## LIGHT SKY ${ }^{\circ}$

## FLY DRAGON LIGHTING EQUIPMENT CO.,LTD



## F400BSW

USRR MRNUAI
Please read these user manual carefully before use

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Congratulations on choosing our company product! We thank you for your custom.

- Please note that this product, as all the others in the rich my company range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.
-Carefully read this user manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.
- My company disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this user manual, which must always accompany the fitting. - My company reserves the right to modify the characteristics stated in this user manual at any time and without prior notice.


## SAFETY INFORMATION



## Installation

Make sure all parts for fixing the projector are in a good state of repair. Make sure the point of anchorage is stable before positioning the projector. The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails,the fitting falls as little as possible. If the safety chain gets used, it needs to be replaced with a genuine spare.

## -Mounting surfaces

It is permissible to mount the fitting on normally flammable surfaces.


Minimum distance of illuminated objects
When the luminaire projects an object, the minimum distance of the luminaire to the flammable object is 12 meters.

Please do not install the fixture onto combustible surface.

Distance between this fixture and combustible goods needs more than 1 meter.
Ensure a minimum clearance of 0.2 m around the cooling fans and ventilation.

## -Maximum ambient temperature

The fixture is intended for indoor application.
Do not operate the fixture if the ambient temperature ( Ta ) exceeds $38^{\circ} \mathrm{C}$.

## Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1).
It is,moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

Connection to mains supply
The double insulation between the LV power supply and the control conductor on the fixture. Connection to the electricity mains must be carried out by a qualified electrical installer.
Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.
This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.
Don't use the power cable when the insulation is damaged.
It must be the manufacturer or distributor or the professional person to change the damaged power cable in order to avoid any dangerous.

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is $100^{\circ} \mathrm{C}$.

## Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply. After switching off, do not remove any parts of the fitting, to avoid getting burnt for at least 30 minutes. After this time the likelihood of the lamp exploding is virtually nill.
The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly Damaged, they have to be replaced with genuine spares.

## Lamp

The fitting mounts a high-pressure lamp that needs an external .


Immediately replace the lamp if damaged or deformed by heat.
The light source in this fixture shall be replaced by the manufacturer or its service agent or similar qualification.
Always disconnect from mains before replacing the lamp.

## Protection against explosion

The protection screen, lens or ultraviolet screen on the lamp can be damaged to the degree of failure if visible damage, such as a crack or deep mark, should be replaced.


Protection optical radiation
Never look directly into the light source. You risk injury to your retina, which may induce blindness.
Do not stare directly into the light output.Never look at an exposed lamp while it is lit.

## Battery

This product contains a rechargeable lead-acid battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

The product implementation standard: GB 7000. 1-2015 GB7000. 217-2008
The products referred to in this manual conform to the European Community Directives to which
they are subject:
Low Voltage 2014/35/EU
Electromagnetic Compatibility 2014/30/EU

## TECHNICAL INFORMATION

## -Power supplies available

$100 \mathrm{~V} \sim 240 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz} 5 \mathrm{~A}$
-Power
495W(220V/50Hz) PF0.98

## Lamp

- Brand: USHIO NSL360(31mmWD)
- Lamp power: 360W
- Colour temperature ; 6900K
- Average life:1500h


## -Motors :

- 12 ultra-quiet motors,
olnputs
- DMX512
-Color
- 14 colors + white,
- Static gobo wheel
- 11Gobo + 1 white + animation range
-Rotation Gobo Wheel
-7 rotating Gobos+open, Bi-direction
flow water animation effect
- 12 facet round Prism (zoom from to 20 degree)


## -Beam angle

-Beam Projection 0-1.5 ${ }^{\circ}$, Spot Projection 1.5-20

- Wash angle
$-8-60^{\circ}$ independent Wash effect
-Focus and Lens
- High precision optical lens,linear adjustment
-Strobe
- Double lens strobe(0.5-9 times/second)
-Dimmer
- 0-100\% linear adjustment

- X/Y Resolution: $2.11^{\circ} / 0.98^{\circ}$
-X/Y Speed:2.7S/1.6S
$\bullet$ Lighting Size (1sets) : 380X300X616MM
-Box Size : 450X370X700MM
N.W.: 22.5 kg , G.W.:25kg
-Flycase Size(2 sets): 820X535X810MM N.W.: 45 kg , G.W.: 80.3 kg
-IP set
- Automatic charge battery, IP could be set without electricity.


