

# SKYSTAR

PROFESSIONAL SHOW LIGHTING

## THUNDER-160H BEAM MOVING-HEAD

USER MANUAL



# SKYSTAR

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## 1.INDEX

Many thanks for choosing THUNDER160H 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 read 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 safe place for future reference.

Note: As part of our ongoing commitment to continuous product development, the company will keep the right to improve these products, the information in this manual may be changed in the future, the company reserves the right to change the data without any notice.

## 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 polybag and put it on a very smooth & horizontal surface place for the next operation.

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

2.3 Packing list

The following parts are packed together with the projector:

Attachment	
<b>DMX cable</b>	<b>1pc</b>
<b>User manual</b>	<b>1pc</b>
<b>Mounting Bracket</b>	<b>2pc</b>

### 3. Install and safe usage

#### 3.1 Install the projector:

##### 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 bolts provided in the package. Always make sure that the projector is anchored firmly to avoid any vibration or falling.

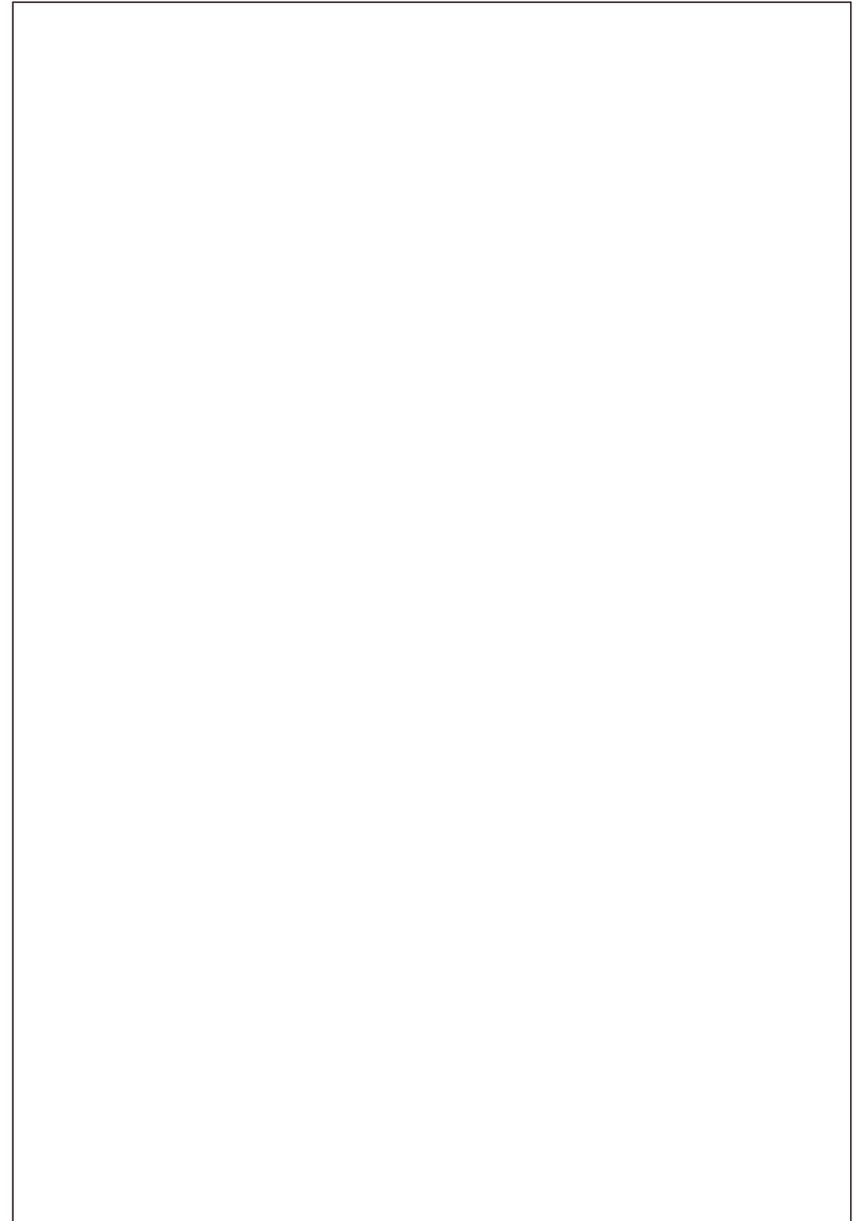
3.1.2.3 For safety the projector should have a secondary fixing with a safety cord through the truss and the handle of projector. The safety cord will fasten the projector on the truss tightly to avoid any vibration or falling directly if the clamp or the truss is loose.

3.1.2.4 When installing the projector, not allow any person pass by,

3.1.2.5 After installing the light. Please inspect whether the safety cord attached, 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 responsible for it.

##### 3.1.2.6 Other safety terms

3.1.2.6.1 Minimum distance between the projector's shot & goal project:



THUNDER160H DMX Channel Control	
CH1 Pan	0 Pan 255 0° 540°
CH2 Tilt	0 Tilt 255 0° 250°
CH3 Pan Fine	0 Pan 255 0° 3.6°
CH4 Tilt Fine	0 Tilt 255 0° 3°
Ch5 X/Y Speed	0 255 X/Y Speed Fast to slow
Ch6 6 color	0 255
Ch7 Strobe	0 240 241-255 [Icons: lightning bolts]
Ch8 Dimmer	0 240 241-255 [Slider bar]
Ch9 Color	0-7 8-15 16-23 24-31 32-39 40-47 48-55 56-63 64-71 72-79 [Color wheel icons]
Ch10 Color Adjust	0 255
Ch11 GOBO	[Gobo icons: star, triangle, circle, etc.] 128-255 fast Low fast
Ch12 GOBO Shake	0 255
Ch13 Focus	0 255 [Focus icons]
Ch14 Prism1 rotate	0 31 128 255 [Prism icons]
Ch15 Prism2 rotate	0 31 128 255 [Prism icons]
Ch16 Reset	100-105 Turn off the lamp 200-205 Turn on the lamp (off the lamp after 1 minute) 255 Later 2s System Reset

When fix the orientation of the projector. Please keep the minimum distance between the flammable retarding subject and the projector'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 higher 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 is 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. If your power cable can't share the minimum power supply loading. Please don't connect all the projectors meantime.

#### 4.Lamp replacement

##### 4.1 Lamp description:

Model	Lamp description
THUNDER160H	led: 160w
	Color temperature:8000K

##### 4.2 Lamp replacement

Per to the THUNDER160H ,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 plug 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: 16standard 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  
 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 down the light.

Warning2:Disconnecting the power supply before replacing the lamps.

Warning3:When the lamp is operating, its temperature will be extremely 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.Moreover,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 damage the projector's spot system. The electric parts on the circuit board may be started by the high voltage.The got lamp fragments may injure people, explode or set on fire.

### 5.Power supply and signal 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 separately 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  
factory to connect the first projector`s output to the second projector`s  
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 p-  
rojector`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..If 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  
75Ω 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 Lihgt 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