PROGRAMMABLE CONTROL TIMER
PCZ-529.3

OPERATING MODES AND FUNCTIONS

ON-OFF COMMAND - program entry for enabling or disabling the receiver.
500 MEMORY CELLS - memory for program entries that allows to program 500 pairs of ON-OFF COMMANDS.
AUTOMATIC MODE - operation by ON-OFF COMMANDS programmed by the user in the timer memory (highlighted "on icon on display)
MANUAL MODE - (ON) permanently open closed contact (position 1-5) or (OFF) permanently open contact (position 1-6) when the AUTOMATIC MODE is off (no "on icon on display)
CYCLE - adjustable, yearly cycle of the receiver switching in accordance with the programmed ON-OFF COMMANDS.
AUTOMATIC TIME CHANGE - change from winter time to summer time with options to change automatically or not. User can set the time zone so that the switching time is consistent with the local time.
DATE PREVIEW - the ability to preview the set date [OK].
CURRENT PROGRAM PREVIEW - pressing the +/- keys in the date preview mode displays information about the number and details of the current program.
NFC WIRELESS COMMUNICATION - wirelessly read and write timer configuration from an Android phone equipped with the NFC module.
PCZ Konfigurator APP - free application for Android mobile phones and tablets equipped with the NFC module for wireless communication.

FUNCTION KEYS DESCRIPTION

MENU - enter the program menu
- return to the previous position (back).
OK: - move to the next setting
- accept setting
- preview of the date and current program
- [Plus]: change the setting by one position up for the selected programming option (holding down the button continuously changes the setting by one position up in a loop)
- [Minus]: change the setting by one position down for the selected programming option (holding down the button continuously changes the setting by one position down in a loop)
- in MANUAL MODE: permanent ON and OFF contact switching
- in AUTO MODE: permanent ON and OFF contact switching

PROGRAMMING

1. START
1.1 Connect the power supply.
1.2 The timer will start at the root level and the display will show selected hour.

2. DATE
Press MENU. The timer will enter program menu. Using the +/- buttons select the date setting mode [date].

DON'T MISS: Select individual timer program with internal configuration menu or by using the "PCZKonfigurator" app for mobile devices.

In the absence of any program entries, timer will automatically run in manual mode. If the previous entries are present, timer will execute the program. To erase all previous settings, see section 8.B.

3. TIME
Press MENU. The timer will enter program menu. Using the +/- buttons select the mode for time setting [hour].

DON'T MISS: Timer will allow to choose [ON] or [OFF] option [off].

4. ON-OFF COMMAND - setting the parameters
Press MENU. The timer will enter program menu. Using the +/- buttons select the mode for the date setting [set].

Press OK to accept date setting. The timer will automatically exit from the date setting mode and go to the program menu.

DON'T MISS: The date setting is tantamount to time determination: winter or summer.

In Poland, the time change from winter to summer is done automatically at night, on the last Sunday of March at 0:00 AM (by adding one hour to the current time). Time change from summer to winter is done automatically at night, on the last Sunday of October at 3:00 AM (by subtracting one hour from the current time).

DON'T MISS: NOTE! The automatic time change can be turned off [see section 8.1].

5. EDITION OF ON/OFF COMMANDS PARAMETERS
Press MENU. The timer will enter program menu. Using the +/- keys select the parameter edit mode [edit].

Press OK to accept. The timer will enter the memory cell number selecting mode. The display will automatically show the number of the first empty memory cell.

Press OK to accept (or select another number using the +/- keys). Clock will enter the single ON-OFF COMMANDS parameter setting mode.

A. Date - dA
Timer will show settings for the next parameters: month and day. Set the values using +/- keys, move to the next parameter with the OK button. Go back to the previous item by pressing MENU.

DON'T MISS: Time of contact closing established by a pair of ON-OFF commands can be longer than 24 hours, which means that [on] command can be set at any time and any day of the week (e.g. Tuesday, 1:45 PM) and [off] command to any hour of any other day of the week (e.g. Thursday, 5:05 PM).

B. Hours and minutes - ti
Timer will show setting for the next parameters: hour and minutes. Set the values using +/- keys, move to the next parameter with the OK button. Go back to the previous item by pressing MENU.

DON'T MISS: Set ON or OFF using +/- keys; confirm with OK. Timer will automatically enter the next ON-OFF COMMAND parameter input mode.

DON'T MISS: PLEASE NOTE! The registered ON-OFF commands do not constitute solid pairs of commands for a contact opening and closing. They are treated as individual commands and executed in accordance with the specified time chronology.

Cases of overlapping contact closing times from two pairs of ON-OFF commands are illustrated in the following diagrams:

Set ON or OFF using +/- keys; confirm with OK. Timer will automatically enter the next ON-OFF COMMAND parameter input mode.

