F&F Filipowski sp. j.
Konstantynowska 79/81, 95-200 Pabianice, POLAND
phone/fax (+48 42) 215 23 83 / (+48 42) 227 09 71
www.fif.com.pl; e-mail: biuro@fif.com.pl

PCS-534

Pulse-time,
sequentual controller,
4-channels

5 902431 671017

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 PCS-534 controller is designed for automation systems that require simultaneous control of a group of receivers in a fixed ON/OFF combination forced by consecutive pulses. The pulses are fed either manually or automatically on the control input or according to the time intervals between subsequent switches.

Functioning

Sequential relay has 4 separate OUT1÷OUT4 outputs and 4 independent IN1÷IN4 signal inputs. The closed/open contacts are set sequentially according to the program. Switching the contacts to the next state occurs after another pulse on the control input or automatically, according to the time schedule.

The controller allows to program up to 125 different sequences.

Operating modes

Pulse – programmed contact sequences are executed after consecutive pulses from control input IN1. The first pulse switches from sequence 0 to sequence 1 and the next ones after the subsequent pulses. When the last sequence is executed, the relay executes the program from sequence 0 or 1 for **Autostart** feature.

Time – contact switching is performed automatically according to the time schedule. Pulse on the IN1 input switches from sequence 0 to sequence 1 and continues to switch automatically after the set time. After the last sequence, the relay returns to sequence 0 and waits for the control pulse at input IN1 or continues executing program from sequence 1 (**Autostart** option).

Sequence 0 – starting status of contacts (0000) after turning on the power (fixed option, not changed by the user). Autostart executes the program from sequence 1.

Additional option:

Autostart – self-start operating feature. In pulse mode it automatically switches to sequence 1 when the power is turned on. In time mode it automatically starts operation according to the time schedule.

Input functions

IN1 – "Start":

» pulse: pulse switches contacts to another state;

» time: pulse triggers a time schedule.

IN2 – "Pause":
» pulse: blocks switching to another sequence despite consecutive pulses on IN1;
» time: stop countdown time to switch to next state.
IN3 – "Continuation":
» pulse: restores the response to input pulses IN1;
» time: continue the countdown time in the stopped sequence.
IN4 – "Reset":
» pulse: immediately stop the program being executed and return to sequence 0 and wait for restart. The **Autostart** option executes the program from sequence 1.
» time: immediately stop the program being executed and return to sequence 0 and wait for the start signal on IN1. The **Autostart** option executes the program from sequence 1.

Program

The program for Windows is available on the device manufacturer's website.

Connection with the controller via miniUSB-USB cable.
Run the file "PCS-534 Config.exe".
The program window will open.
The program will connect to the relay automatically.
Settings:
Language – language selection: Polish, English, Russian.
Connect/Disconnect – connection and disconnection of communication with the controller.
Help – information about the program and the activation of the console (service window with a preview of program status).

Sequence

configuration of the OUT contacts position and activation times of the given sequence. 1 - ON; 0 - OFF. Keep spaces between consecutive characters in the same way as in the 000 sequence. Enter time in hours-minutes-seconds format [hh: mm: ss]. Use a ":" (colon) as the separator. Accept each entered sequence by pressing enter (move to the next line). In Pulse mode, the entered times are ignored.

Status

information about OUT outputs position, executed sequence number and operating status: READY – sequence 000, waiting for start signal (IN1); OPERATION – execution of subsequent sequences in Pulse or Time mode; PAUSE – suspend execution of subsequent sequences after PAUSE signal (IN2); RESET – stop the execution of the sequence after the RESET signal (IN4).

