Controller for 12V RGB LED Unit (12/24VDC , DMX ready, RJ45) Operation Manual

General Introduction:

Controller for 12 V RGB LED Unit (LED CONTROLLER) is a full-color LED control system which uses on indoor and outdoor decorative lighting. It has more than 30 color changing patterns, speed of each pattern can be adjusted separately. There is a LCD screen to display the program info. It has a dimmer mode, user can get wished color from this mode. Its also can work with a DMX512 controller/console. It can be connected to the power amplifier to expand unlimited power to control thousands of modules synchronous changing.

Features:

- Meets DMX512(1990), can be used as a DMX512 decoder;
- LCD screen for easy programming and showing currently state;
- Wireless remote controller(Optional) for changing color pattern speed and brightness;
- 256 levels brightness, totally 16.77 million colors, real full color (up to 65536 levels);
- 36 changing modes, separate speed regulation for each mode;
- 0-100 different changing speed level for each mode;
- Automatic parameter memory, parameter re-load function RGB individual dimming function;
- Two kinds DMX512 control signal input/output interface: XLR-3 Male & Female, RJ45
- Can be unlimited extend power by power amplifier, convenient for wiring and installation;
- Good function at anti-jamming and auto-resumption.

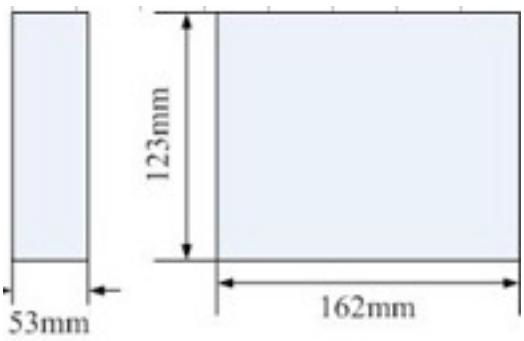
Technical Parameter:

- Input Voltage:12 / 24VDC
- Input Signal:DMX512 (1990)
- Transmission speed: 250Kbps
- Output channel: 3 Channels
- Output current: 8A max. per channel
- Working temperature: 0~70°C

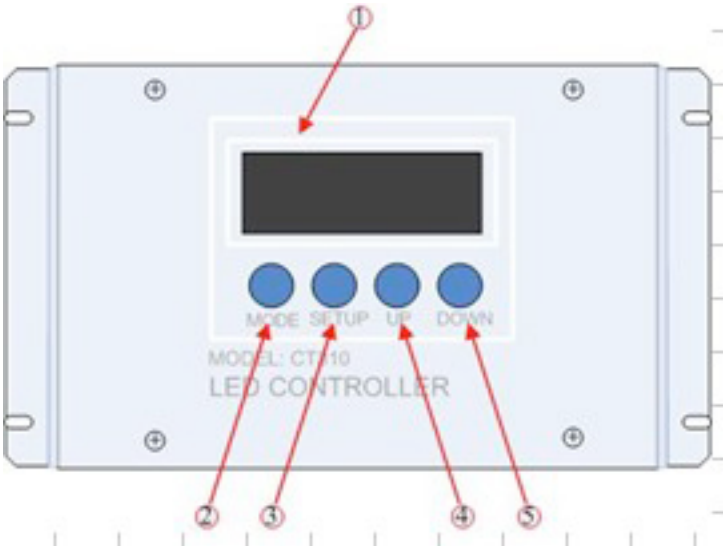
Packing:

- Size: 162(mm)*123(mm)*53(mm)
- G.W.: 1KG

Dimension Diagram:

