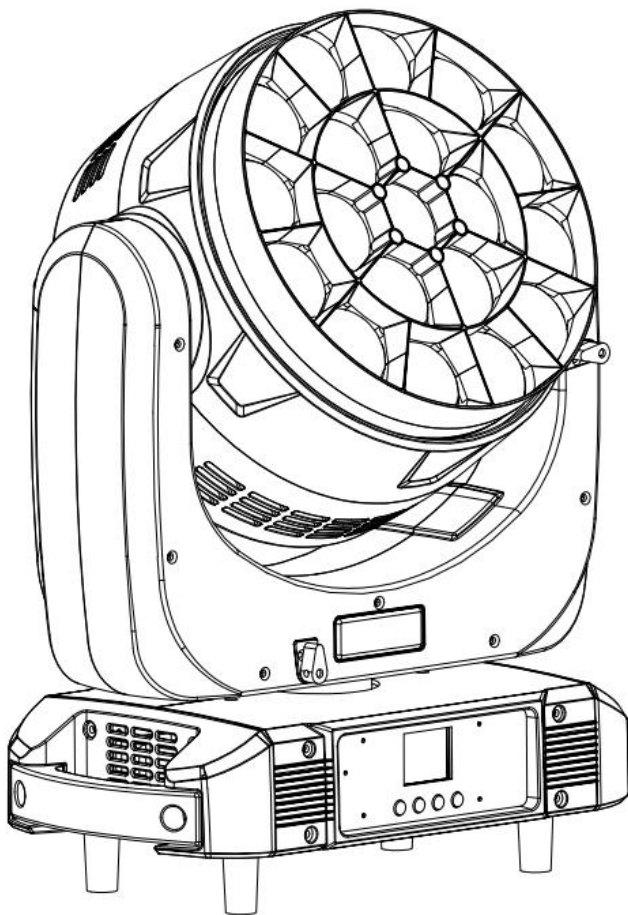


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## Bee eye Zoom 19\*40w moving head



User manual

Please read the instructions carefully before use

# TABLE OF CONTENTS

|                                   |       |
|-----------------------------------|-------|
| 1. Safety Instructions .....      | 3- 4  |
| 2. Technical Specifications ..... | 5     |
| 3. Lux Date.....                  | 6     |
| 4. How To Control The Unit.....   | 7-9   |
| 5. DMX Channel List.....          | 10-38 |
| 6. Shape.....                     | 39    |
| 7. Trouble shooting .....         | 41    |
| 8. Fixture Cleaning .....         | 42    |

## statement

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can't be responsible for any malfunction & problem owing to ignore the 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 booklet.

- Unpack and check carefully there is no transportation damage before using the unit.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The unit is for indoor use only. Use only in a dry location.
- The unit must be installed in a location with adequate ventilation, at least 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect main power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this unit. Do not handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is  $T_a: 40^{\circ}\text{C}$ . Do not operate it where the temperature is higher than this Unit surface temperature may reach up to  $85^{\circ}\text{C}$ . Do not touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Do not touch any wire during operation as high voltage might be causing electric shock.

## **Warning:**

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Do not open the unit within five minutes after switching off.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

## **Caution:**

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

## **Installation:**

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

## 2. Technical Specifications

### Light Sources

19\*40W 4IN1 RGBW LED

Beam Angle:3.5°- 50°

Power Consumption: 640w

Power Voltage: AC 100-240V, 50/60Hz

Dimension: 376\*280\*420.5mm

Net Weight:14.5 Kgs

Carton package 1in1 size: 53.5\*39\*49.5cm

Gross Weight: 18Kgs

Flight Case 1in2 size: 97\*46\*64cm

Gross Weight: 62 Kgs

### Control

DMX Channel:21/23/35/78/92/97/99 Channels

Control Modes: DMX512/master-Slave/Auto Run/Music

### Pan/Tilt

Pan: 540°/ 360°, Tilt: 270°

Pan/Tilt Resolution: 8/16 bit

### Construction

Display:180° reversible 1.8 inch TFT colorful Display

Data In/Out socket: 3-pin & 5-pin XLR sockets

Power Socket: Power Con in/out

Protection Rating: IP20

### Features

LED single control, can display arrows, numbers, letters and patterns

High-efficiency optical system, wonderful flower effect plus zoom

Fan work speed auto adjustable with head temperature

Led temperature protection & Fan run speed automatic based on the head temperature.

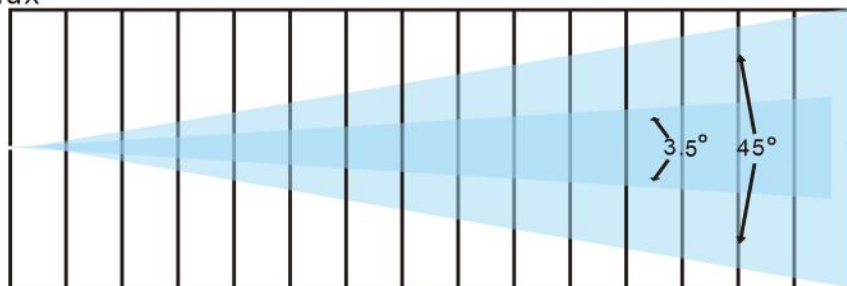
# 3 LUX Date

Beam Angle = 3.5°

|          |        |       |       |       |
|----------|--------|-------|-------|-------|
| R lux    | 25900  | 13500 | 6350  | 2530  |
| G lux    | 57300  | 28000 | 13300 | 5510  |
| B lux    | 10100  | 5100  | 2690  | 1020  |
| W lux    | 70000  | 35700 | 19000 | 7060  |
| 4in1 lux | 142000 | 73700 | 35000 | 14400 |

Beam Angle = 45°

|          |       |      |      |     |
|----------|-------|------|------|-----|
| R lux    | 10300 | 1000 | 412  | 163 |
| G lux    | 22300 | 2140 | 907  | 382 |
| B lux    | 4260  | 407  | 173  | 72  |
| W lux    | 27700 | 2630 | 1100 | 456 |
| 4in1 lux | 57300 | 5490 | 2320 | 744 |



Distance (m)

