RED LIGHTING

PROFESSIONAL MOVING HEAD USER MANUAL

CLASSE LS 60

KEEP THIS MANUAL FOR FUTURE NEEDS

CE

Contents

Thank you for your patronage. We are confident that our excellent products and service can satisfy you.
In order to install , operate, and maintain the lighting safety and correctly. We suggest that the installation and operation should be done by the verified technician and follow the instruction strictly.

	CAUTION! Keep this device away from rain and moisture !
	CAUTION! Unplug mains lead before opening the housing.

INTRODUCTION:

Thank you for having chosen this professional led moving head.
You will see you have acquired a powerful and versatile device.

Unpack the device. Inside the box you should find:
1. One XLR connection cable
2. One omega clamps
3. One safety rope
4. Manual

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

1. FEATURES

· LED type: SST-90
· Extremely Long Life: 100,000 hr and lower power consumption
· 3 DMX channel mode: 12/14/16 channels
· 3 operational modes: DMX-512, Master/Slave & Sound Active
· 630°or540° pan / 270° tilt (8-bit)
· Strobe effect with 1-13 flashes per second and pulse effect
· Color wheels：8dichroic filters plus open, rainbow-effect with adjustable speed in both directions
· Rotation gobo: 7 interchangeable, rotating gobos plus open
· Prism and prism rotating , with 16 prism macros
· Linear dimmer in precise speed from 0% ~ 100%
· Friendly blue LCD display
· Rechargeable Back up Battrty for Display
· Preset program: 7 built in programs can be called up via DMX controller
· Fan automatically adjust speed according to the LED temperature
· Software-upload by optional accessory via DMX line

2. FIXTURE OVERVIEW
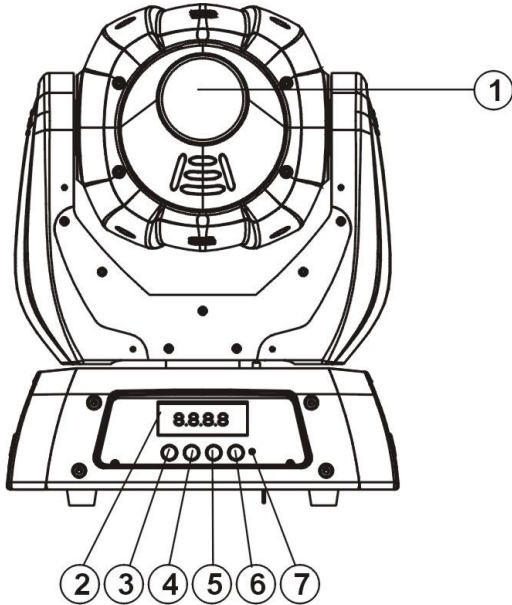
1: Lens

2: Display

3: Mode/Esc-button

4: Up-button

5: Down-button

6: Enter-button

7: Microphone
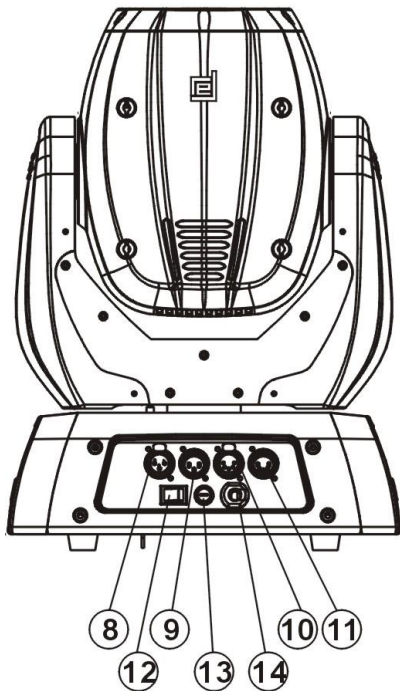
8: 3-Pin DMX out

9: 3-DMX in

10: 5-Pin DMX out

11: 5-DMX in

12: Power switch

13: Fuse

14: Power supply

3. SAFETY INSTRUCTIONS

3.1) Important safety warns

> **CAUTION!**
> Be careful with your operations.With a dangerous voltage you can Suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

	CAUTION!
⚠	Never touch the device during operation! The housing may heat up
⚠	CAUTION! Never look directly into the light source, as sensitive persons may suffer an epileptic shock.

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

3.2) GENERAL GUIDELINES

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

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

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

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

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. Please don't project the beam onto combustible substances. The minimum distance between light-output from the projector and the illuminated surface must be more than 0.5 meter.

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

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

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

For safety reasons, please be aware that all modifications on the device are forbidden.

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, lamp explosion, crash, etc.

4. INSTALLATION INSTRUCTIONS
4.1) Mounting the device

> **CAUTION!**
> Please consider the GB7000.15/EN60598-2-17 and the other respective national norms during the installation. The installation must only be carried out by a qualified person.

The applicable temperature for the lighting is between -25°C to 45°C. Do not use the lighting under or above the temperature.
The installation of the effect has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety rope.

Never stand directly below the device when mounting, removing or servicing the fixture.
The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.

These installations have to be approved by a skilled person once a year.

Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Before mounting make sure that the installation area can hold a minimum point load of 10 times the device's weight.
Connect the fixture to the mains with the power plug.

