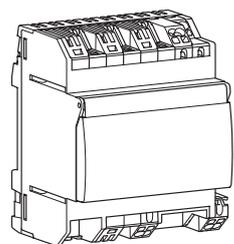


(EN)

4 channel programmer annual and weekly cycle with programming key

User instructions



6LE001666A

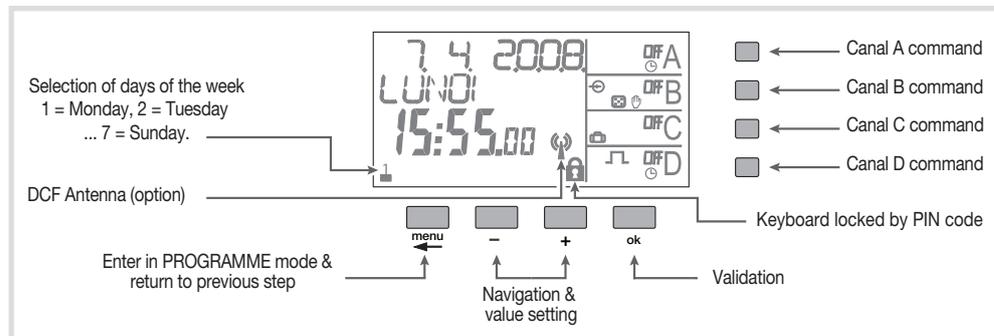
TYA720



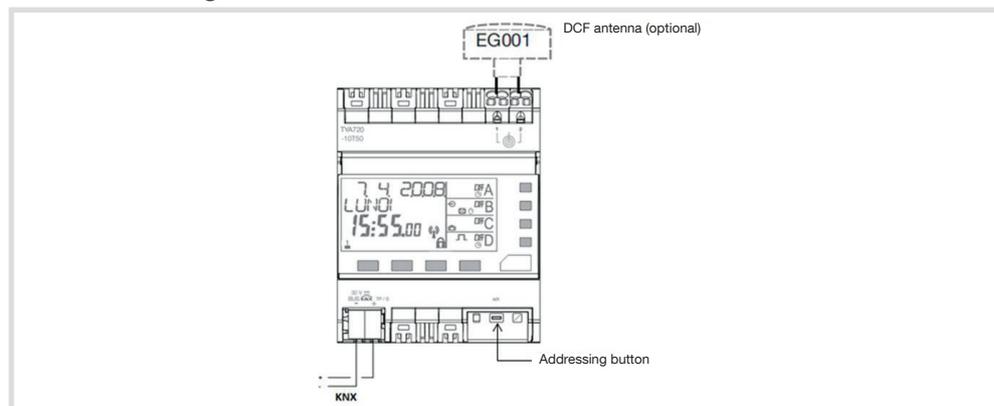
Presentation

- Product delivered with current time and date set.
- Automatic change of summer/winter time.
- Programming key
 - For permanent overrides
 - For program copy or save
- 300 programme steps ; ON, OFF, pulses \square or $\square\square$.
- Permanent overrides On or Off (permanent light on).
- Temporary overrides On or Off (flashing).
- Overrides (temporary, permanent or time delayed) remote activation possible.
- Simulation of presence.
- Keyboard lock function by PIN number.
- Counter of operating time on every output.
- Programmable with power off.
- Display with backlight.

Product Presentation



Connection diagram



Technical Specifications

• Supply Voltage	21...32 V DC SELV	• Mounting	DIN Rail (DIN EN 60715)
• BUS Consumption	Max 25mA	• Terminal Type	Quick Connect
• Switching functions	ON ; OFF ; Pulse ; cycle ; annual program	• Connection capacity	- Flexible : 0,75 to 2,5 mm ² - Rigid : 0,75 to 2,5 mm ²
• Programming capacity	300 steps	• Protection index	IP 20 / IK 04
• Minimum time between 2 steps	1 min.	• Protection Class	II
• Clock generator	Quartz, KNX Bus or DCF signal (optional)	• Standards	EN 60730-1; EN 60730-2-7; EN 50491-3; EN 50491-5-1; EN 50491-5-2; EN 50491-5-3
• Power reserve	Lithium battery accumulation of 5 years of power outages (unlimited backup of the program)	• DCF input	Yes, with use of double-insulated cable (DCF antenna EG001, optional)
• Accuracy (at 20° C)	± 0,25 sec /24 h	• Rated surge voltage	4kV
• Screen	High resolution LCD (12,8 cm ²)	• Type of action	1
• Operating temperature	-10 °C ... +50 °C	• Pollution level	2
• Storage temperature	-20 °C ... +70 °C	• Software structure	Class A
• Ball test temperature	75°C ... 125°C		
• Dimensions	4 modules (45 x 71,5 x 58 mm)		

First Commissioning

When using for the first time, the following settings must be done :

- select the language
- select the year, month, day
- select the hour and the minutes
- select the automatic change summer/winter.

