

## LED BAR (4 IN 1) LTL.BL154

### Operation manual



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## 1. BEFORE YOU BEGIN

### What is included

- 1 x Fixture
- 1 x Power cable with plug
- 1 x User manual

### Unpacking instructions

Immediately upon receiving a fixture, carefully unpack the carton; check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

### AC power

This fixture has an auto-switching switch-mode power supply that can accommodate a wide range of input voltages. The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This fixture will accommodate between 100V and 240V AC 50-60 Hz. Each light is connected end to end by the power socket "POWER IN" and "POWER OUT" on the light, or use the waterproof power cord. Please ensure the head and the tail tightening when connect the lights, to prevent the power leakage occurred by water seepage to the plug.



Help preserve the environment! Ensure that this product is recycled at the end of its life. Your supplier can give details of local arrangements for the disposal of products.

### Safety instructions



#### WARNING!

Please read these instructions carefully, which includes important information about the installation, usage and maintenance of this product.



**DANGER!**  
Safety hazard.  
Risk of severe injury or death.



**DANGER!**  
Hazardous voltage. Risk of lethal or severe electric shock.



**WARNING!**  
Fire hazard.



**WARNING!**  
LED light emission. Risk of eye injury.



**WARNING!**  
Refer to user.

- This light belongs to grade protection device, therefore the light must connect to the earth excellently. And the power connection must be operated by the professional technician.
- Make sure that the working voltage will not higher or lower than the rated value.
- Make sure that the cable didn't be damage or lacerated by sharp.
- The light must be power off when it's standing idle or before clearing.
- The cable must with plug, and you must pull out the cable by handle the plug.
- Please be careful when installing the lighting. Never touch the bared cable, or it will cause the deadly electric shock.
- Please use the suitable and safe cable to connect the light.
- Please never remodel the light randomly, we will not take the guarantee for the faulty and damage which caused by dismantle repair or remodel of the nonprofessional person.
- Maximum ambient temperature 40°C. Do not operate fixture at temperatures higher than this.
- Never connect the device to a dimmer pack.
- Do not daisy chain power to more than 8 units @ 120V and 12 units @ 230V.

## 2. INTRODUCTION

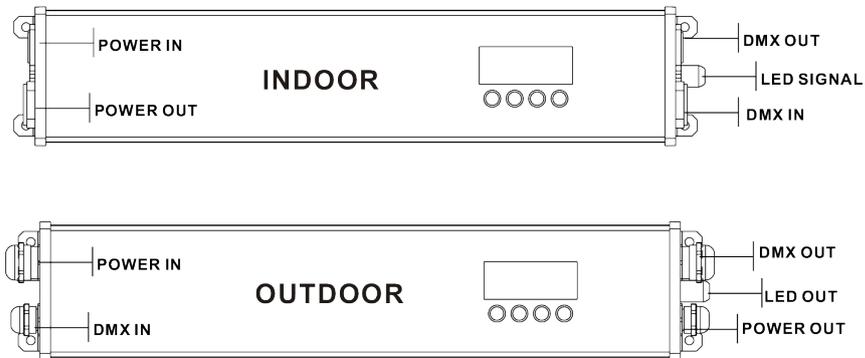
### Specifications

- Voltage rating : AC100V 240V 50-60Hz
- Power rating : 110W
- LED quantity : 15X4-in-1(RGBW)
- LED : 380mA
- Beam angle : 20° / 30° / 40°(option)
- Ingress protection : IP65 / indoor (option)
- Product size : 990X120X145mm
- Package size : 1070X160X170 mm
- N/W : 5.7Kg

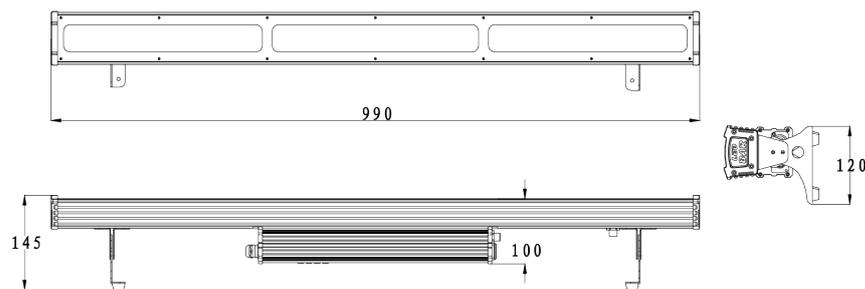
### Features

- RGBW color mixing with or without DMX controller
- Special effect (minimum 16psc one group)
- 5 distinct dimming curves
- LED display with password protection
- Operating Modes : DMX512 connection / Master & Slave ...
- DMX Channels : 11/04/06/11/15/17 /21/60 channels

## Product overview



## Dimensions



## 3. SETUP

### Installation requirement

This product can be used in a variety of situations, can hang and put on the ground.

