#### **USER MANUAL**

#### **CAUTION!**

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

# For your own safety, please read this user manual carefully before you initial start-up.

Every person involved with installation, operation and maintenance of this device have to:

-Be qualified

-Follow the instructions of this manual

#### INSTRODUCTION

Thank you for choosing this MOVING HEAD LIGHT. You will see you have acquired a powerful and versatile device.

Unpack your moving-head light.

Before your initial start-up, please make sure that there is no damage caused by transportation. If there is any damage, consult your dealer and do not use the device.

#### SAFETY INSTRUCTIONS

#### **CAUTION!**

Operate with your great care! Keep away from lines that afford the high voltage!

This device has left our promises in absolutely perfect condition. In order to maintain this condition and to ensure the safe operation, the user should 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 this any resulting defects or problems.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Keep the device on until it has reached the room temperature.

This device falls under protection-class 1. The power plug must only be plugged into a protection class 1 outlet.

Never let the power-cord come into connection with other cables! Handle the power-cord and all connections with the mains with particular caution!

Make sure that the available voltage is not higher than that stated on the rear panel.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

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 the initial start-up some of smell may arise. This is a normal process, 1

which does not necessarily mean that the device is defective.

Caution: During the operation, the housing becomes very hot.

Be careful of scald! Never install the device on a highly flammable surface (e.g. fair carpet)!

#### HEALTH HAZARDI

Never look directly into the light source. Because sensitive persons may suffer an epileptic shock (especially meant for epileptics)!

Keep children and amateurs away from the device!

#### **OPERATING DETERMINATIONS**

This device is moving-head spot for creating decorative effects. This product is only allowed to be operated with an alternating current of 230V, 50Hz and was designed for indoor use only.

This device is designed for professional use, e.g. on stages, in discotheques, theatres etc.

Lighting effects are not designed for permanent operation. Consistent operation breaks will 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.

Never list the fixture by holding it at the projector-head, as the mechanics may be damaged by heat, moisture or dust. There should not be any cables lying around in order to keep the safety of others and you.

The symbol  $\left(\begin{array}{c} 1.00 \\ \end{array}\right)$  indicates the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than this value.

Make sure that the area below the installation place is blocked when rigging servicing the fixture.

Always fix the fixture with an appropriate safety-rope. Fix the safety-rope at the correct fixation points only. The safety-rope must never be fixed at the transport handles!

Only operate the fixture under the condition that the housing is firmly closed and all screws are tightly  $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-\infty}^{\infty$ 

fastened.

The lamp must never be on if the objective lens or any housing-cover is opening, as discharge lamps may explode and emit a high ultraviolet radiation, which may cause burns.

Operate the device only after having familiarized with its functions. Unprofessional persons are forbidden to operate this device, because most damages are the result of their operation!

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

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

If remove the serial barcode in any way that is different to the one described in this manual, the dealer will not respond the repair even if the products are damaged. Furthermore, any other wrong operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc.

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#### **DESCRIPTION OF THE DEVICE**

#### **Features**

### **Powerful Moving-Head**

Versatile Moving-Head has a wide range of illumination and decoration possibilities, such as 9 brilliant, diachronic colors and open; 7 static metal gobos and open; auto focus; strobe-effect with 1-7 flashes per second; exact positioning within 450° Pan and 270° Tilt; 8 DMX-channels -16 bit Pan/Tilt movement resolution; 8 DMX-channels -8 bit Pan/Tilt movement resolution; 3-digit LCD display for starting address; for bright 575W discharge lamp; suitable controllers: DMX Operator.

#### INSTALLATION

#### Installing/replacing the lamp

#### DANGER TO LIFE!

Only install the lamp with the device switched off!

#### Unplug from mains before!

For the installation, you need one HMI575 lamp. Protection gloves, helmet with sight, leather apron

#### CAUTION!

The lamp has to be replaced when it is damaged or deformed due to be heat!

The lamp life given by the manufacturer must never be exceeded, that is why you need to take notes on the operational time of the lamp and replace the lamp in time.

