Squareled

User Manual

SquareLED Hi-Precision

500 W RGBAL Fresnel

1 Technical Parameters

1.1 Electrical Parameters

Input Voltage：100-240AC   50/60HZ

Power Consumption：≤350W

Control Signal：DMX512/master/slave mode

Control Channel：3/5 channels

DMX input/output interface: XLR 3PIN (In & Out)

Power Interface：Aviation head

1.2 Optical Parameters

Light Source：500W integrated cob source

Color（Light Source）：RGBAL

Beam Angle：20°- 35°

Dimmer：0-100%

Strobe：0-20Hz

1.3 Mechanical and physical parameters

Case Material：die-casting aluminum/aluminum/plastic

Protection Grade：IP22

Working Temperature：-20~40°C

Noise：36db

Net Weight：11KG

Dimension：507*380*440mm

2 Illumination Chart

3 Safety Warning

Notice：

● Professional technical people required to install and maintain this equipment.

● This equipment has passed strict inspection before delivery.

● Users have to obey the safety and notice guide.

● Supplier won't afford the accidents and losses that don't operate the fixture according to the operation guide and change it without permission.

Important Notice:

● Make sure the power supply within the standard data range.

● The fixture's power connection line can't connect to any other fixtures.

● The fixture's DMX512 connection line can't connect to any other fixtures. That is each output of former fixture connects to the input of its follower, and each output DMX line cannot be divided into more than one outputs.

● Make sure the fixture is appropriately earthed before use this fixture safely.

● Yellow-green line is earthed line, select the eligible power socket to make sure the safety and operation; or cut off the plug and connect the switch directly.

● To avoid the hard collision when installation, using or moving the fixture.。

4 Installation

4.1 Install & Method

Horizon Installation:

▲ Hanging angle adjustable to install on the suitable truss, show below:

Hanging angle
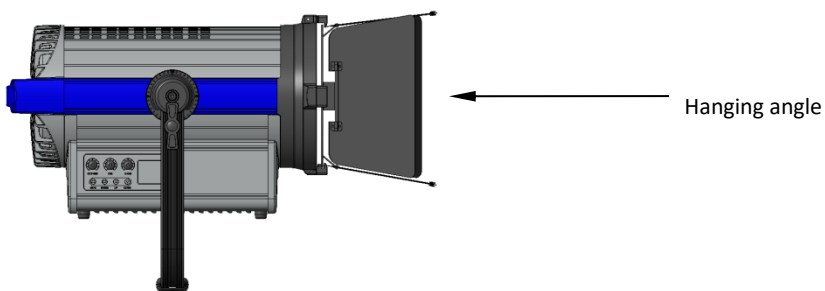
Suspending installation:

Notice：Make sure the install location is safety and adapt to this fixture.

▲ When install or use this fixture, make sure to keep a distance at least 0.3m with inflammable and explosive materials;

▲ Use the proper tools to install the fixture in a right place;

▲ The installation setting has to bear at least decuple weights compared to the fixture itself, and make sure no metamorphoses within one hour;

▲ When use safety rope to install it, make sure the safety rope has to bear at least decouple weights compared to the fixture itself. The safety rope has the insurance buckle. Pulled the safety rope through the lock hole at the bottom of fixture, then round the truss, then the end of the rope tightly inserted to insurance buckle and tighten the screw, show below:
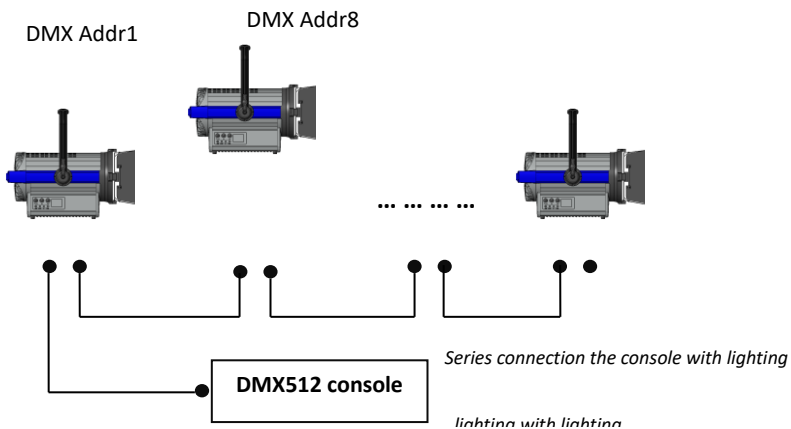
Hanging on truss
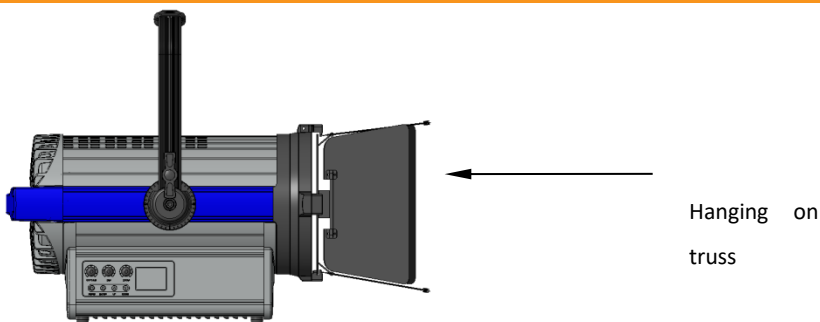
4.2 Power Connection

