

# 1-BUTTON RGB CONTROLLER

## The Advantage & Characteristics of LED

1. The light is soft, looking like the nature light, meeting the sense of vision request.
2. Have no the electromagnetism radiation, eradicate completely the radiation pollution, protect the brain.
3. Economize on energy efficiently, brighter than common incandescent bulbs and saving 80% energy.
4. The pure direct current drive, real zero frequency, protection sight and prevention nearsighted.
5. Super long service life 100,000 hours, it is 100 times of common lamps.
6. High performance AC adapter which can work normally and keeping constant in the voltage scope of 85V-265V.
7. Bear impact of the switch, soft start, prolong the service life.
8. The mute design, have no interference.

## The Data of our LED lamps

LED Bulbs (pcs)	Voltage(V)	Current(mA)	Power(W)	Lumen(LM)	Equal to the incandescent bulb(W)
30	21.5	85	3.6	120	50
36	21.5	100	4	144	60
42	21.5	120	4.6	168	70
48	21.5	136	5	192	80
60	21.5	170	6	240	100
96	21.5	272	8.5	384	120
192	21.5	544	16	768	150

## The compare between traditional lamps and LED lamp

Light Source	Consume(W)	Rating Voltage(V)	Temperature	Reliability	Service Life(hrs)
Fluorescent Tube	4-100	220	Higher	low	5000-8000
Incandescence Bulb	52-200	220	high	low	3000
Energy Saving Lamp	3-150	220	low	low	5000
LED Lamp	Very Low	22	Very low	Very Higher	>100000



# 4 Buttons RGB Controller

LE-CWH3H10-B RGB controller is signed for LED lighting dimmer. It can control modules, LED ribbons, LED bars. High Power LED modules and other LED lighting fixtures, which form the complete LED lighting dimmer system with 12V DC power supply.

## 1. Features

Operating Temperature,  $-25^{\circ}\text{C}$ ~ $60^{\circ}\text{C}$

Power, DC12V

Measurement: 104\*65\*24mm

Connection, Common Anode

Rated load current: 10A

Max load current: 15A

Output: Three CMOS output.

Control method: four buttons, wireless control.

Buttons (from top to bottom): MODE, UP, DOWN, ON/OFF

**MODE button:** To press one time to achieve one mode.

All together 11 modes.

**UP button:** To speed up color changing. To press one time, the colors change will be more fast. To press steadily, the changing will become quicker until to the quickest. The green signal will light when press unless the changing rates reach to the highest.

**DOWN button:** To slow down the color change. Same as the UP button method.

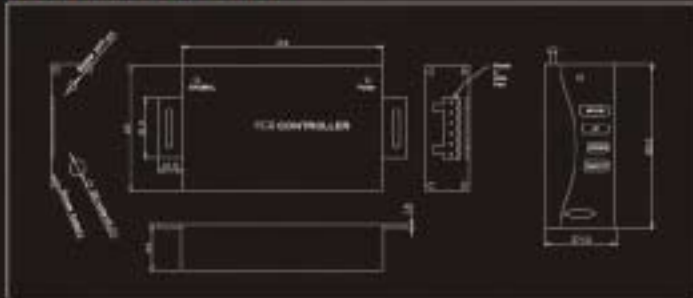
**ON/OFF button:** To press one time, the controller will work or shut off.

**Mode:**

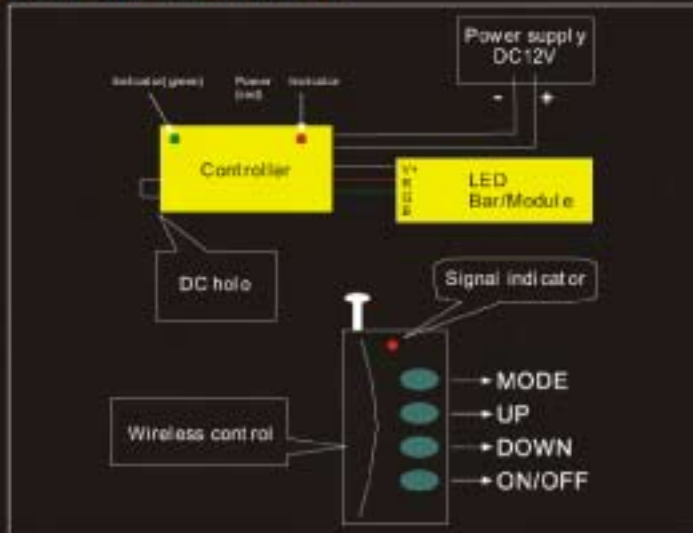
1. static red,
2. static green,
3. static red/green mix,
4. static blue,
5. static red/blue mix,
6. static green/blue mix,
7. static red/green/blue mix,
8. jumpy cycle changing,
9. disorder flash Changing,
10. gradual cycle changing,
11. disorder gradual changing.



