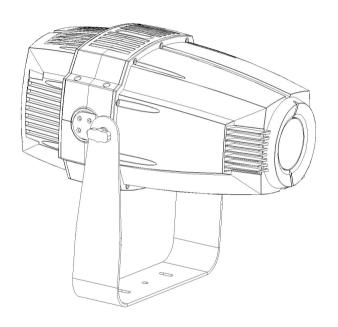
# **HT-360T**

360 LED ZOOM PROJECTOR IP65



# USER MANUAL

### Foreword

Thank you for choosing our 360 LED Outdoor Projector, which is the latest high-quality projector light developed by Hi-LTTE LIGHTING. It is ultra compact and more convenient in the same power products. This projector combines the characteristics of international advanced electronic control technology and outstanding humanized industrial design.

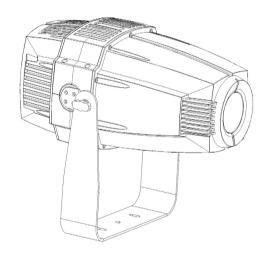
It fully complies with the CE standard and supports the international DMX512 signal control mode, it also support radar sensing activation system.

The equipment is fitted with long lifespan top LED module, with strong light effect, clear gobo, circular smoothing motor and accurate positioning, uniform color wheel.

Meanwhile it has 6 colorful gobos, and a color wheel with 10 color + 1 open. And it also has a 3-facet prism.

360 LED is widely used in outdoor projects.

# Catalog



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### 1. Safety Instructions

Please carefully read the instructions, this guide consists of important information about installation, using and maintenance.

Before using this product, please carefully check the product is not unwrapped or damage during transport. In case of damage caused by transportation, please do not use this equipment, and contact your dealer or manufacturer as soon as possible.

Before turning on the product, ensure that the voltage and hertz to meet the requirements of this product.

It is very important, connecting the ground wire to avoid electric shock.

This product must be installed on the sufficient space, adjacent to interface the shortest distance of 50cm, to ensure that the lights will not crash each other.

Before moving or repairing the product, please unplug the power.

When it working, ensure that no inflammable and explosive near objects.

When installing this product, please use the safety rope. When handling this product, lift the armrest base, rather than the lamp body.

The product is suitable for minus 20 to 45 degrees Celsius, when the surrounding environment is higher than 45 degrees Celsius, please do not use this product. Please remarks if lower than minus 25 degrees Celsius.

Do not touch when the equipment is working.

If there is a problem with the operation during using, the equipment should be stopped immediately. Do not perform repairs, damage or repairs that may occur during maintenance. Please contact the company's service point for repair. Use the same model of accessories during the repair process. During the repair process, use the same type of accessories.

Please read this manual, especially regarding the installation, use, maintenance parts. It is important that the moving head light must have anti-vibration protection carton or flight case during transportation.

### 2. Technical Parameters

DMX Channel: 13CHs

Control Mode: DMX512, RDM, support radar

sensing activation system

LED LCD Display + Press Button

Source: Top LED 360W Module Light Source

Color temperature is 8000K, life span is

20,000Hs

10 Colors + Open, Semi Color Effect

Gobo: 6 Rotating gobos

Prism: 3-Facet Prism

Optical lens: High precision glued optical lens

combination

Zoom: 14-45°

Dimmer: 0-100% Linear Dimmer Adjustment

Strobe: Electronic strobe

Motors: 8pcs super mute sound motors,

16bit

Housing: High temperature, ultraviolet and

oxidation resistant alloy plastics

Rated Power: 420W

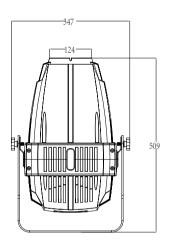
Luminous Flux: 23000LM

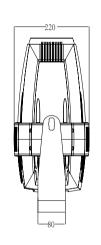
IP Rate: IP65

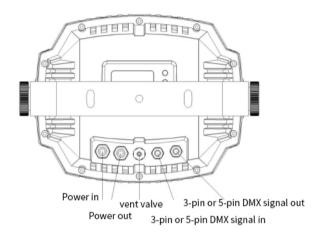
Weight: 13.3 KG

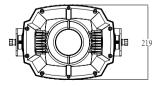
Size: 509\*220\*347mm

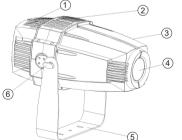
## 3. Schematic Lighting Components











- 1.back cover
- 2. Decorative cover
- 3.front cover
- 4.Lens
- 5.Stander
- 6.Rotating button

