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Thank you for your patronage. We are confident that our excellent products and service can satisfy you. For your own safety, please read this user manual carefully before installing the device.
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. |

Every person involved with the installation, operation and maintenance of this device has to: -be qualified
-follow carefully the instructions of this manual

## INTRODUCTION:

Thank you for having chosen this professional 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. Two 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

- Lamp: MSR GOLD 700/2 MiniFastFit
- 3 DMX Channels mode: 19/21/32 channels
- Stand alone operation with Master/Slave function, sound activated via built in microphone.
- Pan and tilt movement: 8 and 16 bit resolution

For smooth and precise motion Movement: Pan: $540^{\circ} / 630^{\circ}$ optional, Tilt: $245^{\circ}$
Speed of pan/tilt movement adjustable
Scan position memory, auto reposition after unexpected movement

- Colors: Basic color wheel with 7 dichroic mirrors, plus white, two direction rainbow effect.
- CMY+CTO Variable Color Mixing for Infinite Color Possibilities
- 30 CMY and color wheel MACROS and Random CMY
- One rotation gobo wheel with 6 rotating gobos plus open each, One fixation gobo wheel with 7 gobos plus open, both gobo wheels have different speed of gobo shaking and rainbow effect, and gobo indexing
- Prism and prism rotating
- Focus: motorized focus
- Dimmer intensity from 0\%~100\%
- Stepless frost, $0 \% \sim 100 \%$ linear change frost
- Control board with full color LCD graphic display and touch-keyboard
- Display: Can be changed $180^{\circ}$ reverse to fit for different installation position.
- Strobe/shutter: High speed shutter, 0-13 Hz or random strobe
- Wireless receiver pre-installed
- Rechargeable Back up Battery for Display, no need external power supply, enable users to enter display menu for address setting or access other functions setting.
- Auto-program: 7 pre-built programs can be selected.
- Software-upload by optional accessory via DMX line


## 2. FIXTURE OVERVIEW



1: Lens
2: Display
3: Wireless indicator
4: DC Switch
5: Microphone
6: Left-button
7: Down-button
8: Right-button
9: Mode/Esc-button
10: Up-button
11: ENTER-button
12: Antenna - Wireless DMX
13: Handle
14: 3-Pin DMX out
15: 3-Pin DMX in
16: Fuse
17: Power supply
18: 5-Pin DMX out
19: 5-Pin DMX in

## 3. SAFETY INSTRUCTIONS

## 3.1) Important safety warns

## CAUTION! <br> 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.
If protection screen,lens or ultraviolet screen in the fixture is apparently damaged or is damaged to exceed their own effective degree, such as cracked and gashed, it must be replaced.

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

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 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) Installing or replacing the lamp

## CAUTION!

Only install the lamp with the device unplugged from the mains.

## CAUTION!

The lamp has to be replaced when it is damaged or deformed.

Before replacing the lamp let the lamp cool down, because during operation, the lamp can reach very high temperature.

During the installation of halogen lamps do not touch the glass bulbs bare handed. Always use a cloth to handle the lamps during insertion and removal.

Do not install lamps with a higher wattage. They generate higher temperatures than which the device was designed for.

For the installation, you need one: MSR GOLD 700/2 MiniFastFit

## Procedures:


1).Center the hot-spot (the brightest part of the beam) using the 3 adjustment screws located under the lamp cover labeled A, B, and C as illustrated on the next page. Turn one screw at a time to drag the hot-spot diagonally across the projected image. If you cannot detect a hot-spot, adjust the lamp until the light is even.
2).To reduce a hot-spot, pull the lamp in by turning all three screws clockwise a $1 / 4$-turn at a time until the light is evenly distributed.


Please remember the lamp is not a hot-restrike type, you must wait for approximately 10 minutes after having turned off the lamp before you can turn it back on again.

## CAUTION!

Do not operate this device with open cover

## 4.2) 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 $-25^{\circ} \mathrm{C}$ to $45^{\circ} \mathrm{C}$. 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.

## CAUTION!

The electric connection must only be carried out by a qualified electrician.

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


a) Fixed the clamp on the bracket by tighten up the M12 screw on the bracket to the $\Phi 13$ 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:



Layout Drawings:


## Mounting points

Be sure this fixture is kept at least 5 m 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.


