

tecnoswitch 

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DAILY-WEEKLY DIGITAL TIME SWITCH

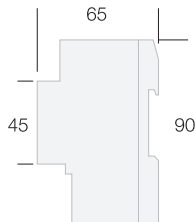
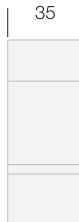


Fig.2

DAILY-WEEKLY DIGITAL TIME SWITCH

Thank you for purchasing daily-weekly digital time switch. Please read carefully all the instructions below reported.

The digital time switch can control an electrical load all day long every day of the week.

It comes with blue led back illuminated display and Joystick, which makes it easy and handy to use.

Strong points are Made in Italy high quality production, permanent internal memory to make safe the programs stored, even in absence of network power supply and super-capacitor power supply, that can make possible do not replace the battery anymore.

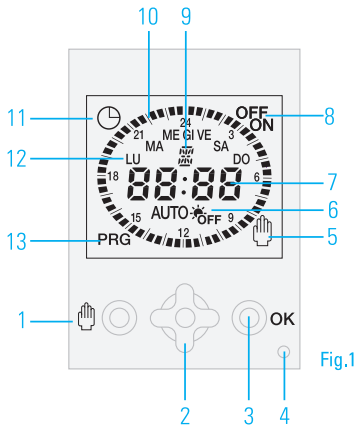


Fig.1

CONTROL AND INDICATION

Control fig.1

1. Manual or Automatic mode activation button.
2. 5 ways Joystick key. 4 way directions (◀ left, right ▶, ▲ Up, ▼ Down) needs to select On, OFF, clock and PRG icons and moving through trippers and days programming . If you press and keep hold a joystick direction, it will move the selection quickly.
Press the joystick in the middle(5 way), enter in the main Menu.
3. OK button, confirm a choosing.
4. Reset button, set digital time switch to default values.

Indication fig.1

5. Manual mode indication icon.
6. "AUTO-☀" icon, Winter/summer time automatic update setting enabled
"AUTO-☀OFF" icon Winter/summer time automatic update setting disabled.
7. Current time indication.
8. Relay output indication , if closed **ON** icon enabled, if open **OFF** icon enabled.
9. Day, month, year, hour, minute programming indications.
10. Trippers relay state indication: **ON**, will be highlighted. **OFF**, will be not highlighted.
Every tripper highlighted means 30 programmation minutes.
11. Automatic mode indication (Clock Icon).
12. Week current day.
13. Set the programs(PRG Icon).

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1.0 INSTALLATION

Device Must be installed on DIN 35mm bar (EN60715) inside an electrical panel, without electrical voltage avoiding heat source [fig. 3](#)



Fig.3

2.0 ELECTRICAL CONNECTION

2.1 Follow the electrical connections using the digital clock screw terminals showed in [fig. 4](#)

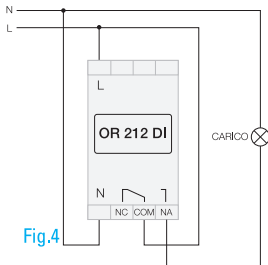


Fig.4

3.0 DEFAULT SETTING

Digital clocks comes without any programming with default settings:

- 1 Winter/summer time automatic time settings ON "AUTO-☀️"
- 2 Italian language.
- 3 30 minutes Programming resolution
- 4 Automatic mode ON.
- 5 Weekly settings.

4.0 HOUR, DATE AND WINTER/SUMMER TIME SETTINGS

4.1 Press the Joystick in the middle at least 1 sec, display will show this icons. [Fig.5](#)
Clock icon blink.



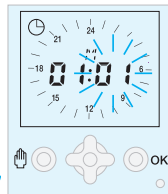
Fig.5

4.2 Press OK button to confirm the clock selection. Year numbers begin blinking and letter "Y" appears. [Fig.6](#)



Fig.6

- 4.3 Press UP or DOWN Joystick direction and select the current Year.
- 4.4 Press **OK** button and confirm the Year. Month numbers begin blinking and letter "M" appears. [Fig.7](#)
- 4.5 Press Up or DOWN Joystick direction and select the current Month.



