EN

series EVENT by FLASH

LED moving head

ZOOM Rotation

WashFX 300

F7100810



User Manual(V2.1)

IP20 LED ---0.2m t_a 40°C t_c 150°C

KEEP THIS MANUAL FOR FUTURE NEEDS

1. Unpacking

Thank you for choosing our fixture. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

This fixture is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

4-IN-1 LEDs(RGBW) which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

Moving Head - One

Hanging Bracket - Two

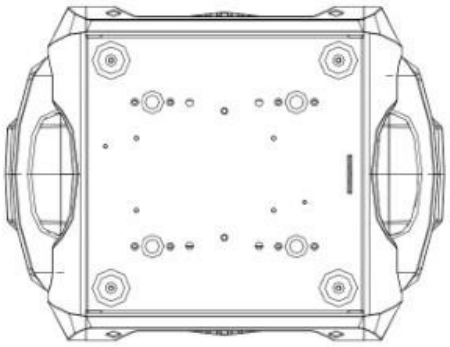
Safety Cable - one

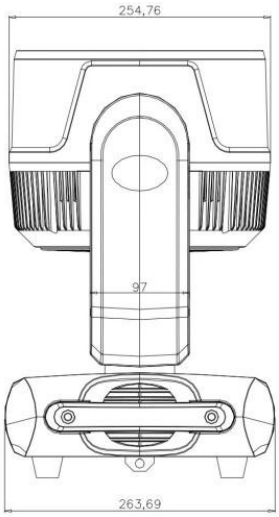
Signal Cable – One

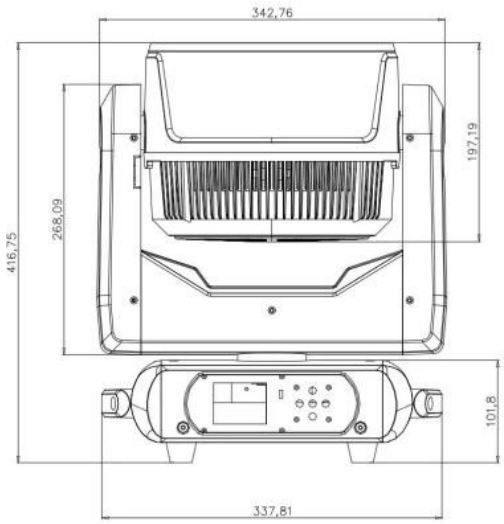
Power Cable – One

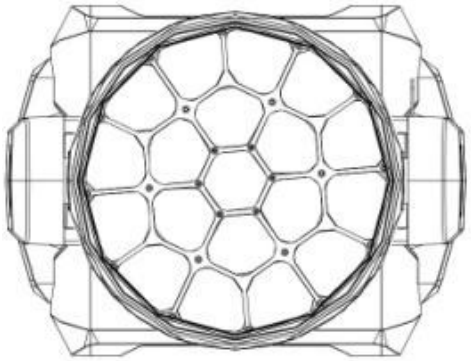
User Manual – One

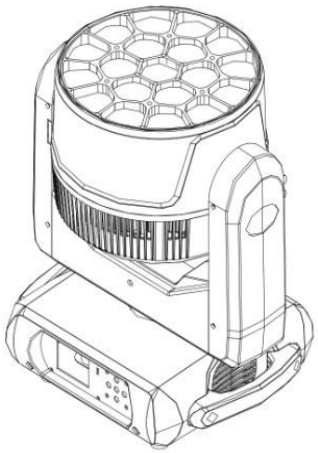
2. Product Introduction

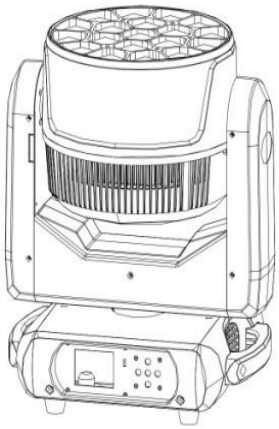












3. Safety Instructions



CAUTION!
Be careful with your operations.With a dangerous voltage you can Suffer 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.