## Software upgrade

- Insert USB upgrade software.


## -Features

- Remote control lamp's swith function display light and lamp's using time.automaticallay adjust cooling fan's speed,Drop power when strobe lens.


## -IP20 protection/IP20

- Protected against the entry of solid bodies larger than 12 mm .
- No protection against the entry of liquids.


## -Safety Devices

- BIPOlar circuit breaker with thermal protection.
- Automatic break in power supply in case of overheating or failed operation of cooling system.


## Cooling

- Forced ventilation with axial fans.


## -Structure

- Heat-proof plastic+module pressing alloy materials.
- The vertical direction of the use of hidden locking device, convenient transportation and maintenance.
-CE Marking
- In conformity with the European Union Low Voltage Directive 2014/35/EU and Electomagnetic compatibility Directive 2014/30/EU. 2014/30/EU



Photometric Data:


## ATTACHMENT AND BODY SIZE

| 1 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | dmx Cable | power cord | SAFETY CORD |

Attachment contents- Fig. 1


Body Size---Fig 2

## INSTALLATION AND CONNECTING



Installing the projector- Fig. 3

The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall. WARNING:with the exception of when the projector is positioned on the floor, the safety rope must be fitted. This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.


The N terminal is connected with the blue line.


The $L$ terminal is connected with the brown line.

Connecting to the mains suppply ---Fig 4

- The stage lighting power supply can not be more than 2 pcs pre line
- connection to the eiectricty mains must be carried out by a qualified electrical installer.
- After doing the above operation and making sure all the devices had been installed with natural operate, press the power switch to check whether every -thing is working normally.

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## Connecting to the control signal line (DMX) - Fig. 5

© Please use the round 3 or $5-\mathrm{pin}$ 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
© The projectors's control signal output or input by using the 3 or 5 -pin XLR pug and socket. If need to lengthen the communication cable, please make sure the both side of 3 or 5 -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 0.5 mm diameter.(Caution:All the inside leading wire of 3 or 5 -pin XLR plug couldn't touch each other or plinth).
© Recommend to use the DMX signal terminator for the installation to avoid the electronic noise dama -ge the digital control signal. Simply speaking, DMX terminator is an XLR connector with a $120 \Omega$ 1/2W resistor connected across pin 2 and 3 . Which is then plugged into the output socket on the last projec -tor in the chain. Refer to the connection.

## CONTROL PANEL



Up arrowhead:page up
Down arrowhead:page down Left arrowhead:reduce Right arrowhead:increase Enter:0K function Exit:in the choice screen

Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display(please refer to the actual material):


MENU SETTING(V1.0)


