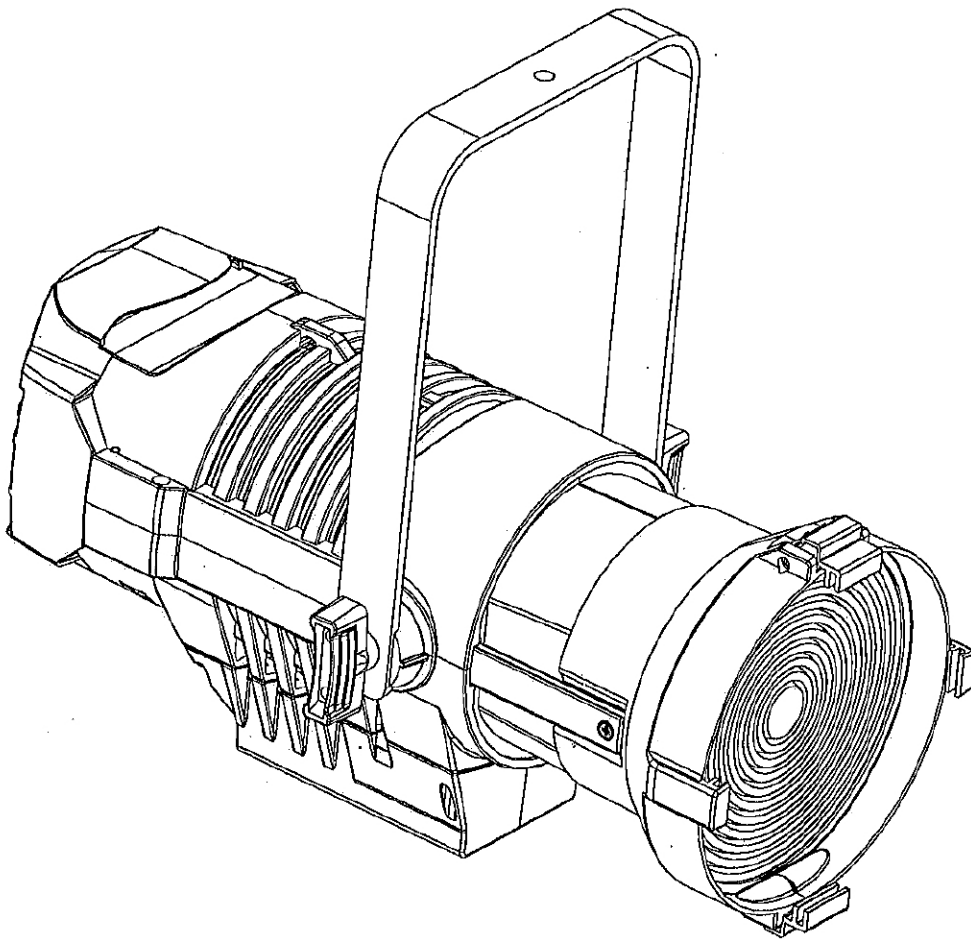# User Manual

EVO FRESNEL Z 300

Safety Instructions

Advice before use

Read these instruction carefullyAs soon as the equipment is delivered, open packing and inspect the equipment carefully.If you notice any damage, immediately contact the transport company and register your complaint in due form of listing the defects.Be sure that this equipment left our factory in perfect condition.Check if the received equipment is consistent with the delivery notice and if this delivery notice is consistent with your order.If it is not, immediately contact with you supplier.

General Remarks

This luminaire is lighting equipment designed for professional use only indoors in theatres and televison or film studios. It must imperatively be connected to earth by means of its earth wire.To prevent any electrical shock, this equipment should not be opened when functioning.

Nevertheless

Any part or lenses have to be replaced if they are visibly damaged and their efficiency might be reduced, for example in case of deep cracks or scratches. If internal access is needed for control, service or repair purposes, always refer to qualified personnel.In all events, always unplug the power supply cable before opening.It is the user's responsibility to use the luminaire for its intended purpose and to check the equipment that might be connected to it.The luminaire can under no circumstances be modified.BRIGHTEN will not assume any responsibility in case of damage resulting from modifications made to the luminaire.This luminaire is a piece of professional equipment designed for easy and simple use. Nevertheless, always refer to qualified personnel for any installation or repair work.