☐ Power cable use 2.5mm2 copper core. When power serial connect, AC220V connect 15 pcs fixtures Max; AC110V connect 8 pcs fixtures Max.

☐ DMX512 signal cable connect 20pcs fixtures Max; When the distance between console and fixture, or distance between two fixtures, longer than 50M then add a signal amplifier is very necessary.

☐ Recommend to plug a terminal in signal output socket of the last fixture, which connected in the end of each signal transmission line.   To weld a 120Ω / 1W resistor between the male plug 2 and 3 feet to make a terminal plug. The usage is to reduce the reflected wave interference caused by the end of control signal cable's circuit open.
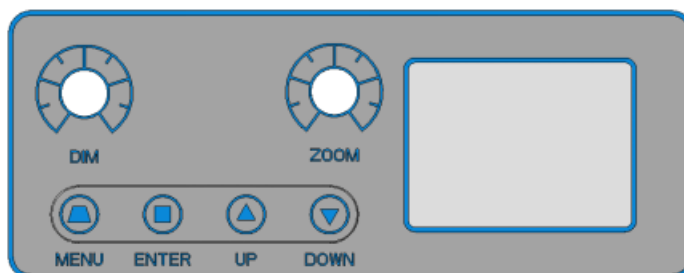
4.3 DMX512 Console Connect

◇ Serial connect the DMX512 console and signal cable.

◇ DMX512 address code is reusable.

◇ DMX512 address code can be any number between 001 to 512.

DMX Addr1   DMX Addr8

… … … …

Series connection the console with lighting

DMX512 console

lighting with lighting

5 Operation

5.1 Key Operation

■ ENTER ：Enter to next submenu, save and confirm the function data value as we set.

■ UP   ：Select the function submenu, upper circular adjust the data value.

■ DOWN ：Select the function submenu; down circular adjust the data value.

■ MENU ：back to previous menu or back to the main menu.

■DIM…: Turn the knob to adjust the brightness of the fixture.

■ZOOM…:Turn the knob to adjust the beam angle of the fixture.

5.2 Manual SET... CTRL

CTRL	⟹	DIM	000-255
		CCT	000-255
		FOCUS	000-255
		STROBE	000-255
		DIM_Speed	000-255
		DIM_CRUVE	000-255
		RESERVED	
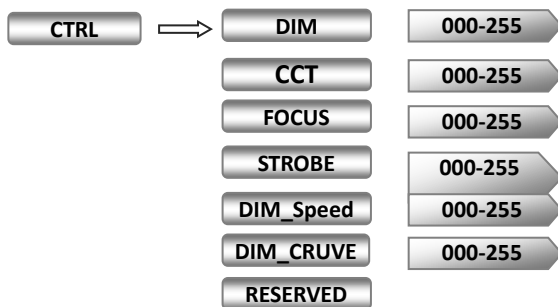
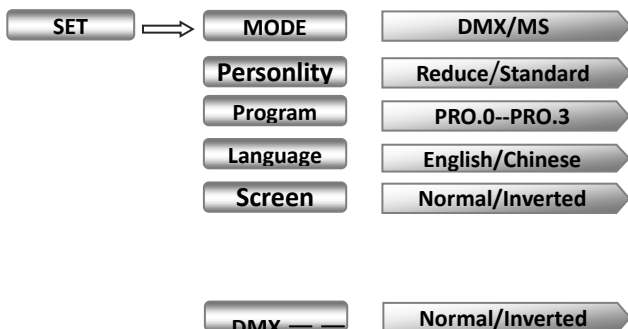◇Press［ENTER］in Menu［CTRL］enter into manual setting

◇Press [ENTER] to cycle through the brightness [DIM], color temperature [CCT], focus [ZOOM], press [UP]/[DOWM] to adjust and set the relevant data.

◇Press [MENU] to back to main menu and save automatically.

◇{CTRL}Each submenu option corresponds to 7 DMX512 channels;

◇It should be noted that [CTRL] is only valid when the luminaire has no DMX signal input.

