

**PROFESSIONAL MOVING HEAD USER MANUAL** 





KEEP THIS MANUAL FOR FUTURE NEEDS  $\mathsf{CE}$ 

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.

## Features:

- Lamp: Philips MSR GOLD 300 FASTFIT
- 3 Control channel modes: 16/18/26 channels
- Pan/tilt movement: 8 bit and 16 bit resolution

For smooth and precise resolution

Pan: 540°/630° optional, Tilt: 246° movement

High speed of pan/tilt movement, speed of pan/tilt movement is adjustable Scan position memory, auto reposition after unexpected movement

- Motorized color wheel with 8 dichroic filters and open, rainbow-effect with adjustable speed in both directions
- CMY color mixture to get indefinite color effects
- 30 CMY and color wheel MACROS and Random CMY
- One gobo rotation wheel with 6 rotating gobos plus open each, with different speed of gobo shaking and rainbow effect, and gobo indexing
- Rrism: Rotating 3 facets prism and prosm indexing
- Strobe effect with 13 flashes per second or random strobe via shutter
- Linear dimmer in precise speed from 0~100%
- Stepless frost, 0%~100% linear change frost
- Friendly blue and white LCD display

- Local and remote lamp on/off
- 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
- Software-upload by optional accessory via DMX line

## **OVERVIEW**



QQQQ

11 12 13 14

- (1) Lens
- (2) LCD display
- (3) Mode/esc-button
- (4) Up-button
- (5) Down-button
- (6) Enter-button
- (7) Carrying handle
- (8) Yoke
- (9) Power supply
- (10) Fuse
- (11) 3-PIN DMX output socket
- (12) 3-PIN DMX input socket
- (13) 5-PIN DMX output socket
- (14) 5-PIN DMX input socket

## SAFETY INSTRUCTIONS



**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.



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

## **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.

## INSTALLATION INSTRUCTIONS

Installing or replacing the lamp



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 Philips MSR GOLD 300 FASTFIT

## **Procedure:**



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 15 minutes after having turned off the lamp before you can turn it back on again.



## 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 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.



**CAUTION!** Before taking into operation for the first time, the installation has to be approved by an expert.

## **Cautions:**

The effect should be installed outside areas where persons may reach it, walk by or be seated.



#### **CAUTION!** When installing the device, make sure there is no highly

inflammable material within a distance of min. 0,5m

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 method via clamp

Please refer to the picture below:



Screw one clamp each via a M12 screw and nut onto the Omega holders. 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. Install the second Omega holder. 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.

## **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-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.



## Projector DMX starting 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 moving head, which is 18 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 19(18 + 1), the third unit to 37 (19+18), and so on.

## **Control Board**

There are four keys on the control panel, which could be used to set the address, turn ON/OFF, operating the program and reset.

[Mode/Esc] press this key to enter into edit mode. Press this key under the edit mode if you want to return to previous menu. it will exit from edit mode 60 seconds after the last keypress

**[UP]** screen will flash when pressing this key in normal mode, the adress value will increasing. Keep pressing this key, the address value will increase rapidly. it will exit from flash 60 seconds after the last keypress. Press this key under edit mode, you can choose the function you want from the buttom up in the menu.

**[DOWN]** screen will flash when pressing this key in normal mode, the adress value will idecreasing. Keep pressing this key, the address value will decrease rapidly. it will exit from flash 60 seconds after the last keypress. Press this key under edit mode, you can choose the function you want from the top down in the menu.

**[ENTER]** this key is functionless when in normal mode. Press this key under the edit mode, it will enter into next menu.

# 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.

Default se	ettings shaded			
	Set Dmx Address	A001~AXXX		DMX address setting
Mode	Value Display	PAN		DMX value display
Function Mode	Set To Slave	Slave1,Slave2,S	lave3	Slave setting
FI	Auto Program	Master / Alone	Master / Alone	
	Music Control	Master / Alone		Music control
		Current Time	XXXX(Hours)	Power on running time
		Total Life Hours	XXXX(Hours)	Fixture running time
		Last Run Hours	XXXX(Hours)	Fixture Last times clear
		Lamp Hours	XXXX(Hours)	Lamp running time
lation	Time Information	Lamp Off Time	XXXX(Minute)	Lamp off time
Information		Timer Password	Password=XXX	Timer Password 038
		Clear Last Run	ON/OFF	Clear Fixture Last time
		L-Timer Password	Password=XXX	Lamp Password Code="038"
		Clear Lamp Time	ON/OFF	Clear lamp time
	Temperature Info	Head Temperature	XXX°C/°F	Temperature in the head
	Software Version	Ver1.3		Software version of each IC

