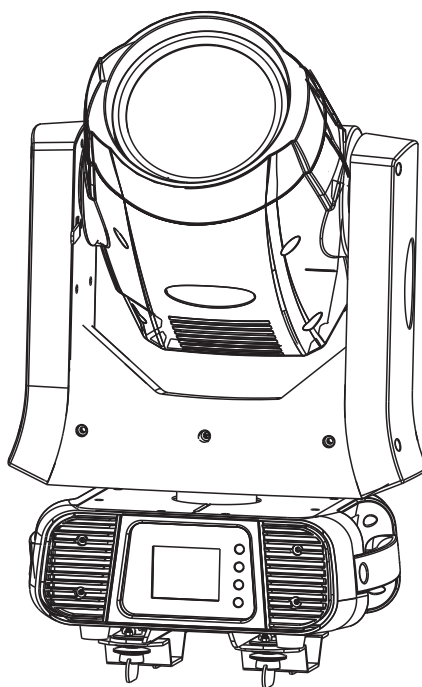


# SI-220 PROBEAM 231



CE   IP20 LED  0.2m  t<sub>a</sub> 40°C t<sub>c</sub> 150°C

# User Manual

KEEP THIS MANUAL FOR FUTURE NEEDS

# 1

## **SAFETY INSTRUCTIONS**



### **CAUTION**

Becareful with your operations. With a dangerous voltage you cansuffer 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.

The device shall only be used with rate voltage and frequency.

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.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

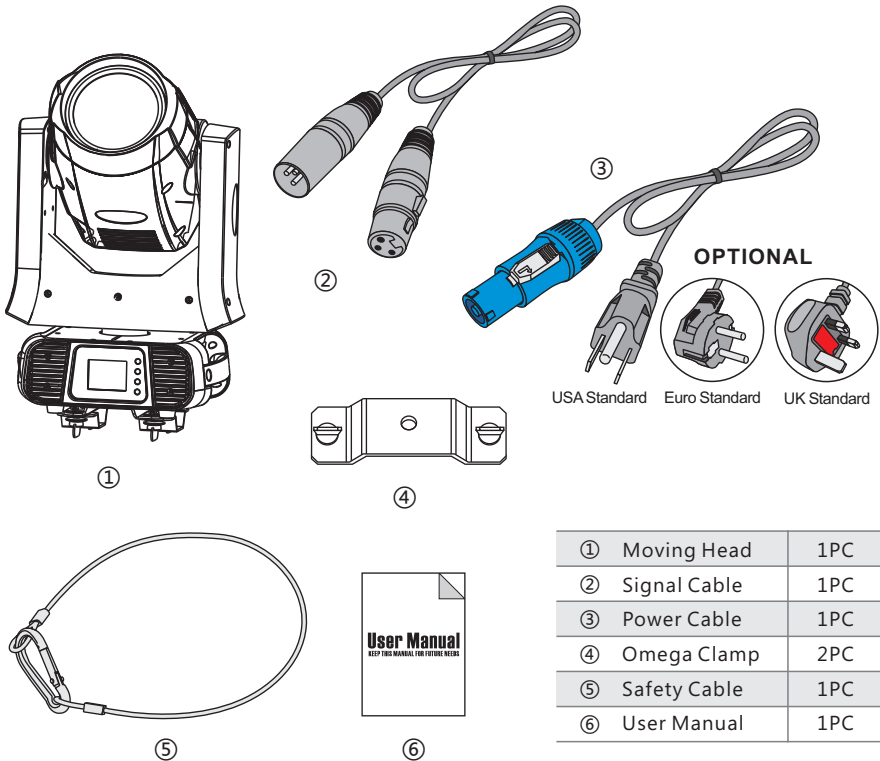
If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

## 2 UNPACKING

Thank you for choosing our PROBEAM 231. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

The PROBEAM 231 is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

The PROBEAM 231 adopts a 231W white LED lamp which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:



①	Moving Head	1PC
②	Signal Cable	1PC
③	Power Cable	1PC
④	Omega Clamp	2PC
⑤	Safety Cable	1PC
⑥	User Manual	1PC

