Product Specification

Model: AP-036RF Black

Name: Iron Shell 6 keying

CE

RoHS

[Brand]: AIPIN-TECH

[Product name]: Iron Shell 6-key controller

[Model]: AP-036RF

[Operating voltage]: 12-24VDC

[Working current]: 18A 24A 36A (customizable)

[Function mode]: 20

[Remote control size]: 90mm long, 36mm wide and 17mm high

[Size control]: 82mm long, 84mm wide and 33mm high

[Product weight]: 210g

[Controllable light bar]: 20 meters per 10 meters amplifier can be infinitely connected to the light bar

● Overview

    This product is a stable wireless control method adopted by our company. Humanized design, beautiful and elegant, direct and convenient; Long-distance and non-directional color control can be realized with only one key in hand. This remote controller can control RGB lamps with color selection, mode transformation, brightness and speed adjustment and other related functions. It has the characteristics of long distance, strong driving ability and stable performance. This product can adapt to various constant voltage RGB lamps, such as RGB hard light bar, soft light bar, RGB panel lamp, RGB module, flat light, panel lamp, etc.

● Features

1. Input voltage adaptive DC12 ~ 24V, with input polarity protection function.

2. Advanced PWM (pulse width modulation) control technology is adopted, with fine change effect and no flicker.

3. Strong driving load capacity, up to 36A, stable performance.

4. Wireless remote control, no direction, remote control distance is not less than 20m.

5. The remote controller has low power consumption and long standby time.

6. It Has Memory functions such as color, mode, speed and brightness.

7. The appearance is novel, beautiful and elegant, especially suitable for indoor home and commercial places.

● Technical parameters

Controller	
Operating voltage	12V~24VDC
Working current	6Ax3CH【8Ax3CH　12 Ax3CH】Customizable

Output Channel	3CH
Output power	216W/432W(12V/24V)【288W/576W 432W/864W】
Control mode	RF
Output mode	Common positive connection
Number of changed styles	20 kinds
Output Control mode	PWM
Output gray level	256

Remote control

Operating voltage	1.5VDC
Remote control mode	RF
Transmission frequency	433Mhz
Remote control distance	More than 20 meters
Battery Type	1 AAA battery
Standby power consumption	0.08mW
Operating power consumption	6mW
Transmit power consumption	40mW
Number of keys	6 buttons

Complete machine

Operating temperature	-20℃~60℃
Authentication	CE 、RoHS
Weight (gross weight)	210g
Packing size	L100*W100*H65mm

● Remote control and connection instructions

Symbol	Function
	Turn on/off
	There are 20 mode switching keys
	B +/B-brightness plus or minus key: used to increase or decrease brightness in static mode.
	S +/S-speed plus or minus key: used to increase or decrease the speed in Dynamic mode.
	Remote control antenna (retractable)
	Power Input Port: input voltage: 12 ~ 24VDC.
	Load output port: used to connect LED RGB lamps.

Same frequency and different frequency

When you need to check the code, you can use the instructions on the picture. Within 5 seconds after the controller is powered on,

Press "S-key" and "S + key" at the same time or the lamp flickers for three times, indicating that the code is successfully matched.

If the light band or lamp does not flicker for three times, please re-operate the above process.

Our company defaults to the general code specification when the products leave the factory.

Remarks:

1. Same frequency: it means that multiple controllers and remote controllers can be used universally.

2. Different frequencies: it means that a remote controller can only correspond to one controller.

● Installation of remote control battery

The remote controller uses an A battery with A voltage of 1.5V. When replacing the battery, please open the back cover of the remote controller and fill a battery according to the direction instructions on the battery box.

Note: when the indicator light on the remote controller flickers regularly, this reminds the user that it is time to replace the battery.

