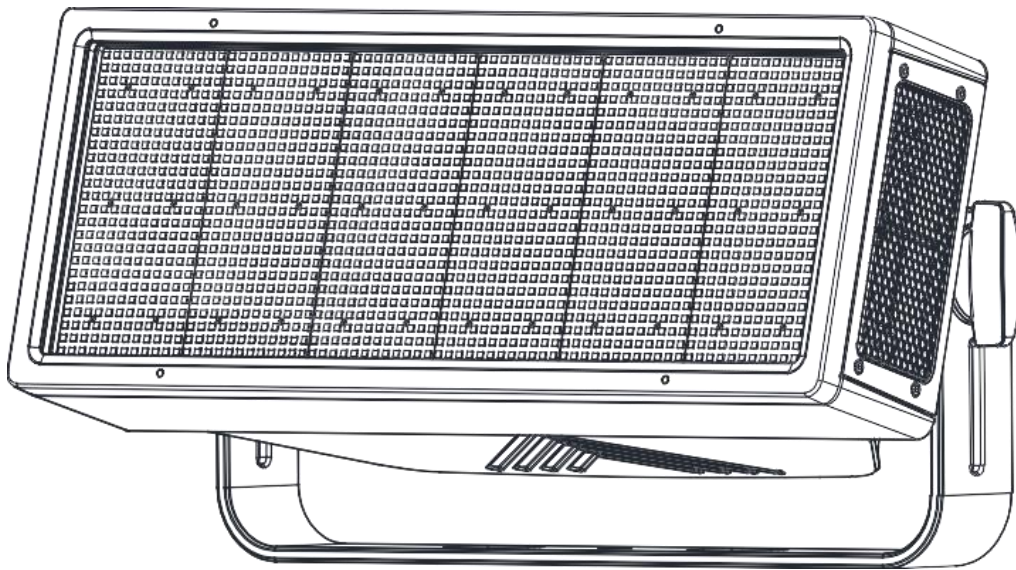


SHOWPRO

EK



COLLIDER FC

USER MANUAL

1.0 – 1.22 FIRMWARE

WARNING! Before carrying out any operations with the unit, carefully read this instruction manual and keep it with care for future reference. It contains important information about the installation, usage, and maintenance of the unit.

