# CLF BEAM 6

# MANUAL

# TABLE OF CONTENTS

# SAFETY INSTRUCTIONS

The following symbols are used to identify important safety information on the product and in this manual:

| DANGER! Safety hazard. Risk of severe injury or death. | DANGER! Hazardous voltage. Risk of lethal or severe electric shock. | WARNING! Fire hazard. | WARNING! LED light emission. Risk of eye injury. | WARNING! Burn hazard. Hot surface. Do not touch. | WARNING! Wear protective eyewear. | WARNING! Refer to user manual. |

To guarantee proper and consistent operation, it is important to follow the guidelines in this manual. The manufacturer will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

In order to ensure the fixture could operate normally, the ambient temperature must not exceed 38°C and 0°C. Under normal conditions, the highest sectional surface temperature will be up to 60°C.

The fixture is designed with electric shock protection. The fixture should be connected to a power supply system with earth grounding. The fixture's ground cable should be connected with the ground cable of the power supply system as well.

When the isolation is damaged please ask the manufacturer, distributor or a professional mechanic for a new power cable as replacement in order to avoid dangerous situations.

Never open the fixture while power is connected.

Never look directly into the light source. You risk injury to your eyes, which may cause blindness.

Please be aware that damages caused by modifications to the device are not subject to warranty.

# FIXTURE OVERVIEW



TOUCH SCREEN

DMX          POWER

# DIMENSIONS



155

268

226
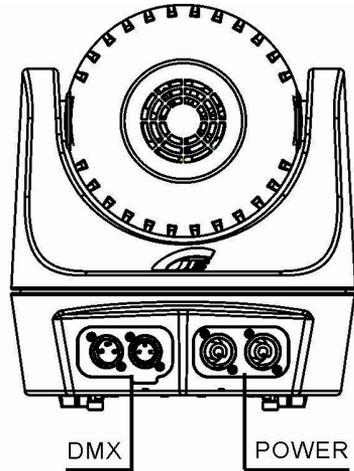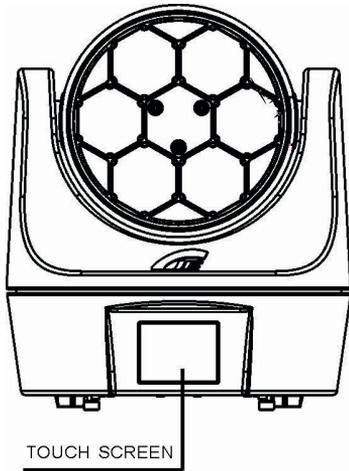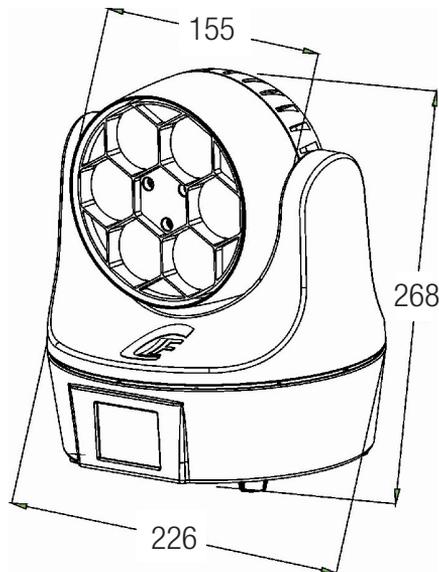
# PHOTOMETRIC DATA

| | Lux | | | |
|---|---|---|---|---|
| R | 3160 | 1190 | 615 | 272 |
| G | 10200 | 4860 | 2900 | 2140 |
| B | 1080 | 850 | 392 | 95.5 |
| RGBW | 10600 | 5050 | 2900 | 1770 |

| | | | | |
|---|---|---|---|---|
| Distance(m) | 0 | 3 | 5 | 7 | 10 |
| Diameter(m) | 0 | 0. 41 | 0.6 | 0.83 | 1.02 |
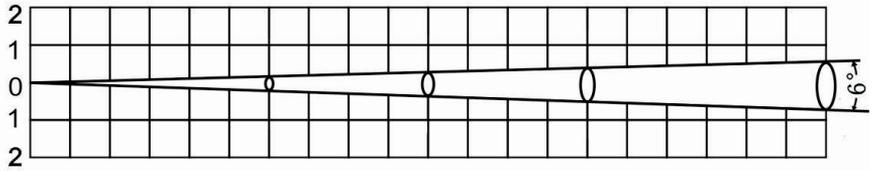
6.1°

# PHYSICAL INSTALLATION

## CAUTION:

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight. Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

To avoid injury, never stand directly below the device when mounting, removing, or servicing the fixture.

