



**TANGO 1800 SPOT**

**PR-6616**

The user manual contains important information about the safe installation and use of a projector. Please read and follow these instructions carefully and keep the manual in a safe place for future reference.

PR LIGHTING LTD.

<http://www.pr-lighting.com>

**INDEX**

|  |  |  |
| --- | --- | --- |
| 1. | SAFETY AND WARNINGS…………………………………………………………………………………… | 3 |
| 2.  3. | INSTRUCTIONS………………………………………………………………………………………………  APPEARANCE……………………………………………………………………………………………… | 4  5 |
| 4. | INSTALLATION……………………………………………………………………………………………… | 5 |
| 5. | SETUP AND CONFIGURATION……………………………………………………………………………… | 7 |
| 6. | OPERATION MENU…………………………………………………………………………………………… | 9 |
| 7. | DMX PROTOCOL……………………………………………………………………………………………… | 10 |
| 8. | ERROR MESSAGES………………………………………………………………………………………… | 17 |
| 9. | TECHNICAL DATA…………………………………………………………………………………………… | 17 |
| 10. | COMPONENT ORDER CODES……………………………………………………………………………… | 21 |

The following items are supplied with a projector and please check:

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Quantity | Unit | Remark |
| User manual | 1 | Pc |  |
| Safety cord | 1 | Pc |  |

**Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of the manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.**

**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.**

**Note: For the products made by Guangzhou PR lighting Ltd, the warranty for the whole product is one year starting from the delivery date but the light source is not within the warranty.**

**1. SAFETY AND WARNINGS**

|  |
| --- |
| **注意安全.jpg**  **NOTE**  **Before a projector’s installation, power-on, operation and maintenance, please carefully read**  **the safety information hereinafter!** |

**The following safety signs are used in the user manual.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **注意安全.jpgWarning** | **参阅指南.jpgUser**  **Manual** | **当心触电.jpgElectrical shock** | **防护眼镜.jpg**  **Goggles** | **必须戴防护手套.jpgProtective Gloves** | **当心火灾.jpgFlames** | **注意高温.jpgHigh Temperature** |

|  |  |
| --- | --- |
| **注意安全.jpg** | ● When unpacking , check if there is any damage caused by transportation before using a projector. Should there be any damage, consult your dealer and do not use it.  ●The manufacture is not responsible for any loss caused by a user not following the manual or changing a projector as he/she likes.  ●Please be noted that any damage caused by changing the projector at will is not warranted.  ● Do not hesitate to contact the dealer or the manufacturer if any questions or advice. |
| **参阅指南.jpg** | ● A projector rated for IP66 or higher can be used indoors and outdoors.  ●For a projector with lower IP class ,it is for bidden to contact with water or any other liquids directly or indirectly.  ●A projector should be kept away from high temperature, fire, electrical surge, vibration and strong light while being operated.  ●A projector is only intended for installation, operation and maintenance by a qualified person. And the operation must strictly follow the procedures in the manual.  ●A projector is not for a user to make any replacements and the user shouldn't open a projector for repair and maintenance.  RTX截图未命名 |
| **防护眼镜.jpg** | ●Don’t look straightly into the light sources especially for epileptics, otherwise eyes will be burned..  ●Do not connect this device to any type of dimmer pack.  ●If the lamp, lens and screen protective cover of the a projector have obvious damage, i.e., to the extent that it hurts the performance like cracking or deformation, please stop using it and replace them with the original parts, otherwise its performance will be compromised.  ● For the location of a projector, it shouldn’t be seen in the distance of less than 4 meters. |
| **必须戴防护手套.jpg** | ●Before operation, please confirm that all covers(housing) are on and screws tightened. It’s forbidden to use a projector while its covers(housing)are off .  ●Keep the lamp clean and do not touch it with bare hands.  ●While operating it, wear protective items like goggle and gloves. |
| **当心触电.jpg** | ●Any electrical connection must be carried out by a qualified person .  ●Before installation, please confirm the voltage supplied matches what is required for a projector.  ●Each projector must be properly earthed and installed as per related electrical standards.  ●Do not use power cord with its insulator damaged and connect the power cord with other cables.  ●If a projector is not used or under cleaning,, please hold its plug and unplug it. Do not unplug it forcefully or by pulling the power cable.  ●All power cords must conform to related safety and regulations.  ●While being operated, if a projector is not waterproof and dust-proof, it should not be under rains or in humidity to avoid being short.  ●Do not switch on and off a projector constantly in very short intervals, otherwise its light source’s and other electrical parts’ life will be shortened . |
| **注意安全.jpg** | ●There are safety cord holes at the bottom of the base of a projector. In view of safety, please run the safety cord supplied through the safety cord holes for safety support.  ●Before any installation, maintenance and cleaning work, please ensure a projector is disconnected from power mains. |
| **注意高温.jpg** | ●While being in stable working state under normal ambient temperature, the temperature of the surface of the metallic housing of a projector including heat sink will reach 75℃.  ●While its lamp is stricken for the first time, there will be smoke and strange smell. It’s normal and does not mean a projector has some defects.  ●While a projector running, do not touch the metallic housing to avoid being burned. |
| **当心火灾.jpg** | ●Do not mount a projector directly on inflammable surface.  ●Do not project the beam straightly on combustible items and the minimum distance between it  and illuminated items is 10m.  ●A projector should be installed with good ventilation and the minimum distance between it and walls is 50cm. At the same time, please ensure the fans and air inlets and outlets are workable.  ●Do not let the front lens expose to sunlight or other strong light sources at any angle, otherwise the focused beam inside can result in fire potentially. |

