

## **8 MAINTENANCE AND CLEANING**

The following points have to be considered during the inspection:

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



### **CAUTION**

Disconnect from mains before starting maintenance operation.



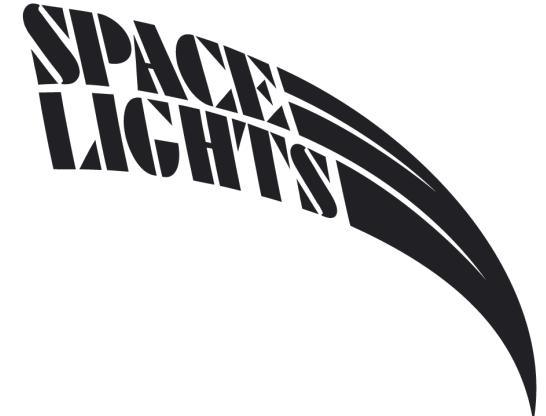
In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

- 1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- 2) Clean the fan each week.
- 3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

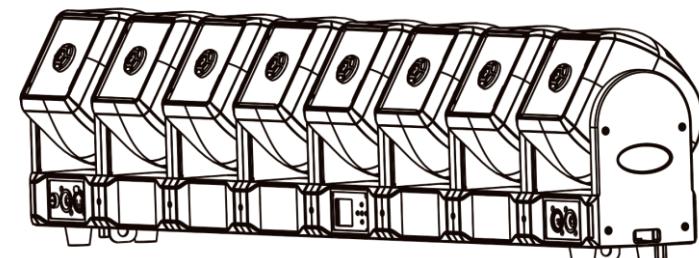
We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.



# **PLANETA BAR 860**



CE F IP20 ta 40°C tc 100°C

**User Manual**  
KEEP THIS MANUAL FOR FUTURE NEEDS

# 1 SAFETY INSTRUCTIONS



## CAUTION

Becareful with your operations. With a dangerous voltage you cansuffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.



## IMPORTANT

Damages caused by the disregard of this user manual are not subject to warranty.  
The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

112	EFFECT (STRIP LIGHT 5)	0 - 255	Dynamic effect options
113	Speed (STRIP LIGHT 5)	0 - 255	Speed control of dynamic effect
114	DIMMER (STRIP LIGHT 6)	0 - 255	Linear Dimmer 0 – 100%
115	SHUTTER (STRIP LIGHT 6)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
116	RED (STRIP LIGHT 6)	0 - 255	Linear 0 -100%
117	GREEN (STRIP LIGHT 6)	0 - 255	Linear 0 -100%
118	BLUE (STRIP LIGHT 6)	0 - 255	Linear 0 -100%
119	EFFECT (STRIP LIGHT 6)	0 - 255	Dynamic effect options
120	Speed (STRIP LIGHT 6)	0 - 255	Speed control of dynamic effect
121	DIMMER (STRIP LIGHT 7)	0 - 255	Linear Dimmer 0 – 100%
122	SHUTTER (STRIP LIGHT 7)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
123	RED (STRIP LIGHT 7)	0 - 255	Linear 0 -100%
124	GREEN (STRIP LIGHT 7)	0 - 255	Linear 0 -100%
125	BLUE (STRIP LIGHT 7)	0 - 255	Linear 0 -100%
126	EFFECT (STRIP LIGHT 7)	0 - 255	Dynamic effect options
127	Speed (STRIP LIGHT 7)	0 - 255	Speed control of dynamic effect
128	DIMMER (STRIP LIGHT 8)	0 - 255	Linear Dimmer 0 – 100%
129	SHUTTER (STRIP LIGHT 8)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
130	RED (STRIP LIGHT 8)	0 - 255	Linear 0 -100%
131	GREEN (STRIP LIGHT 8)	0 - 255	Linear 0 -100%
132	BLUE (STRIP LIGHT 8)	0 - 255	Linear 0 -100%
133	EFFECT (STRIP LIGHT 8)	0 - 255	Dynamic effect options
134	Speed (STRIP LIGHT 8)	0 - 255	Speed control of dynamic effect

