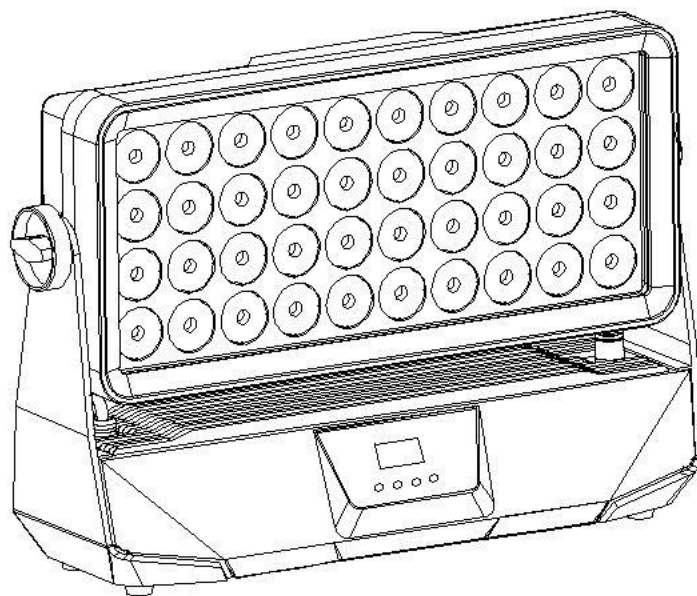


# Thunder P40 IP

## User Manual



**Guangzhou Mitek Light Co.,LTD**

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## TECHNICAL PARAMETERS

### Light source

Input voltage: AC 100V/120V/200V/220V/230V/240V 50/60Hz

Power : 600W@220V

LED light source: 40PCS 15W RGBW

Working lifetime : 50000h

### Controls

International standard DMX 512signal, 3 Pin (5 Pin) DMX512 interface RDM Wireless :

2.4 GHz W-DMX™ (optional)

4 channel modes Master-slave

Stand-alone mode Self-test mode

### Effect

Control in 4 segments

Variable Speed Two-way Rainbow Effect Color Flow Effect

Dimmer : 0-100% linear dimming

Strobe : Electric strobe, 0.3-20pcs/sec Max 20 Hz

### Construction

Adjustable horizontal and vertical speed Display fixture using time

Display software version number

Modular structure for easy maintenance Speed-regulating radiator

Shell and protection level:

High-strength casting aluminum alloy, black shell (white optional)