Installation via the Omega holders

(1)Omega–holders
(2)Clamp
(3)Safety–rope
(4)Quick–lock fastener
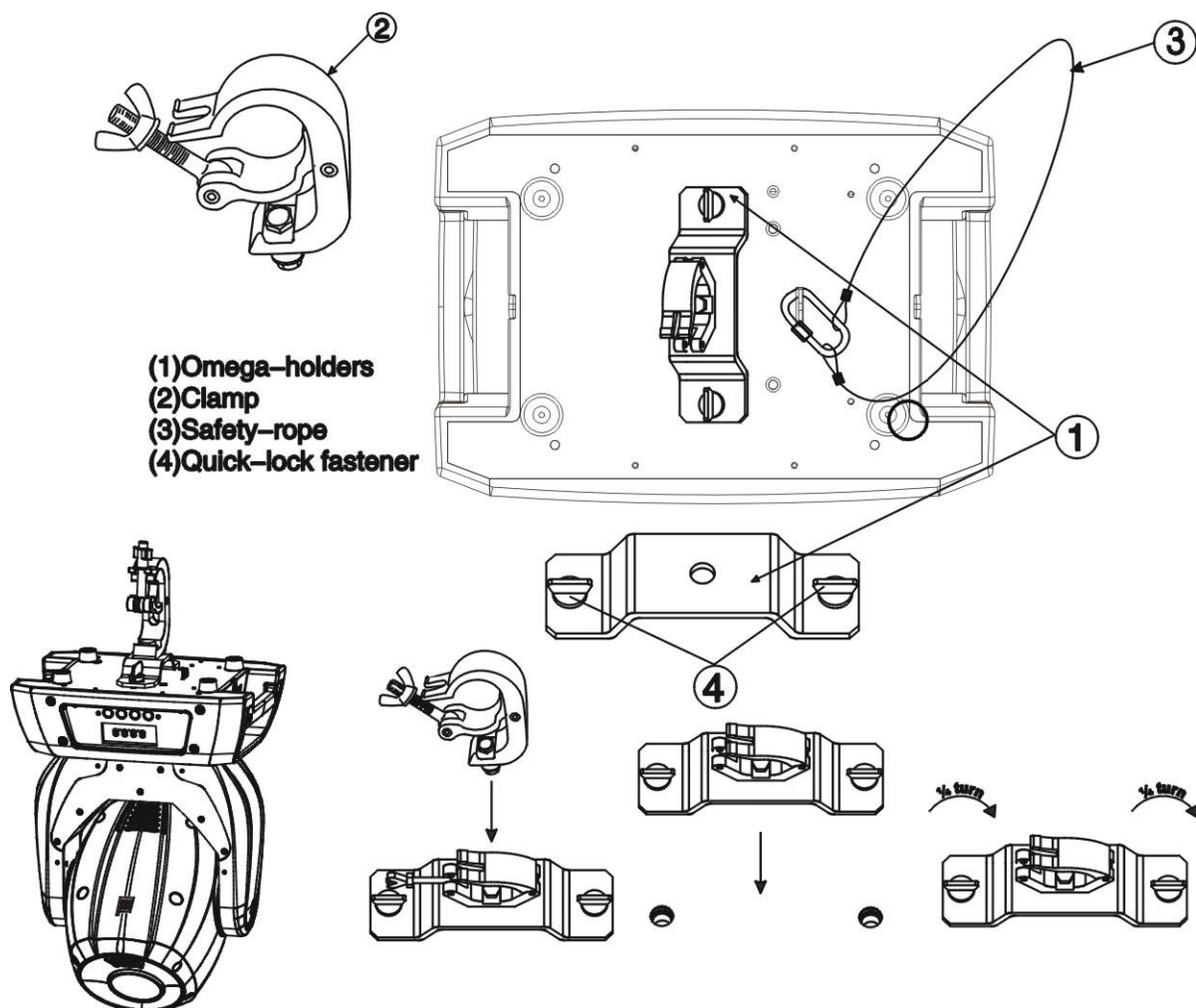
a) Fixed the clamp on the bracket by tighten up the M12 screw on the bracket to the Φ13 hole in the middle of the bracket.
b) Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
c) Install the second Omega holder.
d) Pull the safety-rope through the holes on the bottom of the base and over the trussing system or a safe fixation spot. Insert the end in the carabine and tighten the safety screw.

Notice: this step is quite important to ensure that the fixture will not drop out   by the damage of the clamp.

Dimensional Drawings:

Classe LS 60 v1.0
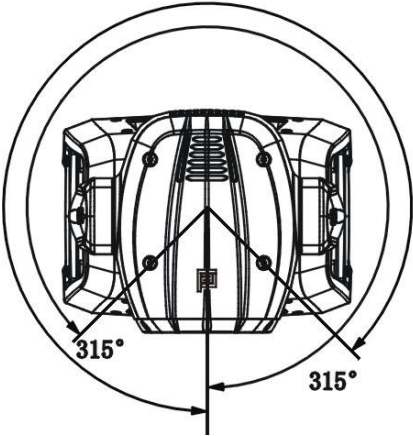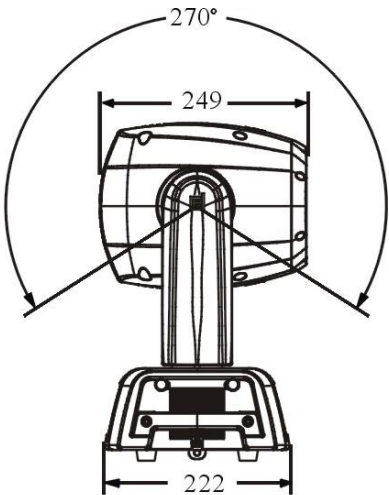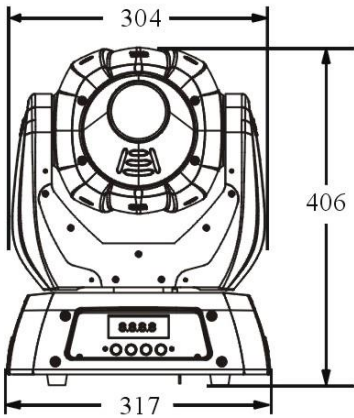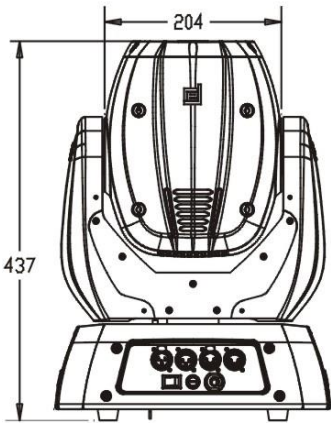
Layout Drawings:
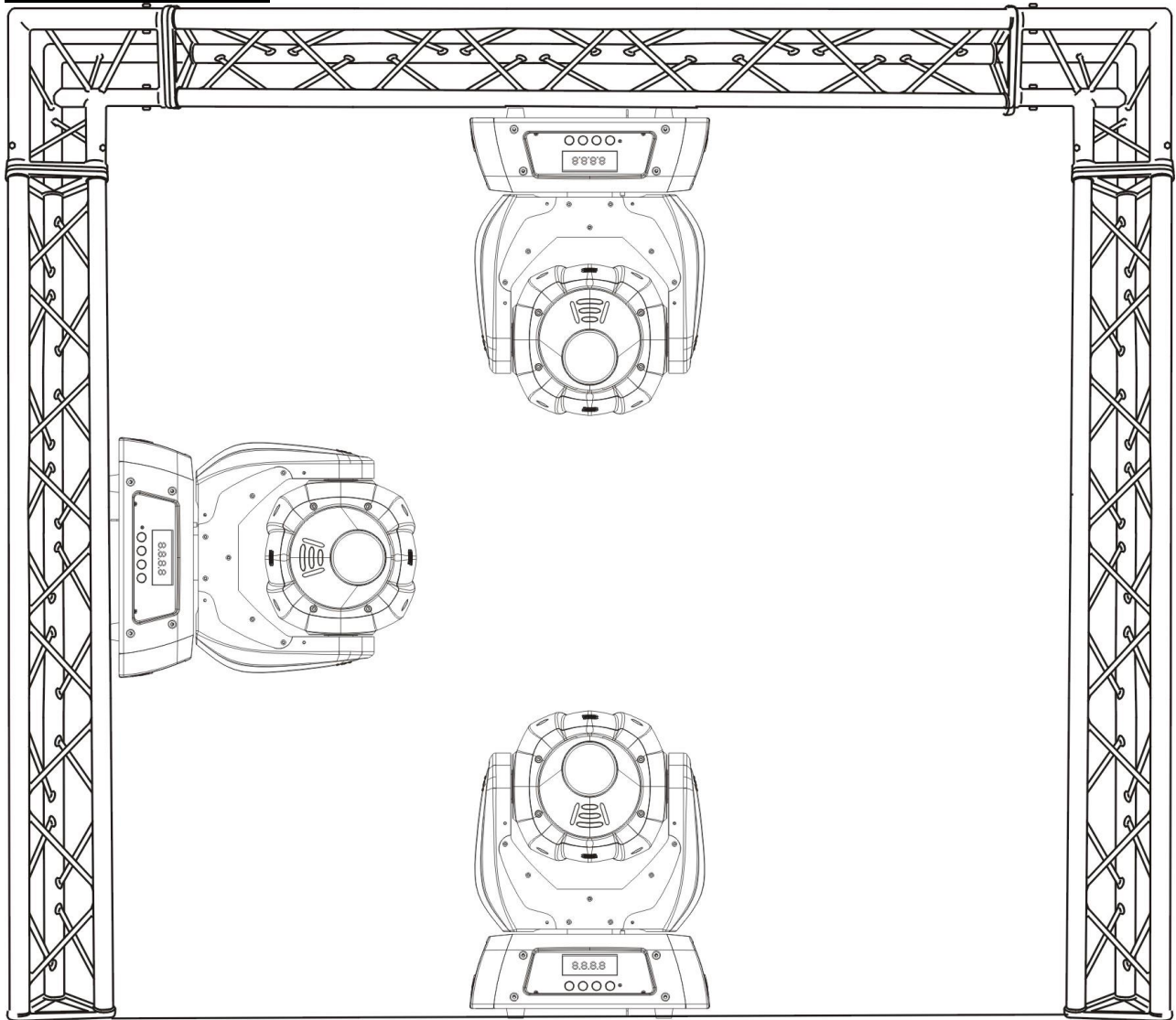
Mounting points

Be sure this fixture is kept at least 0.5m away from any flammable materials (decoration etc.). 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.

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

5. DMX-512 control connection

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 head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX output
3-Pin XLR Socket

DMX Input
3-Pin XLR Socket
1: Ground
2: Signal (−)
3: Signal (+)

DMX Output
5-Pin XLR Socket

DMX Input
5-Pin XLR Socket
1: Ground
2: Signal (−)
3: Signal (+)
4: N.A.
5: N.A.