DON'T MISS: PLEASE NOTE! The registered ON-OFF commands do not constitute solid pairs of commands for a contact opening and closing. They are treated as individual commands and executed in accordance with the specified time chronology.

Cases of overlapping contact closing times from two pairs of ON-OFF commands are illustrated in the following diagrams:

Set ON or OFF using +/- keys; confirm with OK. Timer will automatically enter the next ON-OFF COMMAND parameter input mode.

DON'T MISS: PLEASE NOTE! The registered ON-OFF commands do not constitute solid pairs of commands for a contact opening and closing. They are treated as individual commands and executed in accordance with the specified time chronology.

Cases of overlapping contact closing times from two pairs of ON-OFF commands are illustrated in the following diagrams:

Set ON or OFF using +/- keys; confirm with OK. Timer will automatically enter the next ON-OFF COMMAND parameter input mode.

DON'T MISS: PLEASE NOTE! The registered ON-OFF commands do not constitute solid pairs of commands for a contact opening and closing. They are treated as individual commands and executed in accordance with the specified time chronology.

Cases of overlapping contact closing times from two pairs of ON-OFF commands are illustrated in the following diagrams:
6. DELETION – removing entries
Press MENU. Timer will enter program menu. Using the +/- keys select ON-OFF COMMANDS reset mode “del”.

Press OK to accept. The timer will enter the memory cell number selecting mode. Select the cell to be deleted and accept by pressing OK. The timer will be waiting for confirmation. This is indicated by alternating flashing of the number of the selected cell and its set parameters.

Confirm by pressing OK. The cell will be deleted. The timer will display the next programmed cell number. Pressing MENU will take you to the root level.

PLEASE NOTE!
To erase all previous ON-OFF COMMANDS settings see section 8.6.

7. OPERATION MODE
Press MENU. Timer will enter program menu. Using the +/- keys select “mode”.

Accept by pressing OK. The timer will enter work mode menu (auto – hand).
With +/- keys select desired operation mode.

* MANUAL – “hand”
* AUTOMATIC – “auto”

Accept by pressing OK. The timer will automatically exit the operation mode selection and go to the program menu. Pressing MENU one more time will take the timer back to the root menu.

PLEASE NOTE!
To change the contact position in the MANUAL OPERATION mode use the +/- keys at the root level. In the absence of any program entries timer will automatically run in MANUAL MODE (there is no option to set AUTOMATIC OPERATION MODE).

8. SYSTEM SETTINGS
Press MENU. Timer will enter program menu. Using the +/- keys select system settings “syst”.

Confirm by pressing OK. Timer will enter System Settings submenu (dist – utc – batt – cal – lcd – clear – info). Select the parameter with the +/- keys and confirm with OK. Pressing MENU will take you to the upper level.

8.1 Automatic time change – dist

DST – Daylight Saving Time – international name of summer time. Confirm by pressing OK. Timer will enter the menu with the option to disable automatic time change (auto-off). With +/- keys select desired mode:
* with AUTOMATIC TIME CHANGE – “auto”
* without AUTOMATIC TIME CHANGE – “off”

8.2 Time zone – utc

Confirm by pressing OK. Timer will display current parameter for time zone (12/12). Pressing +/- keys set time zone for the clock. Confirm by pressing OK. Time zone for Poland +1.

8.3 Battery charge indicator – batt

Confirm by pressing OK. The clock will display information about battery charge level.

HIGH – fully charged, new battery.
GOOD – in good condition, provides long-term operation.
LOW – low battery level, recommended replacement. EMPTY – discharged, it must be replaced immediately.

8.4 System clock time adjustment - cal

Time adjustment is the number of seconds by which the system clock is adjusted per month. Setting range: +/- 300 seconds. For example: If the clock is fast 4 seconds per month, set the parameter value -4.

8.5 Display contrast - lcd

Setting the display contrast. Range: -3 (lowest) ... +3 (highest).

Confirm by pressing OK. The timer will display current parameter of time adjustment. Press +/- keys to set desired number of seconds. Confirm by pressing OK.

8.6 Resetting the commands, parameter settings and errors - clear

Confirm by pressing OK. Timer will enter the submenu (prog - sys - error). Use the +/- keys to select reset option:
- “prog” – deletion of ON/OFF entries
- “sys” – deletion of system settings

Confirm by pressing OK.

A. prog

Confirm selected option by pressing OK. The timer will enter standby mode awaiting for deletion confirmation. This is indicated by alternating flashing of “prog” and “clear” on display.

Confirm by pressing OK. Timer will start deleting entries. The display will count off consecutive numbers of deleted entries (from 1 to 500). Upon completion the display will show “prog”.

B. sys

Confirm selected option by pressing OK. Timer will enter standby mode awaiting for deletion confirmation. This is indicated by alternating flashing of “sys” and “clear” on display.

Confirm by pressing OK. The timer will start deleting entries. Upon completion the display will show “sys”.

