CINDY®

TOUGH 1920 LED WASH
MANUAL
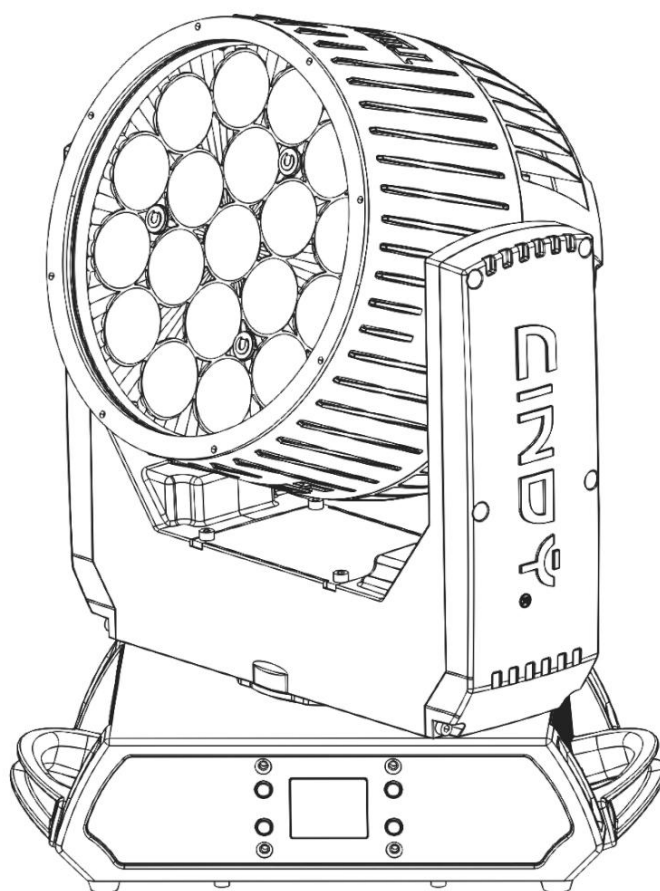
广州星迪智能光电科技有限公司
CINDY PROFESSIONAL LIGHTING CO., LTD

EN

V10

CONTENTS

1. SAFETY WARNING

1. **CAUTION!** The optics in this fixture may concentrate sunlight on the internal of the fixture, causing damage or fire. **DO NOT** expose the fixture or front lens to the light beams from direct sunlight at any time.

2. Carefully unpack the product immediately and check if all the parts are in the package and in good condition, in case the fixture is damaged by transportation。

3. This fixture is an extremely sophisticated piece of electronic equipment. Please make sure every person involved with installation and maintenance of this fixture has to be qualified and should follow the instructions in this manual. **Do not** attempt any repairs yourself。

4. The maximum ambient temperature is 45℃, and minimum ambient temperature is -5℃. Please **DO NOT** operate this fixture at higher or lower temperatures.

5. The fixture must be mount in a location with adequate ventilation.

6. Make sure that the available voltage is not higher than stated on the spec sticker, and with correct protection for over-load and electric leakage .

7. This fixture must be mount at least 0.5m from adjacent surface.

8. Always connect the fixture to a grounded circuit to avoid the risk of electrocution.

9. For overhead installation, this fixture must be always secured with a safety cable that can bear at least 10 times the weight of the fixture.

10. Make sure this fixture is mount away from any flammable material. The minimum distance to any flammable material is 0.5m.

11. Make sure the fixture uses the correct fuse.

12. Make sure there is no flammable material, water, metal or other things entering the fixture to avoid file or electrocution. Disconnect the power

immediately if it happens.

13. Never touch the fixture during its operation as the housing becomes very hot and there are a lot of moving parts.

14. Minimum distance to lighted objects is 10 meters.

15. To maintain optimum performance and minimize wear, clean this fixture frequently. Usage and environment are contributing factors in determining the cleaning frequency.

16. If the housing, optics or other parts are damaged, stop using the fixture immediately and contact trained technicians for repairs. **DO NOT** replace parts that are not from the original manufacturers.

