm by pressing **OK**.
3. When prompted, select channels \triangle and confirm by pressing \checkmark . \rightarrow **OK**
 - ▷ The weekday display is flashing.

ON command:

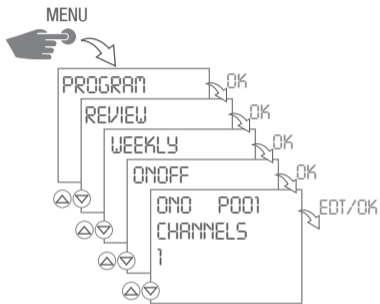
4. Select the desired days \triangle and confirm by pressing \checkmark \rightarrow **OK**
5. Enter start date (month and day) in the relevant box (+/-) \rightarrow **OK**
6. Enter stop date (month and day) in the relevant box (+/-) \rightarrow **OK**
7. Enter hour (+/-) \rightarrow **OK**
8. Enter minutes (+/-) \rightarrow **OK**

OFF command:

9. When prompted, select desired days \triangle and confirm by pressing \checkmark \rightarrow **OK**
10. Enter hour (+/-) \rightarrow **OK**
11. Enter minutes (+/-) \rightarrow **OK**
 - ▷ The program is saved.



View and edit program



Weekly and yearly programs can be viewed and edited separately.

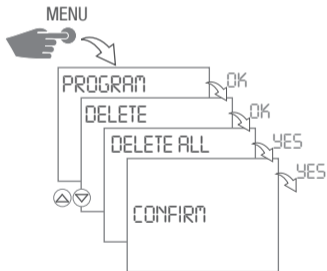
- Press Δ ∇ to scroll through the different program steps.
- Press **EDT** to edit a program.
This procedure is similar to creating a new program.
- Press **OK** to go to the next program.



Delete program

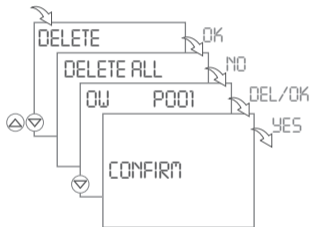
Delete all programs

- Press **YES** to delete all programs.
- Press **NO** to delete individual programs.



Delete individual programs

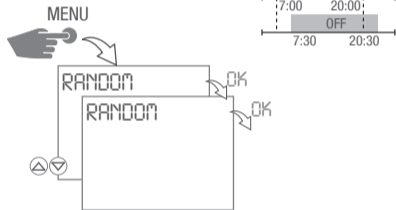
- Press **OK** to go to the next program.





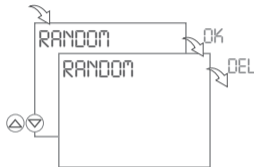
Random switching program

i The programmed switching command is delayed by a variable (random) period of 0-30 minutes.



1. Press **OK** to start the random switching program.
 - ▷ **RANDOM** flashes.
2. To return to the main menu, press the Menu key.

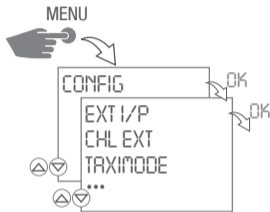
Finish random switching program



- ▶ Press **DEL** to finish the random switching program.
 - ▷ The timer returns to Automatic mode.



Configuration



Channel extension – Add



Communication between the channel extension and the timer takes place via Powerline Communication (PLC).

Channel extension and timer must be operated in the same phase.

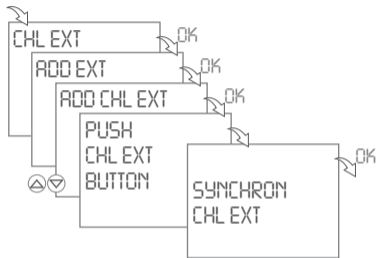
The distance between the two devices must not be more than 50 meters.

You can extend the timer to up to eight channels. Add each extension separately.