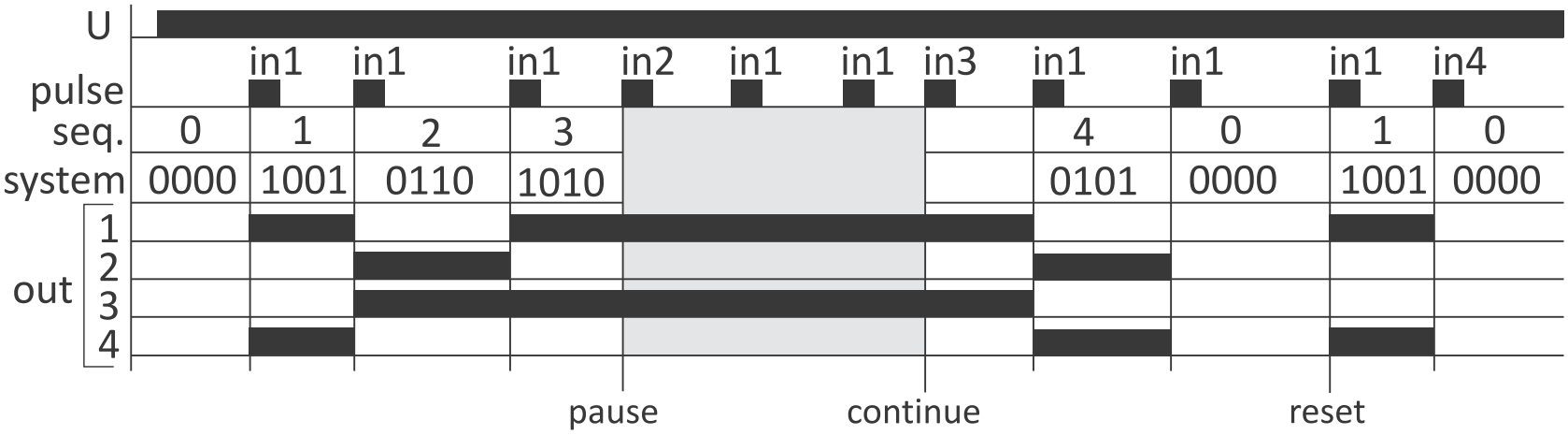
Operation mode

select **Pulse** or **Time mode** and additional **Autostart** operation.

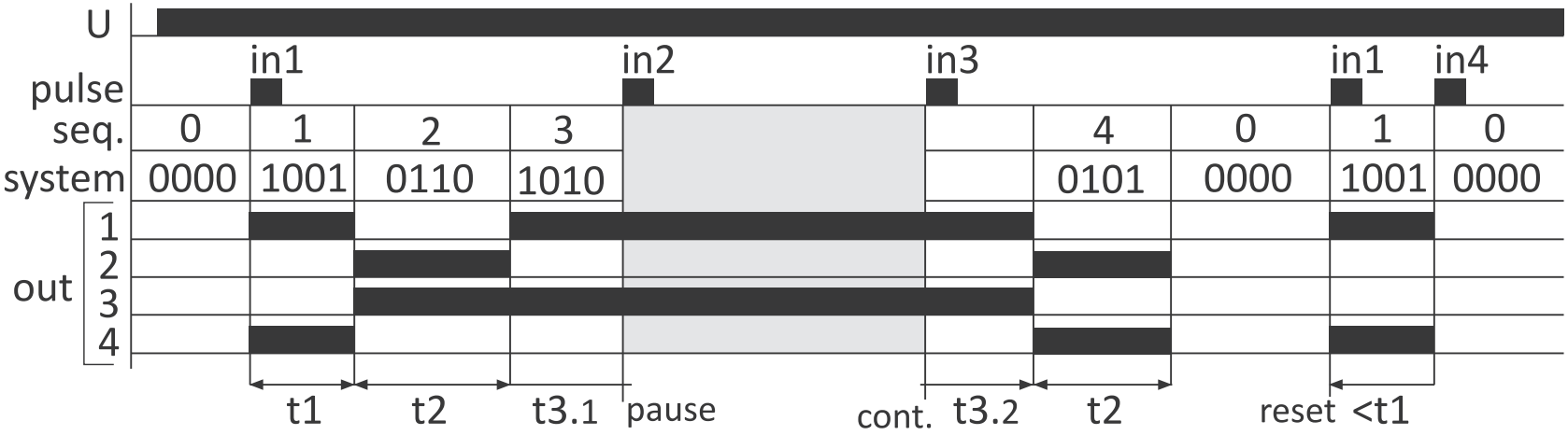
Commands

Read PCS: read configuration from controller;
Save PCS: save the new configuration to the controller;
Import to file: save configuration to external archive txt file;
Export from file: download configuration from archive file.