17. When power linking other fixtures, make sure the power linking is done according to the specific standards and quantities.

18. Lamp product instructions (specific for product in which the light source is lamp):

19. **DO NOT** install lamp that is not the same as the original part to avoid danger or damage to the fixture.

20. **NEVER** use damaged lamp

21. Replace the lamp in time when the lamp is damaged, or exceed lifetime.

22. **CAUTION!** Never power off the fixture if the lamp is on, or it will damage the lamp. Set the lamp off for 5 minutes before cutting off the power. It's not covered by warranty if the lamp is damaged because of the above reason.

2. SPECIFICATION

1. Input Voltage：AC 100V-240V 50/60Hz

2. Power：412W

3. Light Source：19×20W RGBW LED

4. Channel Signal：DMX512 15/17/22/33/54/56/33(MS)/54(MS)

5. Colour：RGBW color mixing system

6. Strobe：0~25Hz selectable multiple strobe effects with different speeds

7. Dimmer：0~100% electronics

8. Zoom：Motorized

9. Pan range：540° 8bit/16bit

10. Tilt range：260° 8bit/16bit

3. INSTALLATION

The applicable temperature for the device is between -5°C to 45°C. Any operation outside of this temperature range may cause the fixture not functioning properly or even damage to the light source and other components. Installation operation, or servicing must be carried out by qualified technicians. To maintain optimum performance and minimize wear, make sure the fixture and all safety related factors is checked in proper intervals.

3.1 Mounting

1、Before mounting this fixture, make sure the rigging point, all safety cables and clamps are in good conditions, and can bear at least 10 times the weight of the fixture plus whatever accessory attached.

2、Insert the quick-lock fasteners of the clamp into the respective holes on the bottom of the fixture.Tighten the quick-lock fasteners fully clockwise.

3、Pull the safety cable through the handle of the base and over the trussing system or another suitable rigging point. Insert the end into the carabiner and tighten the safety screw.
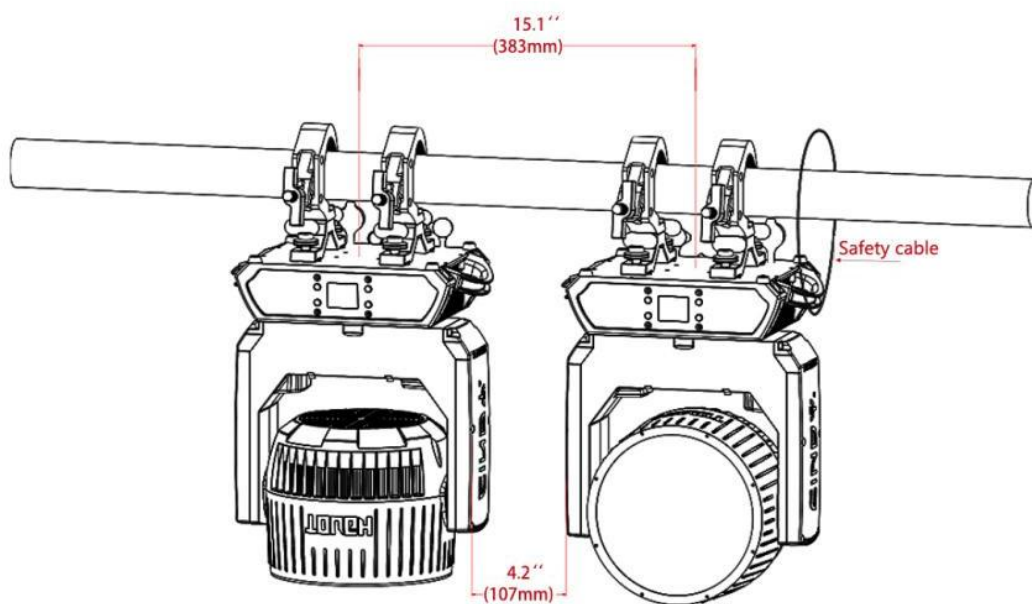
4、Make sure the pan and tilt of the fixture is unlocked, and no flammable material within 0.5m from the fixture.

