

SpeakerPhone Jeweller

Wireless voice module for alarm verification

Loud and clear

SpeakerPhone Jeweller is a voice module designed for quick audio alarm verification via direct voice calls between a monitoring company and a secured site. The device provides clear and secure full duplex voice communication using the VoRF¹ proprietary audio streaming protocol and AI technologies. In case of an alarm, a central monitoring station (CMS) operator can immediately contact the facility to speak with someone on the spot or listen to what is happening. The operator assesses the situation and takes the right action – and only when the threat is real. Also, operators can use SpeakerPhone Jeweller to deter intruders or respond to auxiliary alarms.

Key features

<p>Audio alarm verification</p> <p>direct voice communication between monitoring company and facility</p>	<p>Up to 10 m 30 ft</p> <p>distance of voice audibility</p>	<p>VoRF¹ communication technology</p> <p>proprietary audio streaming protocol using time-division duplex</p>	<p>12 V⁼⁼, 1 A</p> <p>optional external power supply</p>
<p>Up to 3 years of operation</p> <p>with pre-installed batteries</p>	<p>Jeweller radio communication</p> <p>Power adjustment</p> <p>Frequency hopping</p> <p>Encryption</p> <p>TDMA</p> <p>Two-way communication</p> <p>Power adjustment</p>	<p>Tamper alarm</p>	<p>Up to 1,700 m 5,550 ft</p> <p>distance of radio communication with an Ajax hub²</p>
<p>Three ways to get in touch in case of an alarm</p> <ol style="list-style-type: none"> 1. The CMS operator calls the site 2. Hub automatically calls the CMS 3. CMS requests a callback from the site 	<p>3 W speaker with volume of up to 103 dB</p>	<p>AI-powered sound optimization for clear voice transmission</p>	<p>Up to 12 hours of operation in a conversation mode</p>
<p>Option to use a SIP server for communication between the hub and CMS</p>	<p>Automatic over-the-air updates without additional maintenance</p>	<p>Informative push notifications</p> <p>Ajax Home: started call from company Sheriff via SpeakerPhone in Living room</p>	<p>Holding screw for reliable fastening</p>
<p>Two colors</p>	<p>Remote control and configuration</p>	<p>Hassle-free installation</p> <p>QR code</p> <p>SmartBracket App</p>	<p>Up to 10 voice modules in a single Ajax system</p>

Audio alarm verification for any facility type

Private house	Office	Vacation home	Store	Apartment	Nursing home
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Always on call for emergencies

SpeakerPhone Jeweller is a fast and simple way to keep contact with the secured facility, prevent false dispatches, and protect users' peace of mind. If an alarm is raised, a CMS operator immediately calls the facility to verify the situation. They can ask a code or control question or listen to the background noise. In case of a verified intrusion, the CMS operator can deter the burglars to help minimize the damage. Alternatively, SpeakerPhone Jeweller can be used in health facilities and nursing homes to enable direct communication with those needing immediate assistance.

Alarm verification	Deterring intruders	Help request
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Smart scaling for comprehensive security

One security system supports up to ten SpeakerPhone Jeweller devices. If only one speakerphone is installed in the facility, it gets activated after any alarm on-site. In the case of large facilities with several speakerphones in the system, the devices will be activated only when detectors in the same room or security group are triggered. The CMS operator can also switch between several speakerphones in the system to assess the situation at the facility more fully.

- Private houses
- Big estate and large facilities

Discover future-proof hardware

1. AI-powered microphone
2. Speaker
3. Jeweller and VoRF antennas
4. Pre-installed batteries
5. Connector for external power supply
6. LED indicator
7. SmartBracket mounting panel
8. Tamper
9. Holding screw

Never miss a call

SpeakerPhone Jeweller is equipped with a powerful speaker to ensure no call from the monitoring company goes unnoticed. The speaker produces a volume of up to 103 dB, enough for the sound to be heard from any corner of the room. People on the spot will be aware of every call from the security company, and intruders will know they are being monitored. Adjust the speaker to the environment by selecting one of three volume modes in an Ajax app.

3 W output speaker power	Up to 103 dB speaker volume	Three volume modes
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Clear voice transmission with the power of AI

SpeakerPhone Jeweller features an AI-powered microphone with deep learning technologies to ensure clear voice transmission even at long distances and in noisy environments. The microphone suppresses extraneous noise and automatically adjusts sensitivity, allowing the talking person to be heard up to 10 meters 30 feet away. The feature can be managed remotely via an Ajax app. Enable AI sound optimization to hear a person in a noisy setting. Disable the feature if users on the spot do not respond: it helps to listen to the surroundings and check the situation.