SAFETY

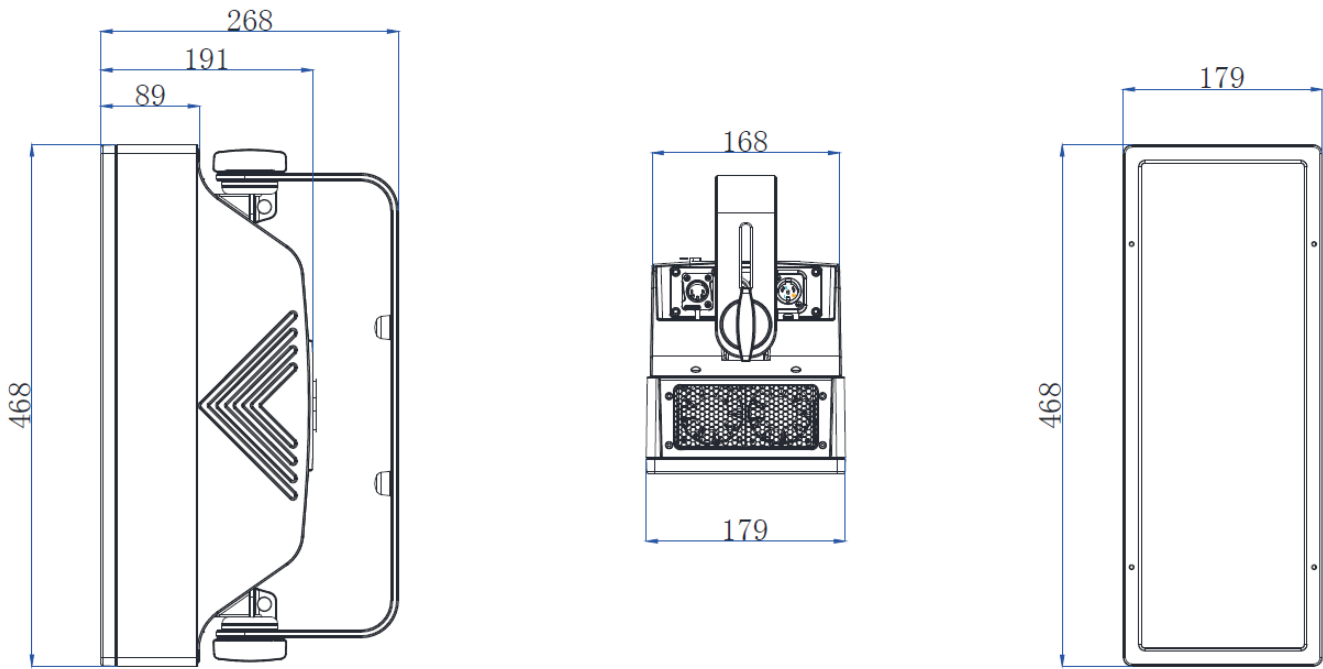
General instructions

- The products referred to in this manual conform to the European Community Directives and are therefore marked with CE.
- The unit is supplied with hazardous network voltage (230V~). Leave servicing to skilled personnel only. Never make any modifications on the unit not described in this instruction manual, otherwise you will risk an electric shock.
- Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1). It is, moreover, recommended to protect the supply lines of the units from indirect contact and/or shorting to earth by using appropriately sized residual current devices.
- The connection to the mains network must be carried out by a qualified electrical installer. Check that the main frequency and voltage correspond to those for which the unit is designed as given on the electrical data label.
- The unit is not for home use, only professional applications.
- Never use the fixture under the following conditions:
 - In places subject to vibrations or bumps
 - In places with temperatures over 40°C
- Make certain that no flammable liquids, water, or metallic objects enter the fixture.
- Do not dismantle or modify the fixture.
- All work must be carried out by qualified technical personnel. Contact the nearest sales point for an inspection or contact the manufacturer directly.
- If the unit is to be put of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment.

Warnings and installation precautions

- If this device will be operated in any way different to the one described in this manual, it may suffer damage and the warranty becomes void. Furthermore, any other operation may lead to dangers like short circuit, burns, electrical shock, etc.
- Before starting any maintenance or cleaning the fixture, cut off power from the main supply.
- Always additionally secure the fixture with a safety cable. When carrying out any work, always comply with all the regulations (particularly regarding safety) currently in force in the country in which the fixture is being used.
- Install the fixture in a well-ventilated place.
- Keep any flammable material at a safe distance from the fixture.
- Shields, lenses, or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
- The lamp (LED) shall be changed if it has become damaged or thermally deformed.
- Never look directly at the light beam. Please note that flashing lights, may trigger epileptic seizures in photosensitive persons or persons with epilepsy.
- Do not touch the product's housing when operating because it may be very hot.

DIMENSIONS



DESCRIPTION

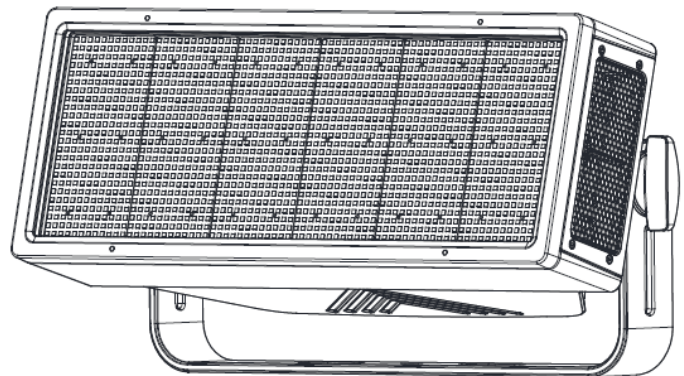
The most powerful RGBW pixel-mappable LED strobe on the planet