## 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 $120 \Omega$ 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.


## 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 move head, which is a 21 channel fixture, you should set the starting address of the first unit to 1 , the second unit to $22(21+1)$, the third to $43(21+22)$, and so on.

## 8. Operting instructions of the internal DMX wireless system

## 1. Equipments:

DMX 512 controller, wireless transmitter, and the fixtures with wireless receiver.
2. Message from the LED indicator:

1) Rapid flashing red/Green: logging in to a transmitter
2) Slow flashing Red/Green: Logged on a transmitter and the DMX line is idle (No DMX is connected to transmitter).
3) Solid Green: Logged on to a transmitter and receiving DMX data.
4) Solid Red: Not logged on to a transmitter (free)
3. WDMX in the menu of the fixture:

On a fixture installed with wireless system, in order to switch between wireless control system and traditional DMX control (with cable), a new menu WDMX is added to the display board.

ON: (Activate WDMX)

1) When the fixture is on power, and the WDMX is activated to ON status, but did not connect to the controller and did not $\log$ in to the transmitter, the fixture will search for the DMX signal source. If the fixture is connected to the DMX controller it can be controlled by DMX controller; if it is $\log$ in to the wireless transmitter, it can be controlled by the Transmitter
2) When the fixture is power off, and the WDMX is in ON status, if the fixture is connected to DMX controller. After the fixture is power on, it can be controlled only by the DMX controller which connected. The fixture can $\log$ in the wireless transmitter, and receive only radio signal from transmitter, but not DMX from the transmitter.

OFF: (De-activate WDMX)
In this status, wireless system is not activated, so the fixture can not log in the transmitter.
REST: (reset WDMX memory);
Can remove the fixture from the connection with the transmitter, the fixture become free and ready to $\log$ in any transmitter.
4. Setup the wireless system:

1) Connect the transmitter with the DMX controller
2) To make the fixture installed with wireless receiver $\log$ in to the transmitter
a) Initially, the indicator on the receiver fixture should be in Solid red
b) Press and hold the configuration button on transmitter for less than 3 seconds the red/green LEDs on the transmitter and the receiver fixture will flash rapidly for about 5~ 10 seconds while the system goes through its setup procedure.
c) Once the receiver fixture is logged in to the transmitter (T1), the fixture with wireless receiver will keep the memory, even if restart the power, this unit will $\log$ in the
transmitter (T1) automatically.
3) Use the DMX 512 to control the fixture
5. Remove the receivers from transmitter (T1) and to $\log$ in to another transmitter (T2).

Case 1: Remove a receiver:
a) On the control board of the fixture, enter menu to activated the function of REST.
b) The LED for wireless on the fixture should turn to Solid red; the receiver can log out from the transmitter (T1).
c) press the configuration button on transmitter(T2) for less than 3 second, then the fixture will start to connect with the transmitter(T2).

Case 2: Remove all receivers from a transmitter (T1) to $\log$ in to T 2.
a) Press and hold the configuration button on the T 1 as least 5 seconds, can clear the connection with all the fixtures.
b) All the red/green LED on the receiver fixtures will turn to Solid red to indicate that the receivers are unassigned and removed from the transmitter ( T1).
c) Press and hold the configuration button on the T 2 less then less than 3 second , the fixtures will connect with the T 2 .

PS: 1. Please log the receivers out from the transmitter after every job, so that the receivers are in free un assigned state and ready to be assigned to a transmitter.
2. Do not connect the fixture which is under the communication of wireless system to the DMX controller, otherwise it will cause interference from the DMX controller.

## 9. Control Board

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

The main menu is accessed by pressing the
-button until the display starts flashing. Browse through the menu by pressing the (®) -button, (®) -button, © -button or (c) -button. Press the Enter-button in order to select the desired menu. You can change the
 Confirm every selection by pressing the
 -button. You can leave every mode by pressing the flash 10 seconds after the last keypress. Press this key under edit mode, . The functions provided are described in the following sections.