Press the buttons +/- to set the display. Press OK to validate.

When the settings are finished, the clock goes to automatic mode.

In the event of use of DCF antenna EG001, it is not possible to change the time zone of the DCF signal either on the product or in the ETS application.

Reinitializing

Pressing simultaneously the menu, -, +, ok keys allows you to reinitialize the product. The program is kept in memory.

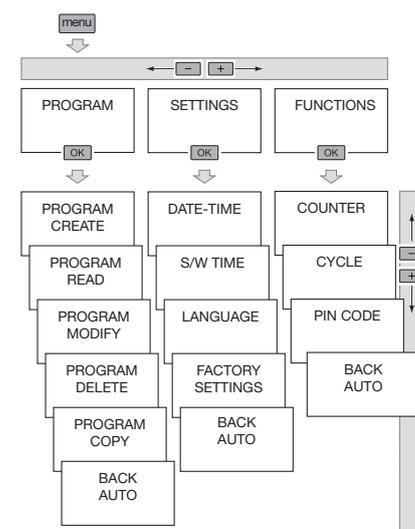
Menu

Press the button menu to access the programming/setting mode.

All of the programming and adjustments are based on the following principle :

- the 1st line and/or 2nd line of the display indicate the requested setting,
- the buttons +/- allow navigation through the menus and settings,
- the button ok allows validation.

Pressing the button menu allows you to access the following settings :



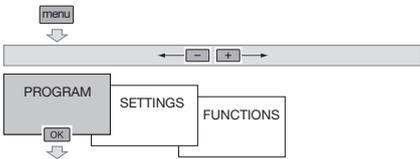
At any time, pressing the button menu allows you to return to the previous choice level.

Programming

To do the yearly programming of the clock, you have the following 4 types of programme :

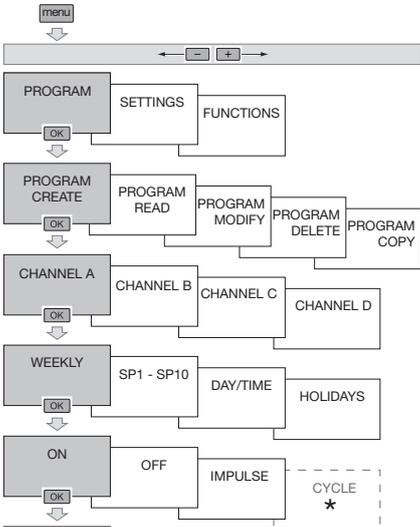
- **Basic weekly programme**
This is a non-priority weekly programme.
- **Sub-programmes 1 to 10**
These are weekly sub-programmes which are activated for a defined date-to-date period. As the sub-programme number increases, so does the priority.
- **DATE/TIME**
This is a programme step composed of a time and a date which will run in addition to the usual programme. If there is conflict between this programme step and another programme step (SP or weekly), this step has priority.
- **Holidays**
This programme allows you to define a permanent ON or OFF from date-to-date. This programme has the highest priority.

PROGRAM prog



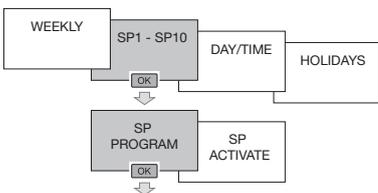
PROGRAM CREATE

Creating the basic weekly programme :



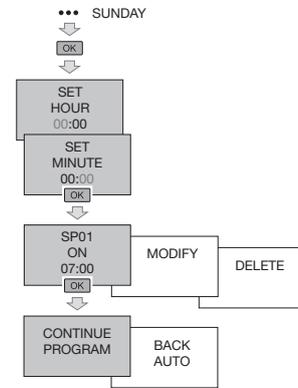
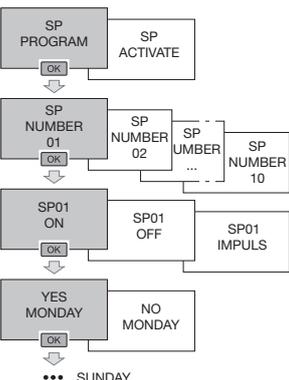
*The cycle programme is only possible if one or several cycles have been defined in the FUNCTION/CYCLE menu.