### 4. Packing And Shipping

### 4.1 Packing Material and Accessories

360 LED Gobo Projector is packaged by carton or flight case. Accessories items as show below.

Name	Quantity	Unit
User manual	1	piece
Signal line	1	piece
safe ropeHanging lamp	1	piece
hook and fastener	2	piece
Power line	1	piece

### 4.2 Packing

- 1. Power off to let the lamp cool completely before packaging equipment at least 15 minutes or more.
- 2. Lock the light when cleaning the surface of the light.

- 3. Use the packing bag to cover the light, put it into the box gently.
- 4. Add lighting accessories after putting the light into packing box.
- 5. It's only up to two crates stacked and is prohibited upside down.
- 4.3 Unpacking
- 1. Open the packing box and packing bag.
- 2. Seizing the equipment's handles, lifting and carrying away the light from the packing box or opening the flight case cover placing lift boom close to the light base, then equipping light hook on light base bottom tightening quick Install locks. At last rising away boom to the top of the lamp from flight case, put the flight case away.

### 5. Installation

Note: Upon receipt of lamps, please check if there is damage to the fold closure caused by transport, where there is transportation damage, please do not use this fixture, and contact us as soon as possible.

### 5. Safety Standard

Users should ensure that light and installation materials are checked for regular safety checks. Unprofessional incorrect installation can lead to dangerous, if the lack of working conditions and professional standards, please operate the light by professionals.

Do not use the light if the working temperature isn't minus 25 - 45 degrees Celsius. Don't stand directly under the light when the light is installed, dismantled, moved or serviced. The operator must ensure that the fixtures are

securely connected. Installing the light after professionals approving electrical parameters make sure that these installation must be checked at least once per year by experts.

### 5.1 Hook Clamp Installation

200W LED could be placed on the truss or on a stand in any direction with M8 stainless steel screws and clamps.

### 5.2 Fixing Equipment

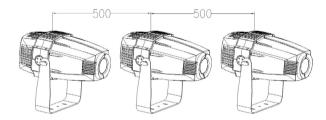
1. Before installing fixtures must verified rigging equipment is not damaged, and can bear at least 10 times of light's weight.

Check the building can be bore at least 10 times of total weights of light, fixture, and cable accessories.

2. Use a wrench to connect the M8 stainless.

steel screws to the lamp body bracket to the mounting part.

Note 1: Lights be placed vertically upward, the shortest distance between working lights must be more than or equal 500mm, lighting installation layout as picture.



#### 5.3 Data cable

Data cable is DMX512 signal.

Note: Signal line connections is X-type connector.

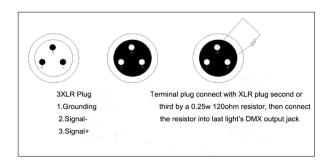
X-type connector-----If the external flexible

cable or cord of this light is damaged, please replace

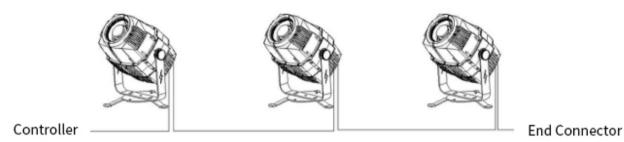
professional cable or cord from the manufacture or its agent.

Lights' DMX input and output connects to a 3&5pin XLR, first pin is grounded, then negative signal is second pin, third pin connects to the positive polarity signal, the fourth and fifth is empty.

In order to prevent reception reflection and interference control signal, a terminal plug must be installed on the first branch of the connected device last 3-pin output jack.



The controller connects to the nearest input XLR 3-pin, then from the output of the device connects to the input of the next device, continuous connection one by one, the final output data cable terminal equipment plug one end into the terminal.



#### 5.3 Data cable

If the signal transmission is long-distance, DMX 512 signal amplifier must be added. DMX512 signal controller connect to the input of the amplifier first, then connect to the fixture from its output, couple with the terminal plug last.