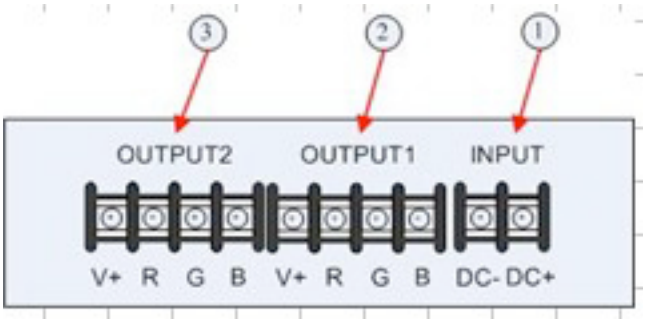


LED CONTROLLER Top Panel Instruction:



1. LCD screen
2. MODE: Change mode by pressing this button
3. SETUP: Press this button to set the program according to user's need
4. UP: Press this button to increase the parameter value of currently item (keep pressing to increase continuously) ,or choose next chaning mode or reload defaut setting.
5. DOWN: Press this button to decrease the parameter value of currently item (keep pressing to decrease continuously), or choose last chaning mode or reload defaut setting.

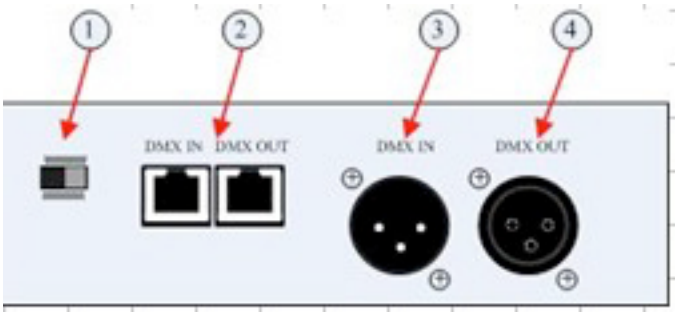
Front Panel Instruction:



- Power input terminals : 12V/24V DC. Make sure the right connection.
- Drive output terminals 1: Connect to LED modules.
- Signal output terminals 2: Connect to LED modules.

Remark: the signal of output port 1 is same with output port 2.

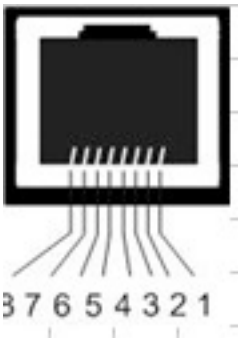
Back Panel Instruction:



- Switch of DMX512 signal terminator, turn to "on" to terminate DMX512 signal.
- RJ45 input/output interface: connect to DMX512 signal cable
- XLR-3 male input/output interface: connect to DMX512 signal cable
- XLR 3 Female output interface: connect to DMX512 signal cable

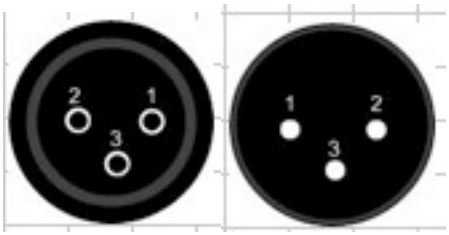
LED CONTROLLER Signal Interface Instruction:

1)RJ45 interface



- 1: DATA+
- 2: DATA-
- 3-6: NC
- 7-8: GND

2)XLR 3 interface



- 1: GND
- 2: DATA-
- 3: DATA+

LED CONTROLLER Mode Introduction:

1: Black (all off)	13: RGB jumping	25: RGB fade in, fade out
2: Static red	14: RGB flicker	26: White fade in, fade out
3: Static green	15: RG jumping	27: RG fade in, fade out
4: Static blue	16: RB jumping	28: RB fade in, fade out
5: Static yellow	17: GB jumping	29: GB fade in, fade out
6: Static purple	18: White jumping	30: Red fade in, fade out
7: Static cyan	19: 7-color gradual change	31: Green fade in, fade out
8: Static white	20: RGB gradual change	32: Blue fade in, fade out
9: 7-color jumping	21: RG gradual change	33: RGB color adjustable
10: 7-color flicker	22: RB gradual change	34: DMX512 decoder
11: 6-color jumping	23: GB gradual change	35: DMX512 control mode
12: 6-color flicker	24: 7-color fade-in, fade-out	36: Automatic mode

LED CONTROLLER Controller Programming Instructions:

Mode 1-8 are static color mode without adjusting functions; Mode 9-32 (preset changing mode), can be set the program speed, run times in the automatic mode, or reload default value.