Harness the stunning kinetic energy of pure blinding power

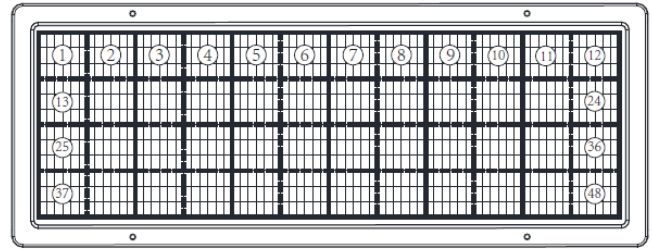
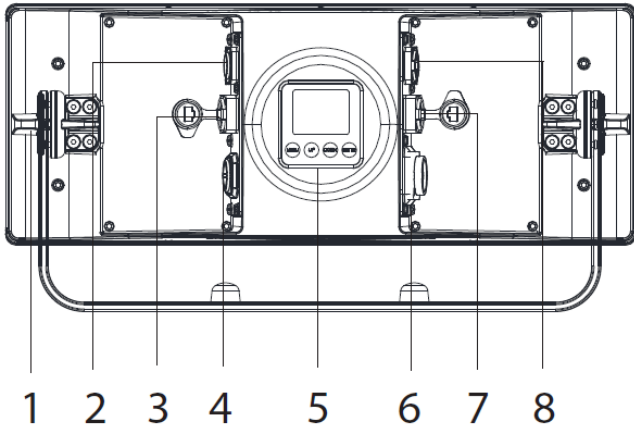
Two-layer colours with onboard macros enable quick programming and stunning effects

IP65-rated tour-grade construction

DMX and Artnet Control



INTRODUCTION



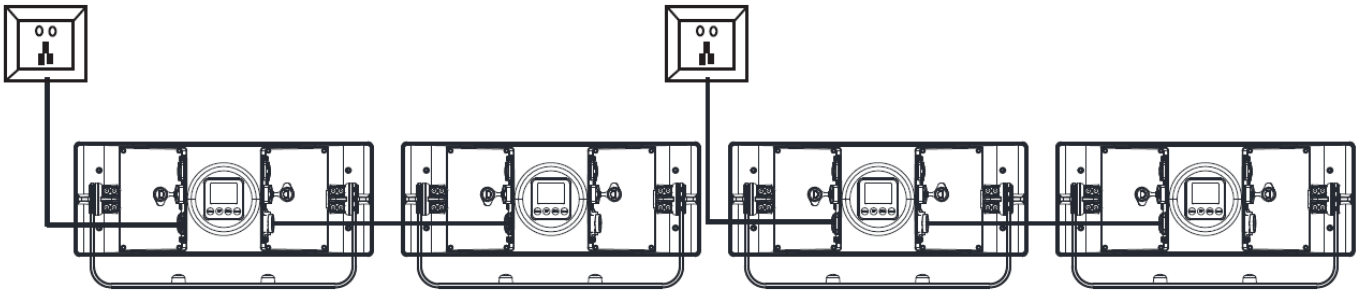
48 individually controllable segments
for dynamic effects

1. Hanging Bracket Knob
2. DMX In
3. Art-Net In
4. Power In
5. Display
6. Power Out
7. Art-Net Out
8. DMX Out

Display Function Navigation

	Description	Effect
Menu	Enter the Menu	Menu Operation
Up	Scroll Up	Increase the Numeric Value
Down	Scroll Down	Decrease the Numeric Value
Enter	Confirm	Save the Function