120 Ohms

DMX512

DMX-controller

Address 29   Address15   Address 1
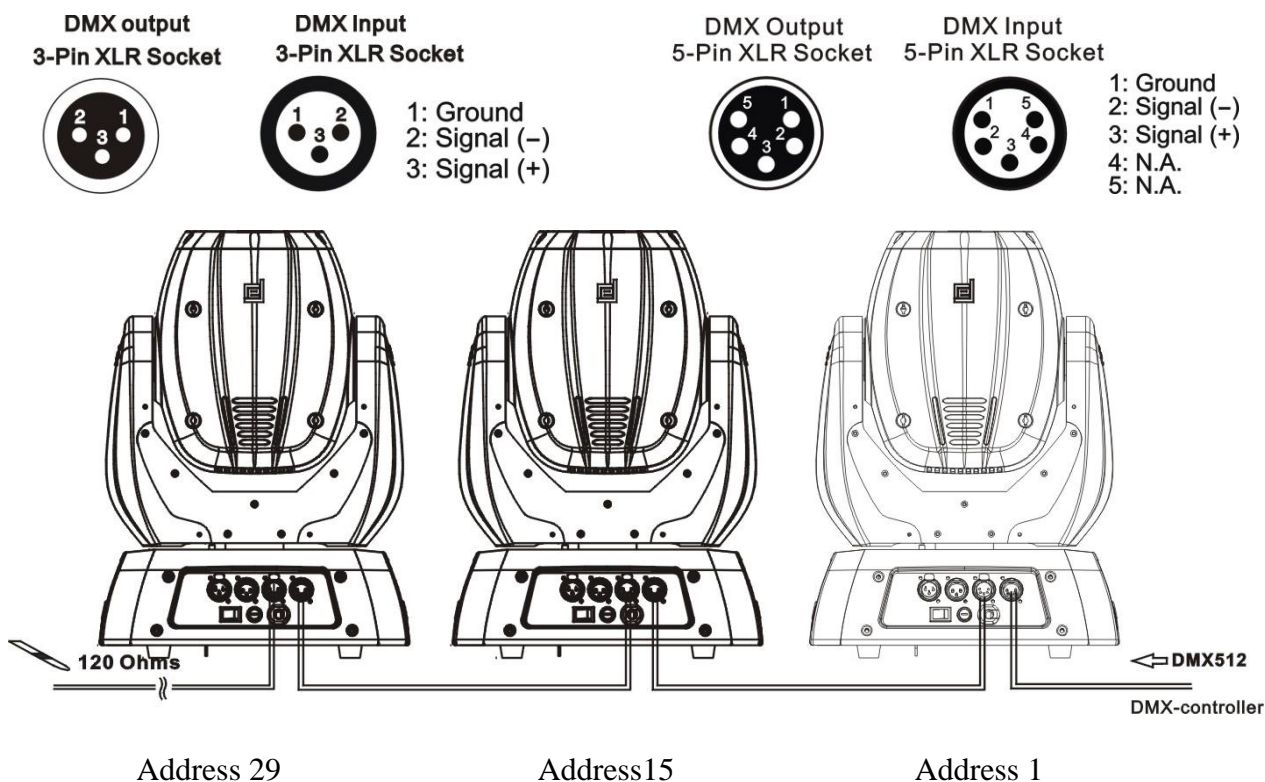
6. DMX-512 connection with DMX terminator

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.

120 Ω

PIN 3
PIN 2
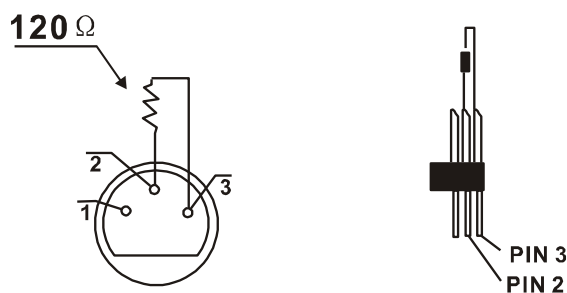
7. Projector DMX start address selection

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to "listen" to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to "listen" to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the led moving head, which is 14 channels fixture when you select the standard channel mode, you should set the starting address of the first unit to 1, the second unit to 15(14 + 1), the third unit to 29 (14+ 15), and so on.

8. Control Board

The Control Board offers several features: you can simply set the starting address, switch on and off the lamp, run the pre-programmed program or make a reset.

The main menu is accessed by pressing the **Mode/esc**-button until the display starts flashing. Browse through the menu by pressing the **Up**-button or **Down**-button. Press the **Enter**-button in order to select the desired menu. You can change the selection by pressing the **Up**-button or **Down**-button. Confirm every selection by pressing the **Enter**-button. You can leave every mode by pressing the **Mode/esc**-button. The functions provided are described in the following sections.

To access the display menu via the internal battery, press the UP or DOWN button. The display will automatically switch off about 10 seconds after the last actuation of the buttons.

Function Mode	Set Dmx Address	A001~AXXX		DMX address setting
	Value Display	PAN……		DMX value display
	Set To Slave	Slave1,Slave2,Slave3		Slave setting
	Auto Program	Master / Alone		Auto program
	Music Control	Master / Alone		Music control
Information	Time Information	Current Time	XXXX(Hours)	Power on running time
		Total Life Hours	XXXX(Hours)	Fixture running time
		Clear Life Time	ON/OFF(密码 838)	Clear Fixture Life time
	Temperature Info	Head Temperature	XXX℃/℉	Temperature in the head
	Software Version	Ver1.0……		Software version of each IC
Personality	Status Settings	Address via DMX	ON/OFF	Add. via DMX
		No DMX Status	Close/Hold/Auto/Music	Auto run if no DMX
		Pan Reverse	ON/OFF	Pan Reverse movement
		Tilt Reverse	ON/OFF	Tilt Reverse movement
		Pan Degree	630/540	Pan Degree Select
		Feedback	ON/OFF	Movement Feedback switch
		Movement Speed	Speed 1~ 4	Movement Mode Select
		Mic Sensitivity	0~99%	Sensitivity of Mic.
		Hibernation	0FF/1~99M，15M	Stand by mode
	Fans Control	Auto Fans Speed		Fans Speed Mode Select
		High Fans Speed		
		Low Fans Speed		
	Display Setting	Shutoff Time	02~60m 05m	Display shutoff time
		Key Lock	ON/OFF	Key Lock