 ● The product meets The General Technical Requirements and Standards for Recycle and Use Of Expired

Appliance and Electronic Products.

● When the product meets disposal standards and needs to be disposed, a client needs to dispose and recycle it.

**2. INSTRUCTIONS**

●**CLEANING AND MAINTENANCE**

If a projector can’t start. Please check if the fuse is blown up. If it does, replace it with a new fuse with same ratings. And it has over-temperature protective device. If the temperature is too high, the protective device will be triggered to shut it off. When it happens, please check if the fans run normally or fan shield is blocked by dust. After the issue is solved, restart it.

The accumulation of oil, smoke and dust on the lens will compromise the light output. Cleaning a projector is very necessary to ensure a reliable use of it. Cooling fans need to be cleaned every 15days. Internal lens, reflector and hot mirror need to be cleaned periodically to optimize light output.

Cleaning frequency is to be decided by operations and its environment. Use soft cloth and normal detergent for glass for cleaning work. It’s advised external optical system be cleaned every 20days and internal optical systems every 30/60days. Keep lens clean and do not touch optical parts with bare hands.

|  |  |
| --- | --- |
| **当心触电.jpg** | ●Before any maintenance and cleaning, please ensure a project is off the power.  ●Only a qualified person is allowed to do maintenance.  ●During maintenance and before maintenance, a projector must be off power. |
| **注意安全.jpg** | ●To avoid sunlight or other light penetrating into the head via the front lens, resulting in high temperature internally causing damages to a projector. Before power-off, please use Tilt channel to move the head and make it facing downward.  ● Do not use alcohol or other organic solvent to clean the housing to avoid damage.  ● Do not use any solvent with chemical elements to clean color filters or hot mirror. |

**SPECIAL NOTE**

**While water-proof projectors are in use, it’s normal there will be some minor mist on the front lens.**

●**LUBRICATION**

To ensure smooth movement of gobos and zoom and focus lens, it’s advised rotators’ bearings and 2 sliding bars for zoom and focus lens be lubricated every 2 months. High quality and high temperature lubricant/grease is advised..

