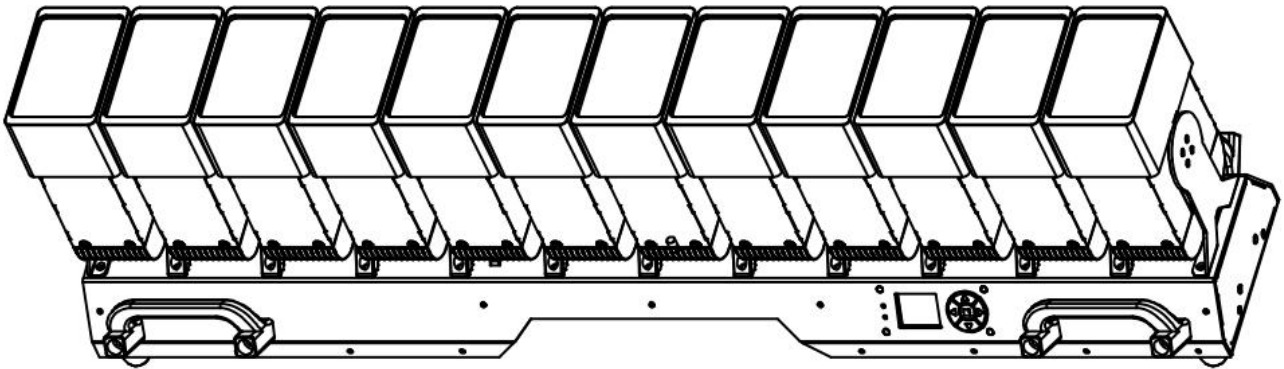


MEDUSA



USER MANUAL

KEEP THIS USER MANUAL FOR FUTURE NEEDS

Thank you for your patronage!

We are confident that our excellent products and service can satisfy you.

For your own safety, please read this user manual carefully before installing the device.

In order to install, operate, and maintain the lighting safety correctly.

We suggest that the installation and operation should be done by the verified technician and follow the instruction strictly.



CAUTION!

Keep this device away from rain and moisture!



CAUTION!

Unplug mains lead before device's installation, cleaning and maintenance!

Every person involved with the installation, operation and maintenance of this device has to:

-be qualified

-follow carefully the instructions of this manual

INTRODUCTION

Thank you for having chosen this professional moving head.

You will see you have acquired a powerful and versatile device.

Unpack the device. Inside the carton box you should find:

1. One power in cable
2. One 3 Pin DMX cable(5 Pin optional)
3. Two mounted brackets
4. One safety rope
5. One English user manual

(Flight case, Clamps are optional, please contact your dealer)

Please check carefully that there is no damage caused by transportation. Should there be any questions, please consult your dealer and don't install this device.

GENERAL GUIDELINES

This device is a lighting effect for a professional use on stages, TV, in discotheques, theaters, etc., The device was designed for indoor use only.

This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications in 6th page of this manual.

Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects.

Do not shake the device. Avoid brute force when installing or operating the device.

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. Please don't project the beam onto combustible substances. The minimum distance between light-output from the projector and the illuminated surface must be more than 0,5 meter.

If you use the quick lock cam in hanging up the fixture, please make sure the quick lock fasteners turned in the quick lock holes correctly.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

Please use the original packaging if the device is to be transported.

For safety reasons, please be aware that all modifications on the device are forbidden. If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, crash, etc.

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.

1. In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60degrees.

2. Always mount this unit in safe and stable matter.

The qualified professionals are allowed to carry out the lamp installation, operation and maintenance, but they must guarantee to operate in strict accordance with the instructions referred to.

▲ 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 temperatures.

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.

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.

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.



CAUTION!

Never touch the device during operation!
The housing may heat up!



CAUTION!

Never look directly into the light source,
As sensitive persons may suffer an epileptic shock.

Please be aware that damages caused by manual modifications to be the device are not subject to warranty. Keep away from children and non-professionals.

CLEANING AND MAINTENANCE

1. To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
2. Do not spill water or other liquids into or on to your unit.
3. During long periods of non-use, disconnect the unit's main power.
4. It should be installed in a well-ventilated place, at a distance of 50 centimeters or more with the walls. At the same time, please check if the fan and ventilation holes are unobstructed.

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. Fixations and installations 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.

TECHNICAL PARAMETERS

LIGHT SOURCE & OPTIC

Light source: 12pcs 60W 4in1 RGBW LED

LED Lifespan: 50K hrs

Color Temperature (range): 2700 to 8000K

Beam Angle Spot: 5.7

Beam Angle Flood: 26.8

Field Angle Spot: 99

Field Angle Flood: 33.9

Cutoff Angle Spot: 9.9.

Cutoff Angle Flood: 36.3.