	Temperature C/F	Celsius Fahrenheit			Temperature switch between °C/°F
	Initial Effect	PAN……	PAN =XXX		Initial effect position
	Reset Default	ON/OFF			Restore factory set.
Reset Function	Reset All Reset Pan&Tilt Reset Colors Reset Gobos Reset Others				Reset all motors Reset Pan/Tilt Reset color wheel Reset gobos Reset other motors
Effect Adjust	Test Channel	PAN ……			Test function
	Manual Control	PAN :	PAN =XXX :		Fine adjustment of the lamp
	Calibrate Values	--Password-- Color wheel :	Password=XXX Color wheel=XXX :		Calbrate and adjust the effects to standard/right position Password "050"
Users Mode Set	User Mode	Standard Mode Basic Mode Extended Mode User Mode A User Mode B User Mode C			User's mode to change channel numbers
	Edit User Mode	Max Channel PAN :	Max Channel = XX PAN = CH01 :		Preset User modes
Edit Program	Select Programs	Auto Pro Part 1 Auto Pro Part 2 Auto Pro Part 3	Program 1 ~ 10 Program 1 ~ 10 Program 1 ~ 10	Program 1 Program 2 Program 3	Select programs to be run
	Edit Program	Program 1 : Program 10	Program Test Step 01=SCxxx Step 64=SCxxx	("STEP XX")	Testing program Program in loop Save and exit
	Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,…… --Secne Time-- Input By Outside	Pan=xxx…… TIME=xx.xs	Save and automatically return manual scenes edit
	Rec. Controller	XX~XX			Automat. scenes rec

Default settings shaded

8.1 FUNCTION MODE

9.1.1 Set DMX Address
With this function, you can adjust the desired DMX-address via the Control Board.
1．Access the main menu.
2．Tap the <Up/Down>button until "Set DMX Address" is displayed.
3．Press ENTER, the display will show "Set DMX Address".
4．Tap the <Up/Down>button，the display will show "A001~AXXX"
5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

8.1.2 Value Display
With this function you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.
1．Access the main menu.
2．Tap the <Up/Down>button until "Value Display" is displayed.
3．Press ENTER, the display will show "Value Display".
4．Tap the <Up/Down>button，choose each channel.
5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

8.1.3 Set to slave
With this function, you can define the device as slave.
1．Access the main menu.
2．Tap the <Up/Down>button until " Set To Slave" is displayed.
3．Press ENTER, the display will show "Set To Slave".
4．Tap the <Up/Down>button，the display will show "Slave1", "Slave2", "Slave3".
5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

8.1.4 Auto Program
With this function, you can run the internal program. You can select the desired program under **"Select program"**. You can set the number of steps under **"Edit program"**. You can edit the individual scenes under **"Edit scenes"**. With this function, you can run the individual scenes either automatically, i.e. with the adjusted Step-Time.

1．Access the main menu.
2．Tap the <Up/Down>button until "Auto Program" is displayed.
3．Press ENTER, the display will show "Auto Program".
4．Tap the <Up/Down>button，the display will show "Master1", " Alone".
5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

8.1.5 Music control
With this function, you can run the internal program sound-controlled.
1．Access the main menu.
2．Tap the <Up/Down>button until "Music control" is displayed.
3．Press <ENTER>, the display will show "Music control".
4．Tap the <Up/Down>button，the display will show "Master", " Alone".
5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.2 Information
8.2.1 Time information
Current Time
With this function, you can display the temporary running time of the device from the last power on. The display shows "XXXX", "XXXX" stands for the number of hours. The counter is resetted after turning the device off.
1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Information" is displayed. Press ENTER, the display will show "Information". Tap the <Up/Down>button until the display will show "Time Information". Press ENTER, the display will show "Time Information".
2．Press <Up/Down>, the display will show "Current Time".

3．Press< ENTER>, the display will show "Current Time".
4．The display will show "XXXX" (Hours)；
5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Total Life Hours
With this function, you can display the running time of the device. The display shows "XXXX", "XXXX" stands for the number of hours.
1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Information"is displayed. Press ENTER, the display will show "Information". Tap the <Up/Down>button until the display will show "Time Information". Press ENTER, the display will show "Time Information".
2．Press <Up/Down>, the display will show "Total Life Hours".
3．Press< ENTER>, the display will show "Total Life Hours".
4．The display will show "XXXX" (Hours)；
5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Clear Life Time
With this function, you can clear total run time of the fixture. The display shows "ON" or "OFF", Press "Enter" to confirm.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Information"is displayed. Press ENTER, the display will show "Information". Tap the <Up/Down>button until the display will show "Time Information". Press ENTER, the display will show "Time Information".
2．Press <Up/Down>, the display will show "Clear Life Time".
3．Press< ENTER>, the display will show "OFF" or "ON".
4．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.2.2 Temperature Info
Head Temperature
With this function you can display the temperature on the display board of the base (near CMY-filter) in Celsius.
1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Information"is displayed. Press ENTER, the display will show "Information". Tap the <Up/Down>button until "Temperature Info" is displayed. Press ENTER, the display will show "Temperature Info".
2．Press <Up/Down>, the display will show "Head Temperature".
3．Press< ENTER>, the display will show "Head Temperature".
4．The display show "XXX ° C/ ° F".
5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.2.3 Software version
With this function, you can display the software version of the device.
1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Information" is displayed. Press ENTER, the display will show "Information".
2．Press <Up/Down>, the display will show "Software version".
3．Press< ENTER>, the display will show "Software version".

4．The display show "Ver 1.0……".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.3PERSONALITY
8.3.1Status setting
Address via DMX
With this function, you can adjust the desired DMX-address via an external controller.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Address via DMX".

3．Press< ENTER>, the display will show "Address via DMX".

4．The display show "ON",Press <Up/Down>, the display will show "OFF".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

No DMX Status
With this function, when the drive is not DMX signal, it runs automatism, close, hold and music, the default is hold.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality"is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "No DMX Status".

3．Press< ENTER>, the display will show "No DMX Status".