To access the display menu via the internal battery, press the DC switch button for 2seconds; To shut off the display immediately, choose the commend " Reset All" menu and press "Enter" button, otherwise, the display will automatically switch off about 1 minute from last button press.

|  | Set Dmx Address <br> Value Display <br> Set To Slave <br> Auto Program <br> Music Control | $\begin{aligned} & \text { A001~AXXX } \\ & \text { PAN...... } \end{aligned}$ <br> Slave1,Slave2,Slave3 <br> Master / Alone <br> Master / Alone |  | DMX address setting DMX value display Slave setting Auto program Music control |
| :---: | :---: | :---: | :---: | :---: |
|  | Time Information | Current Time <br> Total Life Hours <br> Last Run Hours <br> Lamp Hours <br> Lamp Off Time <br> Timer Password <br> Clear Last Run <br> L-Timer Password <br> Clear Lamp Time | XXXX(Hours) XXXX(Hours) XXXX(Hours) XXXX(Hours) XXXX(Minute) Password=XXX ON/OFF Password=XXX ON/OFF | Power on running time <br> Fixture running time <br> Fixture Last times clear <br> Lamp running time <br> Lamp off time <br> Timer Password 038 <br> Clear Fixture Last time <br> Lamp Password Code="038" <br> Clear lamp time |
|  | Temperature Info | Head Temperature | $\mathrm{XXX}^{\circ} \mathrm{C}^{\circ} \mathrm{F}$ | Temperature in the head |
|  | Software Version | Ver1.0..... |  | Software version of each IC |
| $\begin{aligned} & \text { 으 } \\ & \text { U } \\ & \text { 諸 } \end{aligned}$ | Lamp On or Off ON/OFF <br> Automatic La-On ON/OFF <br> Lamp On Via DMX ON/OFF <br> Lamp Off Via DMX $\mathrm{ON} /$ OFF <br> Lamp On at Temp. $20 \sim 79^{\circ} \mathrm{C} 45^{\circ} \mathrm{C} / 68 \sim 174^{\circ} \mathrm{F} 113^{\circ} \mathrm{F}$ <br> Lamp Off at Temp. $80 \sim 139^{\circ} \mathrm{C}, 130^{\circ} \mathrm{C} / 176 \sim 282^{\circ} \mathrm{F}, 266^{\circ} \mathrm{F}$ |  |  | Lamp on/off <br> Lamp on/off when Power on <br> Lamp on via DMX <br> Lamp off via DMX <br> Lamp restart at temp. <br> Lamp off at temp. |
|  | Status Settings | Address via DMX <br> No DMX Status <br> Pan Reverse <br> Tilt Reverse <br> Pan Degree <br> Feedback <br> Movement Speed <br> Mic Sensitivity <br> Hibernation | ON/OFF <br> Close/Hold/Auto/Music <br> ON/OFF <br> ON/OFF <br> 630/540 <br> ON/OFF <br> Speed 1~ 4 <br> 0~99\% <br> OFF, 01M~99M, 15M | Add. via DMX <br> Auto run if no DMX <br> Pan Reverse movement <br> Tilt Reverse movement <br> Pan Degree Select <br> Movement Feedback switch <br> Movement Mode Select <br> Sensitivity of Mic. <br> Stand by Mode |
|  | Fans Control | Auto Fans Speed High Fans Speed Low Fans Speed |  | Fans Speed Mode Select |
|  | Display Setting | Shutoff Time Display Reverse Key Lock | $\begin{aligned} & \text { 02~60m 05m } \\ & \text { ON/OFF } \\ & \text { ON/OFF } \end{aligned}$ | Display shutoff time Display Reverse 180 degree Key Lock |
|  | Temperature C/F | Celsius/ Fahrenheit |  | Temperature <br> switch <br> between ${ }^{\circ} \mathrm{C}^{\circ} \mathrm{F}$ |
|  | Initial Effect | PAN = XXX |  | Initial effect position |
|  | Wireless DMX | De-Act WDMX <br> Activate WDMX <br> Act \& Data Out <br> Rest WDMX Mem |  | De-activate WDMX <br> Activate WDMX <br> Act \& Data Out <br> Reset Wireless DMX Mem |
|  | Reset Default | ON/OFF |  | Restore factory set. |



Default settings shaded

### 9.1 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.

### 9.1.2 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.

### 9.1.3 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.

### 9.1.4 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.

### 9.1.5 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.

### 9.2 Information

### 9.2.1 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.

## Last Run Hours

With this function, you can display last the running time of the lamp. 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 "Last Run Hours".
3. Press< ENTER>, the display will show "Last Run Hours" .
4. The display will show "XXXX" (Hours) ;
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## Lamp Hours

With this function, you can display the running time of the lamp. The display shows "XXXX", "XXXX" stands for the number of hours.