## **3 FEATURES & SPECIFICATIONS**

### **Features**

- 1\*OSRAM SIRIUS HRI 231W Lamp
- 2000 hours rated lamp source
- Electronic ballast and power supply
- Smooth and precise resolution for PAN/TILT movement
- 540°PAN and 270°TILT movement optional
- Scan position memory, auto reposition after unexpected movement
- 2.5° Beam angle
- Improved optics and flat beam field
- No need for adjustment of reflector or lamp
- Anti-reflection 136mm front lenses
- 1 Static gobo wheel with 16 gobos plus open
- 1 Color wheel with 11 colors plus open
- Variable direction rainbow effect with speed adjustable
- Motorized focus from near to far
- 16-facet prism with variable speed and direction
- 16-Facet+8-facet prism with variable speed and direction
- Combined prism effect by 16-facet prism and 16-Facet+8-facet prism with variable speed and direction
- Frost filter available (Hybrid effect for wash)
- Dual flag mechanical dimming system
- 20T/sec high speed LED shutter/strobe effect with variable speed
- Preset variable/random strobe and dimming pulse effect
- 14/16 DMX channels USITT DMX-512
- Vector mode with blackout MIB function
- DMX512, master-slave and sound activated controllable or auto operation
- Sound control with sensitivity adjustment
- RDM available (Remote Device Management)
- Art-NET as optional
- Wireless Solution's wireless receiver system built-in as optional

- 2.4" TFT LCD display with 4 control buttons and battery back-up for menu preset
- 180°Reversible for LCD display
- LCD display switch-off automatically after 60 seconds
- DMX signal monitoring indicator available
- Software up-datable through DMX connectors
- Efficient low noise self adjusting fan cooling system
- Constant temperature readout and management function
- Over heat protection management
- Powercon IN/ OUT with power switch and fuse
- 3-Pin XLR DMX connectors IN/OUT
- IP20 protection rating
- -35°C to 45°C ambient temperature
- 2\*1/4 turn fastening Omega Clamps (Adaptable vertically and horizontally)
- 1\*Safety attachment point

## Specifications

**Input Voltage:** AC100-240V 50/60Hz

**LED Quantities:** 1\*OSRAM SIRIUS HRI 231W Lamp

**Control Signal:** DMX512, master-slave and sound activated or auto operation

**Control Channel:** 14/16 DMX channels USITT DMX-512

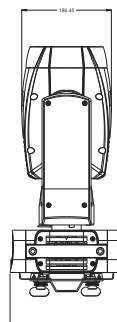
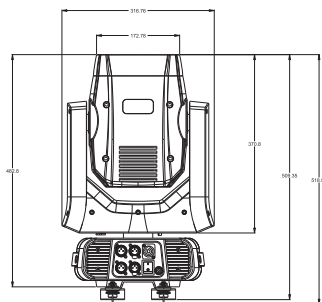
**Power Consumption:** 270W

**Dimensions:** 209(D)\*367(W)\*505(H)mm

**Packing Dimensions:** 420(D)\*445(W)\*515(H)mm

**Net Weight:** 14kg

**Gross Weight:** 17kg



## **4**

## **OPERATION INSTRUCTIONS**

- The PROBEAM 231 is for beam effect for on-site decoration purpose.
- Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
- This light should be keep away from strong shaking during any transportation or movement.
- Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
- Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.
- Make sure the installation place is in good safety condition before installing the fixture.
- Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
- Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.
- Make sure the fixture is operated by qualified personnel who knows the fixture before using.
- Keep the original packages if any second shipment is needed.
- Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
- It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

## **5** **INSTALLATIONS**

**Cautions:** For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture.

from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 ft) away from any flammable materials (decoration etc.).

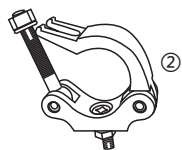
Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