#### Note:

- 1. Do not use two separate output connections. To connect the branch, a separating consecutive DMX512 signal amplifier must be used to separate.
- 2. Please use the specialized DMX512 shielded twisted-pair cable. Standard microphone cables can not be reliably controlled long-distance data.

### 6. Power Connection

If the external flexible cable or cord of this light is damaged, please contact the manufacturer or its agent or a similar qualified person to replace, in order to avoid danger.

Connect the power supply personnel must have the appropriate qualifications before proceeding, you must make sure you are using the power supply voltage matches the voltage identified and have overload or leakage protection. Directly connect the device to the power supply, do not connect to the silicon box dimming system, otherwise damage to the equipment.

### 7. LED Chip

360 LED uses top LED 360W light source module, this LED light source + concentrator integrated light source provides a very stable color temperature at 8000K, Color rendering index 70 or 90 is optional, and average life is more than 20,000 hours (according to leds Relevant use environment).

#### Note:

- 1. Please do not install other similar led light source, otherwise it will cause safety hazards or damage the equipment.
- 2. To reduce the risk of damage to the light, replace the LED Chip before it exceeds the life of the lamp.
- 3. It is forbidden to use damaged LED Chip.

### 8.FUNCTIONS

#### 8.1 Glass Gobo Wheel

6 glass gobos, gobos can be customized (customized gobos are chargeable).

#### 8.3 Zoom Function

Zoom Angle:14-45°

### 8.4 Dimming and Strobe

0-100% electronic dimming, instant switching, stroboscopic speed can be adjusted, up to 0.5-20 times / sec, with special function of random strobe.

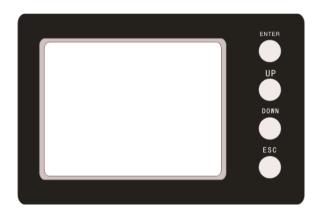
#### 8.2 Color Wheel

The color wheel consists of 10 colors, users can easily choose the color they want and create a perfect lighting effect. At the same time, it can be used with the gobo wheel, to have a better effect. Colors can be customized. (customized colors are chargeable).



# 9.LCD Display

### 9.1 Display Board



### 9.2/Menu Operation:

	360 led zoom projector			
1.DMX A	ddress:1-512			
2.Chann	el Mode:13			
3.Reset	t 1. Power on/ YES/NO off			
	2.Color YES/NO			
	3.Gobo YES/NO			
	4.Zoom/Prism YES/NO			
4.DMX	1.Number Set	Number Set	Any	
Setting		Destination	model / Only	
	2.Destination Address	Address by number	same model	
		Uniform Address		

5.Operation	DMX/Human Sensing/Auto1/Auto2/Auto3/User Program		
	1.Color	0-255	
	2.Gobo Wheel Rotation	0-255	
	3.Gobo auto rotation	0-255	
	4.Prism	0-255	
6.Manual Control	5.Focus	0-255	
6.Manual Control	6.Zoom	0-255	
	7.Strobe	0-255	
	8.Dimmer	0-255	
	9.Prism Auto Rotation	0-255	
	10.Auto Return	Never/30s/2 Min	
	1.dimming curve	Line/square/root /S curve/logarithm	
7.D . C	2.Master-Slave Mode	Master/Slave	
7.Running Setting	2 Missad again	Play Scene	1-12
	3.Mixed scene	First Scene	А-Н

		Second Scene	A-H	
		Third Scene	A-H	
		Fourth Scene	А-Н	
		Fifth Scene	А-Н	
		Sixth Scene	А-Н	
		Seventh Scene	А-Н	
		Eighth Scene	А-Н	
	4.Scene Editing	Scene Editing	А-Н	
		Step Number	0-29	
			Time	0-255
		Step Editing	Channel	1-25
			Number	0-255
		Сору		
		Paste		
		Recording		

