ZABLL NO1J

ZABLL Mini Wireless Remote Control Switch Kit (Model NO1J) User Manual

Model: NO1J

1. Introduction

This document provides instructions for the ZABLL Mini Wireless Remote Control Switch Kit, Model NO1J. This kit includes an ultra-small remote receiver and a transmitter, designed for various DIY applications requiring a safe, flexible, and widely used remote relay function.

The system utilizes 433MHz RF technology, offering stable signal transmission and the ability to control devices through walls, floors, and doors within a reliable range of up to 50 meters without significant obstacles.

Package Contents:

- 1 x Receiver Module (without cover)
- 1 x Transmitter Module

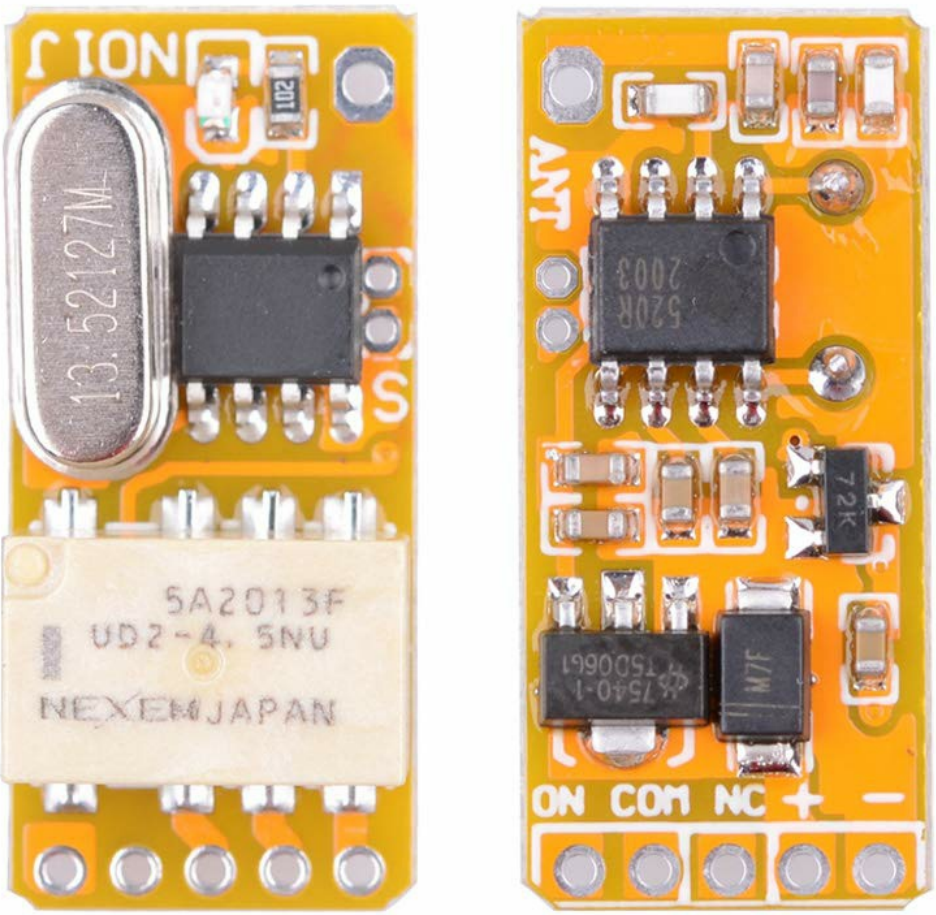


Figure 1: ZABLL Mini Wireless Remote Control Receiver and Transmitter Modules.

2. Setup and Wiring

The transmitter and receiver units are pre-paired and tested before shipping. No additional pairing is required for initial use; simply install and connect according to the following instructions.

2.1 Receiver Module Wiring

The receiver module operates on a DC voltage range of 3.5V to 12V. Ensure the power supply matches this requirement. The maximum load capacity is 1A, with a recommended load of less than 700mA for optimal performance and longevity.

The receiver features three output terminals: Normally Open (NO), Common (COM), and Normally Closed (NC). These allow for flexible integration into various circuits.