**Mounting points:** 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.

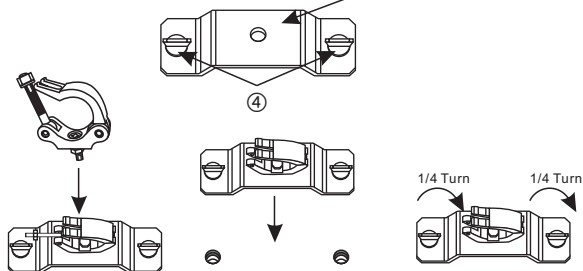
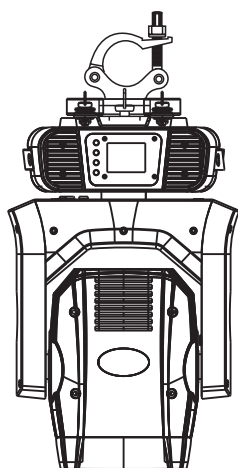
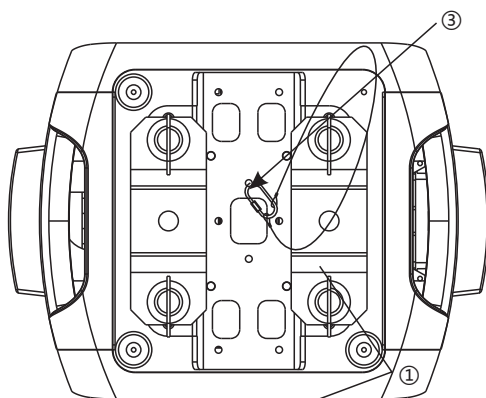
Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

**Clamp Mounting:** The PROBEAM 231 provides two unique mounting bracket assembly that integrates the bottom of the base, the included "Omega Bracket," and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "omega bracket". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly.

Regardless of the rigging option you choose for your PROBEAM 231, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.



- ① Omega Bracket
- ② Safety Clamp
- ③ Safety Cable
- ④ 1/4 Turn Quick-Lock Fasteners

