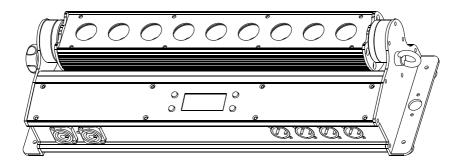




# LEDWash RGBW USER MANUAL











# 1.BEFORE YOU BEGIN

#### What is included

- 1 x Fixture
- 1 x Power cable 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:



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 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 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  $40\,^{\circ}\text{C}.$  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 @ 120 V and 15 units @ 230 V.

# 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

 ${\tt 3\; channels}(\textbf{HSV}){\tt :\; Hue+Saturation+Value}$ 

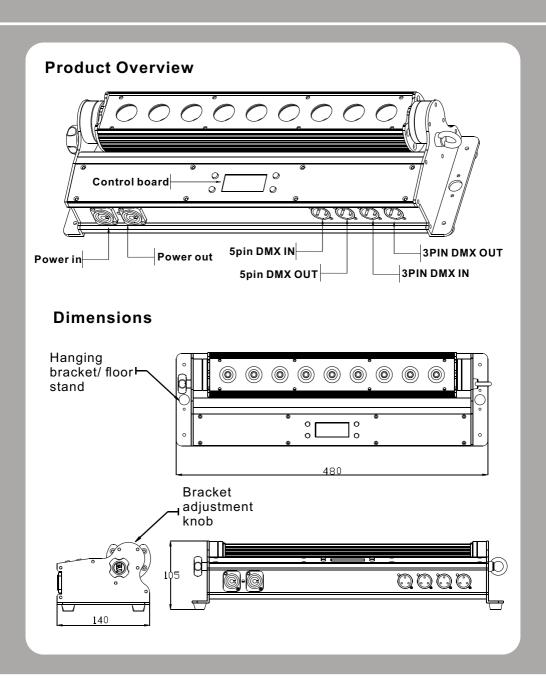
11 channels: Dimmer+RGBW+Macro + strobe + AUTO + Auto speed

+dimming speed +ID

3 channels : RGB

4 channels :Dimmer+RGB 4 channels (DEF):RGBW 5 channels:Dimmer+RGB W

6 channels:Dimmer+RGBW +Strobe



# 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.

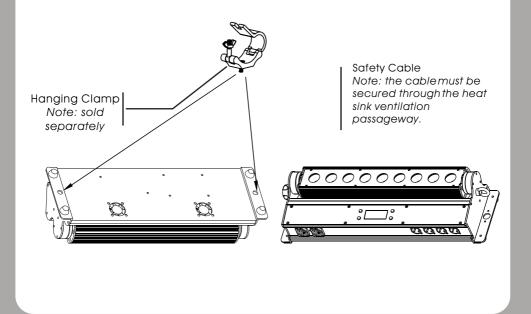
Please choose the suitable location to put or hang the light when installing it.

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.

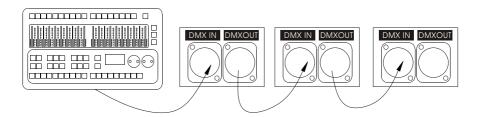
The installation should be operated by professional person; any irregular installation will cause the body injury or equipment damage.

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 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.



#### 3 PINTO 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

# **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	SUB- FUNCTION	SELECTION	INSTRUCTION
	9000		
	R000	000 055	
	6000	000~255	User can combine RED, GREEN, BLUE
STAT	P000	(0 ~ 100%)	and WHITE togenerate a custom color
	M000		
	5000	00~20	Select strobe frequency
RUTo	A TOO	01~10	10 auto programs available
	PR00	01~10	chose program from 10 "EDIT" programs
ХМР	900 I	001~512	Set DMX startaddress