1. Tap <MODE/ESC>button, access the main menu, Tap the $<\mathrm{Up} /$ 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 "Lamp Hours".
3. Press<ENTER>, the display will show "Lamp Hours".
4. The display will show "XXXX" (Hours) ;
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## Lamp off time

With this function, you can display the temporary running time of the lamp from the last lamp on. The display shows "XXXX", "XXXX" stands for the number of hours. The counter is resetted after turning the lamp 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 "Lamp Off Time".
3. Press<ENTER>, the display will show "Lamp Off Time" .
4. The display will show "XXXX" (Minute) ;
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## Time Password

With this function, you can display the timer password. The time password is 038.

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 "Time Password".
3. Press<ENTER>, the display will show "Time Password", the time password is 038.
4. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## Clear Last Run

With this function, you can clear last 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 Last Run".
3. At "Timer Password" menu input a correct password, press< ENTER>, the display will show "Clear Last Run" ,
4. The display will show "OFF" or "ON" .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## L-Time Password

With this function, you can display the timer password. The time password is 038.

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 "L-Time Password".
3. Press< ENTER>, the display will show "L-Time Password", the time password is 038.
4. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## Clear lamp time

With this function you can clear the running time of the lamp. Please clear the lamp time every time you replace the lamp.

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 Lamp Time".
3. At "Timer Password" menu input a correct password, press< ENTER>, the display will show "Clear Lamp Time",
4. The display will show "OFF" or "ON".
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.2 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 ${ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$ ".
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.3 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.

### 9.3 LAMP CONTROL

When the real temperature around the lamp is higher than the preset value, the lamp will be shut down in 5 minutes automatically.

- When the LCD display shows "Off", it means the lamp must be turned on again manually;
- When the LCD display shows "Hot", it means the actual temperature around the lamp is still higher than the preset value, so even the lamp can not be striked even the menu Lamp is turned to ON, as the lamp switch is compelled to turned off.
- When the temperature unit after the temperature value come to lowercase letter " c " or " f ", it means menu Lamp is turned to ON, but the lamp is not full dimming up.
- When the temperature unit after the temperature value come to capital letter "C" or "F", it menu Lamp is turned to ON, and the lamp is full intensity.


### 9.3.1 Lamp on/off

With this function you can switch the lamp on or off via the Control Board.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until"Lamp Control" is displayed. Press ENTER, the display will show "Lamp Control". Tap the <Up/Down>button until the display will show "Lamp On ot Off". Press ENTER, the display will show "Lamp On ot Off".
2. Press <Up/Down>, the display will show "OFF" or "ON".
3. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Remark: The menu Lamp On/Off is the software command only, the lamp can be striked successfully only when the menu Lamp is set to ON and the actual temperature is lower than the limited value.

### 9.3.2 Lamp on/off when power on

With this function you can select if the lamp will be switched on when switching the power on. Select "ON" by turning the encoder if you wish to enable this function or "OFF" if you don't.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until"Lamp Control" is displayed. Press ENTER, the display will show "Lamp Control". Tap the <Up/Down>button until the display will show "Automatic La-On". Press ENTER, the display will show "Automatic La-On" .
2. Press <Up/Down>, the display will show "OFF" or "ON".
3. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.3.3 Lamp on via external controller

With this function you can select if you can switch the lamp on via an external controller (DMX-channel of internal programs, value 64-79). Select "ON" by turning the encoder if you wish to enable this function or "OFF" if you don't.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until"Lamp Control" is displayed. Press ENTER, the display will show "Lamp Control" . Tap the <Up/Down>button until the display will show "Lamp On Via DMX". Press ENTER, the display will show "Lamp On Via DMX".
2. Press <Up/Down>, the display will show "OFF" or "ON".
3. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.3.4 Lamp off via external controller

With this function you can select if you can switch the lamp off via an external controller (DMX-channel of internal programs, value 224-239). Select "ON" by turning the encoder if you wish to enable this function or "OFF" if you don't.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until"Lamp Control" is displayed. Press ENTER, the display will show "Lamp Control" . Tap the <Up/Down>button until the display will show "Lamp Off Via DMX". Press ENTER, the display will show "Lamp Off Via DMX"
2. Press <Up/Down>, the display will show "OFF" or "ON"
3. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.3.5 Lamp on at temp.