## Technical Drawing



## Connection sketch map



## Note

- 1) Make sure the products working voltage must be 12V DC or it will be damaged.
- 2) The wireless control should be powered by 23A, 12V battery.
- 3) Please connect according to the above sketch map. The connection port can be pulled out.
- 4) When the power is on, the red indicator will light, the green indicator do not light. The controller is waiting for work. To press the ON/OFF button, it will began to work. The green indicator will flash when press any button unless it is out of work.
- 5) UP and DOWN button: It can work only when the controller is in color changing mode.
- 6) Our packing is one wireless control matched one controller. Please do not use other wireless control or it will not work.

# RGB AMPLIFIER

Part No.: LE-AH3H10

AMPLIFIER

Part no circumscription

LE—Company mark A—Amplifier H—Input(12V) (DC12V) 3—3 channel H—Output (DC12V) 10—Output Current(10A)

## Function parameter

PART NUMBER	INPUT(VDC)	OUTPUT(VDC)	INPUT(A)	OUTPUT(A)	POWER(W)
LE-AH3H10	12	12	10	10	120

## Object



## Characteristic:

- 1) This controller can control LED modules, LED ribbons, LED bars, High Power LED modules and other LED lighting fixture. Max output 15A. Max power load consumption 150W.
- 2) Amplifier need to be used together with controller
- 3) Simply, delicacy appearance, with DC connector and pull/push connector port.

## Connection mode:

① The illustration drawing of controller and amplifier powered by separate power supplies



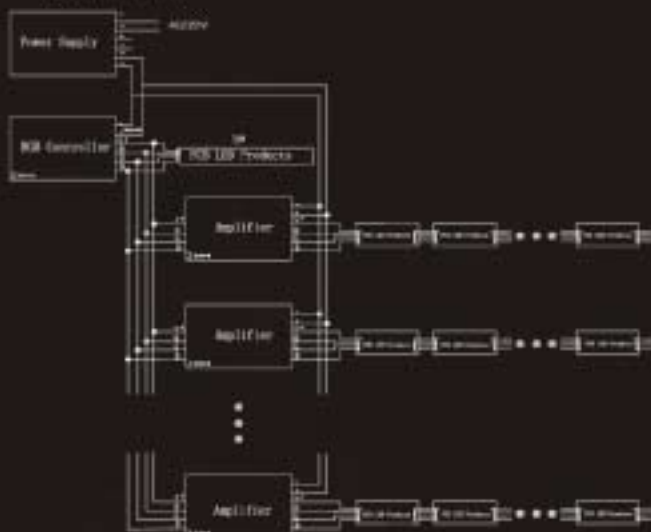
② The illustration drawing of controller and amplifier powered by separate power supplies



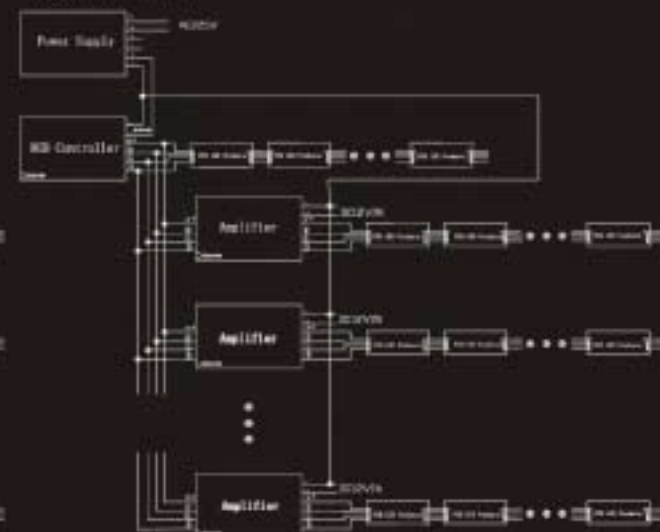
- 1) The quantity of power adapter depends on the max power of the RGB LED light bar, and making sure 20% power free.
- 2) Equipped with one or several Amplifier according to the quantity of RGB LED light bars
- 3) The cathode and Anode of the output ends of the controller and amplifier must be connected together if they have to common power adapter during the installation.

