

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

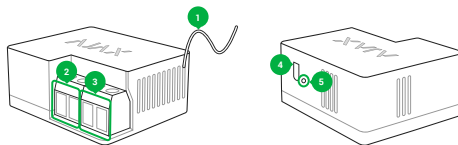
Remote control relay with a dry contact

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](http://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.

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 not 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.

|   |   |
|---|---|
| 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* (resistive 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](http://ajax.systems/warranty)

User Agreement:

[ajax.systems/end-user-agreement](http://ajax.systems/end-user-agreement)

Technical support:

[support@ajax.systems](mailto:support@ajax.systems)

## COMPLETE SET

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



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.

Manufacturer: Research and Production Enterprise "Ajax" LLC  
Address: Sklyarenko 5, Kyiv, 04073, Ukraine  
By request of Ajax Systems Inc.  
[www.ajax.systems](http://www.ajax.systems)