DieseRC DieseRC_ee5588fc59bd40fb9abc930e041c534e

DieseRC Radio Frequency Light Remote Control Switch User Manual

Model: DieseRC_ee5588fc59bd40fb9abc930e041c534e

1. Product Overview

The DieseRC Radio Frequency Light Remote Control Switch system allows for wireless control of lights and other electrical appliances. It consists of a relay receiver and two remote control transmitters, operating on a 433MHz RF frequency. This manual provides instructions for installation, setup, and operation.

2. Package Contents

- 1x Relay Receiver
- 2x Transmitters (with CR2016 batteries included)
- 1x Product Manual (this document)

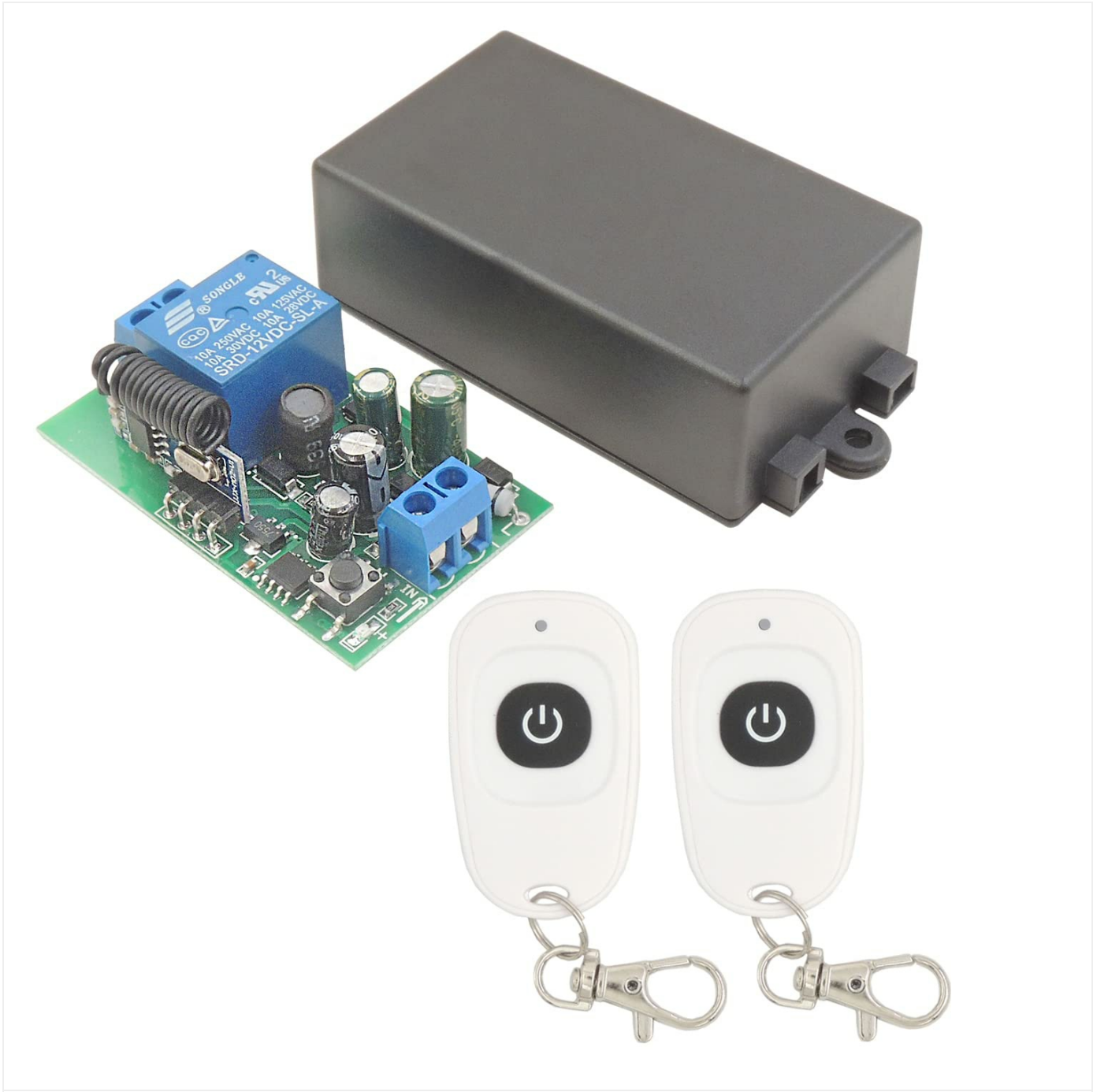

Image 1: Contents of the DieseRC RF Wireless Relay Switch package, showing the receiver module, its protective casing, and two remote control transmitters.

