

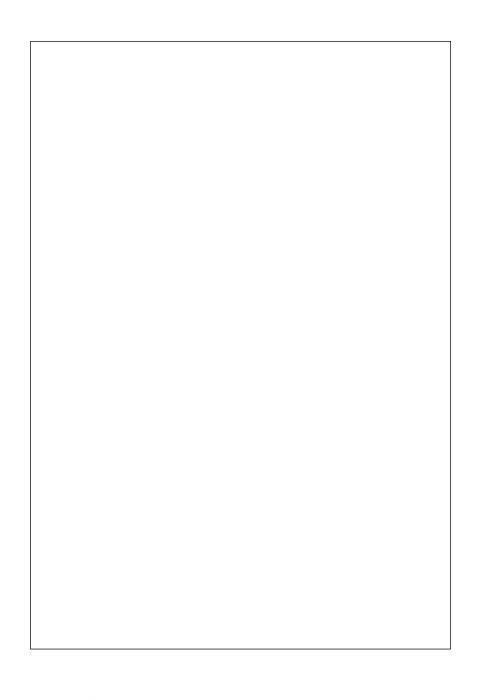
# THUNDER-160HR BEAM MOVING-HEAD

**USER MANUAL** 





Http://www.lightskystar.com



#### 1.INDEX

Many thanks for choosing THUNDER160HR beam moving head. The design & production are passed through the full quality control to ensure the fineness ability.

This manual covers important information about installation&operation of this projector.Please rsad this user manual carefully before installing or operating this projector.Please do follow the safety instruction.list as below carefully and keep this manual in a safety place for future reference.

Note: As part of our ongoing commitment to continuos products development, company will keep the right to improve this products, the information in this menu may be changed in the future, the company reserve the right to change the data without any advise.

# 2.Packing

- 2.1 The packing of the series of products is paper carton, the flycase can order.
- 2.2 To open the carton

First please open the carton and take out the relative accessories, Take out the projector from the polybad and put it on a very smooth & horizontal surface place for the next operation.

Attention:Do not press the plastics parts to avoid any damage and distortion.

2.3 Packing list

The following parts are packed together with the projector:

Attachment	
DMX cable	1pc
User manual	1pc
Moutnting Bracket	2рс



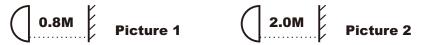


# 3.Install and safe usage

- 3.1 Install the porjector:
  - 3.1.1 Requirement for the installing place:

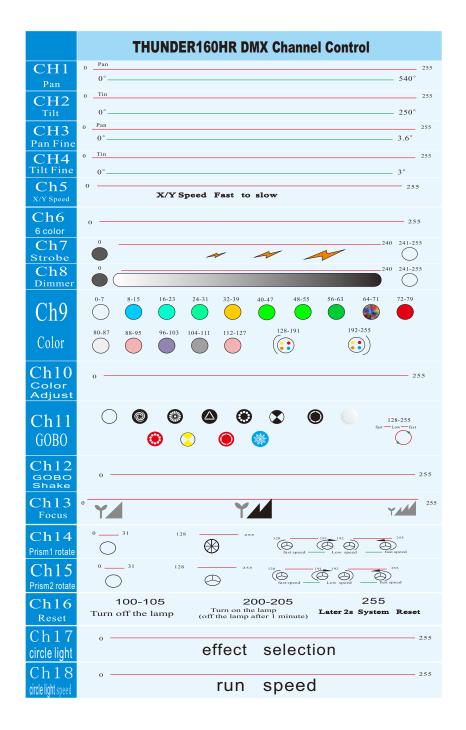
Please do ensure fasten the mount bracket firmly before installing. The mount bracket must share the weight 10 multiple weight of the projector's.