●**TROUBLESHOOTING**

|  |  |
| --- | --- |
| **PROBLEM** | **ACTION** |
| A projector can’t be switched on | * Check if the fuse is burned * Check if the power cord is connected well * Check if the switching power supply is bad or not connected well. A professional technician is required for the repair * Check if the control board is connected well. .A professional technician is required for the repair |
| A projector can be switched on , but the LED lamp’s brightness can’t be controlled | * Check if the LED driver board is connected well. A professional technician is required for the repair |
| A projector can be switched on normally, but not controlled by the DMX controller | * Make sure that its start address is right * Replace or repair the XLR signal cable. |
| The beam is not bright and its brightness decreases sharply | * Make sure the fans are working well or fans and their shields are not blocked by dust. * Make sure that the internal optics are clean. |
| A project image appears to have a halo | * Carefully clean the LED lamp, optical lenses and other components. |
| Heavily Defective Beam | * Check if lens are in good condition(not cracked) * Clean dust or grease on the lens. |

1. **APPEARANCE**

HEAD

BASE

SUPPORT

****

1. **INSTALLATION**

● **POWER CONNECTION**

Connect the power cord as follows:

L (live) =brown

E (earth) =yellow/green

N (neutral) =blue

Before power connection, please ensure the power supplied must match what the nameplate says. It is recommended that each projector be connected with power separately so that they may be individually switched on and off.

****

**●The earth wire(yellow/green) must be connected to the ground. And electrical connection must be in accordance with the standards concerned.**

**●If any questions about the electrical installation, do not continue but consult a qualified electrician.**

**●A projector uses naked wires. For wiring please use waterproof junction box with IP class not lower than IP66.**

● **THE WIRING OF CONTROL SIGNAL**

The colors of signal wires responds to their respective functions:

Blue color –A+

White color –B-

Black color –Shield wire

The shielded 2-core wire between a projector and a controller or between projectors should be not less than 0.5mm in diameter and the maximum number of projectors in a DMX chain should be less than 32 pieces.

****

●**DMX TERMINATOR**

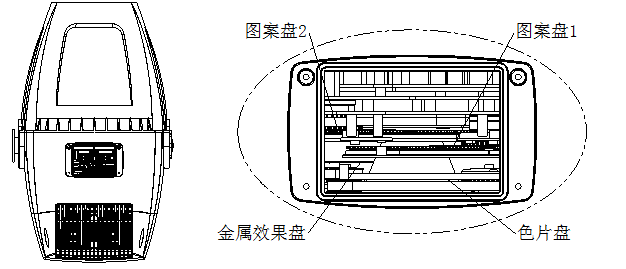
In the Controller mode, at the last fixture in the chain, its female DMX output has to be connected with a DMX terminator.

The DMX terminator is simply a Canon connector with a 120Ω (ohm) resistor connected across pin A+ and pin B-, which prevents electrical noise from disturbing and corrupting the DMX control signals. Before DMX terminator connection, please make proper insulation and waterproof treatment.

. The connections are illustrated below.



●**GOBO FILTER REPLACEMENT**

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Colour wheel

Effect wheel

Rotating Gobo wheel 2

Rotating Gobo wheel 1

Lock the tilt and loosen the 4 fast-fit screws on the upper cover ,After removing the cover, you will see the structures as the figure above.

To replace a gobo on the rotating gobo wheel: take the rotator from the wheel in the sequence of 1→2 , take the gobo out from the rotator by removing the tightening spring. Put the new gobo back to the rotator, then tighten it with the spring. Please ensure the spring is in the narrow location of the rotator, which is the internal ring of it and flatten it. At last, pull up the spring strip using proper tool and put the rotator back to the wheel with the assistance by another hand. Its installation is of the opposite sequence of removal(（2→1）.



Installation of gobos

**NOTE**: Do not touch the glass gobo with bare hand. Place clean and soft paper or cloth between hand and glass gobos.

Tighten 4 hexagon screws after the cover is on. Unlock the tilt.