Zoom Range: 5.7° to 36.3

Individual LED Control

EFFECTS

Dimming: 32bit 0~100% linear dimming

Strobe: 0 ~ 30Hz

CONTROL & PROGRAM

Control Protocol: DMX512/RDM, Optional Artnet.

DMX CH Model: CH20, CH169A, CH169B, CH53, CH101, CH155, CH179

(Chauvet COLORado PXL Curve 12 Compatible)

POWER SUPPLY

Consumption: 800w

Power connections: PowerCON IN/OUT

Data connections: 3pin(or5pin)DMX IN/OUT

MOVEMENT

Tilt: 200

Tilt Range: 60°, 180°, 200°

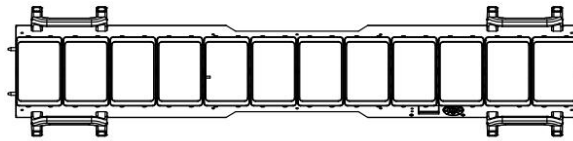
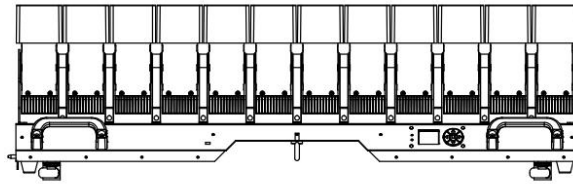
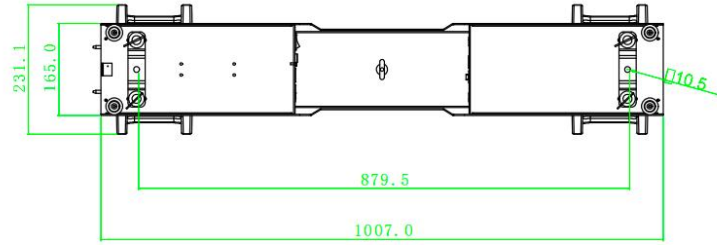
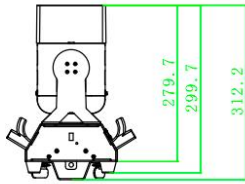
BODY

IP rating: IP20

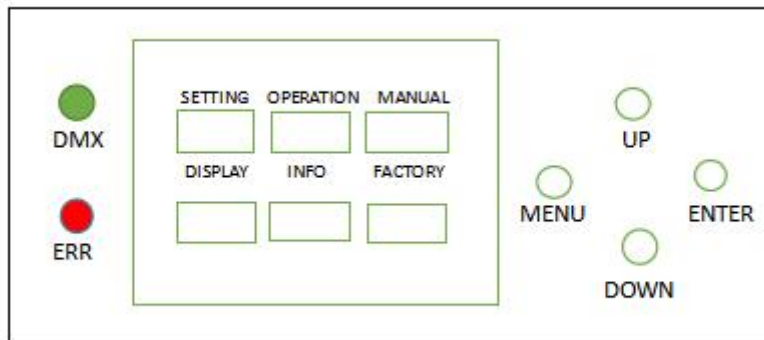
WEIGHT & SIZE

Size: 1000*300*165MM

Weight: 25.5KG



Display panel and button definition



menu: Enter/return to main menu

UP: Menu function upward selection/parameter increment

DOWN: Menu function down selection/parameter decrement

Enter: Select the menu function, and confirm and save when the menu function parameters are modified.

Menu Function

After turning on the power and resetting the whole machine, press the menu key to enter the main menu (the main menu interface will exit after 30 seconds of no operation), see the main menu function table for details (a total of 5 main menu options); press the up or down key to select the main menu, Enter the key to enter and modify the function parameters of each menu, and then press the key to save the current function parameters after modification (with power-off memory after saving).

MENU	SUBMEN	MENU FUNCTION DESCRIPTION
System settings	DMX Address	Modify the DMX address code up or down (the address code range is 001-512), press the confirm key to save, and the default is 001.
	Tilt Reverse	Up or down to modify the Y inversion on/off, press the confirm key to save, the default is off.
	No singal	Clear
	Advanced settings	
Operation mode	operating mode	Up or down to select the operation mode DMX/voice control/automatic, Enter key to save to save, and the default is DMX.
	channel selection	Up or down select the channel CH20, CH169A, CH169B, CH53. CH101, CH155, CH179, Enter key to save, the default is CH20.
	Tilt	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 128.
	Tilt Speed	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 128.
	Tilt mode	Modify the parameter value up or down (adjustable range

