GlassProtect Jeweller

Wireless glass break detector with a microphone

Intruders can break silence, not security

Forget about the typical problem of glass break detectors — false alarms caused by barking dogs, traffic, water splashing, and extraneous noise. GlassProtect Jeweller has a unique DualTone digital algorithm designed to minimize false alarms. The detector's microphone responds only to vibrations characteristic of the glass breaking sound. You can adjust one of three sensitivity levels and run the test to check if everything works properly.

Up to 9 m glass break detection distance	Adaptable to any facility with 3 sensitivity levels	Remote control and configuration	Terminals to connect a third-party NC detector
180° glass break detection angle	DualTone digital algorithm to prevent false alarms	Up to 1,700 m communication range with an Ajax hub or a range extender[1]	2 colors of glossy enclosure EN 50131 (Grade 2) PD 6662:2017 UL
Up to 7 years of operation with the pre-installed battery	Informative push notifications Critical **Office:** Glass breakage detected, GlassProtect Jeweller in Hall. **Manufacturing:** Lid closed, GlassProtect Jeweller in Office.	Hassle-free installation QR code ↓ SmartBracket ↓ App	Jeweller radio communication Power adjustment Frequency hopping Encryption TDMA Two-way communication

Superior, **Fibra**, and **Baseline** product lines are mutually compatible. This opens up numerous possibilities for building systems of any configuration.

Wherever there is a risk of intrusion

Office	Home	Store	Warehouse	School

Discover future-proof hardware

- Electret microphone
- Pre-installed battery

- Tamper against detaching the detector from the surface
- Jeweller antenna
- Terminals to connect a third-party NC detector
- SmartBracket mounting panel

Enhanced glass break detection

GlassProtect Jeweller uses a sensitive electret microphone and the DualTone digital algorithm to detect the sound of glass breaking. To register a glass break and report an alarm, the device must detect a dull (low-frequency) sound of an impact and a ringing (high-frequency) sound of glass breaking in 1.5 seconds. This two-stage glass break detection algorithm decreases the risk of false alarms. Three sensitivity levels can be configured in the Ajax app, making the detector suitable for any object.

GlassProtect Jeweller doesn't respond to the breaking of glass covered with shockproof, sunscreen, decorative, or any other film. To detect such glass breaking, we recommend using DoorProtect Plus Fibra, DoorProtect S Plus Jeweller, or DoorProtect G3 Fibra detectors with shock and tilt sensors.

Easy integration with third-party detectors

GlassProtect Jeweller has terminals for connecting a third-party wired NC detector. This allows the installer to enhance system reliability with any NC detector, whether newly installed or already in place, such as motion, opening, or vibration detectors. For example, GlassProtect Jeweller enables you to integrate an existing third-party2 opening detector into the system.

- Opening detector
- Vibration detector
- Motion detector

Wire-free flexibility and reliable performance

Baseline devices operate without any wires, offering maximum flexibility during installation. The pre-installed CR123A battery from proven manufacturers ensures a hassle-free setup, requiring no additional steps to start operating the devices. In addition to real-time testing during battery production, Ajax Systems inspects every unit to ensure the accuracy of the battery characteristics. The battery can be easily replaced after approximately five years of autonomous operation. Its status is always accessible in the Ajax app. Users and security companies receive low battery level notifications months in advance, allowing for timely replacement without rushing.

- Real-time testing during battery production
- Up to 5 years of autonomous operation
- Low battery level notification in advance

Unique wireless technology

An Ajax system uses two-way secure radio communication based on the Jeweller proprietary protocol. It provides block encryption and device authentication at each communication session with the hub to prevent sabotage, spoofing, or data theft.

Ajax wireless technology has up to 1,200 m (3,900 ft) of radio communication range in an open space. This distance is on average longer than competing solutions. Automatic power adjustment ensures energy efficiency by avoiding the constant use of maximum power in system devices' radio transmitters. Also, the Jeweller technology is more stable due to using less noisy radio frequencies. Ajax hubs use frequency hopping to protect against radio interference and signal interception. The system automatically changes frequency within a band and notifies the security company and users about the jamming.

Jeweller uses polling to display the real-time device status and transmits alarms, events, and all measured readings into Ajax apps. It features encryption and device authentication to prevent spoofing.

- Up to 1,200 m (3,900 ft) of radio communication with a hub or a range extender[2]
- Encrypted two-way radio communication
- Notifications about jamming and communication loss

Scaled and comprehensive

ReX 2 Jeweller boosts the radio range of all Ajax devices via Jeweller and ensures stable communication even through steel and concrete via Ethernet using the wire as the additional communication channel. Up to 5 range extenders can operate within one Ajax system to expand the network twice as big, covering underground parking, basement, or metal hangar.

- Up to 5 range extenders within one system
- Ethernet as an alternative communication channel

- Big estate and large facilities
- Business center with underground parking
- Warehouse or industrial complex
- Sectional metal hangar

System supervision

All Ajax devices perform automatic self-diagnosis and report their states to the hub. Essential parameters, such as a tamper state, communication, power supply, and sensor statuses, are continuously monitored. The Ajax Cloud server controls communication between the hub and Ajax apps, ensuring instant notifications for ARCs, security companies, and users. In case of any malfunction or communication failure, an engineer is informed immediately to provide necessary services.

- Automatic device self-diagnosis with status report
- Regular polling to display the current device state in apps
- Instant maintenance notifications

Sabotage resistance

Tamper alarm The enclosure has a tamper button. It notifies the security company and users once the device is detached from the mounting panel.	**Data encryption** All data the system stores and transmits is protected by block encryption featuring a dynamic key. The encryption makes it extremely difficult to reprogram the device and provides robust protection against data replacement and theft.	**Data-rich notifications** The Ajax system instantly delivers informative push notifications about alarms and events. Security companies and users receive precise details about the incident, including the triggered device, along with the time and location.
Device authentication against spoofing **During each communication session, t**he hub authenticates the device by checking its unique parameters. If any parameter fails the check, the hub ignores device commands.	**Regular polling** The device regularly exchanges data with the hub. The system controls each device's state and reports any malfunction or communication loss.	**Communication loss detection** At minimal polling interval settings (3 data packages every 12 seconds), it takes only 36 seconds to detect communication loss and notify the security company and users about the incident.

Effortless installation and setup

GlassProtect Jeweller is ready to operate straight out of the box. Using the SmartBracket panel, an installer can effortlessly mount the device on the wall, eliminating the need to disassemble the enclosure. Ajax apps help quickly make the device a part of the ecosystem: simply pair the device with the hub by scanning the QR code. It can always be reconfigured remotely without the need for on-site visits.

Connection	Installation	Setup	Monitoring

Pairing with the hub by scanning the QR code	The SmartBracket mounting panel: no need to disassemble the enclosure	Configuring and testing in mobile and desktop apps	The **PRO Desktop** app for macOS and Windows

[1] In an open space.
[2] GlassProtect Jeweller can't power a third-party detector. The power supply for this detector should be connected separately.