

## ERC22 Series Dry Contact Controller Product Specification

### Modify Record

Serial no.	Version	Date	Modify Content
1	V1.0	2021-09-01	Initial Version

## 1 Product Description

### 1.1 Product Introduction

Dry Contact Controller supports WiFi 2.4G and RF433, which can control the garage door, power door and socket by Tuya App and 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). Through the smart speaker, it can achieve ON/OFF by voice control. (Smart speakers like Google Assistant, Amazon Alex).

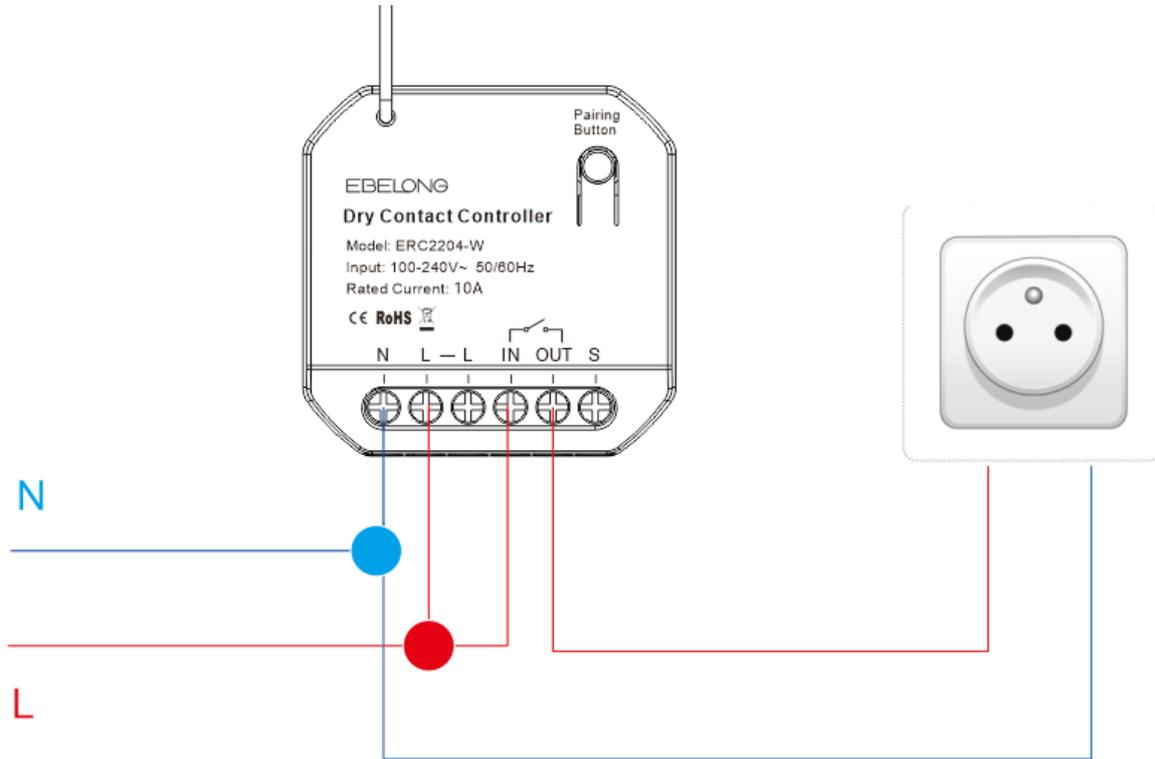
### 1.2 Product Image



## 2 Technical Parameters

Project	Parameters
Product Model	RF Version: ERC2204 WiFi Version: ERC2204-W
Power supply	AC100V -240V 50/60Hz
Output Channel	Single Channel
Operational current	10A
Radio frequency	ERC2204: RF 433MHz ERC2204-W: WiFi IEEE 802.11 b/g/n 2.4G & RF 433MHz
Operate range	80m (Outdoors) 25m(Indoors) (depending on building materials)
Standby Power Consumption	< 1W
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

### 3 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)

### 4 Product Features

#### 4.1 Network Method (Only apply to ERC2204-W)

After the Receiver is powered on, it enters the network configuration (EZ mode) by default, and the LED light flashes quickly (2 flashes per second). If LED light is not in right state, need to reset the device to enter the network configuration mode, follow the steps below: Press the button for 10 seconds, then release the button after the light is still, and when the LED light is flashing quickly, it means that it enter the network configuration state. After entering the network configuration mode, it can add devices through the App of "Tuya Smart" or "Kinetic Switch". After the device is successfully added, it can achieve ON/OFF by App control.