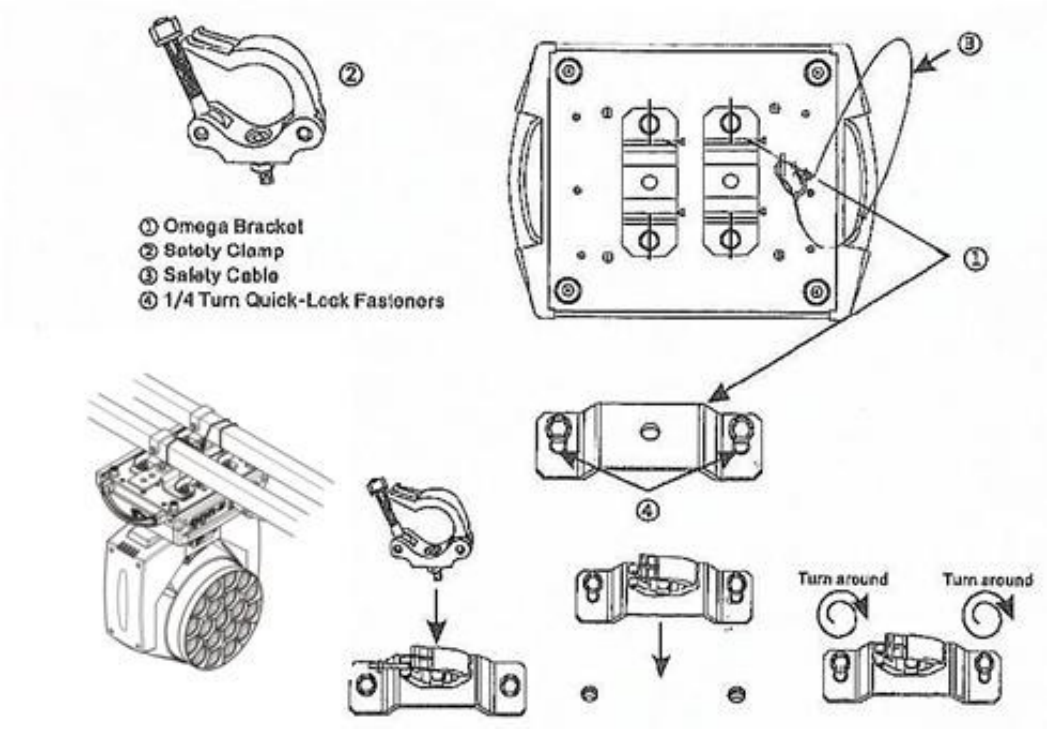
4. Operation Instructions

-The WashFX 300 is for wash effect for on-site decoration purpose.
-Don’t turn on the fixture if it’s been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
-This light should be keep away from strong shaking during any transportation or movement.
-Don’t pull up the light by only the head, or it might cause damages to the mechanical parts.
-Don’t expose the fixture in overheat, moisture or environment with too much dust when installing it. And don’t lay any power cables on the floor. Or it might cause electronic shock to the people.
-Make sure the installation place is in good safety condition before installing the fixture.
-Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
-Make sure the lens are in good condition. It’s recommended to replace the units if there are any damages or severe scratch.
-Make sure the fixture is operated by qualified personnel who knows the fixture before using.
-Keep the original packages if any second shipment is needed.
-Don’t try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
-It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

5. Mounting and Installation

Cautions: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel.
Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device’s weight.
Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

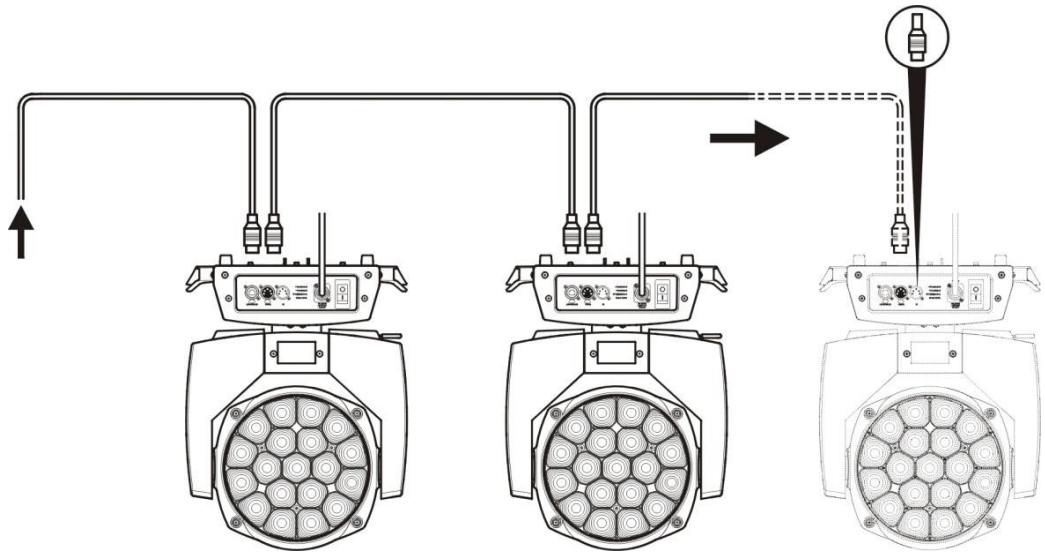
Never stand directly below the device when mounting, removing, or servicing the fixture from a
periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.
Clamp Mounting: The product provides a unique mounting bracket assembly that integrates the bottom of the base, the included “Omega Bracket,” and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the “omega bracket”. As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly



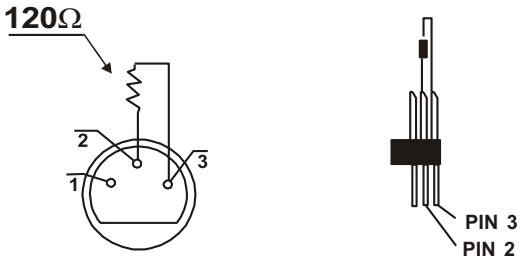
Regardless of the rigging option you choose for WashFX 300, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

6. 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 heads be connected 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 Ω 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.



STAND - 21 channels					
Ch	Function	Value	Description	Default	Highlight / locate
1	Red	0-255	Red min-max	255	255
2	Red fine	0-255	Red fine	255	255
3	Green	0-255	Green min--max	255	255
4	Green fine	0-255	Green fine	255	255
5	Blue	0-255	Blue min-max	255	255
6	Blue fine	0-255	Blue fine	255	255
7	White	0-255	White min--max	0	0
8	White fine	0-255	White fine	0	0
9	CTC	0-9	No function	0	0
		10	8000K		
		…	…		
		255	2500K		
10	Color macro	0-255		0	0
11	Shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
12	Dimmer	0-255	Dimmer	0	255
13	Dimmer fine	0-255	Dimmer fine	0	255
14	Pan	0-255	Pan	127	-
15	Pan fine	0-255	Pan fine	127	-
16	Tilt	0-255	Tilt	127	-
17	Tilt fine	0-255	Tilt fine	127	-
18	Function	0-37	No function	0	-
		38-42	Dimmer curve 1 - linear		
		43-47	Dimmer curve 2 - SCurve		
		48-52	Dimmer curve 3 - Square		
		53-57	Dimmer curve 4 - I square		
		58-190	No function		
		191-192	Dimmer fast		
		193-194	Dimmer smo-oth		
		195-255	No function		
19	Control	0-25	No function	0	-
		26-76	Zoom reset		

