



# LEDWash RGBW USER MANUAL





# **1.BEFORE YOU BEGIN**

### What is included

- 1 x Fixture
- 1 x Powercable with plug
- 1 x User Manua

### **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 240VAC 50-60 Hz. Each light is connected end to end by the power socket "POWER IN" and "POWER OUT" on the light



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..

The following symbols are used to identify important safety information on the product and in this manual:



This light belongs to grade I 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 pullout 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 attemperatures higher than this.

Never connect the device to a dimmer pack.

electric shock.

Do not daisy chain power to more than 8 units @ 120V and 15 units @ 230V.

# 2.INTRODUCTION

### **Specifications**

Voltage Rating: AC100V~240V 50-60Hz Power Rating: 65W Cos φ:0.67 Power Usage: 130VA LED Quantity: 9X4-in-1(RGBW) LED: 550mA Beam Angle: 50° Ingress Protection: indoor Product Size: 480x140x105mm Package Size: 510x210x175mm N/W:3.5Kg

#### Features

RGBW color mixing with or without DMX controller 5 distinct dimming curves User defined program/ inner optional program LED display with password protection Transfer custom programs between fixtures Operating Modes: DMX512 Connection with ID Address/Master & Slave... DMX Channels: HSV/11CH/03CH/04CH/DEF/ 05CH/06CH 3 channels(HSV): Hue+Saturation+Value 11 channels: Dimmer+RGBW+Macro + strobe + AUTO + Auto speed +dimming speed +ID 3 channels :RGB 4 channels :Dimmer+RGB 4 channels (DEF):RGBW 5 channels:Dimmer+RGBW + Strobe

### **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

- Please use the fixture controller wire specially when use the DMX512 Controller. Connect (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.



#### **3 PIN TO 5 PIN CONVERSION CHART**

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

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# **4.OPERATING INSTRUCTIONS**

## **Control Panel Functions**



MODE ENTER UP DOWN

#### 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	SUB- FUNCTION	SELECTION	INSTRUCTION
	4000		
	R000	000 055	
	6000		User can combine RED, GREEN, BLUE
STAT	6000		and WHITE togenerate a custom color
	W000		
	5000	00~20	Select strobe frequency
AUTo	ATOO	01~10	10 auto programs available
	PR00		chose program from 10 "EDIT" programs
ΧМЬ	1 006	001~512	Set DMX startaddress

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MAIN FUNCTION	SU Func	-	SELECTION	INSTRUCTION
	ЧΜХ			Sets the operating mode for the fixture:to receive signal from a DMX controller
RUN	SLA	IN .		(DMX) .receive signal or Download programs from Master fixture. (Slave)
			H5 N	3 channels: Hue, Saturation, Value
			IICH	11 channels: D+RGBW+S
PERS			03CH	3 channels: RGB
			0468	4 channels: D+RGB
			dEF	4channels: RGBW
			05CH	5 channels: D+RGBW
			06C H	6 channels: D+RGBW+S
Ч	01~66			Assign ID address for fixtures
	195	iМ	ON~OFF	Enable or disable ID
	UPI	Ld	Password	Upload programs(Password required)
	ЧI	м	OFF	"Off" means select linear dimming, or choose dimmer 1-4to control the dimming
SET			DIM1/2/3/4	speed, dimming 1 of the fastest dimming curves, 4 for the most slowly dimming curve
	RES	57	Password	Reset factory defaults
	١E	R	V1.47	Version number
	PROI	SCOI	ROOD	
Edit	01~09	01~30	6000	
	custom	scene	6000	(0~255)
			4000 W	
	PRID 5CDI custom 01~90 scene		5000	(0~20Hz)Select strobe frequency
			T000	(0~255) step time
			F000	transition time of last step to current step
κ ΕΥ	ON~C	DFF		Enables or Disables password lockout

## **Operating instructions**

#### 1. Upload custom program or set to another machine

Set all the fixtures which receive custom programs from the source fixture as [5LRN]

Press MODE button until [RUN] is displayed.

Then press ENTER button, use UP/DOWN buttons until [5LRN] is displayed. Press MODE return to MENU

On the Masterunit, Press MODE button until [ 5ET] is displayed on source fixture.

Then press ENTER button, use UP/DOWN buttons until [UPLd] is displayed.

Then press ENTER button, Input password UP, UP, DOWN, DOWN, press ENTER.All the lights display yellow color when uploading.After upload finish, it will turns to green which means upload successful.If has mistake, it will turns to red color.

Press <MODE> on the source unit to exit the upload mode.

#### 2 Enable password lock

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

[ON] enable lock, [OFF] disable lock

Enable the password lock, control panel in the bootor go into standby automatically take effect, this time to operate lamps need to enter your password. {  $MODE_{\vee} UP_{\vee} MODE_{\vee} DOWN \setminus MODE_{\vee} UP_{\vee} MODE_{\vee} DOWN$  } {ENTER}

#### **3 Factory reset**

#### [ SET ] [REST ] {UP, UP, DOWN, DOWN} {ENTER} Note: The password is permanently set as {UP, UP, DOWN, DOWN}

Then press ENTER button

#### 4 Custom program

#### [Edit] [PROI] [SCOI]

Press MODE buttonuntil **[Ed | T]** is displayed, pressENTER access programmode.