Important Remark

Power supply cables and other connections are essential for your equipment and contribute greatly to a safe and trouble free operation.Always hold the plug when disconnecting a cable, never pull the cable. Never use cables or connectors in bad condition, check them before installation and periodically thereafter.Never tie power supply and data cables together.

Electrical Connection

This luminaire is designed for operating at a nominal voltage of 230V.For your own safety, make sure the earth wire(yellow-green) is ALWAYS connected to earth.If the external cable is destroyed, it may only be replaced by manufacturers or service agents or qualified person for safety.
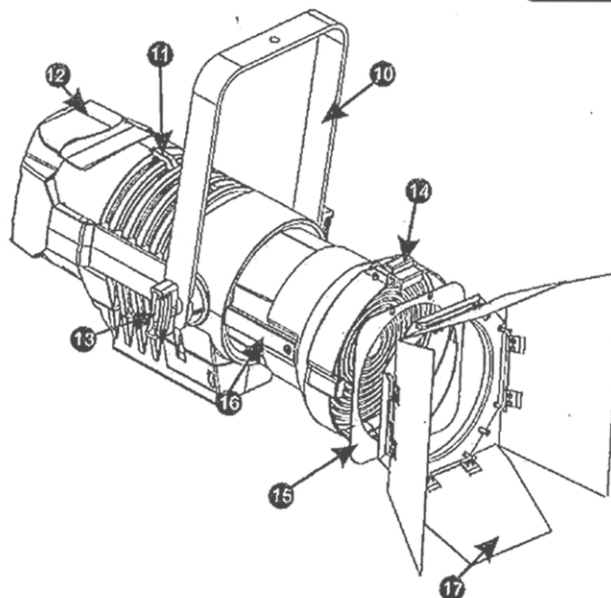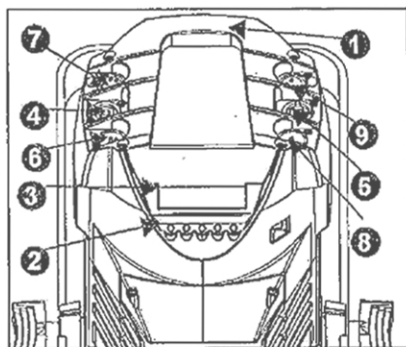
Attention

1.Function/address code setting,please wait 15 seconds after the display turn off,the system will default automatic memory the program is running.

