

## The JA-155J universal transmitter

The JA-155J is a component of the JABLOTRON 100 alarm system. It is designed to be installed inside cars with (a voltage supply of 12 to 24 V) to control electrical appliances remotely (e.g. garage doors or parking gates, etc.) in a similar way to the JA-162J keyfob. It can also be used for sending an alarm signal from a car. The transmitter does not require to be powered continuously and only transmits a signal the moment it is connected to the voltage supply. It can be configured to send a signal instantly or when it has been connected to a voltage supply repeatedly. The transmitter is intended to be installed by a trained technician with a valid certificate issued by an authorised distributor.

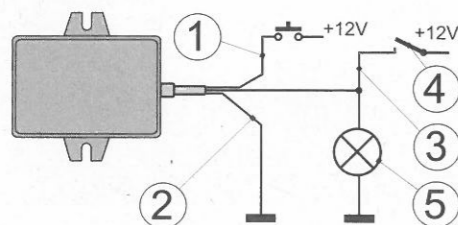
### Installation

Install the transmitter into the car's interior (e.g. in the dashboard). We recommend securing the transmitter onto a plastic part of the car with screws or glue. Avoid installing it directly onto a metal surface (it adversely affects the transmitter's radio range). The wires also serve as an antenna therefore they should not be shorter than 30 cm.

### Wiring

Black	GND
Red	Connecting to a positive voltage supply sends the "A" activation signal.
White	Connecting to a positive voltage supply sends the "B" activation signal.
Red + white	Connecting both wires to a positive voltage supply sends the "A+B" activation signal. See F-Link settings.

For operation in a car it is possible to use its existing switches (for example, full-beam headlight flash switch – it is recommended to have the double-pulse reaction enabled), or, alternatively, any other suitable additional switches can be installed.



Example of wiring in a car: 1 - red; 2 - black; 3 - white; 4 - full-beam headlight flash; 5 - full-beam headlights

- In order to transmit alarm information from a car to a JABLOTRON control panel, connect the red and white wires to the car alarm output which triggers a positive voltage supply (e.g. the siren output).
- Warning: Avoid using this output for confirming car alarm operation (it may result in unwanted transmission of alarm signals)
- Additionally, it is necessary to select a required Panic/Report reaction in the device's internal settings in the F-Link software.

### Enrollment to a control panel

The JA-11xR radio module must be installed in the control panel in order for the transmitter to be functional. The transmitter can be enrolled to an unlimited number of JABLOTRON control panels. Concerning enrollment, the transmitter acts similarly to the JA-162J keyfob, however the wires must be connected to a voltage supply instead of pressing buttons. In order to send the enrollment signal, a jumper (included in the packaging) must be connected inside the module the moment the voltage supply is connected. The transmitter occupies one position in the control panel.

- The control panel has to be in service mode.
- Basic procedure:
  - Go to the F-Link software, select the required position in the Devices tab and launch enrollment mode by clicking on the Enroll button.
  - Connect the black wire to GND and both red and white wires to the voltage supply +12V (+24V) for 4 seconds.
  - The transmitter sends the enrollment signal to the control panel which will enroll the device.



In order to configure the JA-155J transmitter to comply with security grade or other requirements, use the System profiles function in the Parameters tab of the F-Link software.

#### Notes:

- Enrolling the transmitter to the control panel is also possible by entering the production code via the F-Link software. The production code is on a sticker with a bar code which is glued

onto the rear side of the remote. All digits of the production code are required (example: 1400-00-0000-0001).

- If you want to remove the transmitter from the system (for example in case of loss), erase it from its position in the control panel.

### Setting the properties

Setting the properties is done by using the F-Link software – Devices tab. Click on the transmitter's Internal settings to display a window where you can set the following parameters:

**Functions of the activations:** It is possible to set a particular function for the activations A or B (typically unsetting/setting, OFF/controlling an appliance/Panic) or a function for activation A+B which is essentially another function of the transmitter. For a list of functions, see the following table 1.

Reaction to the activation "A" Red wire connected to GND	Reaction to the activation "B" White wire connected to GND
<ul style="list-style-type: none"> <li>None (activation not used)</li> <li>Unset</li> <li>PG always OFF</li> <li>Copy PG</li> <li>Change PG status</li> <li>Panic/Audible panic</li> <li>Report A, B, C, D</li> </ul>	<ul style="list-style-type: none"> <li>None (activation not used)</li> <li>Partially Unset/Set</li> <li>PG OFF</li> <li>Copy PG</li> <li>Change PG status</li> <li>Panic / Audible panic</li> <li>Report A, B, C, D</li> </ul>
Reaction to the activation "A+B" Red + white wire connected to GND	
<ul style="list-style-type: none"> <li>Copy PG</li> <li>Change PG status</li> <li>Panic</li> </ul>	<ul style="list-style-type: none"> <li>Audible panic</li> <li>Report A.B.C.D</li> </ul>

Table 1. Transmitter functions overview

For each function it is necessary to select the PG outputs or sections to be controlled, or events they should report (panic, etc.). It is **not recommended to operate a common section** to set multiple sections simultaneously, instead select the desired sections in the transmitter's internal settings.

**Take over a user's access privileges:** The transmitter can use the access privileges and Time limited access (if enabled) of a selected user to control sections assigned to this user. Factory settings: disabled.

**Take over a user's identity:** The selected user will be visible as the source in the event log. Factory settings: disabled.

#### Notes:

- By factory default, the transmitter is not configured; therefore it is necessary to set up its behaviour using the F-Link SW.
- A signal is sent only if at least one of the wires is connected to the voltage supply. For the next activation, the voltage supply must be disconnected first and then connected again. The functions of each wire are independent – if one wire is permanently connected to a voltage supply, the other one remains functional.

### Double-pulse reaction

By factory default, the transmitter will send a signal immediately after being connected to a voltage supply. This behaviour can be changed by connecting a jumper inside the transmitter. This way, both inputs will react only when a voltage supply is connected for the second time within 2 seconds. This corresponds to pressing a button twice. This feature allows you to prevent appliances from reacting to turning lights on/off and so on.

### Operation with a multipurpose relay (MPR)

The transmitter can also be enrolled to a multipurpose relay of the AC-16x series to control a relay according to a chosen mode. Each of the activations can be enrolled to an MPR with a different mode. One transmitter can be enrolled to multiple MPRs, for example with a different function. When you enroll a transmitter to the control panel and also to an MPR within its RF range, do not select the same buttons. To enroll a transmitter to an MPR, follow the installation manual of the MPR.

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### Technical specifications

Voltage supply	12V t	± 30%
Current consumption in standby mode		<5 mA
Current consumption during transmission		<20 mA
Communication band	868.1 MHz, JABLOTRON protocol	
Communication range	approx. 300 m (open area)	
Configurable input reactions	1 or 2 pulses of voltage supply	
Operational temperature range		-40 to +85 °C
Storage temperature range		-10 to +40 °C
Dimensions, weight	84 x 53 x 25 mm, 120 g	
IP coverage		IP41
Complies with	ETSI EN 300 220-2, EN 50130-4 ed.2+A1, EN 55032, EHK010, EN 62368-1, EN 50581	
Can be operated according to	ERC REC 70-03	



JABLOTRON ALARMS a.s. hereby declares that the JA-155J is in a compliance with the relevant European Union harmonisation legislation: Directives No: 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU. The original of the conformity assessment can be found at [www.jablotron.com](http://www.jablotron.com) - Downloads section

**Note:** Although this product does not contain any harmful materials we suggest you return the product to the dealer or directly to the producer after use.