# RGB AMPLIFIER

① The illustration drawing of controller and amplifier powered by separate power supplies (Application: modules)



② The illustration drawing of controller and amplifier powered by separate power supplies (Application: modules)



- 1) The quantity of power adaptor depends on the max power of the RGB LED light bars, and making sure 20% power free.
- 2) Equipped with one or several Amplifier according to the quantity of RGB LED light bars
- 3) The cathode and Anode of the output ends of the controller and amplifier must be connected together if they here to common power adaptor during the installation.

## Rectification

Operating Temperature:  $-25^{\circ}\text{C}\sim+85^{\circ}\text{C}$

Storage temperature:  $-25^{\circ}\text{C}\sim+85^{\circ}\text{C}$

Operating Voltage: DC12V

## Dimension



## Operation Instruction:

- 1) When the load power is over the controller's max output power, you should use the amplifier. Amplifier quantity depends is base on the led product's max loading.
- 2) Four pin connections port (connect power) is the input port, six pin connects is output port, as the diagram showing, connect the wire base on the printed instruction. V+ is the anode wire, R, G, B pin port is corresponding R, G, B wire which is from RGB light bar.
- 3) Suggest use drawing 3,4 connect way when the led product is too long. This method can guarantee lighting's synchronization
- 4) SIGNAL LIGHT POWER LIGHT
- 5) DC12V: Input Voltage. Please make sure match the anode and cathode when connection.

## Notice:

- 1) Before use it, be sure check the RGB light bar or RGB LED Module voltage is suitable with the amplifier or not.
- 2) Power supply max load power need to be kept 20% rest.
- 3) If the led product doesn't use the same power supply, need to connect cathode of all the power supply together.
- 4) Account switch power volume with the Max volume of RGB, and keep 20% volume remains, use the output wire when the current is over 5A. Connect the wires of the controller and LED fittings according to the instruction.

# TRANSFORMER

## Normal Transformer



Normal Transformer -HLA  
CE UL Certified  
Size : 115x50x30mm  
Weight : 260g  
Input Voltage : 100-240V  
Max. Output Power: 50W  
Rated Output Current: 4.16A  
Output Voltage: 12V DC

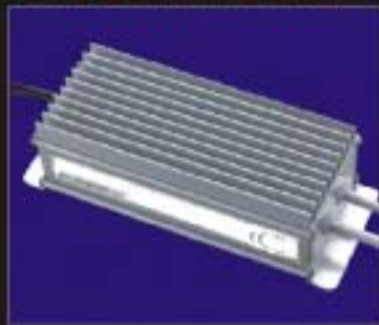


Normal Transformer -HLB  
CE UL Certified  
Size : 115x50x30mm  
Weight : 260g  
Input Voltage : 100-240V  
Max. Output Power: 60W  
Rated Output Current: 5A  
Output Voltage: 12V DC

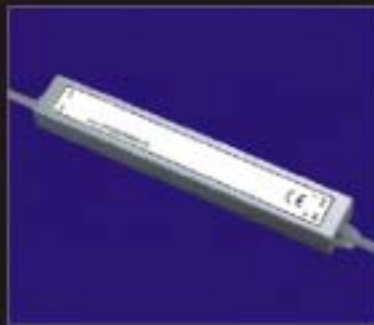


Normal Transformer -HLC  
CE UL Certified  
Size : 200x100x41mm  
Weight : 660g  
Input Voltage : 176-264V  
Max. Output Power: 96W  
Rated Output Current: 8A  
Output Voltage: 12V DC

## Waterproof Transformer



Waterproof Transformer-A  
CE certified  
Size: 180 x 68 x 53mm  
Weight: 850g  
Input Voltage: 170-240V  
Max. Output Power: 60W  
Rated Output Current: 5A  
Output Voltage: 12 ± 0.5V



Waterproof Transformer-D  
CE certified  
Size: 200 x 30 x 20mm  
Weight: 248g  
Input Voltage: 170-250V  
Max. Output Power: 30W  
Rated Output Current: 2.5A  
Output Voltage: 11.6 - 12.3V

# CIE CHROMATICITY DIAGRAM

CIE chromaticity diagram. All Possible color coordinate(x,y) are on or inside the horseshoe curve.

Pure Colors lie on the curve, whereas the white point has the coordinates(1/3,1/3)