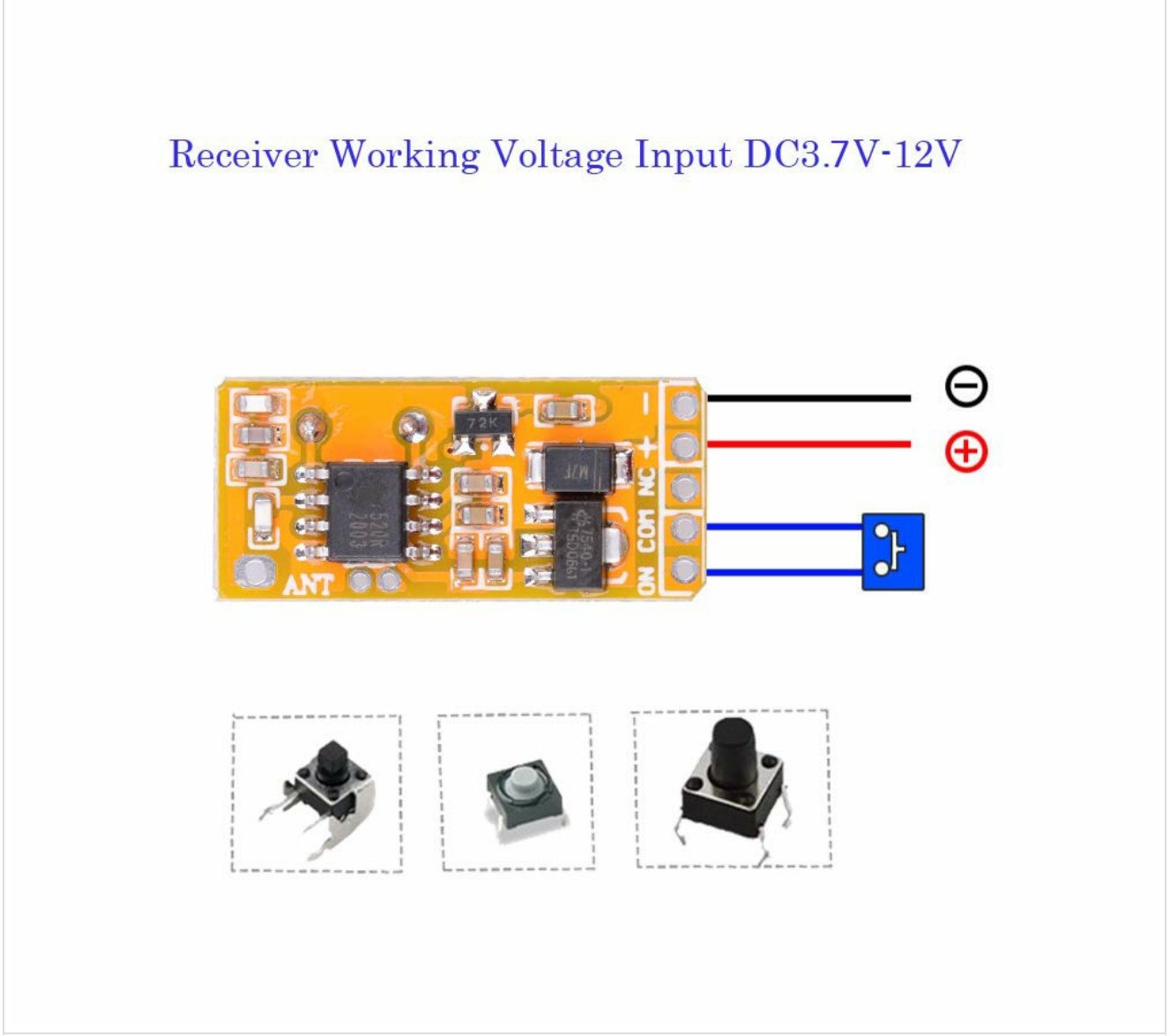


Figure 2: Receiver Working Voltage Input Diagram (DC 3.7V-12V).