| Main menu |  | I menu |  | 11 menu |  | III menu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Personal | Channel mode |  | $\rightarrow$ | Standard (18CH) |  |  |
|  |  |  | Simple(20CH) |  |  |
|  |  | Auto lamp on |  | $\rightarrow$ | OFF |  |  |
|  |  |  | ON |  |  |  |
|  |  | P/T invert | $\rightarrow$ | Pan invert | $\rightarrow$ | OFF |
|  |  |  |  |  |  | ON |
|  |  |  |  | Tilt inver | $\rightarrow$ | OFF |
|  |  |  |  |  |  | ON |
|  |  | Display | Language |  | $\rightarrow$ | English |
|  |  |  |  |  | Chinese |
|  |  |  | $\rightarrow$ | Back Light |  | $\rightarrow$ | Open |
|  | $\rightarrow$ |  |  |  | Auto close(15s) |  |
|  |  |  |  | Reversal | $\rightarrow$ | Normal |
|  |  |  |  |  |  | Rota. 180 |
|  |  |  |  | Backlight blink | $\rightarrow$ | ON |
|  |  |  |  |  |  | OFF |
|  |  |  |  | Return(ESC) |  |  |
|  |  | Return(ESC) |  |  |  |  |
| Manual control | $\rightarrow$ | Channel control | $\rightarrow$ | 1.Dimmer (***) |  |  |
|  |  |  |  | 2.Shutter (***) |  |  |
|  |  |  |  | 3. Colour (***) |  |  |
|  |  |  |  | 4.Gobo (***) |  |  |
|  |  |  |  | 5.Rota.Gobo (***) |  |  |
|  |  |  |  | 6.GoboRota. (***) |  |  |
|  |  |  |  | 7.Frost (***) |  |  |
|  |  |  |  | 8.Focus (***) |  |  |
|  |  |  |  | 9.Zoom (***) |  |  |
|  |  |  |  | 10.Prism (***) |  |  |
|  |  |  |  | 11.PrismRota ( $* * *$ ) |  |  |
|  |  |  |  | 12.PrismZoom (***) |  |  |
|  |  |  |  | 13.Autofocus (***) |  |  |
|  |  |  |  | 14.Pan (***) |  |  |
|  |  |  |  | 15.Pan Fine ( $* * *$ ) |  |  |
|  |  |  |  | 16.Tilt ( $* * *$ ) |  |  |
|  |  |  |  | 17.Tilt Fine (***) |  |  |
|  |  |  |  | 18.Function (***) |  |  |
|  |  |  |  | Return(ESC) |  |  |
|  |  |  |  |  |  |  |




| Main menu | I menu |  | II menu menu | IV menu |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Main menu |  | I menu |  | II menu |  | III menu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service | $\rightarrow$ | Factory | $\rightarrow$ | Defualt |  |  |
|  |  |  |  | Time clean | $\rightarrow$ |  |
|  |  |  |  | Developer |  |  |
|  |  |  |  | Firmware update |  |  |
|  |  | Fan mode | $\rightarrow$ | Standard mode |  |  |
|  |  |  |  | 3000-4000M |  |  |
|  |  |  |  | 4000-5500M |  |  |
|  |  | Return(ESC) |  |  |  |  |
| Lamp | $\rightarrow$ | Off |  |  |  |  |
|  |  | On |  |  |  |  |
| Language | $\rightarrow$ | English |  |  |  |  |
|  |  | Chinese |  |  |  |  |
| Reversal | $\rightarrow$ | Normal |  |  |  |  |
|  |  | Rota. 180 |  |  |  |  |

## CHANNEL FUNCTION(V1.0)

| $\begin{aligned} & 18 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 20 \\ & \mathrm{CH} \end{aligned}$ | DMX | Percentage | Function |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 0-255 | 0-100 | Dimmer |
| 2 | 2 | Shutter/ strobe |  |  |
|  |  | 0-31 | 0-12.35 | Shutter closed |
|  |  | 32-63 | 12.35-24.9 | Shutter open, Full lamp power |
|  |  | 64-95 | 24.9-37.45 | Strobe-effect from slow to fast |
|  |  | 96-127 | 37.45-50 | Shutter open |
|  |  | 128-143 | 50-56.27 | Opening pulse in sequences from slow to fast |
|  |  | 144-159 | 56.27-62.55 | Closing pulse in sequences from fast to slow |
|  |  | 160-191 | 62.55-75.1 | Shutter open |
|  |  | 192-223 | 75.1-87.65 | Random strobe-effect from slow to fast |
|  |  | 224-255 | 87.65-100 | Shutter open, Full lamp power |
| 3 | Colour |  |  |  |
|  | Continual positioning |  |  |  |
|  | 3 | 0-4 | 0-1.76 | Open/white |
|  |  | 5-11 | 1.76-4.51 | White+Dark Red |
|  |  | 12-18 | 4.51-7.25 | Dark Red |
|  |  | 19-25 | 7.25-10 | Dark Red+Nacarat |
|  |  | 26-32 | 10-12.75 | Nacarat |
|  |  | 33-39 | 12.75-15.49 | Nacarat+Light blue |
|  |  | 40-46 | 15.49-18.24 | Light blue |
|  |  | 47-53 | 18.24-20.98 | Light blue+Dark green |
|  |  | 54-60 | 20.98-23.73 | Dark green |
|  |  | 61-67 | 23.73-26.47 | Dark green+Green |
|  |  | 68-74 | 26.47-29.22 | Green |
|  |  | 75-81 | 29.22-31.96 | Green+Purple |
|  |  | 82-88 | 31.96-34.71 | Purple |
|  |  | 89-95 | 34.71-37.45 | Purple+Pink |
|  |  | 96-102 | 37.45-40.2 | Pink |
|  |  | 103-109 | 40.2-42.94 | Pink+Yellow |
|  |  | 110-116 | 42.94-45.69 | Yellow |
|  |  | 117-123 | 45.69-48.43 | Yellow+Magenta |
|  |  | 124-130 | 48.43-51.18 | Magenta |
|  |  | 131-137 | 51.18-53.92 | Magenta+Cyan |
|  |  | 138-144 | 53.92-56.67 | Cyan |