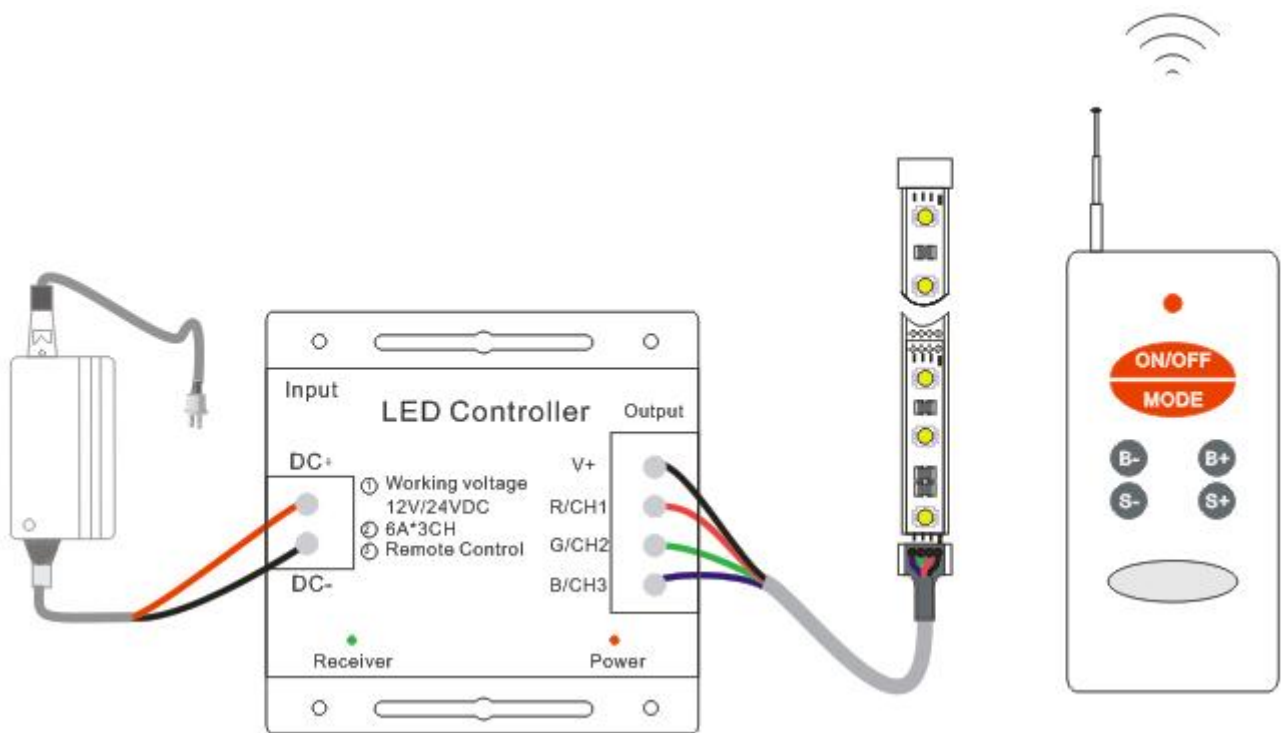## ● Low power consumption mode and wake-up of remote controller

When the user does not use the remote controller for 15 seconds, the remote controller will automatically enter the sleep mode with lower power consumption to save standby power consumption and prolong battery life. When users need to reuse the remote controller, they can wake up the remote controller by touching the mode switch key on the panel and then use it normally.

● Schema table

No.	Mode	Remarks	No.	Mode	Remarks
1	Static red	Adjustable	12	Red stroboscopic	Adjustabl
2	Static Green	brightness	13	Green stroboscopic	e speed