3.2 DMX-512 CONTROL CONNECTION

1、XLR CONNECTORS

Please link this product to a DMX controller using a 3-pin DMX connection. Please insert the male connector of the XLR cable into the signal output port of the controller, and insert the female connector of the XLR cable on the rear panel of this fixture. Multiple fixtures can be connected in series as the below picture shown.
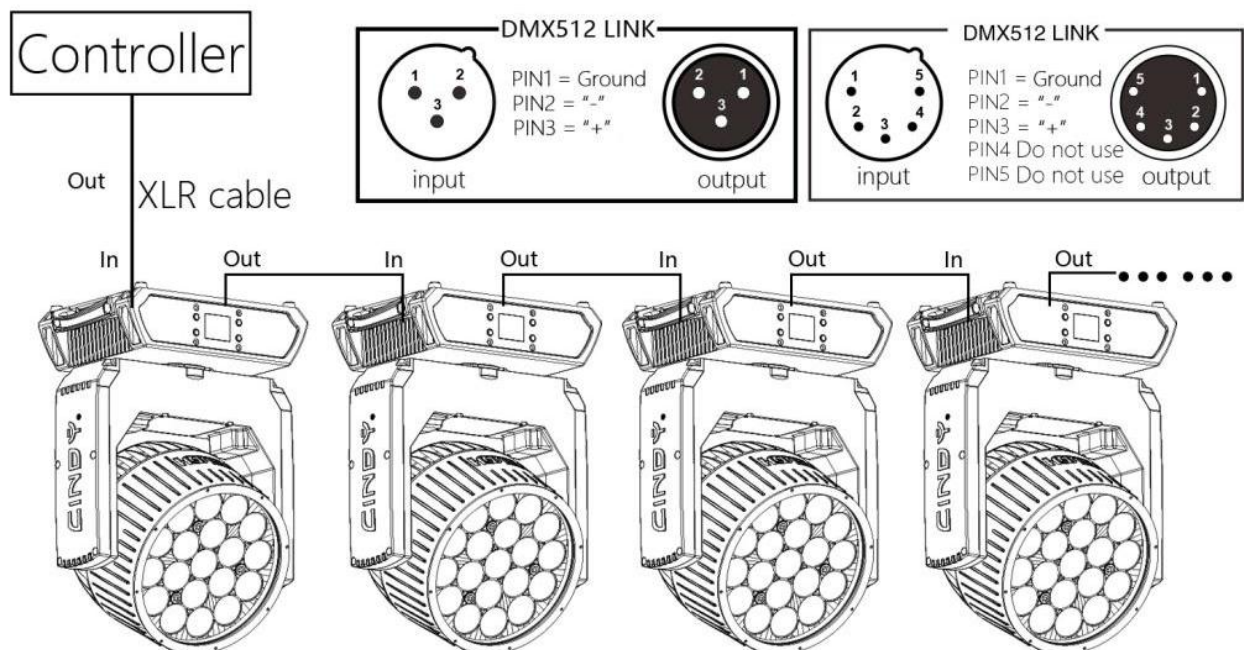
2、DIRECT CABLE CONNECTIONS

Please connect cables as picture shown below to ensure proper connections and ideal waterproof effects.

