User Manual: Squareled Studio 5-in-1 500W RGBAL Fresnel
User Manual

SquareLED Studio 5-in-1

500 W RGBAL Fresnel
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1 Technical Parameters

1.1 Electrical Parameters

Input Voltage: 100-240AC 50/60HZ
Power Consumption: ≤350W
Control Signal: DMX512/master/slave mode
Control Channel: 6/12/17 channels
DMX input/output interface: XLR 5PIN (In & Out)
Power Interface: Aviation head

1.2 Optical Parameters

Light Source: 500W integrated cob source
Color (Light Source): RGBAL
Beam Angle: 20° - 45°
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:

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 decuple 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:
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.
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

<table>
<thead>
<tr>
<th>CTRL</th>
<th>DIM</th>
<th>000-255</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CCT</td>
<td>000-255</td>
</tr>
<tr>
<td></td>
<td>FOCUS</td>
<td>000-255</td>
</tr>
<tr>
<td></td>
<td>STROBE</td>
<td>000-255</td>
</tr>
<tr>
<td></td>
<td>DIM.Speed</td>
<td>000-255</td>
</tr>
<tr>
<td></td>
<td>DIM.CRUVE</td>
<td>000-255</td>
</tr>
<tr>
<td></td>
<td>RESERVED</td>
<td></td>
</tr>
</tbody>
</table>

- ◇ Press [ENTER] in Menu [CTRL] enter into manual setting
- ◇ Press [ENTER] to cycle through the brightness [DIM], color temperature [CCT], focus [ZOOM], press [UP]/[DOWN] 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

◊ 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
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

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

### DMX Control Chart

<table>
<thead>
<tr>
<th>Reduced</th>
<th>Standard</th>
<th>Extended</th>
<th>Wert</th>
<th>Funktion</th>
<th>Beschreibung</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0-255</td>
<td>Hue</td>
<td>0-100%</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0-255</td>
<td>Hue fine</td>
<td>0-100%</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0-255</td>
<td>Saturation</td>
<td>0-100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>---</td>
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<td>--------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
<td>0-255</td>
<td>Dimmer</td>
<td>0-100%</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td>0-255</td>
<td>CCT</td>
<td>ww to cw</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
<td>0-255</td>
<td>Zoom</td>
<td>20-45°</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>7</td>
<td>0-1</td>
<td>Crtl Off/On</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2-255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>8</td>
<td>0-255</td>
<td>Red</td>
<td>0-100%</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>9</td>
<td>0-255</td>
<td>Green</td>
<td>0-100%</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
<td>0-255</td>
<td>Blue</td>
<td>0-100%</td>
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<tr>
<td>11</td>
<td>11</td>
<td>11</td>
<td>0-255</td>
<td>Amber</td>
<td>0-100%</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>12</td>
<td>0-255</td>
<td>Lime</td>
<td>0-100%</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td>0-5</td>
<td>Strobe</td>
<td>0 Hz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6-255</td>
<td></td>
<td>1 - 20 Hz</td>
</tr>
<tr>
<td>14</td>
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<td></td>
<td>0-255</td>
<td>Dimmer mode</td>
<td>slow-to-fast</td>
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<tr>
<td>15</td>
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<td></td>
<td>0-5</td>
<td>Dimmer curve</td>
<td>none</td>
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<td>6-64</td>
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</tr>
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<td>65-128</td>
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<td>square</td>
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<td>129-192</td>
<td></td>
<td>l-shape</td>
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<tr>
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<td></td>
<td>193-255</td>
<td></td>
<td>S-shape</td>
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### Fan Control

<table>
<thead>
<tr>
<th>16</th>
<th>0-127</th>
<th>temp contr mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>128-191</td>
<td>manual mode</td>
</tr>
<tr>
<td></td>
<td>192-255</td>
<td>high speed mode</td>
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</table>

### Dim Freq

<table>
<thead>
<tr>
<th>17</th>
<th>0-80</th>
<th>500 Hz</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>81-160</td>
<td>2000 Hz</td>
</tr>
<tr>
<td></td>
<td>160-240</td>
<td>8000 Hz</td>
</tr>
<tr>
<td></td>
<td>241-255</td>
<td>17600 Hz</td>
</tr>
</tbody>
</table>

### 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)
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