POWER CONNECTION



Power In

Using the POWERCON In/Out

Power cable connected in series

Attention: Due to the power rating,

One 1.5mm² power cable can connect 2 units maximum



Power out



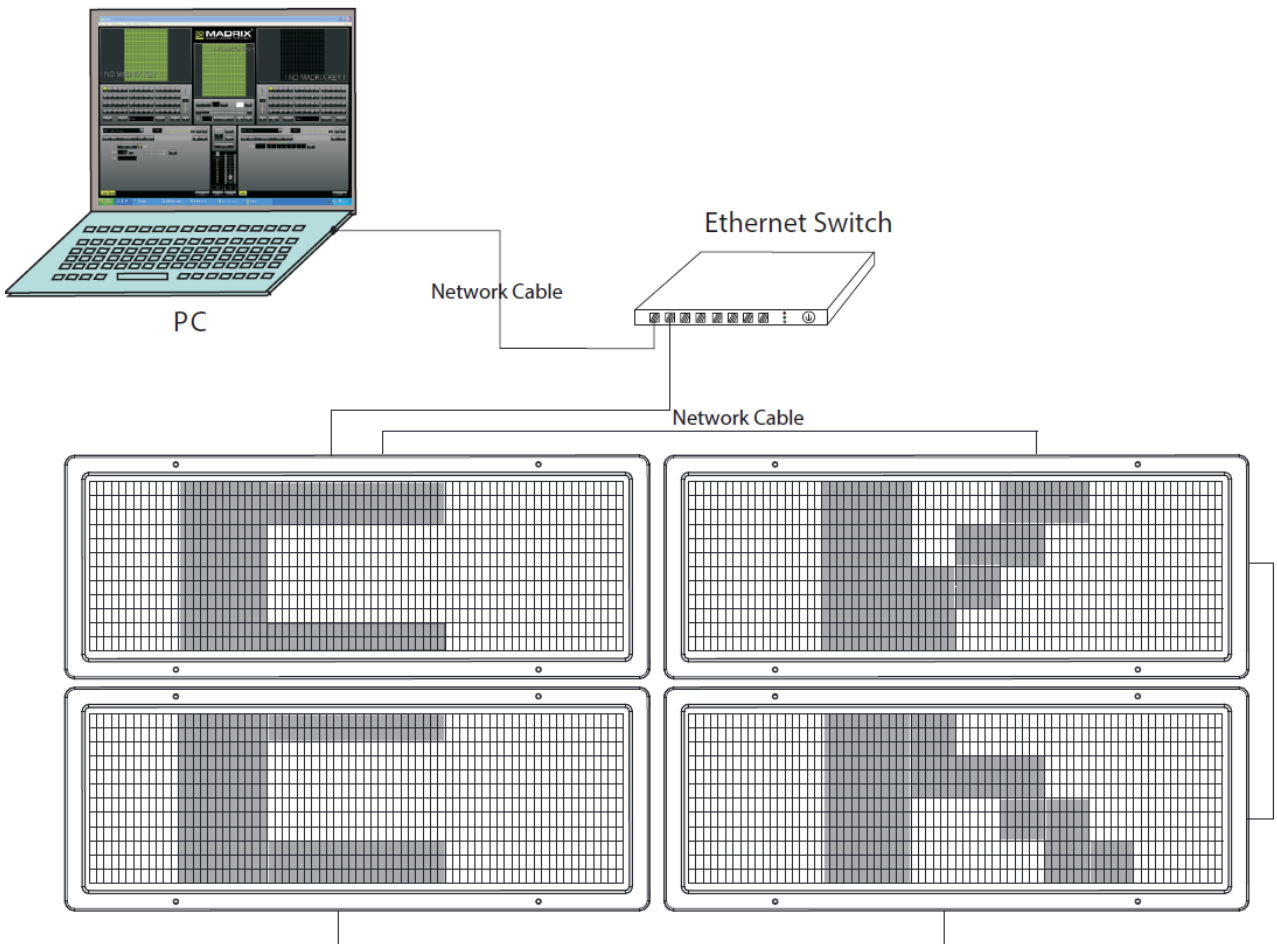
Warning

Do not connect more than 2 units in series with one power cable

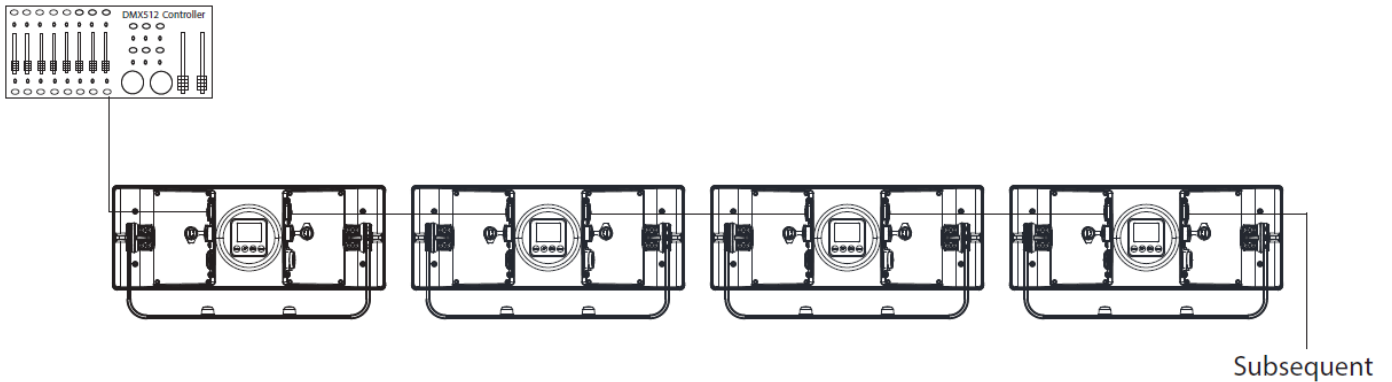
Do not use damaged power cables

Turn off power when units are not in use

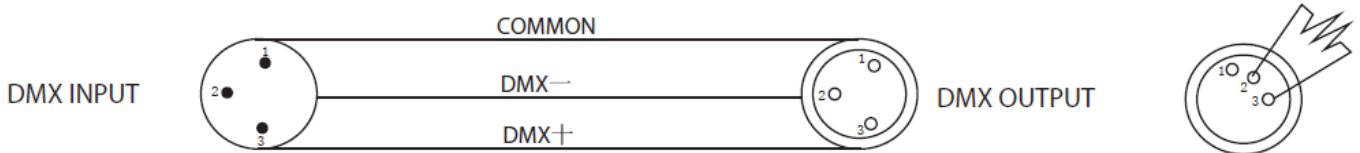
ETHERNET CONNECTION



DMX CONNECTION



DMX512 CONTROLLER



Relation between DMX and Address

Mode	Allocation	1 st Fixture	2 nd Fixture	3 rd Fixture	4 th Fixture
4CH	001 – 004	001	005	009	013
6CH	001 – 006	001	007	013	019
7CH	001 – 007	001	008	015	022
8CH	001 – 008	001	009	017	025
14CH	001 – 014	001	015	029	043
144CH	001 – 144	001	145	289	-
192CH	001 – 192	001	193	-	-
202CH	001 – 202	001	203	-	-

Follow the above method for subsequent fixtures, calculating the starting address as indicated.

DMX CONNECTION

Photometrics

