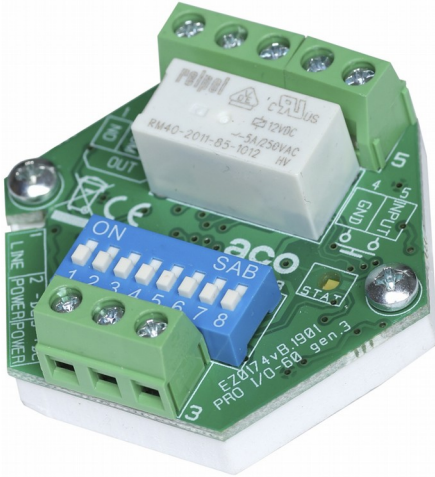




PRO I/O-60 (G3) MODULE OPERATING INSTRUCTIONS

GENERAL INFORMATION



The PRO I/O-60 (G3) module is an optional extension module for the PRO system; it is used as a control module for home automation and external devices, additional signalling and auto-opening. Designed for installation in Ø60mm junction box. PRO I/O-60 (G3) is compatible with all COMO/ Familio PRO, PRO-A devices.

It features two relay output: one pair of NO/NC type 5A/24VDC contacts and NO type input for connecting a NO button. It can be used to connect and operate additional devices, such as garage door, barrier, lighting, roller blinds as well as to connect call signalling devices. With PRO I/O-60 (G3) it is also possible to connect an external button for direct activation of e-lock on the panel, automatic door opening when the receiver is ringing and for calling the door bell function (ringing of the receiver).

Module functions can be called by all receivers in the system or only by the receiver with this specific address.

The module features a function of secure door opening control: the e-lock is connected to the PRO-I/O module (instead of the panel) and the panel activates opening remotely via the system bus.

It is the next generation of the module (G3), which supports a greater number of addresses (with COMO panels), but also can be used to program settings and update the software via the system bus using a PC, etc.

Feature offered by generation 3 of the module include:

- programming settings and software updates via the system bus (PRO-USB computer interface required)
- compatibility with earlier PRO system generations
- individual number for each device: DevID
- search for all devices in the system
- individual or group device management
- handling devices and updates in a running system
- one software to support all devices: PRO 3 MANAGER

TECHNICAL PARAMETERS

• Power supply voltage	15VDC ±5%
• Maximum current consumption	40mA
• Standby power consumption	~0,3W
• Contact load	5A/24VAC
• External triggering type	Zwierne (NO)
• External triggering resistance	≤ 20Ω
• Contact type	NO/NC ze wspólnym punktem COM
• Connection type	złącza śrubowe ARK
• Mode of operation	monostabilna / bistabilna
• External triggering resistance	≤ 20Ω
• Dimensions	50x50x20 mm

OPERATION

The NO input of the module can be used for calling specific receivers (for instance as a doorbell) or for triggering door opening remotely (typically activation of an electric door strike) in the panel or in the Master panel when two panels operate (Master/Slave). Switchable NC/NO output contacts can operate in monostable (momentary) or bistable (on/off) mode and can be used to control another gate, lighting or to connect an external call signalling device. When calling from the module, the receivers with the selected address will start ringing. Depending on the model, this ringing will be distinguished by: no preview for MPRO7 monitors, blinking key icon, ringing tone and for other receivers (MPRO, U-PRO, GLASS-PRO) additionally by different ringing tone and blinking volume control. Use the F2 button/icons/wheel to force the relay on the module.

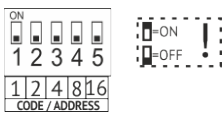

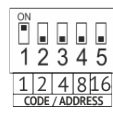



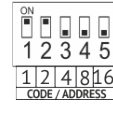

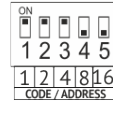



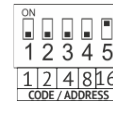

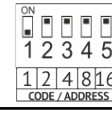

In the door bell mode, the module will switch on the relay when the panel is ringing and, upon shorting the module input, it will immediately start opening the door. When the input is permanently shorted, the relay is activated for 1s and the door is opened at each ringing from the panel.