Press " SETUP" in stand by status:

Times	Description	Operation	Parameter	Remark
1	RUN SPEED	Press "UP"/"DOWN" to change	0-100	Press "
2	RUN TIMES	parameter value	0-100	MODE" to
3	LOAD	Press "UP"/"DOWN" to load	factory	exit
	DEFAULT	default	default	

Remark: " RUN TIMES“ is the runing times of this mode under automatic mode.

RGB color adjustable mode program instuction:

User can adjust the brightness of R,G,B separately, and the value will display on LCD screen:

- Step 1: Press " MODE" to select Mode 33
- Step 2: Press " SETUP" to set brightness of Red, change value by "UP" / " DOWN"
- Step 3: Press " SETUP" again to set brightness of Green, change value by "UP" / " DOWN"
- Step 4: Press " SETUP" again to set brightness of Blue, change value by "UP" / " DOWN"
- Step 5: Press " SETUP" again to reload default value, press " UP" or "DOWN", the R,G,B brightness will reload factory default.
- Step 6: Press " MODE" to exit.

DMX512 decoder program instruction:

The controller can be set as a DMX512 decoder(3 channels), and select desire DMX512 address as follows:

- Step 1: Press "MODE" to select mode 34: DMX512 decoder
- Step 2: Press " SETUP" to set DMX512 address, change value by "UP" / " DOWN"
- Step 3: Press " MODE" to exit

DMX512 mode program instruction:

The controller can be set as a 3 channels controller which was controlled by a DMX512 controller.

Set the DMX addess as follows:

- Step 1: Press "MODE" to select mode 35: DMX512 mode
- Step 2: Press " SETUP" to set DMX512 address, change value by "UP" / " DOWN"
- Step 3: Press " MODE" to exit

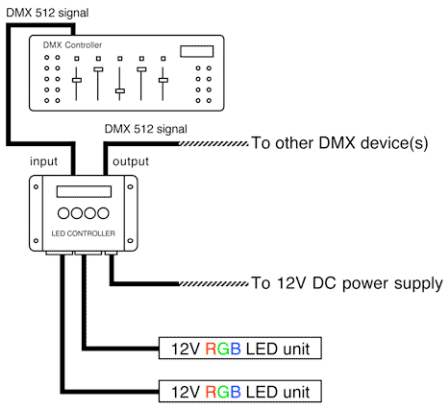
to select the led color changing mode according to the dmx512 parameter value in this mode. the DMX512 value with corresponding mode as following:

0: Black (all off)	10: 6-color jumping	20: RG jumping	30: Green fade in, fade out
1: Static red	11: 6-color flicker	21: RB jumping	31: Blue fade in, fade out
2: Static green	12: RGB jumping	22: GB jumping	
3: Static blue	13: RGB flicker	23: 7-color fade in, fade out	
4: Static yellow	14: RG jumping	24: RGB fade-in, fade out	
5: Static purple	15: RB jumping	25: White fade-in, fade out	
6: Static cyan	16: GB jumping	26: RG fade-in, fade out	
7: Static white	17: White jumping	27: RB fade-in, fade out	
8: 7-color jumping	18: 7-color gradual change	28: GB fade-in, fade out	
9: 7-color flicker	19: RGB gradual change	29: Red fade-in, fade out	

Automatic mode program instruction:

User can select some of 9-32 modes or all of them to run automatically under this mode according to each mode's speed and run times value.

To reload factory default:



•Step 1: Press " mode to select mode 36
•Step 2: Press " SETUP" , then press ' UP' / ' DOWN" to reload default
•Step 3: Press " MODE" to exit