If the controller network cannot be configured successfully in "EZ mode", try "AP mode". Follow the steps to switch to the "AP mode": press the button for 10 seconds in "EZ mode"(When LED light flash

qucikly), then release the button after the light is still, and it can switch to “AP mode”. At this time, the light will turn off once every 2 seconds. If need to switch it from “AP mode” back to “EZ mode”, press the button for 10 seconds, then release the button after the light is still.

## 4.2 The Pairing Method for Wireless Kinetic Switch

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

Ordinary pairing and Directional pairing.

### 4.2.1 Ordinary Pairing

#### 4.2.1.1 App Method (Only apply to ERC2204-W)

Enter the App page, click "Pairing" -> "Start Pairing", and select the corresponding channel. After the App page displays “waiting for pairing”, press the corresponding button of the wireless kinetic switch that needs to be paired. It can complete the pairing. (the App will prompt "Pairing succeeded" after the pairing is completed.)



#### 4.2.1.2 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.

#### 4.2.1.3 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.

### 4.2.2 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:

#### 4.2.2.1 App Method (Only apply to ERC2204-W)

Enter App page, click "Pairing" -> "Start Pairing", select the corresponding channel, after the App page displays "waiting for pairing", quickly press any button of the wireless kinetic switch for 4 times within 1 second (the left and right buttons of the rebound switch are a group) to complete the pairing. (App page will prompt "pairing successful" after the pairing is completed).

#### 4.2.2.2 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.

#### 4.2.2.3 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 1second, and the load stops ON/OFF, it means that the pairing is completed.

### 4.3 Cancel Pairing with Wireless Kinetic Switch

#### 4.3.1 App Method (Only apply to ERC2204-W)

Enter the App page, click "Pairing" -> "Clear Pairing", and select the corresponding channel. After the clearing is completed, the app will prompt "Clearing Successful".

#### 4.3.2 Physical button Mode

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.

### 4.4 Clear Network

#### (1) App Method (Only apply to ERC2204-W)

Enter the app device page and select "Remove Device" to clear the device network configuration

#### (2) Physical button Mode

Press the button for 10 seconds, the light is flashing to still, and then release the button, LED1 will flash quickly, and the devices will be removed from the App.

### (3) Through wired switch (Only support push button)

Within 2 minutes after the controller is powered on, long press wired switch for 15 seconds, and output load state will be reversed, it means network information of controller is cleared (such as: long press the wired switch 15s, lamp will change from opened to closed, clear network is successful), can add controller through the app at this time. After the controller is powered on more than 2 minutes, the network information of controller cannot be cleared through the wired switch.

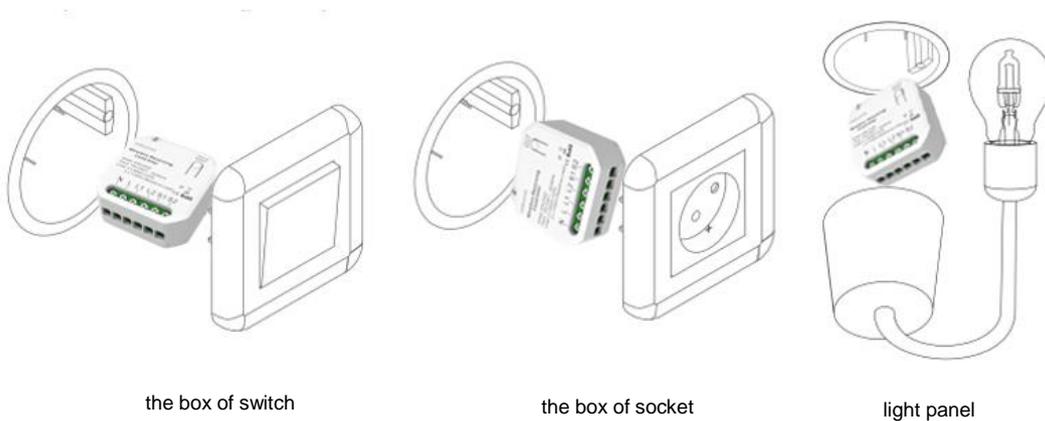
### 4.5 Bridging Mode

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.

### 4.6 Wired switch control.

The controller supports automatic detection of wired switch type (rocker switch or push button) : 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.

## 5 Installation Diagram



## 6 Product Size