Keep exchanged lamp in a protective container and remove accordingly.

Before replacing the lamp, unplug mains lead and let the lamp cool down (approx.10minutes).

During the installation do not touch the glass-bulbs barehanded! Please follow the lamp manufacturer's notes!

Do not install lamps with a higher wattage! Lamps with a higher wattage generate temperatures that the device was not designed for. Damages caused by non-observance are not subject to warranty.

#### Procedure:

**Step 1:**Unscrew the fixation screws of the lamp cover and remove it.

Step 2:Unscrew the knurled-head screws of the lamp holder and remove it.

Step 3:If replacing the lamp, remove the old lamp from the lamp holder.

Step 4:Insert the lamp into the lamp holder.

Step 5: Replace the lamp holder and tighten the knurled-head screws.

**Step 6:**Adjust the lamp as described under lamp adjustment.

Step 7: Replace the lamp cover and tighten the fixation screws.

#### Do not operate this device with opened cover!

# Lamp adjustment

The lamp holder is aligned at the factory. Due to differences between lamps, fine adjustment may improve light performance.

Strike the lamp, open the shutter and the iris, set the dimmer intensity onto 100% and focus the light on flat surface (wall), Center the hot-spot (the brightest part of the bean) using the 3 adjustment screws" A, B, C". Turn one screw at a time to drag the hot—spot, adjust the lamp until the light is even.

To reduce a hot-spot, pull the lamp in by turning all three screws" A, B, C". Clockwise 1/4-turn at a time until the light is evenly distributed.

If the light is brighter around the edge than it is in the center, or if light output is low, the lamp is too far back in the reflector. Push the lamp out by turning the screws "A, B, C" counterclockwise 1/4-turn at a time the light is bright and evenly distributed.

# Rigging

#### DANGER TO LIFE!

Please consider the respective national norms during the installation! An authorized dealer must only carry out the installation!

The installation of the projector 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. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging servicing the fixture staying in the area below the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that an expert approves safety-relating and machine-technical installions after four year in the course of an acceptance test.

The operator has made sure that a skilled person approves safety-relating and machine-technical installations once a year.

#### Procedure:

The projector should be installed outside areas where persons may walk by or be seated.

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the :tor. If you lack these qualifications, do not attempt the installation

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yourself, but instead use a professional structural rigger. Improper installation

Use 2 appropriate clamps to rig the fixture on the truss.

Follow the instructions mentioned at the bottom of the base.

Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixture is secure.

can result in bodily injury and damage to property.

The projector has to be installed out if the reach people.

If the projector

shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The projector must never be fixed swinging freely in the room. Caution: Projectors may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do NOT install the projector!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the projector's weight.

#### DANGER OF FIRE!

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) within a distance of min.0.5m.

The moving head can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics (see the drawing).

For overhead use, always install a safety rope that can hold at least 12 times the weight of the fixture, You must only use safety ropes with screw on cardinal. Pull the safety rope through the hole on the bottom of the base and over the trussing system etc. insert the end in the cardinal and tighten the fixation screws.

Use the safety rope exclusively as a closed ring. Never use by only securing at each end. The maximum drop distance must never exceed 20cm.

A safety rope which already hold the strain of a crash or which is defective must not be used again.

- Omega-holders
- 2, Clamp
- 3、 Safety-rope
- Quick-lock fastener

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.

#### DANGER TO ALFE!

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

#### DMX-512 connection/connection between fixtures

OUT OUT OUT

The wires must not come into contact with each other; otherwise the fixtures will not work at all, or will not work properly.

Only use a stereo shielded cable and 3-pan XLR-plugs and connectors in order to connector the controller with the fixture or one fixture with another

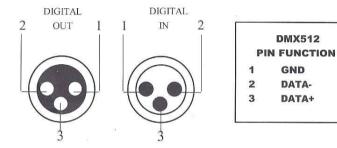
DMX512

GND

DATA-

DATA+

# Occupation of XLR-connection:



If you are using controllers with occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

# Building a serial DMX-chain:

Connect the DMX-output of the fist fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 resistor between signal ("C") and signal (+) into a 3-pin XLR-plug it in the DMX-output of the last fixture.