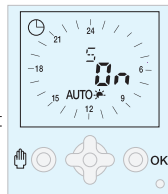
[Fig.7](#)

- 4.6 Press LEFT Joystick direction to set the Day. Day Numbers begin blinking and letter "D" appears. [Fig.8](#)



[Fig.8](#)

- 4.7 Press UP or DOWN Joystick direction and select the current Day.
- 4.8 Press **OK** button and confirm the selections. At this point should be set the WINTER/SUMMER automatic update time. Display will show the letter S (setting), On and "AUTO-☀️" icons. [Fig.9](#)



[Fig.9](#)

4.9 Winter/summer time automatic update setting is enabled by default values, if you want disable (or enable) press UP or DOWN joystick direction, display will show **OFF** and "AUTO OFF" icons.

4.10 Press **OK** button and confirm the selections. Hour numbers begin blinking and "H" letter appears, [Fig.10](#)

4.11 Press UP or DOWN Joystick direction and select the current Hour.

4.12 Press RIGHT Joystick direction, minute numbers begin blinking, [Fig.11](#)



[Fig.10](#)



[Fig.11](#)

4.13 Press UP or DOWN Joystick direction and select the current minutes.

4.14 Press **OK** button and confirm the selections. You will be out of settings.

5.0 WEEKLY/DAILY SETTINGS

Digital time switch can work with weekly or daily programming. It comes with weekly programming default values. It is possible to change to Daily programming :

5.1 Press the Joystick in the middle at least 1s, display will show icons in [Fig.5](#) and Clock icon begin blinking.

5.2 Press UP Joystick direction until appears the blinking "F" letter. [Fig.12](#)

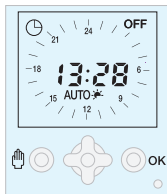
5.3 Press OK button and confirm the selection. Display will show the number 7 that means the current settings enabled (weekly), if you want change the setting press the RIGHT joystick direction. Display will show the number 1.

5.4 Press OK button and confirm the selection.

Digital time switch is now working in Daily settings, display will show hour and programs. [Fig.13](#)



[Fig.12](#)



[Fig.13](#)

6.0 PROGRAMMING RESOLUTION

Digital time switch can work with 1 or 30 minute PROGRAMMING RESOLUTION. It comes with 30 minutes default values. It is possible change the interval:

6.1 Press the Joystick in the middle at least 1s, display will show icons in Fig.5 and Clock icon begin blinking.

6.2 Press UP Joystick direction until appears the blinking "R" letter. Fig.14



Fig.14

6.3 Press OK button and confirm the selection. Display will show the Programming resolution numbers. Press RIGHT joystick direction and select 01 (1 minutes) or Press LEFT joystick direction and select 30 (30 minutes), Fig.15



Fig.15

6.4 Press RIGHT joystick direction and select 01 (1 minutes).

6.5 Press OK button and confirm the selections. You will be out of settings.

7.0 PROGRAMS SETTINGS

7A. Daily setting program:

7A.1 Press the Joystick in the middle at least 1s, Clock icon begin blinking. [Fig.5](#)

7A.2 Press DOWN joystick direction , display will show blinking "PRG" letters. Press **Ok** button to get into the programming. Display will show 00:00 hour and **OFF** Relay state. [Fig.16](#)

Note: Whether Relay icon does not blink we can watch the stored daily program by pressing right joystick direction without modify it.



[Fig.16](#)

7A.3 Press UP or DOWN Joystick direction to set the relay state. When Relay state blink, we can set or modify the program.

7A.4 Press LEFT or RIGHT Joystick direction to set the required time. If you press and keep hold a joystick direction, it will move the selection quickly.

7A.5 Press **OK** button and confirm the programming.

Note: Each day is possible set just one "1 minute program".