## MOUNTING POINTS:

Overhead mounting requires experience, including calculating working load limits, knowledge of the installation material being used and periodic safety inspection of all installation materials and the fixture. If you don't have these qualifications, do not attempt the installation yourself. Wrong installation can result in injuries. Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

## MOUNTING:

The fixture is operational in any mounting position. Be sure the fixture is kept at least 50cm away from any flammable materials (decoration etc.).

When mounted with a clamp, always use and install the supplied safety cable as a safety measure to prevent accidents.

QUICKLOCK
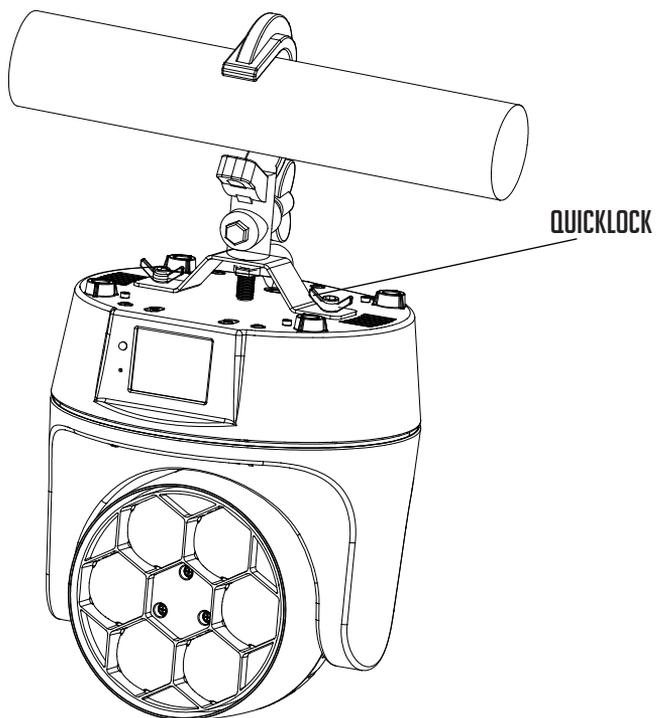
# POWER AND SIGNAL CONNECTION

## POWER SUPPLY:

Use powerCON plug to connect the fixture to the main power supply.

Please check if the voltage and the frequency are the same as mentioned on the fixture.

## SIGNAL CONNECTION:

Please use the 5 pin XLR connectors to connect the first fixture's DMX output to the next fixture's input, and so on.