Select the program you'll edit by pressing UP/DOWN buttons. The available range is o1-10.

Select the step you'll edit by pressing UP/DOWN buttons, and then press ENTER button access program.

When 'R000' displayon the screen, press the UP/DOWN button to choose the value. Repeat this step to edit the value of 'G000', 'b000', 'W000', 'S000', 'T000' and 'F000'. Please pay attention for the 'S' is the rate of strobe. 'T' is the operating time of the present step, the value is between 0 to 255.'F' is the transitional time from previous step to present step. The transitional time is the quickest when the FADE is 0. Notice: Please operate the program in turn, from the 01st step to the 30th step. When the operating program less than 30 steps, please set the final step value be 0

Repeat step 3 till complete programming.

Exit program mode by pressing MODE buttons three times.

# DMX512 Controller Mode

#### 1、DMX operate mode setting

Access control panel function by pressing MODE until 【RUN】 is displayed. Press ENTER, press UP/DOWN buttons until the 【dMX】 is displayed. Press ENTER, Press MODE return to MENU

#### 2、Setting DMX512 Address

#### 【dMX】 【001--512】

Access control panel function by pressing MODE until 【dMX】 is displayed. Press ENTER, addor reduce channels by pressing UP/DOWN between 001 and 512. Press MODE to exit.

#### 3、Setting Channels

#### [PER5] [HSV/11CH/03CH/04CH/DEF/ 05CH/06CH]

Access control panel function by prekssing MODE until [PER5] is displayed. Press ENTER button, select DMX channel by pressing UP/DOWN, Press MODE to exit.

# **DMX512** Channel Values

#### 11 channels:

Channel	Value	Description
1、Dimming	000~255	0-100%
2、RED	000~255	0-100%(Or STEP TIME when CUS.01-10 is activated)
3、Green	000~255	0-10 0%(Or FADE TIME when CUS.01-10 is activated)
4、Blue	000~255	0-100%
5、white	000~255	0-100%
6、Macro color	000~009	No Function
control	010~255	Macro color control
7、Strobe	000~255	Strobe(00~20Hz)
	000~009	No Function
	010~019	Out1 AUTO1
	020~029	Out2 AUTO2
	030~039	Out3 AUTO3
	040~049	Out4 AUTO4
	050~059	Out5 AUTO5
	060~069	Out6 AUTO6
8、auto &	070~079	Out7 AUTO7
custom program	080~089	Out8 AUTO8
-	090~099	Out9 AUTO9
	100~109	Out10 AUTO10
	110~119	cust1 custom program1
	120~129	Cust2 custom program2
	130~139	Cust3 custom program3
	140~149	Cust4 custom program4
	150~159	Cust5 custom program 5
	160~169	Cust6 custom program6
	170~179	Cust7 custom program7
	180~189	Cust8 custom program8
	190~199	Cust9 custom program9
·	200~225	Cust10 custom program10

Channel		Value	)		Description			
9、Auto Spee	ed	000~2	55	0~100%	0~100%(only when usingch.8)			
10、Dimming sp	eed	000~2	55	Dimming	speed			
11、ID		000~2	55	ID addres	ss selection			
ID ADDRE	ss	SELEC	П	ON				
VALUE	Fl	JNCTION		VALUE	FUNCTION		VALUE	FUNCTION
000~009		All Ids		212	ID23		235	ID46
010~019		ID1		213	ID24		236	ID47
020~029		ID2		214	ID25		237	ID48
030~039		ID3		215	ID26		238	ID49
040~049		ID4		216	ID27		239	ID50
050~059		ID5		217	ID28		240	ID51
060~069		ID6		218	ID29		241	ID52
070~079		ID7		219	ID30		242	ID53
080~089		ID8		220	ID31		243	ID54
090~099		ID9		221	ID32		244	ID55
100~109		ID10		222	ID33		245	ID56
110~119		ID11		223	ID34		246	ID57
120~129		ID12		224	ID35		247	ID58
130~139		ID13		225	ID36		248	ID59
140~149		ID14		226	ID37		249	ID60
150~159		ID15		227	ID38		250	ID61
160~169		ID16		228	ID39		251	ID62
170~179		ID17		229	ID40		252	ID63
180~189		ID18		230	ID41		253	ID64
190~199		ID19		231	ID42		254	ID65
200~209		ID20		232	ID43		255	ID66
210		ID21		233	ID44			
211		ID22		234	ld45			

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#### MASTER DIMMER

Channels 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 channel can be used in combinationr

#### 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.

#### **AUTO & CUSTOM PROGRAMS**

Chanel 8 selects the preset Auto/Custom programs 1~10 When activating the Auto/Custom programs, it is then possible to control the Step time and Fade time by using Channels 2 & 3 respectively. Channel 8 has priority over channels 2-7.