		000-255), Enter key to save, the default is 128.	
	Tilt mode fine	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 128.	
	Zoom	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Dimmer	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Strobe	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 000.	
	Red	Modify the brightness of the red lamp bead up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Green	Modify the brightness of the red lamp bead up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Blue	Modify the brightness of the red lamp bead up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	White	Modify the brightness of the red lamp bead up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Mode	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Speed	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Background	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Background Dimmer	Modify the parameter value up or down (adjustable range 000-255), Enter key to save, the default is 255.	
	Reset	Yes/No	
Display setting	Language selection	Select Chinese/EN (English) up or down, Enter key to save, and the default is Chinese.	
	Invert setting	Select up or down to turn off/on the inverted display setting, Enter key to save, and the default is off.	
	Screen protect	Select up or down to turn off/on the screen protect, Enter key to save, and it is turned on by default.	
	Software version	04XZ	
Factory setting	Show please enter the password! Change it up or down to 138, and then enter key to enter the factory setting..	1.Tilt1 calibration	Modify the parameters up or down (range 000-255), Enter key to save, the default is 128.
		2.Focus1 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		3.Tilt2 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		4.Focus2 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		5.Tilt3 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.

		6.Focus3 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		7.Tilt4 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		8.Focus4 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		9.Tilt5 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		10.Focus5 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		11.Tilt6 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		12.Focus6 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		13.Tilt7 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		14.Focus7 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		15.Tilt8 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		16.Focus8 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		17.Tilt9 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		18.Focus9 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		19.Tilt10 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		20.Focus10 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		21.Tilt11 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.

		22.Focus11 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		23.Tilt12 Calibration	Modify the focus 2 calibration (000-255) up or down, Enter key to save, the default is 128.
		24.Focus12 Calibration	Modify the focus 1 calibration (000-255) up or down, Enter key to save, the default is 128.
		25.Tilt travel	Modify the parameters up or down (range 000-255), Enter key to save, the default is 128.
		26.Focus travel	Modify the parameters up or down (range 000-255), Enter key to save,the default is 128.
		27.Red	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
		28.Green	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
		29.Blue	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
		30.White	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
			
		71.Red	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
		72.Green	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
		73.Blue	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
		74.White	Modify theparameters (000-255) up or down, Enter key to save,the default is 255.
		75.LED direction	Modify theparameters (000-255) up or down, Enter key to save,the default is 000.
		76.Electric current	Modify theparameters (000-255) up or down, Enter key to save,the default is 230.
		77.LOGO	Logo change
		78.Temperature	Temperature modify,the default is 45.
		79.Temperature-Fan	On/Off
		80.LED	Sequential switching
		81.Tilt/Focus direction	Modify theparameters (000-255) up or down, Enter key to save,the default is 000.

Master-slave control

2 or more identical lamps connected with DMX signal cables, all lamps are modified to any address from 001 to 512, any one is set as the master, and the other lamps are slaves, and all slave display screens do not flicker; when the master is used to adjust the gradient, pulse, jump, voice control, and auto effects, all slaves synchronize the gradient, pulse, jump, voice control, and auto effects.

Special attention:

1. Only one master can be set for a group of lamps. If there are multiple master, all lamps will flash randomly and not synchronized.
2. All lamps must be master-slave when the DMX512 console is turned off.

DMX512 control

After all the lamp address are set, connect all the lamps to the DMX512 console in parallel with the DMX signal cable. When the address stops flashing, it means that the DMX512 console signal has been sent to the lamp. Use the DMX512 console to control related functions according to the channel description.

Channel list

20 CH

CH	VALUE	FUNCTION
1	000-255	Tilt
2	000-255	Tilt fine
3	000-255	Tilt speed
4	000-255	Tilt mode
5	000-255	CTC
6	000-255	Color Macros
7	000-255	Gobo
8	000-255	LED built-in effects
9	000-255	LED built-in effect speed
10	000-255	LED built-in effect trailing time
11	000-255	LED background
12	000-255	LED background dimmer
13	000-255	Dimmer
14	000-255	Strobe
15	000-255	All zoom in
16	000-255	Function
17	000-255	R
18	000-255	G
19	000-255	B
20	000-255	W

53 CH

CH	VALUE	FUNCTION
1	000-255	Tilt
2	000-255	Tilt fine
3	000-255	Tilt2
4	000-255	Tilt2 fine

.....		
23	000-255	Tilt12
24	000-255	Tilt12 fine
25	000-255	Tilt speed
26	000-255	Tilt mode
27	000-255	CTC
28	000-255	Color Macros
29	000-255	Gobo
30	000-255	LED built-in effects
31	000-255	LED built-in effect speed
32	000-255	LED built-in effect trailing time
33	000-255	LED background
34	000-255	LED background dimmer
35	000-255	Dimmer
36	000-255	Strobe
37	000-255	Zoom in1
.....		
48	000-255	Zoom in12
49	000-255	Function
50	000-255	R
51	000-255	G
52	000-255	B
53	000-255	W