- 3.1.2 The method of installation and caution:
- 3.1.2.1 Connect the mount bracket well and fix the clamp firmly to the truss in order to avoid the projector loose or falling.
- 3.1.2.2 The projector should be mounted via its clamp by using 2 bolts. The clamp itself attached to the underside of the projector with 4 boltsprovided in the package. Always make sure that the projector is anchored firmly to avoid any vibration or falling.
- 3.1.2.3 For safety the projector should have a secondary fixing with a safety cord through the truss and the handle of projector. The safety cord will fasten the projector on the truss tightly to avoid any vibration or falling directly if the clamp or the truss is loose.
  - 3.1.2.4 When in stalling the projector, not allow any person pass by,
- 3.1.2.5 After installing the light.Please inspect whether the safety cord atrried, clamp or truss is loose in order to avoid the projector will slip. If any dangers is happened by falling, the manufacturer won't be risponsible for it.
- 3.1.2.6 Other safety terms
- 3.1.2.6.1 Mininum distance between the projector's shot&goal project:









When fix the orientation of the projector. Please keep the minimum distance between the flammable retarding subject and the porjector's shot is 0.8M at least.(Picture1) But the minimum distance between the inflammable and the projector's lens should be kept away 2m at least. (Picture2).

3.1.2.6.2 The minimum distance between the inflaming retarding subject and any other part of the light:

When fix the orientation of the projector. Please keep the minimum distance between the inflaming retarding subject and the projector shot is 0.3m at least.

3.1.2.6.3 MAX ambient temperature:

In order to ensure the light could operate normally, the ambient temperature couldn't be highter than 33 degree and no lower than 2 degree.

3.1.2.6.4 Electric shock&static electricity portection:

These projectors are designed depends on the electric shock protection, the projector should be connected when the power supply is enough. The projector's ground cable should be connected with the ground cable of the power supply system as well.

3.1.2.6.5 Surface temperature:

Under normal condition, the highest sectional surface temperature may be up to 90-120 degree.

3.1.2.6.6 Connct the main power supply:

Connecting the main power supply should be done by the professional person.





3.1.2..6.6.1 Please check the voltage, frequency data of power supply system id suitable for the mentioned on the projector. Please do avoid the different voltage between them and burn the projector.

3.1.2.6.6.2 Please refer to the actual wattage of the projector's lamp multiply 1.5 multiple multiply total quantity of the projector then you could get the minimum power supply loading. Lf your power cable can't share the minimum power supply loading. Please don't connect all the porjectors meantiome.

## 4.Lamp replacement

### 4.1 Lamp description:

Model	Lamp discription
THUNDER160HR	led: 160w
	Color temperature:8000K

## 4.2 Lamp replacement

Per to the THUNDER160HR, please open the lamp access panel at the rear of the projector by undoing the 4 hand-operated screw. then you can begin to replace the lamp. Pull out the old lamp from the lamp bracket and then pug in the new lamp. Remount the lamp bracket and faster the screw at bothside tightly or the lamp's loose connection will result in high tension short circuit or electric discharge which will effect the lamp life or damage the PCB board. When finished the lamp replacement, please close the cover and faster the screw at both side tightly.

#### **8.TECHNICAL PARAMETER**

VOLTAGE: AC100- 240V 50/60Hz LIGHT SOURCE: 160W LED ENGINE

POWER CONSUMPTION: 200W

OPTICAL DEVICE: high efficiency lens group,0°-2°zoom

ELECTRONIC FOCUS: 20 meters, 7000 LUX

CHANNEL MODE: 16/18 (THUNDER-160HR) standard DMX512 channel

LEVEL SCANNING: 540 (16 bit precision scan) VERTICAL SCAN: 280 (16 bit precision scan)

COLOR WHEEL: 12color and white light

with two-way rotating and rainbow effect

GOBO WHEEL: 13 gobos and white circle

with design jitter and arbitrary positioning function

PRISM: 2 prism,2 prism wheel with superposition, positive and negative rotation.

SHUT: shut up to 10 times per second,

random shut and pulse shut can be choosed

DIMMER: 0% ~ 100% linear dimmer

FROST: 0% ~ 100% linear frost

EFFECT: 6 color wheel

LED EFFECT: 24PC 5050LED ,circle speed change

(THUNDER-160HR)

Electronic ballast : make the product more light and bright.

