

# Mini IP68 Bluetooth RGBW LED Controller

rgbw-mini-BT

## User Manual

- Full Circuit Protection
- IP68 Waterproof
- Supports iOS & Android
- 42 Dynamic Modes
- Bluetooth Connection
- Ultra-Slim Design
- Optional RF Remote
- 6-24VDC Voltage Range

## Environmental Lights

### 3. Indicator Light

The indicator light displays the current status of the unit. It indicates the following:

- Blue fast flashing:** starting up.
- Blue/yellow fast flashing:** waiting for Bluetooth pairing.
- Blue with yellow short flashes:** Bluetooth connected.
- Steady Blue:** Bluetooth disconnected.
- White flash 3 times:** new remote controller paired.
- Short single white flash:** command signal received.
- Red flashing:** overload protection active.
- Yellow flashing:** thermal protection active.

## Operation

### 4. Bluetooth Pairing

Mini Bluetooth LED Controllers connect via Bluetooth and must be paired to enable control through the app. At power-on, the unit will enter pairing mode for 90 seconds. The indicator will quickly flash blue and yellow. In this window, the controller will be visible on the smartphone's Bluetooth settings page. It will show up as a device with name 'LED-XXX', where XXX is the serial number of the controller. Initial pairing can only occur within 90 seconds of power-on.

## Introduction

Mini Bluetooth LED Controllers are designed to drive constant voltage LED products from 6-24VDC. The 4-channel controller works with the 'ColorEasy4 Plus' app on iOS or Android via Bluetooth connection. Users can control the LEDs and save settings from the app. An optional RF remote control is available for easy on/off control and switching between saved settings.



## Installation

### 1. Power Supply

Mini Bluetooth LED Controllers work from 6-24VDC. The red power input cable should be connected to power supply positive and black to negative. Always make sure the power supply voltage is same as the rated LED voltage.

### 2. LED Output

The controller supports constant voltage LED products and controls the load using a PWM output. The black cable connects to LED positive. The red, green, blue and white cables connect to the respective colored LEDs.

### 5. Bluetooth Auto Re-connect

By default, the app is set to automatically re-connect with the most recently paired controller when in range. This setting can be disabled on the app's settings page while the controller and smartphone are connected. When the auto re-connect feature is set to off, the user can manually connect to the controller at any time by tapping the device name on the smartphone's bluetooth settings page. After the initial pairing, the controller does not need to be in the 90 second pairing window.

### 6. RF Remote Pairing

The RF remote can power the controller on/off and cycle through saved settings from the app. One controller can be paired with 5 RF remotes. New RF remotes ship un-paired. To pair a new RF remote:

1. Make sure that remote control function is enabled in the app.
2. Unplug the power from the controller for more than 5 seconds and power on again.
3. Within 5 seconds of power-on, press the on/off key and down arrow key together on the remote.
4. The indicator will flash 3 times to show the remote has been paired.

2

3

# Advanced Features

## 7. Waterproofing

When installing at wet environment, the cable connections must also be waterproofed. Waterproofing glue and heat-shrink are recommended, but waterproof connectors may also be used.

Wireless signals are attenuated by water, so wireless range may be reduced if the receivers are installed underwater. Be sure to test the wireless range before permanently installing the receiver in water or very wet locations.

## 8. Protection

Mini Bluetooth LED Controllers have full protection circuitry for short circuit, output overload, reversed power polarity and overheating. The indicator will flash red for overload or short circuit protection and flash yellow for thermal protection. The controller will automatically recover from protection when conditions return to normal.

# Specifications

Model	rgbw-mini-BT
Dynamic Modes	42 modes
Color Resolution	256 levels
Connection Method	Bluetooth V2.1/4.0 Class 2
Smartphones	iOS, Android
App	ColorEasy4 Plus
Optional RF Remote	Yes
RF Remote Frequency	433.92MHz
Overload Protection	Yes
Thermal Protection	Yes
Working Voltage	6-24VDC
Bluetooth Control Distance	>10m in an open area
Rated Output Current	3x2.5A + 4A
IP Grade	IP68

## App Link:



iOS App



Android App



The app can also be found by searching for "ColorEasy4 Plus"