Jeweller

WallSwitch Jeweller

Power relay to remotely control 110–230 V~ power supply and appliances.



Find the detailed information on the device by QR code or the link:

ajax.systems/support/devices/wallswitch/

Key features

- Allows checking electricity consumption
- Executes automation scenarios
- Up to 1,000 m of the encrypted wireless two-way communication with hub or range extender
- Operates in bistable or pulse mode.
- Adjustable pulse duration: from 1 to 255 seconds
- Device is controlled via mobile and desktop apps or manually with the device function button
- Pairing with a hub via QR code

Operating principle

The relay is installed in the electrical circuit gap to control the power supply of devices connected to this circuit. The device connects directly to the 110–230 V~ source and closes/opens the circuit on command. The relay can handle loads of up to 3 kW.

The device is controlled via the device function button, Ajax apps, Button, and automation scenarios. WallSwitch measures the current, voltage, energy consumed by electrical appliances, and the power they consume. This data and other operating parameters of the relay are available in Ajax apps.

Flexibility

WallSwitch is installed in the electrical circuit gap to control the power supply of devices connected to this circuit. It can operate as a momentary or latching switch, supporting pulse1 and bistable modes. The PRO or user with administrator rights can adjust the operating mode in Ajax apps.

If WallSwitch operates in pulse mode, the duration of its activation can be configured from 1 to 255 seconds. The normal state of the relay contacts is also adjustable[1]:

- **Normally closed** — the relay stops supplying power when activated and resumes when deactivated.
- **Normally open** — the relay supplies power when activated and stops when deactivated.

Variety of usage

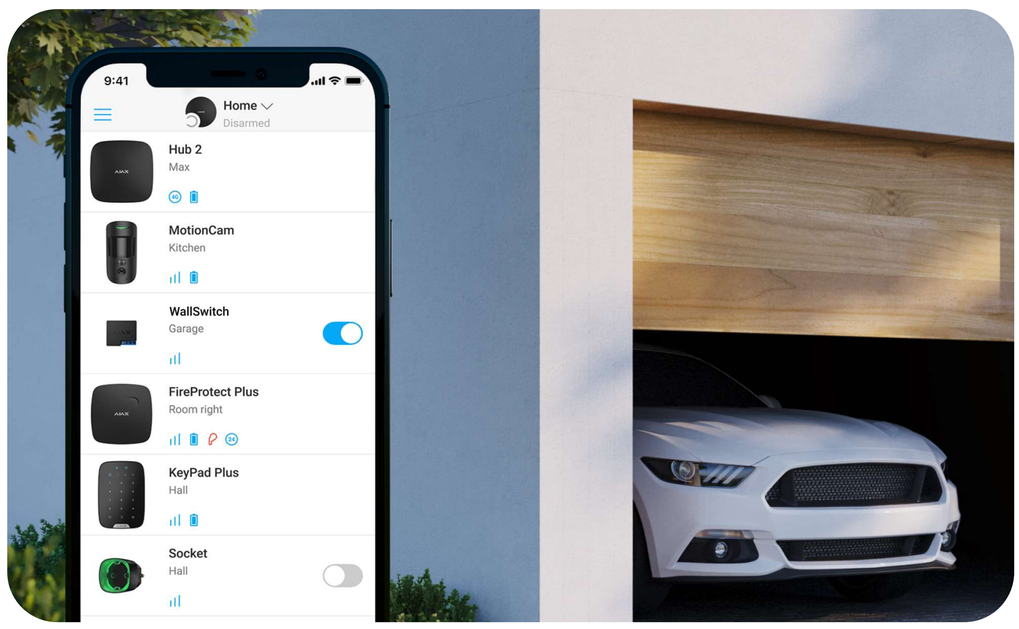


Flood-prevention system

WallSwitch can control the shutoff water valve at the facility. In case the washing machine breaks or the pipe bursts, water is shut off by a scenario after leak detection by LeaksProtect or a third-party leak detector.

Automatic gates or barriers

WallSwitch can control opening-closing electrically driven gates and barriers equipped with a remote control unit.