#### XM206-V1.3-A

Lamp On or Off	ON/OFF		Lamp on/off
Automatic La-On	ON/OFF		Lamp on/off when Power on
Lamp On Via DMX	ON/OFF		Lamp on via DMX
Lamp Off Via DMX	ON/OFF		Lamp off via DMX
Lamp On at Temp.	20~79°C,45°C /68~174°F	113°F	Lamp restart at temp.
Lamp Off at Temp.	80~139°C, 130°C /176~	282°F, 266°F	Lamp off at temp.
	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
Status Settings	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	OFF, 01M~99M, 15M	Stand By Mode
	Service Password	Password=XXX	Service Code "=050"
Service Setting	Fan Voltage	High/Low	Fan Voltage Select
	Gobo Speed	Quick/Slow	Gobo Change Speed
	Auto Fans Speed		Fans Speed Mode Select
Fans Control	High Fans Speed		
	Low Fans Speed		
Display Setting	Shutoff Time	02~60m 05m	Display shutoff time
Display Setting	Key Lock	ON/OFF	Key Lock
Temperature C/F	Celsius		Temperature switch
	Fahrenheit		between °C/°F
Initial Effect	PAN	PAN =XXX	Initial effect position
Reset Default	ON/OFF		Restore factory set.
Reset All			Reset all motors
Reset Pan&Tilt			Reset Pan/Tilt
Reset Colors			Reset color wheel
Reset Gobos			Reset gobos
Reset Shutter			Reset shutter and/or dimmer
Reset Others			Reset other motors
Test Channel	PAN		Test function

Personality

Lamp Control

		PAN	PAN =XXX	Fine adjustment of the lamp	
	Manual Control	:	:		
		Password	Password=XXX	Calbrate and adjust the effects	
	Calibrate Values	Color wheel	Color wheel=XXX	to standard/right position Password "050"	
		:	:	Password 050	
		Standard Mode		User's mode to change channel	
		Basic Mode		numbers	
	User Mode	Extended Mode			
Users Mode Set	User Mode	User Mode A			
ers Mc		User Mode B			
Use		User Mode C			
		Max Channel	Max Channel = $XX$	Preset User modes	
	Edit User Mode	PAN	PAN = CH01		
		:	:		
		Auto Pro Part 1	Program 1 ~ 10 Program 1	Select programs to be run	
	Select Programs	Auto Pro Part 2	Program $1 \sim 10$ Program 2		
		Auto Pro Part 3	Program 1 ~ 10 Program 3		
		Program 1	Program Test ("STEP	Testing program	
ogram	Edit Program	:	Step 01=SCxxx XX")	Program in loop	
Edit Program		Program 10	Step 64=SCxxx	Save and exit	
		Edit Scene 001	Pan,Tilt, Pan=xxx	Save and automatically return	
	Edit Scenes	~ Edit Scene	Secne Time	manual scenes edit	
		250	Input By TIME=xx.xs		
			Outside		
	Rec. Controller	XX~XX		Automat. scenes rec	

## Function Mode

#### DMX address setting

- With this function, you can adjust the desired DMX-address via the Control Board.
- Select "Set DMX address" via the encoder.
- Press the encoder, adjust the DMX address by turning the encoder.
- Press the encoder to confirm.
- Press the Mode/Esc-button in order return to the main menu.

#### **Display the DMX 512 value of each channel**

With this function you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.

#### **Slave setting**

With this function, you can define the device as slave.

#### **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.

#### **Music control**

With this function, you can run the internal program sound-controlled.

## Information

#### **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.

#### **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.

#### 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.

#### 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.

#### 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.

#### Time Password

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

#### **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.

#### L-Time Password

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

#### 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.

- Select "Clear lamp time" by turning the encoder.
- Press the encoder, the display shows "ON" or "OFF".
- Press the encoder to confirm.
- Press the Mode/Esc-button in order to return to the main menu.

#### Temp. Info.

#### Head Temp

With this function you can display the temperature on the display board of the base (near CMY-filter) in Celsius.

#### Software version

With this function, you can display the software version of the device.

- Select "Software version" by turning the encoder.
- Press the encoder, the display shows "V-X.X", "X.X" stands for the version number, e.g. "V-1.0", "V-2.6".
- Turn the encoder in order to read the version of every individual IC.
- Press the Mode/Esc-button in order to return to the main menu.

