



***OPERATING AND MAINTENANCE MANUAL
FOR CONTROLLER BLOCK TYPE
(CHECK-OUT COUNTER)***

G-508-P00

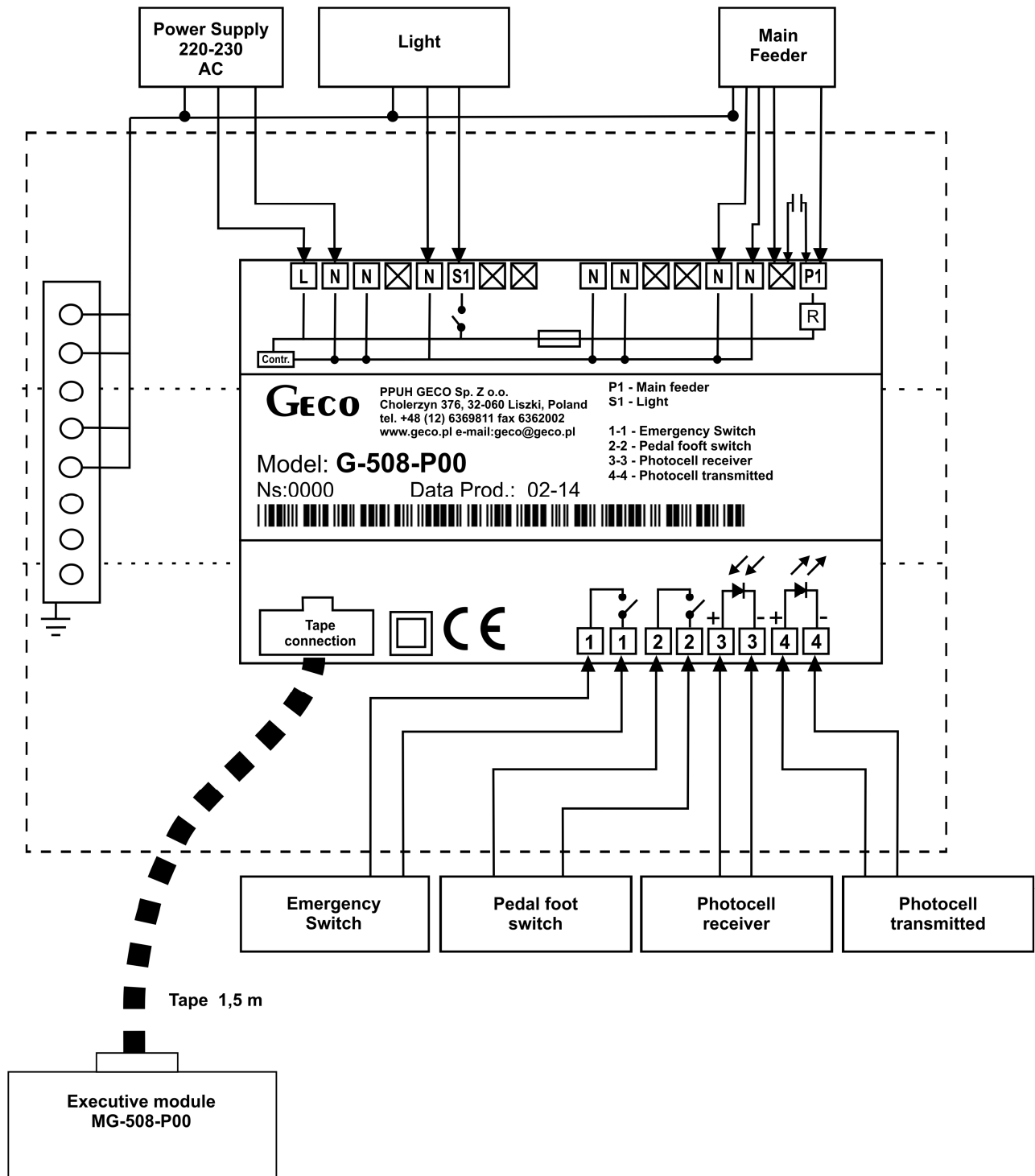
Firmware Version 02a

Please read and understand the manual very carefully before connecting and starting any of our devices. In case of any doubts, please contact us during working hours (8 am to 4 pm).
Note!!! The date of the last revision can be found at the bottom of every of the following pages, please always use the latest available manual that can be received free of charge upon order.

