

## 150W Moving Head

# HAND MANUAL



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Keep this device away from rain and moistture! Unplug mains lead before opening the housing! For your own safety, please read this user manual carefully before you initial start-up!

#### Introduction

Thank you for having chosen our MOVING HEAD .You acquired a versatile, powerful and intelligent lighting-effect. Unpack your MOVING HEAD and make sure that there are no damages caused by transportation. Should there be any, please consult your local dealer and do not take the device into operation.

#### Multi-function MOVING HEAD spot:

●Color system:1 color-wheel. Color-wheel has 7 kinds of different color, dichroic filters white;

- •Gobo-wheel have 7 rotating metal-gobos. The rotating gobos can be turn by 360
- ●Combined shutter/dimmer unit allowing very smooth dimming and strobe effect 1-10 flash/s.
- •Addressing, special functions setting, effects calibration via control panel with 4-digitLED display.
- ullet Pan-movement rang 530° , Tilt-movement rang 280° .
- •6 high-quality stepper-motors for smooth movement.
- Self-resetable thermo-fuse.
- For PHILIPS MSD 150W, or OSRAM MSD 150 lamp

#### SAFETY INSTRUCTIONS

CAUTION! Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wire!

This device has left our premises in absolutely 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 drastic temperature fluctuation(e.g. after transportation),
- This device falls under protection-class 1. The power plug must only be plugged into protection class 1 outlet. Never let the power-cord come into contact with other cables! Handle the power-cord all connections with the mains with particular caution!
- ullet Make sure that the available voltage is not higher than 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 by the plug. Never pull out the plug by tugging the power-cord.
- 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 smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

- COUTION: During the operation, the housing becomes very hot.
- Frequent open/cut the lighting will reduce the life of the lamp.
- Never look directly into the light source, as sensitive persons may suffer an epileptic shock(especially meat for epileptics)!
- Damages caused by non-observance are not subject to warranty.
- Keep away children and amateurs!

#### **OPERATING DETERMINATIONS**

- This device is a moving-head spot for creating decorative effects. And was designed for indoor use only.
- This device is designed for professional use. Such as on stages, in disco, in theater.
- 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.
- Do not operate the device without lamp.
- Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be cables lying around. You own and the safety of others.
- Always fix the fixture with an appropriate safety-rope. Fix the safety-rope at the correct holes only.
- •Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- The lamp must never be ignited if the objective-lens or any housing-cover is open, as discharge lamps may expose and emit a high ultraviolet, which may cause burms.
- The maximum ambient temperature must never be exceeded.
- CAUTION: The lens has to be replaced when it is obviously damaged, so that its function is impaired, dug to cracks or deep scratches.
- •Operate the device only after having familiarized with its functions. Do not operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

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

• Please use the original packing if the device is to be transported.

- •Please consider that unauthorized modifications on the device are forbidden due to safety reasons.
- •Never remove the serial barcode from the device as this would make the guarantee void.

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

#### INSTALLATION

#### FITTING/EXCHANGING THE LAMP

DANGER: Install the lamp with the device switched off only. Unplug from mains before!

Open the small lamp cover by loosening the 3 Phillips screws, if changing the lamp; remove the old lamp from the socket.

Do not install a lamp with a higher wattage! A lamp like this generates temperatures the device is not designed for.

Damages caused by non-observance are not subject to warranty. Please follow the lamp manufacturer's notes! Do not touch the glass-bud bare-handed during the installation! Make sure that the lamp is installed tightly into the lamp holder system. Reclose the top cover of the head and tighten the Phillips screws. Before sticking the lamp, by pressing the" UP" and "DOWN" buttons in one time and then confirming with the Enter-button.

#### **RIGGING:**

• Danger to life!

•Please consider the EN 60598-2-17 and the respective national norms drums during the installation! The installation must only be carried out by an authorized dealer.

• 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 safety attachmant, an appropriate catch net. 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, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working pluses 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 operator for the first time and after changes before taking into operation anther time.

• The operator has to make sure that safety-relating and machine –technical installations are approved by an expert after every four years in the course of an acceptance test.