## 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.

#### Lamp on/off

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

- Select "Lamp on/off" by turning the encoder.
- Press the encoder, the display shows "ON" or "OFF".
- Turn the encoder to select "ON" if you wish to strike the lamp or "OFF" in order to switch it off.
- Press the encoder to confirm.
- Press the Mode/Esc-button in order 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.

#### 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.

#### 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.

#### 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.

#### Lamp off at temp.

With this function you can set the inside temperature at which the projector will automatically switch the lamp off. Turn the encoder to select the maximum inside temperature between  $60^{\circ}$  and  $159^{\circ}$ . Inside temperatures below 90  $^{\circ}$  are not critical.  $90^{\circ}$  and more should lead to the lamp being switched off. Please note that the outside temperature should not exceed  $45^{\circ}$ .

## 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.

## PERSONALITY

## **Status Settings**

#### Address via DMX

With this function, you can adjust the desired DMX-address via an external controller.

- Select "Address via DMX" by turning the encoder.
- Press the encoder, the display shows "ON" or "OFF".
- Turn the encoder to select "ON" if you wish to enable this function or "OFF" if you don't.
- Press the encoder to confirm.
- Press the Mode/Esc-button in order to return to the main menu.
- On the controller, set the DMX-value of channel 1 to "7".
- Set the DMX-value of channel 2 to "7" or "8". When set to "7" you can adjust the starting address between 1 and
- 255. When set to "8" you can adjust the starting address between 256 and 511.

• Set the DMX-value of channel 3 to the desired starting address. If you want to set the starting address to 57, set channel 1 to "7", channel 2 to "7" and channel 3 to "57". If you want to set the starting address to 420, set channel 1 to

"7", channel 2 to "8" and channel 3 to "164" (256+164=420).

• Wait for approx. 20 seconds and the unit will carry out a reset. After that, the new starting address is set.

#### No DMX Status

With this function, when the drive is not DMX signal, it runs automatism, close, hold and music, the default is hold.

#### Pan Reverse

With this function you can reverse the Pan-movement.

#### Tilt Reverse

With this function you can reverse the Tilt-movement.

#### Pan Degree

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

#### Feedback

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

#### **Movement Speed**

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

#### **Mic Sensitivity**

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

#### Hibernation

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.

#### Service setting

#### Service Password

With this function, you can set the service password.

#### Fan Voltage

With this function, you can select fan voltage for high or low, the default is low **Attention: The model is not recommended when ambient temperature is higher than 15 Celsius degree.** 

#### Gobo speed

With this function, you can select GOBO speed for quick or slow, the default is slow.

#### **Fans Control**

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

#### **Display Setting**

#### Shut off time

With this function you can shut off the LCD display after 2 to 59 minutes. Turn the encoder in order to select the desired shut off time.

#### Locked keys the display

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.

#### **Temperature C/F**

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

#### **Initial effect**

With this function, Display initial effect position.

#### **Reset Default**

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

#### **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.

## Effect Adjust

#### Test function of each channel

With this function you can test each channel on its (correct) function.

#### Lamp adjustment

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.

#### **Calibrate values**

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

## 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.

#### User mode

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

#### **Preset User mode**

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

## Edit program

Select program

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

#### Edit program

With this function, you can edit the internal programs.

#### **Edit scenes**

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

#### 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**:

	Scene 10	Scene 11	Scene 12	Scene 13	
L			000110 12	000110 10	

Part 2:

Scene 8	Scene 9	Scene 10	Scene 8	

Part 3:

Scene 12 Scene 13 Scene 13	cene 14 Scene 15 -	
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## DMX channel's functions and their values (26 DMX channels):