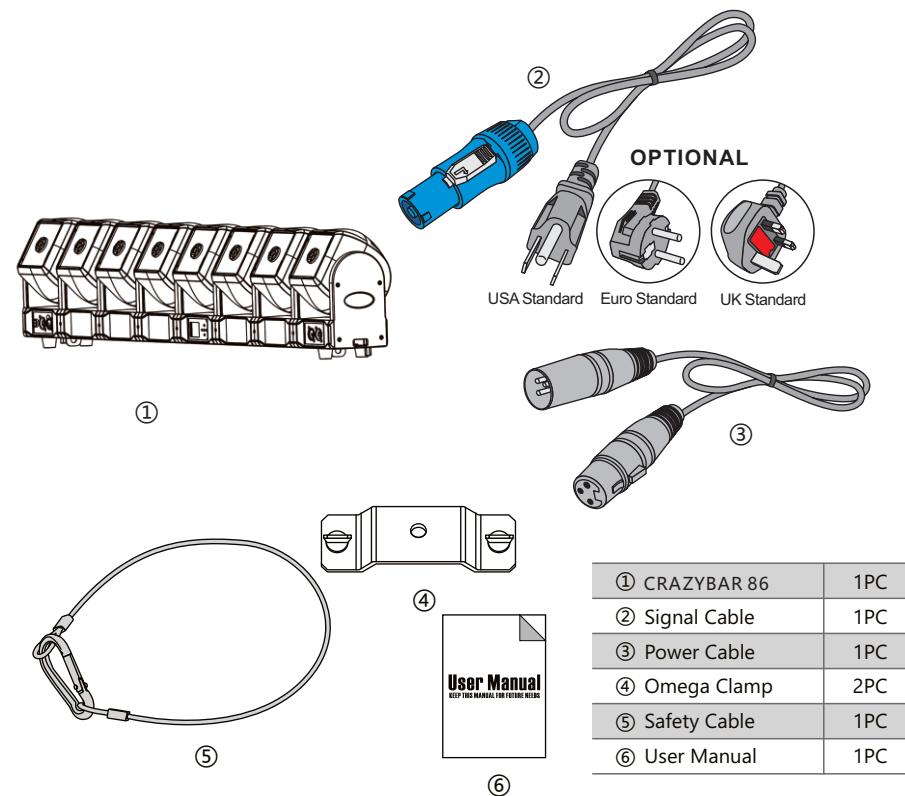
76	360° Continuous TILT 6 Rotation	000 - 003	No Function
77		004 - 129	Forward rotation from fast to slow
78		130 - 255	Backward rotation from slow to fast
79	360° Continuous TILT 7 Rotation	000 - 003	No Function
80		004 - 129	Forward rotation from fast to slow
81		130 - 255	Backward rotation from slow to fast
82	360° Continuous TILT 8 Rotation	000 - 003	No Function
83		004 - 129	Forward rotation from fast to slow
84		130 - 255	Backward rotation from slow to fast
85	DIMMER (STRIP LIGHT 1)	0 - 255	Linear Dimmer 0 – 100%
86	SHUTTER (STRIP LIGHT 1)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
87	RED (STRIP LIGHT 1)	0 - 255	Linear 0 -100%
88	GREEN (STRIP LIGHT 1)	0 - 255	Linear 0 -100%
89	BLUE (STRIP LIGHT 1)	0 - 255	Linear 0 -100%
90	EFFECT (STRIP LIGHT 1)	0 - 255	Dynamic effect options
91	Speed (STRIP LIGHT 1)	0 - 255	Speed control of dynamic effect
92	DIMMER (STRIP LIGHT 2)	0 - 255	Linear Dimmer 0 – 100%
93	SHUTTER (STRIP LIGHT 2)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
94	RED (STRIP LIGHT 2)	0 - 255	Linear 0 -100%
95	GREEN (STRIP LIGHT 2)	0 - 255	Linear 0 -100%
96	BLUE (STRIP LIGHT 2)	0 - 255	Linear 0 -100%
97	EFFECT (STRIP LIGHT 2)	0 - 255	Dynamic effect options
98	Speed (STRIP LIGHT 2)	0 - 255	Speed control of dynamic effect
99	DIMMER (STRIP LIGHT 3)	0 - 255	Linear Dimmer 0 – 100%
100	SHUTTER (STRIP LIGHT 3)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
101	RED (STRIP LIGHT 3)	0 - 255	Linear 0 -100%
102	GREEN (STRIP LIGHT 3)	0 - 255	Linear 0 -100%
103	BLUE (STRIP LIGHT 3)	0 - 255	Linear 0 -100%
104	EFFECT (STRIP LIGHT 3)	0 - 255	Dynamic effect options
105	Speed (STRIP LIGHT 3)	0 - 255	Speed control of dynamic effect
106	DIMMER (STRIP LIGHT 4)	0 - 255	Linear Dimmer 0 – 100%
107	SHUTTER (STRIP LIGHT 4)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
108	RED (STRIP LIGHT 4)	0 - 255	Linear 0 -100%
109	GREEN (STRIP LIGHT 4)	0 - 255	Linear 0 -100%
110	BLUE (STRIP LIGHT 4)	0 - 255	Linear 0 -100%
111	EFFECT (STRIP LIGHT 4)	0 - 255	Dynamic effect options
112	Speed (STRIP LIGHT 4)	0 - 255	Speed control of dynamic effect
113	DIMMER (STRIP LIGHT 5)	0 - 255	Linear Dimmer 0 – 100%
114	SHUTTER (STRIP LIGHT 5)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
115	RED (STRIP LIGHT 5)	0 - 255	Linear 0 -100%
116	GREEN (STRIP LIGHT 5)	0 - 255	Linear 0 -100%
117	BLUE (STRIP LIGHT 5)	0 - 255	Linear 0 -100%

## 2 UNPACKING

The CRAZYBAR 86 is a high-performance stage lighting bar fixture that features 8 individual moving MINI heads, each of which is equipped with a powerful 60W 4-IN-1 RGBW LED light source. With its versatile design and advanced features, specially the mirror based optical system, the CRAZYBAR 86 is capable of producing a wide range of dynamic sharp and collimated BEAM lighting effects that are sure to captivate audiences and enhance performances. Also, thanks to the ingenious front neon ring design on each head, the BAR could bring ultra brilliant and magic lighting effect to the lighting designers.