With this function you can set the inside temperature from which the projector will restrike the lamp after automatic lamp shut off.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until"Lamp Control" is displayed. Press ENTER, the display will show "Lamp Control". Tap the <Up/Down>button until the display will show "Lamp On at Temp". Press ENTER, the display will show "Lamp On at Temp" .
2. Press <Up/Down>, the display will show " $45^{\circ} \mathrm{C}$ ", Temperature generally in $20 \sim 79{ }^{\circ} \mathrm{C}$.
3. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.3.6 Lamp off at temp.

With this function you can set the inside temperature at which the projector will automatically switch the lamp off.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until"Lamp Control" is displayed. Press ENTER, the display will show "Lamp Control". Tap the <Up/Down>button until the display will show "Lamp Off at Temp". Press ENTER, the display will show "Lamp Off at Temp".
2. Press <Up/Down>, the display will show " $130{ }^{\circ} \mathrm{C}$ " , Temperature generally in 80~139 ${ }^{\circ} \mathrm{C}$.
3. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

When the temperature around the lamp is higher than the preset value continuously up to 5 minutes, the lamp will be shut off automatically.

If the lamp be shut off automatically due to over heat, it can not be striked again automatically, it must be turned on again by manually.

### 9.4 PERSONALITY

### 9.4.1Status 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 $<\mathrm{Up} /$ 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 $<\mathrm{Up} /$ 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 $<\mathrm{Up} /$ 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 " $0 \sim 99 \%$ ".
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 " 15 M ", 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.

### 9.4.2 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.

### 9.4.3 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.

## Display Reverse

With this function you can rotate the display by $180^{\circ}$.

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 "Display Setting" . Press ENTER, the display will show "Display Setting" .
2. Press <Up/Down>, the display will show "Display Reverse".
3. Press<ENTER>, the display will show "Display 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.

## Key Lock

With this function you can activate the automatic keylock status. 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 do not need this function.

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 "Display Setting". Press ENTER, the display will show "Display Setting".
2. Press <Up/Down>, the display will show "Key Lock".
3. Press < ENTER>, the display will show "Key Lock".
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.

### 9.4.4 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.

### 9.4.5 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.

### 9.4.6 Wireless DMX

From factory, this projector is prepared for wireless data transmission (W-DMX). If you wish to de-activate W-DMX control, you can select the function "De-activate WDMX" by turning the encoder. With the function "rest", you can log out the projector from the wireless sender.

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 "Wireless DMX"
3. Press< ENTER>, the display will show "Wireless DMX".
4. The display show "Activate WDMX", Press <Up/Down>, the display will show "De-Act WDMX", "Act \& Data Out" or "Rest WDMX Mem".
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.4.7 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.

### 9.5 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 Shutter", Reset Other ".
3. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.6 Effect Adjust

### 9.6.1 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.

### 9.6.2 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.

### 9.6.3 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.

### 9.7 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.

### 9.7.1 User mode

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

### 9.7.2 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.

### 9.8 Edit program

### 9.8.1 Select program

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

### 9.8.2 Edit program

With this function, you can edit the internal programs.

### 9.8.3 Edit scenes

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

### 9.8.4 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.


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:


## Part 2:



## Part 3:

| Scene 12 | Scene 13 | Scene 14 | Scene 15 |
| :---: | :---: | :---: | :---: |

## 10. INSTRUCTIONS ON USE:





|  |  |  | 104-111 | Macrol3 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 112-119 | Macro14 |
|  |  |  | 120-127 | Macro15 |
|  |  |  | 128-135 | Macro16 |
|  |  |  | 136-143 | Macro17 |
|  |  |  | 144-151 | Macro18 |
|  |  |  | 152-159 | Macro19 |
|  |  |  | 160-167 | Macro20 |
|  |  |  | 168-175 | Macro21 |
|  |  |  | 176-183 | Macro22 |
|  |  |  | 184-191 | Macro23 |
|  |  |  | 192-199 | Macro24 |
|  |  |  | 200-207 | Macro25 |
|  |  |  | 208-215 | Macro26 |
|  |  |  | 216-223 | Macro27 |
|  |  |  | 224-231 | Macro28 |
|  |  |  | 232-239 | Macro29 |
|  |  |  | 240-247 | Macro30 |
|  |  |  | 248-255 | Random CMY |
|  |  |  |  | Lamp on/off, reset, internal programs: |
|  |  |  | 0-19 | colour \& gobo change normal |
|  |  |  | 20-29 | colour change to any position |
|  |  |  | 30-39 | colour \& gobo change to any position |
|  |  |  | 40-59 | Lamp on |
|  |  |  | 60-79 | Lamp switch off |
|  |  |  | 80-84 | All motor reset |
|  |  |  | 85-87 | Scan motor reset |
|  |  |  | 88-90 | Colors motor reset |
| 19 | 19 | 30 | 91-93 | Gobo motor reset |
| 19 | 19 | 30 | 94-96 | Shutter \& Dimmer motor reset |
|  |  |  | 97-99 | Other motor reset |
|  |  |  | 100-119 | Internal program 1 (secne1~8 of EEPROM) |
|  |  |  | 120-139 | Internal program 2 (secne9~16 of EEPROM) |
|  |  |  | 140-159 | Internal program 3 (secne17~24 of EEPROM) |
|  |  |  | 160-179 | Internal program 4 (secne25~32 of EEPROM) |
|  |  |  | 180-199 | Internal program 5 (secne33~40 of EEPROM) |
|  |  |  | 200-219 | Internal program 6 (secne $41 \sim 48$ of EEPROM) |
|  |  |  | 220-239 | Internal program 7 (secne49~56 of EEPROM) |
|  |  |  | 240-255 | Music Control (secne of Program 1) |
| 20 |  | 31 |  | Pan Fine 16bit |
| 20 |  | 31 | 0-255 | Fine control of Pan movement |
| 21 |  | 32 |  | Tilt Fine 16bit |
| 21 |  | 32 | 0-255 | Fine control of Tilt movement |

## 11. 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, 4, 5, 6 who has the testing sensor for positioning. For example, when the display shows "Err channel is Cyan 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 Cyan Color", "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.

## 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.

## 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.

## Cyan Color wheel Er

(Cyan 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 $\mathrm{PCB})$. The cyan color wheel is not located in the default position after the reset.

## Magenta color wheel Er

(Magenta 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 magenta color wheel is not located in the default position after the reset.

## Yellow color wheel Er

(Yellow 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 Yellow color wheel is not located in the default position after the reset.

## CTO wheel Er

(CTO 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 Yellow color wheel is not located in the default position after the reset.

## Gobo wheel 1 Er

(Gobo wheel 1 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 Focus is not located in the default position after the reset.

## Gobo Rot 1 Er

(Gobo Rot 1 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 Focus is not located in the default position after the reset.

## Gobo wheel 2 Er

(Gobo wheel 2 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 Focus is not located in the default position after the reset.

## Focus Er

(Focus 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 Focus is not located in the default position after the reset.

## 12. 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) To make sure the smooth gobo rotation, we suggest adding proper lube to the wheel each three month, avoiding the excessive lube splashes during the gobo rotating.
4) 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.

## 13. TECHNICAL SPECIFICATIONS

Power supply: AC $100 \mathrm{~V}-240 \mathrm{~V} \sim, 50 \mathrm{~Hz} / 60 \mathrm{~Hz}$
Power consumption: 1000W
Lamp: MSR GOLD 700/2 MiniFastFit
Lamp power: 700W
Packing dimensions: $59 \times 48 \times 80 \mathrm{~cm}$
Flight case dimensions: $99 \times 61 \times 93 \mathrm{~cm}$ (2Pcs)
Net weight: 34 KGS
Gross weight: 40 KGS (carton packing) 121.5 KGS(flight case packing/2Pcs)
Remark: errors and omissions for every information given in this manual excepted. All information is subject to change without prior notice.