1

3

5

8

Spot diameter (m) 3.5°

0.30

0.60

0.74

1.20

Spot diameter (m) 45°

0.90

2.70

3.80

## 4. How To Control The Unit



Menu

Up

Down

Enter

### Display:

|       |                                          |
|-------|------------------------------------------|
| MENU  | To select the programming functions      |
| DOWN  | To go backward in the selected functions |
| UP    | To go forward in the selected functions  |
| ENTER | To confirm the selected functions        |

### Set DMX Address Code

- 1 Press **"Menu"** to "Set DMX Address", and press **"ENTER"** keys to enter into
- 2 Show "Set DMX Address DMX Address:001", Press the **"UP and DOWN"** keys to amended
- 3 Press **"ENTER"** keys to save and Exit, Press the **"MENU"** Keys does not save and Exit

|      |            |                   |                                |
|------|------------|-------------------|--------------------------------|
| Menu | Pan Degree | 1) 540 ° , 2)360° | X-axis running angle selection |
|      | Mic Sense  | 001 - 100         | Sound sensitivity adjustment   |

|             |                             |                             |                                                    |
|-------------|-----------------------------|-----------------------------|----------------------------------------------------|
|             | Language                    | English                     | Chinese                                            |
|             | No Signal                   | 1.Black Out 2.Hold          | Set the state when the machine has no signal input |
|             | Fan Set                     | 1.Auto 2. Low 3.High        | Set fan speed                                      |
|             | Reset                       | Yes                         | No                                                 |
|             | Default                     | Yes                         | No                                                 |
|             | Adjust                      | Pass Word: ****             |                                                    |
|             |                             | Pan                         | 0 - 255                                            |
|             |                             | Tilt                        | 0 - 255                                            |
|             |                             | Focus                       | 0 - 255                                            |
|             |                             | Rota                        | 0 - 255                                            |
|             |                             | Red                         | 0 - 255                                            |
|             |                             | Green                       | 0 - 255                                            |
|             |                             | Blue                        | 0 - 255                                            |
|             |                             | White                       | 0 - 255                                            |
| Address     | Setting from 001 - 512      |                             |                                                    |
| Reverse     | Forward or reversed setting | Pan                         | 1.Yes                                              |
|             |                             |                             | 2.No                                               |
|             |                             | Tilt                        | 1.Yes                                              |
|             |                             |                             | 2.No                                               |
|             |                             | Display                     | 1.Yes                                              |
|             |                             |                             | 2.No                                               |
| Information | 1.CH Value                  | Each channel show CH value  |                                                    |
|             | 2.Temp ____℃                | Show the temperature of led |                                                    |

|             |        |               |                         |
|-------------|--------|---------------|-------------------------|
|             |        |               | board                   |
| Information |        | 3.Soft V.XXX  | Show the version number |
| Channel     |        | 21 channels   |                         |
|             |        | 23 channels   |                         |
|             |        | 35 channels   |                         |
|             |        | 78 channels   |                         |
|             |        | 92 channels   |                         |
|             |        | 97 channels   |                         |
|             |        | 99channels    |                         |
| Mode        |        | DMX 512       |                         |
|             |        | AUTO          |                         |
|             |        | SOUND         |                         |
| Manual      | Master | Pan: 0--255   | Manual Control          |
|             |        | Tilt:0--255   |                         |
|             |        | Focus:0--255  |                         |
|             |        | Rota:0-255    |                         |
|             |        | Red: 0--255   |                         |
|             | Alone  | Greed: 0--255 |                         |
|             |        | Blue: 0--255  |                         |
|             |        | White: 0--255 |                         |
|             |        | Strobe: 0-255 |                         |

## 5.DMX Channel List

### Model 1 - CH21

| Channel | Display           | Function         | Value     |
|---------|-------------------|------------------|-----------|
| CH-1    | Red               | Red dimming      | 0 --- 255 |
| CH-2    | Red adjustment    | Red adjustment   | 0 --- 255 |
| CH-3    | Green             | Green dimming    | 0 --- 255 |
| CH-4    | Green adjustment  | Green adjustment | 0 --- 255 |
| CH-5    | Blue              | Blue dimming     | 0 --- 255 |
| CH-6    | Blue adjustment   | Blue dimming     | 0 --- 255 |
| CH-7    | White             | White dimming    | 0 --- 255 |
| CH-8    | White adjustment  | White adjustment | 0 --- 255 |
| CH-9    | Color temperature | No               | 0--15     |
|         |                   | R100%,G UP,B0%   | 16--35    |
|         |                   | R DOWM,G100%,B0% | 36--55    |
|         |                   | R0%,G100%,B UP   | 56--75    |
|         |                   | R0%,G DOWM,B100% | 76--95    |

|      |                   |                       |          |
|------|-------------------|-----------------------|----------|
| CH-9 | Color temperature | R UP,G0%,B100%        | 96--115  |
|      |                   | R100%,G0%,B DOWM      | 116--135 |
|      |                   | R100%,G UP,B UP       | 136--155 |
|      |                   | R DOWM,G DOWM, B 100% | 156--175 |
|      |                   | R100%G100%B100%W100%  | 176--195 |
|      |                   | 2800K                 | 196--200 |
|      |                   | 3200K                 | 201--205 |
|      |                   | 3500K                 | 206--210 |
|      |                   | 4000K                 | 211--215 |
|      |                   | 4500K                 | 216--220 |
|      |                   | 5000K                 | 221--225 |
|      |                   | 5500K                 | 226--230 |
|      |                   | 6000K                 | 231--235 |
|      |                   | 6500K                 | 236--240 |
|      |                   | 7000K                 | 241--245 |
|      |                   | 7500K                 | 246--250 |
|      |                   | 8000K                 | 251--255 |
|      |                   | No                    | 0--9     |