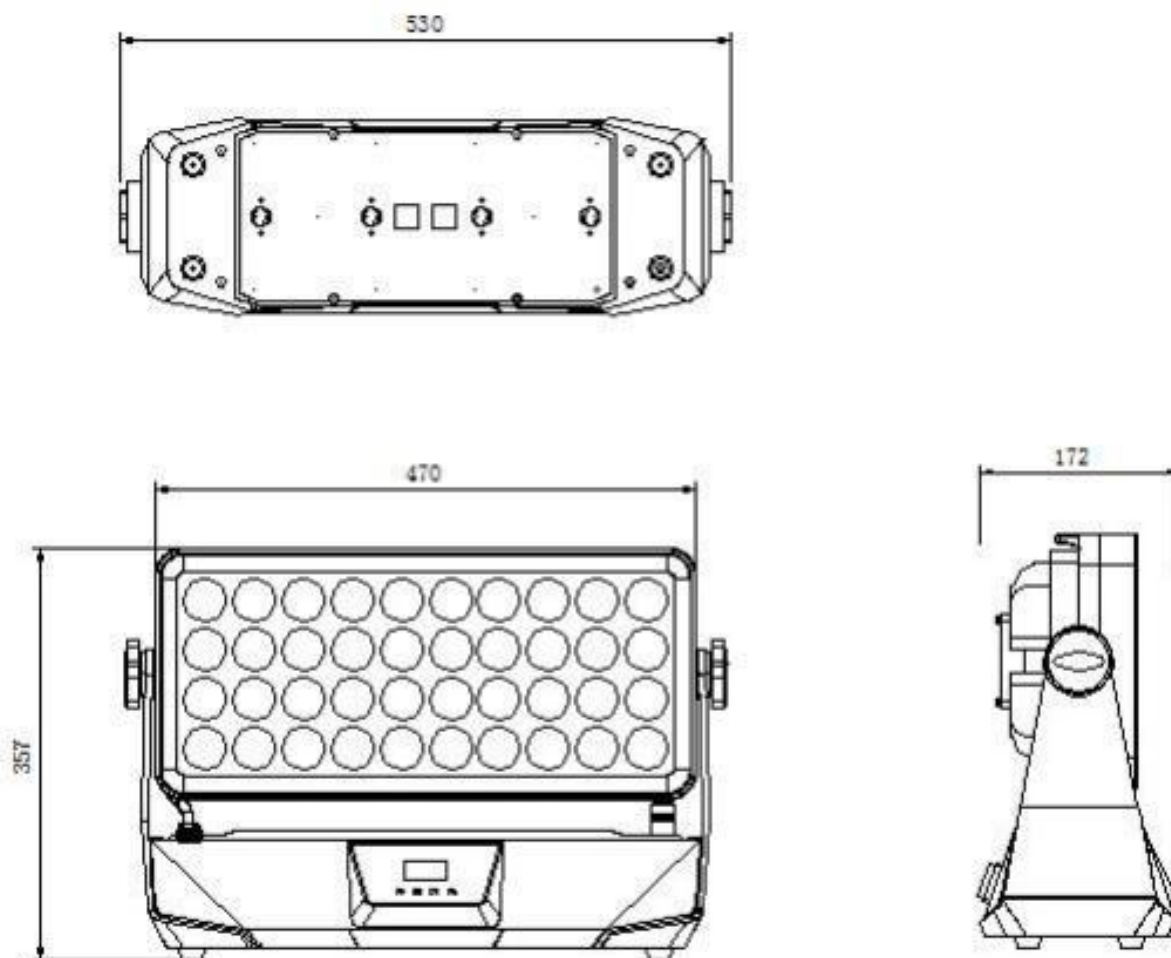
Working temperature: -20°C~40°C

Protection Rating: IP65

### Weight&Dimension

Weight: 14.8Kg

## SIZE DRAWING



Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

**Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice.**

## ACCESSAORIES

The following items have packed with the light, please pay attention to check:

Name	Quantity	Unit	Remark
Clamps	1	PCS	
Safety Cord	1	PCS	
Instructions	1	PCS	



## Safety warning information

After receiving the lights, please open to check whether there is any damages caused by transportation. In case of damages caused of transportation, please don't this device and contact your dealer or manufacturer as soon as possible.

The projector is for indoor and outdoor use, IP65.

Do not install the fixtures onto inflammable surfaces directly



The fixture is only intended for installation, operation and maintenance by qualified personnel. Do not project the beam onto inflammable surfaces, minimum distance is 3 meter.  3m  Avoid direct exposure to the light from the lamp. The light is harmful to the eyes.

Do not attempt to dismantle and/or modify the projector in anyway.

Electrical connection must only be carried out by qualified personnel.

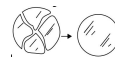
Before installation, ensure that the voltage and frequency of power supply match the power requirements of the fixture.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in "installing the projector" section.

Shields and lens shall be changed if they have become visibly damaged to such an extent than their effectiveness is impaired, for example by cracks or deep scratches.