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1. Connections Diagram



Zasilanie 220-230 VAC	220-230 VAC power
Światło	Light
Podajnik główny	Main feeder
Wyłącznik awaryjny	Emergency stop
Pedał nożny	Pedal foot switch
Odbiornik fotokomórki	Photocell receiver
Nadajnik fotokomórki	Photocell transmitted
Moduł klawiatury G-508-P00	G-508-P00 Executive module
Tasiemka 1,5 m	Flat cable 1.5m
Złącze tasiemki	Flat cable connector
P1 – podajnik główny	P1 – Main Feeder
S1 – light	S1 – Light
1-1 – wył. awaryjny	1-1 Emergency Switch
2-2 pedał nożny	2-2 Pedal foot switch
3-3 odb. fotokom.	3-3 Photocell receiver
4-4 nad. fotokom.	4-4 Photocell transmitted
Ns	S/N
Data Prod.	Prod. Date
STER.	CONTR.

2. General Features

The self-contained Controller, hereinafter called the **G-508**, is a state-of-art device, comfortable and easy to use. The Controller is a microprocessor-based device manufactured using the Surface Mount Technology (SMT).

Depending on the installation options, the two-part design allows installation of the control panel which operates at safe voltage in any available place, without the need to guide the power cables far from the controlled devices.

The G-508-P00 Controller is fitted with:

- photocell input (transmitter, receiver)
- remote control foot pedal input
- emergency switch input.

The G-508-P00 Controller is also equipped with outputs allowing direct connection to devices operating at 230V AC, such as:

- main feeder motor
- light.

3. Technical Specifications

Operating voltage	230VAC +10% -15%
Temperature	+5°C to +40°C
Humidity	20% to 80% RH
Ingress protection	IP65 at the front of the control panel

NOTE!!!

Each housing has a label containing the following information:

- serial number
- description of outputs and their loads
- SBR type.

The total current load of all connected devices must not exceed 10A !!!

4. Electrical System and Rules of Connection

- The electrical system (regardless of its type) should be terminated with a connection outlet fitted with a protective terminal. **Use of an outlet without a protective terminal causes electrical shock hazard!!!**
- The installed clamp terminals are rated for continuous load of 16A !!! The fine thread and special metal clamps of the terminals prevent cutting the wires, therefore even slight tightening of screws provides sufficient contact – do not use excessive force as it may cause breaking of the thread.
- When the device is connected to power, its leads may be powered regardless of the device On/Off status, therefore ***before performing ANY MAINTENANCE ACTIVITIES, please make sure the device is fully disconnected from power!!!***

5. Operating the Controller G-508-P00

5.1. Switching On the device and calibration of the touch keyboard

After connecting the controller to the power supply, the controller for about 4 seconds calibrates the touch keyboard. During calibration you can not bring your hands to the sensors, because it would cause incorrect calibration, and consequently malfunction of the keyboard.



After calibration process, the device performs a 3-second start sequence, during which it displays various information, including the firmware version. When the start sequence is complete, the controller goes into the STANDBY mode. If the keyboard does not work correctly, you should repeat the calibration process. To do this, disconnect controllers and then connect the controller to a power supply and calibrate the keyboard touch one more time, remembering not to put your hands to the sensors.

5.2. STANDBY mode


In the STANDBY mode the display shows the “- -” symbol. The main feeder motor and light are off.


Press  to switch the Controller to the Manual control mode.

5.3. Manual Control

The Manual control mode is indicated by activating the  button indicator light. The main feeder motor operates only when the  button of the remote control pedal is pressed. The photocell system is disabled.