The CRAZYBAR 86 also features a range of advanced lighting effects, including strobe, color mixing, and chase effects. These effects can be easily accessed and controlled via the controller, allowing for precise and customizable lighting setups.

The fixture is tuned with proper LED refresh rate for flicker free operation for TV and FILM. It's a perfect option for large scale live concerts, TV productions, road shows, clubs/bars, weddings, etc.

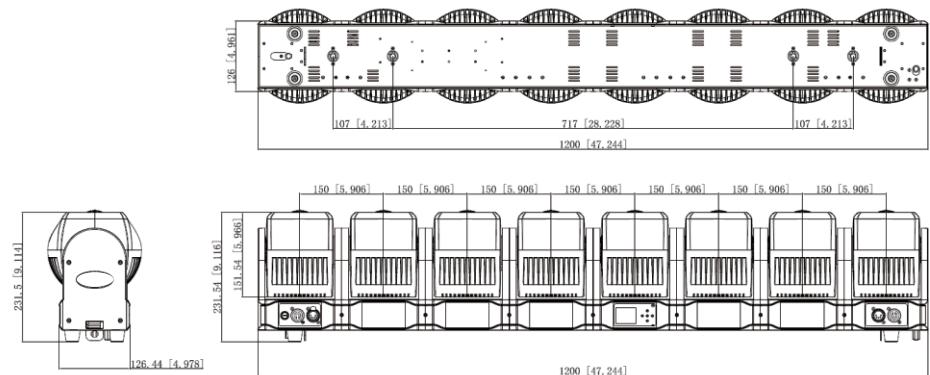


### **3 FEATURES & SPECIFICATIONS**

8\*60W 4-IN-1 RGBW LEDs  
 (8\*30)\*0.2W 3-IN-1 SMD RGB LEDs  
 Flicker free operation for broadcast TV and FILM  
 Life Span: 50000H  
 8PCS high efficiency lens  
 3.5°Projection angle  
 TILT: 2 modes  
 1. 360° Continuous movement  
 2. 240° (8/16 bit)  
 Fast, quiet, smooth and precise 2-phase motors  
 Smooth, fast and precise resolution for TILT movement with low noise operation  
 Scan position memory, auto reposition after unexpected movement  
 Pixel mapping capability with each LEDs controllable individually  
 Sophisticated 4 colors RGBW mixed  
 Linear CTO 2500-8000K  
 Sharp beam effect  
 Preset static patterns  
 Preset dynamic patterns with variable speed  
 Preset dynamic color macro with variable speed  
 Each head with strip effect with different built-in macros  
 (variable speed control)  
 0-100% Smooth linear LED dimming  
 1-25Hz shutter/strobe effect with variable speed  
 Preset pulse strobe effect with variable speed  
 Random strobe effect with variable speed  
 22/59/85/134 DMX channels USITT DMX-512  
 DMX512, master-slave, sound activated or auto operation  
 DMX recorder and edit function integrated  
 RDM available (Remote Device Management)  
 Shielded input signal protection for stable signal without interference  
 3-Pin XLR connectors IN/OUT  
 Electronic supply with active PFC  
 AC100-240V 50/60Hz  
 PowerCON IN/OUT with fuse  
 640W Power consumption  
 -25°C to 45°C ambient temperature  
 IP20 protection rating

38	TILT 8	000 - 255	Mirror 8 positioning (Default REVERSE HEADS option OFF)
39	Red 1	000 - 255	Red 1
40	Green 1	000 - 255	Green 1
41	Blue 1	000 - 255	Blue 1
42	White 1	000 - 255	White 1
43	Red 2	000 - 255	Red 2
44	Green 2	000 - 255	Green 2
45	Blue 2	000 - 255	Blue 2
46	White 2	000 - 255	White 2
47	Red 3	000 - 255	Red 3
48	Green 3	000 - 255	Green 3
49	Blue 3	000 - 255	Blue 3
50	White 3	000 - 255	White 3
51	Red 4	000 - 255	Red 4
52	Green 4	000 - 255	Green 4
53	Blue 4	000 - 255	Blue 4
54	White 4	000 - 255	White 4
55	Red 5	000 - 255	Red 5
56	Green 5	000 - 255	Green 5
57	Blue 5	000 - 255	Blue 5
58	White 5	000 - 255	White 5
59	Red 6	000 - 255	Red 6
60	Green 6	000 - 255	Green 6
61	Blue 6	000 - 255	Blue 6
62	White 6	000 - 255	White 6
63	Red 7	000 - 255	Red 7
64	Green 7	000 - 255	Green 7
65	Blue 7	000 - 255	Blue 7
66	White 7	000 - 255	White 7
67	Red 8	000 - 255	Red 8
68	Green 8	000 - 255	Green 8
69	Blue 8	000 - 255	Blue 8
70	White 8	000 - 255	White 8
71	360° Continuous TILT 1 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
72	360° Continuous TILT 2 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
73	360° Continuous TILT 3 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
74	360° Continuous TILT 4 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
75	360° Continuous TILT 5 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast

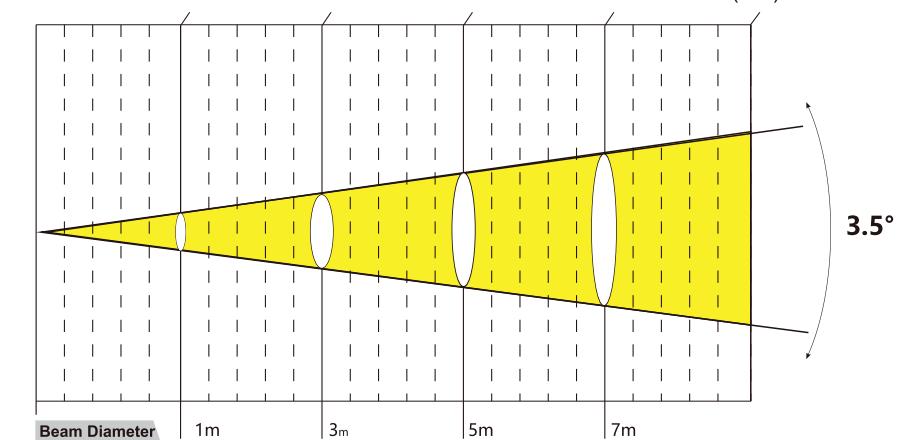
	PRESETHEADPOSITION	128 - 143	Presetheadposition0
		144 - 159	Presetheadposition10
		160 - 175	Presetheadposition11
		176 - 191	Presetheadposition12
		192 - 207	Presetheadposition13
		208 - 223	Presetheadposition14
		224 - 239	Presetheadposition15
		240 - 255	Presetheadposition16
19	SHAPE RED	000 - 255	Linear 0 - 100%
20	SHAPE GREEN	000 - 255	Linear 0 - 100%
21	SHAPE BLUE	000 - 255	Linear 0 - 100%
22	SHAPE WHITE	000 - 255	Linear 0 - 100%
23	FOREGROUND CTO – TBD	000 - 255	TBD
		000 - 003	Light OFF
		004 - 103	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
		104 - 107	Light ON
		108 - 207	Pulsation frequency from slow (1 flash/sec) to fast (25 flash/sec)
		208 - 212	Light ON
		213 - 225	Random Strobe at slow frequency
		226 - 238	Random Strobe at medium frequency
		239 - 251	Random Strobe at fast frequency
		252 - 255	Light ON
25	FOREGROUND DIMMER	000 - 255	Linear Dimmer 0 - 100%
	PATTERN MODE	000 - 005	Normal
26		006 - 130	Static
		131 - 255	Dynamic
	PATTERN SELECTION	000 - 007	Effect 1
		...	...
		255	Effect XXX
	PATTERN SPEED	000 - 255	Indexing
		000 - 124	Speed control fast to slow, forward
28		125 - 130	Stop
		131 - 255	Speed control slow to fast, Backward
	PATTERN FADE	000 - 127	Fade In/Out
		128 - 255	Fade Out
30	PATTERN TRANSITION	000 - 255	Crossfade between layers/pattern (0: instant transition - 255: 3 seconds transition)
31	TILT 1	000 - 255	Mirror 1 positioning (Default REVERSE HEADS option OFF)
32	TILT 2	000 - 255	Mirror 2 positioning (Default REVERSE HEADS option OFF)
33	TILT 3	000 - 255	Mirror 3 positioning (Default REVERSE HEADS option OFF)
34	TILT 4	000 - 255	Mirror 4 positioning (Default REVERSE HEADS option OFF)
35	TILT 5	000 - 255	Mirror 5 positioning (Default REVERSE HEADS option OFF)
36	TILT 6	000 - 255	Mirror 6 positioning (Default REVERSE HEADS option OFF)
37	TILT 7	000 - 255	Mirror 7 positioning (Default REVERSE HEADS option OFF)



## 4 PHOTOMETRIC DATA

### Photometric Beam Angle Data 3.5° Beam Angle LUX × 0.0929=FC

R	1600	206	80	42
G	3860	520	195	102
B	144	20	8	4
W	4673	647	239	124
RGBW	9640	1278	487	256 (LUX)

