



ERC2204 Dry Contact Controller

Product Specification

Modify Record

Serial no.	Version	Date	Modify Content
1	V1.0	2021-07-29	Initial Version



1. Product Overview

1.1 Product Introduction

Dry Contact Controller supports RF433, which can control the garage door, power door and socket by wireless kinetic switch, the maximum current can reach 10A. It reserves the input terminals for traditional switches, and can be controlled by the original traditional switches. It is mounted in the box of switch/socket (European standard box). With the smart gateway, it can be also controlled by kinetic switch APP and the smart speaker (Smart speakers like Google Assistant, Amazon Alex).

1.2 Product Image



2. Product Features

2.1 Pair with EBELONG Wireless Kinetic Switch

There are two pairing methods for pairing with the receiver and the wireless kinetic switch:

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Ordinary pairing and Directional pairing.



2.1.1 Ordinary Pairing

2.1.1.1 Physical button Mode

Press the button for 3 seconds, the light will enter a slow flashing state, the receiver enters the status of "waiting for pairing". At this time, press the button of the wireless switch that needs to be paired once, and the light is off, it means that the pairing is completed.

2.1.1.2 Through wired switch

Within 2 minutes after the controller is powered on ,press quickly the wired switch for 5 times within 2 seconds, and the output load is switched ON/OFF repeatedly. Then the receiver enters the pairing mode. At this time, press the button of the wireless kinetic switch once, and the load stops ON/OFF, it means that the pairing is completed. After controller is powered on more than 2 minutes, the pair mode cannot be triggered by the wired switch.

2.1.2 Directional Pairing

In order to meet the user's habit of using traditional switches, and to ensure the synchronization of the states of multiple wireless receiver in one control and multiple modes, the directional pairing is defined. This pairing method only supports double-buttons or six-buttons rebound switches. The pairing methods are as follows:

2.1.2.1 Physical button Mode

Press the button for 3 seconds, the light will flash slowly, the receiver enters the state of "waiting for pairing ". At this time, press any button of the wireless kinetic switch for 4 times (within 1 second), and the light will turn off, it means that the pairing is completed.

Note: After the pairing is successful, the left and right buttons of the rebound switch are a group, short press the left button is to close, and short press the right button is to open.

2.1.2.2 Through wired switch

Within 2 minutes after the controller is powered on, press quickly the wired switch for 5 times within 2 seconds, and the output load is switched ON/OFF repeatedly. Then the receiver enters the pairing mode. At this time, press the button of the wireless kinetic switch four times within 1 second , and the load stops ON/OFF, it means that the pairing is completed.

2.2 Clear Pairing with Wireless Kinetic Switch

Press the corresponding button of receiver for 12 seconds, the light will flash-still-off, and then release the button, all information for the wireless kinetic switch that matched with this channel will be cleared.





2.3 Bridging Mode

Press the button for 7 seconds, LED light changes from slow flashing to fast flashing (2 flashes per second), and release the button when it flashes quickly, and it enters the bridging mode. At this time, the light flashes once every 2 seconds. If need to exit the bridging mode, just repeat the above steps.

2.4 Wired Switch Control

The controller supports automatic detection of wired switch type (rocker switch or push botton) : After the controller is powered on, press the wired switch once to set the current wired switch type (for example, if the rocker switch is pressed after the controller is powered on, set the wired switch type to rocker switch). To reset the wired switch type, power off the controller and then power on it. Repeat the preceding steps.

2.5 Smart Control

After added with ECH-103 smart gateway, Dry contact controller can be controlled by kinetic switch APP and smart speaker. More details, please check smart gateway user guide.

3. Technical Parameters

Project	Parameters
Product Model	ERC2204
Power Supply	AC100V -240V 50/60Hz
Output Channel	Single Channel
Operational Current	10A
Radio Frequency	RF 433MHz
Operate Range	80m (Outdoors) 25m(Indoors)
	(depending on building materials)
Standby Power Consumption	≤0.5W
Storage Capacity	Each channel can store up to 10 wireless kinetic switch



	info
Wiring Method	Terminals
Installation Method	the box of switch/socket
Dimensions	L44*W44*H22mm
RF Receive Sensitivity	-110dBm
Operational Temperature	-20°C ~ +55°C
IP Rating	IP20
Certifications and Standards	EN60669-1:2018
	EN IEC55015:2019

4. Wiring Diagram



L: Input Live Cable
N: Common Neutral Cable
IN: Input Terminal
OUT: Output Terminal
S: Input Terminal for Traditional Switch, compatible
with rocker switch and push button (detect switch type automatically)





5. Installation Diagram



The Box of Switch

The Box of Socket

Light Panel

6. Product Dimensions