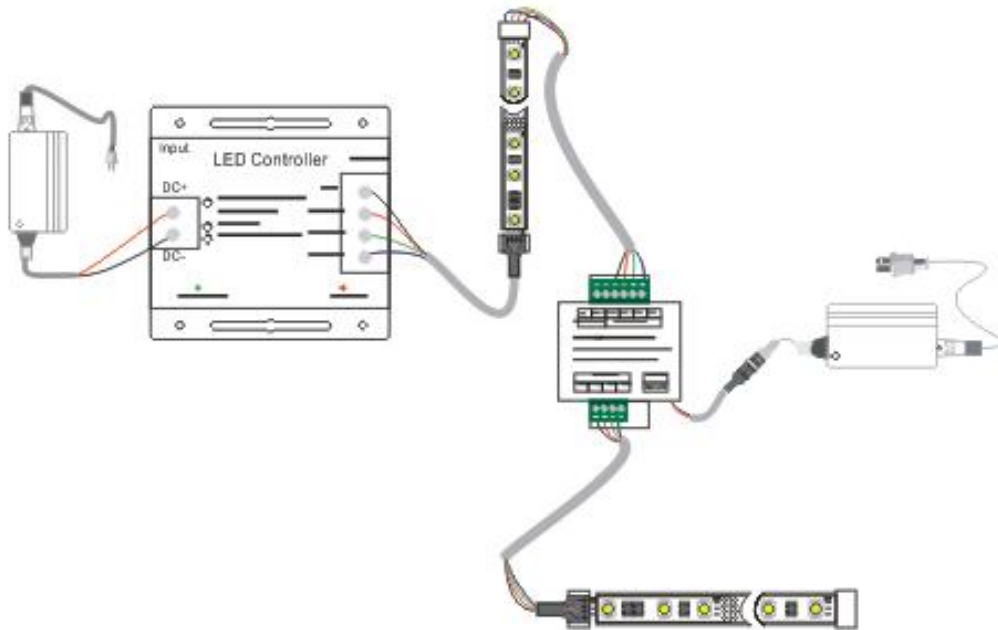| 3	Static Blue		14	Blue stroboscopic	
4	Static yellow		15	Yellow stroboscopic	
5	static purple		16	Purple stroboscopic	
6	Static cyan		17	Cyan stroboscopic	
7	Static White		18	White stroboscopic	
8	Three-color jump		19	Red and blue alternate gradient	
9	Seven-color jump	Adjustable speed	20	Blue-green alternate gradient	
10	Three-color gradient				
11	Seven-color gradient				Fixed mode

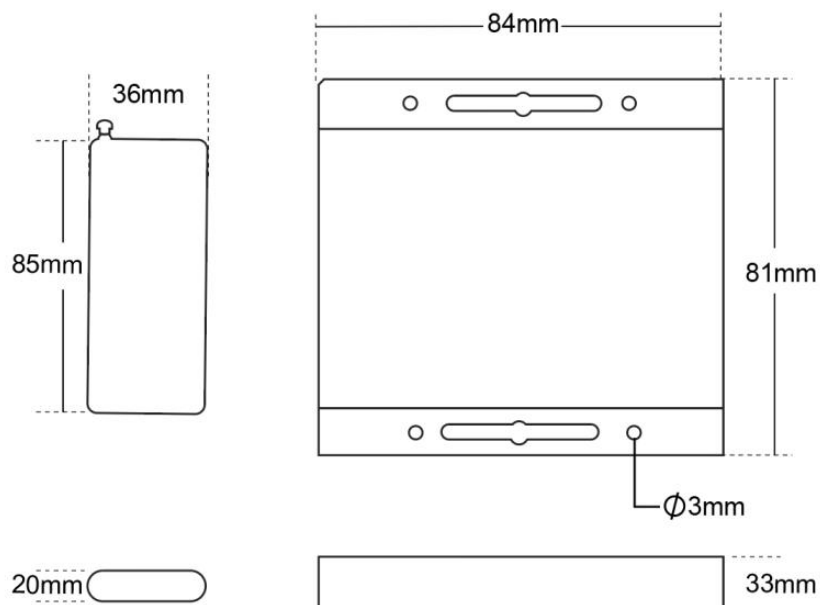## ● Wiring and typical application diagram