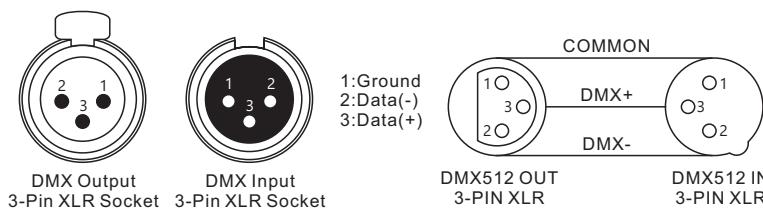
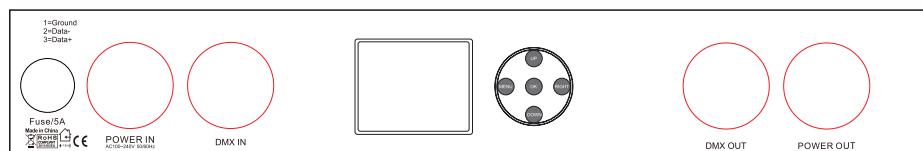


## 5 DMX-512 CONTROL CONNECTIONS

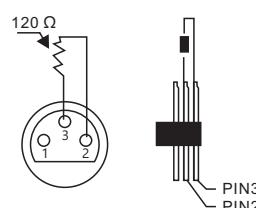
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple

Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX-512 connection with DMX terminator



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a  $120\ \Omega$  resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



134CH	Function	Dmx Value	Description
1	RED	000 - 255	Linear 0 -100%
2	RED FINE	000 - 255	Linear Fine Red (16 Bit)
3	GREEN	000 - 255	Linear 0 -100%
4	GREEN FINE	000 - 255	Linear Fine Green (16 Bit)
5	BLUE	000 - 255	Linear 0 -100%
6	BLUE FINE	000 - 255	Linear Fine Blue (16 Bit)
7	WHITE	000 - 255	Linear 0 -100%
8	WHITE FINE	000 - 255	Linear Fine White (16 Bit)
9	CTO	000 - 009 010 - 255	CTO Off 8000K to 2500K
10	MACRO COLOUR	000 - 255	MACRO COLOUR
11	BACKGROUND SHUTTER	000 - 003 004 - 103 104 - 107 108 - 207 208 - 212 213 - 225 226 - 238 239 - 251 252 - 255	Light OFF Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec) Light ON Pulsation at linearly from slow (1 flash/sec) to fast (25 flash/sec) Light ON Random Strobe at low frequency Random Strobe at medium frequency Random Strobe at high frequency Light ON
12	BACKGROUND DIMMER	000 - 255	Linear Dimmer 0 – 100%
13	MASTER SHUTTER	000 - 003 004 - 103 104 - 107 108 - 207 208 - 212 213 - 225 226 - 238 239 - 251 252 - 255	Light OFF Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec) Light ON Pulsation frequency from slow (1 flash/sec) to fast (25 flash/sec) Light ON Random Strobe at low frequency Random Strobe at medium frequency Random Strobe at high frequency Light ON
14	MASTER DIMMER	000 - 255	Linear Dimmer 0 – 100%
15	MASTER DIMMER FINE	000 - 255	Fine Dimmer (16 bit)
16	FUNCTION	000 - 255	FUNCTION
17	RESET	000 - 025 026 - 127 128 - 255	Unused Range Tilt Reset Complete Reset
18	PRESETHHEADPOSITION	0 001 - 015 016 - 031 032 - 047 048 - 063 064 - 079 080 - 095 096 - 111 112 - 127	No Function Presetheadposition1 Presetheadposition2 Presetheadposition3 Presetheadposition4 Presetheadposition5 Presetheadposition6 Presetheadposition7 Presetheadposition8

63	Red 7	000 - 255	Red 7
64	Green 7	000 - 255	Green 7
65	Blue 7	000 - 255	Blue 7
66	White 7	000 - 255	White 7
67	Red 8	000 - 255	Red 8
68	Green 8	000 - 255	Green 8
69	Blue 8	000 - 255	Blue 8
70	White 8	000 - 255	White 8
71	360° Continuous TILT 1 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
72	360° Continuous TILT 2 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
73	360° Continuous TILT 3 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
74	360° Continuous TILT 4 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
75	360° Continuous TILT 5 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
76	360° Continuous TILT 6 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
77	360° Continuous TILT 7 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
78	360° Continuous TILT 8 Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
79	DIMMER (STRIP LIGHT )	0 - 255	Linear Dimmer 0 – 100%
80	SHUTTER (STRIP LIGHT)	0 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
81	RED (STRIP LIGHT)	0 - 255	Linear 0 -100%
82	GREEN (STRIP LIGHT)	0 - 255	Linear 0 -100%
83	BLUE (STRIP LIGHT)	0 - 255	Linear 0 -100%
84	EFFECT (STRIP LIGHT)	0 - 255	Dynamic effect options
85	Speed (STRIP LIGHT)	0 - 255	Speed control of dynamic effect