As connect in the following figure.
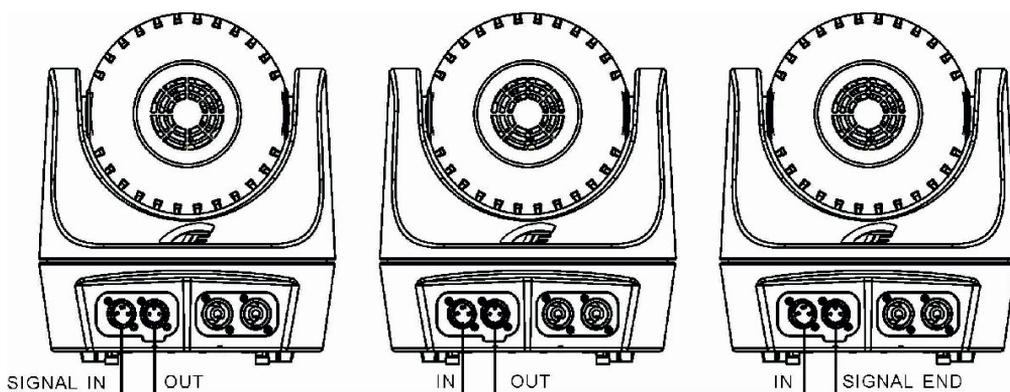


The resistance of each core is at least a diameter of 0.5mm. (**Notice:** The inside leading wire of the 5-pin XLR plug can't touch each other or the earth). We recommend to use the DMX signal terminator during the installation to avoid electronic reflection of the digital control signal. The DMX terminator is a XLR connector with a 120Ω & 1/2W resistor connected across pin 2 and 3 (see picture on the right). Which is plugged into the output socket on the last fixture in the chain. Refer to the connection as in above picture. We advise to use a DMX signal distributor when the distance of the lights is more then 15 meter, to prevent signal loss.
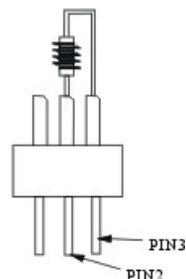
# POWER CONNECTION
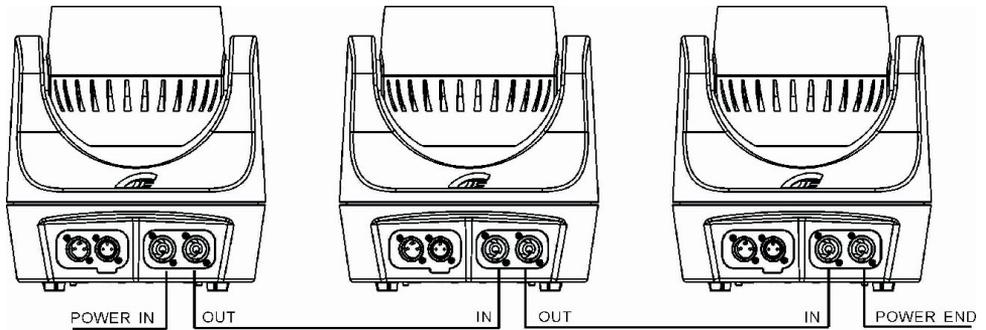


The L terminal is connected with the brown line

**L**

**N**
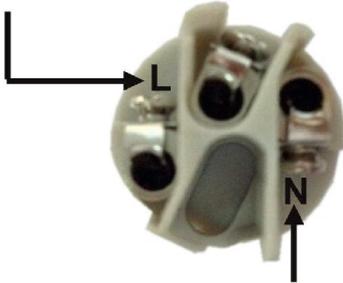
The N terminal is connected with the blue line

Do not daisychain more then 6 fixtures.

# CONTROL MODE

| STANDARD 11CH | | | |
|---|---|---|---|
| 1. Dimmer | 4. Green | 7. Pan | 10. Rota speed |
| 2. Shutter | 5. Blue | 8. Tilt | 11. Fixture control |
| 3. Red | 6. White | 9. Rota lens | |

| STANDARD 17CH | | | |
|---|---|---|---|
| 1. Dimmer | 6. Blue | 11. Tilt | 16. Calibration |
| 2. Dimmer fine | 7. White | 12. Tilt fine | 17. Slave ID |
| 3. Shutter | 8. Macro color | 13. Rota lens | |
| 4. Red | 9. Pan | 14. Rota speed | |
| 5. Green | 10. Pan fine | 15. Fixture control | |