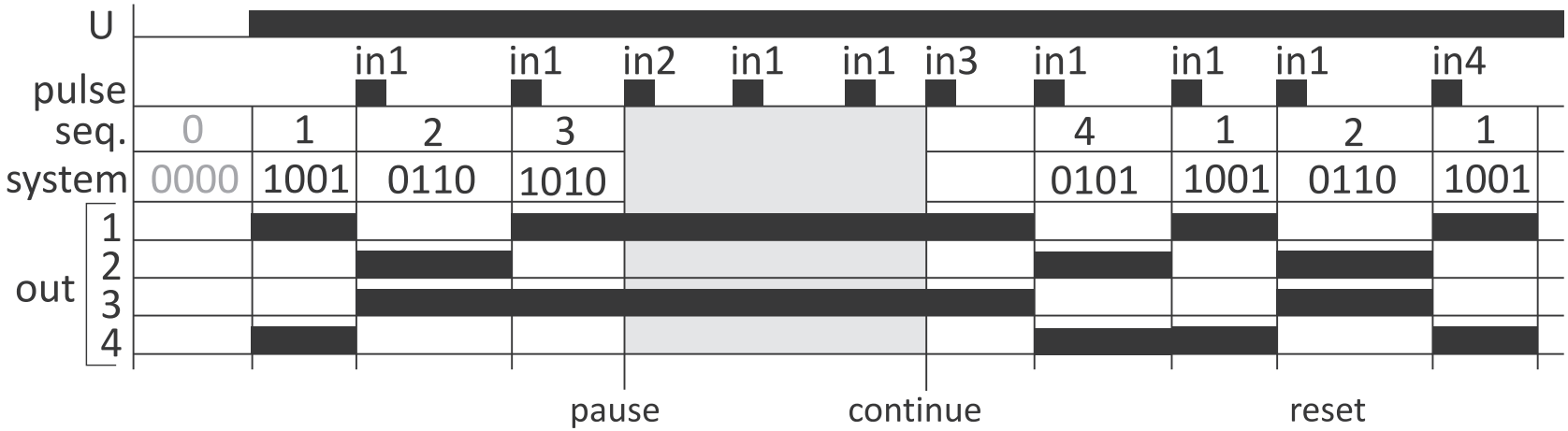
pulse [4 sequence]



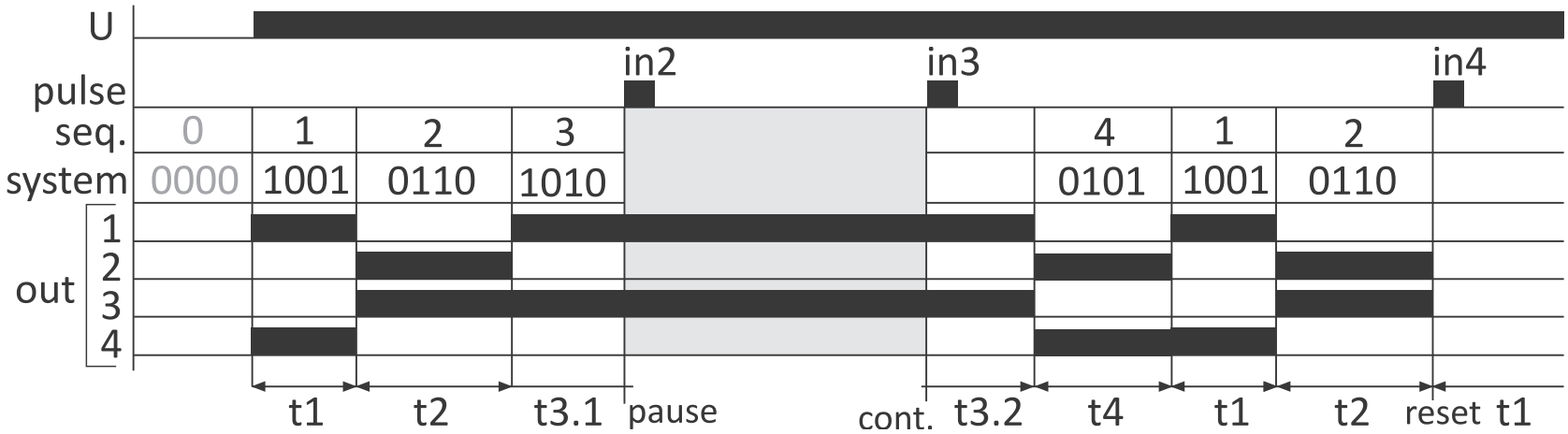
time [4 sequence]