Extension A = Channels 3 and 4

Extension B = Channels 5 and 6

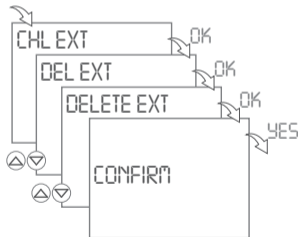
Extension C = Channels 7 and 8



- ▶ For synchronization, press any key on the channel extension.
 - ▷ After successful synchronization, a confirmation appears on the display.
 - ▷ If synchronization is not successful, the message **SYNCHRON ERROR** is shown on the display.

Channel extension – Delete

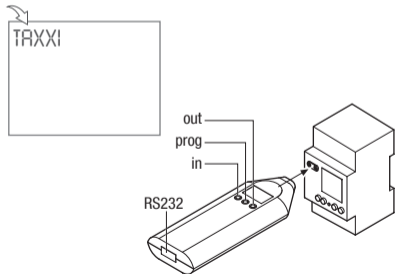
- Each channel extension must be deleted separately.
- Press **OK** to go to the next channel extension.
- Press **DEL** to delete the channel extension.





Taxxi Mode

- A taxi module can be used to exchange programs via the IR interface. To do so, the device must be in the TAXIMODE and connected to power.
- Press **ESC** to finish the TAXIMODE.



Operation of taxi module:

1. Press **PROG** to select the program number.
2. Press **IN** to read in a program.
Press **OUT** to read out a program.
3. Hold the taxi module vertically over the IR interface.
4. Pressing IN or OUT again will start the transmission.



A wrong transmission is shown by Er2.
For further information, see the separate operating manual "talento taxi plus".

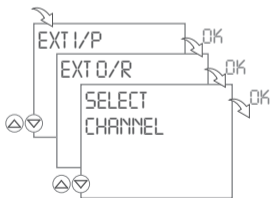


External input - Manual switch

Select **EXT O/R** to assign a channel to an external button.

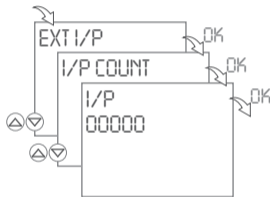
Upon pressing the button, an override switching command will be executed. It will be in effect until the next time the button is pressed or until the next automatic switching command.

(For a description of the Override mode, see page 83)




External input – Pulse counter

Press **I/P COUNT** to check the pulse counter. It will count how many times the external button was pressed.



Press **RES** to reset the pulse counter to zero and confirm by pressing **YES**.

 Do not confound it with the Reset key (**Res.**) in the center of the selection keys!



External input - Countdown timer

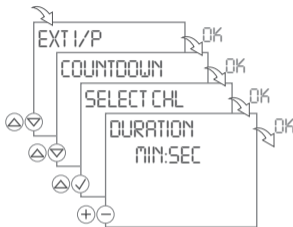
Select **COUNTDOWN** to set the time for a countdown timer.

Upon pressing the button, an ON switching command will be carried out. It switches the selected channel ON for the set time. Pressing the button again will start the countdown timer again at the set time.

If a program is already running on the selected channel, no switching command will be executed! After the time has expired, the timer returns to Automatic mode.

Shortest ON switching duration: 30 seconds

Longest ON switching duration: 90 minutes

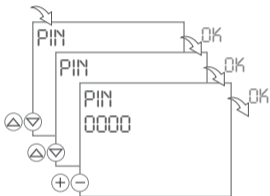


Countdown timer and manual switch cannot be selected at the same time! The function selected last always applies.



Set PIN

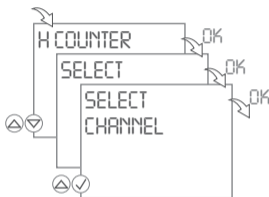
- Press **+** **-** to set a numeric value.
- Press **OK** to set the next number.



Select **NO PIN**, to remove the PIN.