3. Product Specifications

Parameter	Value
Receiver Working Voltage	AC 85V~240V
Quiescent Current	<5mA
Max Current	10A
RF Frequency	433MHz
Working Temperature	-30°C ~ +80°C
Receiving Sensitivity	>97dbm

Parameter	Value
Storage Remote Controls	Up to 20 pieces
Support Encoding	1527 Learning code
RF Operating Mode	ASK superheterodyne wireless reception
Receiving Range (Open Space)	>50 meters
Pin Configuration	N/L
Operating Modes	Momentary / Toggle / Latched Mode
Transmitter Battery	2x CR2016 (included)
Wattage	1500 watts
Maximum Switching Current	10 Amps

4. Installation

The receiver unit is designed for easy integration into existing electrical systems. It should be installed between the power supply and the device you wish to control (e.g., a lamp). The compact size (70*38*21 mm) allows for flexible placement. Ensure all power is disconnected before installation.

Image 2: Illustration of the receiver module connected between an AC 85V-250V power source and a light fixture, demonstrating a typical installation scenario.

The receiver is housed in a protective box for enhanced safety. No complex wiring is required for basic operation, but professional installation is recommended for those unfamiliar with electrical work.

5. Operating Modes

The receiver supports three distinct operating modes: Momentary, Toggle, and Latched. The desired mode must be set during the setup process.

5.1. Momentary Mode

In Momentary Mode, the relay activates only while the remote button is pressed. Releasing the button deactivates the relay.

1. Press and hold one button on the transmitter: The connected device will turn ON.
2. Release the button: The connected device will turn OFF.