Light Source: 1728 x 1W RGBW LED
 Beam Angle: 98°
 Field Angle: 156°
 Output: 1281 Lux @5m

Power

Mains: 100 – 240VAC, 50/60Hz
 Consumption: 1500W/230V (All LED @ Full)
 Power Connections: Trucon In/Out
 Power Linking: Up to 2 units @ 230V

Key Features

Colour Mixing: RGBW
 Strobe: 0 – 30Hz
 Dimming: 4 dimming curve modes

Control

Protocol: DMX, Artnet, Kling-net
 DMX Channels: 3 / 4-1 / 4-2 / 6 / 7 / 8 / 14 / 144 / 192 / 202
 Built-in Programs: Yes
 Display: TFT 220 x 176

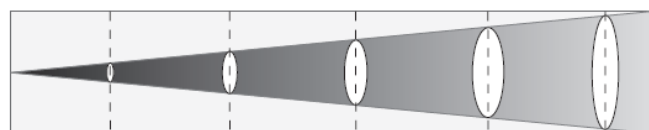
Physical

Size: 468 x 179 x 268mm
 Weight: 15kg
 Ingress Rating: IP65

PHOTOMETRICS

Beam Angle: 98°

FULL on



Project Distance(m)

Luminance(lux)

1m 3m 5m 7m 10m
 32040 3560 1281 653 320

	Ø cm	229.37	Ø cm	688.1	Ø cm	1146.84	Ø cm	1605.57	Ø cm	2293.67
Colour	1m	LUX	3m	LUX	5m	LUX	7m	LUX	10m	LUX
R		3339		371		113.6		68		33.4
G		22590		2510		903.6		461		226
B		1620		180		64.8		33		16.2
W		17784		1976		711.4		363		177.8
All		32040		3560		1281.6		653		320.4