|       |                 |                                                 |           |
|-------|-----------------|-------------------------------------------------|-----------|
| CH-10 | Macro color     | Macro color 1                                   | 10--19    |
| CH-10 | Macro color     | Macro color 2                                   | 20--29    |
|       |                 | .... (10 numbers 1 macro color)                 | ....      |
|       |                 | Macro color 24                                  | 240--249  |
|       |                 | Macro color 25                                  | 250--255  |
| CH-11 | Strobe          | Turn on the light                               | 0---3     |
|       |                 | Synchro strobe speed<br>slow to fast (1HZ-25HZ) | 4---203   |
|       |                 | Random strobe                                   | 204--255  |
| CH-12 | Dimmer          | dark to bright linear dimming                   | 0 --- 255 |
| CH-13 | Dimmer adjust   | Dimmer adjustment control                       | 0 --- 255 |
| CH-14 | Pan             | Pan control                                     | 0 --- 255 |
| CH-15 | Pan adjustment  | Pan adjustment control                          | 0 --- 255 |
| CH-16 | Tilt            | Tilt control                                    | 0 --- 255 |
| CH-17 | Tilt adjustment | Tilt adjustment control                         | 0 --- 255 |
| CH-18 | Dimming Mode    | Mode -1                                         | 0 --- 49  |
|       |                 | Mode -2                                         | 50 --- 99 |
|       |                 | Mode -3                                         | 100---149 |
|       |                 | Mode -4                                         | 150---255 |
|       |                 | NO                                              | 0-250     |

|       |               |                             |           |
|-------|---------------|-----------------------------|-----------|
| CH-19 | Reset         | Reset within 5s             | 251---255 |
| CH-20 | Zoom          | Zoom                        | 0-255     |
| CH-21 | Lens rotation | 0~60°                       | 0-155     |
|       |               | Clockwise infinite rotation | 156-205   |
|       |               | Counterclockwise rotation   | 206-255   |

## Model 2 - CH23

| Channel | Display         | Function                                      | Value     |
|---------|-----------------|-----------------------------------------------|-----------|
| CH-1    | Pan             | 0-540°                                        | 0 --- 255 |
| CH-2    | Pan adjustment  | 16bit adjustment                              | 0 --- 255 |
| CH-3    | Tilt            | 0-205°                                        | 0 --- 255 |
| CH-4    | Tilt adjustment | 16bit adjustment                              | 0 --- 255 |
| CH-5    | Pan/Tilt speed  | Speed from fast to slow                       | 0 --- 255 |
| CH-6    | Zoom            | Angle from small to large                     | 0 --- 255 |
| CH-7    | Lens rotation   | 0~60°                                         | 0-155     |
|         |                 | Clockwise infinite rotation from fast to slow | 156-205   |
|         |                 | Counterclockwise rotation from slow to fast   | 206-255   |
| CH-8    | Dimmer          | dark to bright linear dimming                 | 0 --- 255 |

|       |                   |                               |           |
|-------|-------------------|-------------------------------|-----------|
| CH-9  | Strobe            | Turn on the light             | 0---3     |
|       |                   | Synchro strobe speed          | 4---203   |
|       |                   | From slow to fast (1HZ-25HZ)  |           |
| CH-9  | Strobe            | Random strobe                 | 204--255  |
| CH-10 | R dimming         | dark to bright linear dimming | 0-255     |
| CH-11 | G dimming         | dark to bright linear dimming | 0-255     |
| CH-12 | B dimming         | dark to bright linear dimming | 0-255     |
| CH-13 | W dimming         | dark to bright linear dimming | 0-255     |
| CH-14 | Color temperature | No                            | 0 ---15   |
|       |                   | R100%,G UP,B0%                | 16---35   |
|       |                   | R DOWM,G100%,B0%              | 36---55   |
|       |                   | R0%,G100%,B UP                | 56---75   |
|       |                   | R0%,G DOWM,B100%              | 76---95   |
|       |                   | R UP,G0%,B100%                | 96---115  |
|       |                   | R100%,G0%,B DOWM              | 116---135 |
|       |                   | R100%,G UP,B UP               | 136---155 |
|       |                   | R DOWM,G DOWM, B 100%         | 156---175 |

|       |                   |                                |           |
|-------|-------------------|--------------------------------|-----------|
| CH-14 | Color temperature | R100%,G100%,B100%,W100%        | 176---195 |
|       |                   | 2800K                          | 196---200 |
|       |                   | 3200K                          | 201---205 |
|       |                   | 3500K                          | 206---210 |
|       |                   | 4000K                          | 211---215 |
|       |                   | 4500K                          | 216---220 |
|       |                   | 5000K                          | 221---225 |
|       |                   | 5500K                          | 226--230  |
|       |                   | 6000K                          | 231--235  |
|       |                   | 6500K                          | 236--240  |
|       |                   | 7000K                          | 241--245  |
|       |                   | 7500K                          | 246--250  |
|       |                   | 8000K                          | 251--255  |
| CH-15 | Macro color       | No                             | 0--9      |
|       |                   | Macro color 1                  | 10--19    |
|       |                   | Macro color 2                  | 20--29    |
|       |                   | ....(10 numbers 1 macro color) | ....      |
|       |                   | Macro color 24                 | 240--249  |
|       |                   | Macro color 25                 | 250--255  |
|       |                   | No                             | 0--9      |

|       |                       |                                          |          |
|-------|-----------------------|------------------------------------------|----------|
| CH-16 | Static pattern        | Monochrome pattern 1                     | 10--12   |
|       |                       | Monochrome pattern 2                     | 13--15   |
|       |                       | .....(3 numbers 1 pattern)               | .....    |
|       |                       | Monochrome pattern 67                    | 208--210 |
|       |                       | Mixed color pattern 1                    | 211--213 |
| CH-16 | Static pattern        | Mixed color pattern 2                    | 214--216 |
|       |                       | ....(3 numbers 1 pattern)                | ....     |
|       |                       | Mixed color pattern 14                   | 250--252 |
|       |                       | Mixed color pattern 15                   | 253--255 |
| CH-17 | Dynamic pattern       | NO                                       | 0--9     |
|       |                       | Monochrome dynamic pattern 1             | 10--14   |
|       |                       | Monochrome dynamic pattern 2             | 15--19   |
|       |                       | .....(5 numbers 1 pattern)               | .....    |
|       |                       | Monochrome pattern 30                    | 155--159 |
|       |                       | Mixed color dynamic pattern 1            | 160--164 |
|       |                       | Mixed color dynamic pattern 2            | 165--169 |
|       |                       | .....(5 numbers 1 pattern)               | .....    |
|       |                       | Mixed color dynamic pattern 13           | 220--224 |
|       |                       | Mixed color dynamic pattern 14           | 225--255 |
|       | Dynamic pattern speed | Forward, from fast to slow ( with 17CH ) | 0--127   |

|       |              |                                       |          |
|-------|--------------|---------------------------------------|----------|
| CH-18 |              | Reverse, from slow to fast(with 17CH) | 128--255 |
| CH-19 | Back color R | dark to bright linear dimming         | 0-255    |
| CH-20 | Back color G | dark to bright linear dimming         | 0-255    |
| CH-21 | Back color B | dark to bright linear dimming         | 0-255    |
| CH-22 | Back color W | dark to bright linear dimming         | 0-255    |
| CH-23 | Reset        | NO                                    | 0-250    |
|       |              | Reset within 5s                       | 251-255  |

