# **Product Specification**







Model: CT-A02-A

Name: Touch RGB controller

# Summary

This product is one of our newest intelligent RGB controller R&D by our company, adopting the newest capacitance touch and wireless technology. With elegant color wheel and full touch panel under Humanized design for easy installation and operation. The steady wireless control mode technology makes the remote and free direction control come true by finger touch the corresponding button softly. Meanwhile, the RF remote controller can control the color, mode and change speed with light-dimmer, turning on, turning off and pause in long distance, high sensitivity, strong power-drive ability, steady and reliable performance, This LED controller can be matched with all kinds of low-voltage RGB lights, such as RGB rigid light strip, flexible light strip, RGB panel light, RGB modules and so on.

## **Features**

- 1. Capacitance and wireless touch technology, no mechanical wear, overcoming the lifespan problems caused by Physical buttons.
- 2. Visible color wheel, touched by finger, then What you see is What you get.
- 3. Auto adaptation of 12-24V DC working voltage and with input polarity protection function.
- 4. The newest PWM control technology, delicate light performance, no flicker.
- 5. High power dimmer control MOS tube with stable and reliable performance, strong.power-drive ability with max. 18A of 3 channels.
- 6. Wireless RF control, free direction and long distance, more than 20 m.
- 7. Multi-type memory functions for color, modes, speed, and brightness.
- 8. Smart appearance, standard input and output port, easy installation and high cost performance.

#### Applications

- 1. Construction decoration: commercial buildings, airports or subways.
- 2.Indoor decoration: hotels, shopping malls, squares, restaurants, bars, houses.
- 3. Outdoor decoration: advertising boards, parks, bridges, roads and overpasses, scenic spots.
- 4. Others: decorating for motor vehicles, the places needing RGB lights.

REV: 3 Page 1 of 6

# Technical parameters

Controller	
Supply voltage	12V~24VDC
Loadable current	6Ax3CH
Output channels	3CH
Output power	216W/432W(12V/24V)
Control method	RF
Connection mode	common anode
Changing number	18(7 static color modes , 11dynamic changing modes) , 1 wheel(64 color)
Dimmering mothod	PWM
Grey steps	256 steps per channel
Protection	The power input polarity protection
Remote	
Working voltage	4.5VDC
Remote control way	RF
Launch frequency	433Mhz
Controlable distance	more than 20 meters
Battery types	3 pcs AAA type batteries
Standby power	0.08mW
Power consumption	6mW
Transmission power	40mW
Key Number	6 touch keys , 1 touch wheel
Whole machine	
Working temperature	-20°C~60°C
Identification	CE 、RoHS
Weight	380g
Packing size	L206.5×W136×H43mm

# Panel and interface specifications





REV: 3 Page 2 of 6

#### Panel and interface specifications(continuous)

Symbol	Function
0 1	Turn off/on the LED light in any state.
⊗ ⊗	Touch for selecting 18 change modes before and after.
O	Touch the color on the wheel to get what you want.
**	Static modes for Brightness increasing or decreasing.  Dynamic modes for speed accelerating or decelerating.
0	Voltage of power input port :12/24VDC.
0 0 0	Power output port for connecting LED lights.
0 0	Indicative light to show the power and signal receiver state.

# Remote controller battery installation

This remoter is used 3 pcs AAA batteries, each voltage is 1.5V. Open the cover of the battery; load 3 pcs AAA batteries correctly as per the positive and negative instructions in the battery pack. If the indicator lights on the remote controller flash regularly without touch, please note the battery should be changed.

# The remote of low power consumption and awakening

When the user does not touch the remote controller for 20 seconds, the remote controller will automatically enter the lower power sleep mode to save standby power consumption and extend battery life. When the user needs to re-use reoperate the controller, only touch any key on the touch panel (not the color wheel) to wake up the remote controller for normal use.