MENU

Main Menu	Menu Level 2	Menu Level 3	Menu Level ...	Default		
Connect	DMX Address			1		
	DMX Mode	3Ch		14Ch		
		4Ch-1				
		4Ch-2				
		6Ch				
		7Ch				
		8Ch				
		14Ch				
		144Ch				
		192Ch				
202Ch						
Setup	Screen	Backlight	On	On		
			10s			
			20s			
			30s			
		Flip Display	No	No		
			Yes			
	Key Lock	No	No			
		Yes				
	Fixture	White Balance	Manual	Off	Off	
				Red		<125 – 255>
				Green		<125 – 255>
				Blue		<125 – 255>
		Dimmer Mode		Off	Off	
				Dimmer 1		
				Dimmer 2		
		Fan Mode		Auto	Auto	
				High		
		Temperature Unit		°C	°C	
	°F					
	Ethernet	Protocol		Kling-net	Art-net	
Art-net						
Universe		0 – 255	0			
Start Channel		1 – 512	1			
IP Address		2/10.***.***.***				
Advanced	Factory Reload	No				
		Yes				
Information	Fixture Time	0 – 9999				
	Temperature	**°C				
	Fan Speed	**%				
	Software Version	DISP – V1.0				
		CTR1-NET-V1.0				
CTR2-LED-V1.0						
UID	030F02*****					
Stand Alone	Play	Master/Slave	Master	Slave		
			Slave			

		Sequence	Show 1 Show 2 Show 3 Show 4 Show 5 Show 6 Show 7 Show 8 Show 9 Show 10	Foreground	Speed	1 – 100	Show: 18 Speed: 100 Foreground: R Background: Black						
						Black							
						R							
						G							
						B							
						W							
						GB							
						RB							
						RG							
						RGB							
						RW							
						GW							
						BW							
						RGW							
						RBW							
						GBW							
						RGBW							
					Static					Background	Black		
		R											
		G											
		B											
		W											
		GB											
		RB											
		RG											
		RGB											
		RW											
		GW											
		BW											
		RGW											
		RBW											
		GBW											
		RGBW											
				Static							Fixed Colour	Black	
												R	
					G								
B													
W													
GB													
RB													
RG													
RGB													
		Static		Manual Colour	Red	<000 – 255>							
					Green	<000 – 255>							
					Blue	<000 – 255>							
					White	<000 – 255>							

MENU DESCRIPTION

CONNECT

(1) DMX Address Setting

Set the DMX according to the below range:

3CH: 1 – 510

4CH: 1 – 509

6CH: 1 – 507

7CH: 1 – 506

8CH: 1 – 505

14CH: 1 – 499

144CH: 1 – 369

192CH: 1 – 321

202CH: 1 – 311

(2) 192/202CH are recommended to be run using ethernet control

SETUP

(1) Screen

- a. Backlight: Set the delay time for menu display to go dark
- b. Flip Display
- c. Key Lock: **Password: Up-Down-Up-Down-Enter**

(2) Fixture

- a. White Balance
- b. Dimmer Mode: 4 dimming curve modes
- c. Fan Mode
- d. Temperature

(3) Ethernet

- a. Protocol: Kling-net & Art-net
- b. Universe: 000 – 255
- c. Start Channel: 001 – 512
- d. IP Address: 2/10. *** . *** . ***

ADVANCED

(1) Factory Reset

INFORMATION

(1) Fixture Time: 0 - 9999

(2) Temperature

(3) Fan Speed

(4) Software Version

(5) UID

STAND ALONE

(1) Master/Slave

(2) Sequence

(3) Static

DMX CHANNELS

3CH	Function	Value	Percent/Setting	Remarks
1	Red	000 – 255	0 – 100%	W = Off
2	Green	000 – 255	0 – 100%	
3	Blue	000 – 255	0 – 100%	

4CH-1	Function	Value	Percent/Setting	Remarks
1	Red	000 – 255	0 – 100%	
2	Green	000 – 255	0 – 100%	
3	Blue	000 – 255	0 – 100%	
4	White	000 – 255	0 – 100%	

4CH-2	Function	Value	Percent/Setting	Remarks
1	Dimmer	000 – 255	0 – 100%	
2	Strobe Duration	000 – 255	Strobe duration (15 – 999ms)	
3	Strobe	000 – 010	No Function	
		011 – 255	Strobe Slow to Fast	
4	Special Effects	000 – 005	No effect	
		006 – 042	Ramp up	
		043 – 085	Ramp down	
		086 – 128	Ramp up-down	
		129 – 171	Random	
		172 – 214	Lightning	
		215 – 255	Spikes	

