

# JA-111H-AD TRB BUS module for system control

The JA-111H-AD TRB is a component of the JABLOTRON 100 system and it serves to control the system from an external device with a status or impulse output and it can also provide power from the control panel BUS.

It is designed to be installed mostly inside the controlling device, but it can be placed also out of it in a protected installation box. The module occupies one position in the system. The module should be installed by a trained technician with a valid certificate issued by an authorised distributor.

## Installation

1. Install the module at a suitable place in the controlling device (such as finger print reader) or inside a protected installation box. The wires can be extended to up to 3 m maximum. When the module is installed inside the controlling device ensure that it cannot make a short circuit because of poor isolation.
2. Connect the wires of the module according to figure 1.

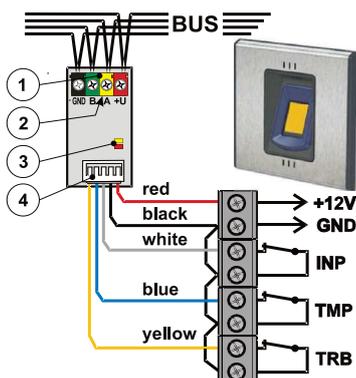


Figure 1: 1 – BUS terminals; 2 – production code; 3 – yellow LED indicates fault/ device not enrolled, the red LED indicates by flashing the activation of any input; 4 – connecting wire, see the following table:

Wire	Meaning	Function
Red	+ 12 V	Power for connected device
Black	GND	Common wire
White	INP	Control input
Blue	TMP	Tamper input
Yellow	TRB	Trouble input / Unset

Table 1

3. Connect the BUS cable and switch on the control panel power.



**When connecting the module to the system bus, always switch the power off.**

**The power consumption of the connected detector must not exceed 50mA (the module power supply output is not protected against overloading).**

4. The control panel has to be in service mode.
5. Proceed according to the control panel installation manual. Basic procedure:
  - a) When the device is switched on, the yellow LED (3) starts flashing repeatedly to indicate that the module has not been enrolled to the system.
  - b) Go to the **F-Link** software, select the required position in the **Devices** tab and launch the enrollment mode by clicking on the **Enroll** option.
  - c) Click on the Add new BUS devices option, select the JA-111H-AD TRB and confirm its enrolling by a double press – the yellow LED (3) goes off.
6. Close the cover of the controlling device with the installed module inside.

### Notes:

- The module can also be enrolled by pressing the tamper contact (connection of the black and blue wire together) or by entering the production code via the F-Link software. The production code is printed on the sticker under the bar code on the PCB of the product.
- If you need to remove the module from the system, erase it from its position in the control panel.

## Setting the module properties

The module properties can be set in the **Devices** tab of the F-Link software. Use the **Internal settings** option at the module position to open a dialogue window where you can set:

**LED indication:** Factory settings indication is enabled. The option serves for switching ON / OFF the LED indication of the red LED. The LED reacts to activation of any input of the module.

**INP input:** The input can be **Disabled** completely and no activation will be reported to the system.

The factory default setting is set to **INP control only**, it controls via one wire (status mode control pre-set). According to the reaction pre-set at the module position, the system reacts to its input activation according to the following table:

Selected reaction of the module	INP input (Non-inverted reaction)		Setting control by impulse
	Action performed on activation (NO)	Action performed on deactivation (NC)	
<b>Setting</b>	Set section (with exit delay)	Unset	NO
<b>Set now</b>	Set section (with no exit delay)	Unset	NO
<b>Partially set</b>	Partially set section (with exit delay)	Unset	NO
<b>Partially set now</b>	Partially set section now (with no exit delay)	Unset	NO
<b>Change status</b>	Activation changes status of pre-set section	--	YES
<b>Unsetting</b>	Unset	--	NO

Table 2

**Note:** Functions according to Table 2 (one wire control) are not supported for security grade 2 installation.

**INP and TRB control** (impulse – two wire control). The system reacts to INP input activation according to the reaction set at the position of the module (for instance it sets the section, to which the module is assigned). The TRB input is pre-set to an Unset reaction (so the input cannot be used for triggering the fault of a connected device). When the INP control function is pre-set then the following options are visible:

**Impulse mode:** The option has to be checked for one-wire control i.e. "INP control only" with the reaction of the module pre-set to "Change status".

**Inverted INP input reaction:** It has a NC reaction by default but it can be changed to a NO reaction.

**INP input reaction delay:** Time filtering which sets how long the INP input must be active in order to be triggered. Default setting is 0.5 s.

**TRB input:** By factory default it is **Disabled** and no activation will be reported to the system. If you select **Fault** then input activation (NC mode) triggers a fault from the connected module.

**Inverted TRB input reaction:** This has an NC reaction by default but it can be changed to an NO reaction.

**TRB input reaction delay:** Time filtering which sets how long the TRB input must be active in order to be triggered. Default setting is 0.5 s.

**TMP input:** By factory default it is **Disabled** and no activation will be reported to the system. Input activation (NC mode) triggers a tamper alarm from the connected module. The TMP input reaction delay is 0.5 s.

**Inverted TMP input reaction:** It has an NC reaction by default but it can be changed to an NO reaction.



**The manufacturer only guarantees correct functioning of this module. However, they cannot guarantee the correct functioning of the connected detector. We therefore recommend using JABLOTRON 100 BUS devices.**

## Technical specifications

Power	from control panel BUS 12 V (9 ... 15 V)
Current consumption in standby mode*	5 mA
Current consumption for cable choice*	5 mA
Maximum allowed current of the connected detector	50 mA
Dimensions	16 x 30 x 12 mm
Weight	8 g
Classification	Security grade 2 / environmental class II
- according to	EN 50131-1, EN 50131-3 (ACE type B)
- environmental	Indoor general
- operating temperature range	-10 to +40 °C
- average humidity	75 % RH non condensing
Also complies with	EN 50130-4, EN 55022
* the consumption of the connected detector has to be added to the system power backup calculation	

JABLOTRON ALARMS a.s. hereby declares that the JA-111H-AD TRB module is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC and (EU) no. 65/2011. The original of the conformity assessment can be found at [www.jablotron.com](http://www.jablotron.com) - Technical Support 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. For more detailed information visit [www.jablotron.com](http://www.jablotron.com).