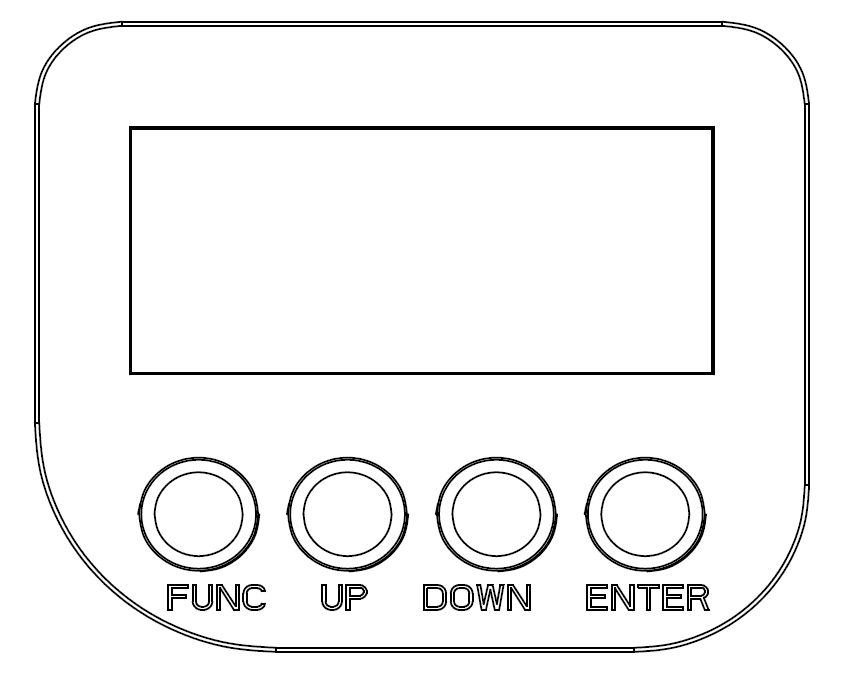
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**DANGER!**

**BEFORE REPLACEMENT OF GOBOS/COLOR FILTERS, A PROJECTOR MUST BE OFF THE POWER!**

1. **SETUP AND CONFIGURATION**

**●FRONT PANEL OPERATION**



A projector’s configuration can be set conveniently via push button and LCD display.

Launch the projector and press button ENTER for more than 5 seconds to unlock the panel, the LCD will show the function menu of the projector, each main menu has its submenus and each submenu has a specific function. For details, please see the “OPERATION MENU” section.

To set up or browse through its functions, press button UP or DOWN

Press button ENTER to save your settings or enter the submenu.

Press button UP or DOWN to change values(plus or minus)

Press button FUNC, it will return to the upper menu. If button FUNC not pressed, the default will show display status automatically.

● **DMX START ADDRESS**

Each unit must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to “listen” to the digital control information being sent out from the controller. The unit has 3 DMX modes. There are standard mode ,short mode and extended mode. For example standard mode has 26**c**hannels, so set the No. 1 projector’s address 001, No. 2 projector’s address 027, No. 3 projector’s address 053, No. 4 projector’s address079, and so on.

Launch the projector. Press button ENTER more than 5seconds to unlock panel.

Press button ENTER to display DMX address;

Press button UP and DOWN, you can set the address;

Press button ENTER to confirm; after powered on next time, the default will be last value saved

Press button FUNC, it will return to the upper menu

.

●**STAND-ALONE MODE**

Operate the projector without connecting with a controller, enable the master mode through the operation panel, the projector will run in Stand-Alone mode automatically.

DMX address can be set at any number within 512.

●**MASTER/SLAVE MODE**

Many projectors can run synchronously in the Master/Slave mode by linking them with each other. First,

connect the first fixture’s DMX output to the second fixture’s DMX input using XLR-XLR control cable and then connect the second fixture’s DMX output to the third fixture’s DMX input, and so on until all projector are connected in this way. Eventually connect the last fixture’s DMX output to a DMX terminator. Set 1st projector as the master and others are Slaves. It’s advised that the maximum quantity of projectors in a DMX chain is less than 32.