169A CH

CH	VALUE	FUNCTION
1	000-255	Function
2	000-255	Tilt speed
3	000-255	Tilt mode
4	000-255	CTC
5	000-255	Color Macros
6	000-255	Gobo
7	000-255	LED built-in effects
8	000-255	LED built-in effect speed
9	000-255	LED built-in effect trailing time
10	000-255	LED background
11	000-255	LED background dimmer
12	000-255	LED background dimmer fine
13	000-255	Strobe
14	000-255	Tilt 1
15	000-255	Tilt 1 fine
16	000-255	Zoom in 1
17	000-255	Dimmer 1
18	000-255	Dimmer 1 fine
19	000-255	R1
20	000-255	R1 fine

21	000-255	G1
22	000-255	G1 fine
23	000-255	B1
24	000-255	B1 fine
25	000-255	W1
26	000-255	W1 fine
27	000-255	Tilt 2
28	000-255	Tilt 2 fine
29	000-255	Zoom in 2
30	000-255	Dimmer 2
31	000-255	Dimmer 2 fine
32	000-255	R2
33	000-255	R2 fine
34	000-255	G2
35	000-255	G2 fine
36	000-255	B2
37	000-255	B2 fine
38	000-255	W2
39	000-255	W2 fine
40	000-255	Tilt 3
41	000-255	Tilt 3 fine
42	000-255	Zoom in 3
43	000-255	Dimmer 3
44	000-255	Dimmer 3 fine
45	000-255	R3
46	000-255	R3 fine
47	000-255	G3
48	000-255	G3 fine
49	000-255	B3
50	000-255	B3 fine
51	000-255	W3
52	000-255	W3 fine
53	000-255	Tilt 4
54	000-255	Tilt 4 fine
55	000-255	Zoom in 4
56	000-255	Dimmer 4
57	000-255	Dimmer 4 fine
58	000-255	R4
59	000-255	R4 fine
60	000-255	G4
61	000-255	G4 fine
62	000-255	B4
63	000-255	B4 fine
64	000-255	W4
65	000-255	W4 fine
66	000-255	Tilt 5
67	000-255	Tilt 5 fine

68	000-255	Zoom in 5
69	000-255	Dimmer 5
70	000-255	Dimmer 5 fine
71	000-255	R5
72	000-255	R5 fine
73	000-255	G5
74	000-255	G5 fine
75	000-255	B5
76	000-255	B5 fine
77	000-255	W5
78	000-255	W5 fine
79	000-255	Tilt 6
80	000-255	Tilt 6 fine
81	000-255	Zoom in 6
82	000-255	Dimmer 6
83	000-255	Dimmer 6 fine
84	000-255	R6
85	000-255	R6 fine
86	000-255	G6
87	000-255	G6 fine
88	000-255	B6
89	000-255	B6 fine
90	000-255	W6
91	000-255	W6 fine
92	000-255	Tilt 7
93	000-255	Tilt 7 fine
94	000-255	Zoom in 7
95	000-255	Dimmer 7
96	000-255	Dimmer 7 fine
97	000-255	R7
98	000-255	R7 fine
99	000-255	G7
100	000-255	G7 fine
101	000-255	B7
102	000-255	B7 fine
103	000-255	W7
104	000-255	W7 fine
105	000-255	Tilt 8
106	000-255	Tilt 8 fine
107	000-255	Zoom in 8
108	000-255	Dimmer 8
109	000-255	Dimmer 8 fine
110	000-255	R8
111	000-255	R8 fine
112	000-255	G8
113	000-255	G8 fine
114	000-255	B8

115	000-255	B8 fine
116	000-255	W8
117	000-255	W8 fine
118	000-255	Tilt 9
119	000-255	Tilt 9 fine
120	000-255	Zoom in 9
121	000-255	Dimmer 9
122	000-255	Dimmer 9 fine
123	000-255	R9
124	000-255	R9 fine
125	000-255	G9
126	000-255	G9 fine
127	000-255	B9
128	000-255	B9 fine
129	000-255	W9
130	000-255	W9 fine
131	000-255	Tilt 10
132	000-255	Tilt 10 fine
133	000-255	Zoom in 10
134	000-255	Dimmer 10
135	000-255	Dimmer 10 fine
136	000-255	R10
137	000-255	R10 fine
138	000-255	G10
139	000-255	G10 fine
140	000-255	B10
141	000-255	B10 fine
142	000-255	W10
143	000-255	W10 fine
144	000-255	Tilt 11
145	000-255	Tilt 11 fine
146	000-255	Zoom in 11
147	000-255	Dimmer 11
148	000-255	Dimmer 11 fine
149	000-255	R11
150	000-255	R11 fine
151	000-255	G11
152	000-255	G11 fine
153	000-255	B11
154	000-255	B11 fine
155	000-255	W11
156	000-255	W11 fine
157	000-255	Tilt 12
158	000-255	Tilt 12 fine
159	000-255	Zoom in 12
160	000-255	Dimmer 12
161	000-255	Dimmer 12 fine