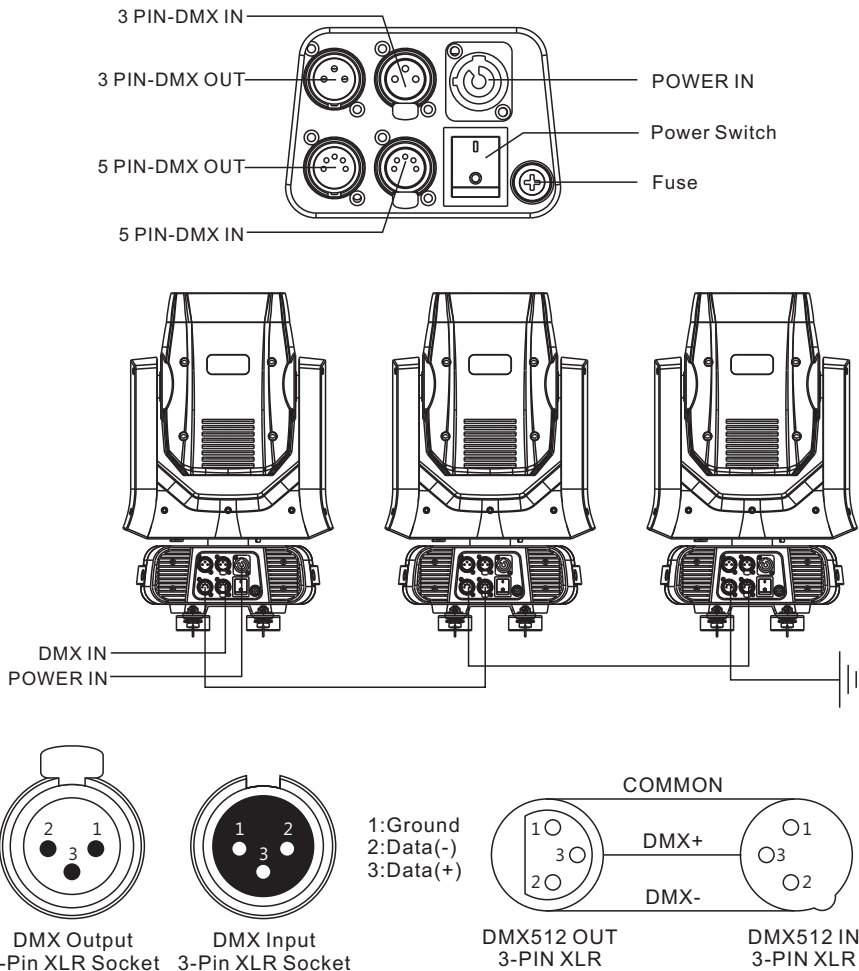


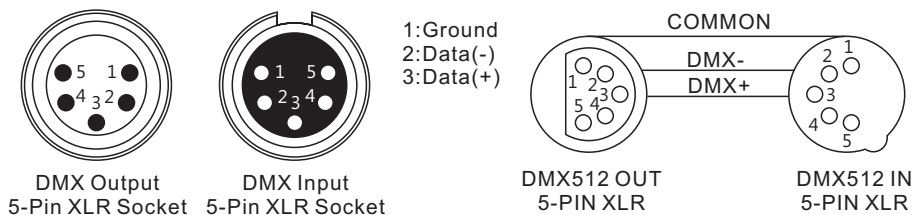


## 6 DMX-512 CONTROL CONNECTIONS

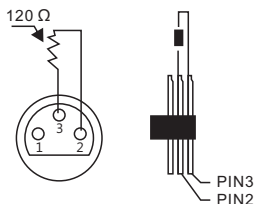
Connect the provided XLR cable to the female 3/5-pin XLR output of your controller and the other side to the male 3/5-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX-512 connection with DMX terminator

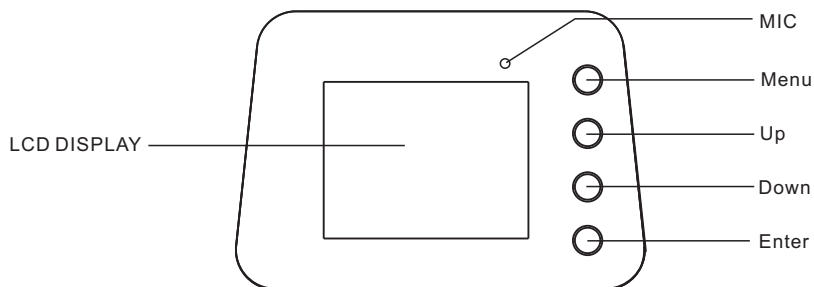




For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR 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.



## 7 MENU OPERATIONS



MENU	DMX512	Dmx Address	1-512	DMX address setting
		Dmx Channel	Mode1(14CH)	Standard channel
			Mode2(16CH)	Vector channel
		Dmx Value		Dmx value form
		Wireless Option	Wireless Priority	Wireless priority
			XLR Priority	XLR priority
			Wireless Only	Wireless only
			XLR Only	XLR only
	Setting	Pan Inverse	Off	Pan inverse close
			On	Pan inverse open
		Tilt Inverse	Off	Tilt inverse close
			On	Tilt inverse open
		Lamp On Power	Off	Lamp on power close
			On	Lamp on power open
		Lamp status	Off	Lamp status close
			On	Lamp status open
	Show	Standly	*	Show mode
	Manual	Pan	000-255	Pan manual adjust
		Tilt	000-255	Tilt manual adjust
		Color	000-255	Color manual adjust
		Gobo	000-255	Gobo manual adjust
		Strobe	000-255	Strobe manual adjust
		Dimmer	000-255	Dimmer manual adjust
		Focus	000-255	Focus manual adjust
		Prism 1	000-255	Prism 1 manual adjust
		Prism 2	000-255	Prism 2 manual adjust
		Frost	000-255	Frost manual adjust
	Rexet	All Reset	Are you sure No/Yes	All reset Menu=No,Enter=Yes
		Pan&Tilt Reset	Are you sure No/Yes	Pan and Tilt reset Menu=No,Enter=Yes
		Other Reset	Are you sure No/Yes	Other reset Menu=No,Enter=Yes
		Factory Set	Are you sure No/Yes	Factory set Menu=No,Enter=Yes
	Display	Language	English	English
			中文简体	Chinese
		BackLight	Auto Close	Backlight auto close
			Always Light	Backlight always light
		Direction	Forward	Display forward
			Reverse	Display reverse
	Infor	Version:01-02-02 Temperatures:XX°C Fan State:1/2:0000/0000 Remain Time:9999:00:00		Information

		Used Time:00:00 Lamp:00:00 Reset Error:		
	Advanced	Enter Password	UP+DOWN+ENTER+UP	Advanced setting