DMX IN   DMX OUT

Connect

Tighten the cover clockwise
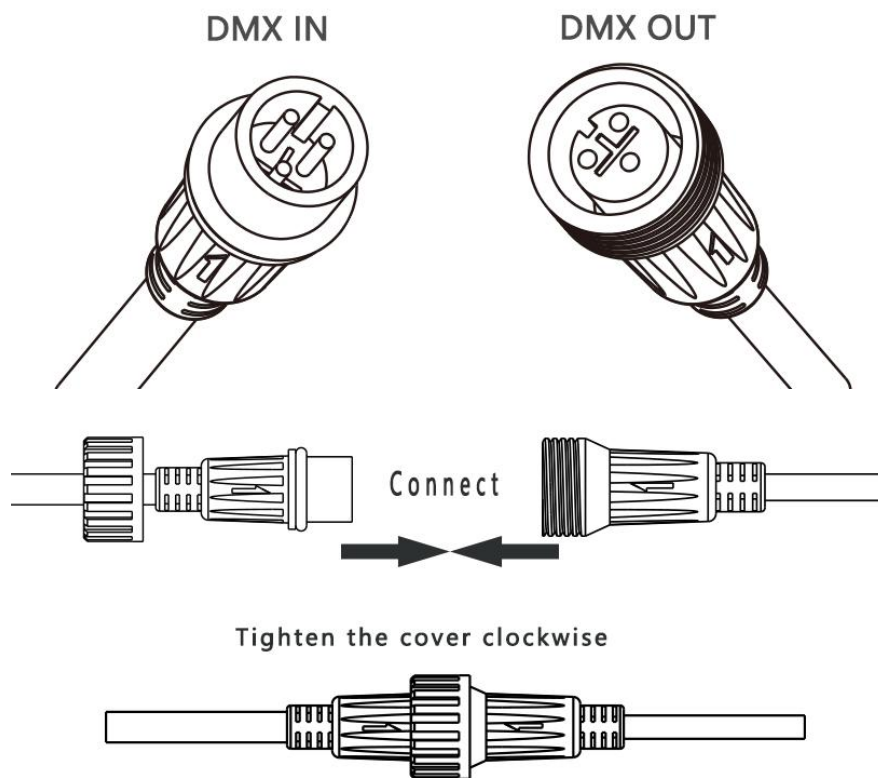
ATTENTION：

　(1) Over long runs can be necessary to insert a DMX level matching amplifier.

　(2) The screened parts of the cable (sleeve) must never be connected to the system's earth, as this would cause faulty fixture and controller operation.

　(3) Unused cable ends must be protected by covers offered by the factory.

3.3 POWER AND WIRING

Make sure that the available voltage is not higher than stated on the spec sticker, and with correct protection for over-load and electric leakage. Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.

Fixtures can shipped with either AC plug version or direct cables version based

on different applications.

1、AC PLUG

POWER IN　　POWER OUT
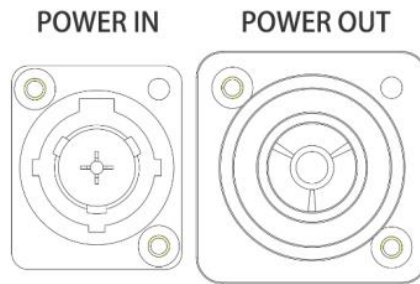
2、DIRECT CABLIES

Make sure the sealing gasket is present for safety reasons.

Unused cable ends must be protected by covers offered by the factory.
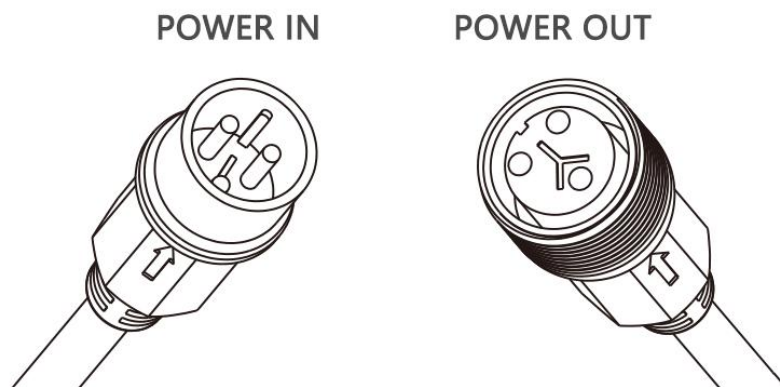
POWER IN　　　POWER OUT

Please connect cables as picture shown below to ensure proper connections and ideal waterproof effects.