4．The display show "Hold",Press <Up/Down>, the display will show "Close", "Auto", "Music".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Pan Reverse
With this function you can reverse the Pan-movement.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Pan Reverse".

3．Press< ENTER>, the display will show "Pan Reverse".

4．The display show "OFF",Press <Up/Down>, the display will show "ON".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Tilt Reverse
With this function you can reverse the Tilt-movement.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Tilt Reverse".

3．Press< ENTER>, the display will show "Tilt Reverse".

4．The display show "OFF",Press <Up/Down>, the display will show "ON".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Pan Degree

With this function, you can select pan degree for 630 or 540.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Pan Degree".

3．Press< ENTER>, the display will show "Pan Degree".

4．The display show "540",Press <Up/Down>, the display will show "630".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Feedback

With this function, you can feedback switch of pan movement or tilt movement.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Feedback".

3．Press< ENTER>, the display will show "Feedback".

4．The display show "ON",Press <Up/Down>, the display will show "OFF".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Movement Speed

With this function, you can select scan mode from 1 to 4.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Movement Speed".

3．Press< ENTER>, the display will show "Movement Speed".

4．The display show "Speed 1",Press <Up/Down>, the display will show "Speed 2", "Speed 3", "Speed 4".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Mic Sensitivity

With this function, the default is 70%, you can select the desired microphone sensitivity from 0 % to 99 %.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Mic Sensitivity".

3．Press< ENTER>, the display will show "Mic Sensitivity".

4．The display show "70%" ,Press <Up/Down>, the display will show "0~99%".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Hibernation ——Standby mode

The lamp and step motors will be power off if the fixture stay without DMX signal for 15 mins (Factory default).And the fixture will be reset before working once it receive DMX signal again.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality". Tap the <Up/Down>button until the display will show "Status setting". Press ENTER, the display will show "Status setting".

2．Press <Up/Down>, the display will show "Hibernation".

3．Press< ENTER>, the display will show "Hibernation".

4．The display show "15M" ,Press <Up/Down>, the display will show "01M", "02M" …. "99M" or "OFF".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.3.2 Fans Control

With this function, you can set the speed of the running fans. The selections have Auto、high and low.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality".

2．Press <Up/Down>, the display will show "Fans Control".

3．Press< ENTER>, the display will show "Fans Control".

4．The display show "Auto Fans Speed" ,Press <Up/Down>, the display will show "High Fans Speed", "Low Fans Speed".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.3.3 Display settings

Shut off time

With this function you can shut off the color LCD display after 2 to 59 minutes. Turn the encoder in order to select the desired shut off time. The default is 5 minute.

Key Lock

With this function you can activate the automatic keylock function. If this function is activated, the keys will be locked automatically after exiting the edit mode for 15 seconds. keeping press the <MODE/ESC> key for 3seconds if you want to deactivate the keylock status.

1. Tap the<Up/Down>button until "LOCK" is displayed and tap the < ENTER> button.

2. Press the <Up/Down> button to select "ON" to activate this function, or "OFF" to deactivate this function. Press< ENTER> to confirm.

3. Press   <MODE/ESC> to return to the main menu.

9.3.4 Temperature C/F

With this function, Display the temperature for Celsius or Fahrenheit.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality".

2．Press <Up/Down>, the display will show "Temperature C/F".

3．Press< ENTER>, the display will show "Temperature C/F".

4．The display show "Celsius",Press <Up/Down>, the display will show "Fahrenheit".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.3.5 Initial effect
With this function, Display initial effect position.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality".

2．Press <Up/Down>, the display will show "Initial effect".

3．Press< ENTER>, the display will show "Initial effect".

4．The display show "XXX".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.3.6 Restore Default
With this function, you can select restore factory set for ON or OFF, the default is OFF.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Personality" is displayed. Press ENTER, the display will show "Personality".

2．Press <Up/Down>, the display will show "Restore Default".

3．Press< ENTER>, the display will show "Restore Default".

4．The display show "OFF",Press <Up/Down>, the display will show "ON".

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.4 Reset-functions
With this function you can reset the device via the Control Board. You can select the different reset functions by turning the encoder.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Reset-functions"is displayed. Press ENTER, the display will show "Reset-functions".

2．The display show "Reset All", Press <Up/Down>, the display will show "Reset Pan/Tilt", "Reset Colors", "Reset Gobos", "Reset Others".

3．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.5 Effect Adjust
8.5.1 Test channel
With this function you can test each channel on its (correct) function.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Effect Adjust" is displayed. Press ENTER, the display will show "Effect Adjust".

2．Press <Up/Down>, the display will show "Test Channel".

3．Press< ENTER>, the display will show "Test Channel".

4．The display show "Pan Moving" frist channel, Press <Up/Down>, can choose other channel.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.5.2 Manual control
With this function, you can adjust the lamp more easily. All effects will be canceled, the shutter opens and the dimmer intensity will be set to 100 %. With the individual functions, you can

focus the light on a flat surface (wall) and erform the fine lamp adjustment.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Effect Adjust" is displayed. Press ENTER, the display will show "Effect Adjust".
2．Press <Up/Down>, the display will show "Manual control".
3．Press< ENTER>, the display will show "Manual control".
4．The display show "PAN=XXX".
5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.5.3 Calibrate values

With this function, you can calibrate and adjust the effect wheels to their correct positions. The password of calibrate values is 050.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until "Effect Adjust" is displayed. Press ENTER, the display will show "Effect Adjust".
2．Press <Up/Down>, the display will show "Calibrate values".
3．Press< ENTER>, the display will show "Calibrate values".
4．The display show "Password=XXXX".
5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.6 Users mode set

In this menu, user can select different channels list by different sequence:

For example, after the user enter this manual, if select Auto Program = CH 22, means in this User's mode, the "Dimmer" is in Channel 16.

