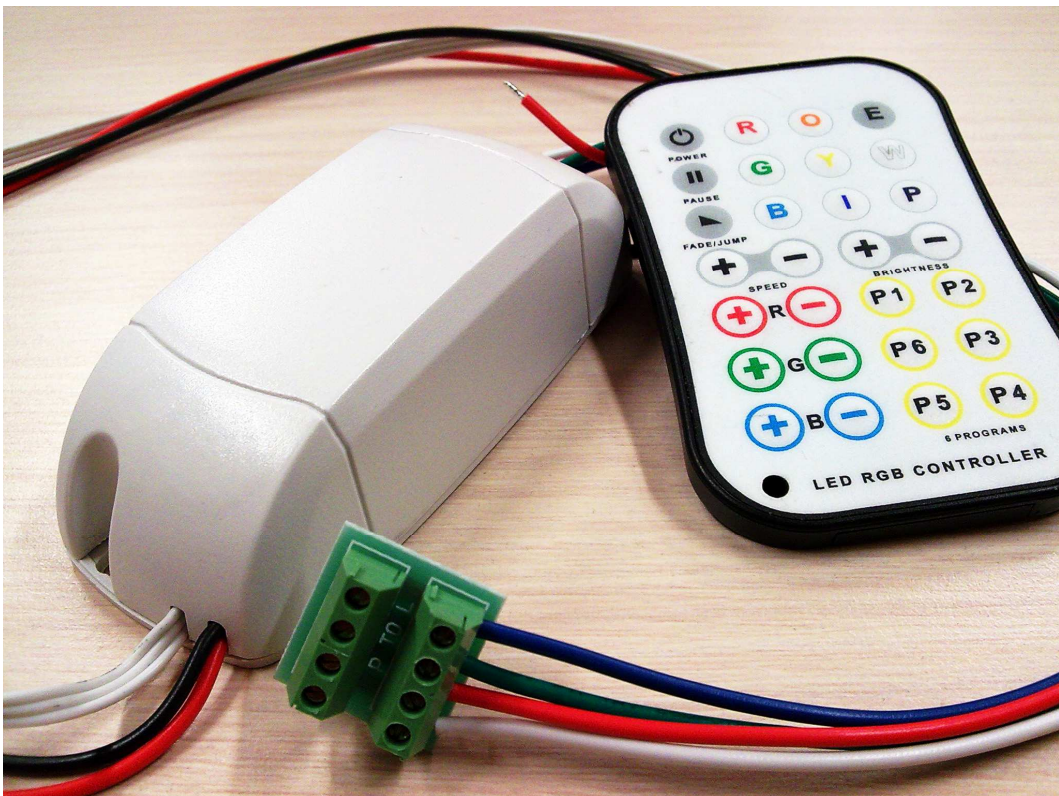


AWCL-120-6P

Mini 6 Programs RGB Controller

USER'S MANUAL



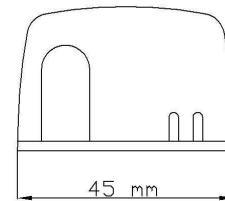
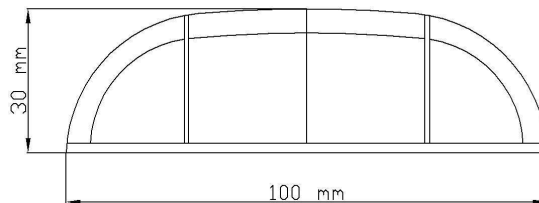
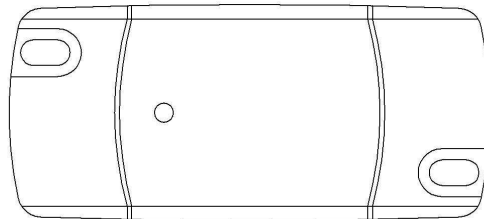
1. Introduction:

1.1 Features

- Support IR-remote control interface ◦
- R、G、B brightness can be adjusted individually, and auto-save the setting ◦
- Built-in six color changing programs; it can be set Fade/Jump and changed the dynamic speed during color changing.
- The maximum output current is 2A x 3 channels, that's 72W/12V or 144W/24V ◦

1.2 Specifications

| | |
|-----------------------|---|
| Operation Voltage | DC10V~30V ◦ |
| LED Output Power | 72W/12V or 144W/24V |
| LED Module Type | Constant Voltage with constant current or Constant voltage |
| Max output current | 2A/channel x 3 channel |
| Weight | 73g |
| Size | L:100mmxW:45mmxH:30mm |
| Operation Temperature | 0°C ~+50 °C |
| Storage Temperature | -10°C ~ +60 °C |



2. User Guide

2.1 Input/ Output Interface



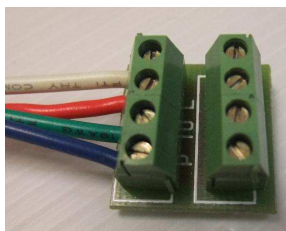
IR Sensor with 50cm extension wire.



Right side: power input

Left side: Output-Terminal to LED modules

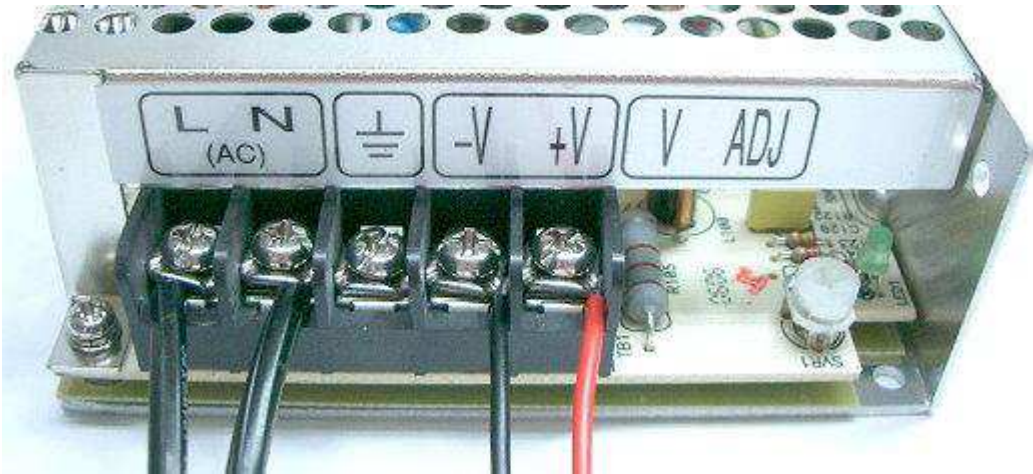
- A. IR Sensor: The distance between IR remote controller and RGB Controller is 7~10m.
- B. Power Input: Power input DC10V~30V.
- C. Output: connect to LED modules



White line=COM or V+
 Red line=Red LED
 Green line= Green LED
 Blue line=Blue LED

- D. Built in Buzzer: Receiving signal from IR remote controller then the buzzer will sound.