### Model 3 - CH35

| Channel | Display          | Function         | Value     |
|---------|------------------|------------------|-----------|
| CH-1    | Red              | Red dimming      | 0 --- 255 |
| CH-2    | Red adjustment   | Red adjustment   | 0 --- 255 |
| CH-3    | Green            | Green dimming    | 0 --- 255 |
| CH-4    | Green adjustment | Green adjustment | 0 --- 255 |
| CH-5    | Blue             | Blue dimming     | 0 --- 255 |
| CH-6    | Blue adjustment  | Blue dimming     | 0 --- 255 |
| CH-7    | White            | White dimming    | 0 --- 255 |

|      |                   |                       |           |
|------|-------------------|-----------------------|-----------|
| CH-8 | White adjustment  | White adjustment      | 0 --- 255 |
| CH-9 | Color temperature | No                    | 0 ---15   |
|      |                   | R100%,G UP,B0%        | 16---35   |
|      |                   | R DOWM,G100%,B0%      | 36---55   |
|      |                   | R0%,G100%,B UP        | 56---75   |
|      |                   | R0%,G DOWM,B100%      | 76---95   |
|      |                   | R UP,G0%,B100%        | 96---115  |
|      |                   | R100%,G0%,B DOWM      | 116--135  |
|      |                   | R100%,G UP,B UP       | 136---155 |
|      |                   | R DOWM,G DOWM, B 100% | 156---175 |
|      |                   | R100%G100%B100%W100%  | 176---195 |
| CH-9 | Color temperature | 2800K                 | 196---200 |
|      |                   | 3200K                 | 201---205 |
|      |                   | 3500K                 | 206---210 |
|      |                   | 4000K                 | 211---215 |
|      |                   | 4500K                 | 216---220 |
|      |                   | 5000K                 | 221---225 |

|       |                |                                |           |
|-------|----------------|--------------------------------|-----------|
|       |                | 5500K                          | 226--230  |
|       |                | 6000K                          | 231--235  |
|       |                | 6500K                          | 236--240  |
|       |                | 7000K                          | 241--245  |
|       |                | 7500K                          | 246--250  |
|       |                | 8000K                          | 251--255  |
| CH-10 | Macro color    | No                             | 0--9      |
|       |                | Macro color 1                  | 10--19    |
|       |                | Macro color 2                  | 20--29    |
|       |                | ....(10 numbers 1 macro color) | ....      |
|       |                | Macro color 24                 | 240--249  |
|       |                | Macro color 25                 | 250--255  |
| CH-11 | Strobe         | Turn on the light              | 0---3     |
|       |                | Synchro strobe speed           |           |
|       |                | From slow to fast (1HZ-25HZ)   | 4---203   |
|       |                | Random strobe                  | 204--255  |
| CH-12 | Dimmer         | dark to bright linear dimming  | 0 --- 255 |
| CH-13 | Dimmer adjust  | Dimmer adjustment control      | 0 --- 255 |
| CH-14 | Pan            | Pan control                    | 0 --- 255 |
| CH-15 | Pan adjustment | Pan adjustment control         | 0 --- 255 |

|       |                  |                               |           |
|-------|------------------|-------------------------------|-----------|
| CH-16 | Tilt             | Tilt control                  | 0 --- 255 |
| CH-17 | Tilt adjustment  | Tilt adjustment control       | 0 --- 255 |
| CH-18 | Dimming Mode     | Mode -1                       | 0 --- 49  |
| CH-18 | Dimming Mode     | Mode -2                       | 50 --- 99 |
|       |                  | Mode -3                       | 100---149 |
|       |                  | Mode -4                       | 150---255 |
| CH-19 | Reset            | NO                            | 0-250     |
|       |                  | Reset within 5s               | 251---255 |
| CH-20 | Zoom             | Zoom                          | 0-255     |
| CH-21 | Lens rotation    | 0~60°                         | 0-155     |
|       |                  | Clockwise infinite rotation   | 156-205   |
|       |                  | Counterclockwise rotation     | 206-255   |
| CH-22 | Pattern rotation | NO                            | 0--9      |
|       |                  | Monochrome dynamic pattern 1  | 10--14    |
|       |                  | Monochrome dynamic pattern 2  | 15--19    |
|       |                  | .....(5 numbers 1 pattern)    | .....     |
|       |                  | Monochrome pattern 30         | 155--159  |
|       |                  | Mixed color dynamic pattern 1 | 160--164  |
|       |                  | Mixed color dynamic pattern 2 | 165--169  |

|       |                      |                                       |          |
|-------|----------------------|---------------------------------------|----------|
|       |                      | .....(5 numbers 1 pattern)            | .....    |
|       |                      | Mixed color dynamic pattern 13        | 220--224 |
|       |                      | Mixed color dynamic pattern 14        | 225--255 |
| CH-23 | Pattern effect speed | NO                                    | 0--9     |
|       |                      | Forward, from fast to slow(with 22CH) | 10--132  |
|       |                      | Reverse, from slow to fast(with 22CH) | 133--255 |
| CH-24 | Pattern effect fade  | Pattern effect fade                   | 0-255    |
| CH-25 | Pattern Back R       | Pattern effect R                      | 0-255    |
| CH-26 | Pattern Back G       | Pattern effect G                      | 0-255    |
| CH-27 | Pattern Back B       | Pattern effect B                      | 0-255    |
| CH-28 | Pattern Back W       | Pattern effect W                      | 0-255    |
| CH-29 | Pattern dimming      | Pattern 0-100% dimming                | 0-255    |
| CH-30 | Background dimming   | Background 0-100% dimming             | 0-255    |
| CH-31 | Pattern change       | Pattern change control                | 0-255    |
| CH-32 | Pattern movement     | Pattern movement(with 22CH)           | 0-255    |
| CH-33 | Prospects strobe     | Prospects strobe                      | 0-255    |
| CH-34 | Background strobe    | Background strobe                     | 0-255    |

|       |                              |                      |       |
|-------|------------------------------|----------------------|-------|
| CH-35 | Background pattern selection | Background selection | 0-255 |
|-------|------------------------------|----------------------|-------|