2.Short period of time,repeated intermittent power outages,Please restart the power supply after 20 seconds.
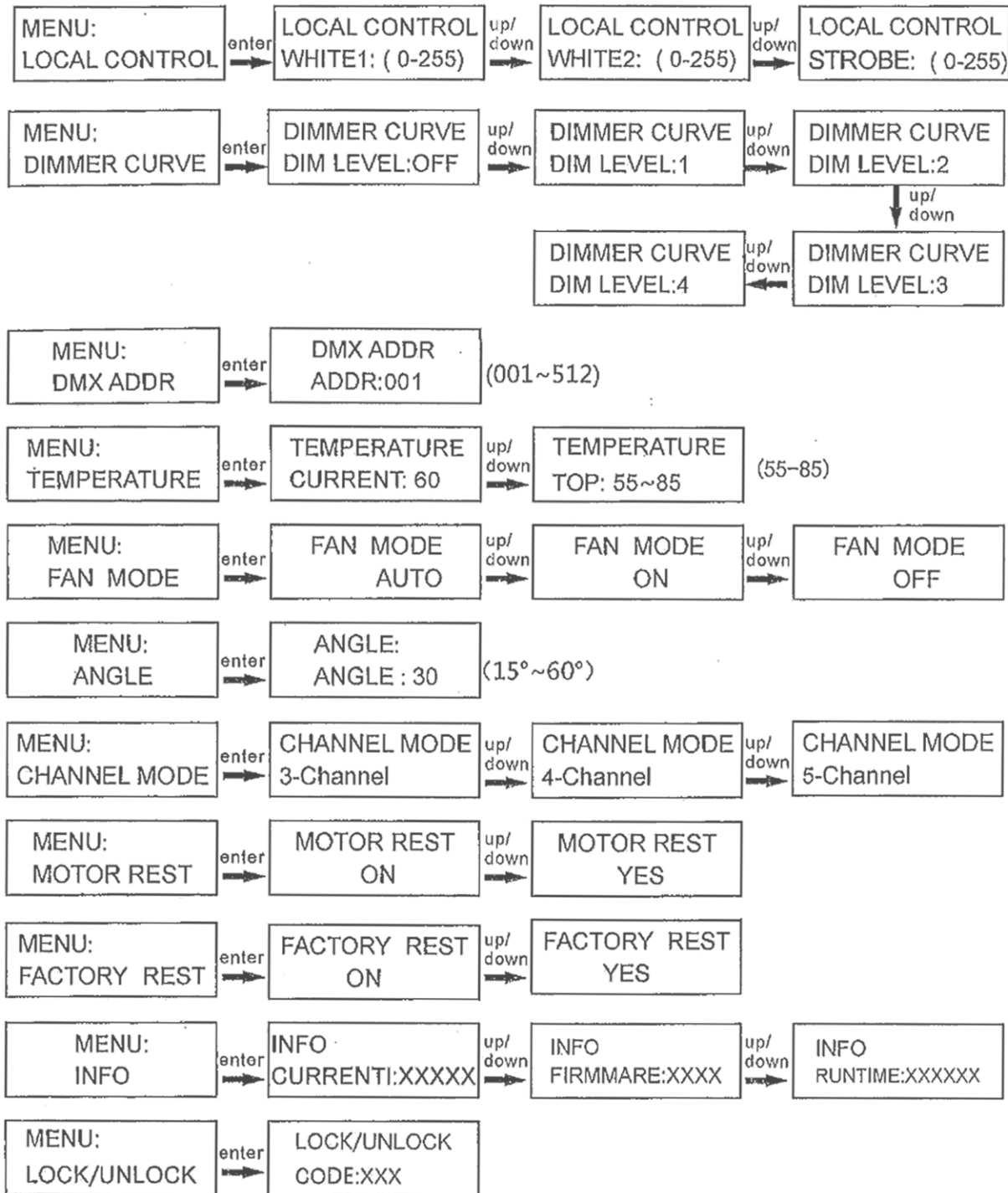
**ATTENTION:
LETHAL VOLTAGE
PRESENT INSIDE!**

1.Rear cover
2.Five-digit Control key
3.LCD
4.Power input
5.Power output
6.5 pin DMX input
7.5 pin DMX output
8.3 pin DMX input
9.3 pin DMX output
10.Handle/Yoke
11.Safety slot
12.Rear handle
13.handle locking knob
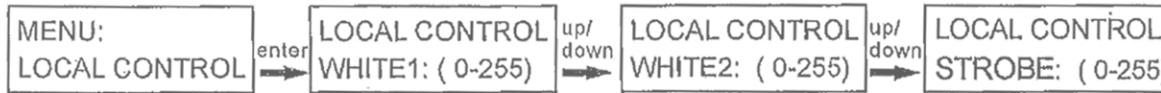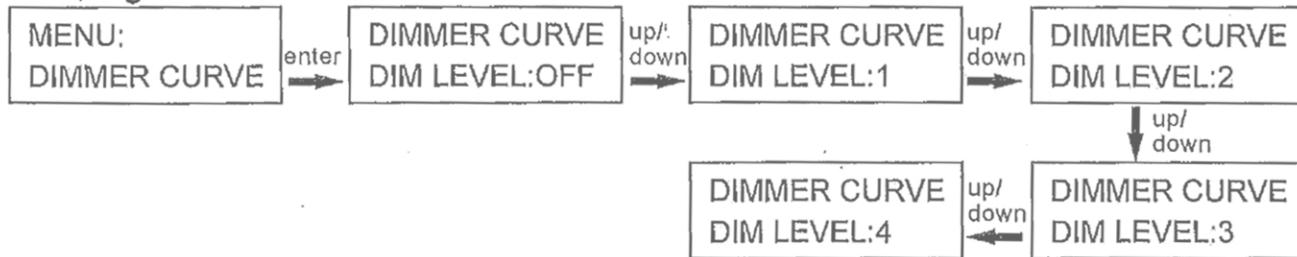14.Locking claw
15.Filter frame
16.Fresnel rail
17.Barndoor