		77-127	P/T reset		
		128-255	Total reset		
20	Zoom	0-255	zoom min--max	127	-
21	Lens rotation	0-127	Lens index	0	-
		128-190	CCW lens rotation		
		191-192	Stop lens rotation		
		193-255	CW lens rotation		

SHAPE - 35 channels					
Ch	Function	Value	Description	Default	Highlight / locate
1	Red	0-255	Red min-max	255	255
2	Red fine	0-255	Red fine	255	255
3	Green	0-255	Green min--max	255	255
4	Green fine	0-255	Green fine	255	255
5	Blue	0-255	Blue min-max	255	255
6	Blue fine	0-255	Blue fine	255	255
7	White	0-255	White min--max	0	0
8	White fine	0-255	White fine	0	0
9	CTC	0-9	No function	0	0
		10	8000K		
		…	…		
		255	2500K		
10	Color macro	0-255		0	0
11	Shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
12	Dimmer	0-255	Dimmer	0	255
13	Dimmer fine	0-255	Dimmer fine	0	255
14	Pan	0-255	Pan	127	-
15	Pan fine	0-255	Pan fine	127	-
16	Tilt	0-255	Tilt	127	-
17	Tilt fine	0-255	Tilt fine	127	-

18	Function	0-37	No function	0	-
		38-42	Dimmer curve 1 - linear		
		43-47	Dimmer curve 2 - SCurve		
		48-52	Dimmer curve 3 - Square		
		53-57	Dimmer curve 4 - I square		
		58-190	No function		
		191-192	Dimmer fast		
		193-194	Dimmer smo-oth		
		195-255	No function		
19	Control	0-25	No function	0	-
		26-76	Zoom reset		
		77-127	P/T reset		
		128-255	Total reset		
20	Zoom	0-255	zoom min--max	127	-
21	Lens rotation	0-127	Lens index	0	-
		128-190	CCW lens rotation		
		191-192	Stop lens rota-tion		
		193-255	CW lens rota-tion		
22	Shape selection	0-7	Open	0	-
		8	Shape 1		
		9	Shape 2		
		…	…		
		70	Shape 63		
		71-255	No function		
23	Shape speed	0-127	Index position	0	-
		128-190	CCW rotation		
		191-192	Stop rotation		
		193-255	CW rotation		
24	Shape fade	0-255		0	-
25	Shape Red	0-255	Shape red intensity	255	255
26	Shape Green	0-255	Shape green intensity	255	255
27	Shape Blue	0-255	Shape blue intensity	255	255
28	Shape White	0-255	Shape white intensity	0	0
29	Shape Dimmer	0-255	Shape dimmer	255	255

30	Background dimmer	0-255	Background dimmer	255	255
31	Shape transition	0-255	Time between changes the shapes	0	0
32	Shape offset	0-255	Start position the shape	0	-
33	Shape shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
34	Background shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
35	Background selection	0-8	Open	0	-
		9	Shape 1		
		10	Shape 2		
		…	…		
		23	Shape 15		
		24-255	No function		

RINGS - 38 channels					
Zone 1 - pixel 1					
Zone 2 - pixels 2-7					
Zone 3 - pixels 8-19					
Ch	Function	Value	Description	Default	Highlight / locate
1	Pan	0-255	Pan	127	-
2	Pan fine	0-255	Pan fine	127	-
3	Tilt	0-255	Tilt	127	-
4	Tilt fine	0-255	Tilt fine	127	-
5	P/T speed	0-255	P/T speed fast - slow	0	-
6	Control	0-10	No function	255	-

		11.gru	Dimmer curve 1 - linear		
		13-14	Dimmer curve 2 - SCurve		
		15-16	Dimmer curve 3 - Square		
		17-18	Dimmer curve 4 - I square		
		19-20	No function		
		21-22	Dimmer fast		
		23-24	Dimmer smo-oth		
		25	No function		
		26-76	Zoom reset		
		77-127	P/T reset		
		128-255	Total reset		
7	Red 1	0-255	Zone 1 - red	255	255
8	Red 1 fine	0-255	Zone 1 - red fine	255	255
9	Green 1	0-255	Zone 1 - green	255	255
10	Green 1 fine	0-255	Zone 1 - green fine	255	255
11	Blue 1	0-255	Zone 1 - blue	255	255
12	Blue 1 fine	0-255	Zone 1 - blue fine	255	255
13	White 1	0-255	Zone 1 - white	0	0
14	White 1 fine	0-255	Zone 1 - white fine	0	0
15	Red 2	0-255	Zone 2 - red	255	255
16	Red 2 fine	0-255	Zone 2 - red fine	255	255
17	Green 2	0-255	Zone 2 - green	255	255
18	Green 2 fine	0-255	Zone 2 - green fine	255	255
19	Blue 2	0-255	Zone 2 - blue	255	255
20	Blue 2 fine	0-255	Zone 2 - blue fine	255	255
21	White 2	0-255	Zone 2 - white	0	0
22	White 2 fine	0-255	Zone 2 - white fine	0	0
23	Red 3	0-255	Zone 3 - red	255	255
24	Red 3 fine	0-255	Zone 3 - red fine	255	255
25	Green 3	0-255	Zone 3 - green	255	255
26	Green 3 fine	0-255	Zone 3 - green fine	255	255
27	Blue 3	0-255	Zone 3 - blue	255	255