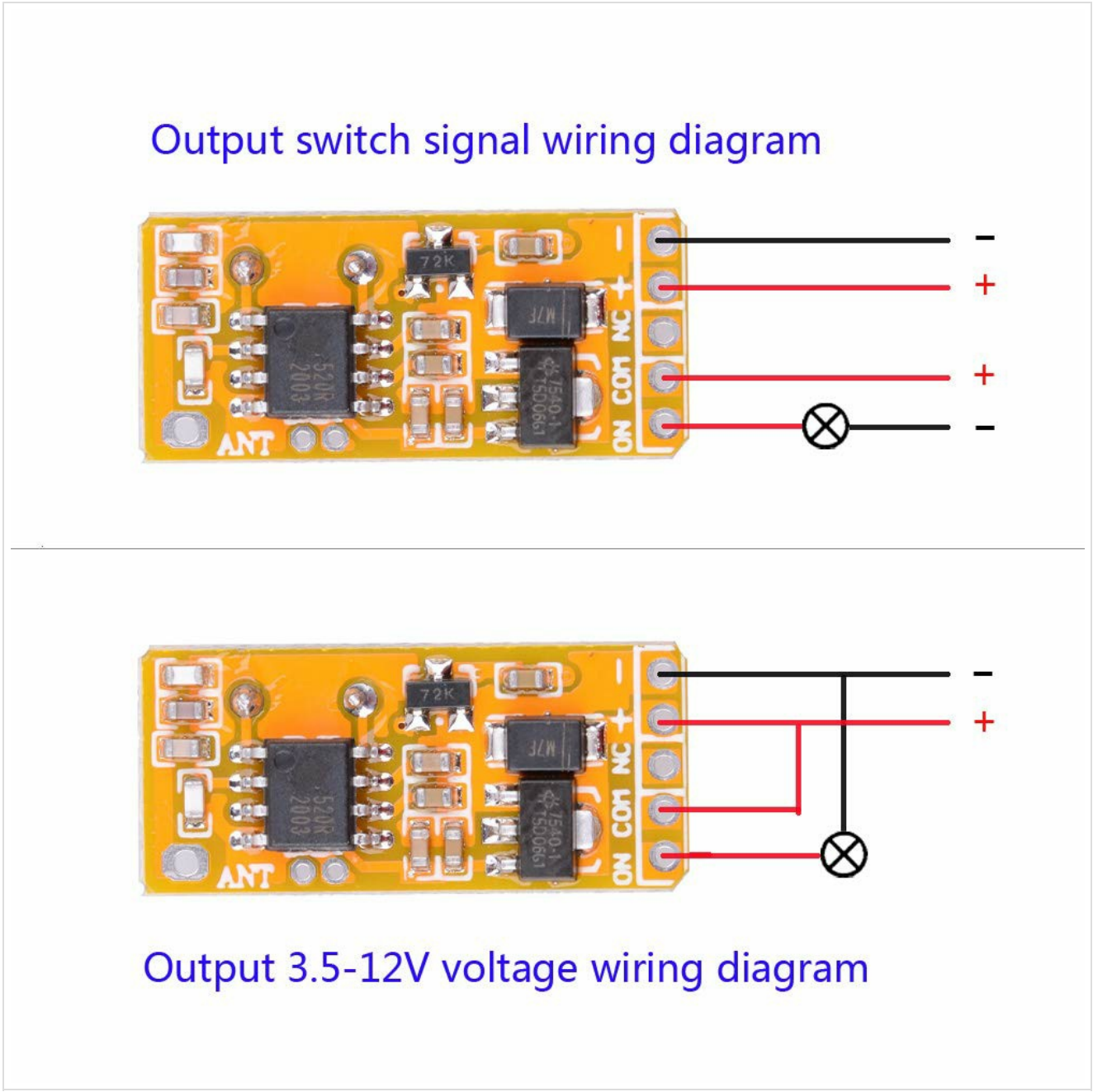


Figure 3: Output Switch Signal and Output Voltage Wiring Diagrams.

2.2 Transmitter Module Power

The transmitter module operates on a DC voltage range of 3.7V to 9V. Connect a suitable power source, such as a battery, to the designated terminals on the transmitter board.