Creating a sub-programme (SP1-10):

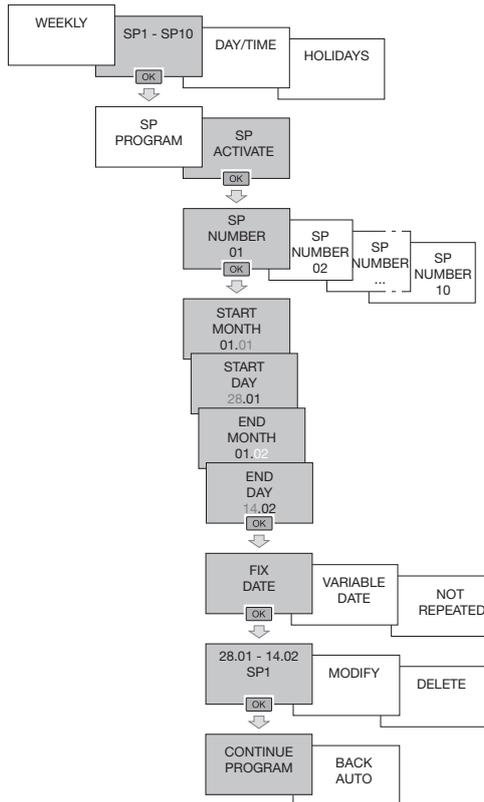


Two phases are necessary to create a sub-programme:
Define the weekly programme.
Define the period when the programme will be active.

1. Define the weekly programme



2. Activate the sub-programme.
To define the start and end of activation dates of the sub-programme:



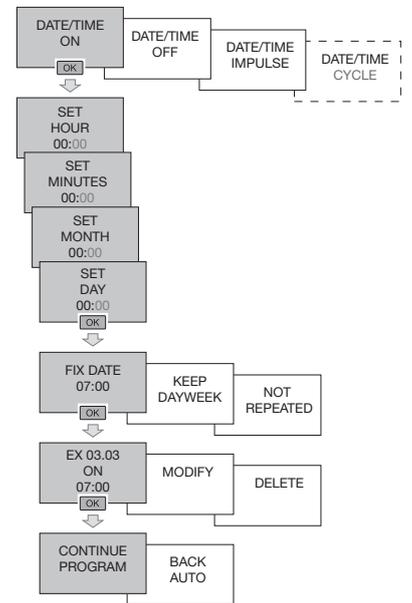
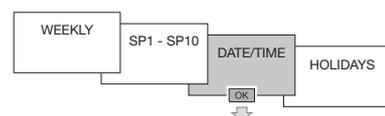
Select:
- FIX DATE: if the programme must be repeated every year at the same dates.
- VARIABLE DATE (↔) if the dates must be recalculated every year according to the dates of Easter.
- NOT REPEATED: if the programme is to be activated once only.

Validate by ok.

A sub-programme can be attributed to several different periods.
When the start date and the end date are identical, the sub-programme is only valid for that day. If several programmes are activated in the same time, at the same date, the programme with the highest number (eg. Pg 10) is the one that will be activated. The other sub-programmes will be cancelled.

Creating a specific programme step (date-time):

A specific programme step is a programme step composed of a switching time and a date. This happens in addition to the weekly programme type or the sub-programme. If there is conflict, this has priority.



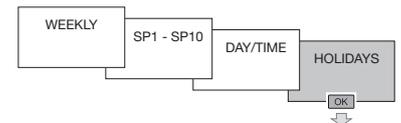
Select:

- FIX DATE: if the programme must be repeated every year at the same dates.
- KEEP DAY WEEK: if the dates must be recalculated every year in order to occur on the same day of the week.
- NOT REPEATED: if the programme is to be activated once only.

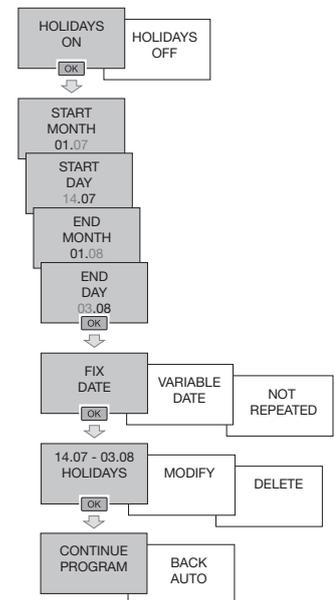
Validate by ok.