28	Blue 3 fine	0-255	Zone 3 - blue fine	255	255
29	White 3	0-255	Zone 3 - white	0	0
30	White 3 fine	0-255	Zone 3 - white fine	0	0
31	CTC	0-9	No function	0	0
		10	8000K		
		…	…		
		255	2500K		
32	Color macro	0-255		0	0
33	Lens rotation	0-127	Lens index	0	-
		128-190	CCW lens rotation		
		191-192	Stop lens rotation		
		193-255	CW lens rotation		
34	Zoom	0-255	zoom min-max	127	-
35	Zoom fine	0-255	zoom fine min--max	127	-
36	Shutter	0-31	Closed	255	255
		32-63	Zone 3 - Strobe slow - fast		
		64-95	All zones - Strobe slow - fast		
		96-111	Zone 2 - strobe slow - fast		
		112-127	Zone 1 - strobe slow - fast		
		128-143	All zones - opening pulse		
		144-159	All zones - closing pulse		
		160-191	Random zones - random strobe slow - fast		
		192-223	All zones - random strobe slow - fast		
		224-255	Open		
37	Dimmer	0-255		255	255
38	Dimmer fine	0-255		255	255

ST1px - 78 channels - standard + pixel engine RGB					
Ch	Function	Value	Description	Default	Highlight / locate
1	Red	0-255	Red min-max	255	255
2	Red fine	0-255	Red fine	255	255
3	Green	0-255	Green min--max	255	255
4	Green fine	0-255	Green fine	255	255
5	Blue	0-255	Blue min-max	255	255
6	Blue fine	0-255	Blue fine	255	255
7	White	0-255	White min--max	0	0
8	White fine	0-255	White fine	0	0
9	CTC	0-9	No function	0	0
		10	8000K		
		…	…		
		255	2500K		
10	Color macro	0-255		0	0
11	Shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
12	Dimmer	0-255	Dimmer	0	255
13	Dimmer fine	0-255	Dimmer fine	0	255
14	Pan	0-255	Pan	127	-
15	Pan fine	0-255	Pan fine	127	-
16	Tilt	0-255	Tilt	127	-
17	Tilt fine	0-255	Tilt fine	127	-
18	Function	0-37	No function	0	-
		38-42	Dimmer curve 1 - linear		
		43-47	Dimmer curve 2 - SCurve		
		48-52	Dimmer curve 3 - Square		
		53-57	Dimmer curve 4 - I square		
		58-102	No function		
		103-105	Main pixel engine on		
		106-190	No function		
		191-192	Dimmer fast		

		193-194	Dimmer smo-oth		
		195-255	No function		
19	Control	0-25	No function	0	-
		26-76	Zoom reset		
		77-127	P/T reset		
		128-255	Total reset		
20	Zoom	0-255	zoom min--max	127	-
21	Lens rotation	0-127	Lens index	0	-
		128-190	CCW lens rotation		
		191-192	Stop lens rota-tion		
		193-255	CW lens rota-tion		
22	Pixel 1 red	0-255		255	255
23	Pixel 1 green	0-255		255	255
24	Pixel 1 blue	0-255		255	255
25	Pixel 2 red	0-255		255	255
26	Pixel 2 green	0-255		255	255
27	Pixel 2 blue	0-255		255	255
28	Pixel 3 red	0-255		255	255
29	Pixel 3 green	0-255		255	255
30	Pixel 3 blue	0-255		255	255
31	Pixel 4 red	0-255		255	255
32	Pixel 4 green	0-255		255	255
33	Pixel 4 blue	0-255		255	255
34	Pixel 5 red	0-255		255	255
35	Pixel 5 green	0-255		255	255
36	Pixel 5 blue	0-255		255	255
37	Pixel 6 red	0-255		255	255
38	Pixel 6 green	0-255		255	255
39	Pixel 6 blue	0-255		255	255
40	Pixel 7 red	0-255		255	255
41	Pixel 7 green	0-255		255	255
42	Pixel 7 blue	0-255		255	255
43	Pixel 8 red	0-255		255	255
44	Pixel 8 green	0-255		255	255
45	Pixel 8 blue	0-255		255	255
46	Pixel 9 red	0-255		255	255
47	Pixel 9 green	0-255		255	255
48	Pixel 9 blue	0-255		255	255
49	Pixel 10 red	0-255		255	255
50	Pixel 10 green	0-255		255	255
51	Pixel 10 blue	0-255		255	255

52	Pixel 1 red	0-255		255	255
53	Pixel 11 green	0-255		255	255
54	Pixel 11 blue	0-255		255	255
55	Pixel 12 red	0-255		255	255
56	Pixel 12 green	0-255		255	255
57	Pixel 12 blue	0-255		255	255
58	Pixel 13 red	0-255		255	255
59	Pixel 13 green	0-255		255	255
60	Pixel 13 blue	0-255		255	255
61	Pixel 14 red	0-255		255	255
62	Pixel 14 green	0-255		255	255
63	Pixel 14 blue	0-255		255	255
64	Pixel 15 red	0-255		255	255
65	Pixel 15 green	0-255		255	255
66	Pixel 15 blue	0-255		255	255
67	Pixel 16 red	0-255		255	255
68	Pixel 16 green	0-255		255	255
69	Pixel 16 blue	0-255		255	255
70	Pixel 17 red	0-255		255	255
71	Pixel 17 green	0-255		255	255
72	Pixel 17 blue	0-255		255	255
73	Pixel 18 red	0-255		255	255
74	Pixel 18 green	0-255		255	255
75	Pixel 18 blue	0-255		255	255
76	Pixel 19 red	0-255		255	255
77	Pixel 19 green	0-255		255	255
78	Pixel 19 blue	0-255		255	255