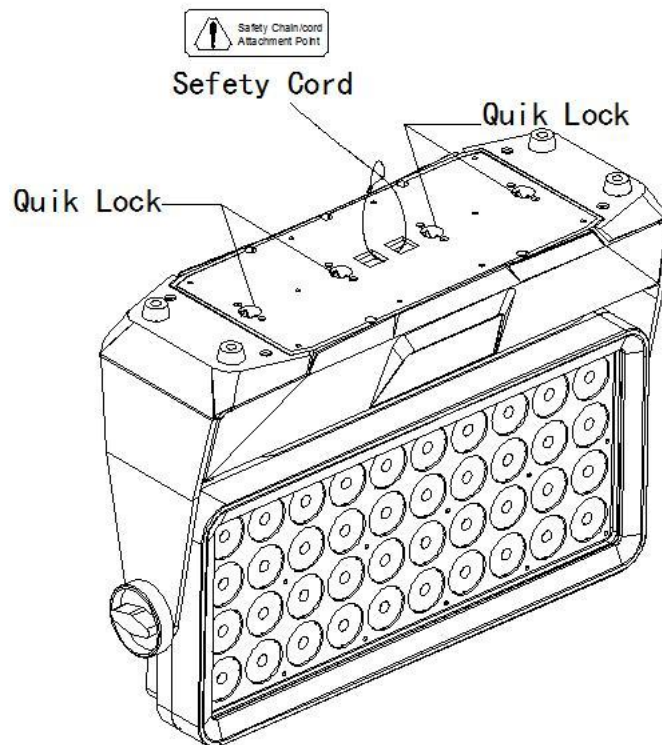


Exterior surface temperatures of the luminaire after 5 minutes operation is 45°C, when steady state is achieved 70°C. There is no user serviceable parts inside the projector, do not open the housing and never operate the fixture with the covers removed.

There is no user serviceable parts inside this light, please check whether all covers or shells have been installed and screws have been tightened securely. It is forbidden to use lights with covers(or shell) open.

If you have any questions, don't hesitate to consult your dealer or manufacturer.

**Always disconnection from Power before the device's installation, cleaning and maintenance**  
**Installation**

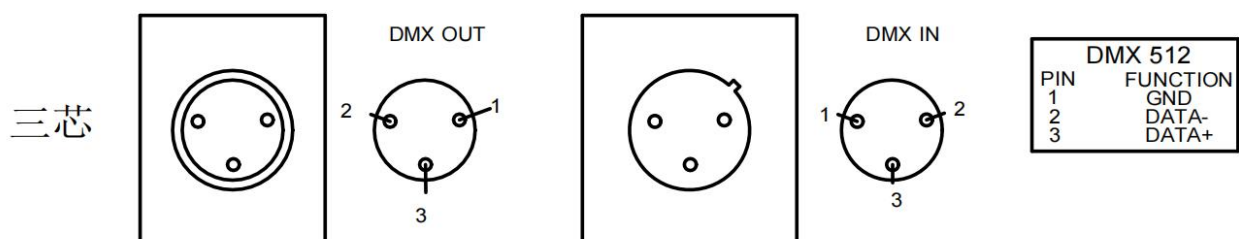


Take out 2 clamps and 1 safety rope, install the 2 clamps on the bottom of the fixture with the 4 quick knob attached to the clamps , then hang the fixture on the fixed support with the clamp, and tighten the clamp lock bolt to fix the fixture. Please confirm that the fixture installation is stable and reliable, and ensure that the hoisting position has sufficient strength to withstand the weight of the fixture. please carry the randomly equipped safety rope through the bottom of the fixture holder for auxiliary hoisting to ensure safety.

**Warn:**

- 1、The clamps are only used when install the fixtures. It is strictly forbidden to use the clamps as a handle to carry the fixtures.
- 2、For safety reasons, please use a safety rope that can withstand 10 times the weight of the fixture through the safety hole of the fixture body.
- 3、Side hang the fixtures are forbidden .

**Signal and power connect**



For the connection of control signals, 2-pin shielded cables with a diameter not less than 0.5 mm must be used between the fixture and the controller and between the fixtures. Please use the 3-pin signal output / incoming line of the lamp to connect. The connections between the 3-pin signal line ports are shown in the figure above. It must be noted that the 3 pin of the XLR plug / socket must not be in contact with the inner

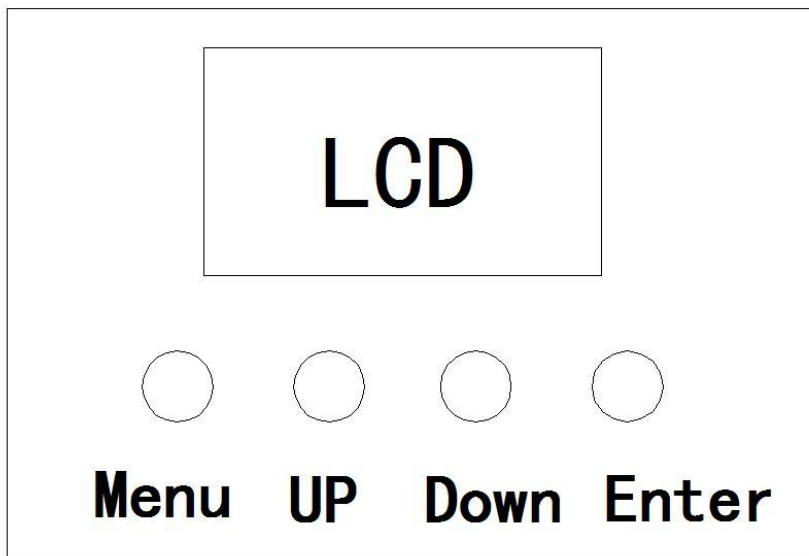
shell or between the cores when connecting. The XLR plug / socket and the XLR control cable cannot be connected in any other way than the connection shown in the figure above. This product receives the international standard DMX512 (1990) control signal.

