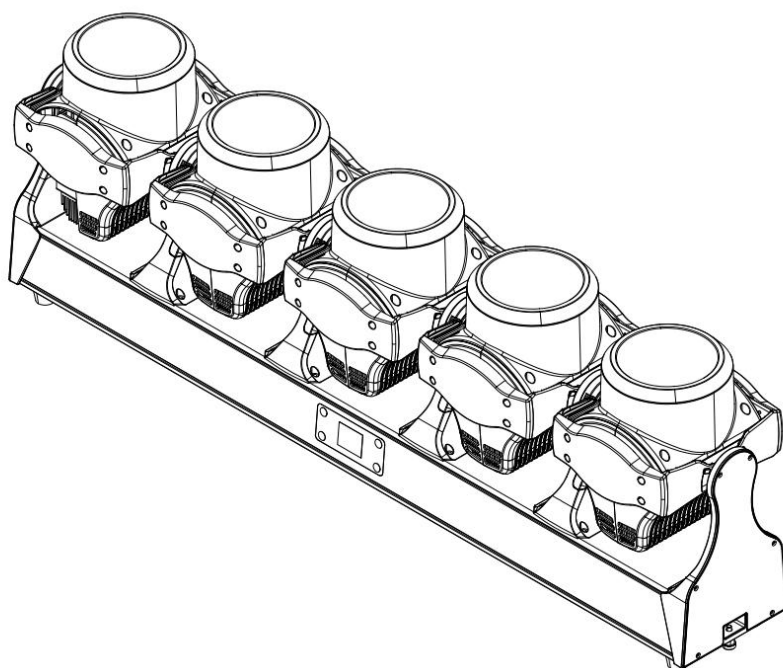


TB5 TORNADO



Manual

1.Safety Instructions

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Unpack and check carefully to ensure that there is no transportation damage before using the unit.

This product is for indoor use only. Use only in a dry location.

DO install and operate by qualified operator.

Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.

The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.

Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.

Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.

It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.

DO NOT connect the device to any dimmer pack.

Keep flammable materials away from the fixture while operating to avoid fire hazard.

Make sure the power cord is not crimped or damaged; replace it immediately if damaged.

Unit's surface temperature may reach up to 75 C. DO NOT touch the housing bare-handed during its operation.

Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.

DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly. DO NOT touch any wire during operation as there might be a hazard of electric shock. Avoid entanglement of the power cord with other wires.

The minimum distance to objects/surface must be more than 0.5 meters.

Disconnect mains power before fuse replacement or servicing.

Replace fuse only with the same type.

In the event of serious operating problem, stop using the unit immediately.

Never turn on and off the unit time after time.

The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

DO NOT open the housing as there are no user serviceable parts inside.

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

2. INSTALLATIONS

3. DO install and operate by qualified operator. Fixtures should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.

This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on trussing, or fix on a flat level surface (such as the ground or a wall). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