- Auto adjustment of the microphone sensitivity
- Suppression of extraneous noise for additional clarity
- Voice audibility at up to 10 m 30 ft

Unique wireless technologies

VoRF

An Ajax system uses a proprietary audio communication protocol to ensure seamless and secure voice exchange. Based on the time division duplex technology, the protocol provides simultaneous two-way communication without additional activation on-site.

- Time division duplex for seamless voice exchange
- Full duplex audio communication
- Adjustable talk time of up to 10 minutes per call session

Jeweller

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

- Up to 1,700 m 5,550 ft of radio communication with a hub²
- Encrypted two-way radio communication
- Notifications about jamming and connection loss

Communication over the VoRF protocol does not affect the operation of Jeweller technology. However, while a conversation is in progress, Wings communication technology is unavailable. So, photos made by MotionCam detectors during the call will be sent by a hub to Ajax apps **only after the call ends**.

Flexible interaction between CMS and end user

Using a SIP server	Using CMS software ³
Use a SIP server to establish communication with the secured facility. Receive alarm notifications on the security company's monitoring software and promptly request a callback from the hub through the SIP server.	Integrate Ajax with the security company's monitoring software for seamless interaction with the hub. In this case, the hub directly contacts the CMS software's SIP server ⁴ . It allows the hub to initiate a call automatically after an alarm.

Low maintenance with over-the-air updates

SpeakerPhone Jeweller requires minimal maintenance to keep the device up-to-date. Ajax speakerphones receive regular updates without the need for site visits. The update process is automatic and takes a few seconds. Constant support from Ajax Systems makes device maintenance easy and cost-effective.

To enable over-the-air updates, connect the hub to Ethernet.

Stable performance for years

Pre-installed batteries	External power supply ⁴
The pre-installed batteries provide up to 3 years of autonomous operation in standby mode and up to 12 hours in conversation mode. Ajax apps will notify an installation engineer and users of the low battery level in advance. The batteries are replaceable, so after three years, the installer pops the new ones, and the speakerphone continues to operate as usual.	SpeakerPhone Jeweller can be connected to a 12 V= grid to operate on an external power supply. The pre-installed batteries will serve as a backup, so even in a power outage, the device continues to operate without any problem.

Complex sabotage protection

<p>Tamper alarm</p> <p>The enclosure of SpeakerPhone Jeweller has a tamper to notify the security company and users if someone tries to dismantle the device from the mounting panel. If the system has sirens, they can be configured to activate a sound signal to deter an intruder in case of a tamper alarm.</p>	<p>Data encryption</p> <p>Block encryption with a dynamic key protects all the stored and transmitted system data. It makes device reprogramming extremely difficult and protects data from replacement and theft.</p>
<p>Data-rich notifications</p> <p>The Ajax system instantly delivers informative notifications of alarms and events. Security companies and users receive precise details about an incident, including a triggered device, time, and location.</p>	<p>Device authentication against spoofing</p> <p>The hub authenticates the device during each communication session by checking its unique parameters. If any parameter fails the check, the hub ignores device commands.</p>
<p>Regular polling</p> <p>The device regularly exchanges data with the hub. The system controls each device state and reports any malfunction and connection loss.</p>	<p>Communication failure detection</p> <p>With minimal ping interval settings available (3 data packages every 12 seconds), it takes only 36 seconds to detect communication loss and notify the security company and users of the incident.</p>

Effortless installation and setup

The device is quick to install and can be easily managed via Ajax apps. Pairing SpeakerPhone Jeweller with the system takes seconds: the installer only needs to scan a QR code. No enclosure disassembly or battery installation is required. To communicate with SpeakerPhone Jeweller, the security company can use a third-party SIP server, the PRO Desktop app, or request CMS software integration³.

Adding to the system	Installation	Setup	Monitoring
Pairing with the security system via QR code	Effortless and secure installation with a SmartBracket mounting panel	Configuring and testing in mobile and desktop apps	Monitoring in the PRO Desktop app for macOS and Windows

¹ Voice over radio frequency.

² In an open space.

³ To request CMS software integration, contact the Ajax support team.

⁴ An external power supply is not required for the device to receive over-the-air updates.