	5.Switching light in	Gobo	Yes/No
	6.Color Linear Switching	Yes/No	
	7.Motion sensing operation mode	DMX/Auto1/Auto2/ Auto3/User Program	
	1.Sleeping	30S/10 Min/Never	
	2.Brightness	1-10S	
8.Display Setting	3.Inverted display	Yes/No	
	4.Indicator light	Auto/Always	
	5.Blinks when no signal	Yes/No	
		Color	-500 ~ 500
		Focus	-500 ~ 500
		Prism Rotation	-500 ~ 500
9.Advanced Setting	1.Fine	Gobo Wheel Rotation	-500 ∼ 500
		Gobo Rotation	-500 ∼ 500
		Zoom	-500 ∼ 500
		Lock the menu	Yes/No

2.Factory Setting		
	Enter the fine menu simultaneously	
3.fine assistance	Recovery	
function	Back up	
	Fine value clear	
	view local data	
4.When no DMX	execute	Middle/Keep/Human Sensing/ Auto1/Auto2/Auto3/User Program
5.Mode	Any time/Only when power on	
6.Auto Power on	Yes/No	
7.Advanced function channel	Yes/No	

	8.Fan speed	Auto/Full Speed		
	9.Language	Chinese/English/ Spanish		
	10.Lamp Using time clear			
	11.Recovery Factory Setting			
	12.Clarity Self-Program			
	13.Disable power-on beam display	Yes/No		
	14.Open Synchronous setting	Yes/No		
	1.PMX Number Monitor			
	2.Situation			
10.Information	3.Lamp Using time	This time:Minutes	Total: Minutes	
	4.Error Message			
	5.Time Remaining	Infinite		

## 10.Channel

	360W LED ZOOM PROJECTOR		
Channel	DMAY Number	Function Description	
13	DMX Number	Function Description	
1		Strobe/Shutter	
	0-2	Close	
	3-7	Open	
	8-97	standard strobe, from slow to fast	
	98-101	Open	
	102-126	fast open slow close, from fast to slow	
	127-151	fast close slow open, from fast to slow	
	152-155	Open	
	156-180	fast open slow close,random strobe,from slow to fast	
	181-205	fast close slow open,random strobe,from slow to fast	

	206-209	Open
	210-249	Random Strobe
	250-255	Random Strobe
2		Dimmer
	0-255	Continuous dimming 0%-100%
3		Dimmer Fine
	0-255	Dimmer fine
4		Color
	1-5	white
	6-11	white+blue
	12-17	blue
	18-23	blue+red
	24-29	red
	30-35	red+orange
	36-41	orange

	42-47	orange+yellow
	48-53	yellow
	54-59	yellow+green
	60-65	green
	66-71	green+purple
	72-77	purple
	78-83	purple+light green
	84-89	Light green
9	90-95	Light green+brown
9	96-101	brown
	102-107	brown+fluorescent purple
	108-113	fluorescent purple
	114-119	fluorescent purple+light blue
	120-125	Light blue
	126-127	Light blue+white
	128-190	Clockwise color switching