The LED display shows the feeder symbol indicating the current status of the main feeder (standstill or movement).

Press the  button to switch the Controller to the Auto mode.

Press the  button to switch the Controller to the STANDBY mode.

5.4. Auto Mode

This mode is indicated by activating the  button upper indicator light.




After entering the Auto mode the main feeder is activated for the time set in the “c0” setting.

The feeder can stop earlier (than the “c0” time) if the photocell light circuit is interrupted (photocell light blocked). If during entering the Auto mode the photocell light is blocked, the main feeder will not start until the photocell obstruction is removed.

When the main feeder is stopped, the photocell signal (photocell obstruction removed) causes it to start for the time set in “c0” or until the photocell light is blocked again.

During the main feeder movement, every photocell signal (photocell light blocked) causes it to stop.

If the setting “c5” = 0, the photocell circuit is disabled.

When the remote control pedal is pressed or the  button is pressed, the main feeder starts and continues operation until the “c0” time expires since the release of the remote control pedal or the  button. The main feeder stops earlier if, after releasing the  button and the remote control pedal, the photocell circuit is interrupted (photocell light blocked).

The photocell status is indicated by a dot located in the lower right corner of the LED display:

- Dot lights – photocell uncovered (transmitter and receiver “can see each other”).
- Dot off – photocell covered (transmitter and receiver “cannot see each other”).

The LED display shows the feeder symbol indicating the current status of the main feeder (standstill or movement).

Press the  button to switch the Controller to the Manual mode.





Press the  button to switch the Controller to the STANDBY mode.

5.5. Photocell

The photocell sensitivity is defined by the “c5” setting ranging from 0 to 50 (factory setting = 10). The higher the “c5” setting, the lower the photocell sensitivity, therefore “c5 = 50” means the lowest sensitivity of the photocell, while “c5 = 1” is the highest photocell sensitivity. Entering a zero in the “c5” setting disables the photocell system.

The “d4” setting which can be set from 1 to 19 (factory set to 1) means a photocell filter setting. The higher the “d4” setting, the longer the filter time constant is, which means the system is more immune to photocell disturbances (changes of ambient light). Please note, however, that the higher time constant of the filter also causes delayed reaction of the photocell in normal operation.

5.6. Light

Light works only in Manual or Auto modes. In STANDBY mode the light is off. Both in the Manual and Auto modes the first press of the  button turns the lamp permanently On (the upper LED on the  button lights), the second press activates pulse lamp operation in cycles set in the device settings (lower LED on the  button pulses), and the third press turns the lamp Off (both LEDs on the  button are Off).

5.7. Main feeder motor soft start

When the setting “c6” = 0, the motor starts without soft starting function (fast start). Choosing other value of the setting causes activation of the soft start function, and the time until reaching full speed is defined as “c6” / 4 seconds, for example for “c6” = 8 the time is 2 seconds. In addition, the user has to select the motor minimum speed (“c7” setting) to prevent the motor starting with a “jerky” or “humming” noise. The motor will restart softly after each stop.

5.8. Main feeder motor soft stop

When the setting “c8” = 0, the motor stops immediately. Choosing other value of the setting causes activation of the soft stop function, and the stopping time from full speed to zero is defined as “c8” / 4 seconds, for example for “c8” = 6 the time is 1.5 seconds.

NOTE!!!

When the emergency stop switch is activated, the motor stops immediately regardless of the “c8” setting.

5.9. Main feeder motor maximum speed


When the setting “c9” = 99, the motor reaches its full speed after the soft start. Use a lower value of the setting to set a lower speed value. Set the lower speed value experimentally.




6. Signalling failure in manual and automatic mode.





If the emergency switch is activated, the main feeder is immediately stopped, the “E1” message is displayed and an acoustic signal sounds until the reason for the protection activation is cleared.

If the controller detect damage of fuse than the main feeder is immediately stooped, the “E2” message is displayed, acoustic sound until the fuse will be replace for the new one and power supply of controller will be reset.