 $\bullet$  The operator has to make sure that safety-relating installations are approved by a skilled person 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 projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and/Or damage to property.

• The projector has to be installed out of the reach of 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 doubted 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.0.5 m.

CAUTION! 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 fixtures is secure.

• The Moving-Head can be placed directly on the floor or rigged in any orientation on a truss without altering its operation character-rustics(see the drawing). There are tow possibility how to fix the MH-1200W on a trusses: with the clam brackets (part of delivery) or mounting plate (is not included in deliver, only on demand. Use the rigging clamps (not included) with screws M 10 or M12.

For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. You must only use safety-ropes with screw-on carbines.

#### **Connection with the mains**

Connect the device to the mains with the power-plug. The occupation of the connection-cables is as follow:

| Cable        | Pin     | International |
|--------------|---------|---------------|
| Brown        | Live    | L             |
| Blue         | Neutral | Ν             |
| Yellow/green | Earth   |               |

The earth has to be connected !

#### DANGER TO LIFE!

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

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

## 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-pin XLR-plugs and connectors in order to controller with the fixture or one fixture with anther.

#### **Occupation of the XLR-connection:**

DMX-output DMX-input XLR mounting-socket: XLR mounting-plug:

1-Ground 2-Signal (-) 3-Signal (+) If you are using the recommended controllers, 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 frits fixture in them-chain with the DMX-input of the next fixture. Ways 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 ohm resistor between Signal (-) and (+) into a 3-pin XLR-plug it in the DMX-output of the last fixture.

-, DMX channel description

| DMX     |                 |      |                        |
|---------|-----------------|------|------------------------|
| channel | Function        | Data | Description            |
| 1       | color-wheel     | 0255 | rotation slow>fast     |
| 2       | gobo wheel      | 0255 | rotation slow>fast     |
| 3       | gobo wheel      | 0255 | gobo angle 0°360°      |
|         | rotation        |      |                        |
| 4       | SHUT and Dimmer | 0255 |                        |
| 5       | pan             | 0255 | pan adjustment 0°540°  |
| 6       | tilt            | 0255 | Tilt adjustment 0°270° |
| 7       | Pan /Tilt speed | 0255 | Fast-slow              |
| 8       | Reset           | 0255 |                        |

#### ADDRESSING

The Control Board on the front side of the base allow you to assign the DMX fixture the address, which is defined as the first channel from which the light will respond to the contrilor. If you set, for example, the address to channel 5, the light will use the channel 5 to 22 for control

Please, be sure that you don't have any overlapping channels in order to control each the light correctly and independently from any other fixture on the DMX data link.

#### **TECHICAL SPECIFICATIONS**

#### **Power supply**

EU-model: 208/230/240V AC, 50/60HZ~ Fuse: T5A, 250V US-model: 100/115/208/230V AC, 50/60HZ Fuse: T 5A Power consumption: 250W

#### **TEMPERATURES**

Maximum ambient temperature:  $40^{\circ}$ C Maximum housing temperature: (steady state)  $80^{\circ}$ C

#### **Dimensions and weight:**

Length of base (including handles): 450mm Width of yoke: 405mm Height (head horizontal) 540mm Weight (net): 15kg Shipping weight: 18kg

#### CLEANING AND MAINTENANCE

The operator has to make sure that safety-relating and machine-technical installations are inspected by an export after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are inspected by a skilled person once a year.

The following points have to be considered during the inspection:

1. All screws used for installing the devices 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 rerate 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 any safety problems have to be removed.

#### DANGER TO LIFE!

Disconnect from mains before starting maintenance operation!

 $\bullet$  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 repaire, 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 brsh. 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.
- To ensure a proper function of the gobo-wheel, we recommend lubrication in six month intervals. The quantity of oil must not be excessive in order to avoid that oil runs out when the gobo-wheel rotates.
- 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.

#### **Replacing the fuse**

If the lamp burns out, the fine-wire fuse of the device might fuse too.Only replace the 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 (anti-clockwise)
- 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.

• 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 authorized dealers only in order to avoid hazards.

• Should you have further questions, please contact your dealer.

We hope you will enjoy the light; we can assure you that you will enjoy this device for years if you follow the instructions given in this manual.