| $\begin{aligned} & 18 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 20 \\ & \mathrm{CH} \end{aligned}$ | DMX | Percentage | function |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 145-151 | 56.67-59.41 | Cyan+CTO2 |
|  |  | 152-158 | 59.41-62.16 | CTO2 |
|  |  | 159-165 | 62.16-64.9 | CTO2+CTB |
|  |  | 166-172 | 64.9-67.65 | CTB |
|  |  | 173-179 | 67.65-70.39 | CTB+Dark Blue |
|  |  | 180-186 | 70.39-73.14 | Dark Blue |
|  |  | 187-219 | 73.14-86.08 | Forwards rainbow effect from fast to slow |
|  |  | 220-222 | 86.08-87.25 | No rotation |
|  |  | 223-255 | 87.25-100 | Backwards rainbow effect from slow to fast |
|  | 4 | Static gobo wheel |  |  |
|  |  | 0-3 | 0-1.37 | Open/hole |
|  |  |  |  | Positioning |
|  |  | 4-9 | 1.37-3.73 | Gobo1 |
|  |  | 10-15 | 3.73-6.08 | Gobo2 |
|  |  | 16-21 | 6.08-8.43 | Gobo3 |
|  |  | 22-27 | 8.43-10.78 | Gobo4 |
|  |  | 28-33 | 10.78-13.14 | Gobo5 |
|  |  | 34-39 | 13.14-15.49 | Gobo6 |
|  |  | 40-45 | 15.49-17.84 | Gobo7 |
|  |  | 46-51 | 17.84-20.2 | Gobo8 |
|  |  | 52-57 | 20.2-22.55 | Gobo9 |
|  |  | 58-63 | 22.55-24.9 | Gobo10 |
|  |  | 64-69 | 24.9-27.25 | Gobo11 |
|  |  | 70-75 | 27.25-29.61 | Gobo12 |
|  |  | 76-81 | 29.61-31.96 | Open/hole |
|  |  | 82-87 | 31.96-34.31 | Open/hole |
| 4 |  |  |  | Shaking gobos from slow to fast |
|  |  | 88-95 | 34.31-37.45 | Gobo1 |
|  |  | 96-103 | 37.45-40.59 | Gobo2 |
|  |  | 104-111 | 40.59-43.73 | Gobo3 |
|  |  | 112-119 | 43.73-46.86 | Gobo4 |
|  |  | 120-127 | 46.86-50 | Gobo5 |
|  |  | 128-135 | 50-53.14 | Gobo6 |
|  |  | 136-143 | 53.14-56.27 | Gobo7 |
|  |  | 144-151 | 56.27-59.41 | Gobo8 |
|  |  | 152-159 | 59.41-62.55 | Gobo9 |
|  |  | 160-167 | 62.55-65.69 | Gobo10 |
|  |  | 168-175 | 65.69-68.82 | Gobo11 |