MAIN FUNCTION	SU FUNC	_	SELECTION	INSTRUCTION	
RUN	чих			Sets the operating mode for the fixture:to receive signal from a DMX controller	
NUN	SLA	11		(DMX) .receive signal or Download programs from Masterfixture. (Slave)	
			H5 V	3 channels: Hue, Saturation, Value	
			IICH	11 channels: D+RGBW+S	
PERS			03CH	3 channels: RGB	
			0464	4 channels: D+RGB	
			dЕF	4channels: RGBW	
			05CH	5 channels: D+RGBW	
			06CH	6 channels: D+RGBW+S	
14	01~	66		Assign ID address for fixtures	
	IdSW UPLd		ON~OFF	Enable or disable ID	
			Password	Upload programs(Password required)	
	.d.1	м	OFF	"Off" means select linear dimming, or choose dimmer 1-4to control the dimming	
SET	4 I M		DIM1/2/3/4	speed, dimming 1 of the fastestdimming curves, 4 forthe most slowlydimming curve	
	RES	5 T	Password	Reset factory defaults	
	ИE	R	V1.47	Version number	
	PROI	5001	R000		
EGIL	01~09	01~30	6000		
	custom	scene	P000	(0~255)	
			M000		
	PRIO	5001	5000	(0~20Hz)Select strobe frequency	
	custom	01~90 scene	T000	(0~255) step time	
	Scelle		F000	transition time of last step to current step	
k EY	ON~C	OFF		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 [5LRV]

Press MODE button until [RUN] is displayed.

Then press ENTERbutton, use UP/DOWNbuttons until [SLRN] is displayed.

Press MODE return to MENU

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

Then press ENTERbutton, use UP/DOWNbuttons 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、UP、MODE、DOWN、MODE、UP、MODE、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

CEBITA CPROIA CSCOIA

Press MODE buttonuntil **[Ed:T]** is displayed, press ENTER 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' display on 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, add or 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 TIMEwhen CUS.01-10 isactivated)	
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 Speed	000~255	0~100%(only when using ch.8)	
10 Dimming speed	000~255	Dimming speed	
11、ID	000~255	ID address selection	

# **ID ADDRESS SELECTION**

VALUE	FUNCTION	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		

#### **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

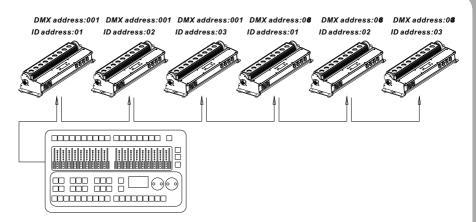
- 1. Access control panel function by pressing MODE until 【 d 】 is displayed.
- 2. Press ENTER, increase or reduce ID values by pressing UP/DOWN between 01 and 66.
- 3. Press MODE to exit.

#### 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 【RUTa】 is displayed. Press ENTER, select 【RTDD】 or 【PRDD】 by pressing UP/DOWN buttons. Press ENTER, and then press MODE to exit.

You can choose [ATDD] 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 ...

[ATDD] or [PRDD], all the slaves will follow the Master's operation synchronously.

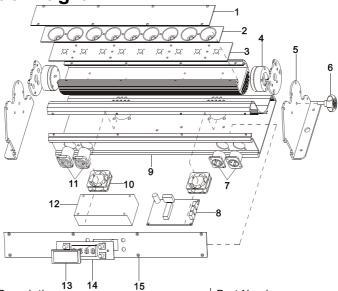
# 5. APPENDIX

# Service Maintenance Guide

Symptom(s)	Possible Solution(s)	
1 or more LED's are	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	
not illuminating	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, resultingin 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 LED shave 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 ashort in the electrical wiring: internal and/or external	
	Check for power on Mains	
Device has no power	-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	
	Check Control Panel settings for correct addressing	
Fixture is not responding to DMX	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	
l and of signal	Use only DMX cables	
Loss of signal	Install terminator	
	Note: Keep DMX cables separated from power cables or black lights	
COLOR-CON	Make sure connectoris firmly connected to device	
Controller does not function, or does not function properly	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 isonly showing: ####	The password lockouthas been enabled. you can use the password: { MODE、UP、MODE、DOWN、MODE、UP、MODE、DOWN }	

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