The module also features a function of switching on the relay during door opening in the PRO system for the same time period as the opening time pre-set in the panel; this does not apply to opening from the panel INPUT. This is the function of secure door opening control: the electric door strike is connected directly to the module rather than to the panel. The module can be located in a completely different part of the facility, it just needs to be connected to the system bus at any location.

The functions of the module are configured using the switches which can be found directly on the module, according to the table below. Use the switches to set the address from 0 to 31. The configuration can also be done remotely, via the system bus, using the "PRO 3 MANAGER" PC application and the optional PRO-USB module. The PC application can also be used to change additional parameters (such as output activation times, restricting the module to the intercom address), setting addresses from 0 to 1024 and for software updates. It is available free of charge at www.aco.com.pl

The first set of switches (1-5) is intended for setting the module address. If the address is set to "0", the module will support all receivers in the system. If an address is set, the module will only support those receivers in the system which feature the same address. The second set of switches (6-8) is intended for configuring the function to be performed by the module.

Table of functions and settings

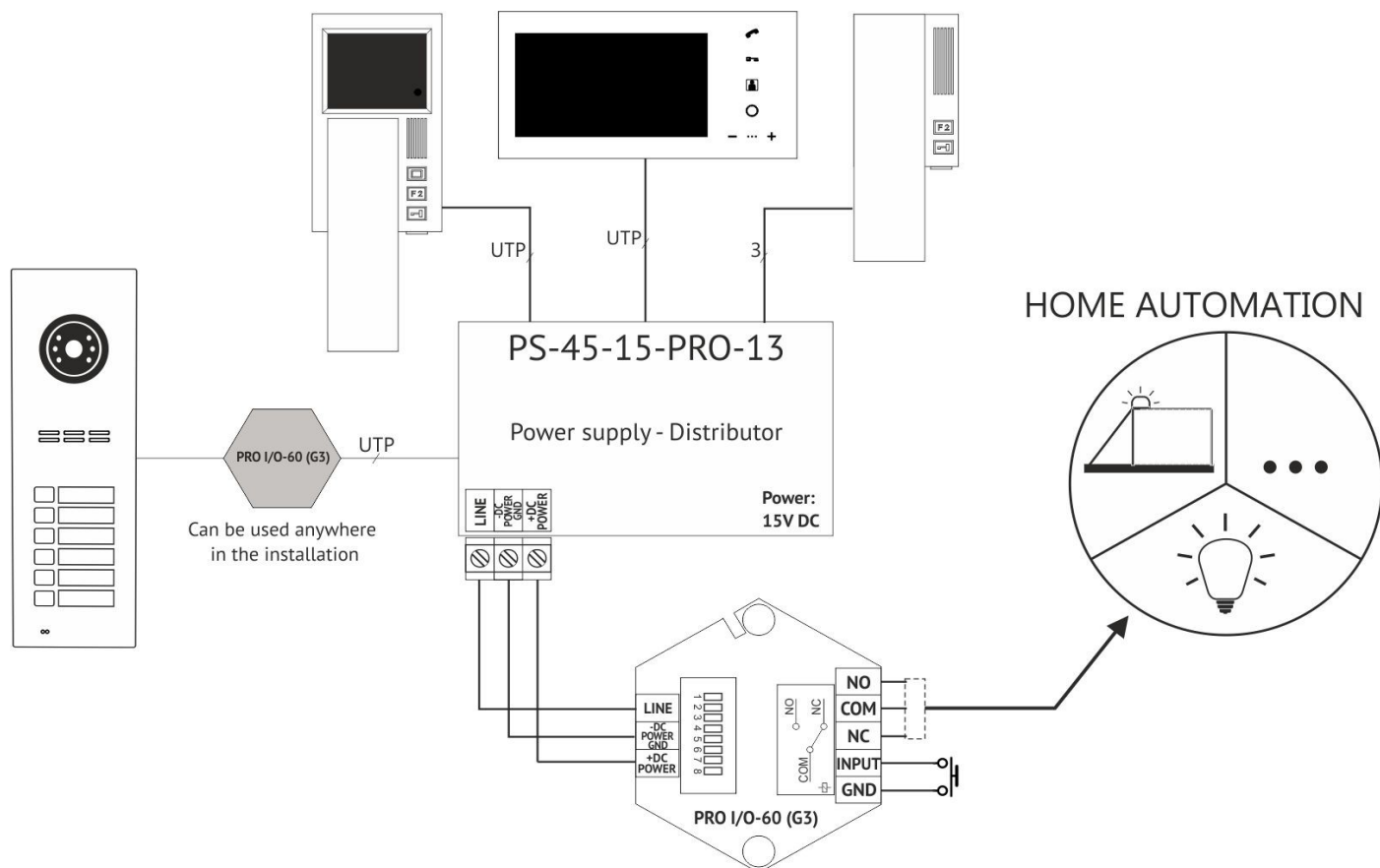
Functions for: - INPUT short-circuit - relay OUTPUT	Settings of switches	
	Address from 0 to 31	Function
Note! The functions can be performed by all receivers in the system, regardless of the address (address "0" is set in the module) or can be dependent for receivers with the same address as pre-set in the module.		
INPUT: ringing of receivers in the doorbell function mode OUTPUT: switching on 1s upon pressing F2/wheel in receivers	Address: 0 (all receivers) 	 1
INPUT: ringing of receivers in the doorbell function mode OUTPUT: switching ON/FF upon pressing F2/wheel	Address examples: Address: 1 (no. 1: ON) 	 2
INPUT: activation of door opening on the panel (or master panel in master/slave operation) OUTPUT: switching on 1s upon pressing F2/wheel in receivers	Address: 2 (no. 2: ON) 	 3
INPUT: activation of door opening on the panel (or master panel in master/slave operation) OUTPUT: switching ON/FF upon pressing F2/wheel	Address: 3 (no. 1, 2: ON) 	 4
INPUT: activation of door opening on the panel (or master panel in master/slave operation) OUTPUT: switching on 1s during panel ringing (single ringing signal)	Address 7 (no. 1, 2, 3: ON) 	 5
INPUT: activation of door opening on the panel (or master panel in master/slave operation) OUTPUT: switching ON/FF when ringing from the panel (continuous ringing signal)	Address 10 (no. 2, 4: ON) 	 6
INPUT: activation of door opening on the panel (or master panel in master/slave operation) OUTPUT: switching on 1s when opening the door in the panel (or master panel in master/slave mode)	Address 16 (no. 5: ON) 	 7
INPUT: activation of door opening on the panel (or master panel in master/slave operation) OUTPUT: switching on for the opening time (pre-set in the panel) when opening door in the panel (or master panel in master/slave operation) - "secure door opening control function"	Address 30 (no. 2, 3, 4, 5: ON) 	 8

