

# **PROBO RF REMOT CONTROLLER User Manual**

## **(Model:PROBO-RFTM)**

# **PROBO RF RECEIVER User Manual**

## **(Model:PROBO-RFRC)**

## General outline

It is a 2.4 GHZ receiver & send operation that can connect with the robot controller and then use the remote control to control robot motions.

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## Product configuration



## How to install a RF receiver board

Install the RF receiver board into the CPU block and do not separate them.

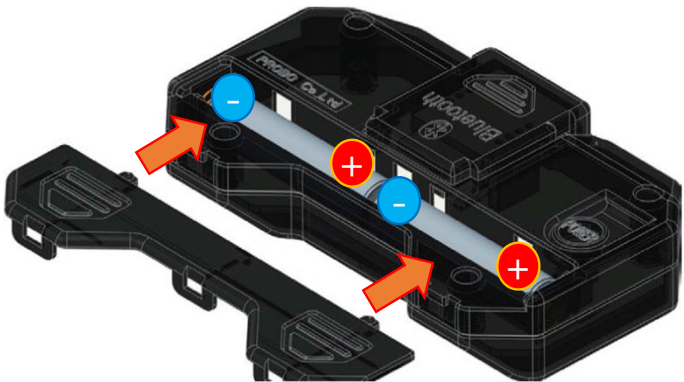


RF receiver cover

RF receiver board

\* Make sure the RF receiver board is inserted in the correct direction.

## How to replace batteries and power on



Slide the cover down and put batteries into the controller. Make sure positive (+) and negative (-) ends in a battery face the correct direction.

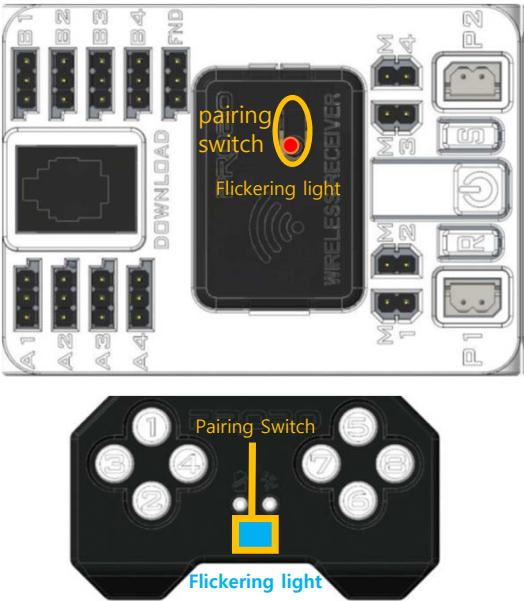


Press the **POWER switch** to turn the power on, and the **LED** light on the front side will flicker

# How to pair RF controller with RF receiver

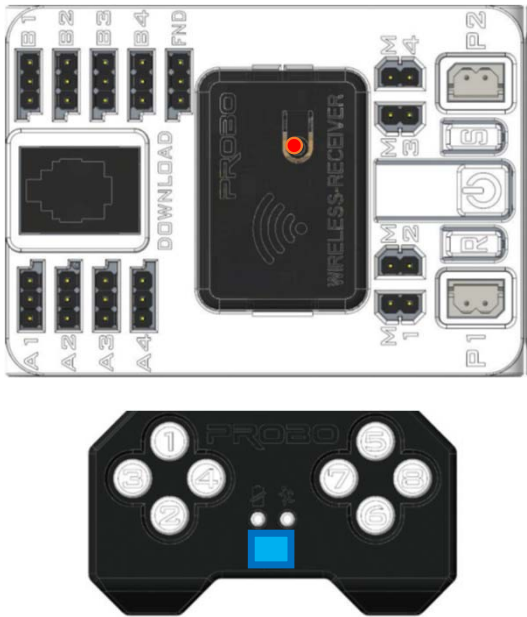
Pairing means you connect your RF controller and RF receiver so that they communicate with each other by signals.

## 1 How to initially pair



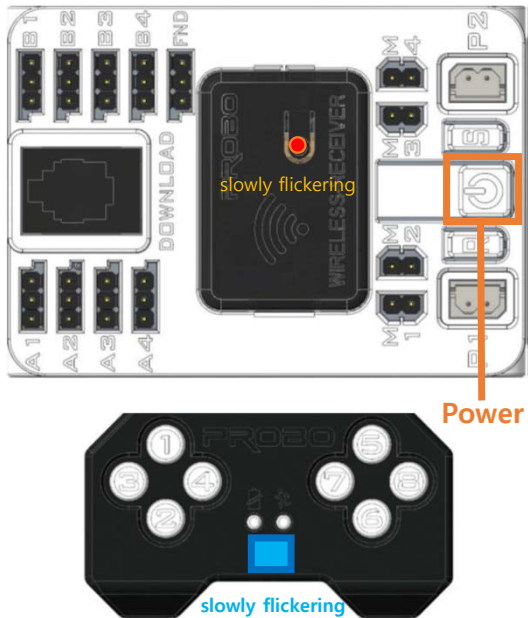
Turn on the RF controller and the CPU block. Press the pairing switch on the RF receiver. The LED light will be **flickering quickly** while searching for the signal.

## 2 Pairing registration is completed



If the LED lights on the receiver and controller stay on and no longer flicker, pairing is completed. Press any button on the controller to check if the LED on the receiver is turned on.

## 3 How to reconnect with the paired robot



Once the robot is paired with the controller, its RF receiver is automatically connected to the registered equipment. The LED light on the receiver will **slowly be flickering**.

## Component descriptions

### Pairing LED

- Voltage: 3V , Current: 10mA
- Pairing Switch detection Led

### Key LED

- Voltage: 3V , Current: 10mA
- In case received data

### Pairing KEY

- Switch for connecting remote and receiver





### RF Chip(nRF24l01+)


- SPI Interface up to 1M/bit
- Worldwide 2.4GHz ISM Band operation
- 3.3V Voltage operation

## Top View



## Component descriptions

- Button**  : Button to control forward motion  
**Button**  : Button to control backward motion  
**Button**  : Button to control turn left motion  
**Button**  : Button to control turn right motion

**Button**  : Button to control motion 1

**Button**  : Button to control motion 4

**Battery LED**



-In case need to change battery

**Working LED**



-In case sending data

**Pairing KEY & LED**



- Pairing Switch detection Led
- Switch for connecting receiver

**Power Key**



-In case Turn On/Off

**Worldwide 2.4GHz ISM Band operation**  
**3.3V Voltage operation**

### Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

### Warning (Part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.