Creating a holiday programme

The Holiday programme allows you to define one or several periods during which the output contact is on ON or OFF. This programme has the highest priority.



To define your Holiday programme:



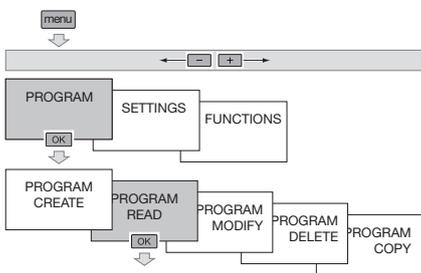
Select:

- FIX DATE: if the programme must be repeated every year at the same dates.
- VARIABLE DATE (↔) if the dates must be recalculated every year according to the dates of Easter.
- NOT REPEATED: if the programme is to be activated once only.

Validate by ok.

PROGRAMME READ

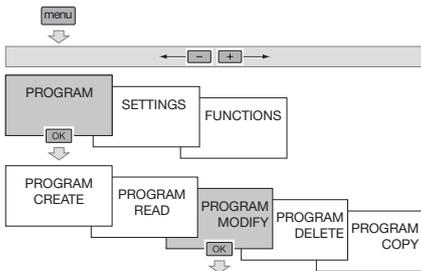
To visualise a programme
To check the steps of the recorded programme without risk of modifying or deleting.



The number of free program steps is displayed. Press **ok** to validate. The buttons **+** and **-** allow you to scroll the programme steps. At the end of the visualisation, press **ok**.

PROGRAMME MODIFY

To modify one or several programme steps.

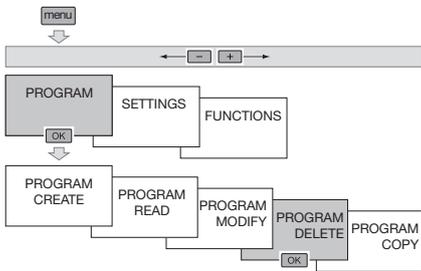


The number of free program steps is displayed. Press **ok** to validate. The buttons **+** and **-** allow you to scroll the programme steps. The button **ok** allows you to select the programme step to be modified.

PROGRAMME DELETE

The menu delete allows you to erase:

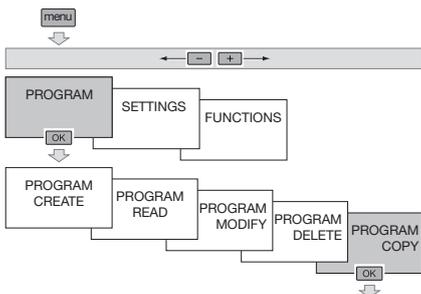
- all of the programme contained in the clock.
- All of the programme on one channels.
- A type of programme (weekly, SP1-10, specific, holiday) for a given channel.
- A programme step.



Everything deleted must be confirmed by pressing the button **ok**.

PROGRAMME COPY

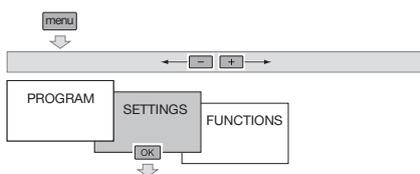
The copy function allows you to copy a programme from one channel to another.



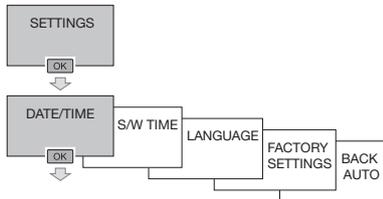
Select the channel from which you wish to copy the programme. Select **(+, - then ok)** the program you wish to copy: WEEKLY, SP1-SP10, DATE-TIME, HOLIDAY. Select the channel into which you wish to paste the programme copied. Validate by pressing **ok**.

Select **CONTINUE**, if you wish to copy more programs. Select **BACK AUTO** to go back to the automatic mode.