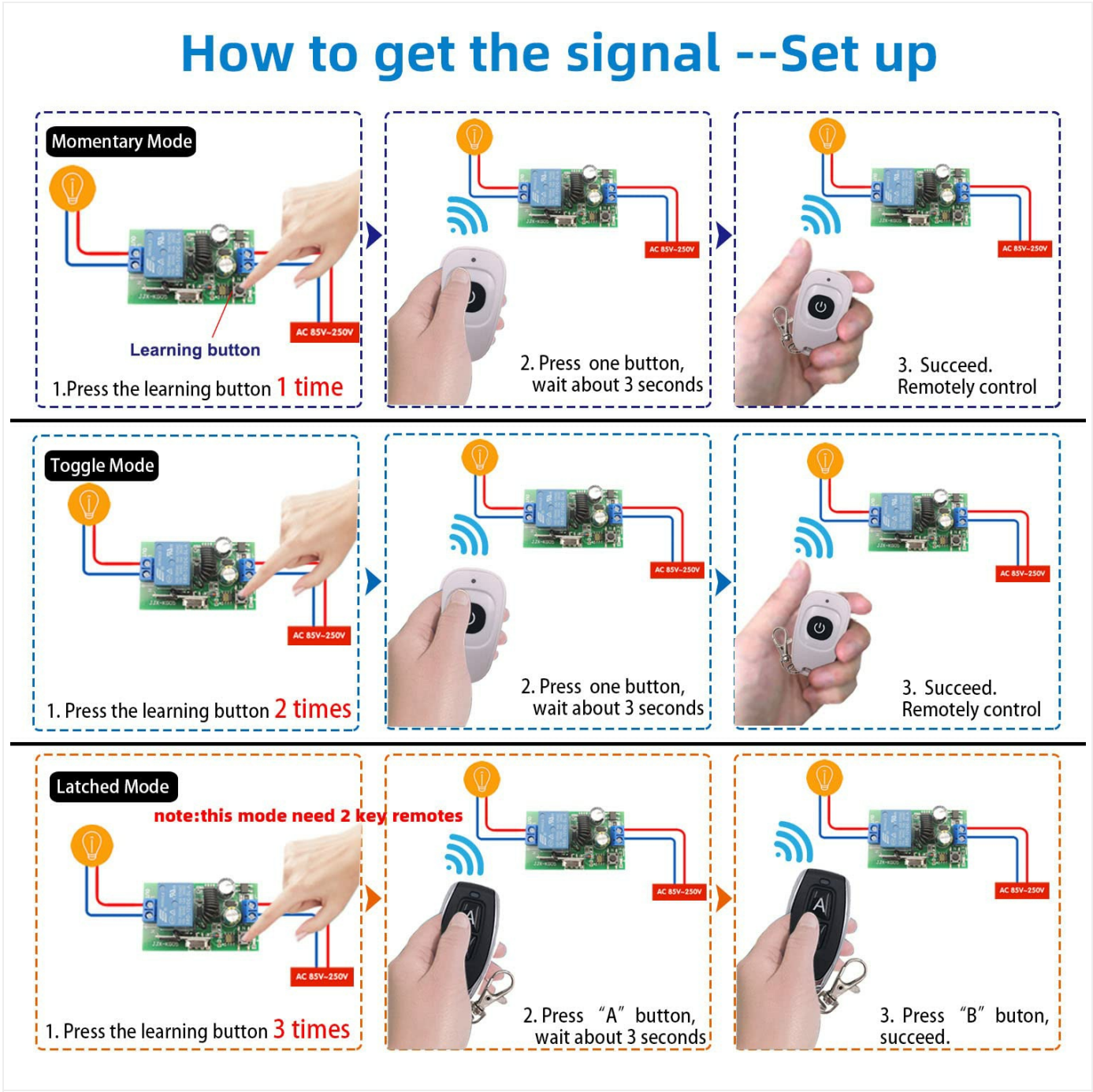

Image 3: Visual representation of Momentary Mode. Pressing and holding the remote button turns the light on; releasing it turns the light off.

5.2. Toggle Mode

In Toggle Mode, each press of the remote button alternates the relay's state (ON/OFF).

1. Press a button on the transmitter: The connected device will turn ON.
2. Press the **same** button again: The connected device will turn OFF.

Note: The product is typically pre-set to Toggle Mode from the factory.