## Model 4 - CH78

| Channel | Display           | Function         | Value     |
|---------|-------------------|------------------|-----------|
| CH-1    | Red               | Red dimming      | 0 --- 255 |
| CH-2    | Red adjustment    | Red adjustment   | 0 --- 255 |
| CH-3    | Green             | Green dimming    | 0 --- 255 |
| CH-4    | Green adjustment  | Green adjustment | 0 --- 255 |
| CH-5    | Blue              | Blue dimming     | 0 --- 255 |
| CH-6    | Blue adjustment   | Blue dimming     | 0 --- 255 |
| CH-7    | White             | White dimming    | 0 --- 255 |
| CH-8    | White adjustment  | White adjustment | 0 --- 255 |
| CH-9    | Color temperature | No               | 0 ---15   |
|         |                   | R100%,G UP,B0%   | 16---35   |
|         |                   | R DOWM,G100%,B0% | 36---55   |
|         |                   | R0%,G100%,B UP   | 56---75   |
|         |                   | R0%,G DOWM,B100% | 76---95   |

|      |                   |                       |           |
|------|-------------------|-----------------------|-----------|
| CH-9 | Color temperature | R UP,G0%,B100%        | 96---115  |
|      |                   | R100%,G0%,B DOWM      | 116--135  |
|      |                   | R100%,G UP,B UP       | 136---155 |
|      |                   | R DOWM,G DOWM, B 100% | 156---175 |
|      |                   | R100%G100%B100%W100%  | 176---195 |
|      |                   | 2800K                 | 196---200 |
|      |                   | 3200K                 | 201---205 |
|      |                   | 3500K                 | 206---210 |
|      |                   | 4000K                 | 211---215 |
|      |                   | 4500K                 | 216---220 |
|      |                   | 5000K                 | 221---225 |
|      |                   | 5500K                 | 226--230  |
|      |                   | 6000K                 | 231--235  |
|      |                   | 6500K                 | 236--240  |
|      |                   | 7000K                 | 241--245  |
|      |                   | 7500K                 | 246--250  |
|      |                   | 8000K                 | 251--255  |
|      |                   | No                    | 0--9      |
|      |                   | Macro color 1         | 10--19    |

|       |                 |                                                 |           |
|-------|-----------------|-------------------------------------------------|-----------|
| CH-10 | Macro color     | Macro color 2                                   | 20--29    |
|       |                 | ....                                            | ....      |
|       |                 | Macro color 24                                  | 240--249  |
|       |                 | Macro color 25                                  | 250--255  |
| CH-11 | Strobe          | Turn on the light                               | 0---3     |
|       |                 | Synchro strobe speed<br>slow to fast (1HZ-25HZ) | 4---203   |
|       |                 | Random strobe                                   | 204--255  |
| CH-12 | Dimmer          | dark to bright linear dimming                   | 0 --- 255 |
| CH-13 | Dimmer adjust   | Dimmer adjustment control                       | 0 --- 255 |
| CH-14 | Pan             | Pan control                                     | 0 --- 255 |
| CH-15 | Pan adjustment  | Pan adjustment control                          | 0 --- 255 |
| CH-16 | Tilt            | Tilt control                                    | 0 --- 255 |
| CH-17 | Tilt adjustment | Tilt adjustment control                         | 0 --- 255 |
| CH-18 | Dimming Mode    | Mode -1                                         | 0 --- 49  |
|       |                 | Mode -2                                         | 50 --- 99 |
|       |                 | Mode -3                                         | 100---149 |
|       |                 | Mode -4                                         | 150---255 |
| CH-19 | Reset           | NO                                              | 0-250     |
|       |                 | Reset within 5s                                 | 251---255 |

|       |                 |                             |         |
|-------|-----------------|-----------------------------|---------|
| CH-20 | Zoom            | Zoom                        | 0-255   |
| CH-21 | Lens rotation   | 0~60°                       | 0-155   |
|       |                 | Clockwise infinite rotation | 156-205 |
|       |                 | Counterclockwise rotation   | 206-255 |
| CH-22 | R1 LED dimming  | R1 LED dimming              | 0-255   |
| CH-23 | G1 LED dimming  | G1 LED dimming              | 0-255   |
| CH-24 | B1 LED dimming  | B1 LED dimming              | 0-255   |
| CH-25 | R2 LED dimming  | R2 LED dimming              | 0-255   |
| CH-26 | G2 LED dimming  | G2 LED dimming              | 0-255   |
| CH-27 | B2 LED dimming  | B2 LED dimming              | 0-255   |
| ..... | .....           | .....                       | .....   |
| CH-76 | R19 LED dimming | R19 LED dimming             | 0-255   |
| CH-77 | G19LED dimming  | G19LED dimming              | 0-255   |
| CH-78 | B19LED dimming  | B19LED dimming              | 0-255   |

## Model 5 - CH92

| Channel | Display        | Function       | Value     |
|---------|----------------|----------------|-----------|
| CH-1    | Red            | Red dimming    | 0 --- 255 |
| CH-2    | Red adjustment | Red adjustment | 0 --- 255 |

|      |                   |                       |           |
|------|-------------------|-----------------------|-----------|
| CH-3 | Green             | Green dimming         | 0 --- 255 |
| CH-4 | Green adjustment  | Green adjustment      | 0 --- 255 |
| CH-5 | Blue              | Blue dimming          | 0 --- 255 |
| CH-6 | Blue adjustment   | Blue dimming          | 0 --- 255 |
| CH-7 | White             | White dimming         | 0 --- 255 |
| CH-8 | White adjustment  | White adjustment      | 0 --- 255 |
| CH-9 | Color temperature | No                    | 0 ---15   |
|      |                   | R100%,G UP,B0%        | 16---35   |
|      |                   | R DOWM,G100%,B0%      | 36---55   |
|      |                   | R0%,G100%,B UP        | 56---75   |
|      |                   | R0%,G DOWM,B100%      | 76---95   |
|      |                   | R UP,G0%,B100%        | 96---115  |
|      |                   | R100%,G0%,B DOWM      | 116--135  |
|      |                   | R100%,G UP,B UP       | 136---155 |
|      |                   | R DOWM,G DOWM, B 100% | 156---175 |
|      |                   | R100%G100%B100%W100%  | 176---195 |