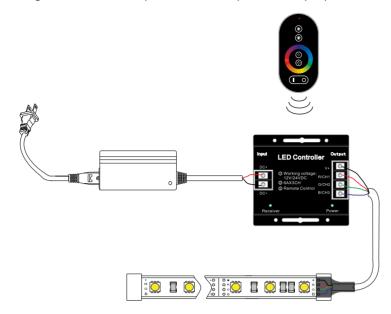
#### Mode table

NO.	Mode	Remark	NO.	Mode	Remark
1	Static red		10	3-color gradient	
2	Stati green		11	3-color smooth	
3	Static blue	Brightness adjustable	12	7-color gradient	
4	Static yellow		13	7-color smooth	
5	Static purple		14	3-color flicker	Brightness/ speed
6	Static cyan	·	15	7-color flicker	adjustable
7	Static white		16	3-color flash	
8	3-color jump	Brightness/	17	7-color flash	
9	7-color jump	speed adjustable	18	Automatically Play	

REV: 3 Page 3 of 6

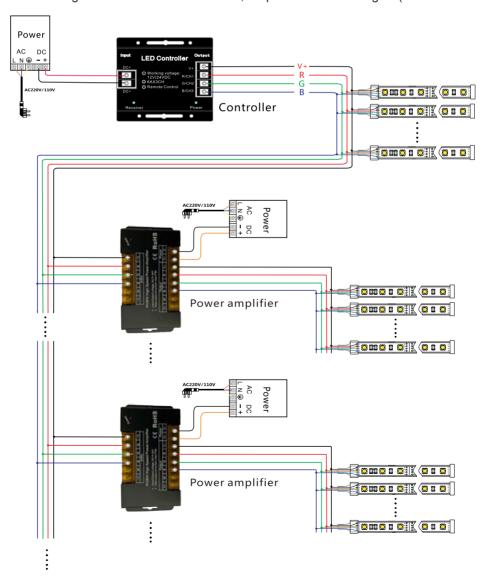
#### The wiring and the typical product apply diagram

The diagram for showing how to connect( take RGB strip for example):



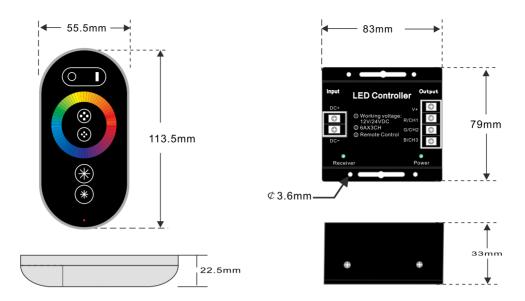
# Power amplifier figure

- 1. When the controller power is not enough, please adopt our constant voltage LED power amplifier. The specifications can be obtained by contacting our sales team.
- 2. The diagram for showing how to connect controllers, amplifiers and LED lights (take RGB strip for example):



REV: 3 Page 4 of 6

#### Product dimensions



# Packing detail



Controller size	Remote size	Packaging size	Weight/pcs	Carton size	Weight/box(30pcs)
L83×W79×H33mm	L113.5×W55.5×H22.5mm	L206.5×W136×H43mm	380g	L670×W286×H220mm	12.2kg

## Product list







Controller User manual

#### Install caution

- 1. Please install the products by professional electrician.
- 2. This product can not waterproof, please put into water-proof tank if the clients want to use it outdoor.
- 3. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature
- 4. Please don't install this controller in lightening, intense magnetic and high voltage fields.
- 5. Check if the voltage and power adapter suit the controller and LED lights.
- 6. Please make sure the wires can sufficiently load the LED lights for avoiding accident.
- 7. Please make sure all the wires are connected correctly before switching on the power.
- 8. Please do not repair or maintain privately, any query, please contact suppliers.

#### After-sales service

- 1. The customers enjoy lifelong technical support for our products.
  - Free Warranty: The customers enjoy free maintainance or replacement for quality problems within one year upon date of purchasing.
  - Paid warranty: If the free warranty time is overdue, We will charge certain cost of raw materials for repair or maintainance.
- 2. Following cases are excluded free warranty terms:
  - Any defects caused by wrong operations.
  - Ay damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
  - Any damages due to transportation, breaking, flooding water after the purchase.
  - Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
  - Any damages caused by negligence, inappropriate storing at high temperature and humidity or environment near harmful chemicals.
- 3. Our company would take up the biggest responsibility to replace the same type and quantity accordingly.
- 4. The cilents please inform suppliers the faulty phenomena, using environment etc. for speeding up the maintainace process.
- 5. The manual is only suitable for this model, any update is subject to change without prior notice.

#### Related products



Model: PS-RGBW-AMPLIFIER Name: RGB-W Amplifier/Repeater



Model: CT-A02-A
Name: CT Touch Controller

# Version modify records

Version	Date	Content
REV: 1	2012.3.30	Create
REV: 2	2012.4.10	Increase the low power comsumption, increase that awakening constant pressure power amplifier developing part of the content and modify part of the page.
REV: 3	2022.8.16	Update Amplifier images, name and part number.

REV: 3 Page 6 of 6