Connect

Tighten the cover clockwise
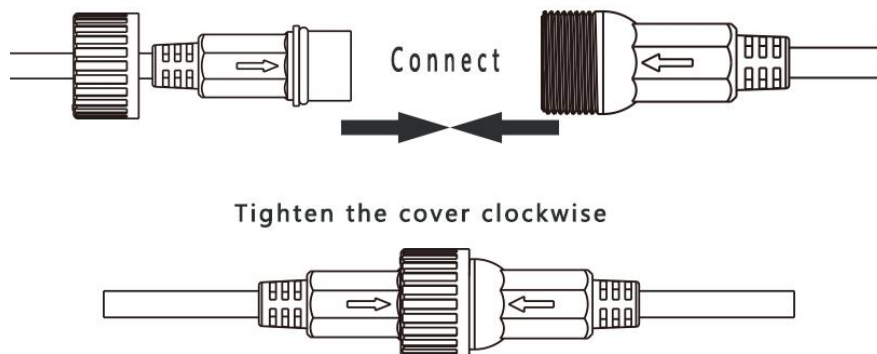
4. MENU MAP

Main Menu	Sub Menu			Menu explanation
Address	Address Setting	001-512		Setting DMX address
RUN MODE	DMX	22CH		Select DMX mode(56,54,33,22,17,15)
	Auto Test			auto test
	Manual test	Pan	000-255	
		Tilt	000-255	
		Dimmer	000-255	
		Shutter	000-255	
		Red1	000-255	
		Green1	000-255	
		Bule1	000-255	
		White1	000-255	
		Red2	000-255	
		Green2	000-255	
		Bule2	000-255	
		White2	000-255	
		Red3	000-255	
		Green3	000-255	
		Bule3	000-255	
		White3	000-255	
		Red4	000-255	
		Green4	000-255	
		Bule4	000-255	
		White4	000-255	
		Red5	000-255	

Main Menu	Sub Menu			Menu explanation
RUN MODE		Green5	000-255	
		Bule5	000-255	
		White5	000-255	
		Zoom	000-255	
Setup	Pan Reverse	OFF		
		ON		
	Tilt Reverse	OFF		
		ON		
	Pan Angle	540		
		360		
		180		
	Tilt Angle	260		
		230		
		180		
		90		
	Fans	Auto		
		Full		
		ECO		
	Display	OFF		
		ON		
	Screen Rev	OFF		
		ON		
	Dimmer Curve	Linear		
		Square		
		I Squa		

Main Menu	Sub Menu		Menu explanation
Setup	Dimmer Speed	S Curve	
		Smooth	
		Fast	
	PWM Option	600Hz	
		1200Hz	
		2000Hz	
		4000Hz	
		6000Hz	
		15000Hz	
	LED R POWER	50-100	
	LED G POWER	50-100	
	LED B POWER	50-100	
	LED W POWER	50-100	
	White Mode	On	calibrated white mode on
		Off	calibrated white mode off
		Custom RED	calibrated white red setting
		Custom GREEN	calibrated white green setting
		Custom BLUE	calibrated white blue setting
		Custom WHITE	calibrated white white setting
	Color calibration	On	color calibration on (default)
		Off	color calibration off
		Custom RED	color calibration red setting
		Custom GREEN	color calibration green setting
		Custom BLUE	color calibration blue setting
	USB Update	NO/YES	

Main Menu	Sub Menu			Menu explanation
Setup	Reset Function	Pan/Tilt		reset pan/tilt
		Zoom		reset zoom
		All		reset all
	Factory Set			reload to factory default
Sys Info	Ver	V1		Fixture software version
	Running Mode	DMX		Current running mode
	DMX Address	001		Current DMX address
	Temperature	025		LED temperature
	Fixture Time	00000		Fixture used time
	UID	21A465400000		RDM UID
	Head Fan1	00000		
	Head Fan2	00000		
	Base Fan1	00000		
	Base Fan2	00000		
Password	0			Hold menu button to enter
	2323			Zero adjust
		PAN	000-255	pan zero adjust
		TILT	000-255	tilt zero adjust
		ZOOM	000-255	zoom zero adjust
		RDM4	000-255	Set RDM 4
		RDM5	000-255	Set RDM 5
		RDM6	000-255	Set RDM 6
	2322			White Balance adjust
		RED	000-255	
		GREEN	000-255	