ST2px - 97 channels - standard + pixel engine RGBW					
Ch	Function	Value	Description	Default	Highlight / locate
1	Red	0-255	Red min-max	255	255
2	Red fine	0-255	Red fine	255	255
3	Green	0-255	Green min--max	255	255
4	Green fine	0-255	Green fine	255	255
5	Blue	0-255	Blue min-max	255	255
6	Blue fine	0-255	Blue fine	255	255
7	White	0-255	White min--max	0	0
8	White fine	0-255	White fine	0	0
9	CTC	0-9	No function	0	0
		10	8000K		
		…	…		

		255	2500K		
10	Color macro	0-255		0	0
11	Shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
12	Dimmer	0-255	Dimmer	0	255
13	Dimmer fine	0-255	Dimmer fine	0	255
14	Pan	0-255	Pan	127	-
15	Pan fine	0-255	Pan fine	127	-
16	Tilt	0-255	Tilt	127	-
17	Tilt fine	0-255	Tilt fine	127	-
18	Function	0-37	No function	0	-
		38-42	Dimmer curve 1 - linear		
		43-47	Dimmer curve 2 - SCurve		
		48-52	Dimmer curve 3 - Square		
		53-57	Dimmer curve 4 - I square		
		58-102	No function		
		103-105	Main pixel engine on		
		106-190	No function		
		191-192	Dimmer fast		
		193-194	Dimmer smo-oth		
		195-255	No function		
19	Control	0-25	No function	0	-
		26-76	Zoom reset		
		77-127	P/T reset		
		128-255	Total reset		
20	Zoom	0-255	zoom min--max	127	-
21	Lens rotation	0-127	Lens index	0	-
		128-190	CCW lens rotation		
		191-192	Stop lens rota-tion		
		193-255	CW lens rota-tion		
22	Pixel 1 red	0-255		255	255

23	Pixel 1 green	0-255		255	255
24	Pixel 1 blue	0-255		255	255
25	Pixel 1 white	0-255		255	255
26	Pixel 2 red	0-255		255	255
27	Pixel 2 green	0-255		255	255
28	Pixel 2 blue	0-255		255	255
29	Pixel 2 white	0-255		255	255
30	Pixel 3 red	0-255		255	255
31	Pixel 3 green	0-255		255	255
32	Pixel 3 blue	0-255		255	255
33	Pixel 3 white	0-255		255	255
34	Pixel 4 red	0-255		255	255
35	Pixel 4 green	0-255		255	255
36	Pixel 4 blue	0-255		255	255
37	Pixel 4 white	0-255		255	255
38	Pixel 5 red	0-255		255	255
39	Pixel 5 green	0-255		255	255
40	Pixel 5 blue	0-255		255	255
41	Pixel 5 white	0-255		255	255
42	Pixel 6 red	0-255		255	255
43	Pixel 6 green	0-255		255	255
44	Pixel 6 blue	0-255		255	255
45	Pixel 6 white	0-255		255	255
46	Pixel 7 red	0-255		255	255
47	Pixel 7 green	0-255		255	255
48	Pixel 7 blue	0-255		255	255
49	Pixel 7 white	0-255		255	255
50	Pixel 8 red	0-255		255	255
51	Pixel 8 green	0-255		255	255
52	Pixel 8 blue	0-255		255	255
53	Pixel 8 white	0-255		255	255
54	Pixel 9 red	0-255		255	255
55	Pixel 9 green	0-255		255	255
56	Pixel 9 blue	0-255		255	255
57	Pixel 9 white	0-255		255	255
58	Pixel 10 red	0-255		255	255
59	Pixel 10 green	0-255		255	255
60	Pixel 10 blue	0-255		255	255
61	Pixel 10 white	0-255		255	255
62	Pixel 11 red	0-255		255	255
63	Pixel 11 green	0-255		255	255
64	Pixel 11 blue	0-255		255	255
65	Pixel 11 white	0-255		255	255
66	Pixel 12 red	0-255		255	255
67	Pixel 12 green	0-255		255	255

68	Pixel 12 blue	0-255		255	255
69	Pixel 12 white	0-255		255	255
70	Pixel 13 red	0-255		255	255
71	Pixel 13 green	0-255		255	255
72	Pixel 13 blue	0-255		255	255
73	Pixel 13 white	0-255		255	255
74	Pixel 14 red	0-255		255	255
75	Pixel 14 green	0-255		255	255
76	Pixel 14 blue	0-255		255	255
77	Pixel 14 white	0-255		255	255
78	Pixel 15 red	0-255		255	255
79	Pixel 15 green	0-255		255	255
80	Pixel 15 blue	0-255		255	255
81	Pixel 15 white	0-255		255	255
82	Pixel 16 red	0-255		255	255
83	Pixel 16 green	0-255		255	255
84	Pixel 16 blue	0-255		255	255
85	Pixel 16 white	0-255		255	255
86	Pixel 17 red	0-255		255	255
87	Pixel 17 green	0-255		255	255
88	Pixel 17 blue	0-255		255	255
89	Pixel 17 white	0-255		255	255
90	Pixel 18 red	0-255		255	255
91	Pixel 18 green	0-255		255	255
92	Pixel 18 blue	0-255		255	255
93	Pixel 18 white	0-255		255	255
94	Pixel 19 red	0-255		255	255
95	Pixel 19 green	0-255		255	255
96	Pixel 19 blue	0-255		255	255
97	Pixel 19 white	0-255		255	255

SH1px - 92ch - shapes + pixel engine RGB					
Ch	Function	Value	Description	Default	Highlight / locate
1	Red	0-255	Red min-max	255	255
2	Red fine	0-255	Red fine	255	255
3	Green	0-255	Green min--max	255	255
4	Green fine	0-255	Green fine	255	255
5	Blue	0-255	Blue min-max	255	255
6	Blue fine	0-255	Blue fine	255	255
7	White	0-255	White min--max	0	0
8	White fine	0-255	White fine	0	0