162	000-255	R12
163	000-255	R12 fine
164	000-255	G12
165	000-255	G12 fine
166	000-255	B12
167	000-255	B12 fine
168	000-255	W12
169	000-255	W12 fine

169B CH

CH	VALUE	FUNCTION
1	000-255	Tilt 1
2	000-255	Tilt 1 fine
3	000-255	Zoom in 1
4	000-255	Dimmer 1
5	000-255	Dimmer 1 fine
6	000-255	Strobe 1
7	000-255	R1
8	000-255	R1 fine
9	000-255	G1
10	000-255	G1 fine
11	000-255	B1
12	000-255	B1 fine
13	000-255	W1
14	000-255	W1 fine
15	000-255	Tilt 2
16	000-255	Tilt 2 fine
17	000-255	Zoom in 2
18	000-255	Dimmer 2
19	000-255	Dimmer 2 fine
20	000-255	Strobe 2
21	000-255	R2
22	000-255	R2 fine
23	000-255	G2
24	000-255	G2 fine
25	000-255	B2
26	000-255	B2 fine
27	000-255	W2
28	000-255	W2 fine
29	000-255	Tilt 3
30	000-255	Tilt 3 fine
31	000-255	Zoom in 3
32	000-255	Dimmer 3
33	000-255	Dimmer 3 fine
34	000-255	Strobe 3
35	000-255	R3

36	000-255	R3 fine
37	000-255	G3
38	000-255	G3 fine
39	000-255	B3
40	000-255	B3 fine
41	000-255	W3
42	000-255	W3 fine
43	000-255	Tilt 4
44	000-255	Tilt 4 fine
45	000-255	Zoom in 4
46	000-255	Dimmer 4
47	000-255	Dimmer 4 fine
48	000-255	Strobe 4
49	000-255	R4
50	000-255	R4 fine
51	000-255	G4
52	000-255	G4 fine
53	000-255	B4
54	000-255	B4 fine
55	000-255	W4
56	000-255	W4 fine
57	000-255	Tilt 5
58	000-255	Tilt 5 fine
59	000-255	Zoom in 5
60	000-255	Dimmer 5
61	000-255	Dimmer 5 fine
62	000-255	Strobe 5
63	000-255	R5
64	000-255	R5 fine
65	000-255	G5
66	000-255	G5 fine
67	000-255	B5
68	000-255	B5 fine
69	000-255	W5
70	000-255	W5 fine
71	000-255	Tilt 6
72	000-255	Tilt 6 fine
73	000-255	Zoom in 6
74	000-255	Dimmer 6
75	000-255	Dimmer 6 fine
76	000-255	Strobe 6
77	000-255	R6
78	000-255	R6 fine
79	000-255	G6
80	000-255	G6 fine
81	000-255	B6
82	000-255	B6 fine

83	000-255	W6
84	000-255	W6 fine
85	000-255	Tilt 7
86	000-255	Tilt 7 fine
87	000-255	Zoom in 7
88	000-255	Dimmer 7
89	000-255	Dimmer 7 fine
90	000-255	Strobe 7
91	000-255	R7
92	000-255	R7 fine
93	000-255	G7
94	000-255	G7 fine
95	000-255	B7
96	000-255	B7 fine
97	000-255	W7
98	000-255	W7 fine
99	000-255	Tilt 8
100	000-255	Tilt 8 fine
101	000-255	Zoom in 8
102	000-255	Dimmer 8
103	000-255	Dimmer 8 fine
104	000-255	Strobe 8
105	000-255	R8
106	000-255	R8 fine
107	000-255	G8
108	000-255	G8 fine
109	000-255	B8
110	000-255	B8 fine
111	000-255	W8
112	000-255	W8 fine
113	000-255	Tilt 9
114	000-255	Tilt 9 fine
115	000-255	Zoom in 9
116	000-255	Dimmer 9
117	000-255	Dimmer 9 fine
118	000-255	Strobe 9
119	000-255	R9
120	000-255	R9 fine
121	000-255	G9
122	000-255	G9 fine
123	000-255	B9
124	000-255	B9 fine
125	000-255	W9
126	000-255	W9 fine
127	000-255	Tilt 10
128	000-255	Tilt 10 fine
129	000-255	Zoom in 10