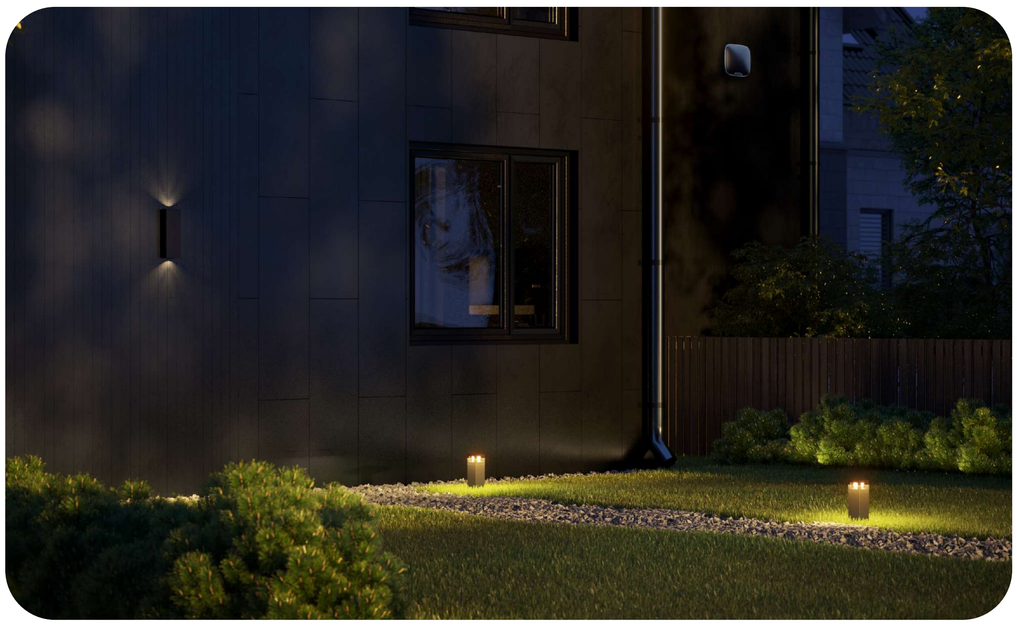


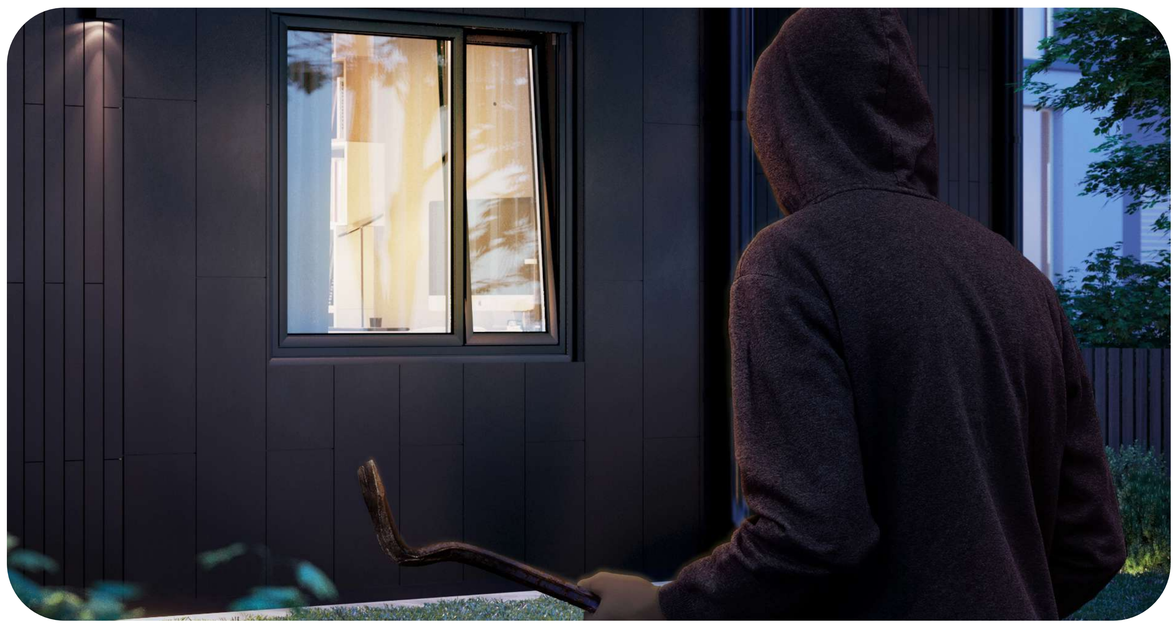
Lighting and electricity supply of a facility

WallSwitch can shut off lights and selected sockets automatically when arming the facility, saving on electricity and reducing the risk of a short circuit.