## 8 DMX CHANNELS

Channel		Function	Values	Description
14CH	16CH			
1	1	Pan	0-255	PAN Movement
2	2	Pan-fine	0-255	Fine control of Pan movement
3	3	Tilt	0-255	Tilt Movement
4	4	Tilt-fine	0-255	Fine control of Tilt movement
5	5	Color wheel1	0-4	Open / white
			5-9	White+Color 1
			10-14	Color 1
			15-19	Color 1+Color 2
			20-24	Color 2
			25-29	Color 2+Color 3
			30-34	Color 3
			35-39	Color 3+Color 4
			40-44	Color 4
			45-49	Color 4+Color 5
			50-54	Color 5
			55-59	Color 5+Color 6
			60-64	Color 6
			65-69	Color 6+Color 7
			70-74	Color 7
			75-79	Color 7+Color 8
			80-84	Color 8
			85-89	Color 8+Color 9
			90-94	Color 9
			95-99	Color 9+Color 10
			100-104	Color 10
			105-109	Color 10+Color 11
			110-114	Color 11
			115-127	Color 11+White
			128-189	Forwards color wheel rotation from fast to slow
			190-193	color wheel rotation stop
			194-255	Backwards color wheel rotation from slow to fast
6	6	Gobo wheel	0-4	Open/White
			5-9	Gobo 1
			10-14	Gobo 2

6	6	Gobo wheel	10-14	Gobo 2
			15-19	Gobo 3
			20-24	Gobo 4
			25-29	Gobo 5
			30-34	Gobo 6
			35-39	Gobo 7
			40-44	Gobo 8
			45-49	Gobo 9
			50-54	Gobo 10
			55-59	Gobo 11
			60-64	Gobo 12
			65-69	Gobo 13
			70-74	Gobo 14
			75-79	Gobo 15
			80-84	Gobo 16
			85-92	Gobo 1 shake from slow to fast
			93-100	Gobo 2 shake from slow to fast
			101-108	Gobo 3 shake from slow to fast
			109-116	Gobo 4 shake from slow to fast
			117-124	Gobo 5 shake from slow to fast
			125-132	Gobo 6 shake from slow to fast
			133-140	Gobo 7 shake from slow to fast
			141-148	Gobo 8 shake from slow to fast
			149-156	Gobo 9 shake from slow to fast
			157-164	Gobo 10 shake from slow to fast
			165-172	Gobo 11 shake from slow to fast
			173-180	Gobo 12 shake from slow to fast
			181-188	Gobo 13 shake from slow to fast
			189-196	Gobo 14 shake from slow to fast
			197-204	Gobo 15 shake from slow to fast
			205-212	Gobo 16 shake from slow to fast
			213-255	Gobo wheel rotation from slow to fast
7	7	Strobe	0-31	Strobe close
			32-63	Strobe open
			64-95	Strobe speed from slow to fast
			96-127	Strobe open
			128-143	Fast closing from slow to fast
			144-159	Fast opening from slow to fast
			160-191	Strobe open
			192-223	Random strobe from slow to fast
			224-255	Strobe open
8	8	Dimmer	0-255	0%~100% dimmer
9	9	Focus	0-255	In(near)to out(far)

10	10	Prism 1	0-5	OFF
			6-127	ON
			128-129	Forwards rotation from fast to slow
			190-193	Prism rotation stop
			194-255	Forwards rotation from fast to slow
11	11	Prism 2	0-5	OFF
			6-127	ON
			128-129	Forwards rotation from fast to slow
			190-193	Prism rotation stop
			194-255	Forwards rotation from fast to slow
12	12	Frost	0-199	Frost OFF
			200-255	Frost ON
13	13	Pan/Tilt speed	0-225	Max to min speed
			226-235	Blackout by movement
			236-245	Blackout by all wheel changing
			246-255	No function
14	14	Special function	0-39	No function
			40-59	Lamp open
			60-79	Lamp close
			80-84	All reset
			85-87	Pan&Tilt reset
			88-90	Color reset
			91-93	Gobo reset
			94-96	Strobe reset
			97-99	Other reset
			100-119	Internal program 1
			120-139	Internal program 2
			140-159	Internal program 3
			160-179	Internal program 4
			180-199	Internal program 5
			200-219	Internal program 6
			220-239	Internal program 7
			240-255	Internal program 8
	15	Color time	0-255	Max to min speed
	16	Gobo time	0-255	Max to min speed

## 9

## MAINTENANCE AND CLEANING

The following points have to be considered during the inspection:

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



### CAUTION

Disconnect from mains before starting maintenance operation.



In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

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

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.



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