6CH	Function	Value	Percent/Setting	Remarks
1	Dimmer	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	Strobe	000 – 010	No Function	
		011 – 255	Strobe Slow to Fast	

7CH	Function	Value	Percent/Setting	Remarks
1	Dimmer	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	Strobe Duration	000 – 255	Strobe duration (15 – 999ms)	
7	Strobe	000 – 010	No Function	
		011 – 255	Strobe Slow to Fast	

8CH	Function	Value	Percent/Setting	Remarks
1	Dimmer	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	Strobe Duration	000 – 255	Strobe duration (15 – 999ms)	
7	Strobe	000 – 010	No Function	
		011 – 255	Strobe Slow to Fast	
8	Special Effects	000 – 005	No effect	
		006 – 042	Ramp up	
		043 – 085	Ramp down	
		086 – 128	Ramp up-down	
		129 – 171	Random	
		172 – 214	Lightning	
		215 – 255	Spikes	

14CH	Function	Value	Percent/Setting	Remarks
1	Dimmer	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	Strobe	000 – 010	No Function	
		011 – 255	Strobe Slow to Fast	
7	Colour Macro	000 – 010	No Function	
		011 – 200	RGB Mix	
		201 – 205	Colour 1	
		206 – 210	Colour 2	
		211 – 215	Colour 3	
		216 – 220	Colour 4	
		221 – 225	Colour 5	
		226 – 230	Colour 6	
		231 – 235	Colour 7	
		236 – 240	Colour 8	
		241 – 245	Colour 9	
		246 – 250	Colour 10	
8	Foreground	000 – 010	No function	
		011 – 255	Foreground colour	
9	Foreground Dimmer	000 – 255	0 – 100%	
10	Background	000 – 010	No function	
		011 – 255	Background colour	
11	Background Dimmer	000 – 255	0 – 100%	
12	Show	000 – 010	No Function	
		011 – 024	Show 1	
		025 – 038	Show 2	
		039 – 051	Show 3	
		052 – 065	Show 4	
		066 – 078	Show 5	
		079 – 092	Show 6	
		093 – 105	Show 7	
		106 – 119	Show 8	
120 – 133	Show 9			

		134 – 146	Show 10	
		147 – 160	Show 11	
		161 – 173	Show 12	
		174 – 187	Show 13	
		188 – 200	Show 14	
		201 – 214	Show 15	
		215 – 227	Show 16	
		228 – 241	Show 17	
		242 – 255	Show 18	
13	Show Speed	000 – 255	Show Speed slow to fast	
14	Dimmer Speed Mode	000 – 051	Preset dimmer speed from display menu	
		052 – 101	Dimmer speed mode Off	
		102 – 152	Dimmer Speed mode 1 (fast)	
		153 – 203	Dimmer speed mode 2 (mid)	
		204 – 255	Dimmer speed mode 3 (slow)	

144CH	Function	Value	Percent/Setting	Remarks
1	Red1	000 – 255	0 – 100%	W = Off
2	Green1	000 – 255	0 – 100%	
3	Blue1	000 – 255	0 – 100%	
4	Red2	000 – 255	0 – 100%	
5	Green2	000 – 255	0 – 100%	
6	Blue2	000 – 255	0 – 100%	
...	
139	Red47	000 – 255	0 – 100%	
140	Green47	000 – 255	0 – 100%	
141	Blue47	000 – 255	0 – 100%	
142	Red48	000 – 255	0 – 100%	
143	Green48	000 – 255	0 – 100%	
144	Blue48	000 – 255	0 – 100%	

192CH	Function	Value	Percent/Setting	Remarks
1	Red1	000 – 255	0 – 100%	
2	Green1	000 – 255	0 – 100%	
3	Blue1	000 – 255	0 – 100%	
4	White1	000 – 255	0 – 100%	
5	Red2	000 – 255	0 – 100%	
6	Green2	000 – 255	0 – 100%	
7	Blue2	000 – 255	0 – 100%	
8	White2	000 – 255	0 – 100%	
...	
185	Red47	000 – 255	0 – 100%	
186	Green47	000 – 255	0 – 100%	
187	Blue47	000 – 255	0 – 100%	
188	White47	000 – 255	0 – 100%	
189	Red48	000 – 255	0 – 100%	
190	Green48	000 – 255	0 – 100%	
191	Blue48	000 – 255	0 – 100%	
192	White48	000 – 255	0 – 100%	