Start Addresses of all Slaves are 001; Operation mode of the Master can be set any mode for a Master’ and Slaves’ operation mode can be set accordingly.

After Powered on, the group will run in Master/Slave Mode



1. **OPERATION MENU**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **1st LEVEL** | **2nd LEVEL** | **3rd LEVEL** | | **4th LEVEL** | **5th LEVEL** | |
| Fixture model  DMX address | | | | | | |
| Signal Mode  Channel mode | | | | | | |
| DMX setting | DMX Address | | Short Mode:1-491 (Short 22CH）  Standard Mode:1-487 (Standard 26CH）  Extended Mode:1-480(Extended 33CH） |  | |  |
| Reset | Total Reset | | Really Reset? | Confirm/Cancel | |  |
| Colour System Reset | | Really Reset? | Confirm/Cancel | |  |
| Gobo Reset | | Really Reset? | Confirm/Cancel | |  |
| Zo.Fo. Pr. Reset | | Really Reset? | Confirm/Cancel | |  |
| Other Reset | | Really Reset? | Confirm/Cancel | |  |
| Config Settings | DMX Channel Mode | | Short Mode 22CH |  | |  |
| Standard Mode 26CH |  | |  |
| Extended Mode 33CH |  | |  |
| View Mode | 001 Strobe  … | |  |
| Loss of DMX | | Normal time out |  | |  |
| Hold Last Value |  | |  |
| Display Config | | Display Mode | Off After Delay | |  |
| On Always | |  |
| Display Invert | Invert OFF | |  |
| Invert ON | |  |
| Language Set | English | |  |
| Chinese | |  |
| Temperature Unit | | Celsius Degree |  | |  |
| Fahrenheit Degree |  | |  |
| Factory Defaults | | Restore Defaults? | Confirm/Cancel | |  |
| Option Set | Invert Set | | Iris | OFF/ ON | |  |
| Zoom Invert | OFF/ ON | |  |
| CYM Invert | OFF/ ON | |  |
| CTO Invert | OFF/ ON | |  |
| Dimmer Set | | Gamma Curve | Gamma 2.0/2.2/2.4/2.6 | |  |
| LED Ref. Rate | 1200/2400/4800/10000/12000/15000/20000/25000Hz | |  |
| Dimmer Speed | Fast/Medium/Slow Speed | |  |
| Fan Set | | Standard/Theatre |  | |  |
| Information | View DMX Values | |  |  | |  |
| Total Hours | | XXXXH |  | |  |
| Temperature | | Display XXX |  | |  |
| Driver 1 XXX |  | |  |
| Driver 2 XXX |  | |  |
| Driver 3 XXX |  | |  |
| Driver 4 XXX |  | |  |
| Fan board XXX |  | |  |
| LED XXX |  | |  |
| Software Version | | Display | X.X.X | |  |
| Driver 1 | X.X.X | |  |
| Driver 2 | X.X.X | |  |
| Driver 3 | X.X.X | |  |
| Driver 4 | X.X.X | |  |
| Fan Board | X.X.X | |  |
| Electronic SN | | Electronic SN=  \*\*\*\*\*\*\*\*\*\*\*\* |  | |  |
| RDM Device Label | | RDM Device Label  ANSI E1.20 RDM |  | |  |
| Fan Status | | Head Fan XXX |  | |  |
| Service | Manual Control | | Strobe XXX  Dimmer XXX  ………. |  | |  |
| Factory Test | |  |  | |  |
| Operation Mode | DMX Mode | | Change Operation Mode? | Confirm/Cancel | |  |
| Master Mode | | Preset Memory | Change Operation Mode? | | Confirm/Cancel |
| User Memory 1 | Change Operation Mode? | |  |
| User Memory 2 | Change Operation Mode? | |  |
| Stand-Alone Mode | | Preset Memory | Change Operation Mode? | |  |
| User Memory 1 | Change Operation Mode? | |  |
| User Memory 2 | Change Operation Mode? | |  |
| Static Scene | | Change Operation Mode? |  | |  |
| User memory | Edit User Memory | | Edit User Memory 1  /Edit User Memory 2 | Scene XX  （1~16 Scenes） | | Channel Value  Strobe XXX  Dimmer XXX  ……  Fade Time XXX  Hold time XXX  Delay Time XXX  Delayunit (msec/s/m)  Next Step XXX |
| Edit Static Scene | Channel Value  Strobe XXX  Dimmer XXX  …… | |  |
| Init User Memory | | Reset User Memory 1 | Reset User Memory? | | Input Password123 |
| Reset User Memory 2 | Reset User Memory? | | Input Password123 |
| Reset Static Scene | Reset Static Scene? | | Input Password123 |