|       |                   |                                |           |
|-------|-------------------|--------------------------------|-----------|
| CH-9  | Color temperature | 2800K                          | 196---200 |
|       |                   | 3200K                          | 201---205 |
|       |                   | 3500K                          | 206---210 |
|       |                   | 4000K                          | 211---215 |
|       |                   | 4500K                          | 216---220 |
|       |                   | 5000K                          | 221---225 |
|       |                   | 5500K                          | 226--230  |
|       |                   | 6000K                          | 231--235  |
|       |                   | 6500K                          | 236--240  |
|       |                   | 7000K                          | 241--245  |
| CH-10 | Macro color       | 7500K                          | 246--250  |
|       |                   | 8000K                          | 251--255  |
|       |                   | No                             | 0--9      |
|       |                   | Macro color 1                  | 10--19    |
|       |                   | Macro color 2                  | 20--29    |
|       |                   | ....(10 numbers 1 macro color) | ....      |
| CH-11 | Strobe            | Macro color 24                 | 240--249  |
|       |                   | Macro color 25                 | 250--255  |
|       |                   | Turn on the light              | 0---3     |
|       |                   | Synchro strobe speed           |           |

|       |                 |                                 |           |
|-------|-----------------|---------------------------------|-----------|
|       |                 | slow to fast (1HZ-25HZ)         | 4---203   |
|       |                 | Random strobe                   | 204--255  |
| CH-12 | Dimmer          | dark to bright linear dimming   | 0 --- 255 |
| CH-13 | Dimmer adjust   | Dimmer adjustment control       | 0 --- 255 |
| CH-14 | Pan             | Pan control                     | 0 --- 255 |
| CH-15 | Pan adjustment  | Pan adjustment control          | 0 --- 255 |
| CH-16 | Tilt            | Tilt control                    | 0 --- 255 |
| CH-17 | Tilt adjustment | Tilt adjustment control         | 0 --- 255 |
| CH-18 | Dimming Mode    | Mode -1                         | 0 --- 49  |
|       |                 | Mode -2                         | 50 --- 99 |
|       |                 | Mode -3                         | 100---149 |
|       |                 | Mode -4                         | 150---255 |
| CH-19 | Reset           | NO                              | 0-250     |
|       |                 | Reset within 5s                 | 251---255 |
| CH-20 | Zoom            | Zoom                            | 0-255     |
| CH-21 | Lens rotation   | 0~60°                           | 0-155     |
|       |                 | Clockwise infinite rotation     | 156-205   |
|       |                 | Counterclockwise rotation       | 206-255   |
|       |                 | NO                              | 0--9      |
|       |                 | Monochrome dynamic pattern<br>1 | 10--14    |

|       |                      |                                        |          |
|-------|----------------------|----------------------------------------|----------|
| CH-22 | Pattern rotation     | Monochrome dynamic pattern 2           | 15--19   |
|       |                      | .....(5 numbers 1 pattern)             | .....    |
|       |                      | Monochrome pattern 30                  | 155--159 |
|       |                      | Mixed color dynamic pattern 1          | 160--164 |
|       |                      | Mixed color dynamic pattern 2          | 165--169 |
|       |                      | .....(5 numbers 1 pattern)             | .....    |
| CH-22 | Pattern rotation     | Mixed color dynamic pattern 13         | 220--224 |
|       |                      | Mixed color dynamic pattern 14         | 225--255 |
| CH-23 | Pattern effect speed | NO                                     | 0--9     |
|       |                      | Forward, from fast to slow (with 22CH) | 10--132  |
| CH-23 | Pattern effect speed | Reverse, from slow to fast (with 22CH) | 133--255 |
| CH-24 | Pattern effect fade  | Pattern effect fade                    | 0-255    |
| CH-25 | Pattern Back R       | Pattern effect R                       | 0-255    |
| CH-26 | Pattern Back G       | Pattern effect G                       | 0-255    |
| CH-27 | Pattern Back B       | Pattern effect B                       | 0-255    |
| CH-28 | Pattern Back W       | Pattern effect W                       | 0-255    |
| CH-29 | Pattern dimming      | Pattern 0-100% dimming                 | 0-255    |

|       |                                 |                             |       |
|-------|---------------------------------|-----------------------------|-------|
| CH-30 | Back Dimming                    | Background 0-100% dimming   | 0-255 |
| CH-31 | Pattern change                  | Pattern change control      | 0-255 |
| CH-32 | Pattern movement                | Pattern movement(with 22CH) | 0-255 |
| CH-33 | Prospects strobe                | Prospects strobe            | 0-255 |
| CH-34 | Background strobe               | Background strobe           | 0-255 |
| CH-35 | Background<br>pattern selection | Background selection        | 0-255 |
| CH-36 | LED1 R                          | LED1 R dimming              | 0-255 |
| CH-37 | LED1 G                          | LED1 G dimming              | 0-255 |
| CH-38 | LED1 B                          | LED1 B dimming              | 0-255 |
| ..... | .....                           | .....                       | ..... |
| CH-90 | LED19 R                         | LED 19 R dimming            | 0-255 |
| CH-91 | LED19 G                         | LED19 G dimming             | 0-255 |
| CH-92 | LED19 B                         | LED 19 B dimming            | 0-255 |