130	000-255	Dimmer 10
131	000-255	Dimmer 10 fine
132	000-255	Strobe 10
133	000-255	R10
134	000-255	R10 fine
135	000-255	G10
136	000-255	G10 fine
137	000-255	B10
138	000-255	B10 fine
139	000-255	W10
140	000-255	W10 fine
141	000-255	Tilt 11
142	000-255	Tilt 11 fine
143	000-255	Zoom in 11
144	000-255	Dimmer 11
145	000-255	Dimmer 11 fine
146	000-255	Strobe 11
147	000-255	R11
148	000-255	R11 fine
149	000-255	G11
150	000-255	G11 fine
151	000-255	B11
152	000-255	B11 fine
153	000-255	W11
154	000-255	W11 fine
155	000-255	Tilt 12
156	000-255	Tilt 12 fine
157	000-255	Zoom in 12
158	000-255	Dimmer 12
159	000-255	Dimmer 12 fine
160	000-255	Strobe 12
161	000-255	R12
162	000-255	R12 fine
163	000-255	G12
164	000-255	G12 fine
165	000-255	B12
166	000-255	B12 fine
167	000-255	W12
168	000-255	W12 fine
169	000-255	Function

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CH	VALUE	FUNCTION
1	000-255	Tilt 1
2	000-255	Tilt 1 fine
3	000-255	Tilt 2

4	000-255	Tilt 2 fine
5	000-255	Tilt 3
6	000-255	Tilt 3 fine
7	000-255	Tilt 4
8	000-255	Tilt 4 fine
9	000-255	Tilt 5
10	000-255	Tilt 5 fine
11	000-255	Tilt 6
12	000-255	Tilt 6 fine
13	000-255	Tilt 7
14	000-255	Tilt 7 fine
15	000-255	Tilt 8
16	000-255	Tilt 8 fine
17	000-255	Tilt 9
18	000-255	Tilt 9 fine
19	000-255	Tilt 10
20	000-255	Tilt 11 fine
21	000-255	Tilt 11
22	000-255	Tilt 11 fine
23	000-255	Tilt 12
24	000-255	Tilt 12 fine
25	000-255	Tilt speed
26	000-255	Tilt mode
27	000-255	CTC
28	000-255	Color Macros
29	000-255	Gobo
30	000-255	LED built-in effects
31	000-255	LED built-in effect speed
32	000-255	LED built-in effect trailing time
33	000-255	LED background
34	000-255	LED background dimmer
35	000-255	Dimmer
36	000-255	Strobe
37	000-255	Zoom in 1
38	000-255	Zoom in 2
39	000-255	Zoom in 3
40	000-255	Zoom in 4
41	000-255	Zoom in 5
42	000-255	Zoom in 6
43	000-255	Zoom in 7
44	000-255	Zoom in 8
45	000-255	Zoom in 9
46	000-255	Zoom in 10
47	000-255	Zoom in 11
48	000-255	Zoom in 12
49	000-255	Function
50	000-255	R

51	000-255	G
52	000-255	B
53	000-255	W
54	000-255	R1
55	000-255	G1
56	000-255	B1
57	000-255	W1
58	000-255	R2
59	000-255	G2
60	000-255	B2
61	000-255	W2
62	000-255	R3
63	000-255	G3
64	000-255	B3
65	000-255	W3
66	000-255	R4
67	000-255	G4
68	000-255	B4
69	000-255	W4
70	000-255	R5
71	000-255	G5
72	000-255	B5
73	000-255	W5
74	000-255	R6
75	000-255	G6
76	000-255	B6
77	000-255	W6
78	000-255	R7
79	000-255	G7
80	000-255	B7
81	000-255	W7
82	000-255	R8
83	000-255	G8
84	000-255	B8
85	000-255	W8
86	000-255	R9
87	000-255	G9
88	000-255	B9
89	000-255	W9
90	000-255	R10
91	000-255	G10
92	000-255	B10
93	000-255	W10
94	000-255	R11
95	000-255	G11
96	000-255	B11
97	000-255	W11

98	000-255	R12
99	000-255	G12
100	000-255	B12
101	000-255	W12

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CH	VALUE	FUNCTION
1	000-255	Tilt 1
2	000-255	Tilt 1 fine
3	000-255	Tilt 2
4	000-255	Tilt 2 fine
5	000-255	Tilt 3
6	000-255	Tilt 3 fine
7	000-255	Tilt 4
8	000-255	Tilt 4 fine
9	000-255	Tilt 5
10	000-255	Tilt 5 fine
11	000-255	Tilt 6
12	000-255	Tilt 6 fine
13	000-255	Tilt 7
14	000-255	Tilt 7 fine
15	000-255	Tilt 8
16	000-255	Tilt 8 fine
17	000-255	Tilt 9
18	000-255	Tilt 9 fine
19	000-255	Tilt 10
20	000-255	Tilt 11 fine
21	000-255	Tilt 11
22	000-255	Tilt 11 fine
23	000-255	Tilt 12
24	000-255	Tilt 12 fine
25	000-255	Tilt speed
26	000-255	Tilt mode
27	000-255	CTC
28	000-255	Color Macros
29	000-255	Gobo
30	000-255	LED built-in effects
31	000-255	LED built-in effect speed
32	000-255	LED built-in effect trailing time
33	000-255	LED background
34	000-255	LED background dimmer
35	000-255	LED background dimmer fine
36	000-255	Dimmer
37	000-255	Dimmer fine
38	000-255	Strobe
39	000-255	Zoom in 1
40	000-255	Zoom in 2