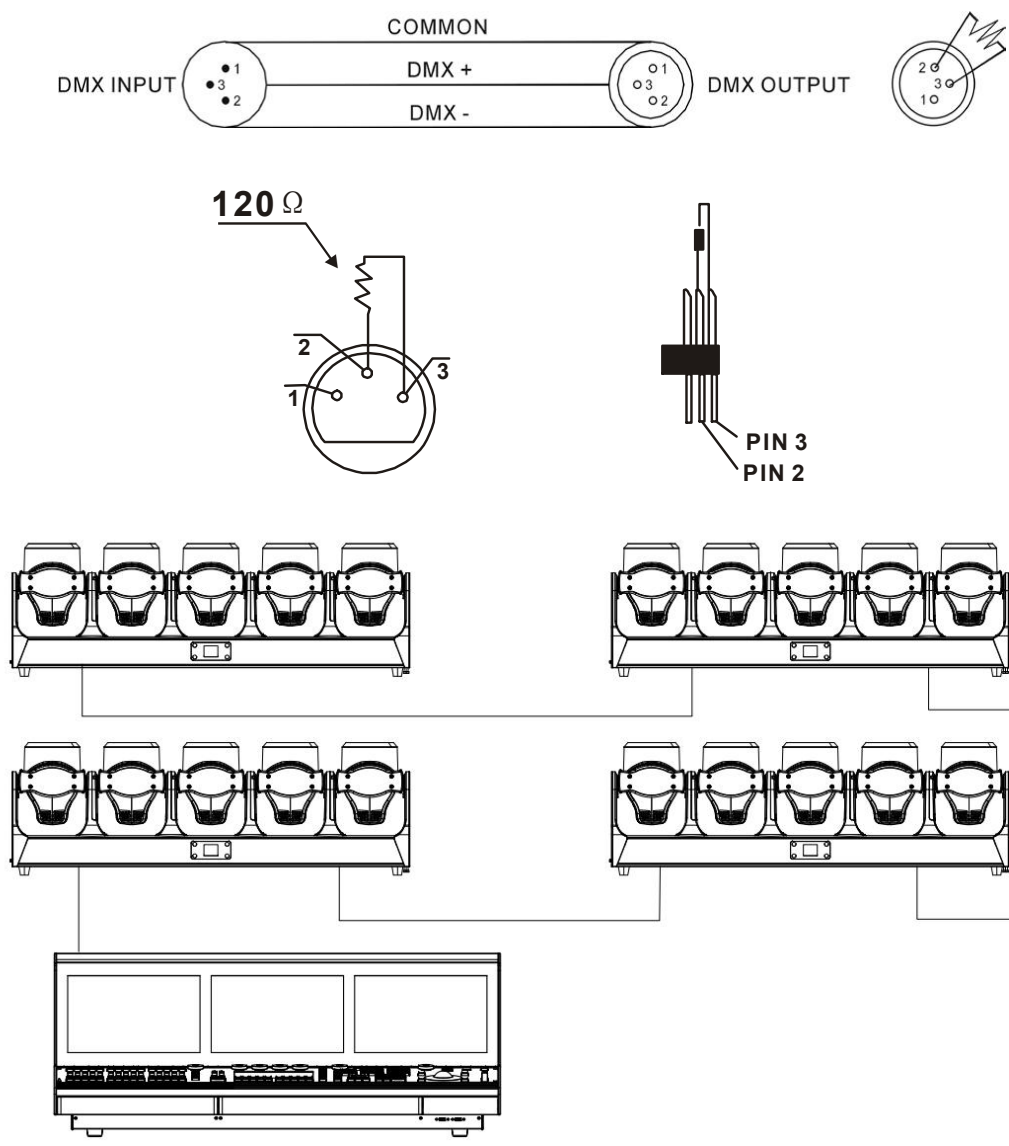
3. DMX-512 control connections

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.

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



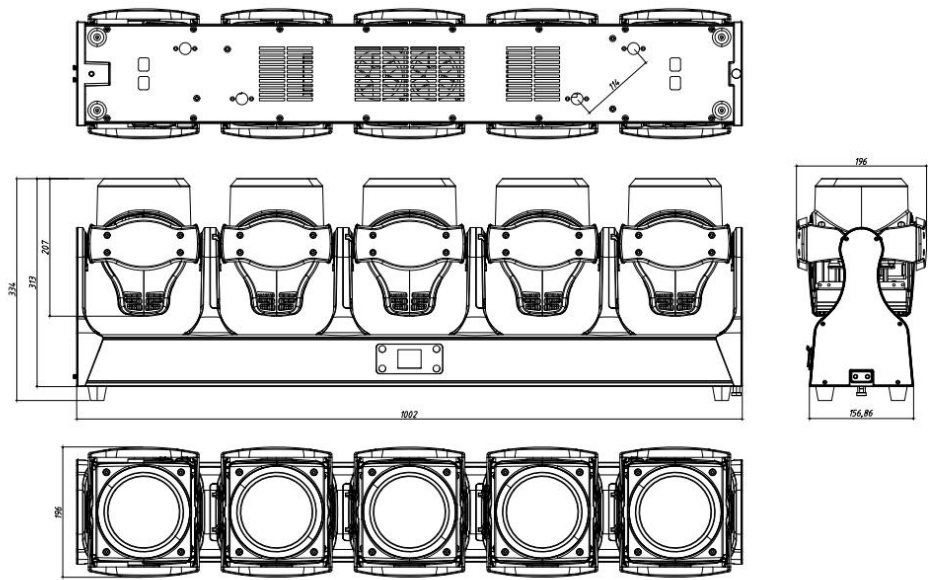
4.Address code setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press the MENU button to enter menu mode, select DMX Settings, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will blink in the display, use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 seconds to exit menu mode. Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel MODE	UNIT1 ADDRESS	UNIT2 ADDRESS	UNIT3 ADDRESS	UNIT4 ADDRESS
41CH	1	42	73	114
71CH	1	72	143	214