Main Menu	Sub Menu			Menu explanation
Password		BLUE	000-255	

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5. ERROR CODE

Error code	Explanation
R-OPEN	Thermistor open circuit error
R-SHORT	Thermistor short circuit error
LED_HOT	LED is too hot
Fan1	head fan 1 error
Fan2	head fan 2 error
Fan3	head fan 3 error

6. DMX CHARTS

56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS	Channel Name	DMX	Function
1	1	1	1	1	1	1	1	Pan	0-255	0-540
2	2	2	2	2	2	2	2	Pan 16bit	0-255	16bit adjustable
3	3	3	3	3	3	3	3	Tilt	0-255	0-270
4	4	4	4	4	4	4	4	Tilt 16bit	0-255	16bit adjustable
5	5	5	5	5	5	5	5	Pan/Tilt speed	0-255	fast to slow
6	6	6	6	6	6	6	6	Dimmer 1	0-255	0-100%
7	7	▨	7	▨	7	7	▨	Dimmer 1 16bit	0-255	0-100%
8	8	7	8	7	8	8	7	Strobe	0-19	off
									20-24	on
									25-64	strobe 1, fast to slow
									65-69	on
									70-84	strobe 2 (fast on, slow off), fast to slow
									85-89	on

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
									90-104	strobe 3 (slow on, fast off), fast to slow
									105-109	on
									110-124	strobe 4 (random), fast to slow
									125-129	on
8	8	7	8	7	8	8	7	Strobe	130-144	strobe 5 (random fast on, slow off), fast to slow
									145-149	on
									150-164	strobe 6 (random slow on, fast off), fast to slow
									165-169	on

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
8	8	7	8	7	8	8	7	Strobe	170-184	strobe 7 (pulse strobe), fast to slow
									185-189	on
									190-204	strobe 8 (random pulse strobe), fast to slow
									205-209	on
									210-224	strobe 9 (fade), fast to slow
									225-229	on
									230-244	strobe 10 (pulse strobe), fast to slow
									245-255	on

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Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
			9	8	9			R(C) all	0-255	0-100%
			10					R(C) all 16bit	0-255	0-100%
			11	9	10			G(M) all	0-255	0-100%
			12					G(M) all 16bit	0-255	0-100%
			13	10	11			B(Y) all	0-255	0-100%
			14					B(Y) all 16bit	0-255	0-100%
			15	11	12			W all	0-255	0-100%
			16					W all 16bit	0-255	0-100%
9	9	8				15	14	R(C)1	0-255	0-100%
10	10					16		R(C)1 16bit	0-255	0-100%
11	11	9				17	15	G(M)1	0-255	0-100%
12	12					18		G(M)1 16bit	0-255	0-100%
13	13	10				19	16	W)1	0-255	0-100%
14	14					20		W)1 16bit	0-255	0-100%
15	15	11				21	17	B(Y)1	0-255	0-100%
16	16					22		B(Y)1 16bit	0-255	0-100%

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
17	17	12				23	18	R(C)2	0-255	0-100%
18	18					24		R(C)2 16bit	0-255	0-100%
19	19	13				25	19	G(M)2	0-255	0-100%
20	20					26		G(M)2 16bit	0-255	0-100%
21	21	14				27	20	B(Y)2	0-255	0-100%
22	22					28		B(Y)2 16bit	0-255	0-100%
23	23	15				29	21	W)2	0-255	0-100%
24	24					30		W)2 16bit	0-255	0-100%
25	25	16				31	22	R(C)3	0-255	0-100%
26	26					32		R(C)3 16bit	0-255	0-100%
27	27	17				33	23	G(M)3	0-255	0-100%
28	28					34		G(M)3 16bit	0-255	0-100%
29	29	18				35	24	B(Y)3	0-255	0-100%
30	30					36		B(Y)3 16bit	0-255	0-100%
31	31	19				37	25	W)3	0-255	0-100%
32	32					38		W)3 16bit	0-255	0-100%
33	33	20				39	26	R(C)4	0-255	0-100%