7. Configuration of Settings

To change values of the service settings, from the STANDBY mode press and hold the  button for at least 7 seconds. The Controller enters to the display where security code should be entered, Enter code screen is indicated by displaying the inscription: “Pr”. If any of the button of keyboard will not be active for at least 5 second, than controller urn to STANDBAY automatically.

By using  (decrement) or  (increment) buttons user enter right code and approve it by using  display. If incorrect code will be entered than controller will return to STANDBY mode. If user entered correct code than controller go to programme mode which indicated by name and value of first service parameter after 1 second.

You can adjust values of the settings by pressing the  (decrement) or  (increment) buttons; press and hold the button to automatically browse the values in the desired direction. The values are browsed in a loop, i.e. when the end of the range is reached, the value increment or decrement restarts. Press the  button to save the new value and move to editing the next setting. When you reach the last of the device settings, press the  button to set its new value and return to the STANDBY mode.

If no button is pressed for at least 20 seconds, the device automatically exits the Programming mode (and returns to the STANDBY mode), and the last edited setting is not saved.

Notes on SBR programming:

- IT IS THE MANUFACTURER'S RESPONSIBILITY TO ENTER NEW SETTINGS REQUIRED FOR PROPER OPERATION OF THE SYSTEM !!!

- The programming must be done carefully – write the values of the settings first on a sheet of paper, then enter the values in the device. Keep in mind that improper settings can cause faulty operation of the system or even completely disable its operation.

- When the device programming and start-up is complete, verify its operation and the values of the device settings.

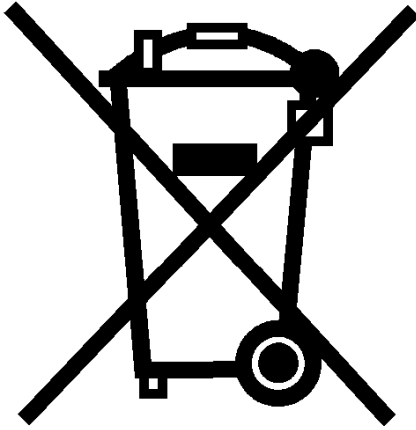
8. Device Settings

Table 1. Device setting symbols and ranges of values.

Symbol	Description	Min.	Max.	Step	Factory setting
C0	Motor extended operation duration after entering the Auto mode or starting with the pedal switch or the photocell.	2	99	1s	20s
C1	Lamp On duration in pulse mode (16=1s).	8	48	1/1 6s	16 (1s)
C2	Lamp Off duration in pulse mode (16=1s).	8	48	1/1 6s	16 (1s)
C3	Emergency switch configuration status when enabled: 0 – contacts normally open 1 – contacts normally closed	0	1	1	0
C4	Remote control pedal switch configuration when enabled: 0 – contacts normally open 1 – contacts normally closed	0	1	1	0
C5	Photocell sensitivity (when set to “0” – no signal from the photocell even in Auto mode).	0	50	1	10
C6	Motor soft start duration (when = “0” – no soft start).	0	10	1/4 s	4 (1s)
C7	Main feeder motor minimum speed.	25	50	1	30
C8	Motor soft stop duration (when = “0” – no soft stop).	0	10	1/4 s	4 (1s)
C9	Main feeder motor maximum speed. Value of “99” means full motor speed.	51	99	1	99
D4	Photocell filter.	1	19	1	1

9. Information regarding marking and collection of waste electronic and equipment.

NOTE!!!



The symbol placed on a product or on its packaging indicates that it is subject to selective collection of waste electric and electronic equipment. This means that the product should not be discarded with other household waste. Appropriate scrapping of old and waste electric and electronic equipment will prevent potentially harmful effects on the environment and human health.

The obligation of selective equipment collection rests on the user who should deliver the equipment to a collection point.

The logo consists of the word "GECO" in a bold, white, sans-serif font, set against a solid red rectangular background. A registered trademark symbol (®) is positioned to the upper right of the letter "O".

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