

# 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/



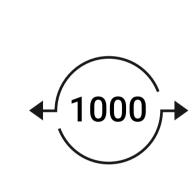
# Key features



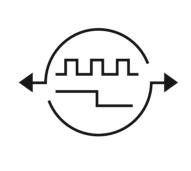
Allows checking electricity consumption



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  $110-230 \text{ V} \sim \text{source}$  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<sup>1</sup>:

- 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

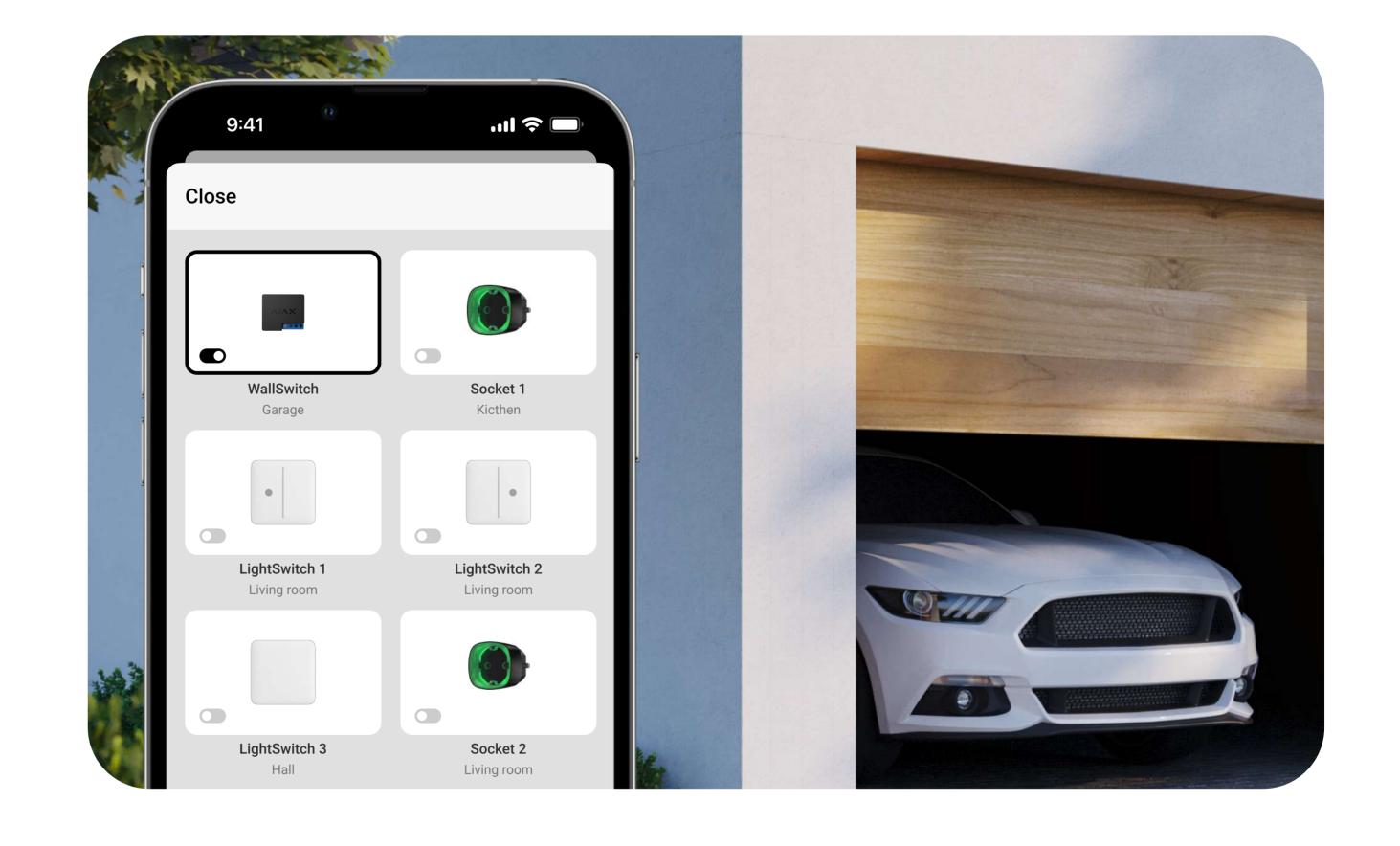


### Flood-prevention system

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.

