INSTALLATION MANUAL FOR PRO I/O, PRO I/O–60

GENERAL INFORMATION

PRO-I/O and PRO-I/O-60 modules are optional extension modules for PRO system with relay output and switch output. Both modules have equal function, difference between them is only visual.

PRO-I/O module has standard ACO housing, possible to suface mount (dimensions: 71x70,5x19,4 mm) and it has Rj45 socket and screw terminals for connecting the wires.

PRO-I/O-60 is equipped only with screw terminals for wires connection, the size (cross-sections is 50 mm) allows putting the module into 60 mm electric back boxes.

PRO-I/O module optionally extends the system with relay output and normally open (NO) input. The latter can be used to call certain receivers (from additional door bell button) or from remote opening activation (typical activation of e-lock).

NC/NO contact points work either in monostable or bistable mode and they can be used to control additional gate, lights or external calling signal can be connected to it.

In case call incoming from the I/O module the receiver shows the picture from the camera (if available) and starts to ring. Calling from the I/O module is shown by pulsating key icon and lasts for 10 s. and the receivers with handset ring with different tone. In order to enable the relay in the I/O module use F2 button (circle icon). Any action at the receiver during incoming call from the module cancels the call and enables the desired action. When the call signal mode is enabled, the I/O module enables the relay while there is call from the panel and when the module's input gets the contact, the I/O module will automatically open the door. When the input has a permanent contact, every call from the panel will enable the relay for 1 s and will open the door.The module can work also as a relay and trigger the e-lock for the time set in the outside unit, it doesn't concern opening from the INPUT function of the outside station (this feature is available in the software version of the module 2.1 and the panel's version from v.1.1.5)

TECHNICAL PARAMETERS

• Power voltage	15VDC ±5%
• Max. power consumption	35mA
• Power consumption in standby	~0,14W
• Contacts load	5A/250VAC
• Type of external trigger	NO switch
• Resistance	≤ 20Ω
• Contacts type	NO/NC with common point COM
• Sockets type	RJ45 socket / screw terminals ARK
• Work mode	monostable / bistable
• Additional calling type	Normally open (NO)

62-002 Suchy Las, ul. Diamentowa 7, tel./ fax + 48 61 843 93 71
www.aco.com.pl/en

CONFIGURATION AND INSTALLATION

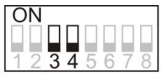
Programming of the I/O module is done by switches in the module – according to the diagram below:

INPUT: calling all receivers

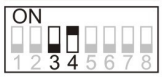
INPUT: calling receivers with address 1

INPUT: calling receivers with address 2

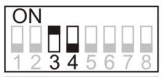
INPUT: calling receivers with address 3



OUTPUT: switched on from all receivers

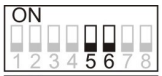


OUTPUT: switched on from receivers with address 1



OUTPUT: switched on from receivers with address 2

OUTPUT: switched on from receivers with address 3



OUTPUT: switched on independently from intercom

OUTPUT: switched on from the intercom address 1

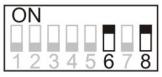
OUTPUT: switched on from the intercom address 2

OUTPUT: switched on from the intercom address 3

OUTPUT: push button switch (1s)

OUTPUT: toggle switch for 8=ON constant signalisation

OUTPUT: Triggering signal
INPUT: door opening

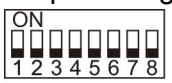


OUTPUT: Switches on when the door opens in the outside unit
INPUT: door opening

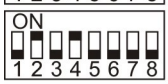
The first group of switches (1-2) is responsible for selection of receivers which will ring in case of incoming call from the outside button (INPUT). The second group (3-4 and 5-6) allows to set the work mode of additional output (OUTPUT). Use switches 3-4 to set which receivers will be able to control the output regarding the calling address from the panel. The group of receivers that is allowed to control the output can be limited by appropriate intercom address. The switch 7 is responsible for choosing the work mode of the relay between: monostable (switch off) or bistable (switch on). During the monostable mode F2 buttons enable the relay for 1 s. Enabled relay is confirmed with signal tone („bip") in the receiver and by the PK ON led in the module. In bistable mode F2 button enables the relay and it is confirmed by with single signal. Switching off is done by the user with F2 button – confirmation with double signal. The relay can be operated from the panel (only models with keypad) if before entering code or swiping proximity tag „the key" is pressed. The switch 8 enables call signal mode (call from the panel) and it changes function of the outside button (INPUT) to activation of the door opening in the panel.

Call signal activates the relay (INPUT) for 1 s. (switch 7 off) during call incoming from the panel to the address set with the switches 3-4 (check the diagram above). If the switch 7 is in position ON, the OUTPUT will be continually enabled every 6 seconds (for 1 second) until the panel stops ringing (call cancels for e.g. Activation of door opening). If INPUT gets permanent contact, every incoming call from the panel activates OUTPUT for one second and automatically activates door opening in the panel. Turning on the switches 8 and 6 triggers the OUTPUT when the doors are being opened from the outside unit. Opening in the outside unit can be triggered from an inside unit (the 'key' button), from the outside unit (pin code, proximity key tag, not the INPUT of the outside unit) or from the INPUT of PRO-I/O module. Activity time of the OUTPUT equals the time of the set door opening time in the outside unit. The I/O module can be connected anywhere to the main line with RJ45 (connections: IN, OUT) and its location does not have anything to do with the receivers in the system. If the RJ45 is not used, the signal line (the terminal: line) has to be lead to the module together with the power supply (terminals: +DC and -DC POWER)

Example configurations:



INPUT button calls to all receivers. OUTPUT relay in push button switch mode is controled from every receiver in the system.



INPUT calls to all receivers with the address 1. OUTPUT relay in push button switch mode is controlled from the receivers with address 1.

INPUT calls to all receivers with the address 2. OUTPUT relay in toggle switch mode is controlled from the receivers with the address 2 and with the intercom address 2.

INPUT button opens the door. OUTPUT relay signals calling (1 x impulse 1 s.) to the receiver with the address 1.

More possibilities of Familio PRO (systems with more monitors, typical troubleshooting and examaple diagrams) can be found in the manual for Familio PRO system available at www.aco.com.pl/en

PRINCIPLES OF STORING USED-UP ELECTRIC EQUIPMENT Used-up electric equipment may not be stored together with other waste products. They should be stored in special places assigned for this purpose. When disposing of used-up equipment, please address appropriate institutions or companies that provide waste recycling services. - Directive 2002/96/ECC/ of 27.01.2003