Hour counter

- Press **△** **▽** to select the channels.



Select **REVIEW** to check the hour counter.

- Press **△** **▽** to scroll through the different program steps.
- Press **RES** to reset the hour counter for this channel.

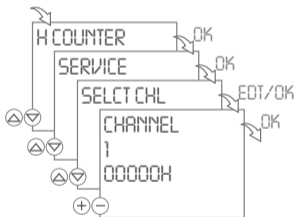


Do not confound it with the Reset key (**Res.**) in the center of the selection keys!



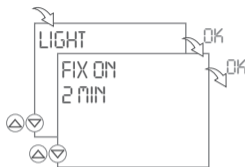
Set service counter

You can set the number of operating hours after which a service message is to appear. It will be shown on the display as soon as the counter has reached the number of hours set by you.



- Press \triangle ∇ to select the channels.
- Press $+$ $-$ to set a numeric value.

Background illumination



- Select **FIX ON** to set the background lighting permanently.
- Select **2 MIN** if you want the background lighting to be automatically switched off 2 minutes after your last input.



Add LAN module

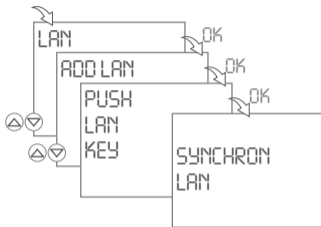


Each LAN module must be added via the Timer menu!

Communication between the LAN module and the timer takes place via Powerline Communication (PLC).

LAN module and timer must be operated in the same phase.

The distance between the two devices must not be more than 50 meters.

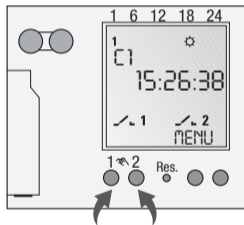




- ▶ For synchronization, you must press the COM key on the LAN module.
 - ▷ After successful synchronization, the timer display shows a confirmation. The **SYNC LED** (yellow) on the LAN module goes out.
 - ▷ If synchronization is not successful, the message **SYNCHRON ERROR** is shown on the timer display.
- ▶ Select **DEL EXT**, to remove the LAN module.



Automatic/Manual mode

- Manual switch: Duration ON / Duration OFF / OVR / Automatic mode
- Left button = channel 1 / right button = channel 2



- Press 1x = FIX ON = FIX  = Duration ON
Press 2x = FIX OFF = FIX  = Duration OFF
Press 3x = OVR = Override mode
Press 4x = Automatic mode

Switching state display

 1 = channel ON

 1 = channel OFF

There is no display in automatic mode.

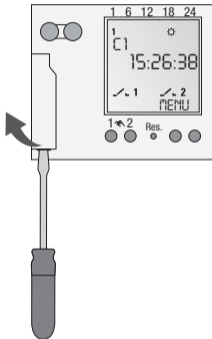
Override mode

The Override function (temporary program overwrite) allows the user to finish the currently running program prematurely or start a program to run later before its scheduled start. This depends of the current channel status. The Override function applies only to the current program and remains active until the next program change. After that, the timer returns to Automatic mode.



Maintenance and repair

Battery change



When a battery is changed without power supply, date and time will get lost!

1. Lift the battery compartment using a screwdriver.
2. Take the battery out of the support.
3. Insert new battery into support. Observe polarity of the battery!
4. Push battery support downward until it engages.
5. Dispose of the battery in an environmentally friendly manner.



Disposal / Recycling

Dispose of the packing material correctly according to legal requirements and regulations.

Observe the following notes for disposing of defective system components or the system after its service life:

- Dispose of appropriately, i.e. separating the parts to be disposed of according to material groups.
- Do not throw electrical and electronic components in the bin. Bring these parts to the recycling centers.
- Always ensure the environmentally sound disposal conform to the state-of-the-art environment protection, recycling and disposal engineering.

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