Activation of the relay is confirmed by an acoustic signal ("beep") in the receiver and by the STAT LED in the module. For bi-stable operation, the relay is activated by pressing F2/wheel and is confirmed by a single beep. Switching off is also done by the user by pressing F2/wheel again - this will be confirmed by a double beep. The relay can also be controlled from the panel: for this the use of the code or proximity card must be preceded by pressing the key button.

If the continuous ringing signalling from the panel is pre-set, the module will signal as long as ringing lasts (ringing can be cancelled, for instance by opening the door). By default the resolver will switch on every 2 seconds for 1 second (this time can be changed using the PC application). If INPUT is shorted permanently, each time the panel rings, it will activate OUTPUT for 1 second and automatically start the door opening in the panel.

If the output is set to be activated when opening using the panel, it will be activated after an opening call from a receiver, for instance (the "key" button), the panel (correct opening code, using the proximity key or from the INPUT of the PRO I/O module. NOTE! The module output WILL NOT be activated when INPUT opening is triggered from the Panel (this function is used for secure door opening control function).

SYSTEM ASSEMBLY AND CONNECTION



The module features screw connectors to connect the wires and is of a miniature size (diameter 50mm), hence it can be installed, for instance, in a standard 60 mm junction box. It can be plugged in anywhere in the installation and its location is in no way related to the receiver supported by it. Connect the module to the bus at any location by plugging the wires into the appropriate terminals: **LINE** (audio signal), **+DC POWER** and **-DC POWER** (power supply).

RULES FOR STORING WASTE ELECTRICAL EQUIPMENT

Waste electrical equipment must not be disposed of with other waste. It should be stored in places designated for this purpose. For this purpose, please contact the responsible institutions or companies involved in waste recycling. - Directive 2002/96/EC of 27.01.2003