In this case, the 30 minutes trippers related will be highlighted and display will be show the settings.

7B Weekly setting program:

7B.1 Press the Joystick in the middle at least 1s, Clock icon begin blinking.

[Fig.5](#)

7B.2 Press DOWN joystick direction, display will show blinking "PRG" letters. Press OK button to get into the programming

Number 1 begin blinking, [fig.17](#), together with visible trippers stored programming already saved.

We can choose 2 options:

- get in in "1" icon and modify it by pressing OK button.
- press RIGHT Joystick direction and set another day program.

7B.3 EXAMPLE: selection A.

Press OK button to set the program 1, display will show 00:00 hour and Relay state currently OFF. [Fig.18](#)

Note: Whether Relay icon does not blink, we can watch the stored program by pressing right joystick direction without modify it.

7B.4 Press UP or DOWN Joystick direction to set the relay state.

When Relay state blink, we can set or modify the program.

7B.5 Press LEFT or RIGHT Joystick direction to set the required time.

If you press and keep hold a joystick direction, it will move the selection quickly



[Fig.17](#)



[Fig.18](#)

Note: Each day is possible set just one "1 minute program".

In this case, the 30 minutes trippers related will be highlighted and display will be show the settings.

7B.6 We can confirm by pressing **OK** button the 1 day programming, right after,

"1", "2" and relay state blink. **Fig.19**

We have two choices:

a. Copy the program of day 1 into day 2 (Monday into Tuesday) by pressing the **OK** button.

After that, day 2 and day 3 alternately blinking.

b. Change the Tuesday program, or next days, by pressing **RIGHT** Joystick direction.

After that day 2 is blinking, press **OK** button to get inside the program 2, **Fig.20**

7B.7 Let's assume we want to copy program 1 into program 2 by pressing the **OK** button.

Display will show 2 and 3 alternately blinking. You can go on with same commands up to number 7, **Fig 21**

When you complete the programming, if you want come back to last function press **Manual** button or after 30 sec, without any buttons pressure, you will come back at previous step.

Fig.19

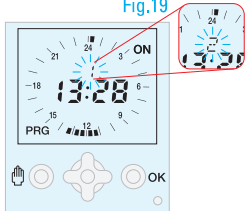
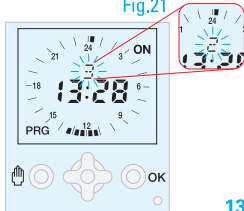


Fig.20



Fig.21



WEEKLY PROGRAMMATION EXAMPLE:

Take care to set digital clock with Programming resolution to "1 minute" as showed in chapter 6 about "R".

From Monday 1 to Friday 5: from 00:02 to 00:03 relay ON and from 11:00 to 13:28 relay ON.
Saturday and Sunday: From 05:00 to 06:15 relay ON and from 12:30 to 19:45 relay ON.

Read point 7B.1 - 7B.3 , get in in 1 Fig.18

Press DOWN Joystick direction and set relay OFF. Relay icon is blinking.

Press RIGHT Joystick direction for 00:02 minutes.

Press UP Joystick direction and set Relay state ON (tripper will be highlighted).

Press RIGHT Joystick direction until display show 00:04 hour, then press DOWN Joystick direction and set Relay state OFF.

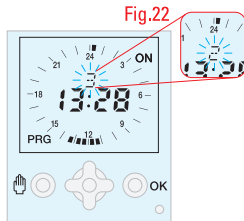
Press and keep hold RIGHT Joystick direction until display show 11:00 hours.

Press UP Joystick direction and set relay state ON.

Press and keep hold RIGHT Joystick direction until display show 13:29 hours.

Press DOWN Joystick direction and set relay OFF then press OK button and confirm the selections.