## Model 6 - CH97

| Channel | Display          | Function         | Value     |
|---------|------------------|------------------|-----------|
| CH-1    | Red              | Red dimming      | 0 --- 255 |
| CH-2    | Red adjustment   | Red adjustment   | 0 --- 255 |
| CH-3    | Green            | Green dimming    | 0 --- 255 |
| CH-4    | Green adjustment | Green adjustment | 0 --- 255 |

|      |                   |                       |           |
|------|-------------------|-----------------------|-----------|
| CH-5 | Blue              | Blue dimming          | 0 --- 255 |
| CH-6 | Blue adjustment   | Blue dimming          | 0 --- 255 |
| CH-7 | White             | White dimming         | 0 --- 255 |
| CH-8 | White adjustment  | White adjustment      | 0 --- 255 |
| CH-9 | Color temperature | No                    | 0 ---15   |
|      |                   | R100%,G UP,B0%        | 16---35   |
|      |                   | R DOWM,G100%,B0%      | 36---55   |
|      |                   | R0%,G100%,B UP        | 56---75   |
|      |                   | R0%,G DOWM,B100%      | 76---95   |
|      |                   | R UP,G0%,B100%        | 96---115  |
|      |                   | R100%,G0%,B DOWM      | 116--135  |
|      |                   | R100%,G UP,B UP       | 136---155 |
|      |                   | R DOWM,G DOWM, B 100% | 156---175 |
|      |                   | R100%G100%B100%W100%  | 176---195 |
|      |                   | 2800K                 | 196---200 |
|      |                   | 3200K                 | 201---205 |
|      |                   | 3500K                 | 206---210 |
|      |                   | 4000K                 | 211---215 |

|       |                   |                                |           |
|-------|-------------------|--------------------------------|-----------|
| CH-9  | Color temperature | 4500K                          | 216---220 |
|       |                   | 5000K                          | 221---225 |
|       |                   | 5500K                          | 226--230  |
|       |                   | 6000K                          | 231--235  |
|       |                   | 6500K                          | 236--240  |
|       |                   | 7000K                          | 241--245  |
|       |                   | 7500K                          | 246--250  |
|       |                   | 8000K                          | 251--255  |
| CH-10 | Macro color       | No                             | 0--9      |
|       |                   | Macro color 1                  | 10--19    |
|       |                   | Macro color 2                  | 20--29    |
|       |                   | ....(10 numbers 1 macro color) | ....      |
|       |                   | Macro color 24                 | 240--249  |
|       |                   | Macro color 25                 | 250--255  |
| CH-11 | Strobe            | Turn on the light              | 0---3     |
|       |                   | Synchro strobe speed           |           |
|       |                   | slow to fast (1HZ-25HZ)        | 4---203   |
|       |                   | Random strobe                  | 204--255  |
| CH-12 | Dimmer            | dark to bright linear dimming  | 0 --- 255 |
| CH-13 | Dimmer adjust     | Dimmer adjustment control      | 0 --- 255 |

|       |                 |                             |           |
|-------|-----------------|-----------------------------|-----------|
| CH-14 | Pan             | Pan control                 | 0 --- 255 |
| CH-15 | Pan adjustment  | Pan adjustment control      | 0 --- 255 |
| CH-16 | Tilt            | Tilt control                | 0 --- 255 |
| CH-17 | Tilt adjustment | Tilt adjustment control     | 0 --- 255 |
| CH-18 | Dimming Mode    | Mode -1                     | 0 --- 49  |
|       |                 | Mode -2                     | 50 --- 99 |
|       |                 | Mode -3                     | 100---149 |
|       |                 | Mode -4                     | 150---255 |
| CH-19 | Reset           | NO                          | 0-250     |
|       |                 | Reset within 5s             | 251---255 |
| CH-20 | Zoom            | Zoom                        | 0-255     |
| CH-21 | Lens rotation   | 0~60°                       | 0-155     |
|       |                 | Clockwise infinite rotation | 156-205   |
|       |                 | Counterclockwise rotation   | 206-255   |
| CH-22 | R1 LED dimming  | R1 LED dimming              | 0-255     |
| CH-23 | G1 LED dimming  | G1 LED dimming              | 0-255     |
| CH-24 | B1 LED dimming  | B1 LED dimming              | 0-255     |
| CH-25 | W1 LED dimming  | W1 LED dimming              | 0-255     |
| ..... | .....           | .....                       | .....     |
| CH-94 | R19 LED dimming | R19 LED dimming             | 0-255     |

|       |                |                 |       |
|-------|----------------|-----------------|-------|
| CH-95 | G19LED dimming | G19 LED dimming | 0-255 |
| CH-96 | B19LED dimming | B19 LED dimming | 0-255 |
| CH-97 | W19LED dimming | W19 LED dimming | 0-255 |

## Model 7 - CH99

| Channel | Display         | Function                                      | Value     |
|---------|-----------------|-----------------------------------------------|-----------|
| CH-1    | Pan             | 0-540°                                        | 0 --- 255 |
| CH-2    | Pan adjustment  | 16bit adjustment                              | 0 --- 255 |
| CH-3    | Tilt            | 0-205°                                        | 0 --- 255 |
| CH-4    | Tilt adjustment | 16bit adjustment                              | 0 --- 255 |
| CH-5    | XY speed        | Speed from fast to slow                       | 0 --- 255 |
| CH-6    | Zoom            | Angle from small to large                     | 0 --- 255 |
| CH-7    | Lens rotation   | 0~60°                                         | 0-155     |
|         |                 | Clockwise infinite rotation from fast to slow | 156-205   |
|         |                 | Counterclockwise rotation from slow to fast   | 206-255   |
| CH-8    | Dimmer          | dark to bright linear dimming                 | 0 --- 255 |
|         |                 | Turn on the light                             | 0---3     |