5. Fixture size



6. Technical parameters:

Input Voltage: 100-240V, 50/60Hz

Total power: 840W

Main light source: 5x120W RGBL LED

Auxiliary light: 120x0.5W RGB LED

LED life: >20000 hours

Zoom angle: 4~35 °

Control mode: DMX512, Auto, Sound, Master/Slave, RDM

Linear color temperature adjustment

Dimming: 0-100% 16bit linear dimming

Four dimming modes

Quick dimming and standard dimming can be set

Multiple refresh rate options available

Strobe: Multiple strobe speed effects

Channel : 41/71CH

Five independently controlled LED heads

Power socket: power connector input/output

Signal input/output: Three core or five core XLR head

Y axis magnetic coding positioning is more accurate

The lamp is equipped with seamless splicing locks (all equidistant)

Size: 1002x196x334mm

Feature

The fixture is equipped with 5 120W RGBL LEDs as its main light source, supplemented by an outer ring of 120 0.5W RGB LEDs. The fixture is equipped with five independently controlled LED heads, which independently control the XY axis and focusing of each LED, providing unlimited possibilities for artistic creation on stage. Quick focusing produces a sharp and saturated beam effect in beam mode, and a uniform and soft dyeing effect in dyeing mode. Excellent color mixing function and color macro effect, multiple speed strobe effects, rich dynamic built-in effects of auxiliary lighting, 0-100% smooth dimming, multiple dimming curves and refresh rates, can be quickly spliced horizontally, ensuring consistent and equidistant spacing for each.

7. Menu operation

Main Menu	Sub menu	description
Dmx Add	Address	1-512
SET	Run mode	DMX/sound/Auto1/Auto2
	Channel mode	41/71CH
	Invert pixel	OFF/ON
	Invert tilt	OFF/ON
	Reserve	OFF/ON
	Hall crct	OFF/ON
	Encoder crct	OFF/ON
	Signal keep	OFF/ON
	Screen Saver	OFF/ON
	Invert Screen	OFF/ON/Auto
	Update Slave	OFF/ON
	Language	中/EN
	Screen lock	OFF/ON
	Speed mode	Normal /fast
	Silent mode	OFF/ON
	Dimmer curve	curve1-4
	Dim frequency	4000KZ/2500KZ/1500KZ/1400KZ/1300KZ/1200KZ/1100KZ/1000KZ/900KZ/25000KZ/20000KZ/15000KZ/10000KZ/6000KZ/5000KZ
	LED SET	OFF/ON
	Load default	
Manual	Manual control channel values	000-255
Calib	Enter password	0000

Reset	Focus motor reset	Reset effect
	Y-axis reset	Reset scan
	Reset all motors	Reset all
Note	Reset info	Display specific information content
	DMX Data	Display specific DMX detection content
	Sensor information	Display the specific information of optocoupler and Hall
	Hardware version	Display hardware version number
	Software version	Display software version number

8. DMX512

41CH

41CH	Function	DMX value	explain
1	X1	0-255	0°-220°
2	X1 Fine	0-255	0°-2°
3	Y1	0-255	0°-60°
4	Y1 Fine	0-255	0°-2°
5	Zoom 1	0-255	0%-100%
6	X2	0-255	0°-220°
7	X2 Fine	0-255	0°-2°
8	Y2	0-255	0°-60°
9	Y2 Fine	0-255	0°-2°
10	Zoom 1	0-255	0%-100%
11	X3	0-255	0°-220°
12	X3 Fine	0-255	0°-2°
13	Y3	0-255	0°-60°
14	Y3 Fine	0-255	0°-2°
15	Zoom 3	0-255	0%-100%
16	X4	0-255	0°-220°
17	X4 Fine	0-255	0°-2°
18	Y4	0-255	0°-60°
19	Y4 Fine	0-255	0°-2°
20	Zoom 4	0-255	0%-100%
21	X5	0-255	0°-220°