At this point, Monday has been set and 1-2 are alternately blinking, Fig.19



If you want COPY the program press the **OK** button.
Number 2 and 3 are alternately blinking. **Fig.22**
Continue as explained until Friday.
Now, 5 e 6 are alternately blinking.
Press **RIGHT** Joystick direction if you do not want copy it.
Now, only number 6 is blinking,
Press **OK** button to get inside the program.
Press **DOWN** Joystick direction and set relay **OFF**.
Press and keep hold **RIGHT** Joystick direction until display show 05:00 hours.
Press **UP** Joystick direction and set Relay state **ON** (tripper will be highlighted).
Press and keep hold **RIGHT** Joystick direction until display show 06:16 hours the
press **DOWN** Joystick direction and set Relay state **OFF**.
Press and keep hold **RIGHT** Joystick direction until display show 12:30 hours.
Press **UP** Joystick direction and set Relay state **ON** (tripper will be highlighted).
Press and keep hold **RIGHT** Joystick direction until display show 19:46 hours then
press **DOWN** Joystick direction and set Relay state **OFF**.
Press and keep hold **RIGHT** Joystick direction until display show 00:00 hours if you want delete
already programs stored after 19:45 hours.
Press **OK** button and confirm.
Now number 6 e 7 are alternately blinking.
Press **OK** button and confirm.
When you complete the programming, if you want come back to last function press **Manual** button
or after 30 sec, without any buttons pressure, you will come back at previous step.

8.0 OPERATING MODE

Digital time switch can work in Automatic, Manual or OFF operating mode (OFF).

9.0 OFF MODE OPERATING

OFF mode can be activated by pressing and keep holding at least 4 sec, OK button.

Display will be showed Relay state **OFF** and the current Hour in the center.

If you want activate digital time switch again, press and keep hold at least 4 sec, OK button.

You will come back at previous step.

10.0 MANUAL MODE OPERATING

10.1 In Manual mode is possible set **ON** or **OFF** program for an indeterminate time bypassing the main programming. If you want set it, press the **Hand** button.

Display will show **Hand** icon, current time, "AUTO" icon, current day and all activated trippers if Relay state is **ON**, Fig.23

10.2 It is possible change the relay state by pressing DOWN Joystick direction. Fig. 24

10.3 If you want come back to Automatic program press again **Hand** button.

16

Fig.23



Fig.24



11.0 AUTOMATIC MODE OPERATING

11.1 Digital time switch with activated Automatic mode, allows the already program stored turning on and turning off control, each day of week.

If you want activate it, press and keep hold the Hand button until display will show **clock icon**, [Fig.25](#)

The display will show any possible tripper already programmed.

Note: During the Automatic mode is possible view **all** the programs stored. You can see , Hours and Relay state by pressing RIGHT Joystick direction.

After 4 sec without any button pressure you will come back to previous state and display will show the current hours and relay state.



[Fig.25](#)

12.0 LOCKING SETTING

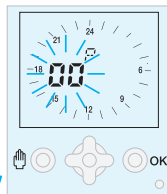
Digital time switch allows a 4 digit locking code to avoid unauthorized programs modification when works in public environment. If you want activate it:

12.1 Push and keep hold at least 4 sec. Manual button until backlight turn on and display shows "PASS", as showed in [Fig. 26](#)



[Fig.26](#)

12.2 Press OK button to confirm the selection. Display will show 2 blinking numbers on the left, [Fig.27](#)



[Fig.27](#)

12.3 Press UP or DOWN Joystick direction and set the first 2 locking code numbers.

12.4 Press RIGHT Joystick direction and another 2 number will blink on the right of display, [Fig.28](#)



[Fig.28](#)

12.5 Press UP or DOWN Joystick direction and set the last 2 locking code numbers.

12.6 Press OK button and confirm the selections. Display will show for 5 sec "C" symbol (Closed) and stored locking code, [Fig.29](#) After that, you will come back to previous step.