#### DIMMER SPEED

Channel 10 is for selecting the dimmer mode and dimmer speed. When channel 10 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

#### **ID ADDRESS SELECTION**

Use channel 11 to select ID addressed fixtures. Each independent DMX address can have up to 66 ID addressed fixtures. ID address "0" allows control of all fixtures simultaneously.

#### 3 channels: HSV

Channel	Value	Description	
1	000~255	Hue	
2	000~255	Saturation	
3	000~255	Value (Intensity)	

**Note:** In HSV mode, Hue stands for the visible light, such as red, yellow, and cyan, etc. Saturation refers to the dominance of hue in the color; when saturation is at 100%, then the color is at its purest. Value is the color's brightness; when value is at 100%, then the color is at its brightest.

#### 3 channels:

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

#### 4 channels:

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

#### 4 channels: DEF

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



#### 5 channels:

Channel	Value	Description	
1	000~255	Dimming	
2	000~255	Red	
3	000~255	Green	
4	000~255	Blue	
5	000~255	White	

#### 6 channels:

Channel	Value	Description	
1	000~255	Dimming	
2	000~255	Red	
3	000~255	Green	
4	000~255	Blue	
5	000~255	White	
6	000~255	Strobe	

# **ID Address Instructions**

#### 1.Setting ID address

1. Access control panel function by pressing MODE until 【Id】 is displayed.

 $2\,{\scriptstyle \sim}\,$  Press ENTER, increase or reduce ID values by pressing UP/DOWN between 01 and 66.

3、Press MODE to exit.

#### 2. Enable or disable ID

#### (SET) (IdSW) (ON-OFF)

- 1. Access control panel function by pressing MODE until [SET] is displayed.
- 2、 Press ENTER, select by pressing UP/DOWN until is 【Id5W】 displayed.
- 3、 Press ENTER, turn on or off ID addressing by pressing UP/DOWN buttons.
- 4、 Press MODE to exit.

For every DMX512 address the user can set 66 separate ID addresses. ID addressing is a secondary function in DMX512 mode. In DMX512 Controller Mode, the user can simultaneously control the individual DMX address of all lights, and can control the lights which have separate ID address in independent DMX512.



Select **STAG** channel on fixture's control panel (Please refer to DMX512 Channels Selection). The figure above shows a simple DMX layout which has used three units at each DMX address. The three units have different ID addresses. In the DMX address: 001, the user can control the first three lights simultaneously. When using channel 11 select the channel number is 020-029 and ID Address=02, the controller can control the second light individually. When using channel 11 select the channel number is 000-010 and ID Address=00, all the lights are in common use at the same DMX address.

# Master/Slave Control Mode

#### 1、Setting master machine

Access control panel function by pressing MODE until [RUTo] is displayed. Press ENTER, select [RTDD] or [PRDD] by pressing UP/DOWN buttons. Press ENTER, and then press MODE to exit.

You can choose [ATOD] pre-set programs, the range is [o1--10]. Or you can choose [PRDD] custom programs, the range is [o1--10].

#### 2. Setting slave machine

Access control panel function by pressing MODE until 【RUN】 is displayed. Press ENTER, press UP/DOWN buttons until the 【5LRN】 is displayed. Press MODE return to MENU

#### 3、Usage of Master/Slave

When two or more fixtures connected, you can set up the first machine as the Master and the followed fixtures as Slaves. The Master can choose pre-set programs ... (ATOD) or (PRDD), all the slaves will follow the Master's operation synchronously.

# 5. APPENDIX

# Service Maintenance Guide

Symptom(s)	Possible Solution(s)	
1 or moreLED'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 mayhave failed, resultingin a shortcircuit. 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	

Symptom(s)	Possible Solution(s)	
Breaker/Fuse keeps	Check total load placed on the electrical circuit	
blowing	Check for a short in the electrical wiring: internal and/or external	
Device has no power	Check for poweron 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	
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 connectoris firmly connected to device	
	This fixture mustbe 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 hasbuilt-in, automatic programsthat may be triggered from the onboard Control Board	
The display isonly showing: ####	i i lpassword MODE LIP MODE DOWN MODE LIP	

Blow-out Diagram.				
	Description	Part Number		
1	Dustproof acrylic	6D00207		
2	LED Lens assembly	4170901		
3	LED Metal-core PCB assembly	2D00201		
4	bearing	6D00208		
5	side cover	6D00201		
6	Bracket adjustment metalknob	5020108		
7	DMX socket	5040208		
8	LED Driver PCB	2D00202		
9	case	6D00204		
10	FAN	5060109		
11	Neutrik power socket	5050110		
12	Electronic Transformer	5080139		
13	Display Clear plastic cover	6D00212		
14	LED Display PCB	2D00203		
15	Display mounting apparatus	6D00203		