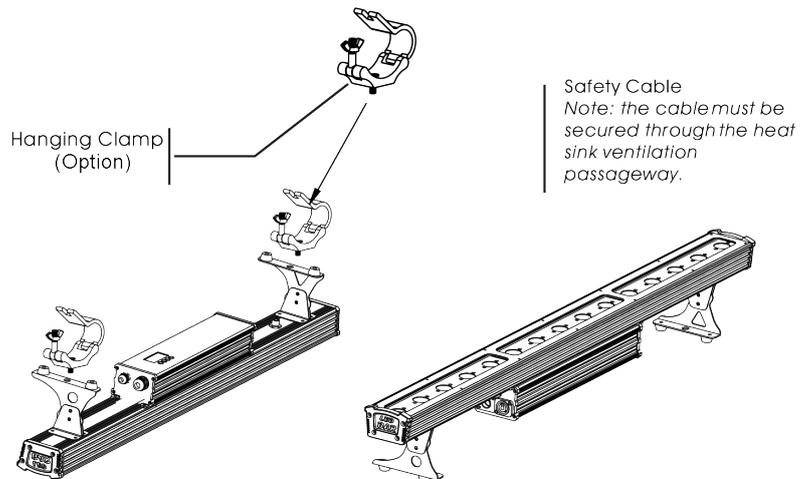
If hanging the fixture for over head use, then please follow the below steps.

Please choose the suitable location to put or hang the light when installing it. You must use the exclusive clamp hanger and screw when hanging it, and make sure the weight of the light is within limits of the hanger.

Please make sure without any flammable objects within 0.5m when installing the light.

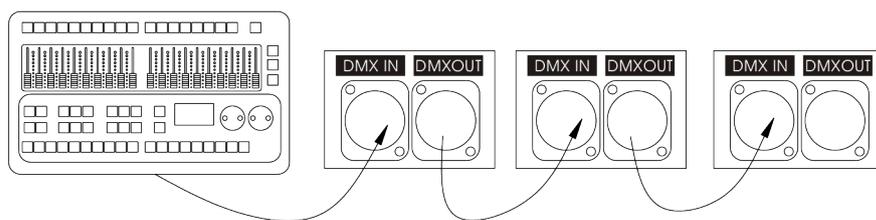
The installation should be operated by professional person; any irregular installation will cause the body injury or equipment damage.

Block access below the work area and use suitable and stable platform when installing or servicing fixture.



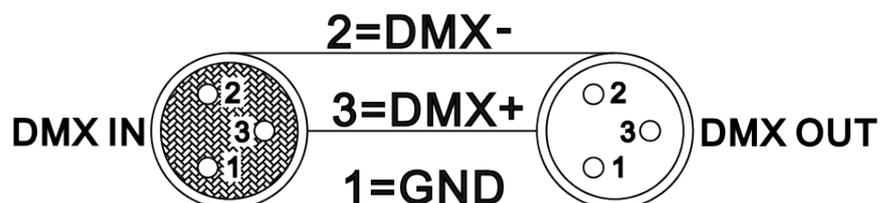
## Connection of DMX signal wire

1. Please use the fixture controller wire specially when use the DMX512 controller. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (male) 3 pin connector to the input connector of the next fixture consisting of a (female) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.
3. This product can be connected numerous lamps in series without the need for the signal amplifier; the signal will not be weakened.



## 3-PIN to 5-PIN conversion chart

Note : If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter.



Conductor	3 Pin Female (output)	5 Pin Male (Input)
Ground / Shield	Pin 1	Pin 1
Data ( - ) signal	Pin2	Pin2
Data ( + ) signal	Pin 3	Pin 3
Do not use		Do not use
Do not use		Do not use

## 4. OPERATING INSTRUCTIONS

### Control panel functions



Button	Function
Mode	Exits from the current menu or function
Enter	Enables the currently displayed menu or sets the currently selected value in to the selected function
Up	Navigates upwards through the menu list and increases the numeric value when in a function
Down	Navigates downwards through the menu list and decreases the numeric value when in a function