| $\begin{aligned} & 18 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 20 \\ & \mathrm{CH} \end{aligned}$ | DMX | Percentage | function |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 176-183 | 68.82-71.96 | Gobo12 |
|  |  | 184-191 | 71.96-75.1 | Open/hole |
|  |  | 192-199 | 75.1-78.24 | Open/hole |
|  |  | 200-201 | 78.24-79.02 | Open/hole |
|  |  | 202-221 | 79.02-86.86 | Forwards gobo wheel rotation from fast to slow |
|  |  | 222-223 | 86.86-87.65 | No rotation |
|  |  | 224-243 | 87.65-95.49 | Backwards gobo wheel rotation from slow to fast |
|  |  | 244-249 | 95.49-97.84 | Unused range |
|  |  | 250-255 | 97.84-100 | Auto random gobo selection from fast to slow |
| 5 | 5 | Rotating gobo wheel |  |  |
|  |  | In the range of 0-59 DMX the gobo selection speed is controlled by the Effect Speed channel Index-set indexing on channel |  |  |
|  |  | 0-6 | 0-2.55 | Open/hole (default) |
|  |  | 7-30 | 2.55-11.96 | Gobo1 |
|  |  | 31-54 | 11.96-21.37 | Gobo2 |
|  |  | 55-78 | 21.37-30.78 | Gobo3 |
|  |  | 79-102 | 30.78-40.2 | Gobo4 |
|  |  | 103-126 | 40.2-49.61 | Gobo5 |
|  |  | 127-150 | 49.61-59.02 | Gobo6 |
|  |  | 151-174 | 59.02-68.43 | Gobo7 |
|  |  |  |  | Shaking gobos from slow to fast Index - set indexing on channel 6 |
|  |  | 175-184 | 68.43-72.35 | Gobo1 |
|  |  | 185-194 | 72.35-76.27 | Gobo2 |
|  |  | 195-204 | 76.27-80.2 | Gobo3 |
|  |  | 205-214 | 80.2-84.12 | Gobo4 |
|  |  | 215-224 | 84.12-88.04 | Gobo5 |
|  |  | 225-234 | 88.04-91.96 | Gobo6 |
|  |  | 235-244 | 91.96-95.88 | Gobo7 |
|  |  | 245-249 | 95.88-97.84 | Open/hole |
|  |  | 250-255 | 97.84-100 | Auto random gobo selection from fast to slow |


| $\begin{aligned} & 18 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 20 \\ & \mathrm{CH} \end{aligned}$ | DMX | Percentage ／百分比 | Function／功能 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Rot．gobo indexing and rotation |
|  |  | 0－127 | 0－50 | Gobo indexing |
| 6 | 6 | 128－187 | 50－73．53 | Forwards gobo rotation from fast to slow |
|  |  | 188－195 | 73．53－76．67 | No rotation |
|  |  | 196－255 | 76．67－100 | Backwards gobo rotation from slow to fast |
|  |  |  |  | Frost |
| 7 | 7 | 0－127 | 0－50 | Close |
|  |  | 128－255 | 50－100 | Open |
|  |  |  |  | Focus |
| 8 | 8 | 0－255 | 0－100 | Continuous adjustment from far to near |
| － | 9 |  |  | Focus－fine |
|  |  | 0－255 | 0－100 | Fine focusing |
|  |  |  |  | Zoom |
| 9 | 10 | 0－255 | 0－100 | Zoom from max．to min．beam angle |
| － | 11 | Zoom－fine |  |  |
|  |  | 0－255 | 0－100 | Fine zooming |
| 10 | 12 | Prism |  |  |
|  |  | 0－127 | 0－50 | Open position（hole） |
|  |  | 128－255 | 50－100 | Prism |
| 11 | 13 | Prism rotation and indexing |  |  |
|  |  | 0－4 | 0－1．76 | No rotation |
|  |  | 5－128 | 5－50．39 | Forwards prism rotation from fast to slow |
|  |  | 129－131 | 50．39－51．57 | No rotation |
|  |  | 132－255 | 51．57－100 | Backwards prism rotation from slow to fast |
| 12 | 14 | Prism zoom－set position on channel 12／14 |  |  |
|  |  | 0－127 | 0－50 | Zoom from min．to max．beam angle |
|  |  | 128－255 | 50－100 | Prism |