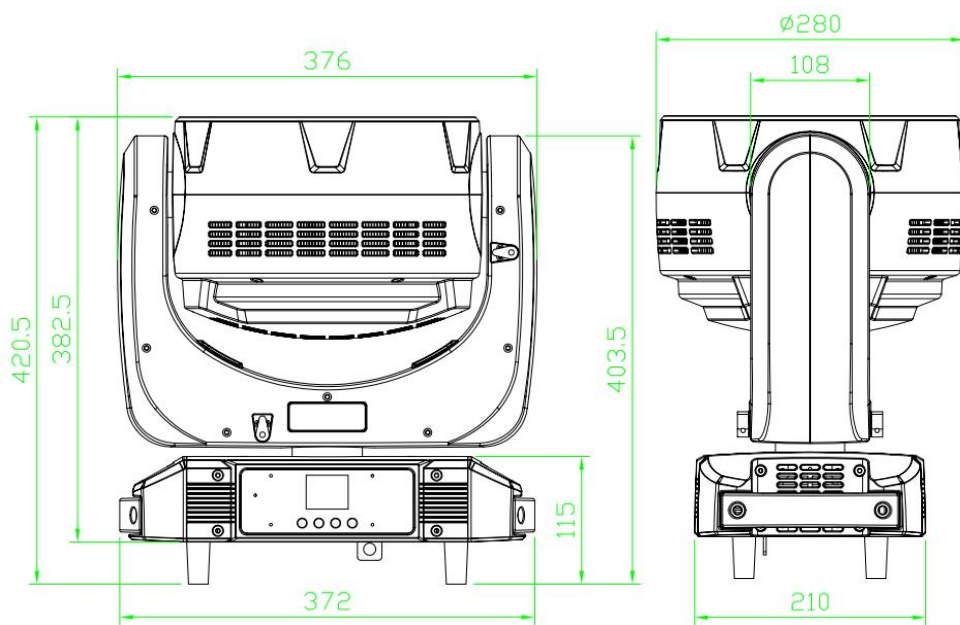
|       |                      |                                                      |           |
|-------|----------------------|------------------------------------------------------|-----------|
| CH-9  | Strobe               | Synchro strobe speed<br>From slow to fast (1HZ-25HZ) | 4---203   |
|       |                      | Random strobe                                        | 204--255  |
| CH-10 | R dimming            | dark to bright linear dimming                        | 0-255     |
| CH-11 | G dimming            | dark to bright linear dimming                        | 0-255     |
| CH-12 | B dimming            | dark to bright linear dimming                        | 0-255     |
| CH-13 | W dimming            | dark to bright linear dimming                        | 0-255     |
| CH-14 | Color<br>temperature | No                                                   | 0 ---15   |
|       |                      | R100%,G UP,B0%                                       | 16---35   |
|       |                      | R DOWM,G100%,B0%                                     | 36---55   |
|       |                      | R0%,G100%,B UP                                       | 56---75   |
|       |                      | R0%,G DOWM,B100%                                     | 76---95   |
|       |                      | R UP,G0%,B100%                                       | 96---115  |
|       |                      | R100%,G0%,B DOWM                                     | 116---135 |
|       |                      | R100%,G UP,B UP                                      | 136---155 |
|       |                      | R down,G down, B 100%                                | 156---175 |
|       |                      | R100%,G100%,B100%,W100%                              | 176---195 |

|       |                   |                                |           |
|-------|-------------------|--------------------------------|-----------|
| CH-14 | Color temperature | 2800K                          | 196---200 |
|       |                   | 3200K                          | 201---205 |
|       |                   | 3500K                          | 206---210 |
|       |                   | 4000K                          | 211---215 |
|       |                   | 4500K                          | 216---220 |
|       |                   | 5000K                          | 221---225 |
|       |                   | 5500K                          | 226--230  |
|       |                   | 6000K                          | 231--235  |
|       |                   | 6500K                          | 236--240  |
|       |                   | 7000K                          | 241--245  |
| CH-15 | Macro color       | 7500K                          | 246--250  |
|       |                   | 8000K                          | 251--255  |
|       |                   | No                             | 0--9      |
|       |                   | Macro color 1                  | 10--19    |
|       |                   | Macro color 2                  | 20--29    |
|       |                   | ....(10 numbers 1 macro color) | ....      |
|       |                   | Macro color 24                 | 240--249  |
|       |                   | Macro color 25                 | 250--255  |
|       |                   | No                             | 0--9      |
|       |                   | Monochrome pattern 1           | 10--12    |

|       |                       |                                        |          |
|-------|-----------------------|----------------------------------------|----------|
| CH-16 | Static pattern        | Monochrome pattern 2                   | 13--15   |
|       |                       | .....(3 numbers 1 pattern)             | .....    |
|       |                       | Monochrome pattern 67                  | 208--210 |
|       |                       | Mixed color pattern 1                  | 211--213 |
|       |                       | Mixed color pattern 2                  | 214--216 |
| CH-16 | Static pattern        | ....(3 numbers 1 pattern)              | ....     |
|       |                       | Mixed color pattern 14                 | 250--252 |
|       |                       | Mixed color pattern 15                 | 253--255 |
| CH-17 | Dynamic pattern       | NO                                     | 0--9     |
|       |                       | Monochrome dynamic pattern 1           | 10--14   |
|       |                       | Monochrome dynamic pattern 2           | 15--19   |
|       |                       | .....(5 numbers 1 pattern)             | .....    |
|       |                       | Monochrome pattern 30                  | 155--159 |
|       |                       | Mixed color dynamic pattern 1          | 160--164 |
|       |                       | Mixed color dynamic pattern 2          | 165--169 |
|       |                       | .....(5 numbers 1 pattern)             | .....    |
|       |                       | Mixed color dynamic pattern 13         | 220--224 |
|       |                       | Mixed color dynamic pattern 14         | 225--255 |
| CH-18 | Dynamic pattern speed | Forward, from fast to slow (with 17CH) | 0--127   |
|       |                       | Reverse, from slow to fast(with        | 128--255 |

|       |                |                               |         |
|-------|----------------|-------------------------------|---------|
|       |                | 17CH)                         |         |
| CH-19 | Back color R   | dark to bright linear dimming | 0-255   |
| CH-20 | Back color G   | dark to bright linear dimming | 0-255   |
| CH-21 | Back color B   | dark to bright linear dimming | 0-255   |
| CH-22 | Back color W   | dark to bright linear dimming | 0-255   |
| CH-23 | Reset          | NO                            | 0-250   |
|       |                | Reset within 5s               | 250-255 |
| CH-24 | R1 LED dimmer  | R1 LED dimming                | 0-255   |
| CH-25 | G1LED dimmer   | G1 LED dimming                | 0-255   |
| CH-26 | B1 LED dimmer  | B1 LED dimming                | 0-255   |
| CH-27 | W1LED dimmer   | W1 LED dimming                | 0-255   |
| ..... | .....          | .....                         | .....   |
| CH-96 | R19 LED dimmer | R19 LED dimming               | 0-255   |
| CH-97 | G19 LED dimmer | G19 LED dimming               | 0-255   |
| CH-98 | B19 LED dimmer | B19 LED dimming               | 0-255   |
| CH-99 | W19 LED dimmer | W19 LED dimming               | 0-255   |

## 6. Shape



## 7. Trouble shooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

### A. The unit does not work, no light and the fan does not work

1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

### B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.

2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

### **C. One of the channels is not working well**

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

## **8. Fixture Cleaning**

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- **Clean with soft cloth using normal glass cleaning fluid.**
- **Always dry the parts carefully.**
- **Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.**