2.2 AWCL-120-6P RGB Controller to DC PC Supply



Input power: DC 10V~ 30V

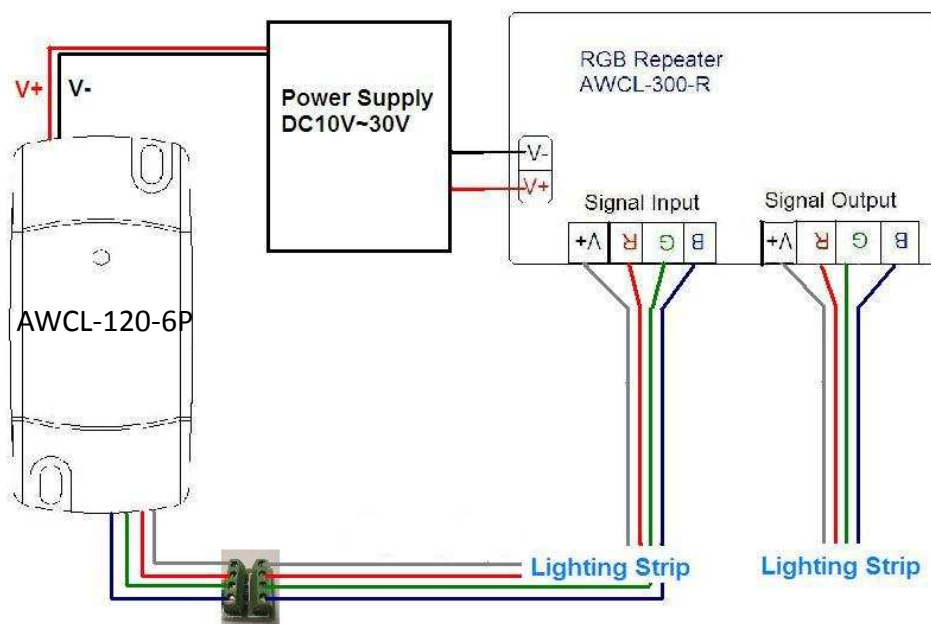
2.3 AWCL-120-6P RGB Controller to Power Supply and LED Modules



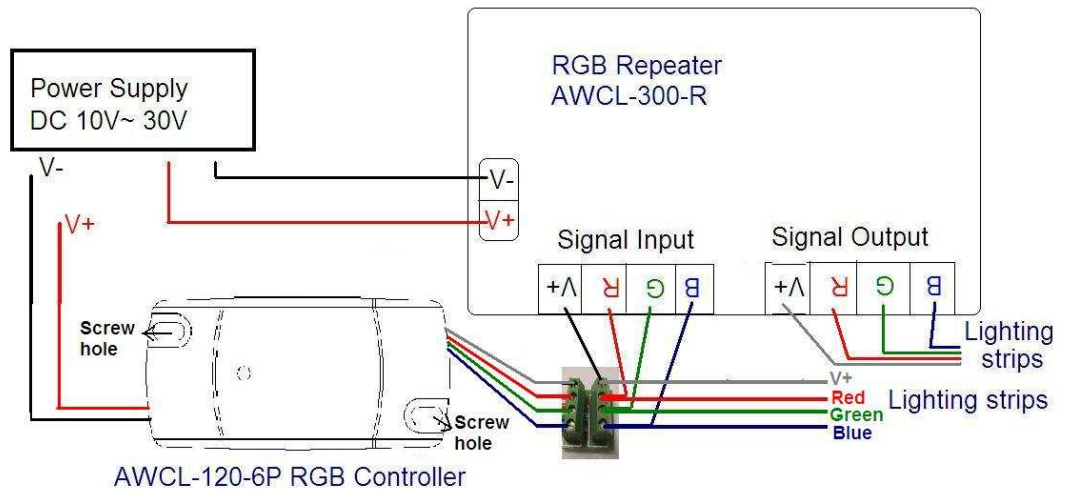
Output power: DC24V/144W; DC12V/72W

2.4 AWCL-120-6P RGB Controller connects to AWCL-300-R Signal Repeater for extension connecting.

While Voltage drops or consumption of AWCL-120-6P RGB Controller is full, connect AWCL-300-R RGB Repeater (DC10V~30V, 5Ax3 channels) by the last LED module or directly connect the RGB controller and the signal repeater by wires for signal Extension. Please check the AWCL-300-R's manual for more detail specification.