| $\begin{aligned} & 18 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 20 \\ & \mathrm{CH} \end{aligned}$ | DMX | Percentage | Function |
| :---: | :---: | :---: | :---: | :---: |
| 13 | 15 |  |  | Autofocus (priority \& distance selection) Select desired distance and effect on which you need to focus and use "Focus" channel (18/20) to focus the image. |
|  |  | 0-15 | 0-5.69 | Autofocus Off |
|  |  | 16-55 | 5.69-21.37 | 10 metres |
|  |  | 56-95 | 21.37-37.06 | 15 metres |
|  |  | 96-135 | 37.06-52.75 | 20 metres |
|  |  | 136-175 | 52.75-68.43 | 30 metres |
|  |  | 176-215 | 68.43-84.12 | 40 metres |
|  |  | 216-255 | 84.12-100 | 50 metres |
| 14 | 16 | 0-255 | 0-100 | Pan <br> Pan movement by 540 |
| 15 | 17 | 0-255 | 0-100 | Pan Fine <br> Fine control of pan movement |
| 16 | 18 | 0-255 | 0-100 | TILT <br> Tilt movement by 230 |
| 17 | 19 | 0-255 | 0-100 | TILT Fine <br> Fine control of tilt movement |
| 18 |  |  |  | Function |
|  | 20 | 0-89 | 0-35.1 | Reserved |
|  |  | 90-99 | 35.1-39.02 | Reserved |
|  |  | 100-109 | 39.02-42.94 | Reserved |
|  |  | 110-119 | 42.94-46.86 | Reserved |
|  |  | 120-129 | 46.86-50.76 | Reserved |
|  |  | 130-139 | 50.76-54.71 | Lamp ON |
|  |  | 140-149 | 54.71-58.63 | PAN/TITL Reset |
|  |  | 150-159 | 58.63-62.55 | Fuction reset |
|  |  | 160-169 | 62.55-66.47 | Total reset |
|  |  | 170-229 | 66.47-90 | Reserved |
|  |  | 230-239 | 90-93.92 | Lamp Off |
|  |  | 240-255 | 93.92-100 | Reserved |

Circuit connecting diagram

Display board

## CLEANING AND MAINTENANCES

- In order to ensure the projector could work normally. It should be kept clean always. It is recommended that the fans and ventilation in let should be cleaned every 15 days. The lens and dichroic colour filters should also be reg -ularly cleaned to maintain an optimum light output.Do not use any type of solvent on dichroic colour filters. It will damage the projector.
- Suggestion:The continue usage of the light don't exceed 4 hours. Or it will shorter the usage of the lamp. Please use the alternative operation to solve this problems.
-Please disconnect the power supply when begin to maintenaceor takedown the light. Please let the parts cool down 10 minute at least then begin to install. If need to replace the lamp, please wait 10 minute again at least to let the lamp cool down completely or which maybe burned down.
- Please inspect the lens or other moving parts timing and keep them clear and static. If find anything damaged or losseness, must change a lamp or fix the lamp in order to avoid the accident.
- The light use the strong cool system. It is easy for the dirty to be collected. Please do clear the hot-sak one time two week at least.
- After you use the light, please check the intake place whether there are some wastepaper, please clean it up,or the windmill will break down and causing fire.


## TROUBESHOOTING

It is recommended some solution for some normal trouble shooting. Any unsolutioned problems should always be handle by the professional person. Disconnect the power supply before maintenance the light.