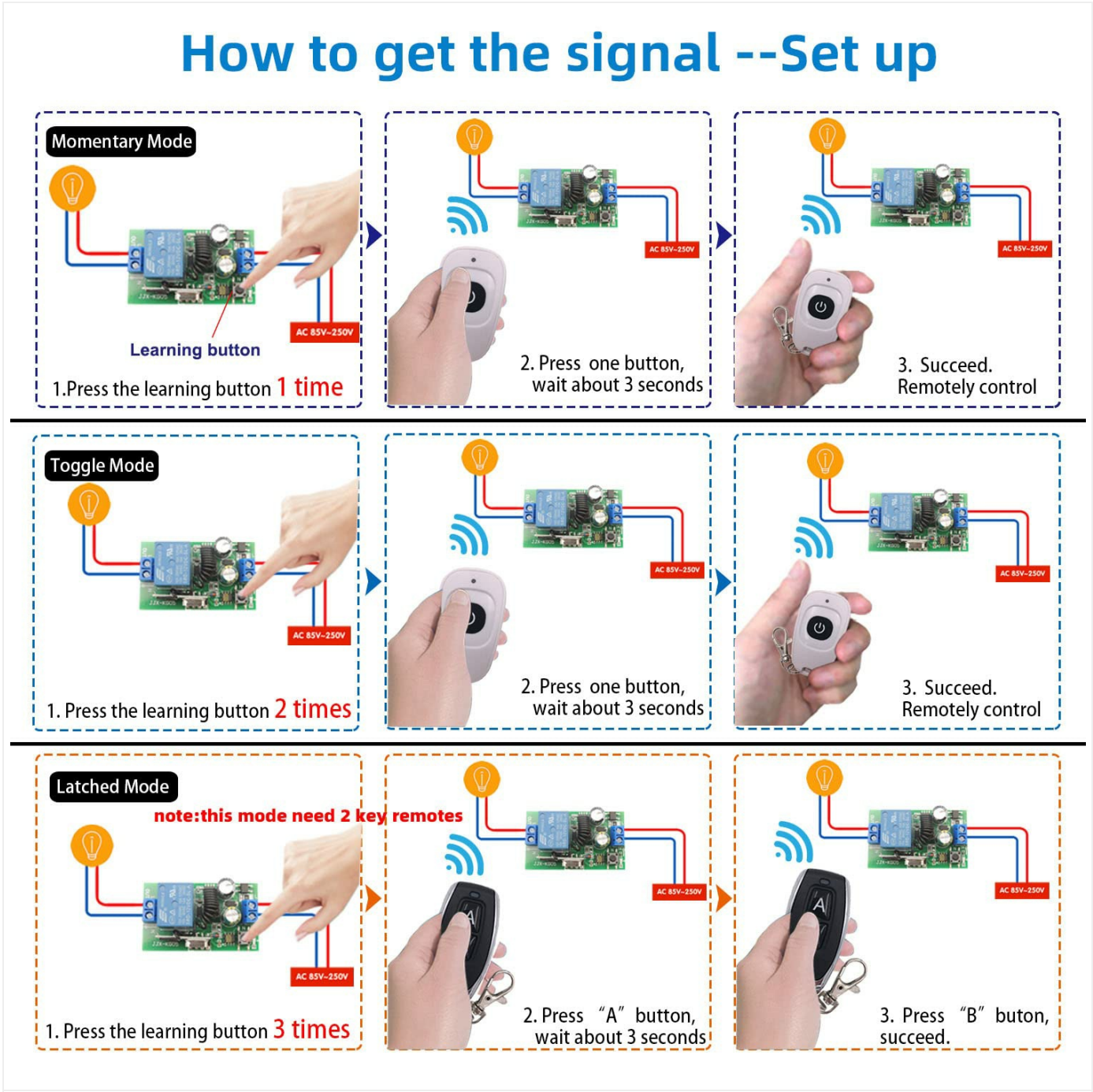

Image 4: Visual representation of Toggle Mode. Each press of the remote button alternates the light's state between on and off.

5.3. Latched Mode

Latched Mode requires two distinct buttons on the remote: one for ON and one for OFF.

1. Press the "ON" button: The connected device will turn ON.
2. Press the "OFF" button: The connected device will turn OFF.

Note: This mode requires a remote with at least two distinct buttons for ON/OFF functionality.