C. error

If the timer system detects an error, the display will show “error” message at the root level. At the same time in the “clear” section the extra “error” item will appear. Error reset is possible only through the menu (menu -> syst -> clear -> error).

Confirm the “error” option by pressing OK. Timer will enter standby mode awaiting for deletion confirmation. This is indicated by alternating flashing of “error” and “clear” on display.

Confirm by pressing OK. Timer will reset the error. The display will show “error”. The clock will return to standard operation mode.

8.7 System information – info

Confirm by pressing OK. Timer will enter the information menu. Browse the information by pressing +/- keys:
* clock type
* software version

BATTERY REPLACEMENT
User can single-handedly replace the battery. Detailed instructions with pictures and videos can be found on the website www.fif.com.pl on the subpage of the timer. Battery type: 2032 (lithium).

SPECIFICATIONS
input power 24-264V AC/DC
contact load up time of the clock (for T=20°C) current load <16A
battery type up time of the display operation battery type no information
accuracy of the clock (for T=20°C) 1s ±1/24h
power consumption precision of program time setting 1min.
operating temperature program memory cell 500
lighting distance battery charge indicator – batt 0.4mm
positions - “standard open” position 2 modules (35mm)
mounting - “standard closed” position on TH-35 rail

CONNECTION SCHEME

IN/OUT DESCRIPTION

1. Power supply
2. ON/OFF control
3. Alarm
4. Transmission description
5. Message
6. Sensor
7. Receiver
8. Battery

SPECIFICATIONS

AC/DC 1 2 3 4 5 6 7 8
3-4 timer power supply
1 COM contact input
5 NO contact output
2 “standard open” position
3 6 NC contact output
“standard closed” position

IN/OUT DESCRIPTION

AC/DC

1 2 3 4 5 6
1 1
3 4
5 6
7 8
PC +5V
Soft50
12:45 AM
5 7 6 8
System error indicated by the word "error" on the root level of the display. Reset of the error is possible only through the menu.

Error codes and their description:
Error 01 - error in reading external memory. Usually caused by electromagnetic interference affecting the NFC module. It is recommended to separate the timer from the source of interference, for example, shielding or moving the devices away from each other.
Error 02 - internal temperature sensor error. Please contact our technical department.
Error 03 - simultaneous error 01 and 02.

Low batt - too low level of the battery that supports the operation of the timer after a power failure. In this case it is recommended to replace the battery. PLEASE NOTE! Low battery does not preclude normal operation of the timer. However, in case of a timer power failure it may lead to loss of date and time settings. PLEASE NOTE: All settings except time and date are stored in non-volatile memory and are not lost when the power is off or the battery level is too low. User can single-handedly replace the batteries. Detailed instructions with pictures and videos can be found on the website www.fif.com.pl on the subpage of the timer.

Battery type: 2032 (lithium).

Low batt indication on the display.
Adding and editing programs

The function window allows to edit program as well as to load and save configuration to a PCZ controller. It appears automatically when we bring the phone closer to the controller, or when we create a new configuration. In the upper part of the screen the application displays a frame with the following information:

- **Dev** – supported controller type
- **ID** – unique identifier of connected controller (appears only when the application is connected with the controller. In the Offline mode that field remains empty).
- Icon of a pencil on the right-hand side allows you to enter your own name for the controller.
- Operating mode – displays the current operating mode for the controller (manual or automatic). Applies only in Online Out mode – Output relay status (enabled or disabled). Applies only in Online mode.

**Keys:**
1) Read the timer configuration.
2) Save the current configuration to the timer.
3) Load configuration from file.
4) Save the current configuration to file.
5) Restore configuration from backup copies.
6) Edit the current configuration.

**List**
Main part of the screen is taken by the list of PCZ programs. Programs are displayed sorted by the time they are written in the controller memory.

- Each program is symbolized by:
  - action icon - the green "v" means that the specific program will activate relay. Red "x" means deactivation of relay.
  - Date and time – show days of programs activation and their start time.
  - Program number - program position in the controller memory. Bold font marking represents a program that is (or should be) executed. Pressing the trash bin icon next to the program entry deletes program.

- The three icons at the bottom of the screen allow you to:
  - Save to file - saves the current configuration to a file.
  - Save to PCZ - saves the configuration to a timer.
  - Back - returns to the function window.

**Filter**
Filter tab performs a similar function to List. In this case, at the top of the screen appears addition frame for choosing the day and time interval for which the application displays a list of programs active during that time. Programs are displayed in chronological order, sorted by the time of their actual execution.

Adding and editing programs

Add or edit program displays a window with following options:

- **Operation** – selects whether the program will turn the relay on or off.
- **Day** – selects the days of program execution. You can select a single day, Monday - Friday, Saturday - Sunday, all week.
- **Time** – selects the time of program execution.