41	000-255	Zoom in 3
42	000-255	Zoom in 4
43	000-255	Zoom in 5
44	000-255	Zoom in 6
45	000-255	Zoom in 7
46	000-255	Zoom in 8
47	000-255	Zoom in 9
48	000-255	Zoom in 10
49	000-255	Zoom in 11
50	000-255	Zoom in 12
51	000-255	Function
52	000-255	R
53	000-255	R fine
54	000-255	G
55	000-255	G fine
56	000-255	B
57	000-255	B fine
58	000-255	W
59	000-255	W fine
60	000-255	R1
61	000-255	R1fine
62	000-255	G1
63	000-255	G1 fine
64	000-255	B1
65	000-255	B1 fine
66	000-255	W1
67	000-255	W1 fine
68	000-255	R2
69	000-255	R2 fine
70	000-255	G2
71	000-255	G2 fine
72	000-255	B2
73	000-255	B2 fine
74	000-255	W2
75	000-255	W2 fine
76	000-255	R3
77	000-255	R3 fine
78	000-255	G3
79	000-255	G3 fine
80	000-255	B3
81	000-255	B3 fine
82	000-255	W3
83	000-255	W3 fine
84	000-255	R4
85	000-255	R4 fine
86	000-255	G4
87	000-255	G4 fine

88	000-255	B4
89	000-255	B4 fine
90	000-255	W4
91	000-255	W4 fine
92	000-255	R5
93	000-255	R5 fine
94	000-255	G5
95	000-255	G5 fine
96	000-255	B5
97	000-255	B5 fine
98	000-255	W5
99	000-255	W5 fine
100	000-255	R6
101	000-255	R6 fine
102	000-255	G6
103	000-255	G6 fine
104	000-255	B6
105	000-255	B6 fine
106	000-255	W6
107	000-255	W6 fine
108	000-255	R7
109	000-255	R7 fine
110	000-255	G7
111	000-255	G7 fine
112	000-255	B7
113	000-255	B7 fine
114	000-255	W7
115	000-255	W7 fine
116	000-255	R8
117	000-255	R8 fine
118	000-255	G8
119	000-255	G8 fine
120	000-255	B8
121	000-255	B8 fine
122	000-255	W8
123	000-255	W8 fine
124	000-255	R9
125	000-255	R9 fine
126	000-255	G9
127	000-255	G9 fine
128	000-255	B9
129	000-255	B9 fine
130	000-255	W9
131	000-255	W9 fine
132	000-255	R10
133	000-255	R10 fine
134	000-255	G10

135	000-255	G10 fine
136	000-255	B10
137	000-255	B10 fine
138	000-255	W10
139	000-255	W10 fine
140	000-255	R11
141	000-255	R11 fine
142	000-255	G11
143	000-255	G11 fine
144	000-255	B11
145	000-255	B11 fine
146	000-255	W11
147	000-255	W11 fine
148	000-255	R12
149	000-255	R12 fine
150	000-255	G12
151	000-255	G12 fine
152	000-255	B12
153	000-255	B12 fine
154	000-255	W12
155	000-255	W12 fine

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CH	VALUE	FUNCTION
1	000-255	Tilt 1
2	000-255	Tilt 1 fine
3	000-255	Tilt 2
4	000-255	Tilt 2 fine
5	000-255	Tilt 3
6	000-255	Tilt 3 fine
7	000-255	Tilt 4
8	000-255	Tilt 4 fine
9	000-255	Tilt 5
10	000-255	Tilt 5 fine
11	000-255	Tilt 6
12	000-255	Tilt 6 fine
13	000-255	Tilt 7
14	000-255	Tilt 7 fine
15	000-255	Tilt 8
16	000-255	Tilt 8 fine
17	000-255	Tilt 9
18	000-255	Tilt 9 fine
19	000-255	Tilt 10
20	000-255	Tilt 11 fine
21	000-255	Tilt 11
22	000-255	Tilt 11 fine
23	000-255	Tilt 12