5.3 System INFO -INFO

```
INFO  ⟹  VER
          Run time
          Temperature
          PR
          IR
```
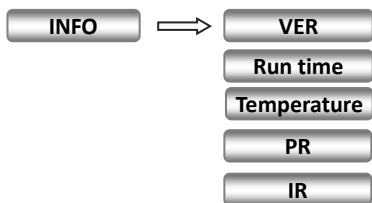
◇ Press{ENTER〕in menu{INFO} to enter into system information;

◇ Press [MENU] to back to main menu and save automatically;

◇ Can view system version number{VER}，system running time{RUN TIME},lamp source temperature{Temperature}

◇ {PR], [IR] are DMX512 receiving information status information .

5.4 LIGHT SET...SET

```
SET  ⟹  MODE          DMX/MS
         Personlity     Reduce/Standard
         Program        PRO.0--PRO.3
         Language       English/Chinese
         Screen         Normal/Inverted


         DMX — —       Normal/Inverted
```

◇ Press [ENTER] in the [SET] menu to enter the fixture setting operation.

◇ Press [UP]/[DOWN] to select the directory for this setting;

◇ The [MODE] menu sets the lamp operation mode, [DMX] is the DMX input status, and the [CTRL] menu cannot be changed when the DMX512 signal is input. The [M/S] status is the system demonstration test mode, and the lamp does not receive the DMX signal.

◇ [personality] menu sets the lamp channel mode, streamlined channel mode [reduce], standard channel mode [standard]

◇ [Program] built-in program selection

◇ [Language] language selection

◇ [Screen] screen shows inverted settings

5.5 DMX512 Address Code Setting

```
ADDR  ⟹  D.001-512
```
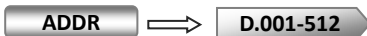
◇ Press [ENTER] in the [ADDR] menu to enter the fixture setting operation;

◇ Press [UP]/[DOWN] to set the address code.

◇Press the [MENU] button to return to the main menu

◇Select the standard DMX512 signal cable to connect the lamps in series;

◇Use the operation menu ADDR to set the DMX512 address code of the fixture;

◇Set the same or different DMX512 addresses for different lamps according to the actual situation on site.

6 DMX512 Control Channel

		Value	Function	
Reduced	Standard			
	1		**Hue**	
		0-255	HUE 0 to 100%	
	2		**H_fine**	
		0-255	Hue_fine	Fine tuning

	3		**Saturation:**	
		0-255	Zoom adjustment	Zoom in from big to small
	4		**Dimmer intensity :**	
		0-255	0-255	DIM from slow to fast
	5		**CCT:**	
		0-255	0-255	CCT from slow to fast
	7		**ZOOM：**	
		0-255	20-35°	Zoom 20-35°
	8		**Ctrl onff:**	
		0-1	HSIC MODE	HSIC control mode
		1-255	Monochromatic MODE	Single color control mode
	9		**Red Color:**	
		0-255	Red 0 to 100%	
	10		**Green Color:**	
		0-255	Green 0 to 100%	
	11		**Blue Color:**	
		0-255	**Blue** 0 to 100%	
	12		**Amber Color:**	
		0-255	Amber 0 to 100%	
	13		**Lime Color:**	

		0-255	Lime 0 to 100%	
	14		**Strobe:**	
		0-5	0Hz	
		5-255	1-20Hz	Strobe from slow to fast
	15		**Dimmer mode:**	
			0-255	DIM from slow to fast
			Dimmer Curve:	
		000-005	None Function	
		006-064	Linear Dimmer Curve	
		065-128	Square Dimmer Curve	
		129-192	I-Square Dimmer Curve	
		193-255	S-Shape Dimmer Curve	
		0-255	255 continued over 3s	System reset
	16		**Fan Control:**	
		0-127	Temprature control mode	
		128-191	Manual mode	
		192-255	High speed mode	
	17		**Set Freq:**	
		0-80	500Hz	Dimming frequency
		81-160	2000Hz	Dimming frequency
		161-240	8000Hz	Dimming frequency
		240-255	17600Hz	Dimming frequency

7 Standard Accessories

Power Supply Cable x 1pc

Signal Cable x 1pc

Safety Rope x 1pc

User Manual x 1pc

Warranty x 1pc

Barn Door x 1set

European Standard Power Cable (optional)

American Standard Power Cable (optional)

Das Lichttechnikhaus Vertriebs GmbH

Rudolf-Diesel-Str. 3, D-89312 Günzburg

Telefon	+49 (0) 82 21 207 98-0
Fax	+49 (0) 82 21 207 98-69
E-Mail	info@lth-gmbh.de
Web	www.lth-gmbh.de