SETTINGS

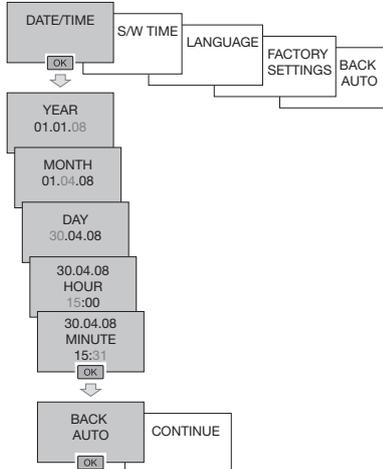


The setting menu allows you to access the following settings:



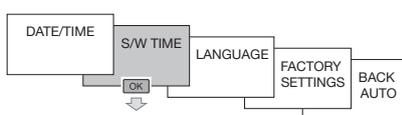
DATE-TIME

Time and day setting



Press **ok** to go back to automatic mode. For other settings (automatic changes summer/winter, language, reset), press **+** and select **CONTINUE**.

SUMMER/WINTER



Select the type of summer/winter change required and then validate by **ok**.

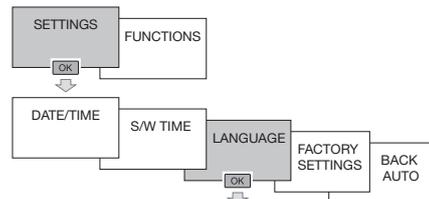
Types available:

Type	Start of Summer time	Start of Winter time	Zone of application
EURO* SUMMER/WINTER	Last Sunday in March	Last Sunday in October	European Union
USA SUMMER/WINTER	Second Sunday of March	First Sunday in November	North America
AUSTRALIA SUMMER/WINTER	First Sunday in October	First Sunday in April	Australia
USER SUMMER/WINTER	Date freely programmed	Date freely programmed	
NO SUMMER/WINTER	No change	No change	

* default type

When the **USER** type is chosen: Define the month, then the week of the change of summer time. Define the month, then the week of the change of winter time. The change always happens between 2 and 3 am. The change always happens on Sunday.

LANGUAGE



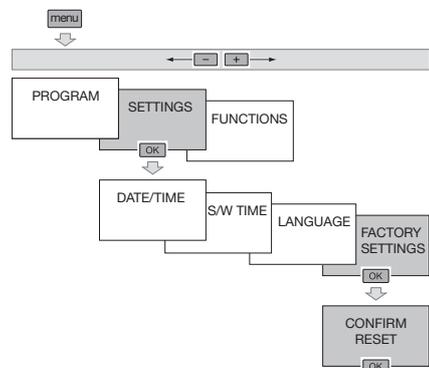
Select the language required amongst the following: FRANÇAIS, DEUTSCH, ENGLISH, NEDERLANDS, PORTUGUES, ESPANOL, ITALIANA.

Validate by **ok**.

FACTORY SETTINGS

Reset to zero

To reset the product to the manufacturer's configuration, that is to say, erase all of the programme as well as the settings made:

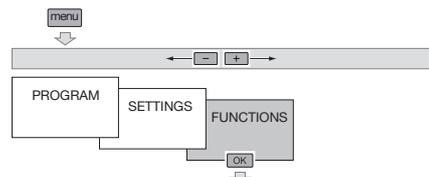


Confirm the complete reset by **ok**.

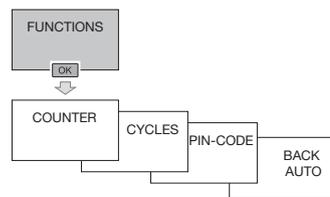
At the end of the reset to zero, as for the first commissioning, the following settings must be done:

- language
- selection of date and time
- Automatic summer/winter change.

FUNCTIONS



The functions menu allows you to access the following functions and information:



Usable in all Europe and in Switzerland



This device must be installed only by a qualified electrician according to the installation standards in force in the country.

COUNTER

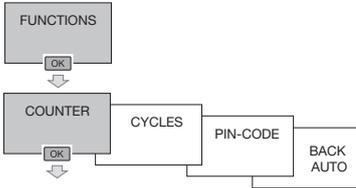
The "Counter" menu allows you to visualise the number operating hours (position ON) for every output, as well as the number of time changes since commissioning.

The counter also allows you to visualise the number of operating hours of the clock (product connected to mains supply).

The counters cannot be reset to zero (even after activating the function factory settings).

Press the button **menu**.

Using the buttons + or -, then **ok**, select the FUNCTIONS menu, then COUNTER.

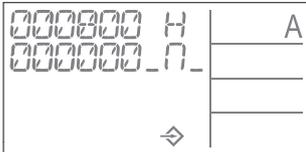


The first line indicates the number of operating hours of the output.

The second line indicates the number of time changes (ON then OFF) done by the output.

