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PCZ-524.4

Astronomical
programmable,
control timer, 1-channel



Do not dispose of this device in the trash along with other waste!

According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



Purpose

The PCZ-524.4 astronomical control timer is used to switch lighting or other electrical appliances on and off according to the times of sunset and sunrise.



Features

- » Based on information about the current date and the geographical coordinates of its location, the astronomical timer automatically determines the daily programmed switch-on and switch-off points for the lighting. The exact switch-on and switch-off times are determined by calculating the position of the sun relative to the horizon.

- » Possibility to independently set the on/off moment based on:
 - astronomical sunset and sunrise;
 - dusk and dawn;
 - offset to sunrise and sunset;
- » The controller operates in the same way regardless of the day of the week;
- » Automatic switching between summer and winter time;
- » Replaceable battery to maintain timer settings in the event of power failure;
- » NFC wireless communication providing the ability to read and save the timer configuration wirelessly using a smartphone and the free PCZ Configurator app. **Writing/reading data to the timer via NFC connection does not require the timer to be powered.**
- » The PCZ Konfigurator app is designed for smartphones equipped with an NFC wireless communication module and running Android or iOS. The application enables:
 - prepare the configuration offline, without the need to access or connect to the timer;
 - read and write configurations to the timer (requires direct proximity of the smartphone to the front of the timer);
 - quick programming of multiple timers using a single set of settings;
 - reading and writing configurations to a file;
 - sharing the configuration via e-mail, network drives, instant messaging, etc.
 - unambiguous identification of the connected timer and the possibility to give the devices their own names;

- automatic backup of read configurations, which, combined with the unique identifier of each timer, allows quick restoration of previous settings;
 - setting of time and data based on the smartphone timer (requires power connection at the time of programming);
- » Display contrast correction capability for clear LCD readouts for different viewing angles.

Functioning

The PCZ-524.4 timer controller can operate in one of two modes:

» **AUTOMATIC MODE**

Automatic operation according to the programmed switch-on and switch-off points of the contact.

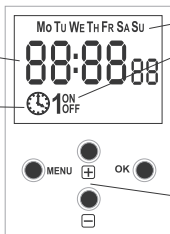
» **MANUAL MODE**

[**ON**] permanent contact switching on (pos. 1-5) or [**OFF**] permanent contact disconnection (pos. 1-6) when **AUTOMATIC OPERATION** mode is switched off.

Display description

Date and time/
program entries

Mode indicator/
automatic mode



Days of the week

Indication
of the contact
position

Buttons

Manual



The full manual for the PCZ-524.4 timer can be downloaded from www.fif.com.pl from the product sub-page or via the QR code below:



Mobile app

The control application is available free of charge in the App Store and Google Play:

Application available on:



<https://apps.apple.com/pl/app/f-f-pcz-konfigurator/id6446887053?l=pl>

Application available on:



<https://play.google.com/store/apps/details?id=pl.com.fif.clockprogramer>



The NFC connection uses very short-range communication, which means that you need to directly touch the phone to the front of the programmed controller.

Working mode indication

Display	Mode	Relay status
 1 ON OFF	automatic	ON
 1 ON OFF	automatic	OFF
 1 ON OFF	manual	ON
 1 ON OFF	manual	OFF

Legend:

	ON
	OFF

Control buttons

Button	Description
MENU	Pressing the button enters the controller's configuration mode. In parameter edit mode, pressing Menu will drop the parameter being edited (without storing the changes made) and return to the parent menu level.
OK	In edit mode, pressing the button moves to edit the next setting item. If the last item is being edited, pressing the OK button will save the new parameter value, exit the edit mode and move to the higher menu level. In the time display mode, pressing the OK button will display a quick access menu allowing the display of information about the current date and the times when the relay is switched on and off.

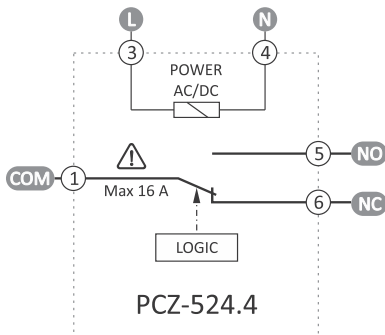
Control buttons cont.

Button	Description
+ (Up)	In edit mode, pressing the button increases the value of the edited parameter by 1. If the button is pressed for a long time, the value of the parameter will cyclically increase by 1. In manual operation mode, pressing the button will permanently switch the contact (ON -> OFF or OFF->ON).
- (Down)	In edit mode, pressing the button decreases the value of the edited parameter by 1. If the button is pressed for a long time, the value of the parameter will decrease cyclically by 1. In manual operation mode, pressing the button will permanently switch the contact (ON -> OFF or OFF->ON).

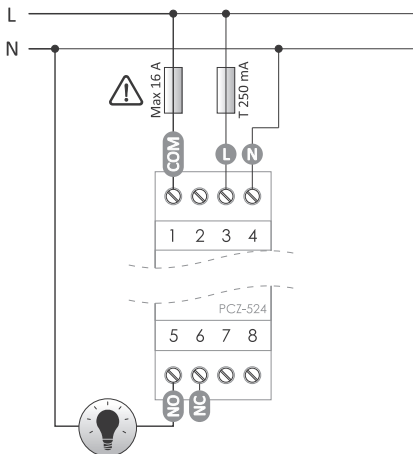
Mounting

1. Turn off the power.
2. Install the clock on the rail in the distribution box.
3. Connect the power cables according to the diagram.
4. Connect receivers according to the diagram.
5. Set the correct date and time.
6. Set the software configuration of the timer.

Controller diagram



Wiring diagram



- 1 relay – COM common contact
- 3 L power supply
- 4 N power supply
- 5 relay – NO contact (normally open)
- 6 relay – NC contact (normally closed)

Technical data

power supply	24÷264 V AC/DC
maximum load current (AC-1)	16 A
contact	separated 1×NO/NC
backup time clock operation	6 years*
battery type	2032 (lithium)
backup time display operation	none
accuracy of the clock	1 s
error time	±1 s/ 24 h
power consumption	1.5 W
terminal	2.5 mm ² screw terminals (cord) 4.0 mm ² screw terminals (wire)
tightening torque	0.5 Nm
working temperature	-20÷50°C
dimensions	2 modules (35 mm)
mounting	on TH-35 rail
ingress protection	IP20

* Battery life depends on operating conditions and how long the timer is powered by battery only. Low ambient temperature greatly reduces the life of the battery.

Warranty

The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us.

CE declaration

F&F Filipowski L.P. declares that the device is in conformity with the essential requirements of Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.

The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found at www.fif.com.pl on the product page.