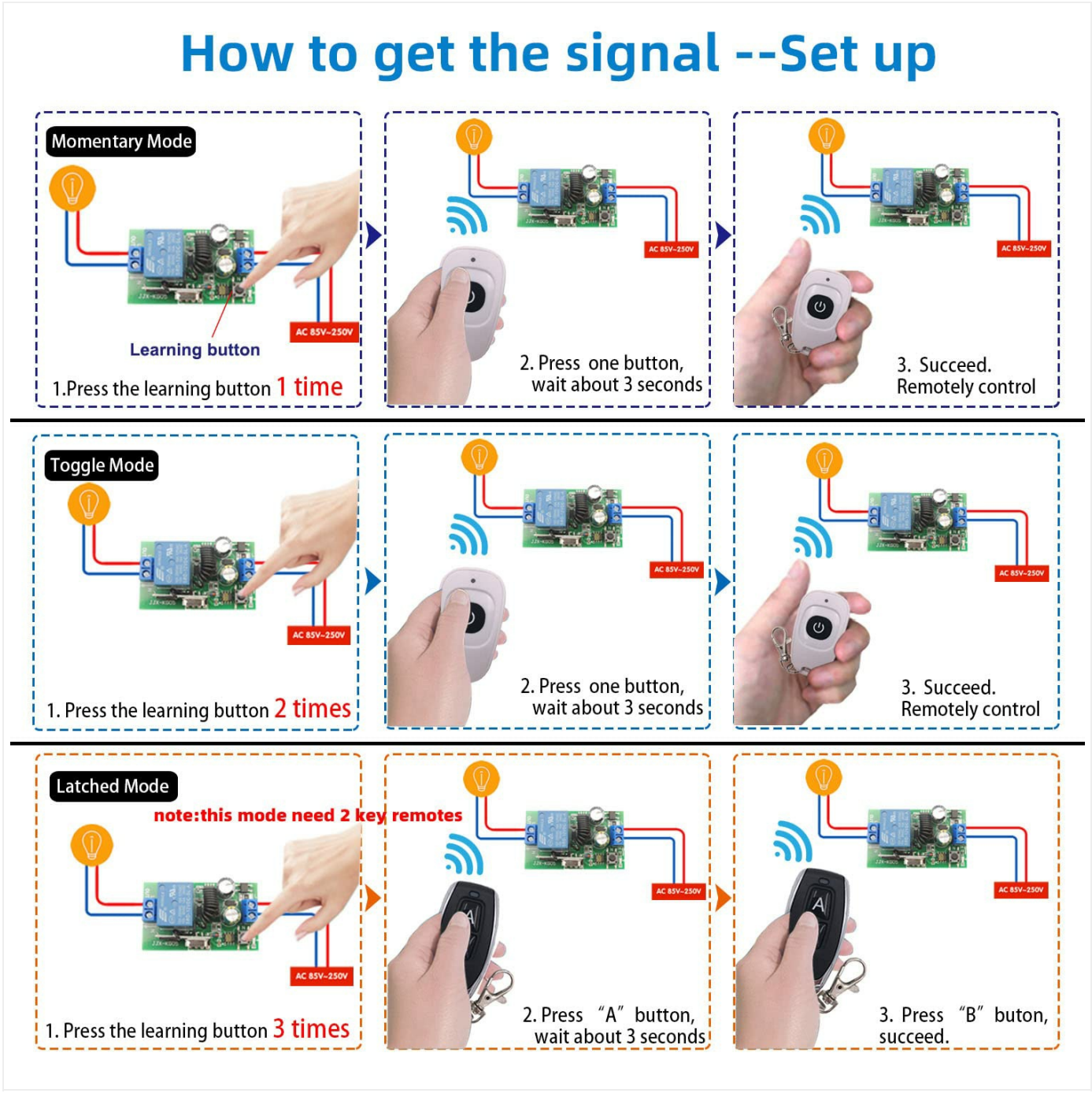

Image 5: Visual representation of Latched Mode. One remote button turns the light on, and a separate button turns it off.

6. Setup and Pairing

To pair a transmitter with the receiver and set the operating mode, follow these steps:

6.1. Pairing for Momentary Mode

1. Press the learning button on the receiver**1 time**.
2. Wait for approximately 3 seconds.
3. Press any button on the transmitter. The pairing is successful.

Image 6: Step-by-step guide for setting up Momentary Mode, showing the learning button press and remote pairing.

6.2. Pairing for Toggle Mode

1. Press the learning button on the receiver**2 times**.
2. Wait for approximately 3 seconds.
3. Press any button on the transmitter. The pairing is successful.

Image 7: Step-by-step guide for setting up Toggle Mode, showing the learning button press and remote pairing.

6.3. Pairing for Latched Mode

1. Press the learning button on the receiver**3 times**.
2. Wait for approximately 3 seconds.
3. Press the desired "ON" button on the transmitter.
4. Press the desired "OFF" button on the transmitter. The pairing is successful.

Note: For Latched Mode, you need a transmitter with at least two distinct buttons to assign ON and OFF functions.

Image 8: Step-by-step guide for setting up Latched Mode, showing the learning button press and pairing of two remote buttons for ON/OFF.

7. Resetting the Receiver

To clear all paired transmitters from the receiver's memory:

- Press the learning button on the receiver**8 times** consecutively.
- The reset is successful.

Important: After a reset, all previously paired remote controls will no longer function with this receiver. You will need to re-pair them following the setup instructions above.

8. Product Features and Applications

The DieseRC RF Wireless Relay Module offers robust performance and versatility:

- **Strong Signal:** The 433MHz radio frequency signal can penetrate walls, floors, and doors, providing reliable control

within a 50-meter range in open areas.

- **High Capacity Relay:** Equipped with a 10 Amp relay, it can handle high-power electrical appliances up to 1500W.
- **Durable Components:** The high-quality relay is rated for over 400,000 operations, and the remote control transmitter buttons are designed for over 500,000 clicks.
- **Wide Voltage Compatibility:** The receiver supports AC 85V~250V, making it suitable for 110V, 220V, 230V, and 240V systems.
- **Compact Design:** The mini size of the receiver (70*38*21 mm) and the portable key-fob style transmitters ensure convenience and discreet installation.

Image 9: Examples of applications including LED spotlights, lamps, general lighting, ventilation systems, and electric fans.

This system is suitable for a wide range of applications in homes, farms, factories, offices, laboratories, and supermarkets. It can remotely control various devices such as lamps, lighting fixtures, ventilation equipment, food waste disposers, and other DIY wireless projects.

Image 10: Depiction of the remote control system managing lights in a large residential setting, highlighting the 50-meter remote control distance.