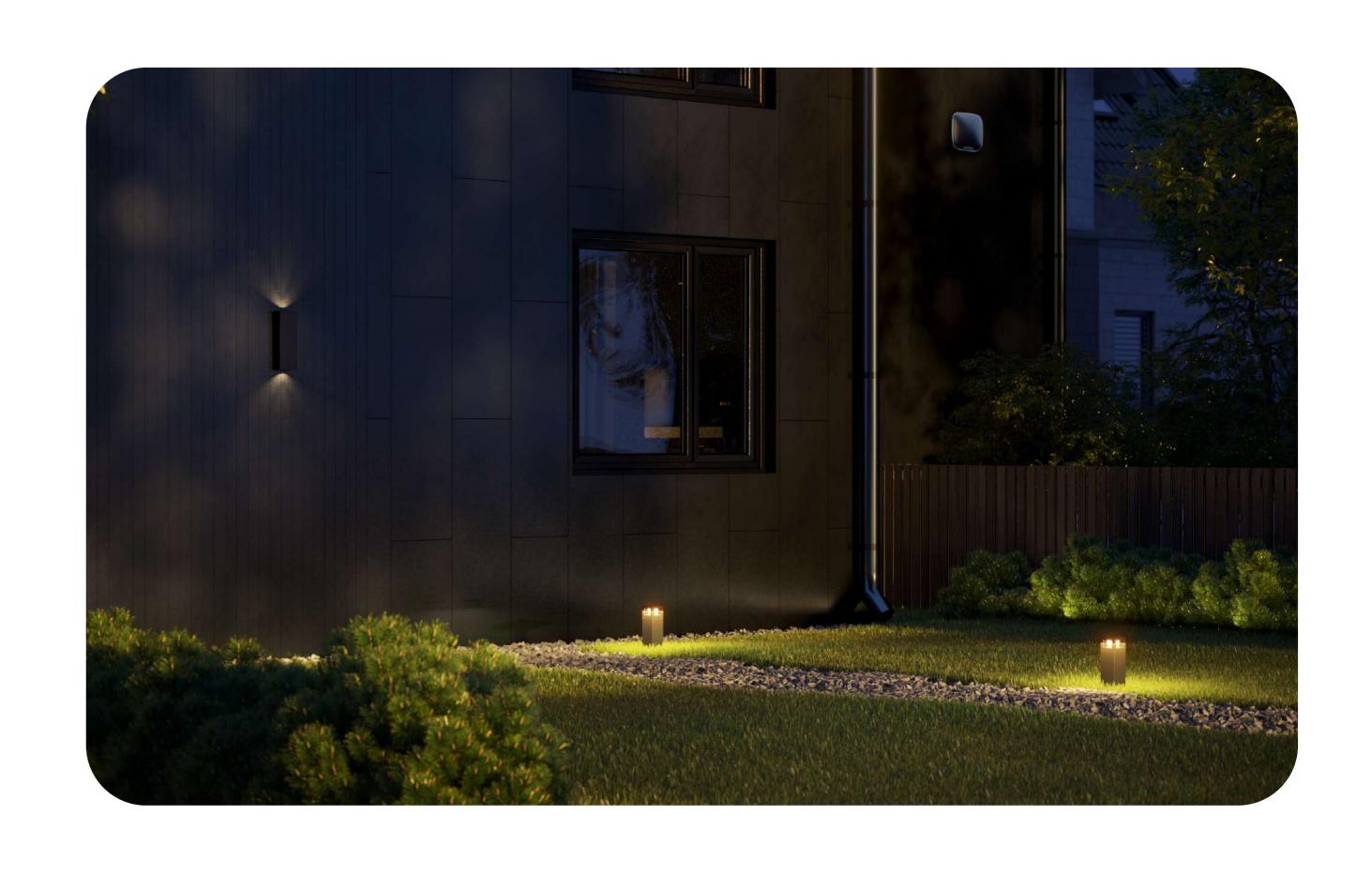


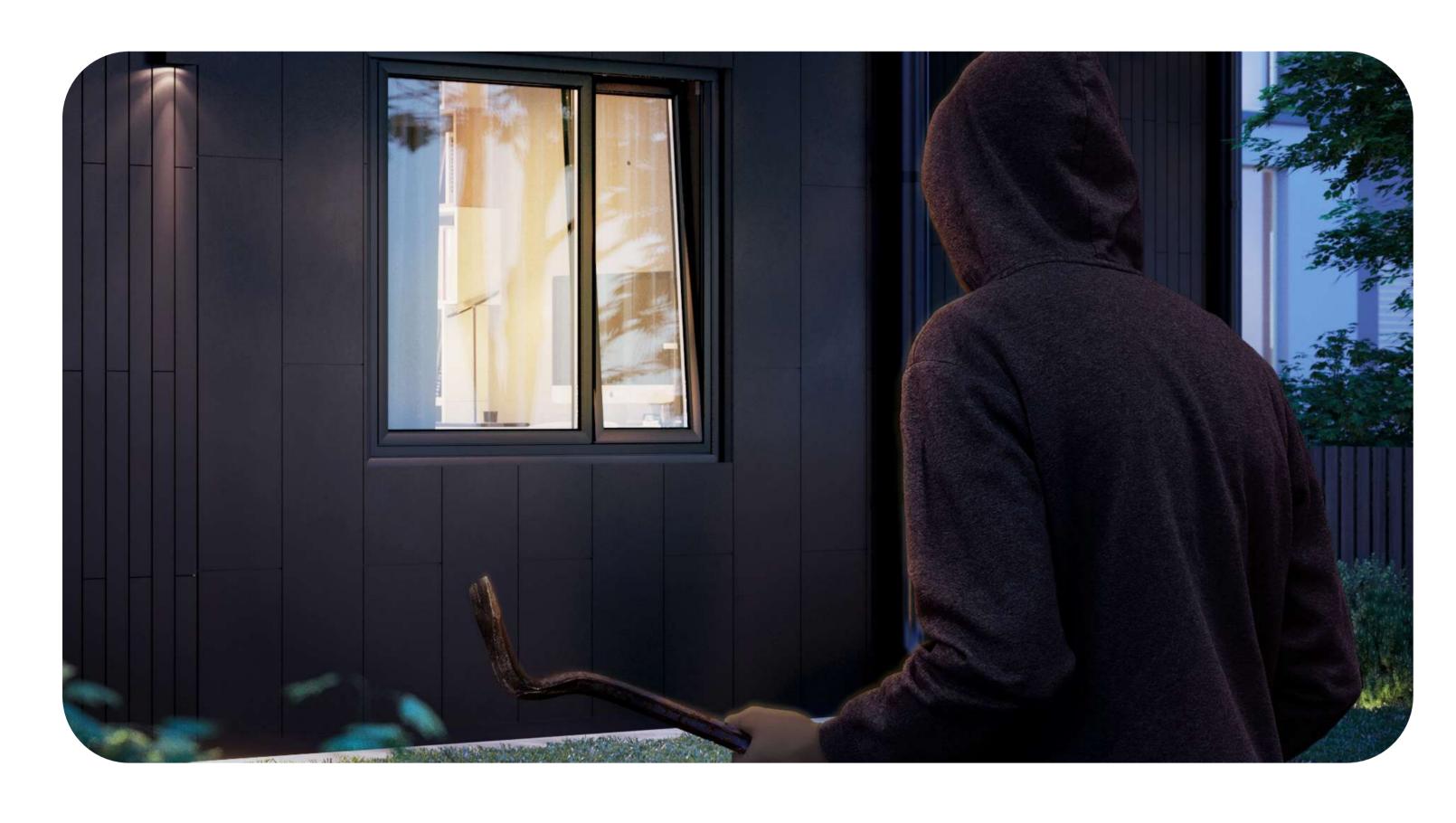
# Lighting and electricity supply of a facility

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 carbon dioxide (CO<sub>2</sub>) concentration



Reactions to humidity changes



Reactions to pressing 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:  $39 \times 33 \times 18$  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

Depends on the sales region.

921.0-922.0 MHz

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

Compatibility

Hubs all Ajax hubs

Range extenders
all Ajax radio signal range
extenders

Power

Power supply

Ajax app.

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

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