The signal connection of multiple fixtures, the maximum number of connection is 32 fixtures, use a 3-pin signal cable from the DMX output port of the controller to the DMX input line of the 1 st fixture, and connect from the DMX output line of the first fixture To the DMX input line of the second fixture, and so on, until all the fixtures are connected.

When the first fixture is not connected to the controller (the signal line connection between the other fixtures remain unchanged), it is the connection mode of master-slave synchronous control. However, to achieve master-slave synchronization control, the first fixture should be set as the master in the menu, and the remaining fixtures should be set as slaves (the default value is slave).

When connecting the power supply, the power supply of each fixture should be connected separately. Please note that the power supply voltage and frequency must match with the power supply voltage and frequency listed in the product manual.

## Function and installation



Press button **UP** or **DOWN** if you want to browse through the various Setup Options.

Press button **ENTER** to save your settings or enter the next menu.

Press button **UP** or **DOWN** to shift.

Press button Menu will return to the upper menu one by one.

## DMX address setting

When using the controller to control multiple fixtures, each fixture shall be provided with a DMX address to receive signals from the controller and respond correctly, There are 3 control modes in this product, which are

simple mode, standard mode and extent mode.

For example: The fixture has 20 channels at standard mode.

We set the 1 st fixture :DMX Address 001, then the 2 nd fixture DMX Address 021, the 3 rd fixture DMX Address 041, the 4 th fixture 61, ... ...and so on.

Turn on the fixture, If operating menu is locked, press **ENTER** for 5 Sec, the fixture will be unlocked  
 Then press Menu , or **UP** or **DOWN** to findAddR menu;  
 Press **ENTER** , display DMXAddress;  
 Press **UP** / **DOWN** set DMXAddress value;  
 Press **ENTER** to confirm, then the fixture automatically saved this DMX address.  
 Press Menu will return to the upper menu.

## Operation menu

Level 1	Level 2	Level 3
<b>DMX address</b>	1-512	
	Cancel	
	Enter	
<b>DMX channel mode</b>	6 channel mode 1	
	6 channel mode 2	
	8 channel mode	
	10channel mode	
<b>DMXS DMX setting</b>	ONCA(Only XLR)	
	ONWR (Only wireless)	
	PPCA(XLR first)	
	PRWR (wireless first)	
	WTOC (wireless to XLR)	
<b>PAIR</b>	yes	
	no	
<b>Dimmer curve</b>	Dimmer curve 1	
	Dimmer curve 2	
	Dimmer curve 3	
	Dimmer curve 4	
<b>Frequency (HZ)</b>	A	
	B	
	C	
	D	
<b>Manual color</b>	Y axis	0-255
	Red	0-255
	Green	0-255
	Blue	0-255
	White	0-255
<b>Auto program</b>	Auto color	0-255
	Aoto fade	0-255
<b>Language</b>	English	
	Chinese	
<b>Display</b>	Normal	
	Reverse	

	Red	
	Green	
	Blue	
	Purple	
<b>Factory settings</b>	No	
	Yes	
<b>System information</b>	RDM UID	
	Version	
	DMX channel	
	Run time	
	Use time	
	Temperature	

#### Remarks:

1. Only one fixture can be set to host in one signal line, remove DMX control signal when using host function
2. In the synchronous control of multiple fixtures parameters can be transmitted from the master including: DMX mode, display setting, operation mode (user memory data included); All fixtures accepting parameters will automatically be set to slave mode.