# CIRCUIT CONNECTION DIAGRAM
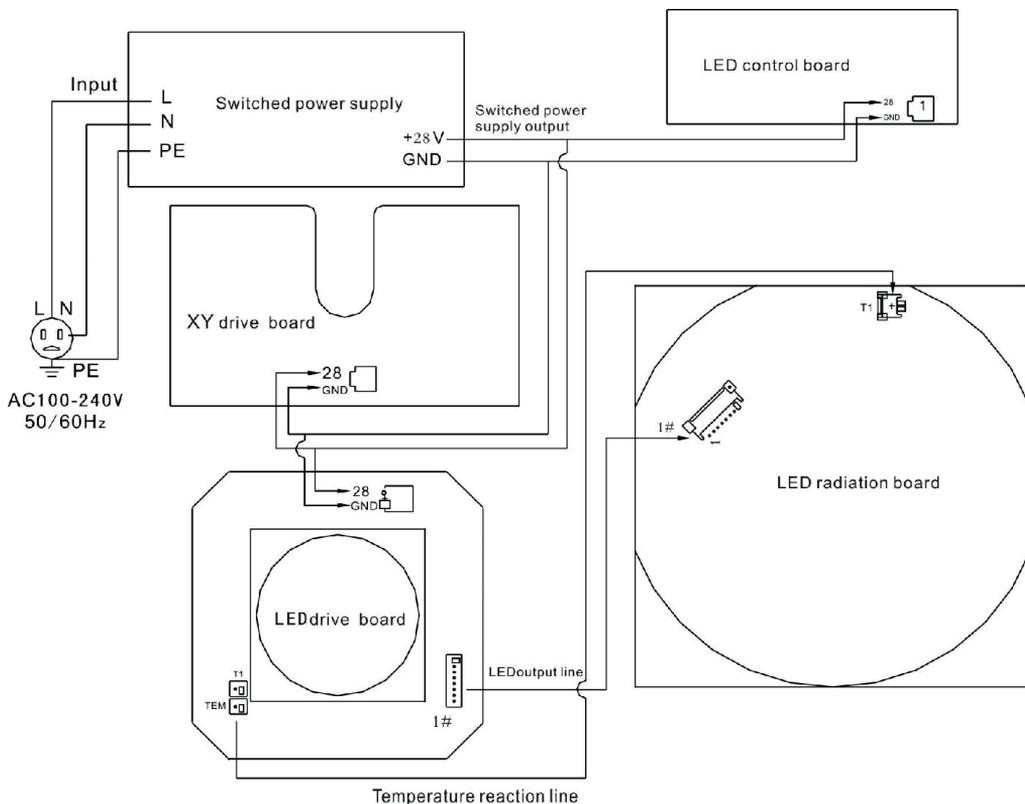
# ONBOARD CONTROL MENU

| MENU | | | REMARK |
|---|---|---|---|
| Setting | DMX address | 001 - 512 | |
| | Fixture ID | 000 - 064 | |
| | Channel mode | Standard 11CH | Default |
| | | Extended 17CH | |
| | DMX Function | Hold | |
| | | Black | |
| | | D. scene | |
| | | Program 1 | |
| | | Program 2 | |
| | | Program 3 | |
| | | Program 4 | |
| | | Program 5 | |
| | | Program 6 | |
| | | Program 7 | |
| | | Program 8 | |
| | Slave - Master | Slave mode | |
| | | Master mode | |
| Info | Fixture times | Power on time ****H | |
| | | Lamp on time ****H | |
| | Fixture temperature | Lamp_tem ****°C | |
| | RDM UID | ******** | |
| | DMX live | 1. Dimmer | |
| | | 2. Dimmer fine | |
| | | 3. Shutter | |
| | | 4. Red | |
| | | 5. Green | |
| | | 6. Blue | |
| | | 7. White | |
| | | 8. Macro color | |
| | | 9. Pan              0 - 255 | |
| | | 10. Pan fine | |
| | | 11. Tilt | |
| | | 12. Tilt fine | |
| | | 13. Rota lens | |
| | | 14. Rota sp | |
| | | 15. Fixturecontrol | |
| | | 16. Calibration | |
| | | 17. Slave ID | |
| | Version info | LED_XY_SOFT:V2.00 | |
| | | LED_DPY_SOFT:V4.00 | |

# ONBOARD CONTROL MENU

| MENU | | | | REMARK |
|---|---|---|---|---|
| Personality | Pan / Tilt | P/T swap | OFF | Default |
| | | | ON | |
| | | Pan invert | OFF | Default |
| | | | ON | |
| | | Tilt invert | OFF | Default |
| | | | ON | |
| | DMX reset | ON | | Default |
| | | OFF | | |
| | Reset | System reset | | |
| | Quick closedown | ON | | Default |
| | | OFF | | |
| | P/T angle limit | Close | | |
| | | Open | | |
| | Program on/off | Close | | |
| | | Open | | |
| | Set P/T angle | Pan start | | |
| | | Pan end | | |
| | | Tilt start | | |
| | | Tilt end | | |
| | Display | Display sleep | Light always | |
| | | | 2 minutes | |
| | | | 4 minutes | |
| | | | 6 minutes | |
| | | Display intensity | 10 - 100 | |
| | | Display rotation | Rotate 180 | |
| | | | Normal | |
| | | TFT calibration | | |

# ONBOARD CONTROL MENU

| MENU | MENU I | | REMARK |
|------|--------|---|--------|
| Manual control | 1. Dimmer | | |
| | 2. Dimmer fine | | |
| | 3. Shutter | | |
| | 4. Red | | |
| | 5. Green | | |
| | 6. Blue | | |
| | 7. White | | |
| | 8. Macro color | | |
| | 9. Pan | 0 - 255 | |
| | 10. Pan fine | | |
| | 11. Tile | | |
| | 12. Tilt fine | | |
| | 13. Rota lens | | |
| | 14. Rota sp | | |
| | 15. Fixturecontrol | | |
| | 16. Calibration | | |
| | 17. Slave ID | | |

| MENU | | | MENU IV | |
|------|---|---|---------|---|
| Program | Edit program | Edit program 1 | Scene | 000 - 100 |
| | | | 1. Dimmer | |
| | | | 2. Dimmer fine | |
| | | | 3. Shutter | |
| | | | 4. Red | |
| | | | 5. Green | |
| | | | 6. Blue | |
| | | | 7. White | |
| | | | 8. Macro color | |
| | | | 9. Pan | 000 - 255 |
| | | | 10. Pan fine | |
| | | | 11. Tilt | |
| | | | 12. Tilt fine | |
| | | | 13. Rota lens | |
| | | | 14. Rota sp | |
| | | | 15. Fixturecontrol | |
| | | | 16. Calibration | |
| | | | 17. Slave ID | |
| | | | Save scene | |