24	000-255	Tilt 12 fine
25	000-255	Tilt speed
26	000-255	Tilt mode
27	000-255	CTC
28	000-255	Color Macros
29	000-255	Gobo
30	000-255	LED built-in effects
31	000-255	LED built-in effect speed
32	000-255	LED built-in effect trailing time
33	000-255	LED background
34	000-255	LED background dimmer
35	000-255	LED background dimmer fine
36	000-255	Dimmer
37	000-255	Dimmer fine
38	000-255	Strobe
39	000-255	Zoom in 1
40	000-255	Zoom in 2
41	000-255	Zoom in 3
42	000-255	Zoom in 4
43	000-255	Zoom in 5
44	000-255	Zoom in 6
45	000-255	Zoom in 7
46	000-255	Zoom in 8
47	000-255	Zoom in 9
48	000-255	Zoom in 10
49	000-255	Zoom in 11
50	000-255	Zoom in 12
51	000-255	Function
52	000-255	R
53	000-255	R fine
54	000-255	G
55	000-255	G fine
56	000-255	B
57	000-255	B fine
58	000-255	W
59	000-255	W fine
60	000-255	Dimmer 1
61	000-255	Dimmer 1 fine
62	000-255	R1
63	000-255	R1 fine
64	000-255	G1
65	000-255	G1 fine
66	000-255	B1
67	000-255	B1 fine
68	000-255	W1
69	000-255	W1 fine
70	000-255	Dimmer 2

71	000-255	Dimmer 2 fine
72	000-255	R2
73	000-255	R2 fine
74	000-255	G2
75	000-255	G2 fine
76	000-255	B2
77	000-255	B2 fine
78	000-255	W2
79	000-255	W2 fine
80	000-255	Dimmer 3
81	000-255	Dimmer 3 fine
82	000-255	R3
83	000-255	R3 fine
84	000-255	G3
85	000-255	G3 fine
86	000-255	B3
87	000-255	B3 fine
88	000-255	W3
89	000-255	W3 fine
90	000-255	Dimmer 4
91	000-255	Dimmer 4 fine
92	000-255	R4
93	000-255	R4 fine
94	000-255	G4
95	000-255	G4 fine
96	000-255	B4
97	000-255	B4 fine
98	000-255	W4
99	000-255	W4 fine
100	000-255	Dimmer 5
101	000-255	Dimmer 5 fine
102	000-255	R5
103	000-255	R5 fine
104	000-255	G5
105	000-255	G5 fine
106	000-255	B5
107	000-255	B5 fine
108	000-255	W5
109	000-255	W5 fine
110	000-255	Dimmer 6
111	000-255	Dimmer 6 fine
112	000-255	R6
113	000-255	R6 fine
114	000-255	G6
115	000-255	G6 fine
116	000-255	B6
117	000-255	B6 fine

118	000-255	W6
119	000-255	W6 fine
120	000-255	Dimmer 7
121	000-255	Dimmer 7 fine
122	000-255	R7
123	000-255	R7 fine
124	000-255	G7
125	000-255	G7 fine
126	000-255	B7
127	000-255	B7 fine
128	000-255	W7
129	000-255	W7 fine
130	000-255	Dimmer 8
131	000-255	Dimmer 8 fine
132	000-255	R8
133	000-255	R8 fine
134	000-255	G8
135	000-255	G8 fine
136	000-255	B8
137	000-255	B8 fine
138	000-255	W8
139	000-255	W8 fine
140	000-255	Dimmer 9
141	000-255	Dimmer 9 fine
142	000-255	R9
143	000-255	R9 fine
144	000-255	G9
145	000-255	G9 fine
146	000-255	B9
147	000-255	B9 fine
148	000-255	W9
149	000-255	W9 fine
150	000-255	Dimmer 10
151	000-255	Dimmer 10 fine
152	000-255	R10
153	000-255	R10 fine
154	000-255	G10
155	000-255	G10 fine
156	000-255	B10
157	000-255	B10 fine
158	000-255	W10
159	000-255	W10 fine
160	000-255	Dimmer 11
161	000-255	Dimmer 11 fine
162	000-255	R11
163	000-255	R11 fine
164	000-255	G11

165	000-255	G11 fine
166	000-255	B11
167	000-255	B11 fine
168	000-255	W11
169	000-255	W11 fine
170	000-255	Dimmer 12
171	000-255	Dimmer 12 fine
172	000-255	R12
173	000-255	R12 fine
174	000-255	G12
175	000-255	G12 fine
176	000-255	B12
177	000-255	B12 fine
178	000-255	W12
179	000-255	W12 fine

REMARK

The product has perfect performance and integrity packing. All users should be strictly comply with the warning and operating instructions as stated. Or we aren't in charge of any result by misusing.

Any damage resulting by misuse is not within the Company's warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.

Thank you again for your patronage!
We will be offering sincere service as always,
Wish you have a good lighting journey!