## DMX channel list

### 6 Channel

Channel	Name	DMX Value	DMX Percentage	Description	
1	Shutter	0-7	0-0.27%	Closed	
		8-15	3.1%-5.9%	Open	
		16-151	6.3%-59.2%	Variable Strobe	
		152-175	59.6%-68.6%	Pulse-Open	
		176-199	69%-78%	Pulse-Closed	
		200-244	78.4%-95.7%	Variable Random Strobe	
		245-255	96.1%-100%	Shutter Open	
2	Dimmer	0-225	0-100%	0-100%Intensity	
3	Red	0-225	0-100%	0-100% R	
4	Green	0-255	0-100%	0-100% G	
5	Blue	0-255	0-100%	0-100% B	
6	White	0-255	0-100%	0-100% W	



## 6 Channel

### 2(CTC)

Channel	Name	DMX Value	DMX Percentage	Description	
1	Shutter	0-7	0-0.27%	Closed	
		8-15	3.1%-5.9%	Open	
		16-151	6.3%-59.2%	Variable Strobe	
		152-175	59.6%-68.6%	Pulse-Open	
		176-199	69%-78%	Pulse-Closed	
		200-244	78.4%-95.7%	Variable Random Strobe	
		245-255	96.1%-100%	Shutter Open	
2	Dimmer	0-225	0-100%	0-100%Intensity	
3	CTC	0	0	5600K	
		1-4	0.4%-1.6%	RAW	
		5-255	2%-100%	White CTC 2000-10000K	
4	Red	0-255	0-100%	0-100% R	
5	Green	0-255	0-100%	0-100% G	
6	Blue	0-255	0-100%	0-100% B	

## 8 Channel

Channel	Name	DMX Value	DMX Percentage	Description	
1+2	Red	0-225(65535)	0-100%	0-100% R	
3+4	Green	0-255(65535)	0-100%	0-100% G	
5+6	Blue	0-255(65535)	0-100%	0-100% B	
6+8	White	0-255(65535)	0-100%	0-100% W	

## 10 Channel (CTC)

Channel	Name	DMX Value	DMX Percentage	Description	
1	Shutter	0-7	0-0.27%	Closed	
		8-15	3.1%-5.9%	Open	
		16-151	6.3%-59.2%	Variable Strobe	

		152-175	59.6%-68.6%	Pulse-Open	
		176-199	69%-78%	Pulse-Closed	
		200-244	78.4%-95.7%	Variable Random Strobe	
		245-255	96.1%-100%	Shutter Open	
2+3	Dimmer	0-225(65535)	0-100%	0-100%Intensity	
4	CTC	0	0	5600K	
		1-4	0.4%-1.6%	RAW	
		5-255	2%-100%	White CTC 2000-10000K	
5+6	Red	0-255(65535)	0-100%	0-100% R	
7+8	Green	0-255(65535)	0-100%	0-100% G	
9+10	Blue	0-255(65535)	0-100%	0-100% B	

Channel priority: dimming> built-in program call > user program call>ARGBW dimming >HSV dimming> Macro Instruction> Color Temperature

## Maintenance

To ensure the reliability of the projector it should be kept clean. It is recommended that the fans should be cleaned every 15 days. The lens and dichroic color filters should also be regularly cleaned to maintain an optimum light output.

**Do NOT use any type of solvent on dichroic color filters.**

Cleaning frequency depends on the environment in which the fixture operates: damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. A soft cloth and typical glass cleaning products should be used in cleaning. It is recommended to clean the external optics at least once every 20 days and clean the internal optics at least once every 30 / 60 days.

**Do not use any organic solvent, e.g. alcohol, to clean the reflector mirror, dichroic color filters or housing of the apparatus.**

## Trouble shooting

Problems	Action
The fixture wont switch on properly	<ul style="list-style-type: none"> <li>➤ power cord connection is not normal</li> <li>➤ the switching power supply is damaged or the connection is not normal, professional qualified technician needed to carry out maintenance and repair</li> <li>➤ control board connection is not normal , professional qualified technician needed to carry out maintenance and repair</li> </ul>

The fixture switch on , but LED not bright and not controlled	➤ LED board connection is not normal , professional qualified technician needed to carry out maintenance and repair
Switch on and light normally , but not controlled by controller	➤ check the DMX starting address code setting is correct or not ➤ Check the XLR signal line is damaged or not
The fixture is dim and the brightness drops sharply	➤ The fixtures temperature is too high, please take necessary ventilation and heat dissipation measures

## REMARK

The product has perfect performance and integrity packing.

All users should be strictly comply with the warning and operating instructions as stated.

Or we aren't in charge of any result by misusing.

Any damage resulting by misuse is not within the Company's warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.