JA-162M Wireless module with two universal inputs

Typ: 5INPUTUNI2201ND

The JA-162M is a wireless module of the **JABLOTRON** system, featuring two independent universal inputs and the option to connect a tamper contact.

The product can be connected to various devices such as magnetic contacts, flood sensors, or, when connected to the CT-01 roller shutter movement sensor, it can also be used to detect manipulation of the external window shutters.

The product is intended for installation by trained technicians with a valid Jablotron certificate issued by an authorized distributor.
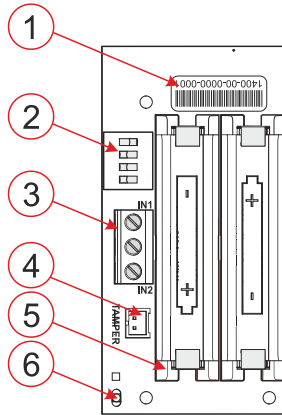

Figure: 1 – serial number, 2 – DIP switches for input mode settings,
3 – IN1, IN2, C input terminals, 4 – tamper contact connector,
5 – battery holder with marked polarity, 6 – LED status indicator.

Installation

1. Install the JA-195PL or JA-194PL installation box.
2. Screw the product into the prepared raised holes in the mounting box.
3. Connect the wires from the installed accessories to the required IN1/IN2 input and C terminals (3). If one of the IN1 or IN2 terminals is not used, there is no need to connect the unused terminal to the C terminal.
4. Use the DIP switches (2) to set the requested behavior of the inputs (see Table).
5. Follow the installation manual of the control panel. Basic procedure:
   In the **F-Link** program with activated service mode select the desired position in the **Devices** tab, insert the batteries into the detector, and the product will transmit the enrolment signal, which will assign the module to the control panel. Pay attention to the correct batteries polarity (5).

   Note: The connected device will occupy two consecutive positions in the system. If the second position is already occupied, it will be automatically overwritten.
6. To meet the requirements of standards, the product must be installed in a mounting box equipped with a tamper contact cover connected to the TMP connector (4).
7. If installing the product in the JA-190PL or another mounting box without a tamper protective contact cover, it is necessary to connect the TMP connector with the provided shorting jumper; otherwise, the transmitter will indicate tamper alarm.
8. If the installation is performed without tamper contact, it does not meet the certified security level requirements, and the proper functionality of the certified security system is not guaranteed.

Notes:

– The product requires at least one JA-11xR radio module installed in the system.
– The module can also be assigned to the system by entering the serial number in the F-Link sw.
– If only the first input is used, the second input in the system can be deleted and the position can be released for assigning another device.
– Deleting the position of the first input will remove the product from the system.

Setting the detector properties

The input properties are set using the DIP switches (2). Select the required mode according to Table 1. **The module reads the NO/NC state of both input terminals when the batteries are inserted. The detected state is taken as the default** (standby). The IN1 and IN2 inputs can be balanced with a 1kΩ resistor.

Description of inputs:

IN1 – Input terminal for connecting to sensor/magnetic contact No. 1

IN2 – Input terminal for connection to sensor/magnetic contact No. 2

C – Common terminal for inputs IN1 and IN2

Description of input modes:

Normal – State mode, both the activation and deactivation signals of IN1 and IN2 inputs are transmitted.

Pulse – Pulse mode, only changes from the default state are transmitted (activation or deactivation depending on the default state of the terminals).

Rol1, Rol2 – Roller shutter mode, responds to repeated and short opening pulses with adjustable sensitivity in two levels: **Rol1** = activation after 3 pulses within 2 minutes, **Rol2** = activation after 5 pulses within 2 minutes. **LD-81** Mode for connecting one or two **LD-81** flood detectors. When using two flood detectors simultaneously, an alarm will always be triggered only by the first flooded detector.

Note: When using Rol1/Rol2 modes, the module remains inactive for 10 seconds after transmitting.

DIP1	DIP2	DIP3	DIP4	IN1	IN2
	•	•	•	LD-81	LD-81
•				Normal	Normal
•			•	Normal	Pulse
•		•		Normal	Rol1
•		•	•	Normal	Rol2
•	•			Pulse	Pulse
•	•		•	Pulse	Rol1
•	•	•		Rol1	Rol1
•	•	•	•	Rol2	Rol2

Table 1: *Setting the detector properties (• = DIP switch **ON**)*

Batteries replacement

The system sends a report (Low Batt) automatically when the voltage level of batteries is critical low. Remember to switch the system to Service or Maintenance mode before changing the batteries, otherwise tamper alarm will be reported.

Warning: The input terminals must be in default (standby) state when new batteries are inserted. The detected state is taken as the default.

Recommended accessories

JA-195PL – Multipurpose installation box including two tamper contacts
JA-194PL – Multipurpose installation box – medium size including two tamper contacts
CT-01 – Roller shutter movement sensor
LD-81 – Flood detector
JA-11xR – Bus interface for JA-100 wireless devices
SA-220 – Magnetic detector (for roller shutter garage door)

Technical specifications

Power	2 x alkaline battery, type AAA (LR03; 1.5 V/1 Ah)
	Please note: Batteries are not included.
Typical lifetime of batteries	max 2 years (max. 4 activations daily)
LowBatt state	<2 V
Quiescent current consumption	10 µA
Maximum current consumption	50 mA
Communication frequency	868.1 MHz, protocol JABLOTRON
Maximum radio-frequency power (ERP)	8 mW
Communication range	approx. 300 m (unrestricted area)
The maximum length of cable for external detectors	3 m
Dimensions	38 x 76 x 15 mm
Weight	22 g
Classification	Security grade 2/Environmental class II (EN 50131-1) with JA-195PL
Operational environment	indoor general
Operating temperature range	-10 °C to +40 °C
Average operating humidity	75% RH, without condensation
Certification body	Trezor Test s.r.o. (no. 3025)
Complies with	EN 50131-1, EN 50131-3, EN 50131-5-3, EN 50131-6, ETSI EN 300 220-1,-2, EN 50130-4, EN 55032, EN IEC 62368-1, EN IEC 63000
Can be operated according to	ERC/REC 70/3
Recommended screw	2 x ø 3,5 x 40 mm (countersunk head)

JABLOTRON ALARMS a.s. hereby declares that the 5INPUTUNI2201ND product is in a compliance with the relevant Union harmonization legislation: Directives No.: 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU if it is used as intended. The original of the conformity assessment can be found at www.jablotron.com - Section Downloads.

Note: Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please return the product to the dealer or contact your local authority for further details of your nearest designated collection point.