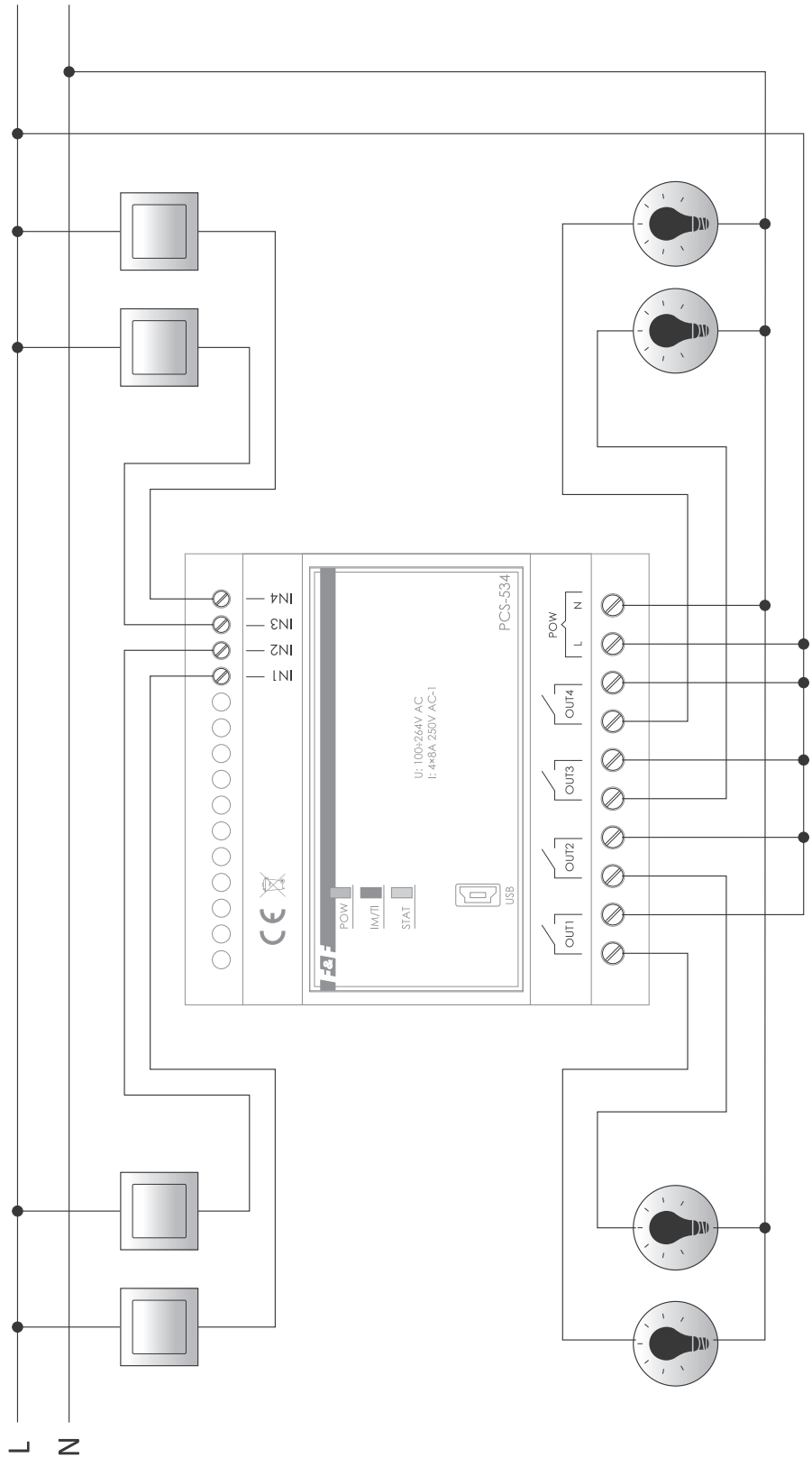
pulse reset [4 sequence]



time reset [4 sequence]



Wiring diagram



LED signallisation

POW (green)	power supply	
IM/TI (yellow)	operating mode:	
	– shines constantly:	pulse mode (taking the impulse signaled by a blink)
	– flashes:	time mode
STAT (red)	work status:	
	– doesn't shines:	READY (0 sequence)
	– shines:	WORK
	– flashes:	PAUSE

Mounting

1. Turn off the main power.
2. Mount the controller on the rail in the distribution box.
3. Connect the power to the POW terminals as indicated: L – phase; N – neutral wire.
4. Connect the control signals to the IN inputs.
5. Power supply of the controlled receivers connect in series with the appropriate OUT outputs.
6. Install the protective cover of the distribution box and then switch on the power.
7. Use a miniUSB-USB cable to connect the controller to your laptop.
8. Start the PCZ-534 Config program and properly configure the controller.

Technical data

power supply	160÷260 V AC/DC
load current of outputs	4×16 A
contact	4×NO
voltage tolerance of inputs	160÷260 V AC/DC
time settings t_1, t_2, t_3, t_4	1 s÷99 h 59 min. 59 s
time setting accuracy	1 s
number of cycle repeats	1÷999999 or infinitely in the loop
maximum number of sequences	125
communication port	miniUSB
power consumption	1.3 W
terminal	2.5 mm² screw terminals
tightening torque	0.4 Nm
working temperature	-20÷50°C
dimensions	5 modules (87.5 mm)
mounting	on TH-35 rail
ingress protection	IP20

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 sp. j. declares that the device is in conformity with the essential requirements of The Low Voltage Directive (LVD) 2014/35/EU and the Electromagnetic Compatibility (EMC) Directive 2014/30/UE.

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.


«F&F»