#### Connection with mains

Connect the device to the mains with the enclosed power supply cable.

# The occupation of the connection-cables is as follows:

Cable	Pin	International
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	

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The earth has to be connected!
Lighting effects must not be connected to dimming-packs.

#### **OPERATION**

After you connected the effect to the mains, this moving-head light starts running. During the reset, the

motors are trimmed and the device is ready for use afterwards.

You can control the projectors individually via your DMX-controller. Every DMX-channel has a different occupation with different features. In order to all up the different features, you first have to open the shutter.

Turn the focus-screw next to the objective lens for adjusting the focus in order to obtain a sharp projection.

#### Connection

After finished all mentioned process, confirm fixed the right lamp, turn on the switch and check if everything is correct, connect the light with power supply, after some seconds will start reposition, at the same time, if everything is ok, LCD Screen will display DMX start ADD No. (run node: DMX512; DMX address:001; )

#### Dimmer:

Turn on the lamp by controller, and use cross screw-driver adjust the three screw which located at the back of light, adjust the three screw, and turn to best brightness. (Note: the 3 screw can not rotate for big range)

# **Display Add Setting**

Every Moving Head Light should give one digital ADD No., so the moving head light can response for right control signal. Digital start ADD is a channel No., through this No., moving head light can obey the signal which transmit from the controller. This Moving Head Light use 16 Channels digital control Channels, it is set through the LCD screen which located in the panel, and let it as the start digital ADD No.

# Moving head light Digital Address calculation:

Current moving head light address No=(Frontal moving head start address No)+(main controller channel No).

Note: 1. The ADD NO. of the first computer light should be 1;

2. Total channel of control should not less than total computer digital channels.

#### **Panel Operation:**

- 1 Press MODE key and display DMX512 ADD NO., then press UP and DOWN key choose ADD NO.
- 2 Press FUNC key and set function, then press UP or DOWN amend parameters.

# Operation panel:

1, press ENTER to display DMX512 address code, and then UP and DOWN button adjustable address code. ENTER key and then determine.

- 2, or set up voice-activated self-by looked DOWN button, then click ENTER, and then be able to press UP and DOWN button, voice-activated or self-selection, ON voice said, OFF said self-chosen after determining ENTER, and then According to the ESC key to return to the screen
- 3, or how to run the self-voice, UP double-click the button, and then ENTER key to the next two.
- 4. X-axis to set the direction of rotation according to the DOWN button three times, and then click ENTER button, select ON or OF, ON, said the reverse rotation, OF, said positive spin, and then ENTER key

5. Y axis set the direction of rotation, according to two key DOWN, and then click ENTER button, select ON or OF, ON, said to the rotation, OF, said positive spin, and then ENTER key.

DMX Channel	DMX ADD NO.	Function
1. Flash	0~7	OFF
	8~231	Flash/ Slow to fast
	232~255	ON
2. Dimmer	0~255	Dimmer/ Bright to dark
3. Pan	0~255	Pan Max: 0~450°
4. Tilt	0~255	Tilt Max: 0~270°
5. Color Wheel	0~15	Open
	16~31	Color 1
	32~47	Color 2
	48~63	Color 3
	64~79	Color 4
	80~95	Color 5
	96~111	Color 6
	112~127	Color 7
	128~255	Rotate/ Slow to fast
6. Gobo Wheel	0~15	Open
	16~31	Gobo 1
	32~47	Gobo 2
	48~63	Gobo 3
	64~79	Gobo 4
	80~95	Gobo 5
	96~111	Gobo 6
	112~127	Cobo 7
	128~255	Rotate/ Slow to fast
7. Gobo Auto-rotate	0~7	Goho wheel non-stop
	8~119	Gobo wheel rotate/ Slow to fast clockwise
	120~231	Gobo Wheel rotate/ Slow to fast anti-clockwise
	232~239	Gobo wheel rotate 180°
	240~247	Gobo wheel rotate 360°
	248~255	Gobo wheel rotate 720°
8, Focus	0~255	Focus
9, Prism	0~127	No Prism
	128~255	With Prism
10, Prism Auto-rotate	0-7	Prism no rotate
	8~119	Prism rotate/ Slow to fast clockwise
	120~231	Prism rotate/ Slow to fast anti-clockwise
	232~239	Prism Rotate 180°
	240~247	Prism Rotate 360"
	248~255	Prism Rotate 720"
11, Pan 16bit		- Subsection of the Control of the C
12, Tilt 16bit		
13, PAN/TILT Speed-Adjust	0~8	Speed control with controller
Common Co	9~255	Speed control slow to fast
14, reset	0~249	No reset
*** ******	250~255	Reset last for 5 second
	200 200	weser rest for a second