9	CTC	0-9	No function	0	0
		10	8000K		
		…	…		
		255	2500K		
10	Color macro	0-255		0	0
11	Shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
12	Dimmer	0-255	Dimmer	0	255
13	Dimmer fine	0-255	Dimmer fine	0	255
14	Pan	0-255	Pan	127	-
15	Pan fine	0-255	Pan fine	127	-
16	Tilt	0-255	Tilt	127	-
17	Tilt fine	0-255	Tilt fine	127	-
18	Function	0-37	No function	0	-
		38-42	Dimmer curve 1 - linear		
		43-47	Dimmer curve 2 - SCurve		
		48-52	Dimmer curve 3 - Square		
		53-57	Dimmer curve 4 - I square		
		58-102	No function		
		103-105	Main pixel engine on		
		106-190	No function		
		191-192	Dimmer fast		
		193-194	Dimmer smo-oth		
		195-255	No function		
19	Control	0-25	No function	0	-
		26-76	Zoom reset		
		77-127	P/T reset		
		128-255	Total reset		
20	Zoom	0-255	zoom min--max	127	-
21	Lens rotation	0-127	Lens index	0	-
		128-190	CCW lens rotation		
		191-192	Stop lens rota-tion		

		193-255	CW lens rotation		
22	Shape selection	0-7	Open	0	-
		8	Shape 1		
		9	Shape 2		
		…	…		
		70	Shape 63		
		71-255	No function		
23	Shape speed	0-127	Index position	0	-
		128-190	CCW rotation		
		191-192	Stop rotation		
		193-255	CW rotation		
24	Shape fade	0-255		0	-
25	Shape Red	0-255	Shape red intensity	255	255
26	Shape Green	0-255	Shape green intensity	255	255
27	Shape Blue	0-255	Shape blue intensity	255	255
28	Shape White	0-255	Shape white intensity	0	0
29	Shape Dimmer	0-255	Shape dimmer	255	255
30	Background dimmer	0-255	Background dimmer	255	255
31	Shape transition	0-255	Time between changes the shapes	0	0
32	Shape offset	0-255	Start position the shape	0	-
33	Shape shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
34	Background shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		

35	Background selection	0-8	Open	0	-
		9	Shape 1		
		10	Shape 2		
		…	…		
		23	Shape 15		
		24-255	No function		
36	Pixel 1 red	0-255		255	255
37	Pixel 1 green	0-255		255	255
38	Pixel 1 blue	0-255		255	255
39	Pixel 2 red	0-255		255	255
40	Pixel 2 green	0-255		255	255
41	Pixel 2 blue	0-255		255	255
42	Pixel 3 red	0-255		255	255
43	Pixel 3 green	0-255		255	255
44	Pixel 3 blue	0-255		255	255
45	Pixel 4 red	0-255		255	255
46	Pixel 4 green	0-255		255	255
47	Pixel 4 blue	0-255		255	255
48	Pixel 5 red	0-255		255	255
49	Pixel 5 green	0-255		255	255
50	Pixel 5 blue	0-255		255	255
51	Pixel 6 red	0-255		255	255
52	Pixel 6 green	0-255		255	255
53	Pixel 6 blue	0-255		255	255
54	Pixel 7 red	0-255		255	255
55	Pixel 7 green	0-255		255	255
56	Pixel 7 blue	0-255		255	255
57	Pixel 8 red	0-255		255	255
58	Pixel 8 green	0-255		255	255
59	Pixel 8 blue	0-255		255	255
60	Pixel 9 red	0-255		255	255
61	Pixel 9 green	0-255		255	255
62	Pixel 9 blue	0-255		255	255
63	Pixel 10 red	0-255		255	255
64	Pixel 10 green	0-255		255	255
65	Pixel 10 blue	0-255		255	255
66	Pixel 1 red	0-255		255	255
67	Pixel 11 green	0-255		255	255
68	Pixel 11 blue	0-255		255	255
69	Pixel 12 red	0-255		255	255
70	Pixel 12 green	0-255		255	255
71	Pixel 12 blue	0-255		255	255
72	Pixel 13 red	0-255		255	255
73	Pixel 13 green	0-255		255	255
74	Pixel 13 blue	0-255		255	255

75	Pixel 14 red	0-255		255	255
76	Pixel 14 green	0-255		255	255
77	Pixel 14 blue	0-255		255	255
78	Pixel 15 red	0-255		255	255
79	Pixel 15 green	0-255		255	255
80	Pixel 15 blue	0-255		255	255
81	Pixel 16 red	0-255		255	255
82	Pixel 16 green	0-255		255	255
83	Pixel 16 blue	0-255		255	255
84	Pixel 17 red	0-255		255	255
85	Pixel 17 green	0-255		255	255
86	Pixel 17 blue	0-255		255	255
87	Pixel 18 red	0-255		255	255
88	Pixel 18 green	0-255		255	255
89	Pixel 18 blue	0-255		255	255
90	Pixel 19 red	0-255		255	255
91	Pixel 19 green	0-255		255	255
92	Pixel 19 blue	0-255		255	255

SH2px - 111ch - shapes + pixel engine RGBW					
Ch	Function	Value	Description	Default	Highlight / locate
1	Red	0-255	Red min-max	255	255
2	Red fine	0-255	Red fine	255	255
3	Green	0-255	Green min--max	255	255
4	Green fine	0-255	Green fine	255	255
5	Blue	0-255	Blue min-max	255	255
6	Blue fine	0-255	Blue fine	255	255
7	White	0-255	White min--max	0	0
8	White fine	0-255	White fine	0	0
9	CTC	0-9	No function	0	0
		10	8000K		
		…	…		
		255	2500K		
10	Color macro	0-255		0	0
11	Shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		