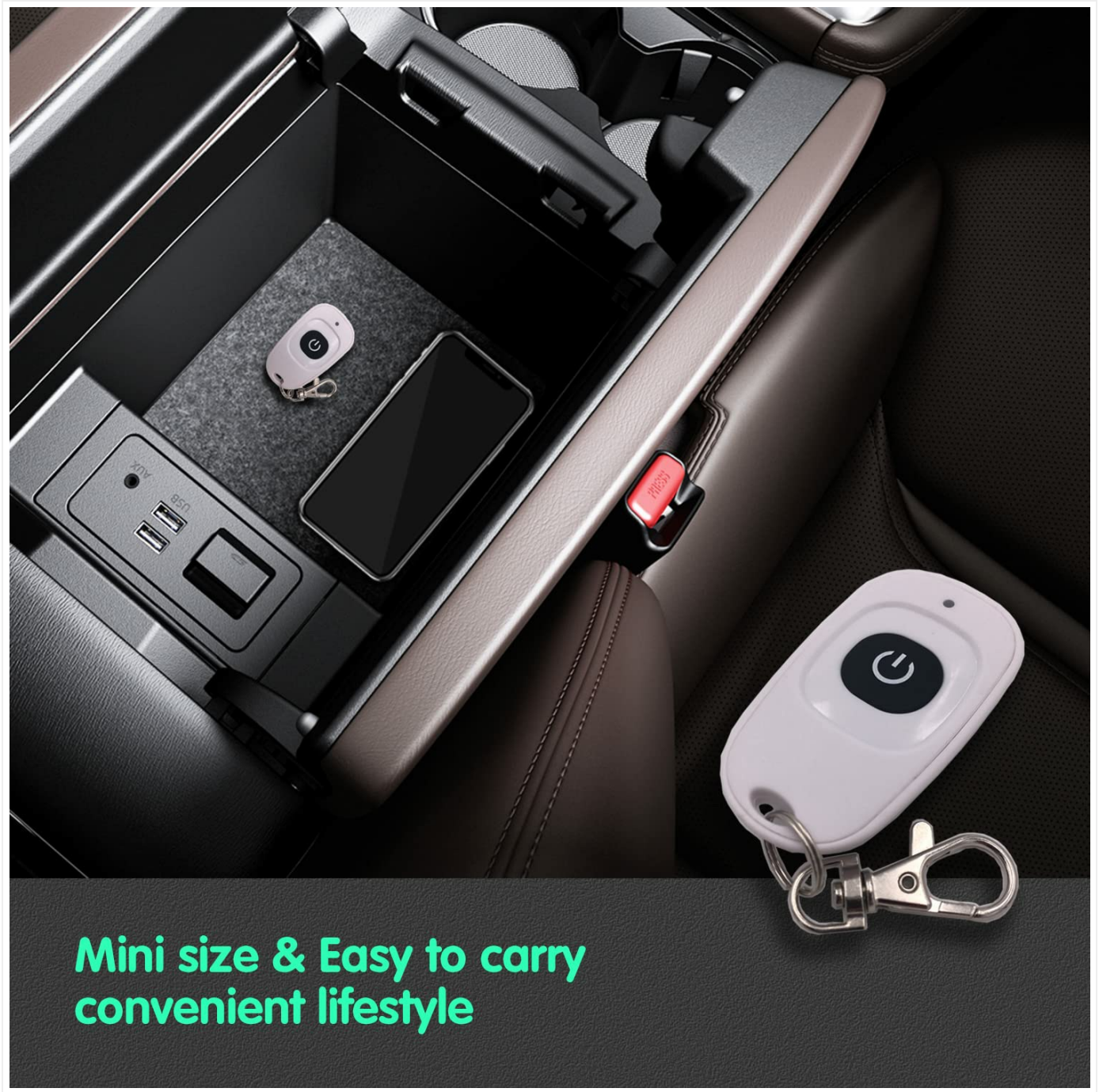

Image 11: The remote control being used to operate lights in a bedroom, living room, and dining room, emphasizing convenience.