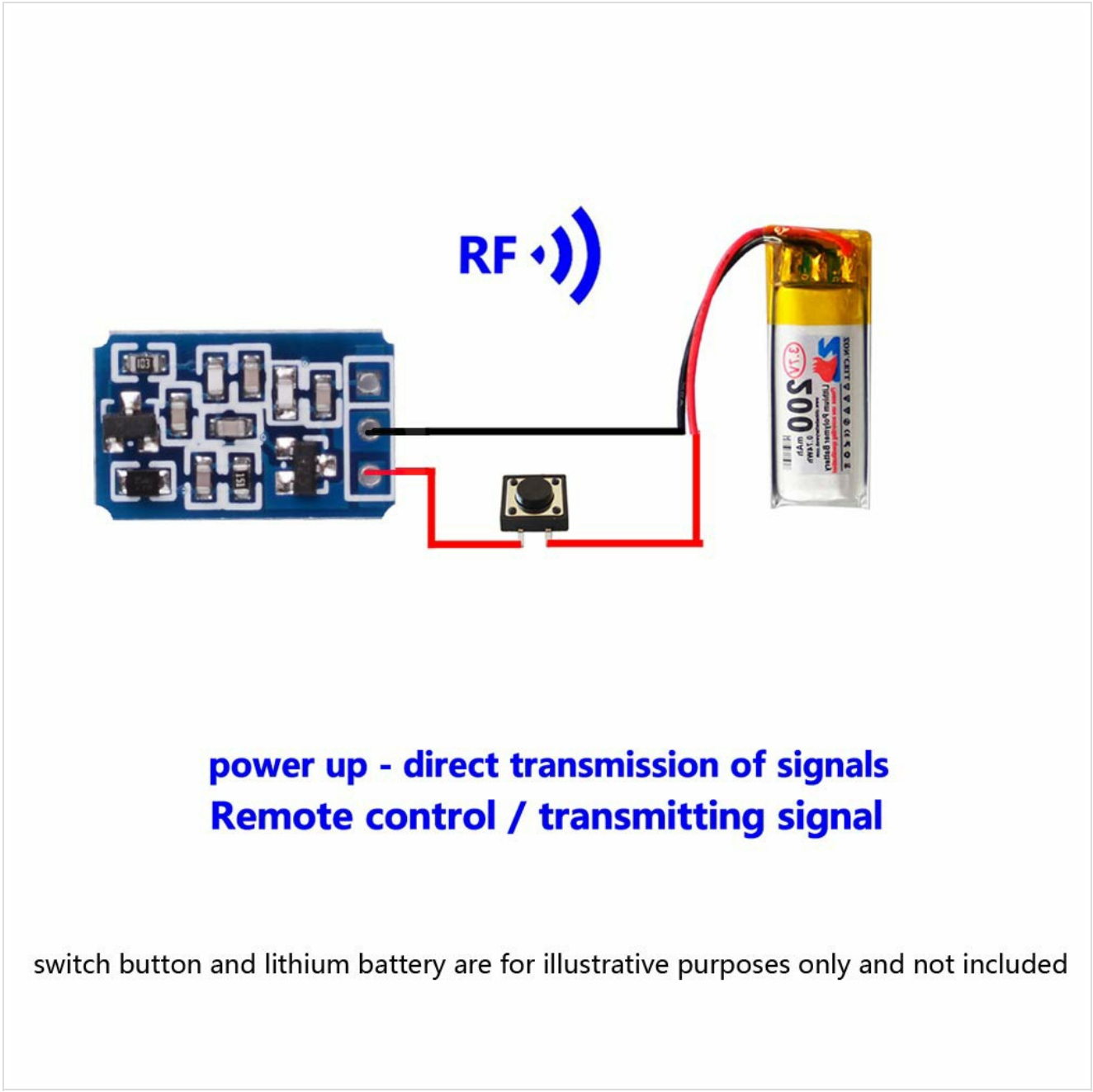


Figure 4: Transmitter Power Connection Example.

3. Operating Modes and Learning

The receiver supports multiple operating modes: Momentary, Toggle, Latched, and Delay. The default mode is Momentary. You can adjust the operating mode through the learning process.