		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
12	Dimmer	0-255	Dimmer	0	255
13	Dimmer fine	0-255	Dimmer fine	0	255
14	Pan	0-255	Pan	127	-
15	Pan fine	0-255	Pan fine	127	-
16	Tilt	0-255	Tilt	127	-
17	Tilt fine	0-255	Tilt fine	127	-
18	Function	0-37	No function	0	-
		38-42	Dimmer curve 1 - linear		
		43-47	Dimmer curve 2 - SCurve		
		48-52	Dimmer curve 3 - Square		
		53-57	Dimmer curve 4 - I square		
		58-102	No function		
		103-105	Main pixel engine on		
		106-190	No function		
		191-192	Dimmer fast		
		193-194	Dimmer smooth		
		195-255	No function		
19	Control	0-25	No function	0	-
		26-76	Zoom reset		
		77-127	P/T reset		
		128-255	Total reset		
20	Zoom	0-255	zoom min--max	127	-
21	Lens rotation	0-127	Lens index	0	-
		128-190	CCW lens rotation		
		191-192	Stop lens rotation		
		193-255	CW lens rotation		
22	Shape selection	0-7	Open	0	-
		8	Shape 1		
		9	Shape 2		
		…	…		
		70	Shape 63		
		71-255	No function		

23	Shape speed	0-127	Index position	0	-
		128-190	CCW rotation		
		191-192	Stop rotation		
		193-255	CW rotation		
24	Shape fade	0-255		0	-
25	Shape Red	0-255	Shape red intensity	255	255
26	Shape Green	0-255	Shape green intensity	255	255
27	Shape Blue	0-255	Shape blue intensity	255	255
28	Shape White	0-255	Shape white intensity	0	0
29	Shape Dimmer	0-255	Shape dimmer	255	255
30	Background dimmer	0-255	Background dimmer	255	255
31	Shape transition	0-255	Time between changes the shapes	0	0
32	Shape offset	0-255	Start position the shape	0	-
33	Shape shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
34	Background shutter	0-3	Closed	255	255
		4-103	Strobe		
		104-107	Open		
		108-207	Pulse strobe		
		208-212	Open		
		213-251	Random strobe		
		252-255	Open		
35	Background selection	0-8	Open	0	-
		9	Shape 1		
		10	Shape 2		
		…	…		
		23	Shape 15		
		24-255	No function		
36	Pixel 1 red	0-255		255	255
37	Pixel 1 green	0-255		255	255

38	Pixel 1 blue	0-255		255	255
39	Pixel 1 white	0-255		255	255
40	Pixel 2 red	0-255		255	255
41	Pixel 2 green	0-255		255	255
42	Pixel 2 blue	0-255		255	255
43	Pixel 2 white	0-255		255	255
44	Pixel 3 red	0-255		255	255
45	Pixel 3 green	0-255		255	255
46	Pixel 3 blue	0-255		255	255
47	Pixel 3 white	0-255		255	255
48	Pixel 4 red	0-255		255	255
49	Pixel 4 green	0-255		255	255
50	Pixel 4 blue	0-255		255	255
51	Pixel 4 white	0-255		255	255
52	Pixel 5 red	0-255		255	255
53	Pixel 5 green	0-255		255	255
54	Pixel 5 blue	0-255		255	255
55	Pixel 5 white	0-255		255	255
56	Pixel 6 red	0-255		255	255
57	Pixel 6 green	0-255		255	255
58	Pixel 6 blue	0-255		255	255
59	Pixel 6 white	0-255		255	255
60	Pixel 7 red	0-255		255	255
61	Pixel 7 green	0-255		255	255
62	Pixel 7 blue	0-255		255	255
63	Pixel 7 white	0-255		255	255
64	Pixel 8 red	0-255		255	255
65	Pixel 8 green	0-255		255	255
66	Pixel 8 blue	0-255		255	255
67	Pixel 8 white	0-255		255	255
68	Pixel 9 red	0-255		255	255
69	Pixel 9 green	0-255		255	255
70	Pixel 9 blue	0-255		255	255
71	Pixel 9 white	0-255		255	255
72	Pixel 10 red	0-255		255	255
73	Pixel 10 green	0-255		255	255
74	Pixel 10 blue	0-255		255	255
75	Pixel 10 white	0-255		255	255
76	Pixel 11 red	0-255		255	255
77	Pixel 11 green	0-255		255	255
78	Pixel 11 blue	0-255		255	255
79	Pixel 11 white	0-255		255	255
80	Pixel 12 red	0-255		255	255
81	Pixel 12 green	0-255		255	255
82	Pixel 12 blue	0-255		255	255

83	Pixel 12 white	0-255		255	255
84	Pixel 13 red	0-255		255	255
85	Pixel 13 green	0-255		255	255
86	Pixel 13 blue	0-255		255	255
87	Pixel 13 white	0-255		255	255
88	Pixel 14 red	0-255		255	255
89	Pixel 14 green	0-255		255	255
90	Pixel 14 blue	0-255		255	255
91	Pixel 14 white	0-255		255	255
92	Pixel 15 red	0-255		255	255
93	Pixel 15 green	0-255		255	255
94	Pixel 15 blue	0-255		255	255
95	Pixel 15 white	0-255		255	255
96	Pixel 16 red	0-255		255	255
97	Pixel 16 green	0-255		255	255
98	Pixel 16 blue	0-255		255	255
99	Pixel 16 white	0-255		255	255
100	Pixel 17 red	0-255		255	255
101	Pixel 17 green	0-255		255	255
102	Pixel 17 blue	0-255		255	255
103	Pixel 17 white	0-255		255	255
104	Pixel 18 red	0-255		255	255
105	Pixel 18 green	0-255		255	255
106	Pixel 18 blue	0-255		255	255
107	Pixel 18 white	0-255		255	255
108	Pixel 19 red	0-255		255	255
109	Pixel 19 green	0-255		255	255
110	Pixel 19 blue	0-255		255	255
111	Pixel 19 white	0-255		255	255