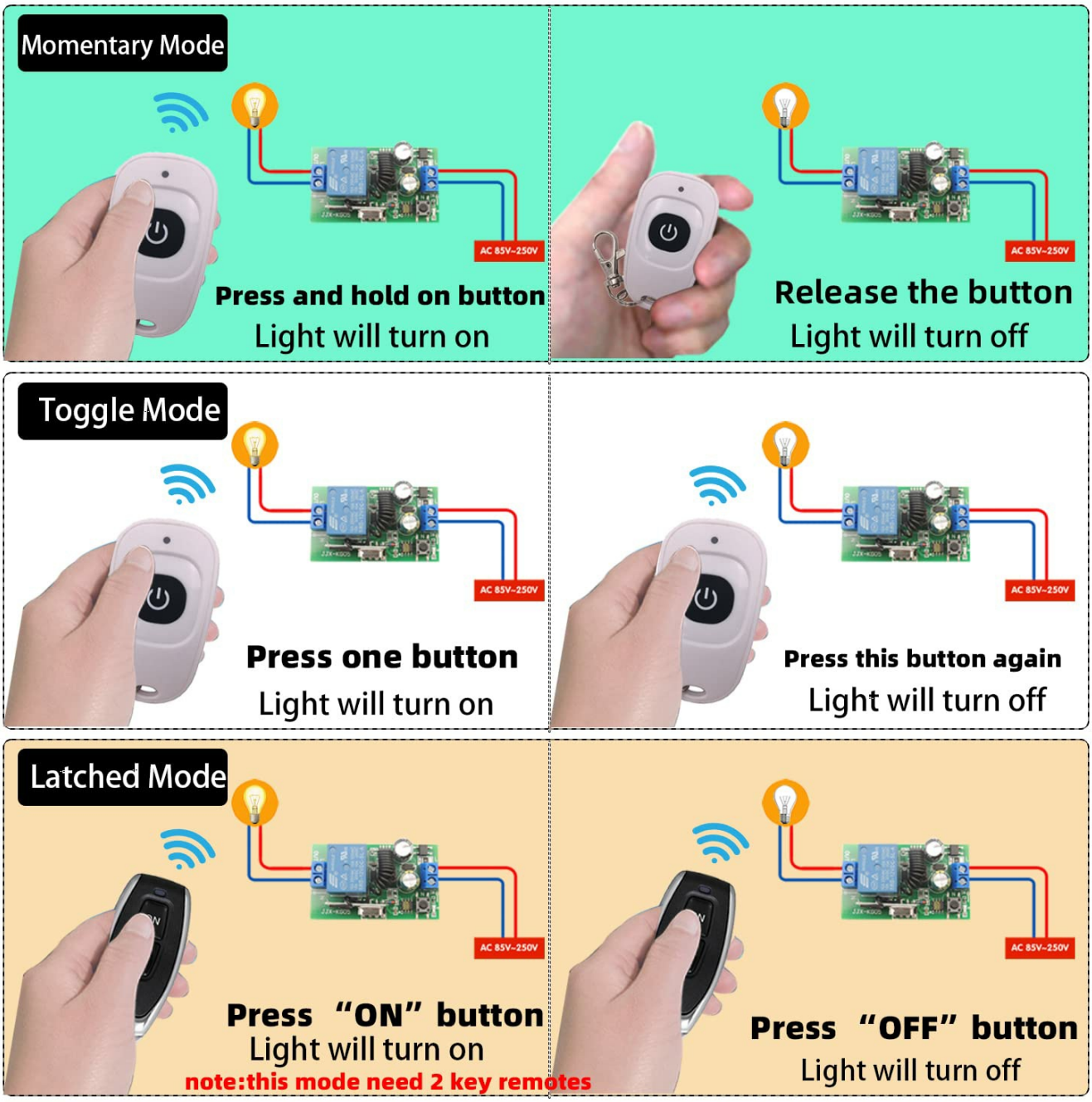

Image 12: The compact remote control shown in a car's center console, illustrating its portability and ease of carrying.

