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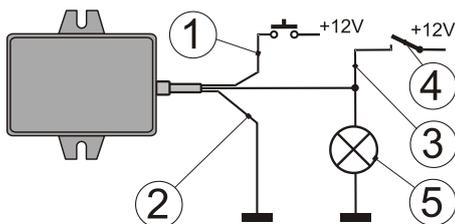
Example of wiring in a car: 1 - red; 2 - black; 3 - white;
4 - full-beam headlight flash; 5 - full-beam headlights

– **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 100+ control panels. In order to send the enrollment signal, a jumper (included in the packaging) must be connected inside the module at the moment the power supply is connected. The transmitter occupies one position in the control panel.

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

– 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 properities

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 positive voltage	Reaction to the activation "B" White wire connected to positive voltage
• None (activation not used) • Unset • PG always OFF • Copy PG* • Change PG status • Panic/Audible panic • Report A, B, C, D	• None (activation not used) • Partially set/Set • PG ON • Copy PG* • Change PG status • Panic/Audible panic • Report A, B, C, D

Reaction to the activation "A+B" Red + white wire connected to positive voltage	
• Copy PG • Change PG status • Panic	• Audible panic • Report A.B.C.D

Table 1. Transmitter functions overview

*-In order to use this function please refer to the chapter "Continuous transmission for the "Copy PG" function.

For each reaction 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.

– 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 power supply. For the next activation, the power 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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Continuous transmission of the "Copy PG" function

In order to turn on the function of continuous transmission of the "Copy PG" function, it is necessary to follow through these following steps:

a) Connect the jumper inside the transmitter.
b) Connect A+B conductors to the power supply at the same time.
c) Remove the jumper within two seconds. (confirmed by flashing 3 times)
d) Disconnect the power supply within two seconds. (function activation is confirmed by flashing 3 times)

Notes:

– In order to revert the function back to pulse mode, follow the same instructions as above, the only difference being that after disconnecting the jumper, the change is indicated by the LED flashing thrice two times.

– The copy PG function is not suitable for installations where it is likely that the "copy PG" function will be triggered outside of the communication range of the control panel, as it will result in the transmitter being disconnected. The control panel will stop reacting to the transmitter and it will have to be re-enrolled onto the control panel.

Technical specifications

Voltage supply	12V to 24 V DC
Current consumption in standby mode	≤5 mA
Current consumption during transmission	≤20 mA
Maximum radiofrequency output (ERP)	1mW
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°C to +85 °C
Storage temperature range	-10°C to +40°C
Dimensions, weight	84 x 53 x 25 mm, 120 g
IP coverage	IP41
In compliance with	ETSI EN 300 220-1,-2, EN 50130-4 ed.2+A1, EN 55032, EN 62368-1, EN 50581, EHK10
Can be operated according to	ERC REC 70-03

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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 - 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.