7. Display instruction

Address	001-512	
Run Mode	DMX 21CH/35CH/78CH/92CH/97CH	
	Auto Test	
	Manual Test	Pan/Tilt/Focus/RoTA/Color/R/G/B/W/Dimmer/Shutter
	Auto	
	Channel Test	Manual test each channel
Setup	Pan Reverse	Yes/No
	Tilt Reverse	Yes/No
	Screen Reverse	Yes/No
	No signal Hold	Yes/No
	Pan Angle	540/360/180
	Tilt Angle	270/180/90
	Language	EN/CH
	Dimmer Speed	Fast/Smooth
	Dimmer Curve	Linear/Square/I Sequare/Scurve
	Reset Function	Pan/Tilt / Focus / All
Sys Info	Ver: V1.0	
	Running Mode: DMX/Auto	
	Dmx Address: 001-255	
	Temperature: Open	
	Fixture hours	
	Save NUM	

8. Key Features:

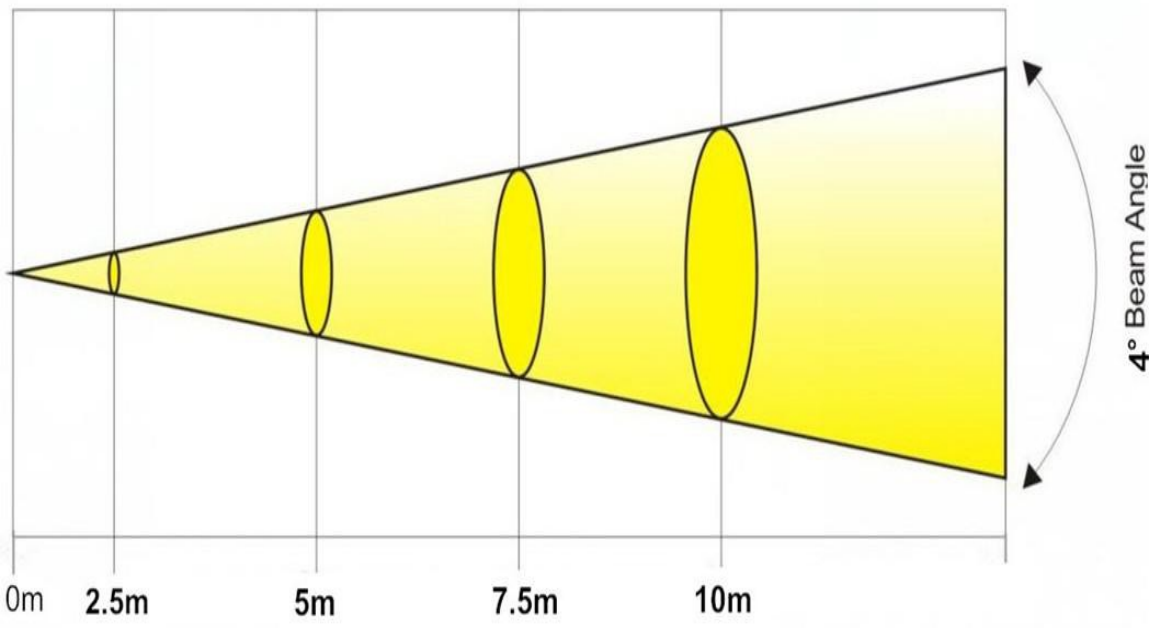
- Voltage: AC100V ~ 240V 50-60HZ
- Power: 450W
- LED Source: 19x15W high power RGBW 4 in 1 LEDs
- Zoom: 3,5 -60°
- Strobe: 0-20Hz
- Control Mode: DMX512, Auto-control, Master/slave
- DMX Channels: 21/35/38/78/97/107/92/102/111/121/217/95/114
- Dimmer: 0-100% linear dimmer
- Pan: 540°+16 bit fine Tilt: 270°+16 bit fine
- Display: LCD colorful display
- IP: IP20
- Fixture dimension: 41,5x 27,5x 42,5 cm
- N.W: 15 kg
- Case for SET: (F0902005)

Special Points.
1. Each LED can be controlled individually. With unique honeycomb designed lens
2. The front lens can rotate without limitation in forward and reverse direction to create amazing effects
3. Display screen can be turned upside down with 180 ° automatically to fit the installation in different place, Display can be equipped with rechargeable battery to set DMX address without power connection.
4. Can be used as beam, wash or effect light use (Kaleido effects)
5. The scanning position can be memory, it will be automatically reset without expected movement after rotation.
6. Fan cooling (fan will be change the speed with the temperature variation).
Temperature detecting system (If the temperature detected error, the light will stop working to protect the fixture)
7. Fast speed with 3 phase motors on Pan and Tilt

9. Photometric Data:

LUX Data of 4 degree beam angle:

R	**83700LUX@2.5m**	**2550LUX@5m**	**1150LUX@7.5m**
G	**13800LUX@2.5m**	**3800LUX@5m**	**1780LUX@7.5m**
B	**15300LUX@2.5m**	**4460LUX@5m**	**1970LUX@7.5m**
W	**18000LUX@2.5m**	**5300LUX@5m**	**2320LUX@7.5m**
RGBW	**50400LUX@2.5m**	**15500LUX@5m**	**6680LUX@7.5m**



10. 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