8.6.1 User mode

With this function, you can create user defined channel orders.

8.6.2 Preset User mode

With this function, you can adjust the rest user defined channel order.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until"Users mode set" is displayed. Press ENTER, the display will show "Users mode set".
2．The display show "User Mode" frist channel, Press <Up/Down> the display will show "Edit User Mode".
3．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

8.7 Edit program

8.7.1 Select program

With this function, you can select the program for the Program Run.

8.7.2 Edit program

With this function, you can edit the internal programs.

8.7.3 Edit scenes

With this function, you can edit the scenes of the internal programs.

8.7.4 Auto scenes rec.

The moving head features an integrated DMX-recorder by which you can transmit the programmed scenes from your DMX-controller to the moving head. Adjust the desired scene numbers via the encoder (from – to). When you call up the scenes at your controller, they will

automatically be transmitted to the moving head.

Excursion:

A Master unit can send up to 3 different data groups to the Slave units, i.e. a Master unit can start 3 different Slave units, which run 3 different programs. The Master unit sends the 3 program parts in a continuous loop.

Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3		Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3		Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3

The Slave unit receives data from the Master unit according to the group which the Slave unit was assigned to. If e.g. a Slave unit is set to "Slave 1" in the menu "Set to Slave", the Master unit sends "Auto Program Part 1" to the Slave unit. If set to "Slave 2", the Slave unit receives "Auto Program Part 2".

To start a Auto Program please proceed as follows:

1. Slave-Setting
- Select "Function Mode" by turning the encoder.
- Press the Enter button to confirm.
- Select "Set to slave" by turning the encoder.
- Press the Enter button to confirm.
- Turn the encoder to select "Slave 1", "Slave 2" or "Slave 3".
- Press the Enter button to confirm.
- Press the MODE/ESC button in order to return to the main menu.

2. Automatic Program Run
- Select "Function Mode" by turning the encoder.
- Press the Enter button to confirm.
- Select "Auto Program" by turning the encoder.
- Press the Enter button to confirm.
- Turn the encoder to select "Master" or "Alone". The selection "Alone" means Stand Alone-mode and "Master" that the device is defined as master.
- Press the Enter button to confirm.
- Press the MODE/ESC button in order to return to the main menu.

3. Program selection for Auto Pro Part
- Select "Edit program" by turning the encoder.
- Press the Enter button to confirm.
- Select "Select programs" by turning the encoder.
- Press the Enter button to confirm.
- Turn the encoder to select "Auto Pro Part 1", "Auto Pro Part 2" or "Auto Pro Part 3", and thus select which Slave program is to be sent. Selection "Part 1" means, that the Slave unit runs the same program as the master units.
- Press the Enter button to confirm.
- Press the MODE/ESC button in order to return to the main menu.

4. Program selection for Edit Program
- Select "Edit program" by turning the encoder.
- Press the Enter button to confirm.
- Select "Edit program" by turning the encoder.

- Press the Enter button to confirm.
- Turn the encoder to select the desired program. With this function you can edit specific scenes into a specific program.
- Press the Enter button to confirm.
- Press the MODE/ESC button in order to return to the main menu.

5. Automatic Scene Recording
- Select "Edit program" by turning the encoder.
- Press the Enter button to confirm.
- Select "Edit scenes" by turning the encoder.
- Turn the encoder to select the desired scene numbers. You can program a maximum number of 250 • Turn the encoder to select the desired scene numbers. You can program a maximum number of 250 scenes.
- Press the Enter button to confirm.
- Press the MODE/ESC button in order to return to the main menu.

Example:
Program 2 includes scenes: 10, 11, 12, 13
Program 4 includes scenes: 8, 9, 10
Program 6 includes scenes: 12, 13, 14, 15
Auto Pro Part 1 is Program 2;
Auto Pro Part 2 is Program 3;
Auto Pro Part 3 is Program 6

The 3 Slave groups run the Auto Program in certain time segments, as shown in the following picture:

Part 1:

Scene 10	Scene 11	Scene 12	Scene 13

Part 2:

Scene 8	Scene 9	Scene 10	Scene 8

Part 3:

Scene 12	Scene 13	Scene 14	Scene 15
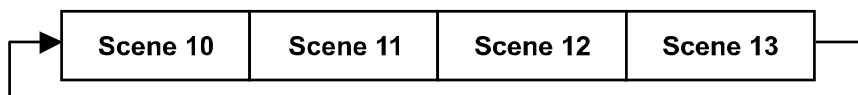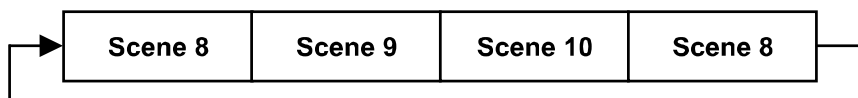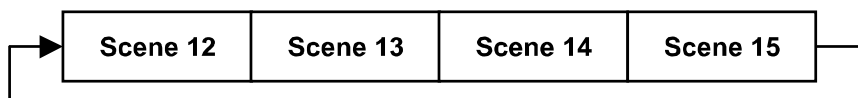
9. INSTRUCTIONS ON USE:

