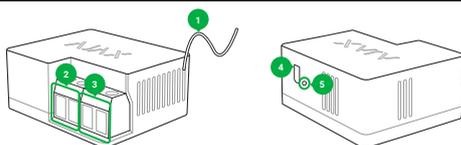Dry contact relay
Model Name: **Ajax Relay**

Remote control relay with a dry contact

The Relay is a wireless relay with a potential-free dry contact intended for switching appliances and devices on and off, powered by a 7–24 V DC source. The relay also has a pulse equipment control function. It is connected to the Ajax security system by the Jeweller secure protocol, the distance range is up to 1,000 meters if there are no obstacles.

The built-in relay contacts are not galvanically connected to the device itself, so they can be connected to input control circuits for different equipment, imitating a button, switch, etc.

> IMPORTANT: This Quick Start Guide contains general information about the Relay. Before using the device, we recommend to reviewing the User Manual on the website:
> ajax.systems/support/devices/relay

FUNCTIONAL ELEMENTS

1— antenna
2— power supply terminal block
3— contacts terminal block
4— function button
5— light indicator

CONNECTION AND SETTING UP

IMPORTANT: Do not connect the Relay power supply terminals to 110–230 V electric mains! Do not connect the Relay to a power supply with a voltage exceeding 36 V. It creates a fire hazard and will damage the device!

The Relay is powered by a 7–24 V DC source. The recommended voltage values for the Relay are 12 V and 24 V.

The Relay connection and setup is carried out via the Ajax Security System mobile app.

To make the Relay detectable, connect it to a power supply and wait 10–15 seconds. Then launch the procedure of adding a device in the mobile app and press the Relay function button.

During pairing, the relay and the hub should be located at the same site.

CONNECTION AND SETTING UP

Voltage protection – the contact will be opened when the voltage falls outside the limits of 6.5–36.5 V.

Temperature protection – the contact will be opened when the threshold temperature of 85°C is reached inside the Relay.

LOCATION SELECTION

The Relay must be installed by a qualified electrician regardless of the type of electric circuit to which the device is connected.

When selecting the place of installation for the Relay, consider the distance of the device from the hub and the presence of objects preventing radio signal transmission.

The Relay is designed to be installed inside a connection box, electric service panel, or the housing of electric switchboards.

Do no install the Relay:

1. Outside the premises (outdoors).
2. In metal junction boxes and electric service panels.
3. In rooms with a temperature and humidity outside the allowable limits.

Status indicator	Signal level
	Excellent signal level
	Good signal level
	Poor signal level
	No signal

To check the quality of connection with the hub, test the signal level in the Ajax Security System app for at least a minute.

MOUNTING THE DEVICE

1. Turn off power on the cable to which the Relay will be connected.
2. Connect the power supply cable to the Relay terminals, and then the Relay contact terminals to the required circuit with wires/cable of a sufficient diameter.

If the device is installed in a connection box, install the antenna outside. The further the antenna is located away from metal structures, the less the chance of radio signal shielding. The antenna must not be shortened under any circumstances.

During the Relay installation and operation, follow the general electrical safety rules for using electrical devices, as well as the requirements of the electrical safety regulations. It is expressly prohibited to disassemble the device.

$C\epsilon$ This product can be used across all EU member states.

This device in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. All essential radio test suites have been carried out.

TECH SPECS

Actuating element	Electromagnetic relay
Service life of the relay	200,000 switchings
Supply voltage range	7–24 V (DC only)
Voltage protection	Yes, min — 6.5 V, max — 36.5 V
Maximum load current*	5 A at 24 V DC, 13 A at 230 V AC
Maximum current protection	No
Output power* (resitive load 230 V)	Up to 3 kW
Parameter control	Yes (voltage)
Device energy consumption	Less than 1 W/h
Frequency band	868.0–868.6 MHz
Effective radiated power	3.99 mW (6.01 dBm), limit — 25 mW
Modulation	GFSK
Maximum distance between the device and the Hub	1,000 m (any obstacles absent)
Communication ping with the receiver	12–300 sec. (default 36 sec.)
Shell protection rating	IP20
Operation temperature range	From 0°C to +64°C (ambient)
Max. temperature protection	Yes, over 65°C at the place of installation or over 85°C inside the Relay
Operating humidity	Up to 75%
Dimensions	38 x 25 x 18 mm
Weight	32 g

* If using inductive or capacitive load, the maximum commutated current decreases to 3 A at 24 V DC and to 8 A at 230 V AC!

WARRANTY

Warranty for Ajax devices is valid for two years after the purchase date. If the device does not work correctly, you should first contact the support service—in half of the cases, technical issues can be solved remotely!

The full text of the warranty is available on the website:
ajax.systems/warranty

User Agreement:
ajax.systems/end-user-agreement

Technical support:
support@ajax.systems

COMPLETE SET

1. Relay.
2. Double-sided adhesive tape.
3. Quick Start Guide.