### Menu map

Main function	Subfunction	Selection	Instruction
<i>DMX</i>	<i>d001</i>	001~512	Set DMX start address
<i>CoLo</i>	<i>R000</i>	000~255 (0 ~ 100%)	User can combine red, green, blue and white to generate a custom color
	<i>G000</i>		
	<i>b000</i>		
	<i>w000</i>		
<i>AUTO</i>	<i>S000</i>	00~20	Select strobe frequency
	<i>AT00 (01~ 50)</i>	SP00-20	Auto programs available
	<i>AP00 (01~ 50)</i>	SP00-20	Combine auto program
<i>SLAV</i>	<i>CP00</i>	01~25	Combine cartoon effects
	<i>SLA</i>		Slaves

Main function	Subfunction	Selection	Instruction
<i>PERS</i>		11CH	Select 11/04/06/15/17/21/60 channel setting
		04CH	
		06CH	
		15CH	
		17CH	
		21CH	
		60CH	
<i>SET</i>	<i>d IM</i>	OFF	«Off» means select linear dimming, or choose dimmer 1-4 to control the dimming speed, dimming 1 of the fastest dimming curves, 4 for the most slowly dimming curve
		DIM1/2/3/4	
	<i>VER</i>		Version number
<i>KEY</i>		ON ~ OFF	Enables or Disables password lockout
<i>COMP</i>	<i>C.SUM</i>	01~16	Amount set of combined lights
	<i>C.I d</i>	01~16	Number set of combined lights

## Operating instructions

### Enable password lock

*[KEY]* *[ON]* / *[OFF]* {ENTER}

*[ON]* enable lock, *[OFF]* disable lock

Enable the password lock, control panel in the boot or go into standby automatically take effect, this time to operate lamps need to enter your password. { MODE, UP, MODE, DOWN, MODE,UP, MODE, DOWN } {ENTER}

### DMX512 controller mode

#### 1. Setting DMX512 address

*[DMX]* *[001--512]*

Access control panel function by pressing MODE until *[DMX]* is displayed.

Press ENTER, add or reduce channels by pressing UP/DOWN between 001 and 512.

Press MODE to exit.

#### 2. Setting channels

*[PERS]* *[11CH/04CH /06CH /15 CH /17 CH /21 CH /60 CH]*

Access control panel function by pre ssing MODE until *[PERS]* is displayed.

Press ENTER button, select DMX channel by pressing UP/DOWN.

Press MODE to exit.

## DMX512 channel values

### 4 channels :

Channel	Value	Description
1	000~255	Red
2	000~255	Green
3	000~255	Blue
4	000~255	White

### 6 channels

Channel	Value	Description
1	000~255	Red
2	000~255	Green
3	000~255	Blue
4	000~255	White
5	000~255	No function
	006~255	Strobe / Auto speed
6	000~005	No function
	006~255	AUTO (AT01~50)

Channel 6 has priority over channels 1-5.

When activating the auto programs, then it is possible to control the auto speed by using channel 5.

### 15 channels

Channel	Value	Description
1. LED	000 ~015	No function
2. LED	016 ~031	R
3. LED	032 ~047	G
4. LED	048 ~063	B
5. LED	064 ~079	R+G
6. LED	080 ~095	G+B
7. LED	096 ~111	R+B
8. LED	112 ~127	R+G+B
9. LED	128 ~143	W
10. LED	144 ~159	R+W
11. LED	160 ~175	G+W
12. LED	176 ~191	B+W
13. LED	192 ~207	R+G+W
14. LED	208 ~223	G+B+W
15. LED	224 ~239	R+B+W
	240 ~255	R+G+B+W

## 17 channels

Channel	Value	Description
1. LED	000 ~015	No function
2. LED	016 ~031	R
3. LED	032 ~047	G
4. LED	048 ~063	B
5. LED	064 ~079	R+G
6. LED	080 ~095	G+B
7. LED	096 ~111	R+B
8. LED	112 ~127	R+G+B
9. LED	128 ~143	W
10. LED	144 ~159	R+W
11. LED	160 ~175	G+W
12. LED	176 ~191	B+W
13. LED	192 ~207	R+G+W
14. LED	208 ~223	G+B+W
15. LED	224 ~239	R+B+W
	240 ~255	R+G+B+W
16. Strobe	000 ~255	Strobe (0~20HZ)
17. Fade	000 ~255	Dimmer speed (fast to slow)

## 11 channels

Channel	Value	Description
1. Dimming	000~255	0-100%
2. Red	000~255	0-100%
3. Green	000~255	0-100%
4. Blue	000~255	0-100%
5. White	000~255	0-100%
6. Macro color control	000~009	No function
	010~255	Macro color control
7. Strobe	000~255	Strobe (00~20Hz)
8. Module selection	000~004	#1=ON, #2=ON, #3=ON,
	005~034	#1=ON
	035~064	#2=ON
	065~094	#3=ON
	095~124	#1=ON, #2=ON
	125~154	#1=ON, #3=ON
	155~184	#2=ON, #3=ON
	185~214	#1=ON, #2=ON, #3=ON ,
	215~244	#1=OFF, #2=OFF, #3=OFF,
245~255	Convert to 11CH-2	

Channel	Value	Description
8. Module selection	245~255	Convert to 11CH-2
9. Auto	000~005	No function
	006~025	Auto (AT01~50)
10	000~255	Auto speed
11	000~255	Dimmer speed

### Master dimmer

Channel 1 controls the intensity of the currently projected color when the slider is at the highest position (255), then the intensity of the output is at the maximum.