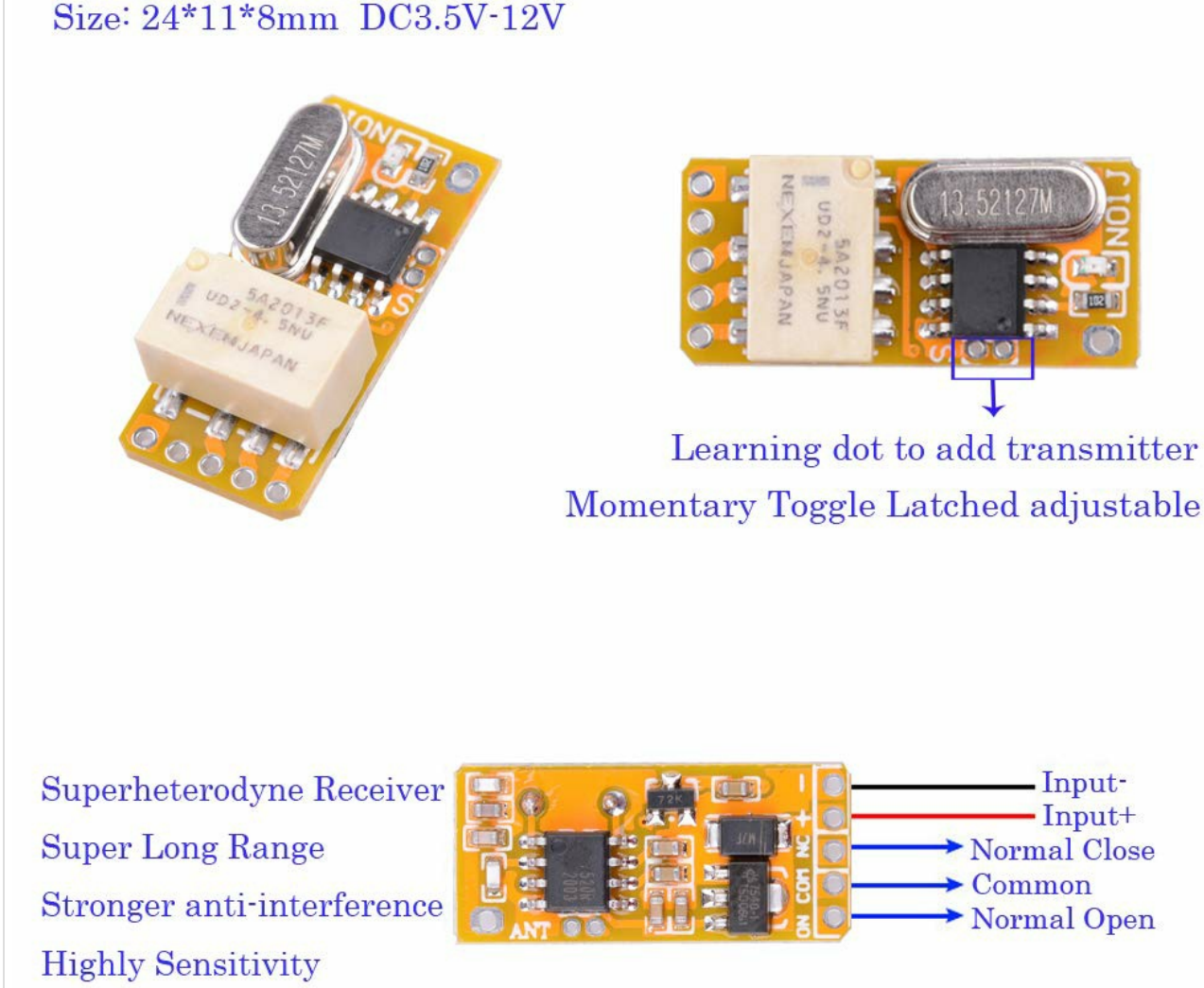


Figure 5: Receiver Board with Learning Dot and Connection Points.



Figure 6: Close-up of Receiver Chip showing Learning Dot.

3.1 Operating Modes Explained

- **Momentary Mode:** Press and hold the remote button to activate the relay; release the button to deactivate the relay. (One channel switch requires one remote button).
- **Toggle Mode:** Press the remote button once to activate the relay; press the same button again to deactivate the relay. (One channel switch requires one remote button).
- **Latched Mode:** Press one remote button to activate the relay; press another remote button to deactivate the relay. (One channel switch requires two remote buttons).
- **Delay Mode:** Press the remote button, the corresponding relay activates and remains active for a set delay time (e.g., 10 seconds) before automatically deactivating.