DM	DMX channel's functions and their values (26 DMX channels):						
Mod	Mode/Channel		Value	Function			
St	Ba	Ex					
2	2	1		Cyan Color :			
2	2	1	0-255	Cyan (0-white, 255-100% Cyan)			
		2		Cyan Color Fine :			
		Z	0-255	Cyan Fine			
3	3	3		Magenta Color :			
5		3	0-255	Magenta (0-white, 255-100% magenta)			
		4		Magenta Color Fine :			
		4	0-255	Magenta Fine			
5	5	5		PAN Movement 8bit :			
3	5	5	0-255	Pan Movement			
6	6	6		<u>TILT Movement 8bit :</u>			
0	0	0	0-255	Tilt Movement			
7	7	7		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		
4	4	8		Yellow Color :		
4	4	0	0-255	Yellow (0-white, 255-100% Yellow)		
		9		Yellow Color Fine :		
		9	0-255	Yellow Fine		
				Color Wheel:		
			0-13	Open / white		
			14-27	Color 1		
			28-41	Color 2		
			42-55	Color 3		
			56-69	Color 4		
1	1	10	70-83	Color 5		
			84-97	Color 6		
			98-111	Color 7		
			112-127	Color 8		
			128-189	Forwards rainbow effect from fast to slow		
			190-193	No rotation		
			194-255	Backwards rainbow effect from slow to fast		
				Color Wheel Fine :		
		11	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		
		12	40-49	Rot. gobo 4		
			50-59	Rot. gobo 5		
8	8		60-69	Rot. gobo 6		
			70-89	Gobo 1 shake slow to fast		
			90-109	Gobo 2 shake slow to fast		
			110-129	Gobo 3 shake slow to fast		
			130-149	Gobo 4 shake slow to fast		
			150-169	Gobo 5 shake slow to fast		
			170-189	Gobo 6 shake slow to fast		
			190-255	Rot. gobo wheel cont. rotation slow to fast		
				Rotating gobo index, rotating gobo rotation :		
			0-127	Gobo indexing		
9	9	13	128-189	Forwards gobo rotation from fast to slow		
			190-193	No rotation		
		ŀ	194-255	Backwards gobo rotation from slow to fast		

		1.4		Rotating gobo indexing Fine	
		14	0-255	Fine indexing	
				<b>Rotating Effect index, rotating Effect rotation:</b>	
			0-3	NO Effect	
10	10	15	4-127	Effect indexing	
10	10	15	128-189	Forwards prism rotation from fast to slow	
			190-193	No rotation	
			194-255	Backwards prism rotation from slow to fast	
		16		Rotating Effect indexing Fine	
		10	0-255	Fine indexing	
				Shutter, strobe:	
			0-31	Shutter closed	
			32-63	No function (shutter open)	
			64-95	Strobe effect slow to fast	
11	11	17	96-127	No function (shutter open)	
			128-159	Pulse-effect in sequences	
					160-191
			192-223	Random strobe effect slow to fast	
			224-255	No function (shutter open)	
12	12	18		Dimmer intensity:	
12	12	18	0-255	Intensity 0 to 100%	
		19		Fine Dimmer intensity:	
		19	0-255	Dimmer intensity fine	
13	13	20		Frost:	
15	15	20	0-255	Frost 0~100%	
		21		Frost Fine:	
		21	0-255	Frost Fine	
14	14	22		Speed Of CMY & Colour macro Speed:	
14	14	22	0-255	Speed Max —>Min	
15	15	23		Colour macros - CMY and colour wheel:	
			0-7	OFF	
			8-15	Macrol	
			16-23	Macro2	
			24-31	Macro3	
			32-39	Macro4	
			40-47	Macro5	
			48-55	Macro6	
			56-63	Macro7	
			64-71	Macro8	
			72-79	Macro9	
			80-87	Macro10	
			88-95	Macro11	
			96-103	Macro12	

			104-111	Macro13
			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
16	16	24	91-93	Gobo motor reset
10	10	21	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 (secne41~48 of EEPROM)
			220-239	Internal program 7 (secne49~56 of EEPROM)
			240-255	Music Control (secne of Program 1)
17		25		Pan Fine 16bit
		-	0-255	Fine control of Pan movement
18		26		Tilt Fine 16bit
			0-255	Fine control of Tilt movement

## 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.

#### 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.

#### 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 Gobo wheel 1 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 Gobo Rot 1 is not located in the default position after the reset.

#### Effect Er

(Zoom-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 Effect is not located in the default position after the reset.

## **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.

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.

## **TECHNICAL SPECIFICATIONS**

Power supply:  $\square AC100V \sim, 50Hz; \square AC120V \sim, 50Hz; \square AC208V \sim, 50Hz; \square AC220V \sim, 50Hz; \square AC230V \sim, 50Hz;$  $<math>\square AC240V \sim, 50Hz; \square AC120V \sim, 60Hz; \square AC208V \sim, 60Hz; \square AC220V \sim, 60Hz; \square AC230V \sim, 60Hz;$  $<math>\square AC240V \sim, 60Hz;$ Power consumption: 500W Lamp: Philips MSR GOLD 300 FASTFIT Packing dimensions: 74 x 45.5 x 55cm Flight case dimensions: 57.5 x 53 x 89 cm Net weight: 25.6KGS Gross weight: 31KGS (carton packing) 57.6KGS(flight case packing)

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