### Red, green, blue and white color selection

Channels 2, 3,4 and 5 control the intensity ratio of each of the Red, Green, Blue & White LEDs. 1,2,3,4 and 5 channels can be used in combination.

### Color macros

Channel 6 selects the required color macro.

Channel 6 has priority over channels 2, 3, 4 & 5 .

Channel 1 is used to control the intensity of the current color macro.

### Strobe

Channel 7 controls the strobe of channels 1 through 6.

Channel 7 has priority over channels 2, 3, 4 & 5.

Speed of the strobe is adjustable from 0 to 20 Hz.

### Module selection

Channel 8 provides individual control of the three LED modules in each fixture.

245 ~255 switch to the 11CH-2 mode.

### Auto programs

Channel 9 selects the preset auto programs 1~50.

When activating the auto programs, then it is possible to control

the auto speed by using channel 10.

Channel 9 has priority over channels 2-8.

### Dimmer speed

Channel 11 is for selecting the dimmer mode and dimmer speed.

When channel 11 is not activated, then RGBW and master dimmer are linear.

The dimmer modes 1, 2, 3 and 4 are different speeds of the nonlinear dimming curves.

## 21 channels

Channel	Value	Description
1. LED 1	000~015	No function
2. LED 2	016~031	R
3. LED 3	032~047	G
4. LED 4	048~063	B
5. LED 5	064~079	R+G
6. LED 6	080~095	G+B
7. LED 7	096~111	R+B
8. LED 8	112~127	R+G+B
9. LED 9	128~143	W
10. LED 10	144~159	R+W
11. LED 11	160~175	G+W
12. LED 12	176~191	B+W
13. LED 13	192~207	R+G+W
14. LED 14	208~223	G+B+W
15. LED 15	224~239	R+B+W
	240~255	R+G+B+W
16. Module 1	000~005	No function
17. Module 2		
18. Module 3	006~255	Strobe (0~20HZ)
19. Module 1 fade	000~255	Dimmer speed
20. Module 2 fade	000~255	Dimmer speed
21. Module 3 fade	000~255	Dimmer speed

Attention : Module 1 is composed of 1-5 LED.  
 Module 2 is composed of 6-10 LED.  
 Module 3 is composed of 11-15 LED.

## 60 channels

Channel	Value	Description
1. LED 1	000~255	Red (0~100%)
2. LED 1	000~255	Green (0~100%)
3. LED 1	000~255	Blue (0~100%)
4. LED 1	000~255	White (0~100%)
5. LED 2	000~255	Red (0~100%)
...	?	...
57. LED 15	000~255	Red (0~100%)
58. LED 15	000~255	Green (0~100%)
59. LED 15	000~255	Blue (0~100%)
60. LED 15	000~255	White (0~100%)

## Master / Slave control mode

### 1. Setting master machine

Access control panel function by pressing MODE until [AUTO] is displayed.  
Press ENTER, select [AT00] / [AP00] / [CP00] by pressing UP/DOWN buttons.  
Press ENTER and then press MODE to exit.

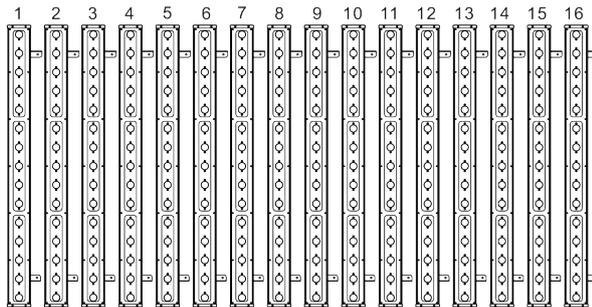
You can choose [AT00] pre-set programs, the range is [01--50].

Or you can choose [AP00] custom programs, the range is [01--50].

### 2. Setting slave machine

Access control panel function by pressing MODE until [SLAVE] is displayed.  
Press ENTER.