Overview

Menu Structure

| MENU:
LOCAL CONTROL | → enter | LOCAL CONTROL
WHITE1: (0-255) | up/down → | LOCAL CONTROL
WHITE2: (0-255) | up/down → | LOCAL CONTROL
STROBE: (0-255) |

| MENU:
DIMMER CURVE | → enter | DIMMER CURVE
DIM LEVEL:OFF | up/down → | DIMMER CURVE
DIM LEVEL:1 | up/down → | DIMMER CURVE
DIM LEVEL:2 |

DIMMER CURVE DIM LEVEL:2 → up/down → DIMMER CURVE DIM LEVEL:3 ← up/down ← DIMMER CURVE DIM LEVEL:4

| MENU:
DMX ADDR | → enter | DMX ADDR
ADDR:001 | (001~512) |

| MENU:
TEMPERATURE | → enter | TEMPERATURE
CURRENT: 60 | up/down → | TEMPERATURE
TOP: 55~85 | (55~85) |

| MENU:
FAN MODE | → enter | FAN MODE
AUTO | up/down → | FAN MODE
ON | up/down → | FAN MODE
OFF |

| MENU:
ANGLE | → enter | ANGLE:
ANGLE : 30 | (15°~60°) |

| MENU:
CHANNEL MODE | → enter | CHANNEL MODE
3-Channel | up/down → | CHANNEL MODE
4-Channel | up/down → | CHANNEL MODE
5-Channel |

| MENU:
MOTOR REST | → enter | MOTOR REST
ON | up/down → | MOTOR REST
YES |

| MENU:
FACTORY REST | → enter | FACTORY REST
ON | up/down → | FACTORY REST
YES |

| MENU:
INFO | → enter | INFO
CURRENTI:XXXXX | up/down → | INFO
FIRMMARE:XXXX | up/down → | INFO
RUNTIME:XXXXXX |

| MENU:
LOCK/UNLOCK | → enter | LOCK/UNLOCK
CODE:XXX |

Menu Brief
Local Control

MENU: LOCAL CONTROL	enter →	LOCAL CONTROL WHITE1: (0-255)	up/ down	LOCAL CONTROL WHITE2: (0-255)	up/ down	LOCAL CONTROL STROBE: (0-255)

1.Select 【LOCAL CONTROL】 menu and press 【ENTER】 to 'LOCAL CONTROL', the fixture will automatically come into MASTER being at the status of sending data
2.Press 【LEFT】 【RIGHT】 button to select sub-menu: 【WHITE1】 【WHITE2】 【STROBE】
3.Press 【ENTER】 button to return to main menu ("External Control Mode")

Dimming Curve Choice

MENU: DIMMER CURVE	enter →	DIMMER CURVE DIM LEVEL:OFF	up/ down	DIMMER CURVE DIM LEVEL:1	up/ down	DIMMER CURVE DIM LEVEL:2

up/down ↓

| DIMMER CURVE DIM LEVEL:4	← up/ down	DIMMER CURVE DIM LEVEL:3

1.Select 【DIMMER CURVE】 menu and press 【ENTER】 to "DIMMER CURVE Mode"
2.Press 【UP】 【DOWN】 button to select dimming curve parameter, modified parameter will come into effects immediately
3.Press 【ENTER】 button to return to main menu ("External Control Mode")

DMX512 Address Code Setting

MENU: DMX ADDR	enter →	DMX ADDR ADDR:001	(001~512)

1.Select 【DMX ADDR】 menu and press 【ENTER】, it is still " External Control Mode"
2.Press 【UP】 【DOWN】 button to select Value 001~512
3.Press 【ENTER】 button to return to main menu ("External Control Mode")

Temperature Protection

MENU: TEMPERATURE	enter →	TEMPERATURE CURRENT: 60	up/ down →	TEMPERATURE TOP: 55~85	(55-85)
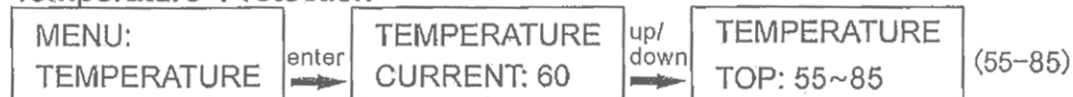
1.Select 【TEMPERATURE】 menu and press 【ENTER】, it is still "TEMPERATURE"
2.Press 【LEFT】 【RIGHT】 button to select 【CURRENT】 or 【TOP】, The current Temperature appears in the interface (Note: subject to hardware material and installation space, the temperature may be not precise, only be reference value of temperature protection setting, press 【ENTER】 to return to main menu ("External Control Mode")
3.Value of temperature protection appears in the interface, press 【UP 【DOWN】 button to modify temperature protection (Range: 55-85)
4.Press 【ENTER】 button to return to main menu ("External Control Mode")