1. **DMX PROTOCOL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Short mode | Standard mode | Extended mode | Description | Decimal low | Decimal High |
| 1 | 1 | 1 | Strobe |  |  |
| Close | 0 |  |
| Pulse strobe from slow to fast | 1 | 127 |
| Strobe from slow to fast | 128 | 225 |
| 2 | 2 | 2 | Dimmer |  |  |
| Close | 0 | 0 |
| Linear dimmer (0-100%) | 1 | 255 |
|  | 3 | 3 | Dimmer in 16 bit |  |  |
| Dimmer in 16 bit adjustment | 0 | 255 |
|  |  |  | CYM macros |  |  |
|  |  |  | The following functions will disable CMY,CTO, color wheel |  |  |
|  |  |  | No function | 0 | 7 |
|  |  |  | Color macro1 | 8 | 9 |
|  |  |  | Color macro2 | 10 | 11 |
|  |  |  | Color macro3 | 12 | 13 |
|  |  |  | Color macro4 | 14 | 15 |
|  |  |  | Color macro5 | 16 | 17 |
|  |  |  | Color macro6 | 18 | 19 |
|  |  |  | Color macro7 | 20 | 21 |
|  |  |  | Color macro8 | 22 | 23 |
|  |  |  | Color macro9 | 24 | 25 |
|  |  |  | Color macro10 | 26 | 27 |
|  |  |  | Color macro11 | 28 | 29 |
|  |  |  | Color macro12 | 30 | 31 |
|  |  |  | Color macro13 | 32 | 33 |
|  |  |  | Color macro14 | 34 | 35 |
| 3 | 4 | 4 | Color macro15 | 36 | 37 |
|  |  |  | Color macro16 | 38 | 39 |
|  |  |  | Color macro17 | 40 | 41 |
|  |  |  | Color macro18 | 42 | 43 |
|  |  |  | Color macro19 | 44 | 45 |
|  |  |  | Color macro20 | 46 | 47 |
|  |  |  | Color macro21 | 48 | 49 |
|  |  |  | Color macro22 | 50 | 51 |
|  |  |  | Color macro23 | 52 | 53 |
|  |  |  | Color macro24 | 54 | 55 |
|  |  |  | Color macro25 | 56 | 57 |
|  |  |  | Color macro26 | 58 | 59 |
|  |  |  | Color macro27 | 60 | 61 |
|  |  |  | Color macro28 | 62 | 63 |
|  |  |  | Color macro29 | 64 | 65 |
|  |  |  | Color macro30 | 66 | 67 |
|  |  |  | Color macro31 | 68 | 69 |
|  |  |  | Color macro32 | 70 | 71 |
|  |  |  | Color macro33 | 72 | 73 |
|  |  |  | Color macro34 | 74 | 75 |
|  |  |  | Color macro35 | 76 | 77 |
|  |  |  | Color macro36 | 78 | 79 |
|  |  |  | Color macro37 | 80 | 81 |
|  |  |  | Color macro38 | 82 | 83 |
|  |  |  | Color macro39 | 84 | 85 |
|  |  |  | Color macro40 | 86 | 87 |
|  |  |  | Color macro41 | 88 | 89 |
|  |  |  | Color macro42 | 90 | 91 |
|  |  |  | Color macro43 | 92 | 93 |
|  |  |  | Color macro44 | 94 | 95 |
|  |  |  | Color macro45 | 96 | 97 |