56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS	Channel Name	DMX	Function
				Mode/Channel				Channel Name	DMX	Function
34	34					40		R(C)4 16bit	0-255	0-100%
35	35	21				41	27	G(M)4	0-255	0-100%
36	36					42		G(M)4 16bit	0-255	0-100%
37	37	22				43	28	B(Y)4	0-255	0-100%
38	38					44		B(Y)4 16bit	0-255	0-100%
39	39	23				45	29	W4	0-255	0-100%
40	40					46		W4 16bit	0-255	0-100%
41	41	24				47	30	R(C)5	0-255	0-100%
42	42					48		R(C)5 16bit	0-255	0-100%
43	43	25				49	31	G(M)5	0-255	0-100%
44	44					50		G(M)5 16bit	0-255	0-100%
45	45	26				51	32	B(Y)5	0-255	0-100%
46	46					52		B(Y)5 16bit	0-255	0-100%
47	47	27				53	33	W5	0-255	0-100%
48	48					54		W5 16bit	0-255	0-100%
49	49	28	17	12	13	9	8	Color	0-4	no function
									5-9	color 1
									10-14	color 2
									15-19	color 3

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
									20-24	color 4
									25-29	color 5
									30-34	color 6
									35-39	color 7
									40-44	color 8
									45-49	color 9
									50-54	color 10
									55-59	color 11
									60-64	color 12
									65-69	color 13
									70-74	color 14
49	49	28	17	12	13	9	8	Color	75-79	color 15
									80-84	color 16
									85-89	color 17
									90-94	color 18
									95-99	color 19
									100-104	color 20
									105-109	color 21
									110-114	color 22
									115-119	color 23

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Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
									120-124	color 24
									125-129	color 25
									130-134	color 26
									135-139	color 27
									140-144	color 28
									145-149	color 29
49	49	28	17	12	13	9	8	Color	150-154	color 30
									155-159	color 31
									160-164	color 32
									165-169	color 33
									170-174	color 34
									175-179	no function

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
49	49	28	17	12	13	9	8	Color	180-201	color fade, fast to slow
									202-207	stop
									208-229	reverse color fade, fast to slow
									230-234	no function
									235-249	Color jump, fast to slow
									250-255	no function
50	50	29	18	13		10	9	Pattern	0-7	○○○○○
									8-15	●○○○○
									16-23	●●○○○
									24-31	●●●○○
									32-39	●●●●○
									40-47	●●●●●
									48-55	○●●●●
									56-63	○○●●●
									64-71	○○○●●
									72-79	○○○○●
									80-87	○○○○○
									88-95	○●●●●

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
50	50	29	18	13		10	9	Pattern	96-103	●○●●●
									104-111	●●○●●
									112-119	●●●○●
									120-127	●●●●○
									128-135	○○●●●
									136-143	●○○●●
									144-151	●●○○●
									152-159	●●●○○
									160-167	○●●●○
									168-175	○○○●●
									176-183	●○○○●
									184-191	●●○○○

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
50	50	29	18	13		10	9	Pattern	192-199	○●●○○
									200-207	○○●●○
									208-215	○○○○●
									216-223	●○○○○
									224-231	○●○○○
									232-239	○○●○○
									240-247	○○○●○
									248-255	○○○○○
51	51	30	19	14		11	10	LED built-in	0-15	no function
									16-20	LED built-in 1
									21-25	LED built-in 2
									26-30	LED built-in 3
									31-35	LED built-in 4

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Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
									36-40	LED built-in 5
									41-45	LED built-in 6
									46-50	LED built-in 7
									51-55	LED built-in 8
									56-60	LED built-in 9
51	51	30	19	14		11	10	LED built-in	61-65	LED built-in 10
									66-70	LED built-in 11
									71-75	LED built-in 12
									76-80	LED built-in 13
									81-85	LED built-in 14
									86-90	LED built-in 15
									91-95	LED built-in 16