Fan Setting

MENU: FAN MODE	enter →	FAN MODE AUTO	up/ down →	FAN MODE ON	up/ down →	FAN MODE OFF

1, Enter into 【FAN MODE 】 menu, Press the 【middle】 key to select fan setting and enter into menu setting interface.
2, Press 【Up】 / 【Down】 to select 【AUTO】 【ON】 【OFF】, it will be valid once the value is modified.
3, Press the 【middle】 key to return to main menu (external control mode)

Beam Angle

| MENU: ANGLE | → enter | ANGLE: ANGLE : 30 | (15°~60°) |
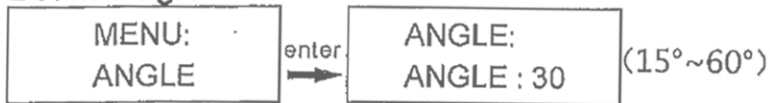
1. Enter into 【ANGLE】 menu, Press the 【middle】 key to select Beam Angle setting and enter into menu setting interface.
2. Press 【Up】 / 【Down】 to select 【15】, it will be valid once the value is modified
3. Press the 【middle】 key to return to main menu (external control mode)

| MENU: CHANNEL MODE | → enter | CHANNEL MODE 3-Channel |

3 Channel Mode

Channel	Value	control Function
1	0~255	Dimmer
2	0~255	CTO
3	0~255	Focusing

1. Select 【CHANNEL MODE】 menu and press 【ENTER】, it is still " External Control Mode"
2. Press 【LEFT】【RIGHT】 button to select sub-menu: 【3-Channels Mode】
3. Press 【ENTER】 button to return to main menu (External Control Mode)

Motor reset

| MENU: MOTOR REST | → enter | MOTOR REST NO | → up/down | MOTOR REST YES |

1. Enter into 【MOTOR REST】 menu, Press the 【middle】 key to select motor rest setting and enter into menu setting interface. Press 【LEFT】【RIGHT】 button to select 【NO】 or 【YES】.
2. Press 【middle】 button to select 【Rest】 will restore the state before the initial setting
3. Press the 【middle】 key to return to main menu (external control mode)

Factory Resrt

| MENU: FACTORY REST | → enter | FACTORY REST NO | → up/down | FACTORY REST YES |

1. Press the 【middle】 key to enter into the menu interface in 【FACTORY RESRT】
2. Press the 【left】【right】 key to select 【No】【YES】, it will return to the status before setting if press the 【YES】
3. Press the 【middle】 key to return to main menu (external control mode)

Fixture Information

MENU: INFO	→enter→	INFO CURRENTI:XXXXX	→up/down→	INFO FIRMMARE:XXXX	→up/down→	INFO RUNTIME:XXXXXX
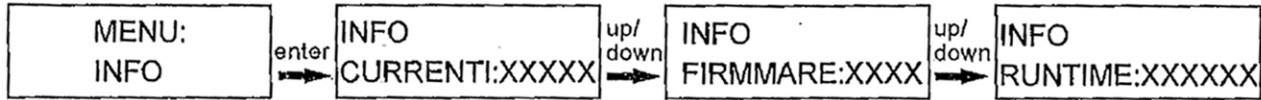
1.Press 【INFO 】 menu into message interface
2.Press 【LEFT】【RIGHT】button to choose 【CURRENTI】 or 【FIRMWARE】【RUNTIME】
3.Press 【ENTER】 button to return to main menu（ "External Control Mode"）

Fixture Registration

MENU: LOCK/UNLOCK	→enter→	LOCK/UNLOCK CODE:XXX

1.Press the 【middle】 key to enter into the menu interface "Fixture Registration" in 【Register】
2.In the current interface there is a flash, press 【Up】【Down】to select 0 to 9.
3.Press the 【middle】 key to return to main menu (external control mode)