The buttons + or - allow you to scroll the various indicators.

Press the button **ok** to exit this menu.

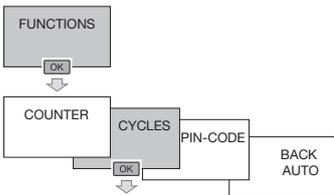


CYCLE

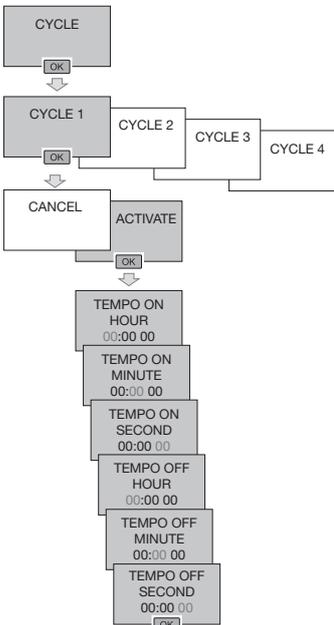
In order to create a cycle programme you must have previously defined the operating cycle(s). A cycle is defined by x h, x min, x sec ON then x h, x min, x sec OFF.

This menu allows you to define, modify or deactivate up to 4 different cycles.

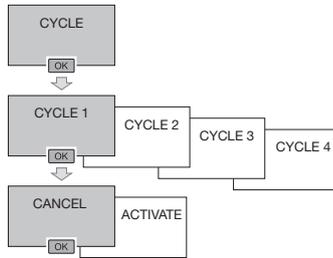
During the creation of a programme step, the active cycles appear in the choice of the state of output.



To create or modify a cycle:

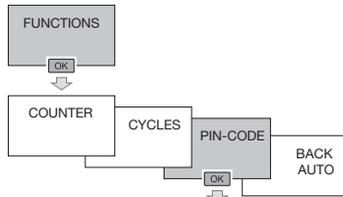


To deactivate a cycle:



Deactivating a cycle also deactivates all the programme steps concerned.

PIN-CODE



The menu PIN CODE allows you to lock the clock keyboard.

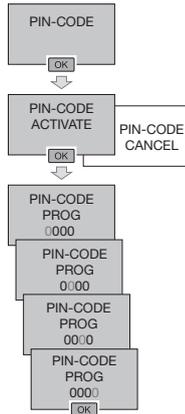
When the PIN number is active:

The symbol  flashes to indicate that the function is activated.

After 1 minute without action on the product, the keyboard is locked.

The symbol  indicates that the keyboard is locked. You must enter the PIN number to reactivate the keyboard.

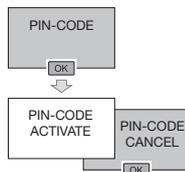
To activate the keyboard lock by PIN code (or modify the PIN code)



With the buttons + or -, select **ACTIVATE**. Validate by **ok**.

With the buttons + or -, enter or modify the 4 figures of the PIN number. Validate by **ok**.

To deactivate the keyboard lock by PIN NUMBER



Key

As soon as the key is present on the switch PROG KEY appears on the screen.

Two types of operation:

A. Permanent override:

Insert the key into the switch.

After 10 seconds the program contained in the key will be executed without clearing the program contained in the time switch.

As soon as the key is removed the program of the time switch is again valid.

B. Copy / Save:

The key allows you to save a program contained in the time switch. You can also copy the contents of the key to the clock.

1. Introduce the key PROG KEY appears on the screen. Press **ok**.

2. Using + or -, select:

save on key: to save the programme contained in the product,

Record in clock: to load the key programme into the time switch,

apply key prog: to execute the programme contained in the key without deleting the one present in the device.

Key readout: to check the programme contained in the key.

3. Validate your choice by **ok**.

An error message may appear on the screen:

Check the type of key.

The error message remains on display as long as the key is present, but the time switch programme is the one which is executed

Overrides

Random operation

By successively pressing the channel command button.

If the output state is **On** :

1st press : temporary override. **Off** and  flashing.

Return to automatic mode will take place at the next programme step.

2nd press : permanent override. **Off** and  are fixed. This override must be cancelled manually.

3rd press : forçage permanent. **On** and  are fixed. This override must be cancelled manually.

4th press : Random operation. For the simulation of presence,  as well as the state of output are displayed. Must be cancelled manually.

In this case the programme steps are staggered at random in a slot of ± 59 min.

5th press : return to automatic mode. The state of output as well as the symbol  are displayed.