## Group working



### 1. Amount set of combined lights

Access control panel function by pressing MODE until (COMP) is displayed.

Press ENTER, select (C.SUM) by pressing UP/DOWN buttons.

Press ENTER, amount set of combined lights, by pressing UP/DOWN between 01 and 16.  
Press MODE to exit.

### 2. Number set of combined lights

Access control panel function by pressing MODE until (COMP) is displayed.

Press ENTER, select (C.ID) by pressing UP/DOWN buttons.

Press ENTER, Amount set of combined lights, by pressing UP/DOWN between 01 and 16.  
Press MODE to exit.

**Attention :** The number of the light could not bigger than the amount of the combined lights.

### 3. Setting master machine

Access control panel function by pressing MODE until (AUTO) is displayed.

Press ENTER, select (AT), (AP) or (CP) by pressing UP/DOWN buttons.

## 4. Setting slave machine

Access control panel function by pressing MODE until [SLAV] is displayed.  
Press ENTER.

### Group working (DMX512 mode)

#### 11CH-2

Channel	Value	Description
1. Module 1 2. Module 2 3. Module 3	000 ~ 015	No function
	016 ~ 031	R
	032 ~ 047	G
	048 ~ 063	B
	064 ~ 079	R+G
	080 ~ 095	G+B
	096 ~ 111	R+B
	112 ~ 127	R+G+B
	128 ~ 143	W
	144 ~ 159	R+W
	160 ~ 175	G+W
	176 ~ 191	B+W
	192 ~ 207	R+G+W
	208 ~ 223	G+B+W
	224 ~ 239	R+B+W
240 ~ 255	R+G+B+W	
4	000 ~ 005	No function
	006 ~ 255	Strobe 0 20HZ
5	000 ~ 005	No function
	006 ~ 255	Combine auto program (AP 1~50)
6	000 ~ 009	No function
	010 ~ 255	Combine cartoon effects (CP 1~25)
7	000 ~ 255	No function
8. Mode selection	000 ~ 244	Convert to 11CH-1
	245 ~ 255	Convert to 11CH-2
9	000 ~ 005	No function
	006 ~ 255	AUTO (AT 1~50)
10	000 ~ 255	CH5/6/9 auto speed
11	000 ~ 255	Dimmer speed

## Auto programs

Chanel 5 selects the preset combine auto program (AP 1~50)

Chanel 6 selects the preset combine cartoon effects(CP 1~25)

Chanel 9 selects the preset auto program (AT 1~50)

When activating the auto programs, then it is possible to control the auto speed by using channels 10.

Channel 9 has priority over channels 2-8.

Channel 5 has priority over channels 2-6.

Channel 6 has priority over channels 2-4.

## 5. APPENDIX

### Service maintenance guide

Symptom(s)	Possible Solution(s)
1 or more LED's are not illuminating	Clean the fixture regularly to avoid any such failure. This fixture is convection cooled, which means that if the surface is kept clean and free of debris, then proper cooling will be allowed to occur.
	An LED may have failed, resulting in an open circuit. In this event, all of the red, green, or blue in a single module will no longer illuminate. This does not mean that all of the LEDs have failed, but the circuit is wired in series.
	An LED may have failed, resulting in a short circuit. In this event, only the single LED which has failed will no longer function. This does not mean that all of the LEDs have failed, but the circuit is wired in series.
	Note : In the event of LED failure, a replacement LED PCB assembly may be purchased directly from our company.
Breaker / Fuse keeps blowing	Check total load placed on the electrical circuit.
	Check for a short in the electrical wiring : internal and / or external.
Device has no power	Check for power on mains.
	Note : In the event of autoswitching transformer failure, the unit can be sent in for repair; however, a replacement part can be ordered directly from our company.
Fixture is not responding to DMX	Check control panel settings for correct addressing.
	Check DMX cables.
	Check polarity switch settings on the controller.
	Check cable connections.
	Call service technician.
	Note : In the event of display PCB failure, a replacement PCB can be ordered directly from our company.

Symptom(s)	Possible Solution(s)
Loss of signal	Use only DMX cables.
	Install terminator.
	Note : Keep DMX cables separated from power cables or black lights.
COLOR-CON controller does not function, or does not function properly	Make sure connector is firmly connected to device.
	This fixture must be in the correct mode in order to properly respond to the COLOR-CON controller. The correct mode is "DMX" in the onboard control panel.
Stand alone operation	This fixture has built-in, automatic programs that may be triggered from the onboard control board.
The display is only showing : ####	The password lockout has been enabled. You can use the password: {MODE UP MODE DOWN MODE UP MODE DOWN}

# LINEARLEDS



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