# ONBOARD CONTROL MENU

| MENU | | | MENU IV | |
|---|---|---|---|---|
| Program | Edit program | Edit program 2 | Same as 'Edit program 1' | |
| | | Edit program 3 | | |
| | | Edit program 4 | | |
| | | Edit program 5 | | |
| | | Edit program 6 | | |
| | | Edit program 7 | | |
| | | Edit program 8 | | |
| | Set program | Set program 1 | Start step | 000 - 100 |
| | | | End step | 000 - 100 |
| | | | Step time | 000 - 255 |
| | | | Save | |
| | | Set program 2 | Same as 'Set program 1' | |
| | | Set program 3 | | |
| | | Set program 4 | | |
| | | Set program 5 | | |
| | | Set program 6 | | |
| | | Set program 7 | | |
| | | Set program 8 | | |
| | Run | Running program | | |
| | Fixed scene | Scene 001 - 100 | | |
| Service | Error list | | | |
| | Adjust | Pan | ±5.00% | |
| | | Tilt | ±5.00% | |
| | | Rotatable lens | ±5.00% | |
| | Factory | Default | | |
| | | Adjust default | | |
| | Firmware update | **** | | |

# DMX PROTOCOL

| CHANNEL | DMX VALUES | % | EFFECT |
|---|---|---|---|
| 1. Dimmer | 000 - 255 | 0 - 100 | |
| 2. Dimmer fine | 000 - 255 | 0 - 100 | |
| 3. Shutter | 000 - 009 | 0 - 3 | |
| | 010 - 049 | 4 - 19 | Light --> dark, slow --> fast |
| | 050 - 089 | 20 - 34 | Dark --> light, slow --> fast |
| | 090 - 119 | 35 - 46 | Dark --> light --> dark, slow --> fast |
| | 120 - 179 | 47 - 70 | Random fast --> slow strobe |
| | 180 - 250 | 71 - 98 | In-phase, slow --> fast |
| | 251 - 255 | 99 - 100 | Unused range |
| 4. Red | 000 - 255 | 0 - 100 | |
| 5. Green | 000 - 255 | 0 - 100 | |
| 6. Blue | 000 - 255 | 0 - 100 | |
| 7. White | 000 - 255 | 0 - 100 | |
| 8. Macro color | 000 - 001 | 0 - 1 | |
| | 002 - 254 | 1 - 99 | Shadow |
| | 255 | 100 | |
| 9. Pan | 000 - 255 | 0 - 100 | |
| 10. Pan fine | 000 - 255 | 0 - 100 | |
| 11. Tilt | 000 - 255 | 0 - 100 | |
| 12. Tilt fine | 000 - 255 | 0 - 100 | |
| 13. Rotatable lens | 000 - 127 | 0 - 49 | |
| | 128 - 135 | 50 - 52 | |
| | 136 - 231 | 53 - 90 | |
| | 232 - 255 | 91 - 100 | |
| 14. Rota sp | 000 - 255 | 0 - 100 | |
| 15. Fixture control | 000 - 009 | 0 - 3 | |
| | 010 - 014 | 4 - 5 | |
| | 015 - 019 | 6 - 7 | |
| | 020 - 024 | 8 - 9 | |
| | 025 - 029 | 10 - 11 | |
| | 030 - 034 | 12 - 13 | |
| | 035 - 239 | 14 - 93 | |
| | 240 - 244 | 94 - 95 | |
| | 245 - 249 | 96 - 97 | |
| | 250 - 255 | 98 - 100 | |
| 16. Calibration | 000 - 255 | 0 - 100 | |