Site lighting

WallSwitch can control the external lights and their activation by security system alarm or schedule. Along with street sirens, this is an effective protection against non-professional burglars.





Effect of presence

WallSwitch can simulate human presence in a cottage or a summer house — by turning on the lights, TV, or music by schedule.

Underfloor heating

An installer can set floor heating or electric heaters on the facility to run it by schedule and save clients money. And, if necessary, turn the equipment on and off remotely through the app.



Automation scenarios

Scenarios provide advanced comfort and protection for your clients and their property. WallSwtich supports the following types of automation scenarios:

- Security mode change reactions
- Scheduled actions
- Alarm reactions

Reactions to temperature changes

Reactions to dioxide (CO_2) concentration

Reactions to humidity changes

Reactions to pressing the light switch LightSwitch



Jeweller is a **wireless data transfer protocol** to provide fast and reliable two-way communication between the hub and connected devices. The protocol helps monitor and control connected devices via Ajax apps. All data transfers — from the hub to a device or the cloud — are delivered in small data packets and protected with floating key encryption.

Supporting up to 1,000 m of wireless connectivity between WallSwitch and hub (or range extender), Jeweller is ready to protect any facilities and deliver the best user experience for both system owners and installers.

Installation

WallSwitch can be sited into a recessed wall plate or the body of an electrical appliance, owing to its size: 39 × 33 × 18 mm. With DIN Holder, the relay can be mounted on a standard 35 mm DIN rail and installed in a junction box, server cabinet, or electrical panel. WallSwitch is fitted in the holder casing and mounted on a rail using side hinges, so no tools are required. Connecting the device to the hub takes less than a minute: it’s enough to connect to the device's external power and scan a QR code with the Ajax app.



DIN Holder solds separately.

Technical specifications

Communication with a control panel or range extender	**Jeweller communication technology** **Frequency bands** 866.0–866.5 MHz 868.0–868.6 MHz 868.7–869.2 MHz 905.0–926.5 MHz 915.85–926.5 MHz 921.0–922.0 MHz Depends on the sales region. **Maximum effective radiated power (ERP)** up to 20 mW **Communication range** up to 1,000 m in line of sight **Polling interval** 12–300 s Adjusted by PRO or user with admin rights in the Ajax app.
Compatibility	**Hubs** all Ajax hubs **Range extenders** all Ajax radio signal range extenders
Power	**Power supply** 110–230 V~, 50/60 Hz **Maximum load current** 10 A **Output power for EAEU countries** up to 2.3 kW At 230 V~ resistive load. **Output power for other countries** up to 3 kW at 230 V~ At 230 V~ resistive load.
Features	**Power consumption in standby mode** up to 1 W **Power parameters available in the app** current voltage power consumption, electrical energy meter

Protection	**Voltage protection threshold** maximum 253 V~ minimum 184 V~ **Current protection threshold** 13 A **Temperature protection threshold** over +65°C at the place of installation over +85°C inside WallSwitch	Features	**Adjustable operating mode** Pulse or bistable With firmware version 5.54.1.0 and higher. Bistable With firmware version under 5.54.1.0 **Adjustable pulse duration** from 1 to 255 s With firmware version 5.54.1.0 and higher.
Enclosure	**Colour** black **Dimensions** 39 × 33 × 18 mm **Weight** 30 g	Installation	**Operating temperature range** from 0°C to +64°C **Operating humidity** up to 75% with no condensation **Ingress protection class** IP20
Complete set	WallSwitch Jeweller Double-sided tape Quick Start Guide		

1 — pulse mode and the normal state of the relay contacts is available with firmware version 5.54.1.0 and higher.