[Fig.29](#)

At this point display shows Current hour, current day and related program stored. Every Button or joystick pressing episode, display will show "PASS" indication. After 5 seconds without any input commands you will come back to previous state. If you want unlock the device:

12.7 After PASS appears on display press manual button, then display will showed 2 blinking numbers "00" on the. [Fig.27](#)

12.8 Press UP or DOWN Joystick direction and insert the first 2 locking code numbers.

12.9 Press RIGHT Joystick direction, display will show other 2 blinking numbers on the right, [Fig.28](#)

12.10 Press UP or DOWN Joystick direction and insert the last 2 locking code numbers.

12.11 Press OK button and confirm the device unlock. at this point display shows "O" letter (open). Locking code has been deleted.

Note: After 3 locking code insertion failure you will be automatic get outside of settings. If you lost the password will be required to make a Total Reset and delete all the saved settings. Look at Reset chapter for further details.

13.0 LANGUAGE SETTING

Language default digital clock value is italian. To set English language:

13.1 Press joystick in the middle at least 1 sec until the clock icon blink. Fig.5

13.2 Press the joystick upwards until the L symbol blink, Fig.30



Fig.30

13.3 Press OK button to confirm. "it" icon will appear, means Italy. Fig.31

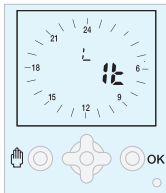


Fig.31

13.4 Move joystick to the left, "En" icon will appear, means English. Fig.32



Fig.32

13.5 Press OK button and confirm English. Fig.8, so the display will be like into the Fig.33

Note: the number "1" at the center indicate the day of the week (1 Monday, 2 Tuesday, and so on...)



Fig.33

14.0 RESET

Malfunctions, change language, technical operations or other technical reasons can required to reset the device. This digital time switch has 3 different kind of Reset:

1. Soft Reset: In this reset, the main processor can be updated and device can be unlocked in case of stop or block of normal working. To perform a soft reset push the button in the hole placed in frontal part of device with a pencil or an electrically isolated object, [fig.34](#) After a while, device will be soft reset.

Soft reset will change this values on main settings:

"AUTO" will be ON; R programming resolution will be 30 minutes if user had chosen 1 minute.



Fig.34

2. Total Reset: delete all the settings and programs stored and install the default values.

SEE CHAPTER 3.0

Press and keep hold Reset and Manual Button then release reset button And continue to keep holding Manual button. If you keep hold for 5 sec. Manual button display will show "r St".

It means device has been reset.

3. Absence network Power supply. There are two possible situation:

a) Within 20 days without network power supply device will keep in memory all the settings and programs stored.

b) Over 20 days without network power supply device will keep in memory: Language, Automatic mode or Manual mode with stored programs.

15.0 TECHNICAL SPECIFICATIONS

- Digital time switch with configurable programs.
- LCD back-illuminated Blue graphic display.
- Super-capacitor backup power supply. No substitution.
- 20 days autonomy without power supply. In case of network Voltage absence, display will turning off but will keep in memory for 20 days all the programs and settings.
- Operating temperature : -20 to + 50 °C.
- Protection degree: IP20
- Minimum hour resolution: 1min
- Programming resolution: 1 or 30 minutes
- A Class software
- SPDT Relay with change over monostable contact NA / COM and NC , 16A 250 Vac
- Electrical insulator level II
- Zero-crossing features.
- 2 independent buttons and 5th generation joystick



16.0 SAFETY WARNINGS

During product installation and operation it is necessary to observe the following instructions:

- Do not power the product if any part of it is damaged.
- Before accessing the connection terminals, verify that the electrical cable are not active.
- The device must be installed and activated in compliance with current electric system standards.
- The device must be installed by a qualified person, in strict compliance with the connections diagrams.
- The electrical system buildings in which the instruments is to be installed should have an over-current switch and a protection device.
- Do not overload the device.
- After installation, inaccessibility to the connection terminals without appropriate tools must be guaranteed.
- In case of malfunction do not perform repairs and contact the technical support.

*Tecno Switch SRL reserves the right to make changes at any time without notice.
Tecno Switch SRL declines all responsibility for any damages to things or
persons consequent on improper use of devices.*

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rev 15.03.17