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
									96-100	LED built-in 17
									101-105	LED built-in 18
									106-110	LED built-in 19
									111-115	LED built-in 20
									116-120	LED built-in 21
51	51	30	19	14		11	10	LED built-in	121-125	LED built-in 22
									126-130	LED built-in 23
									131-135	LED built-in 24 (main built-in)
									136-140	LED built-in 25
									141-145	LED built-in 26
									146-150	LED built-in 27

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
									151-155	LED built-in 28
									156-160	LED built-in 29
									161-165	LED built-in 30
									166-170	LED built-in 31
									171-175	LED built-in 32
51	51	30	19	14		11	10	LED built-in	176-180	LED built-in 33
									181-185	LED built-in 34
									186-190	LED built-in 35
									191-195	LED built-in 36
									196-200	LED built-in 37
									201-205	LED built-in 38
									206-210	LED built-in 39

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
51	51	30	19	14		11	10	LED built-in	211-215	LED built-in 40
									216-220	LED built-in 41
									221-225	LED built-in 42
									226-230	LED built-in 43
									231-235	LED built-in 44
									236-240	LED built-in 45
									241-245	LED built-in 46
									246-250	LED built-in 47
									251-255	LED built-in 48 (main built-in)
52	52	31	20	15		12	11	LED built-in speed	0-255	fast to slow
53								Macro	0-7	no function
									8-23	auto built-in 1

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
53								Macro	24-39	auto built-in 2
									40-55	auto built-in 3
									56-71	auto built-in 4
									72-87	auto built-in 5
									88-103	auto built-in 6
									104-119	auto built-in 7
									120-135	auto built-in 8
									136-151	auto built-in 9
									152-167	auto built-in 10
									168-183	auto built-in 11
									184-199	auto built-in 12
									200-215	auto built-in 13

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
53								Macro	216-231	auto built-in 14
									232-247	auto built-in 15
									248-255	auto built-in 16 (main built-in)
54								Macro Speed	0-255	fast to slow
55	53	32	21	16	14	13	12	Zoom	0-255	from small to big
56	54	33	22	17	15	14	13	Control	0-9	no function
									10-14	pan/tilt blackout
									15-19	reserved
									20-24	reserved
									25-29	reserved
									30-34	reserved
									35-39	reserved
									40-44	reserved
									45-49	reserved
									50-54	pan reset
									55-59	tilt reset
									60-64	zoom reset
									65-69	reserved

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56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS	Channel Name	DMX	Function
									70-74	all reset
									75-79	reserved
									80-84	reserved
									85-89	reserved
									90-94	reserved
									95-99	reserved
									100-104	reserved
									105-109	reserved
									110-114	reserved
56	54	33	22	17	15	14	13	Control	115-119	reserved
									120-124	FAN ECO
									125-129	FAN FULL
									130-134	FAN AUTO
									135-139	dimmer fast mode
									140-144	dimmer smooth mode

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
									145-149	no function
									150-154	Square curve
									155-159	I Square curve
									160-164	Scurve
									165-169	white mode
									170-174	full mode
56	54	33	22	17	15	14	13	Control	175-179	color calibration off when single color
									180-184	color calibration on when single color
									185-239	no function
									240-247	color calibration on

Mode/Channel								Channel Name	DMX	Function
56CH	54CH	33CH	22CH	17CH	15CH	54MS	33MS			
56	54	33	22	17	15	14	13	Control	248-255	color calibration off

7. MAINTENANCE

Cleaning the fixture can maintain optimum performance of the fixture. Cleaning frequency can be determined by environment and usage. Damage caused by excessive dust, smoke fluidity, abnormal usage and unreasonable maintenance is not covered by the warranty.

1. Check the plastic covers, optics and light source. If they are damaged, please replace immediately.

2. Ensure all the screws are fastened.

3. Check wiring for signs of aging.

4. Clean all the optics with ammonia-free glass cleaner.

5. Ensure all the vents are dust-free and no objects blocking it.

6. Ensure there is no objects inside the fixture.

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