# DMX PROTOCOLS

| CHANNEL | DMX VALUES | % | EFFECT |
|---------|-----------|---|--------|
| 17. Slave ID | 000 - 002 | 0 | |
| | 003 - 005 | 1 - 2 | ID:1 effective |
| | 006 - 008 | 2 - 3 | ID:2 effective |
| | --- | --- | |
| | 192 - 194 | 75 - 76 | ID:64 effective |
| | 195 - 197 | 76 - 77 | ID is (2xn) + 1 effective, (n=0 - 31) 1, 3, 5, 7, 9 ... 63 |
| | 198 - 200 | 77 - 78 | ID is (2xn) + 2 effective, (n=0 - 31) 2, 4, 6, 8, 10 ... 64 |
| | 201 - 203 | 78 - 79 | ID is (3xn) + 1 effective, (n=0 - 21) 1, 4, 7, 10, 13 ... 64 |
| | 204 - 206 | 80 - 81 | ID is (3xn) + 2 effective, (n=0 - 20) 2, 5, 8, 11, 14 ... 62 |
| | 207 - 209 | 81 - 82 | ID is (3xn) + 3 effective, (n=0 - 20) 3, 6, 9, 12, 15 ... 63 |
| | 210 - 212 | 82 - 83 | ID is (4*n) + 1 effective, (n=0 - 15) 1, 5, 9, 13, 17 … 61 |
| | 213 - 215 | 83 - 84 | ID is (4*n) + 2 effective, (n=0 - 15) 2, 6, 10, 14, 18 … 62 |
| | 216 - 218 | 84 - 85 | ID is (4*n) + 3 effective, (n=0 - 15) 3, 7, 11, 15, 19 … 63 |
| | 219 - 221 | 85 - 86 | ID is (4*n) + 4 effective, (n=0 - 15) 4, 8, 12, 16, 20 … 64 |
| | 222 - 224 | 87 - 88 | ID is (5*n) + 1 effective, (n=0 - 12) 1, 6, 11, 16, 21 … 61 |
| | 225 - 227 | 88 - 89 | ID is (5*n) + 2 effective, (n=0 - 12) 2, 7, 12, 17, 22 … 62 |
| | 228 - 230 | 89 - 90 | ID is (5*n) + 3 effective, (n=0 - 12) 3, 8, 13, 18, 23 … 63 |
| | 231 - 233 | 90 - 91 | ID is (5*n) + 4 effective, (n=0 - 12) 4, 9, 14, 19, 24 … 64 |
| | 234 - 236 | 91 - 92 | ID is (5*n) + 5 effective, (n=0 - 11) 5, 10, 15, 20, 25 … 60 |
| | 237 - 239 | 93 - 94 | ID is (6*n) + 1 effective, (n=0 - 10) 1, 7, 13, 19, 25 … 61 |
| | 240 - 242 | 94 - 95 | ID is (6*n) + 2 effective, (n=0 - 10) 2, 8, 14, 20, 26 … 62 |
| | 243 - 245 | 95 - 96 | ID is (6*n) + 3 effective, (n=0 - 10) 3, 9, 15, 21, 27 … 63 |
| | 246 - 248 | 96 - 97 | ID is (6*n) + 4 effective, (n=0 - 10) 4, 10, 16, 22, 28 … 64 |
| | 249 - 251 | 97 - 98 | ID is (6*n) + 5 effective, (n=0 - 9) 5, 11, 17, 23, 29 … 59 |
| | 252 - 254 | 98 - 99 | ID is (6*n) + 6 effective, (n=0 - 9) 6, 12, 18, 24, 30 … 60 |
| | 255 | 100 | All ID's are valid |

# CLEANING AND MAINTENANCE

- In order to ensure the fixture could work normally it should be kept clean always .The lens should also be regularly cleaned to maintain an optimum light output. Do not use any type of chemicals on the lens. It will damage the lens.

- Please disconnect the power supply of the fixture when you start maintenance.

**CAUTION: Disconnect the fixture from the main power before you start with the maintenance.**

# SPECIFICATIONS

| | |
|---|---|
| Voltage | 240VAC 50/60Hz |
| Power | 91W |
| LED chips | 6x RGBW 4 in 1 LED chip |
| Lens degree | Standard 1.5° |
| Beam angle | Minimum 6°, maximum 51° |
| Color | RGBW |
| Strobe | 1-30 times / second electronic strobe and random strobe |
| Pan | 540° |
| Tilt | 180° |
| Control mode | DMX512, RDM ready |
| Channel | Standard CH11 & extended CH17 |
| Display menu | 2.4 inch TFT touch screen |
| Software | Upgrade by XLR cable |
| Fixture size | 226 x 226 x 286 mm |
| Netto weight | 3,8 kg |
| Fixture size | 226 x 268mm |
| Ambient temperature | 0°C - 38°C |

# BEAM 6