3.2 Learning Method (Pairing Additional Transmitters / Changing Mode)

To pair an additional transmitter or change the operating mode:

1. Apply 12V DC power to the receiver module.
2. Locate and connect the 'learning point' on the receiver board. The LED indicator on the receiver will illuminate.

3. Press button 'A' on your remote control once. The receiver's LED indicator will flash once.
4. Immediately after, press button 'B' on your remote control once. The receiver's LED indicator will flash again.
5. This sequence indicates successful learning. The operating mode (Momentary, Toggle, Latched, Delay) is typically set during this process or via jumpers near the learning point, depending on the specific receiver version. Refer to the product diagram for jumper settings if available.

3.3 Clearing Code

To clear all learned codes from the receiver:

1. Apply 12V DC power to the receiver module.
2. Connect and hold the 'learning point' on the receiver board.
3. Continue holding until the receiver's LED indicator flashes 6 times. This signifies that all stored codes have been successfully cleared.

4. Maintenance

The ZABLL Mini Wireless Remote Control Switch Kit is designed for low maintenance. To ensure optimal performance and longevity:

- Keep the modules dry and away from moisture.
- Avoid exposing the modules to extreme temperatures.
- Clean the circuit boards gently with a dry, soft cloth if necessary. Do not use liquids or harsh chemicals.
- Ensure all wiring connections are secure and free from corrosion.

5. Troubleshooting

If you encounter issues with your ZABLL Mini Wireless Remote Control Switch Kit, consider the following:

5.1 No Response from Receiver

- **Check Power Supply:** Ensure both the receiver and transmitter have adequate power within their specified voltage ranges (Receiver: DC 3.5V-12V; Transmitter: DC 3.7V-9V).
- **Verify Connections:** Double-check all wiring to the receiver, including input power and output load connections, for correct polarity and secure contact.
- **Transmitter Battery:** If the transmitter is battery-powered, ensure the battery is charged or replaced.
- **Range:** Confirm the transmitter is within the effective transmission range (up to 50 meters without obstacles). Obstacles like thick walls or metal structures can reduce this range.
- **Re-pair:** Attempt the learning method (Section 3.2) again to ensure the transmitter is correctly paired with the receiver.

5.2 Intermittent Operation or Reduced Range

- **Environmental Interference:** Strong electromagnetic interference from other electronic devices can affect RF signal stability. Try relocating the modules or reducing nearby interference sources.
- **Obstacles:** While RF signals can pass through some obstacles, dense materials or multiple barriers can significantly weaken the signal.
- **Antenna:** Ensure the antenna on the receiver (if applicable) is properly connected and not obstructed.

5.3 Learning Process Issues

- **Learning Point:** Ensure you are correctly identifying and connecting to the 'learning point' on the receiver board.

- **LED Indicator:** Pay close attention to the LED indicator's flashes during the learning and clearing processes as described in Sections 3.2 and 3.3. If the LED does not respond as expected, re-check power and connections.

6. Specifications

Feature	Specification
Model Number	NO1J
Brand	ZABLL
Product Dimensions (L x W x H)	25 x 11 x 8 mm (Receiver)
Receiver Operating Voltage	DC 3.5V - 12V
Receiver Max Load	1A (recommended < 700mA)
Receiver Quiescent Current	5mA
Receiver Relay Operating Current	30mA
Transmitter Operating Voltage	DC 3.7V - 9V
Transmitter Operating Current	≤ 12mA
Frequency	433MHz
Transmission Distance	10-50 meters (open area)
Contact Type	Normally Open (NO), Common (COM), Normally Closed (NC)
Controller Type	Button Control
Power (Wattage)	12 Watts (Max)
Encoding Type	Learning Point for additional transmitters

7. Warranty and Support

For any questions, technical assistance, or issues regarding the ZABLL Mini Wireless Remote Control Switch Kit, please contact the seller or manufacturer directly through your purchase platform. Please provide your model number (NO1J) and a detailed description of the issue for efficient support.

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