JA-110B Bus acoustic glassbreak detector

*The JA-110B is component of the **JABLOTRON** system. It is used to detect the breaking of glass windowpanes and glass surfaces in buildings. It reacts to the change of air pressure accompanied by the characteristic sound of breaking glass. The detector has a pulse reaction (only reports its triggering). The detector should be installed by a trained technician with a valid certificate issued by an authorized distributor.* ***This product is compatible with JA-100K, JA-101K, JA-103K, JA-106K and JA-107K control panels.***

Installation

The detector should be installed in the interior. There should be no sources of noise, vibration emitting devices or moving objects which can create a shock wave in its detection field. It is also not recommended to install the detector in places with over-intense air circulation (close to ventilators, heat sources, air conditioning outlets, non-airtight doors, etc.). There should be no sound-absorbing obstacles (e.g. heavy curtains) in front of the detector.

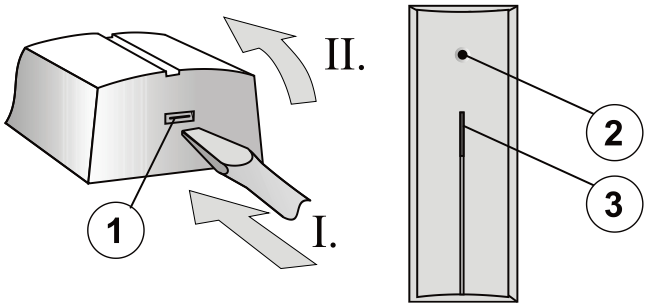


Figure: 1 – cover latch; 2 – acoustic sensor; 3 – light guide

1. **Open the detector cover** by pushing the cover latch (1).
2. **Take out the PCB** – it is held with a PDB latch (5)
3. Insert the bus cable and attach the plastic base to the wall using screws.

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

4. **Insert the PCB back** and connect bus cables to the terminals (6).
5. Proceed according to the control panel installation manual. Basic procedure:
   a. When the detector is switched on, the yellow LED (9) starts flashing repeatedly to indicate that it has not been enrolled into the system.
   b. Go to the ***F-Link*** program, select the required position in the **Devices** window and launch the enrollment mode by clicking on the Enroll option.
   c. Press the tamper contact in the detector (11) – the detector is thus enrolled, and the yellow LED indicator goes off.
6. Close the detector cover and make sure that the rubber part of the sensor does not cover the opening in the cover.

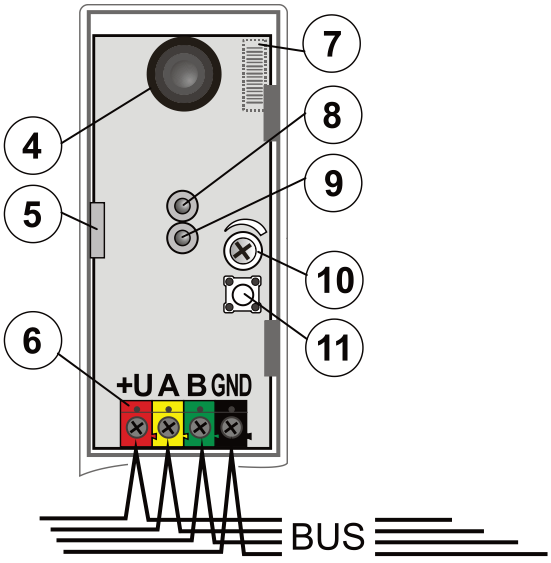


Figure: 4 – GB sensor; 5 – PCB latch; 6 – bus terminals; 7 – serial number (on bottom part); 8 – red LED activation indicator; 9 – yellow LED fault indicator; 10 – trimmer - sensitivity setting; 11 – tamper contact

Detector testing and setting

Using a suitable tool or a hand protected by gloves, one by one, knock all the windows that should be under the detector's protection (A visible deformation of the glass should occur but without any damage). The deformation of glass causes a change in the air pressure of the room which makes the red LED on the detector flash quickly. The detector must react only after a stronger impact on the glass.

Sensitivity to air pressure changes can be adjusted with a trimmer (10) on the PCB. Avoid selecting too high a sensitivity - this can result in an increased number of false alarms.

The complete function of the detector can be tested with a GBT-212 glass-break simulator. After knocking the glass, this simulator will automatically generate the characteristic sound of breaking glass to create the conditions for detector triggering. The red detector LED (8) shall flash for 2 s in such a case.

Detection characteristics

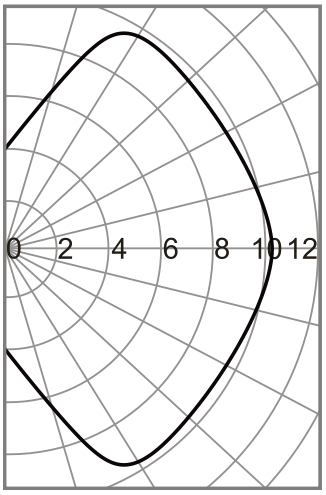


Figure: Detection characteristics of the detector

Technical specifications

Power	*from the control panel bus 12 V DC (9…15 V)*
Quiescent current consumption	*5 mA*
Maximal current consumption	*15 mA*
Recommended installation height	*2.5 m above the floor*
Detection distance	*up to 9 m*
Minimum windowpane size	*0.6 x 0.6 m*
Stabilization time after the switching on	*max. 60 s*
Dimensions	*40 x 100 x 22 mm*
Weight	*50 g*
Classification	*Security Grade II / Environmental class II (according to EN 50131-1)*
Environment	*indoor general*
Operating temperature range	*-10 °C to +40 °C*
Average operational humidity	*75 % RH, non-condensation*
Certification body	*Trezor Test s.r.o. (no. 3025), Kiwa Nedeland b. v.*
In complience with	*EN 50131-2-7-1, T 031 EN 50130-4, EN 55032, EN IEC 63000*
Recommended screw	*2x ø 3.5 x 40 mm (countersunk head)*

JABLOTRON a.s. hereby declares that the JA-110B is in a compliance with the relevant Union harmonisation legislation: Directives No: 2014/30/EU, 2011/65/EU. 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.

JABLOTRON a.s.
Pod Skalkou 4567/33 | 46601 | Jablonec n. Nisou
Czech Republic | www.jablotron.com