Insertion of Accessories

Moving the double clips(7)to ward the middle to open the accessory slot cover(6).After put the filter frame and barndoor into the correct accessory holders(5),pls snap the clips back into place,to fasten the filter frame in the holders.
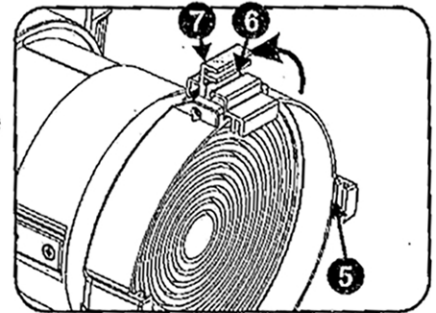
Specification

● Model	VIVI30-SAN-2C
● Voltage	AC110V-240V, 50HZ-60HZ
● Wattage	300W LED
● Color Temperature	3200K/6000K
● Max.Ambient Temperature	<40°C
● Max Surface Temperature	<60°C
● Using Humindity	15-75%
● Body Weight	12 5Kg
● Signal Transfers	DMX512
● Cable	PVC1‑5 square
● Body Material	Tensile aluminum(Plastic)
● Color	Black
● The power factor	≥0. 95 （Full Load）

Accessories(Optional)

P.C Lens   Fresnel Lens   Metal filter frame
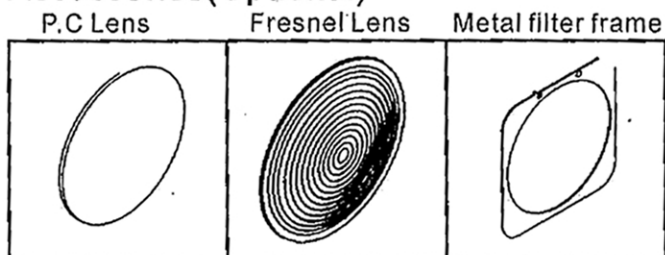
Heavy duty quickly clamp
Available Pipe:52mm

Safety cable
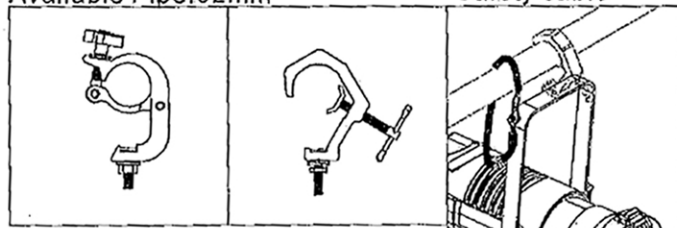
Heavy duty clamp
Available Pipe:40-60mm

Operation panel

Basic usage

* Push button consists of five keys on the menu, such as 【UP】【ENTER】【DOWN】【LEFT】【RIGHT】
* On the first menu, 【UP】【DOWN】【LEFT】【RIGHT】 for Select, 【ENTER】 for the second sub-menu
* On the second menu, 【LEFT】【RIGHT】 for Select, 【UP】【DOWN】 for change parameter on sub-menu, modified parameter come into effects immediately, 【ENTER】 for exit.
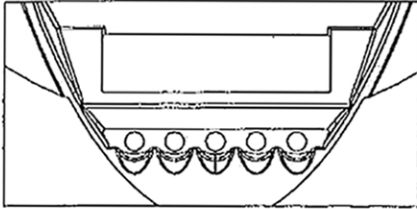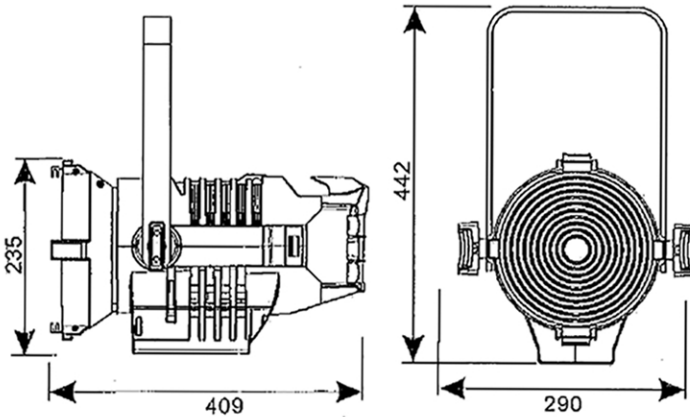