22	X5 Fine	0-255	0°-2°
23	Y5	0-255	0°-60°
24	Y5 Fine	0-255	0°-2°
25	Zoom 5	0-255	0%-100%
26	Main red	0-255	0% -100%
27	Main green	0-255	0% -100%
28	Main blue	0-255	0% -100%
29	Main lemon yellow	0-255	0% -100%
30	Main color temperature	0	No function
		1-255	8000K-2500K
31	Main color	0-9	No function
		10-16	LEE 790 - Moroccan Pink
		17-23	LEE 157 - Pink
		24-30	LEE 332 - Special Rose Pink
		31-37	LEE 328 - Follies Pink
		38-44	LEE 345 - Fuchsia Pink
		45-51	LEE 194 - Surprise Pink
		52-58	LEE 181 - Congo Blue
		59-65	LEE 071 - Tokyo Blue
		66-72	LEE 120 - Deep Blue
		73-79	LEE 079 - Just Blue
		80-86	LEE 132 - Medium Blue
		87-93	LEE 200 - Double CT Blue
		94-100	LEE 161 - State Blue
		101-107	LEE 201 - Full CT Blue
		108-114	LEE 202 - Half CT Blue
		115-121	LEE 117 - Steel Blue
		122-128	LEE 353 - Lighter Blue
		129-135	LEE 118 - Light Blue
		136-142	LEE 116 - Medium Blue Green
		143-149	LEE 124 - Dark Green
		150-156	LEE 139 - Primary Green
		157-163	LEE 089 - Moss Green
		164-170	LEE 122 - Fern Green
		171-177	LEE 738 - JAS Green
		178-184	LEE 088 - Lime Green
		185-191	LEE 100 - Spring Yellow
		192-198	LEE 104 - Deep Amber
		199-205	LEE 179 - Chrome Orange
		206-212	LEE 105 - Orange
		213-219	LEE 021 - Gold Amber
		220-226	LEE 778 - Millennium Gold

		227-233	LEE 135 - Deep Gold Amber
		234-255	LEE 164 - Flame Red
32	Halo red	0-255	0% -100%
33	Halo green	0-255	0% -100%
34	Halo blue	0-255	0% -100%
35	Halo Effect & Speed	0-15	No function
		16-31	Effect 1, from fast to slow
		32-47	Effect 2, from fast to slow
		48-63	Effect 3, from fast to slow
		64-79	Effect 4, from fast to slow
		80-95	Effect 5, from fast to slow
		96-111	Effect 6, from fast to slow
		112-127	Effect 7, from fast to slow
		128-143	Effect 8, from fast to slow
		144-159	Effect 9, from fast to slow
		160-175	Effect 10, from fast to slow
		176-191	Effect of the 11, from fast to slow
		192-207	Effect of the 12, from fast to slow
		208-223	Effect 13, from fast to slow
		224-239	Effect 14, from fast to slow
		240-255	Effect 15, from fast to slow
36	All dimmer	0-255	0%-100%
37	All dimmer fine	0-255	0%-100%16bit
38	Main strobe	0-7	Close
		8-15	open
		16-131	strobe, from slow to fast
		132-139	open
		140-181	Open fast and slow off, from slow to fast
		182-189	open
		190-231	Open it off slowly and turn it off fast, from slow to fast
		232-239	open
		240-247	Random strobe, from slow to fast
		248-255	open
39	Halo strobe	0-7	Close
		8-15	open
		16-131	strobe, from slow to fast
		132-139	open
		140-181	Open fast and slow off, from slow to fast
		182-189	open

		190-231	Open it off slowly and turn it off fast, from slow to fast
		232-239	open
		240-247	Random strobe, from slow to fast
		248-255	open
40	XY speed	0-255	From fast to slow
41	function	0-29	No function
		30-39	Dimmer curve: curve is linear
		40-49	Dimmer curve: square rate
		50-59	Dimmer curve: inverse square rate
		60-69	Dimmer curve: S curve
		70-122	No function
		123	900HZ
		124	1000HZ
		125	1100HZ
		126	1200HZ
		127	1300HZ
		128	1400HZ
		129	1500HZ
		130	2500HZ
		131	4000HZ
		132	5000HZ
		133	6000HZ
		134	10KHZ
		135	15KHZ
		136	20KHZ
		137	25KHZ
		138-139	No function
		140-149	XY axis reset
		150-159	Head reset
		160-199	No function
		200-209	All reset
		210-255	No function

