

# SmartPhone / RF Remote 4-CH LED Controller

RQ320 / RQ320-S

## User's Manual

- Full Protection
- Waterproof Option
- Support iOS & Android
- 42 Dynamic Modes
- Bluetooth Connection
- 16-Mega Colors
- Optional RF Remote
- 6-24V Voltage Range

red and blue cable runs the driving signal of relevant LED color, please connect the color cables to the relevant color LED loads' cathode and the black cable to the common node.

The controller unit has output overload protection function, please check whether the output is short circuit or over loaded if the controller stop working.

### 3. Status Indicator

This is a full color status indicator. It displays all working status of the controller. It indicates different events as following:

**Blue fast flash:** Starting up.

**Blue/yellow fast flash:** Waiting for bluetooth pairing.

**Blue with yellow short flash:** Bluetooth connected.

**Steady Blue:** Bluetooth disconnected.

**White flash 3 times:** New remote controller paired.

**Short single white flash:** new command received.

**Red flash:** overload protected.

**Yellow flash:** overheat protected.

## Operation

### 4. Bluetooth Pairing

RQ320 connects to smartphones via bluetooth. It must be paired to smartphone before the App can work with it.

At each power on, controller will enter pairing mode for 90 seconds, the indicator will quick flash blue and yellow. In this period, user can search bluetooth device on the smartphone bluetooth setting page and will find a device with name 'LED-XXX', the X is the serial number of controller. Please select this device and smartphone will connect to the LED controller.

## Introduction

Thank you for purchasing our product. RQ320 series smartphone 4-ch RGB+W LED controllers are designed to drive constant voltage LED products with common anode connection in voltage range of DC6V-24V. It works with the 'ColorEasy4 Plus' App on iOS or Android smartphones via Bluetooth connection. User can setup static color or dynamic mode from smartphone conveniently. There's also optional RF remote controller available for easy operation of on/off and switching the favourite setting set on smartphone.



## Installing

### 1. Power Supply

The controller unit's supply voltage is from DC 6V to 24V. The red power cable should be connected to power positive and black to negative. Please make sure the power supply voltage is same as the LED load and the power is capable for the load wattage.

### 2. LED Output

The controller unit supports constant voltage driving LED products with common anode connection. The black cable on the output side is the common node, it connects to the power supply positive inside the controller. The white, green,

The unpaired smartphone can only discover the controller in this 90 seconds period. To enter the pairing mode again, user need to power off the LED controller and power on one more time.

### 5. Bluetooth Auto Re-connecting

The default setting of bluetooth is with auto-reconnecting feature. The controller will automatically connected to the latest paired smartphone when in range. However, if user do not want the controller automatically connecting to smartphone, user can disable the auto-reconnecting feature on the App's setup page when controller is connected to smartphone.

When the auto re-connecting feature is set to off, user still can manually connect to the controller at any time by tap the controller bluetooth device name on the smartphone's bluetooth setting page when controller is powered on.

### 6. Using RF Remote Controller

The RM05 hand hold type and RM07 wall switch type RF wireless remote controller is optional accessory for RQ320 series LED controllers. User can use the RF remote controller to turn on/off controller or switch the favourite setting set from the App. The RF remote controller need to be paired to the main unit before using. Please pair the remote controller with following steps:

1. Make sure the remote controller function is enabled on the App setting page when LED controller connected to smartphone.
2. Power off the LED controller for more than 5 seconds and power on again.
3. Within 5 seconds of LED controller powered on, press

the on/off key and downward key together on the remote controller.

4. The indicator of LED controller will flash white for 3 times to show the remote controller is recognized.

User can pair maximum five remote controllers to one RQ320 LED controller. Multiple wall switch or hand hold remote controllers can be used at same time.

User can switch the favourite color or dynamic mode set on smartphone App by pressing upward / downward key on the remote controller. The favourite contents can be customized on the App, this also make the remote controller customized for scrolling different color or dynamic modes. The favourite static color and dynamic modes are linked when press upward / downward keys.

## Advanced Features

### 7. Waterproof

RQ320 model is standard version which can be used in dry environment. RQ320-S is a IP68 waterproof version, which can be used in wet environment or under water within depth of 30 meters.

Note: The bluetooth connection and RF remote controller sensitivity will be decreased when controller installed in wet environment or under water, please setup the controller when it's not wet or in water.

### 8. Protection

RQ320 series controllers have full protection function for output short circuit, overload, and overheat. The indicator will flash red at overload or short circuit protection, and flash yellow at over heat. The controller will automatically recover

from protection when working status is good.

Please ensure the LED loads are in rated range, not shorted and the controller unit is in a good heat dissipation environment to avoid protection.

## Specification

Model	RQ320	RQ320-S
Dynamic Mode	42 modes	
Static Color	16-mega colors	
Connection Method	Bluetooth V2.1/4.0 Class 2	
Support Smartphone	iOS or Android Device	
App Program	ColorEasy4 Plus	
Optional RF Remote	Yes	
RF Remote Frequency	433.92MHz	
Overload Protection	Yes	
Overheat Protection	Yes	
Working Voltage	DC 6-24V	
Bluetooth Control Distance	>10m at open area	
Rated Output Current	3x2.5A + 4A	
IP Grade	IP-63	IP-68

### App Link:



iOS App



Android App