DMX channel´s functions and their values (16 DMX channels):				
Mode/Channel			**Value**	**Function**
St	**Ba**	**Ex**		
				Color Wheel
			0-14	Open / white
			15-29	Color1
			30-44	Color2
			45-59	Color3
			60-74	Color4
1	1	1	75-89	Color5
			90-104	Color6
			105-119	Color7
			120-127	Color8
			128-189	Forwards rainbow effect from fast to slow
			190-193	No rotation
			194-255	Backwards rainbow effect from slow to fast
		2		**Color Wheel Fine :**
			0-255	Color Wheel colour change to any position Fine
				Rotating gobos, cont. rotation
			0-9	Open
			10-19	Rot. gobo 1
			20-29	Rot. gobo 2
			30-39	Rot. gobo 3
			40-49	Rot. gobo 4
			50-59	Rot. gobo 5
			60-69	Rot. gobo 6
2	2	3	70-79	Rot. gobo 7
			80-95	Rot. gobo 1 shake
			96-111	Rot. gobo 2 shake
			112-127	Rot. gobo 3 shake
			128-143	Rot. gobo 4 shake
			144-159	Rot. gobo 5 shake
			160-175	Rot. gobo 6 shake
			176-191	Rot. gobo 7 shake
			192-255	Rot. gobo wheel cont. rotation slow to fast
				Rotating gobo index, rotating gobo rotation
			0-127	Gobo indexing
3	3	4	128-189	Forwards gobo rotation from fast to slow
			190-193	No rotation
			194-255	Backwards gobo rotation from slow to fast
		5		**Rotating gobo indexing Fine**

			0-255	Fine indexing
4	4	6		**Speed pan/tilt movement**
			0-225	max to min speed
			226-235	blackout by movement
			236-245	blackout by all wheel changing
			246-255	no function
5	5	7		**PAN Movement 8bit**
			0-255	Pan Movement By 540/630
6	6	8		**TILT Movement 8bit**
			0-255	Tilt Movement By 270
7	7	9		**Rotating prism, Prism / Gobo macros:**
			0-31	open
			32-63	3 facet prism
			64-95	trapezoid prism
			96-127	Forst
			128-135	Macro 1
			136-143	Macro 2
			144-151	Macro 3
			152-159	Macro 4
			160-167	Macro 5
			168-175	Macro 6
			176-183	Macro 7
			184-191	Macro 8
			192-199	Macro 9
			200-207	Macro 10
			208-215	Macro 11
			216-223	Macro 12
			224-231	Macro 13
			232-239	Macro 14
			240-247	Macro 15
			248-255	Macro 16
8	8	10		**Rotating prism index, rotating prism rotation :**
			0-127	Prism indexing
			128-189	Forwards prism rotation from fast to slow
			190-193	No rotation
			194-255	Backwards prism rotation from slow to fast
9	9	11		**Focus :**
			0-255	Continuous adjustment from far to near
10	10	12		**Shutter, strobe**
			0-31	Shutter closed
			32-63	No function (shutter open)
			64-95	Strobe effect slow to fast
			96-127	No function (shutter open)
			128-159	Pulse-effect in sequences

			160-191	No function (shutter open)
			192-223	Random strobe effect slow to fast
			224-255	No function (shutter open)
11	11	13	**Dimmer (intensity)**	
			0-255	Intensity 0 to 100%
12	12	14	**Reset, internal programs**	
			0-19	Color&Gobo change normal
			20-29	Color change to any position
			30-39	Color&Gobo change to any position
			40-59	No function
			60-79	No function
			80-84	All motor reset
			85-87	Scan motor reset
			88-90	Colors motor reset
			91-93	Gobo motor reset
			94-96	No function
			97-99	Other motor reset
			100-119	Internal program 1
			120-139	Internal program 2
			140-159	Internal program 3
			160-179	Internal program 4
			180-199	Internal program 5
			200-219	Internal program 6
			220-239	Internal program 7
			240-255	Auto program by music
13		15	**Pan Fine 16bit**	
			0-255	Fine control of Pan movement
14		16	**Tilt Fine 16bit**	
			0-255	Fine control of Tilt movement

10. ERROR MESSAGE

ERROR MESSAGE

When you turn on the fixture, it will make a reset at first. The display may show "Err channel is XX" while there are problems with one or more channels. "XX" stands for channel 1, 2, 3,etc who has the testing sensor for positioning.For example, when the display shows "Err channel is Color color", it means there is some error in channel 1. If there are some errors on channel 1, channel 5, channel 6 at the same time, you may see the error message "Err channel is Color wheel", "Err channel is Pan movement   ", "Err channel is Tilt movement " flash repeated for 2 times, and then the fixture will generate a second reset. If the fixture remain error message after performing reset more than 2 times, only the channels which have errors can not work properly, others can work as usual. Please contact with dealer or manufacturer for service, self repair is not allowed.

Color wheel Er

(Color wheel- error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The color wheel is not located in the default position after the reset.

Gobo Rot   Er

(Gobo Rot - error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Gobo Rot 1 is not located in the default position after the reset.

PAN- movement Er

(PAN-yoke movement error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The PAN- movement is not located in the default position after the reset.

TILT- movement Er

(TILT-head movement error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The TILT- movement is not located in the default position after the reset.

Prism- Er

(Prism error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The TILT- movement is not located in the default position after the reset.

Prism Rot   Er

(Prism Rot - error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Gobo Rot 1 is not located in the default position after the reset.

11. CLEANING AND MAINTENANCE

The following points have to be considered during the inspection:
1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
4) The electric power supply cables must not show any damage, material fatigue or sediments.
Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

	CAUTION!
	Disconnect from mains before starting maintenance operation.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.
1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
2) Clean the fan each week.
3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.
There are no serviceable parts inside the device except for the lamp. Please refer to the instructions under "Installation instructions".
Should you need any spare parts, please order genuine parts from your local dealer.

12. TECHNICAL SPECIFICATIONS

Power supply: AC 100-240V~, 50/60Hz
Power consumption: 120W
Packing dimensions: 46x32.5x37.5cm
Flight case dimensions: 86x56x72cm
Net weight :7.1KGS
Gross weight:9.6KGS（carton packing） 77.5 KGS (flight case packing/4PCS)

Remark: errors and omissions for every information given in this manual excepted. All information is subject to change without prior notice.