71CH

71CH	Function	DMX value	explain
1	X1	0-255	0°-220°
2	X1 fine	0-255	0°-2°
3	Y1	0-255	0°-60°
4	Y 1 fine	0-255	0°-2°
5	Main 1 red	0-255	0% -100%
6	Main 1 green	0-255	0% -100%
7	Main 1 blue	0-255	0% -100%
8	Main 1 lemon yellow	0-255	0% -100%
9	Zoom 1	0-255	0%-100%
10	Halo 1 red	0-255	0% -100%
11	Halo 1 green	0-255	0% -100%
12	Halo 1 blue	0-255	0% -100%
13	Halo 1 Effect & Speed	0-15	No function
		16-31	Effect 1, from fast to slow
		32-47	Effect 2, from fast to slow
		48-63	Effect 3, from fast to slow
		64-79	Effect 4, from fast to slow
		80-95	Effect 5, from fast to slow
		96-111	Effect 6, from fast to slow
		112-127	Effect 7, from fast to slow
		128-143	Effect 8, from fast to slow
		144-159	Effect 9, from fast to slow
		160-175	Effect 10, from fast to slow
		176-191	Effect of the 11, from fast to slow
		192-207	Effect of the 12, from fast to slow
		208-223	Effect 13, from fast to slow
		224-239	Effect 14, from fast to slow
		240-255	Effect 15, from fast to slow
14	X2	0-255	0°-220°
15	X2 fine	0-255	0°-2°
16	Y 2	0-255	0°-60°

17	Y 2 fine	0-255	0°-2°
18	Main 2 red	0-255	0% -100%
19	Main 2 green	0-255	0% -100%
20	Main 2 blue	0-255	0% -100%
21	Main 2 lemon yellow	0-255	0% -100%
22	Zoom2	0-255	0% -100%
23	Halo 2 red	0-255	0% -100%
24	Halo 2 green	0-255	0% -100%
25	Halo 2 blue	0-255	0% -100%
26	Halo 2 Effect & Speed	0-15	No function
		16-31	Effect 1, from fast to slow
		32-47	Effect 2, from fast to slow
		48-63	Effect 3, from fast to slow
		64-79	Effect 4, from fast to slow
		80-95	Effect 5, from fast to slow
		96-111	Effect 6, from fast to slow
		112-127	Effect 7, from fast to slow
		128-143	Effect 8, from fast to slow
		144-159	Effect 9, from fast to slow
		160-175	Effect 10, from fast to slow
		176-191	Effect of the 11, from fast to slow
		192-207	Effect of the 12, from fast to slow
		208-223	Effect 13, from fast to slow
		224-239	Effect 14, from fast to slow
		240-255	Effect 15, from fast to slow
27	X3	0-255	0°-220°
28	X3 fine	0-255	0°-2°
29	Y3	0-255	0°-60°
30	Y3 fine	0-255	0°-2°
31	Main 3 red	0-255	0% -100%
32	Main 3 green	0-255	0% -100%
33	Main 3 blue	0-255	0% -100%
34	Main 3 lemon yellow	0-255	0% -100%
35	Zoom 3	0-255	0% -100%
36	Halo 3 red	0-255	0% -100%
37	Halo 3 green	0-255	0% -100%

38	Halo 3 blue	0-255	0% -100%
39	Halo 3 Effect & Speed	0-15	No function
		16-31	Effect 1, from fast to slow
		32-47	Effect 2, from fast to slow
		48-63	Effect 3, from fast to slow
		64-79	Effect 4, from fast to slow
		80-95	Effect 5, from fast to slow
		96-111	Effect 6, from fast to slow
		112-127	Effect 7, from fast to slow
		128-143	Effect 8, from fast to slow
		144-159	Effect 9, from fast to slow
		160-175	Effect 10, from fast to slow
		176-191	Effect of the 11, from fast to slow
		192-207	Effect of the 12, from fast to slow
		208-223	Effect 13, from fast to slow
		224-239	Effect 14, from fast to slow
		240-255	Effect 15, from fast to slow
40	X4	0-255	0°-220°
41	X4 fine	0-255	0°-2°
42	Y4	0-255	0°-60°
43	Y4 fine	0-255	0°-2°
44	Main 4 red	0-255	0% -100%
45	Main 4 green	0-255	0% -100%
46	Main 4 blue	0-255	0% -100%
47	Main 4 lemon yellow	0-255	0% -100%
48	Zoom 4	0-255	0% -100%
49	Halo 4 red	0-255	0% -100%
50	Halo 4 green	0-255	0% -100%
51	Halo 4 blue	0-255	0% -100%
52	Halo 4 Effect & Speed	0-15	No function
		16-31	Effect 1, from fast to slow
		32-47	Effect 2, from fast to slow
		48-63	Effect 3, from fast to slow
		64-79	Effect 4, from fast to slow
		80-95	Effect 5, from fast to slow
		96-111	Effect 6, from fast to slow
		112-127	Effect 7, from fast to slow
		128-143	Effect 8, from fast to slow