191-192       stop         193-255       Anti-clockwise color switching         5       Glass Gobo         0-5       Gobo 1         6-16       Gobo 2         17-27       Gobo 3         28-38       Gobo 4         39-49       Gobo 5         50-60       Gobo 6         61-83       Gobo 1 shake         84-106       Gobo 2 shake         107-129       Gobo 3 shake         130-152       Gobo 4 shake         153-175       Gobo 5 shake         176-198       Gobo 6 shake         199-201       Stop			
Glass Gobo         0-5       Gobo 1         6-16       Gobo 2         17-27       Gobo 3         28-38       Gobo 4         39-49       Gobo 5         50-60       Gobo 6         61-83       Gobo 1 shake         84-106       Gobo 2 shake         107-129       Gobo 3 shake         130-152       Gobo 4 shake         153-175       Gobo 5 shake         176-198       Gobo 6 shake		191-192	stop
0-5       Gobo 1         6-16       Gobo 2         17-27       Gobo 3         28-38       Gobo 4         39-49       Gobo 5         50-60       Gobo 6         61-83       Gobo 1 shake         84-106       Gobo 2 shake         107-129       Gobo 3 shake         130-152       Gobo 4 shake         153-175       Gobo 5 shake         176-198       Gobo 6 shake		193-255	Anti-clockwise color switching
6-16 Gobo 2  17-27 Gobo 3  28-38 Gobo 4  39-49 Gobo 5  50-60 Gobo 6  61-83 Gobo 1 shake  84-106 Gobo 2 shake  107-129 Gobo 3 shake  130-152 Gobo 4 shake  153-175 Gobo 5 shake  176-198 Gobo 6 shake	5		Glass Gobo
17-27 Gobo 3  28-38 Gobo 4  39-49 Gobo 5  50-60 Gobo 6  61-83 Gobo 1 shake  84-106 Gobo 2 shake  107-129 Gobo 3 shake  130-152 Gobo 4 shake  153-175 Gobo 5 shake  176-198 Gobo 6 shake		0-5	Gobo 1
28-38 Gobo 4  39-49 Gobo 5  50-60 Gobo 6  61-83 Gobo 1 shake  84-106 Gobo 2 shake  107-129 Gobo 3 shake  130-152 Gobo 4 shake  153-175 Gobo 5 shake  176-198 Gobo 6 shake		6-16	Gobo 2
39-49 Gobo 5 50-60 Gobo 6 61-83 Gobo 1 shake 84-106 Gobo 2 shake 107-129 Gobo 3 shake 130-152 Gobo 4 shake 153-175 Gobo 5 shake 176-198 Gobo 6 shake		17-27	Gobo 3
50-60       Gobo 6         61-83       Gobo 1 shake         84-106       Gobo 2 shake         107-129       Gobo 3 shake         130-152       Gobo 4 shake         153-175       Gobo 5 shake         176-198       Gobo 6 shake		28-38	Gobo 4
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107-129       Gobo 3 shake         130-152       Gobo 4 shake         153-175       Gobo 5 shake         176-198       Gobo 6 shake		61-83	Gobo 1 shake
130-152 Gobo 4 shake 153-175 Gobo 5 shake 176-198 Gobo 6 shake		84-106	Gobo 2 shake
153-175 Gobo 5 shake 176-198 Gobo 6 shake		107-129	Gobo 3 shake
176-198 Gobo 6 shake		130-152	Gobo 4 shake
		153-175	Gobo 5 shake
199-201 Stop		176-198	Gobo 6 shake
		199-201	Stop

202-227	Gobos clockwise switching, from fast to slow
228-229	Stop
230-255	Gobos anti-clockwise switching, from slow to fast
	Gobo Rotation
)	No action
L-127	Gobo indexing
128-191	Gobo clockwise rotation:from fast to slow
192-255	Gobo anti-clockwise rotation:from slow to fast
	Prism
L-63	No effect
54-255	Prism insertion
	Prism Rotation
)	no
L-127	Prism anti-clockwise rotation, from fast to slow
128-254	Prism clockwise rotation, from slow to fast
255	stop
	228-229 230-255 2-127 28-191 92-255 2-63 34-255

9		Zoom
	0-255	Zoom from small to large
	0-255	Zoom fine, from small to large
11		Focus
	0-255	Focus, from far to near
12		Focus Fine
	0-255	focus fine, from far to near
13		Reset
	0-209	Empty
	210-229	All reset
	230-255	Empty

### 11.Fault Analysis And Resolution

Listed below are a few common problems that you may encounter, with solutions.

Equipment does not work, no light output and the fan does not work;

- 1. Check the power connection and main fuse.
- 2.Be sure the voltage of the connector.

#### Not responding to DMX Console;

- 1.After connecting the controller, the equipment should be working. If it does not work properly, please check if the signal plug and power cable is connected correctly.
- 2. If the DMX LCD display is on and no response to the channel, check the address settings and the polarity of DMX output voltage.
- 3. If the signal of the product is unstable, please check the input terminal and circuit boards.
- 4. Try using another DMX controller.
- 5. Check to see if the DMX cables run near or run alongside to high voltage cable. It may cause damage or interference to DMX interface circuit.

#### One of the channels is not working:

- 1. The stepper motor might be damaged or the cable connected to the PCB is broken.
- 2. The motor's drive IC on the PCB might be out of condition.

### 12. FIXTURE CLEANING

The cleaning of internal and external optical lenses or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture

operates: smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

Clean with soft cloth using normal glass cleaning fluid.

Clean the external optics at least every 30 days.

Clean the fans on the head and base every 90 days.

NOTE: Disconnect the fixture before clear.