JB-160J Dry contact transmitter

JB-160J is a wireless module designed to transmit signals from a switch or push-button to the JABLOTRON system. It allows you to create a control element virtually anywhere without the need for a power supply or wired connection.

The device itself does not switch any load but merely transmits information about a status change (contact closing or opening) to the control panel. The control panel then processes the event and performs the required action, such as light control or another device via an output module.

The module is optimised for installation under a standard wall switch or push-button and can be used with any design of electrical installation components. This makes it easy to add control in places where there is no cabling or power supply available.

A typical application is in combination with the JB-161HN module, which realizes the actual switching of the appliance.

Compatibility with specific control panels can be verified using the QR code at the end of the manual.

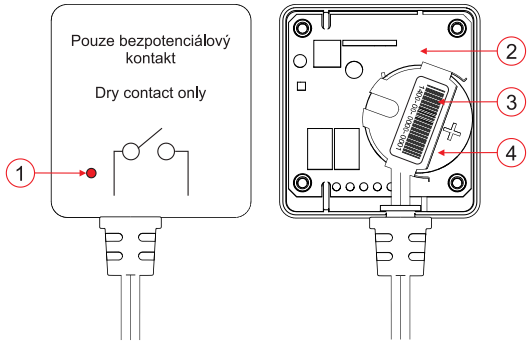


***Fig. 1**: Description of the product's external and internal parts: **1** – LED indication; **2** – printed circuit board; **3** – serial number; **4** – battery*

Installation

Installation may only be carried out by a certified JABLOTRON technician

The transmitter must not be connected in parallel to a 230 V appliance (no external voltage must be applied to the input)

The transmitter is powered by an external CR 2032 lithium battery (3.0 V / 0.2 Ah). It is also necessary to observe the correct battery polarity and type, keep batteries out of the reach of children, never dispose of batteries in fire, handle the product only within its operating temperature range, and never put batteries in the mouth

The transmitter is designed for installation in an electrical installation box under a standard switch or push-button (e.g. KU 68).

For the transmitter to function in an application with a control panel, the JA-11xR radio module must be installed. The controller occupies one position in the system.

Installation and system enrolment procedure:

1. Loosen the two screws to open the module.
2. In the F-Link software select the required position in the Devices tab and select Enrol to switch on enrolment mode.
3. Insert the battery; the module will be enrolled in the system.
4. Close the cover and screw it using the two screws.
5. Connect the conductors to a switch or push-button with an open contact (potential-free). The polarity does not matter.
6. Test whether the module sends a device activation and deactivation signal to the system during a connection or disconnection of the circuit.
7. Complete the installation of the device in the junction box. The module can be placed freely under the device; in case of any other installation case, secure it using double-sided adhesive tape or another suitable method.

Carry out further configuration in the F-Link software in accordance with the control panel installation manual.

***Note**: The device enrolment can also be carried out by entering the serial number (3) in the F-link program. All digits must be entered (serial number format: 1400-00-0000-0001).*

Function description and setting the properties

The module follows the status of the connected contact and sends a signal to the control panel when it changes.

- contact closure → transmission of an activation signal (AKT)
- contact opens → deactivation signal is sent (OK)

The logic can be inverted in the module's internal settings by enabling the "Inverted reaction (normally closed contact)" parameter.

Based on these signals, any reaction can be set in the system, such as activating a PG output, which then controls the connected appliance for PG control.

***Note**: The module uses bidirectional asynchronous communication. Settings are saved in response to a received message sent from the device to the control panel; until then, the pending setting change is indicated by the "Enter" button being highlighted in red. The saving of settings can be accelerated by changing the module's status (by activating or deactivating the connected device). Once the settings have been saved to the device, the red highlighting disappears.*

Examples of use

The transmitter can be used, for example, as:

- **An additional light switch –** allows you to create a new switch without the need to alter the electrical wiring.
- **Wireless cross-control –** adding a second switch at the opposite end of the room.
- **Control of doors or gates –** additional installation of a control button in the garage
- **Control of additional appliances –** irrigation pumps, awnings, roller blinds…

Battery replacement

The transmitter continuously monitors the status of its battery. If the battery is running low, it notifies the control panel, which informs the user. A low battery is also indicated by a short LED flash (3 times) every 5 minutes. We recommend that a service technician replace the battery.

Do not dispose of used batteries in the rubbish; take them to a collecting point instead.

Technical specifications

Power supply	*CR 2032 lithium battery (3.0 V / 0.2 Ah)*
	approx. 1.5 years at 10 activations per day
Low battery detection	*<2.7 V*
Nominal current consumption	*16 µA*
Maximum current consumption	*50 mA*
Communication frequency	*868.1 MHz, JABLOTRON protocol*
Maximum radio frequency power (ERP)	*<25 mW*
Communication range	*approx. 500 m (line of sight)*
Dimensions (without accessories)	*39.8 x 37.3 x 9.7 mm*
Weight (without accessories)	*12.1 g*
Environment	*indoor general*
IP / IK rating	*IP 20 / IK 05*
Operating temperature range	*-10 °C to +40 °C*
Average operating humidity	*75 % RH, non-condensing*
Operating conditions	*ERC REC 70-03*
Complies with	*EN 301 483-1, EN 301 483-3, EN 50130-4, EN IEC 61000-6-3, EN IEC 62368-1, ETSI EN 300 220-2, EN IEC 62311, EN IEC 63000*
Recommended screw	*4x 2.2 x 8 mm*

JABLOTRON a.s. declares that the JB-160J product has been designed and manufactured in accordance with the harmonised legislation of the European Union: Directives 2014/30/EU, 2014/35/EU, 2014/53/EU, 2011/65/EU, provided it is used for its intended purpose. The original declaration of conformity is available at www.jablotron.com in the Downloads section.

Note: Although the product does not contain any harmful materials, do not dispose of it in the general waste; instead, take it to an electronic waste collecting point. For more detailed information, visit www.jablotron.com in the Downloads section.

compatibility table

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