		144-159	Effect 9, from fast to slow
		160-175	Effect 10, from fast to slow
		176-191	Effect of the 11, from fast to slow
		192-207	Effect of the 12, from fast to slow
		208-223	Effect 13, from fast to slow
		224-239	Effect 14, from fast to slow
		240-255	Effect 15, from fast to slow
53	X5	0-255	0°-220°
54	X5 fine	0-255	0°-2°
55	Y5	0-255	0°-60°
56	Y5 fine	0-255	0°-2°
57	Main 5 red	0-255	0% -100%
58	Main 5 green	0-255	0% -100%
59	Main 5 blue	0-255	0% -100%
60	Main 5 lemon yellow	0-255	0% -100%
61	Zoom 5	0-255	0% -100%
62	Halo 5 red	0-255	0% -100%
63	Halo 5 green	0-255	0% -100%
64	Halo 5 blue	0-255	0% -100%
65	Halo 5 Effect & Speed	0-15	No function
		16-31	Effect 1, from fast to slow
		32-47	Effect 2, from fast to slow
		48-63	Effect 3, from fast to slow
		64-79	Effect 4, from fast to slow
		80-95	Effect 5, from fast to slow
		96-111	Effect 6, from fast to slow
		112-127	Effect 7, from fast to slow
		128-143	Effect 8, from fast to slow
		144-159	Effect 9, from fast to slow
		160-175	Effect 10, from fast to slow
		176-191	Effect of the 11, from fast to slow
		192-207	Effect of the 12, from fast to slow
		208-223	Effect 13, from fast to slow
		224-239	Effect 14, from fast to slow
		240-255	Effect 15, from fast to slow
66	All dimmer	0-255	0%-100%
67	All dimmer fine	0-255	0%-100%16bit

68	Main strobe	0-7	Close
		8-15	open
		16-131	strobe, from slow to fast
		132-139	open
		140-181	Open fast and slow off, from slow to fast
		182-189	open
		190-231	Open it off slowly and turn it off fast, from slow to fast
		232-239	open
		240-247	Random strobe, from slow to fast
		248-255	open
69	Halo strobe	0-7	Close
		8-15	open
		16-131	strobe, from slow to fast
		132-139	open
		140-181	Open fast and slow off, from slow to fast
		182-189	open
		190-231	Open it off slowly and turn it off fast, from slow to fast
		232-239	open
		240-247	Random strobe, from slow to fast
		248-255	open
70	XY speed	0-255	From fast to slow
71	function	0-29	No function
		30-39	Dimmer curve: The curve is linear
		40-49	Dimmer curve: square rate
		50-59	Dimmer curve: inverse square rate
		60-69	Dimmer curve: S curve
		70-122	No function
		123	900HZ
		124	1000HZ
		125	1100HZ
		126	1200HZ
		127	1300HZ
		128	1400HZ
		129	1500HZ
		130	2500HZ
		131	4000HZ
		132	5000HZ
		133	6000HZ

		134	10KHZ
		135	15KHZ
		136	20KHZ
		137	25KHZ
		138-139	No function
		140-149	XY axis reset
		150-159	Head reset
		160-199	No function
		200-209	All reset
		210-255	No function

9.To maintain the good condition of the product and extend its service life, we recommend routine cleaning of the product.

1. Clean the external and internal lenses of the product every week to prevent reduced light output due to lens dust accumulation.
2. Clean the fan every week.
3. Every three months, a professional electrical engineer conducts a detailed circuit inspection of the product to ensure that the circuit contacts are in good condition to prevent aging caused by overheating.

We suggest regularly cleaning the product, please be careful not to use damp or burlap, and never use alcohol or solvents for cleaning.