Lamp more stable environmental protection and

more energy saving

SWITCHING POWER SUPPLY: AC1G0 ~ 240 V, 50/60 HZ

FIXTURE DIMENSION: L286×W218×H465 (mm)
PACKING DIMENSION: L345×W280×H530 (mm)

NET WEIGHT: 9.8KG GROSS WEIGHT: 11.5KG)



#### menu selection



## setting:

1.Run mode- dmx(use controller) ,music,auto

2.Dmx address--(6.Set the DMX IP code)

3.channel mode--16ch

4,Invert pan---(off)

5,Invert pan---(off)

6,pan-tilt swap ----(off)

7,pan-tilt encoder ----(on)Digital correction

8,No dmx signal -----(keep)

9, Display----(on)

10,Lamp on@start up-----(on) open light the lamp on

11,Linear color----(off) select color full change

12,Load default

#### Manual:

Use the manual control dmx data of lamps and lanterns for 18ch

System:

The light running information

Advance:

only use factory setting

password: up down up down

# 4.3 Warning!

Warning1:Disconnecting the power supply if there are no lamp fixed inside the light well. Or it will burn downthe light.

Warning2:Disconnecting the power supply before replacing the lamps.

Warning3:When the lamp is operating, its temperature will be extremly high. The feature of the recharge lamp couldn't work under the interruption power supply. Therefore, please let the lamp cool down completely (Approx 15 minutes at least). then you could operate the light again. Otherwise, it will be lead to high tension, short circuit or electric discharge. Morever, the part of the control board will be burn down.

Warning4:All the lamps have its usage life, please inspect the lamp timing and ensure the lamp's usage life not exceed the rated life, otherwife, it may result in the lamp broken, deformation or blacken. if the lamp is broken, the caused impact will demage the projector's spot system. The electric parts on the circuit board may be staved by the high voltage. The got lamp fragments may injure people, explode or set on fire.

# 5. Power supply and singal connection

## 5.1Power supply connection and control

Use the professional plug to connect the projector and main power supply. Please pay attention to the voltage, frequency the same as the mentioned on the projector. Suggest each light has a seperatelly switch of the power supply so that could turn on or turn off each projector desultorily.





# 5.2 Signal connection

Please use the round 3-pin XLR plugs&sockets offered by menu facture to connect the first projector's output to the second projector' input and connect the second projector's output to the third projector's input. And in the same way for the rest, Eventually connect the last projector's output, all the projectors are together as the following figure (picture3)

Picture 3

The projectors's control signal output or input by using the 3pin XLR pug and socket..lf need to lengthen the communication cable, please make sure the both side of 3-pin plug is one to one.(one to one,two to two ,three to three). Otherwise, the communication cable will be interrupted.. The communicate cable is 2-cord screened cable  $75\Omega$  RESISTANCE with each core is at least a 0.5mm diameter. (Caution: All the inside leading wire of 3-pin XLR plug couldn't touch each other or plinth).

## 5.3 Lingt connection

After doing the above operation and making sure all the projectors had been installed with suitable lamps,press the power switch to check whether everything is working normally. The Led display will show the original DMX signal address. If the DMX signal is input, the green light will be shark.

#### 6.Set the DMX IP code

To make sure every projector react to the control signal correctly a digital starting IP code should be given to every MAX projector. Digital star IP code is a channel munber. By this number ,the projector should obey the command form the controller. Digital staring IP code is set by the operation panel, progressing to the staring IP value

When you use fixable channel controller, the address count method as following:

First light's IP code value=(value of the former star IP CODE)+ (channel on the controller)

when you use any unfixable channel controller:

- 1. The first projector's starting IP code is 001
- 2.Channel number on the controller should not be less than the channel number of the projector.

# 7. Control Display

Display: data show that the product information

Menu selection: touch screen& control key both use control

menu selection