## ■Lamp off:

- Please check if install the suitable lamp.
- Please check the connection of the power supply or switch is ok.
- Please check whether the lamp will reach the end of their life can explode, please replace a same description lamp.
- Please measure if the power supply is enough.
- Please check if the operation is correct.Please wait 30 minutes at least till the lamp cool down enough,then could the connect the power supply, which could be normal work.
- Please check whether the DMX 512 controller pass the "turn on" order.
- Please check the connection of the trigger circuit is loose contact.
- Please check whether the connected point of the trigger point is loose contact ,faster the connect cable .
- Please check if the switch of the temperature is damaged.
o Check the bottom box driver board "WK" socket if the resistance 0 between the two line.


## ■The light beam is dark, not inhomogeneou:

- When the lamp is to the usage life, the light is not enough, please change a new one for the same description.
- Please check the reflector parts is dirty.Keep them clear.
- Please measure if the power supply is enough.
o Small adjusting is suitable for change height or screw system till get a ideal light beam.


## The light shadow is fogging:

© Please check the data on the DMX 512 controller is suitable for the electric focus.
© Please check the machenical parts is jamging.After cleaning, please add some temperature -durable juice.

## The light works interruptly:

© Please check if the fan works normally or mote clogging.
© Please check whether the abstract heat have the mote clogging.
OPlease check if the lamp is to the usage life.
© Please check if the power supply is enough, the connection of the power supply or the circuit are good.
©Please check if the switch of the sup-temperature is good.
Though the light is lighting, but it couldn't accept the control order:
OPlease check the start code address and the function option are correct.
© Please check whether the communicate control cable is ongood connection or the cable is too long or interrupt.
© Please check the control system is not valid, check the singal amplifier of chain connected is valid.
© Please check whether the communicate cable is too long or the other equipment is mutually conjugate.
OPlease arrange the wire well ,,Shorter the signal cable, put the high voltage cable and low voltage cable separ -ately .
©Add the signal amplify isolator.
OSignal cable is used the excellent screening doublet (Resistance $75 \Omega$ )
© The end of the light end and the end resistance.
© When the lamp don't cool down enough but do the incorrect operation will let the trigger up to super-high voltage leak.It will damage the electric circuit and communicate IC or CPU .Under this condition, please change the PCB board.

## - the light can't move:

© Please check if the power supply is suitable for the light voltage data.
OPlease check the fuse of input voltage is defective.
© Please check the light if they are deformating, inside parts is broken, become wet...etc will lead the loose contact.
© Please check if the inside lead wire and the connector is loose.
OPlease check the electric parts (such as the switch, transformer, ballast, electric capacity, piezoresistor, filter,
PCB board, controller to motor) is short-circuit or burn down.

## - Part of the projector couldn't be responsled to the controlling order:

OPlease check the order is correct to the moving.
© Please check the mechanicalpart is deformation or loose.
© Please check the function to the motor socket is loose or drive chip is burn down.
©Please check the wire of the motor is cut at zig point.
OPlease check these function to the motor is damaged.
■On working, the pan \&tilt couldn't work normally:
© Please check according to the above step by step.
© Please check the belt of the $X$. $Y$ is broken.
OPlease check the $\mathrm{X} / \mathrm{Y}$ direction data to the receiver is damage.
© Re-projector reset.

## DUTY EXONERATIVE AND COPYRIGHT PROTECTION

$\diamond$ The lamp belongs to consumption products that is not guarantee to keep it in good repair.
$\diamond$ Any products broken that didn't according to the instruction is not guarantee to keep it in good repair.
$\diamond$ The commentary for all the instruction belongs to the supplier in final.
$\diamond$ No authorize can't copy.
$\diamond$ The information in this manual may be changed in the future, the company reserve the right to change the data without any advise.

## ■On working，the pan \＆tilt couldn＇t work normally：

工作时，灯具的 $X$ 或 $Y$ 方向的动作不正常：
©Please check according to the above step by step．
按上一步聚逐个检查；
OPlease check the belt of the $X . Y$ is broken．
检查灯具内X，Y方向对应的传动皮带是否脱落和断裂；
©Please check the $X / Y$ direction data to the receiver is damage．
检查灯具内 $X, ~ Y$ 方向对应的数据反馈接收器（光电传感器）是否损坏；
© Re－projector reset．
重新开机复位一次。

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