● Power expansion application diagram

1. When the controller power is not enough, we can increase our constant voltage power amplifier for power amplification. The specifications of the power amplifier can be obtained by contacting our company.
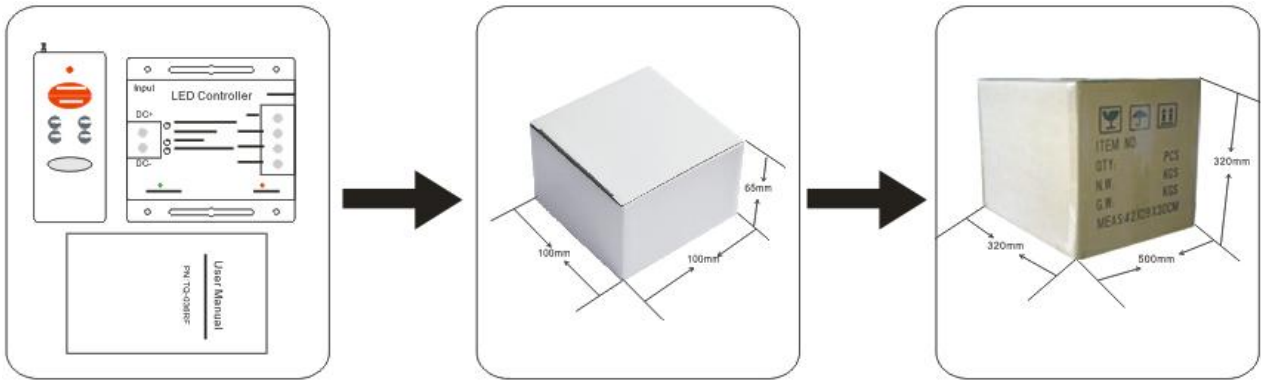
2. The following takes the RGB LED light bar as an example, and the amplifier is connected in parallel on the output line of the controller.

● Product Size Chart

● Product packaging

Controller size	Remote control size	Box size	Weight/set	Carton size	Weight/box (50 sets)
L82*W84*H33mm	L90*W36*H17mm	L100*W100*H65mm	210g	L500×W320×H320mm	11kg

● Installation Precautions

1. Please debug and install this product by personnel with professional qualifications.

2. This product cannot be waterproof and needs to avoid sun and rain. If installed outdoors, please use a waterproof tank.

3. Good heat dissipation conditions will prolong the service life of LED controller. Please install the product in a well-ventilated environment.

4. Please do not install and use such products in lightning, thunder, strong magnetic field or high voltage.

5. Please check whether the output voltage of the LED power supply used meets the requirements of the product voltage range.

6. The diameter of the used wire must be sufficient to load the LED lamps connected, and ensure that the wiring is firm to avoid accidents caused by overheating of the wire or poor contact.

7. Before power-on and debugging, ensure that all wiring is correct to avoid lamp damage caused by wiring errors.

● After-sales service

1. Our LED controller products provide lifelong technical support and warranty services:

Free warranty: Our company will provide free repair or replacement service if there is any quality problem within one year from the date of purchase.

paid warranty: for products beyond the free warranty period, a certain cost of maintenance materials will be charged.

2. The following conditions are not covered by free warranty or replacement services:

Excessive damage caused by human beings such as high voltage, overload, improper operation, etc.

Any wiring errors, water immersion (non-waterproof products) and unauthorized maintenance.

Any serious damage or deformation of the shape caused by transportation or knocking.

The appearance of the product is seriously damaged or deformed.

Damage caused by natural disasters and force majeure, such as earthquakes, floods, fires, etc.

3. The company's greatest responsibility for ex-factory products is to replace products of the same model and quantity.

4. In order to speed up the maintenance or replacement time, please indicate the failure phenomenon, use environment and operation when the failure occurs to repair the product, so as to ensure that the maintenance situation can be handled quickly.