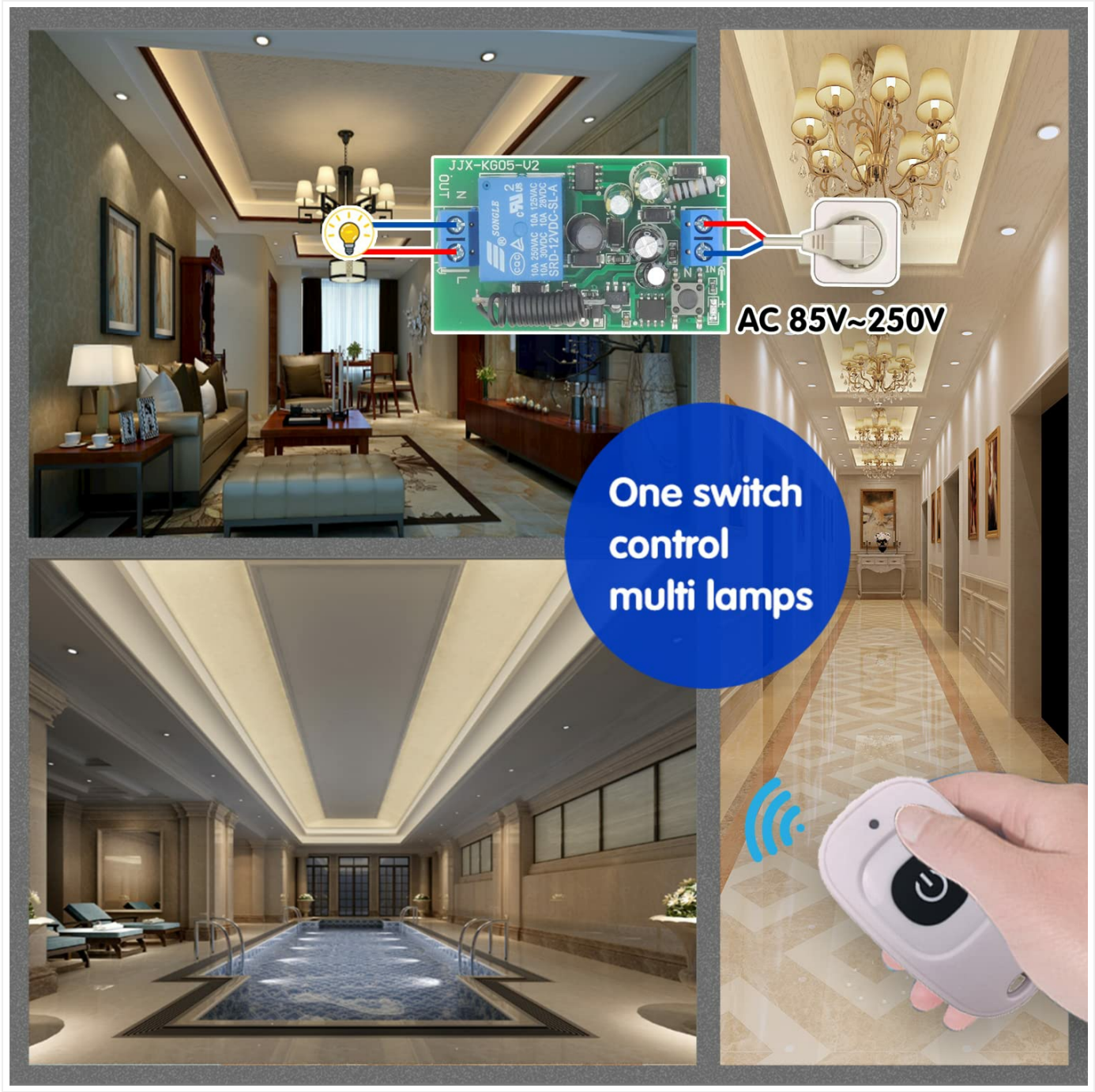

Image 13: An example of one remote switch controlling multiple lamps across different areas like a living room, hallway, and swimming pool area.

9. Transmitter Details

The remote control transmitter features a simple design for ease of use.

Image 14: Detailed view of the remote control transmitter, highlighting its indicator light, soft plastic casing, silicone button, and metal keychain. Also shows the receiver board with its learning button and antenna.

The transmitter includes an indicator light, a silicone button for operation, and a metal keychain for portability. It is powered by two CR2016 batteries, which are replaceable.

Related Documents - DieseRC_ee5588fc59bd40fb9abc930e041c534e

	[DieseRC 2202G Relay Remote Control Switch Product Manual] Comprehensive product manual for the DieseRC 2202G Relay Remote Control Switch. Details technical specifications, operating modes (momentary, toggle, latched), programming instructions, wiring diagrams, troubleshooting, and customer support information for this 433MHz RF wireless relay.
	[DieseRC 2402 Relay Remote Control Switch User Manual] User manual for the DieseRC 2402 Relay Remote Control Switch. This document provides detailed product information, technical specifications, wiring diagrams, operating modes (Momentary, Toggle, Latched), programming instructions, reset procedures, and troubleshooting guidance.
	[DieseRC 1204 Relay Remote Control Switch Manual] User manual for the DieseRC 1204 Relay Remote Control Switch, detailing product information, wiring diagrams, operating modes (momentary, toggle, latched), programming instructions, and troubleshooting.
	[DieseRC Relay Remote Control Switch Type 2201 - User Manual] Comprehensive user manual for the DieseRC Type 2201 Relay Remote Control Switch, detailing technical specifications, wiring diagrams, operating modes (Momentary, Toggle, Latched), programming instructions, troubleshooting, and contact information.
	[DieseRC 2202 Relay Remote Control Switch - Product Manual] This product manual provides detailed information for the DieseRC 2202 Relay Remote Control Switch. It covers technical specifications, operating modes (Momentary, Toggle, Latched), programming instructions, troubleshooting tips, and customer support contact details from Huizhou Wenqiao Electronic Technology Co., Ltd.
	[DieseRC 1201 Relay Remote Control Switch User Manual] User manual for the DieseRC 1201 Relay Remote Control Switch, detailing product information, wiring diagrams, operating modes (Momentary, Toggle, Latched, Delay), programming instructions, and troubleshooting.