UP   DOWN   ENTER   LEFT   RIGHT

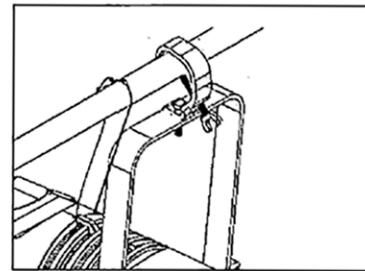|	
【UP】	Up Option key
【DOWN】	Down Option key
【ENTER】	Confirm or Return
【LEFT】	Left option key or value increase
【RIGHT】	Right option key or value decrease
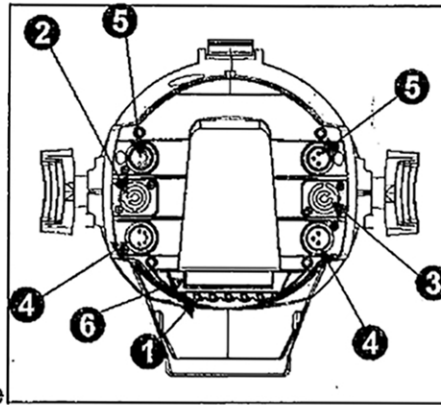
1. Thin Film Button
2. Digital display
3. Power Supply Input
4. Power Supply output
5. Signal Input
6. Signal output
7. Signal Input
8. Signal output

Dimensions

Unit:(mm)

235

442

409

290

Suspension

Hand the lamp on the truss with a clamp and lock the clamp after getting the desired direction.

Operation Brief

Introduction of Product Features

Single type of operating mode
*External Control Mode
Controlled by DMX512 console

Non-linear Dimming and Linear Dimming
*16-bit (60 thousand)

Screen Saver
* Go into screen saver mode without operation in 30 seconds, and press any key to exit screen saver mode

Over-temperature Protection
* Over temperature protection available

Connection control signal

3PIN   DMX OUT   DMX IN   5PIN

      The connection between fixtures and controller as well as between fixtures and fixtures must be used with 2 PIN shielded conductor of over 0.5mm diameter. Please use 3 PIN to DMX512 in/out of Fixture. As shown in the list above, the connection between XLR plug or socket and conductor. It is important to note that, when connected, 3 PIN of XLR plug or socket can not touch with inner shell as well as PINs not touching with each other. Apart from the connection shown in the list above, XLR plug or socket can not be connected with XLR control cable in any other ways.

      Using XLR-XLR control cable to connect from DMX output of controller to DMX input of the first slave, and from DMX output of the first slave to DMX input of the second slave, and so on, until all slave fixture finishes connection. Then put the return plug to connect signal output of the final fixture. So the connection of controller mode finished.

      Under the "external control mode", the DMX output of the last lamp must connect the DMX loop interpolation. The loop interpolation between 2-pin and 3-pin of "Canon"plug connecting a resistor which is about 120(OHM) (As shown below picture). Insert the loop interpolation to the output port of the last lamp, can effectively avoid the noise and reflection phenomenon of the DMX 512 signal in the process of transmission.

> Connection of DMX loop interpolation Between the 2-pin and 3-pin of the XLR plug connecting a resistor which is 120(OHM), and insert it to the DMX output socket of the last lamp.

120Ω   PIN2 PIN3
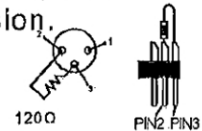
Synchronize Multi-controller

When control multi luminaries via console and apply strobe, auto run mode, the console is simply used to generate channel data. Strobe and auto run effects are realized by individual luminaries. Please note information below:

1. In practical use, unsynchronization can be caused by many reasons, such as different start time and connection time to console. You can change the value of fader to fix them (e.g. Adjust from 20 to 0 and back to 20).

2. Due to crystal frequency deviation among different luminaries, unsynchronization will appear after a long time running.

3. One way to keep synchronization during long time running:

a. Strobe and auto run effect under programmed console control.

General Fault Repairing Description

Fixture can't start normally	Measures
Lighting can't be start	check if power fuse gets burning
Lighting normally, can't be controlled by controller	check if initial address of DMX is correct check if XLR signal cable is broken
Sometimes on and sometimes off	Check whether the fan work.and whether the fan be blocked by the dust
Dark dimming, decrease intensity	check if internal and external optical lens is clean
Serious beam distortion	check if lens is broken clean lens away from dust or oil stain