202CH	Function	Value	Percent/Setting	Remarks
1	Red1	000 – 255	0 – 100%	
2	Green1	000 – 255	0 – 100%	
3	Blue1	000 – 255	0 – 100%	
4	White1	000 – 255	0 – 100%	
5	Red2	000 – 255	0 – 100%	
6	Green2	000 – 255	0 – 100%	
7	Blue2	000 – 255	0 – 100%	
8	White2	000 – 255	0 – 100%	
...	
185	Red47	000 – 255	0 – 100%	
186	Green47	000 – 255	0 – 100%	
187	Blue47	000 – 255	0 – 100%	
188	White47	000 – 255	0 – 100%	
189	Red48	000 – 255	0 – 100%	
190	Green48	000 – 255	0 – 100%	
191	Blue48	000 – 255	0 – 100%	
192	White48	000 – 255	0 – 100%	
193	Colour Macro	000 – 010	No Function	
		011 – 200	RGB Mix	
		201 – 205	Colour 1	
		206 – 210	Colour 2	
		211 – 215	Colour 3	
		216 – 220	Colour 4	
		221 – 225	Colour 5	
		226 – 230	Colour 6	
		231 – 235	Colour 7	
		236 – 240	Colour 8	
		241 – 245	Colour 9	
		246 – 250	Colour 10	
251 – 255	Colour 11			
194	Foreground	000 – 010	No function	
		011 – 255	Foreground colour	
195	Foreground Dimmer	000 – 255	0 – 100%	
196	Background	000 – 010	No function	
		011 – 255	Background colour	
197	Background Dimmer	000 – 255	0 – 100%	
198	Show	000 – 010	No Function	
		011 – 024	Show 1	
		025 – 038	Show 2	
		039 – 051	Show 3	
		052 – 065	Show 4	
		066 – 078	Show 5	
		079 – 092	Show 6	
		093 – 105	Show 7	
		106 – 119	Show 8	
		120 – 133	Show 9	
		134 – 146	Show 10	
		147 – 160	Show 11	
		161 – 173	Show 12	
		174 – 187	Show 13	
		188 – 200	Show 14	
		201 – 214	Show 15	
215 – 227	Show 16			

		228 – 241	Show 17	
		242 – 255	Show 18	
199	Show Speed	000 – 255	Show Speed slow to fast	
200	Dimmer	000 – 255	0 – 100%	
201	Strobe	000 – 010	No Function	
		011 – 255	Strobe Slow to Fast	
202	Dimmer Speed Mode	000 – 051	Preset dimmer speed from display menu	
		052 – 101	Dimmer speed mode Off	
		102 – 152	Dimmer Speed mode 1 (fast)	
		153 – 203	Dimmer speed mode 2 (mid)	
		204 – 255	Dimmer speed mode 3 (slow)	

TROUBLESHOOTING

Problem	Possible Causes	Checklist and Remedies
Fixture does not light up	<ul style="list-style-type: none"> -No mains supply -Dimmer fader is set to 0 -All colour faders set to 0 -Faulty LED -Faulty LED board 	<ul style="list-style-type: none"> -Check the power supply voltage -Increase the dimmer channel -Increase the colour channels -Replace the LED board -Replace the LED board
General low light intensity	<ul style="list-style-type: none"> -Dirty lens assembly -Misaligned lens assembly 	<ul style="list-style-type: none"> -Clean the fixture regularly -Install lens assembly properly
Fixture does not power up	<ul style="list-style-type: none"> -No power -Loose or damaged power cord -Faulty internal power supply 	<ul style="list-style-type: none"> -Check for power on outlet -Check power cord -Replace internal power supply
Fixture does not respond to DMX	<ul style="list-style-type: none"> -Wrong DMX addressing -Damaged DMX cable -Bouncing signals 	<ul style="list-style-type: none"> -Check control panel/unit address -Check DMX cables -Install terminator