### **CLEANING AND MAINTENANCE**

The operator has to make sure that an expert inspects safety-relating and machine-technical installations after every four years in the course of an acceptance test. The operator has to make sure that a skilled person inspects safety-relating and machine-technical installations once a year.

- (1) All screws used 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 housing, fixations and installation spots (ceiling, suspension, trussing).
- (3) Mechanically moved parts like axles, eyes and others must not show any traces of wearing (e.g. material abrading or damages) and must not rotate with unbalances.
- (4) The electric power supply cables must not show any damages, material fatigue (e.g. porous cables) or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and safety problems have to be removed.

#### DANGER TO LIFE!

#### 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!

#### CAUTION!

The lens has to be replaced when it is obviously damaged So that its function is impaired, e.g. due to cracks or deep scratches!

The objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly. The gobos may be cleaned with a soft brush. The interior of the fixture should be cleaned at least annually using a vacuum cleaner or an air-jet.

The diachronic color filters, the gobo-wheel and the internal lenses should be cleaned monthly.

There are no serviceable parts inside the device except for the lamp and the fuse. Maintenance and service operations are only to be carried out by authorized dealers.

Please refer to the instructions under "Installing/ Replacing the lamp".

# Replacing the fuse

If the lamp burns out, the fine-wire fuse of the device might fuse, too. Only replace the fuse by a fuse of same type and rating.

Before replacing the fuse, unplug mains lead.

#### Procedure:

**Step 1:** Unscrew the fuse holder on the rear panel with a fitting screwdriver from the housing (anticlockwise).

Step 2: Remove the old fuse from the fuse holder.

Step 3: Install the new fuse in the fuse holder.

Step 4: Replace the fuse holder in the housing and fix it.

Should you need any spare parts, please use genuine parts.

If the power supply cable of this device becomes damaged, it has to be replaced by a special power supply cable available at your dealer.

Should you have further questions, please contact your dealer.

# **TECHNICAL** parameter

Rated Voltage: 210-230V, 50Hz/60Hz Power Consumption: 680VA (220V)

Lamp: HMI575W/GS(OSRAM, PHILIPS)

Color Temperature: 5600°K

Lifetime: 700 hours

Color: 14 Separate color filter have high-quality color and open effect, and can change colors wheel continuously, and can make the rainbow effect at random.

Gobo: 7 Rotating Gobo+OPEN

Gobo rotate: Gobo can rotate positively, reversed and right and left shakeing or speed adjusting effect.

Strobe Shutter and flash: High speed Strobe shutter can blackout

the light quickly, and flash speed can be 1-7/second. And there are light adjusting effect.

Prism and Prism rotating effect: 3-prism and prism can rotate freely, fast rotate and slow rotate, and still adjusting function.

Auto-focus function: can be electric focus, adjust clearance of Gobo.

Motor: It is consist of 15 piece of advanced step motor which controlled by build in inching controller.

Control: Inch controller: high-steady and anti-interfere CPU was used in it.

Digital control: DMX 512

BODY: Plastic cover, streamline design, lovely and in good taste.

Fan: DC12V fans: nature wind cooling.

Transformer input: AC220V/50HZ 575W

 $Measurement: \ 530mm(L) \times 520mm(W) \times 600mm(H)_{\circ}$ 

Weight: 34kg

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