## 6 MENU OPERATIONS

Main Menu	Second	Third	Fourth
Fixture	Dmx Address	000 - 512	
	Dmx Mode	22CH/59CH/85CH/134CH	
	Run Mode	DMX / Host	
	Tilt Invert	Close / Open	
	No Dmx Signal	Clear / Hold	
	PT Calibrate	Close / Open	
	Frequency	900/1000/1100/1200/1300/1400/1500/2500/400 0/5000/6000/10000/15000/20000/25000Hz	
Manual	Sound Control	1 -- 99	
	Pan	000 - 255	
	Pan Fine	000 - 255	
	Tilt	000 - 255	
	Tilt Fine	000 - 255	
	...	...	
	Time	Current Time	xxxH
Information		Total Time	xxxH
	Sensor	All Sensor are ok!	
	Temperature	Head Temp	xxxC
	Software Version	Panel	Vx.xx
		Motor	Vx.xx
Factory	Password	000 - 255	
	Tilt1	000 - 255	
	Tilt2	000 - 255	
	Tilt3	000 - 255	
	Tilt4	000 - 255	
	Tilt5	000 - 255	
	Tilt6	000 - 255	
	Tilt7	000 - 255	
	Tilt8	000 - 255	
	Red1	000 - 255	
	Green1	000 - 255	
	Blue1	000 - 255	
	White1	000 - 255	
	...	...	
Fixture Reset	Red8	000 - 255	
	Green8	000 - 255	
	Blue8	000 - 255	
	White8	000 - 255	
Display	Motor Reset	Cance / Run	
	Factory	Cance / Run	
	Language	CH / EN	
	Display Flip	Normal / Reverse	
	Display Mode	60s / Show	

# 7 DMX CHANNELS

22CH	Function	Dmx Value	Description
1	TILT	000 - 255	0-270° TILT movement
2	TILT FINE	000 - 255	Fine control of TILT movement
3	360° Continuous TILT Rotation	000 - 003	No Function
		004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 255	Speed control of TILT movement
5	DIMMER	000 - 255	Linear Dimmer 0 – 100%
6	MASTER SHUTTER	000 - 003	Light OFF
		004 - 103	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
		104 - 107	Light ON
		108 - 207	Pulsation frequency from slow (1 flash/sec) to fast (25 flash/sec)
		208 - 212	Light ON
		213 - 225	Random Strobe at low frequency
		226 - 238	Random Strobe at medium frequency
		239 - 251	Random Strobe at high frequency
		252 - 255	Light ON
7	RED	000 - 255	Linear 0 -100%
8	GREEN	000 - 255	Linear 0 -100%
9	BLUE	000 - 255	Linear 0 -100%
10	WHITE	000 - 255	Linear 0 -100%
11	MACRO COLOUR	000 - 255	MACRO COLOUR
12	CTO	000 - 009	CTO Off
		010 - 255	8000K to 2500K
13	EFFECT	000 - 255	Dynamic effect options
14	EFFECT SPEED	000 - 255	Speed control of dynamic effect
15	RESET	000 - 025	Unused Range
		026 - 255	Complete Reset (5s)
16	DIMMER (STRIP LIGHT)	000 - 255	Linear Dimmer 0 – 100%
17	SHUTTER (STRIP LIGHT)	000 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
18	RED (STRIP LIGHT)	000 - 255	Linear 0 -100%
19	GREEN (STRIP LIGHT)	000 - 255	Linear 0 -100%
20	BLUE (STRIP LIGHT)	000 - 255	Linear 0 -100%
21	EFFECT (STRIP LIGHT)	000 - 255	Dynamic effect options
22	Speed (STRIP LIGHT)	000 - 255	Speed control of dynamic effect

28	PATTERN SPEED	000 - 255	Indexing
		000 - 124	Speed control fast to slow, forward
		125 - 130	Stop
		131 - 255	Speed control slow to fast, Backward
29	PATTERN FADE	000 - 127	Fade In/Out
		128 - 255	Fade Out
30	PATTERN TRANSITION	000 - 255	Crossfade between layers/pattern (0: instant transition - 255: 3 seconds transition) ONLY ON LAYER MODE
31	TILT 1	000 - 255	Mirror 1 positioning (Default REVERSE HEADS option OFF)
32	TILT 2	000 - 255	Mirror 2 positioning (Default REVERSE HEADS option OFF)
33	TILT 3	000 - 255	Mirror 3 positioning (Default REVERSE HEADS option OFF)
34	TILT 4	000 - 255	Mirror 4 positioning (Default REVERSE HEADS option OFF)
35	TILT 5	000 - 255	Mirror 5 positioning (Default REVERSE HEADS option OFF)
36	TILT 6	000 - 255	Mirror 6 positioning (Default REVERSE HEADS option OFF)
37	TILT 7	000 - 255	Mirror 7 positioning (Default REVERSE HEADS option OFF)
38	TILT 8	000 - 255	Mirror 8 positioning (Default REVERSE HEADS option OFF)
39	Red 1	000 - 255	Red 1
40	Green 1	000 - 255	Green 1
41	Blue 1	000 - 255	Blue 1
42	White 1	000 - 255	White 1
43	Red 2	000 - 255	Red 2
44	Green 2	000 - 255	Green 2
45	Blue 2	000 - 255	Blue 2
46	White 2	000 - 255	White 2
47	Red 3	000 - 255	Red 3
48	Green 3	000 - 255	Green 3
49	Blue 3	000 - 255	Blue 3
50	White 3	000 - 255	White 3
51	Red 4	000 - 255	Red 4
52	Green 4	000 - 255	Green 4
53	Blue 4	000 - 255	Blue 4
54	White 4	000 - 255	White 4
55	Red 5	000 - 255	Red 5
56	Green 5	000 - 255	Green 5
57	Blue 5	000 - 255	Blue 5
58	White 5	000 - 255	White 5
59	Red 6	000 - 255	Red 6
60	Green 6	000 - 255	Green 6
61	Blue 6	000 - 255	Blue 6
62	White 6	000 - 255	White 6

