λγγ

WallSwitch

1. PURPOSE

WallSwitch remote controller is used to switch on and off appliances maximum power of less than 3 kW. Wallswitch housing is designed for installation in a standard european wall mounted junction box. The switch operates as a part of Ajax system.

▲ IMPORTANT!

The switch works only with the Ajax Hub.

2. SPECIFICATIONS

SPECIFICATION	MEANING
Use	Indoor
Actuator	Relay
Relay service life	200 000 switchings
Power supply voltage	110-240 V AC±10% 50/60 Hz
Voltage protection for 230 V electrical network	Max 264 V, min 161 V
Voltage protection for 110 V electrical network	Max 126 V, min 77 V
Load maximum current	13 A
Maximum current protection	Yes (13 A)
Allowed power (resistive load at 230 V):	Up to 3 kW
Allowed power (resistive load at 110 V):	Up to 1.5 kW
Electric meter option	Yes (statistics available)
Monitoring of power consumption param- eters	Yes (current, voltage, power consump- tion)
Allowed operating ambient temperature	From 0°C (+32°F) to +64°C (+147.2°F)
Maximum temperature protection	Yes (65°C (+149°F) inside the wall box)
Communication protocol	Jeweller (868 or 915 MHz depending on the country of distribution)
Radio signal power	25 mW
Command response time	Less than a second
Maximum distance between detector and Hub	Up to 1000 m (3300 ft) (in open area)
Power consumption in standby mode	Less than 1 W
Ingress protection	IP20
Operating humidity	Less than 75%
Dimensions	38x25x18 mm (1.49x0.98x0.70 in)
Dimenstions for mounting in the wall plate	Ø ≥ 50 mm (1.97 in), depth 55 mm (2.17 in)
Weight	32 g

▲ IMPORTANT!

In case of inductive or capacitive load use the output permissible power is lowered to $2\,kW!$

3. PACKAGE CONTENTS

WallSwitch switch, 2 connecting wires, manual.

▲ IMPORTANT!

Comply with safety standards when operating electrical appliances! All switch installation works should be performed only by a qualified electrician. To avoid the risk of electric shock during installation, disconnect the electrical network leading to the plug-switch prior to installation, make sure that there is no voltage on the wires, having checked it with a multiester or a multimeter. It is strictly prohibited to disassemble switch under voltage, even if the relay is switched off! During installing comply with the state requirements and regulations.

4. GETTING STARTED

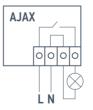
4.1 Before switch installing the power must be switched off! Remove the safety device or switch off automaton which supplies socket with electricity, to which WallSwitch will be installed!

▲ IMPORTANT!

When mounting WallSwitch into wall mounted junction box place it's antenna as far as possible from the metal objects [wires, fasteners, etc.]. It is recommended to install antenna under the external plastic decorative panel. Do not shorten or cut the antenna in any case.

Do not use WallSwitch with a damaged body and/or antenna, it may cause a short circuit or an electric shock!

4.2 Connect WallSwitch as in diagram (PICTURE 1).





PICTURE 1. Wiring diagram of WallSwitch switch PICTURE 2. Recommended WallSwitch antenna placement (under the front panel)

▲ IMPORTANT!

Do not connect to WallSwitch load more than 3 kW. When connecting the load, please carefully learn the wiring diagram (PICTURE 1), as incorrect wiring can cause damage to the device and / or destruction of property.

To switch on Wallswitch without connecting it to the Hub, press button "1" [PIC. 3] for more than 2 seconds – Wallswitch will change it's on/off state.

4.3 To register WallSwitch in Ajax system, you need to start "Add Device" function in Ajax mobile or web application. Then scan the QR-code on WallSwitch box, or enter the switch code manually. Then select a name and a room for the new Wallswitch. Then press Add and device search lasting for 30 sec will start. Once the search has begun, you need to connect and disconnect a load more than 20W to WallSwitch, or press "1" button [PICTURE 3] on its body. If WallSwitch registration is successful it will be added to the Ajax system devices list.

▲ IMPORTANT!

After Wallswitch first connection to power it is in switched off state. After WallSwitch removal from Ajax system Wallswitch goes to switched off state.

4.4 If Wallswitch registration in the system for whatever reason did not take place, repeat the procedure described in paragraph 4.3.

▲ IMPORTANT!

Make sure that in the installation location Wallswitch has a stable radio contact with the Hub! A maximum distance of 1000 m (3281 ft) between the remote controller and the Hub is mentioned as a comparison with other devices. This distance was found as a result of open area tests. Connection quality and distance between the sensor and the receiver can vary depending on installation location, walls, compartments, bridgings, as well as the thickness and constructional material. Signal coming through obstacles, loses power. For example, distance range between the remote controller and the Hub, divided with two reinforced concrete bearing walls, constitutes approximately 30 m [98.4 ft]. Please note that moving the antenna even few centimeters, it is possible to improve the signal reception considerably.

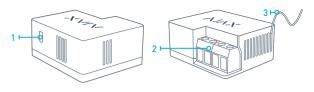
4.5 Be sure to check the radio signal level! You can run signal level test on your mobile or web Ajax application by pressing on "Signal level test" in Wallswitch settings.

▲ IMPORTANT!

Radio communication tests don't start immediately. Some time is needed for main to send a test request to the switch, and the switch has sent confirmation of its readiness to be tested. As a rule, test-launch takes up to 5 seconds.

Test results are displayed in a mobile application or a browser as 3 column-indicators. Signal strength test results may be as follows:

APPLICATION	DESCRIPTION
3 indication bars	excellent signal level
2 indication bars	medium signal level
1 indication bar	bad signal level
0 bars	no signal



PICTURE 3. Remote controller

1 - button, 3 - antenna, 2 - terminal blocks.

5. FUNCTIONS AND POSSIBILITIES

5.1 Functions supported by WallSwitch switch are configured through a mobile application or a browser.

5.2 Functions list:

- manual on / off at any time through a mobile application or a browser;
- statistics accounting of connected devices energy consumption;
- information on current power consumption, current and voltage of the network;
- automatic switch off in case of current exceeding the permitted threshold;
- automatic switch off in case of too high and too low voltage;
- automatic switch off in case of temperature exceeding permitted threshold;
- automatic switch on when voltage or temperature caused automatic switch off came to normal.

6. MAINTENANCE

6.1 The unit requires no maintenance.

7. WARRANTY

7.1 Warranty period for the switch is 24 months under device normal operation. The manufacturer is not liable for any property damage, which was caused by a faulty device. The manufacturer is not liable for incidental, consequential, special, and indirect or punitive damages or for any damages, including, in particular, loss of profit, savings, data, loss of benefits, claims by third parties, and any damage to property or personal injury resulting from or associated with the device operation.

AJAX Systems Inc., www.ajax.systems support@ajax.systems