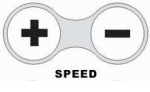


<AWCL-120-6P connects with the Signal repeater by lightings>













<AWCL-120-6P connects with the Signal repeater by wires>

2.5 IR Remote Controller



| | |
|--|--|
|  Power POWER | Power ON/OFF |
| R, G, B, O, Y, I, W, P | Single color in static mode  =100% Red;  =100% Green;  =100% Blue;  Orange=100%Red+50% Green;  Yellow=100%Red+100%Green;  Indigo=100%Green+100%Blue;  White=100%Red+100%Green+100%Blue;  Purple=100%Red+100%Blue. |
| E | LED will flash if in single color |
| Speed+ /-  | P1~P6 Dynamic mode speeding or slower, total 25 degrees.※ |
| Brightness+/-  | Dynamic mode and static mode brighter or darker, total 17 degrees. ※※ **When in “Voice control mode”, you may use the “brightness” control the Sensitive of sound source. Darker means to reduce the sensitive, but it won’t be auto-save in the setting. |
|  Pause PAUSE | P1~P6 pause. Press the “Pause” button again after set in pause mode; it will back to the mode before you pause it. |

| | |
|---|--|
|  Fade/Jump | Switching P1~P6 to Fade/Jump mode |
| P1~P6 programs | Built-in Color mixing 6 programs. Choose one program then set it in fade or jump mode. |
| P1  | 100%Red ->100%Red+100%Green ->100%Green ->100%Green+100%Blue ->100%Blue ->100%Red+100%Blue ->100%Red->repeat |
| P2  | 100%Red ->100%Red+50%Green ->100%Red+100%Green ->50%Red+100%Green ->100%Green ->100%Green+50%Blue ->100%Green+100%Blue ->50%Green+100%Blue ->100%Blue ->50%Red+100%Blue ->100%Red+100%Blue ->100%Red+50%Blue ->100% Red ->repeat |
| P3  | 100%Red ->100%Green ->100%Blue ->100%Green ->100%Red ->repeat |
| P4  | 100%Red ->Dark ->100%Red+100%Green ->Dark ->100%Green ->Dark ->100%Green+100%Blue ->Dark ->100%Blue ->Dark ->100%Red+100%Blue ->Dark ->100%Red ->Dark ->repeat |
| P5  | 100%Red ->100%Red+100%Green ->100%Green ->100%Green+100%Blue ->100%Red+100%Green+100%Blue ->100%Blue ->Dark ->100%Red+100%Blue ->100%Red->repeat |
| P6  | 100%Red+100%Green ->Dark ->100%Green+100%Blue ->Dark ->100%Red+100%Blue ->Dark ->repeat |
| R+/-  | Add or decrease red color in static mode, total 17 degrees. (see ※※) |
| G+/-  | Add or decrease green color in static mode, total 17 degrees. (see※※) |
| B+/-  | Add or decrease blue color in static mode, total 17 degrees. (see ※※) |

Note:

1. R+/-/G+/-/B+/-: To mix the color you need to be in static mode. For example, while the color of the LED module is blue, press R+ button, then the LED color turn to purple; press R- button again, the LED color will return to blue.
2. P1~P6 color mixing programs: Built-in color mixing programs could not be changed. When mass quantity, user could have their own design of color mixing programs.

※ : The speeding degrees as follows : (ms)

| | | | | | | | | | | | | |
|-------|--------|-------|-------|--------|-------|--------|--------|-------|-------|--------|-------|-------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 0.064 | 0.128 | 0.256 | 0.512 | 0.768 | 1.024 | 1.536 | 2.048 | 3.072 | 4.096 | 5.12 | 7.168 | 8.192 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |
| 10.24 | 12.288 | 15.36 | 20.48 | 32.768 | 40.96 | 49.152 | 65.536 | 81.92 | 102.4 | 147.46 | 204.8 | |

※※ : The brightness degrees as follows: (%)

| | | | | | | | | |
|-------|------|-------|------|-------|-------|-------|-------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 6.25 | 12.5 | 18.7 | 25 | 31.25 | 37.5 | 43.74 | 50 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| 56.25 | 62.5 | 68.75 | 75 | 81.25 | 87.5 | 93.75 | 100 | |