	0	No Function
18	PRESET HEAD POSITION	001 - 015 Preset head position 1
		016 - 031 Preset head position 2
		032 - 047 Preset head position 3
		048 - 063 Preset head position 4
		064 - 079 Preset head position 5
		080 - 095 Preset head position 6
		096 - 111 Preset head position 7
		112 - 127 Preset head position 8
		128 - 143 Preset head position 9
		144 - 159 Preset head position 10
		160 - 175 Preset head position 11
		176 - 191 Preset head position 12
		192 - 207 Preset head position 13
		208 - 223 Preset head position 14
		224 - 239 Preset head position 15
		240 - 255 Preset head position 16
19	SHAPE RED	000 - 255 Linear 0 – 100%
20	SHAPE GREEN	000 - 255 Linear 0 – 100%
21	SHAPE BLUE	000 - 255 Linear 0 – 100%
22	SHAPE WHITE	000 - 255 Linear 0 – 100%
23	FOREGROUND CTO – TBD	000 - 255 TBD
24	FOREGROUND SHUTTER	000 - 003 Light OFF
		004 - 103 Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
		104 - 107 Light ON
		108 - 207 Pulsation frequency from slow (1 flash/sec) to fast (25 flash/sec)
		208 - 212 Light ON
		213 - 225 Random Strobe at low frequency
		226 - 238 Random Strobe at medium frequency
		239 - 251 Random Strobe at fast frequency
		252 - 255 Light ON
25	FOREGROUND DIMMER	000 - 255 Linear Dimmer 0 – 100%
26	PATTERN MODE	000 - 005 Normal
		006 - 130 Static
		131 - 255 Dynamic
27	PATTERN SELECTION	000 - 007 Effect 1
		... ...
		255 Effect XXX

59CH	Function	Dmx Value	Description
1	RED	000 - 255	Linear 0 -100%
2	GREEN	000 - 255	Linear 0 -100%
3	BLUE	000 - 255	Linear 0 -100%
4	WHITE	000 - 255	Linear 0 -100%
5	CTO	000 - 009	CTO Off
		010 - 255	8000K to 2500K
6	MACRO COLOUR	000 - 255	MACRO COLOUR
7	MASTER SHUTTER	000 - 003	Light OFF
		004 - 103	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
		104 - 107	Light ON
		108 - 207	Pulsation frequency from slow (1 flash/sec) to fast (25 flash/sec)
		208 - 212	Light ON
		213 - 225	Random Strobe at low frequency
		226 - 238	Random Strobe at medium frequency
		239 - 251	Random Strobe at high frequency
		252 - 255	Light ON
8	MASTER DIMMER	000 - 255	Linear Dimmer 0 – 100%
9	MASTER DIMMER FINE	000 - 255	Fine Dimmer (16 bit)
10	FUNCTION	000 - 255	FUNCTION
11	RESET	026 - 127	Tilt Reset
		128 - 255	Complete Reset
12	PRESET HEAD POSITION	0	No Function
		001 - 015	Preset head position 1
		016 - 031	Preset head position 2
		032 - 047	Preset head position 3
		048 - 063	Preset head position 4
		064 - 079	Preset head position 5
		080 - 095	Preset head position 6
		096 - 111	Preset head position 7
		112 - 127	Preset head position 8
		128 - 143	Preset head position 9
		144 - 159	Preset head position 10
		160 - 175	Preset head position 11
		176 - 191	Preset head position 12
		192 - 207	Preset head position 13
		208 - 223	Preset head position 14
		224 - 239	Preset head position 15
		240 - 255	Preset head position 16

13	TILT 1	000 - 255	Mirror 1 positioning (Default REVERSE HEADS option OFF)
14	TILT 2	000 - 255	Mirror 2 positioning (Default REVERSE HEADS option OFF)
15	TILT 3	000 - 255	Mirror 3 positioning (Default REVERSE HEADS option OFF)
16	TILT 4	000 - 255	Mirror 4 positioning (Default REVERSE HEADS option OFF)
17	TILT 5	000 - 255	Mirror 5 positioning (Default REVERSE HEADS option OFF)
18	TILT 6	000 - 255	Mirror 6 positioning (Default REVERSE HEADS option OFF)
19	TILT 7	000 - 255	Mirror 7 positioning (Default REVERSE HEADS option OFF)
20	TILT 8	000 - 255	Mirror 8 positioning (Default REVERSE HEADS option OFF)
21	Red 1	000 - 255	Red 1
22	Green 1	000 - 255	Green 1
23	Blue 1	000 - 255	Blue 1
24	Red 2	000 - 255	Red 2
25	Green 2	000 - 255	Green 2
26	Blue 2	000 - 255	Blue 2
27	Red 3	000 - 255	Red 3
28	Green 3	000 - 255	Green 3
29	Blue 3	000 - 255	Blue 3
30	Red 4	000 - 255	Red 4
31	Green 4	000 - 255	Green 4
32	Blue 4	000 - 255	Blue 4
33	Red 5	000 - 255	Red 5
34	Green 5	000 - 255	Green 5
35	Blue 5	000 - 255	Blue 5
36	Red 6	000 - 255	Red 6
37	Green 6	000 - 255	Green 6
38	Blue 6	000 - 255	Blue 6
39	Red 7	000 - 255	Red 7
40	Green 7	000 - 255	Green 7
41	Blue 7	000 - 255	Blue 7
42	Red 8	000 - 255	Red 8
43	Green 8	000 - 255	Green 8
44	Blue 8	000 - 255	Blue 8
		000 - 003	No Function
45	360° Continuous TILT 1 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 003	No Function
46	360° Continuous TILT 2 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 003	No Function
47	360° Continuous TILT 3 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 003	No Function
48	360° Continuous TILT 4 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 003	No Function
49	360° Continuous TILT 5 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 003	No Function
50	360° Continuous TILT 6 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 003	No Function
51	360° Continuous TILT 7 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
		000 - 003	No Function
52	360° Continuous TILT 8 Rotation	004 - 129	Forward rotation from fast to slow
		130 - 255	Backward rotation from slow to fast
53	DIMMER (STRIP LIGHT )	000 - 255	Linear Dimmer 0 - 100%
54	SHUTTER (STRIP LIGHT)	000 - 255	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
55	RED (STRIP LIGHT)	000 - 255	Linear 0 -100%
56	GREEN (STRIP LIGHT)	000 - 255	Linear 0 -100%
57	BLUE (STRIP LIGHT)	000 - 255	Linear 0 -100%
58	EFFECT (STRIP LIGHT)	000 - 255	Dynamic effect options
59	Speed (STRIP LIGHT)	000 - 255	Speed control of dynamic effect

85CH	Function	Dmx Value	Description
1	RED	000 - 255	Linear 0 -100%
2	RED FINE	000 - 255	Linear Fine Red (16 Bit)
3	GREEN	000 - 255	Linear 0 -100%
4	GREEN FINE	000 - 255	Linear Fine Green (16 Bit)
5	BLUE	000 - 255	Linear 0 -100%
6	BLUE FINE	000 - 255	Linear Fine Blue (16 Bit)
7	WHITE	000 - 255	Linear 0 -100%
8	WHITE FINE	000 - 255	Linear Fine White (16 Bit)
9	CTO	000 - 009	CTO Off
		010 - 255	8000K to 2500K
10	MACRO COLOUR	000 - 255	MACRO COLOUR
11	BACKGROUND SHUTTER	000 - 003	Light OFF
		004 - 103	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
		104 - 107	Light ON
		108 - 207	Pulsation at linearly from slow (1 flash/sec) to fast (25 flash/sec)
		208 - 212	Light ON
		213 - 225	Random Strobe at low frequency
		226 - 238	Random Strobe at medium frequency
		239 - 251	Random Strobe at high frequency
		252 - 255	Light ON
12	BACKGROUND DIMMER	000 - 255	Linear Dimmer 0 – 100%
13	MASTER SHUTTER	000 - 003	Light OFF
		004 - 103	Strobe frequency from slow (1 flash/sec) to fast (25 flash/sec)
		104 - 107	Light ON
		108 - 207	Pulsation frequency from slow (1 flash/sec) to fast (25 flash/sec)
		208 - 212	Light ON
		213 - 225	Random Strobe at low frequency
		226 - 238	Random Strobe at medium frequency
		239 - 251	Random Strobe at high frequency
		252 - 255	Light ON
14	MASTER DIMMER	000 - 255	Linear Dimmer 0 – 100%
15	MASTER DIMMER FINE	000 - 255	Fine Dimmer (16 bit)
16	FUNCTION	000 - 255	FUNCTION
17	RESET	000 - 025	Unused Range
		026 - 127	Tilt Reset
		128 - 255	Complete Reset