|  |  |  | Color macro46 | 98 | 99 |
|  |  |  | Color macro47 | 100 | 101 |
|  |  |  | Color macro48 | 102 | 103 |
|  |  |  | Color macro49 | 104 | 105 |
|  |  |  | Color macro50 | 106 | 107 |
|  |  |  | Color macro51 | 108 | 109 |
|  |  |  | Color macro52 | 110 | 111 |
|  |  |  | Color macro53 | 112 | 113 |
|  |  |  | Color macro54 | 114 | 115 |
|  |  |  | Color macro55 | 116 | 117 |
|  |  |  | Color macro56 | 118 | 119 |
|  |  |  | Color macro57 | 120 | 121 |
|  |  |  | Color macro58 | 122 | 123 |
|  |  |  | Color macro59 | 124 | 125 |
|  |  |  | Color macro60 | 126 | 127 |
|  |  |  | Color macro61 | 128 | 129 |
|  |  |  | Color macro62 | 130 | 131 |
|  |  |  | Color macro63 | 132 | 133 |
|  |  |  | Color macro64 | 134 | 135 |
|  |  |  | Color macro65 | 136 | 137 |
|  |  |  | Color macro66 | 138 | 139 |
|  |  |  | Color macro67 | 140 | 141 |
|  |  |  | Color macro68 | 142 | 143 |
|  |  |  | Color macro69 | 144 | 145 |
|  |  |  | Color macro70 | 146 | 147 |
|  |  |  | Color macro71 | 148 | 149 |
|  |  |  | Color macro72 | 150 | 151 |
|  |  |  | Color macro73 | 152 | 153 |
|  |  |  | Color macro74 | 154 | 155 |
|  |  |  | Color macro75 | 156 | 157 |
|  |  |  | Color macro76 | 158 | 159 |
|  |  |  | Color macro77 | 160 | 161 |
|  |  |  | Color macro78 | 162 | 163 |
|  |  |  | Color macro79 | 164 | 165 |
|  |  |  | Color macro80 | 166 | 167 |
|  |  |  | Color macro81 | 168 | 169 |
|  |  |  | Color macro82 | 170 | 171 |
|  |  |  | Color macro83 | 172 | 173 |
|  |  |  | Color macro84 | 174 | 175 |
|  |  |  | Color macro85 | 176 | 177 |
|  |  |  | Color macro86 | 178 | 179 |
|  |  |  | Color macro87 | 180 | 181 |
|  |  |  | Color macro88 | 182 | 183 |
|  |  |  | Color macro89 | 184 | 185 |
|  |  |  | Color macro90 | 186 | 187 |
|  |  |  | Color macro91 | 188 | 189 |
|  |  |  | Color macro92 | 190 | 191 |
|  |  |  | Color macro93 | 192 | 193 |
|  |  |  | Color macro94 | 194 | 195 |
|  |  |  | Color macro95 | 196 | 197 |
|  |  |  | Color macro96 | 198 | 199 |
|  |  |  | CMY color mixing fade from slow toast | 200 | 255 |
| 4 | 5 | 5 | Cyan |  |  |
| Cyan (Linear 0-100%) | 0 | 255 |
|  |  | 6 | Cyan in 16 bit |  |  |
| Cyan 16 bit adjustment | 0 | 255 |
| 5 | 6 | 7 | Yellow |  |  |
| Yellow (Linear 0-100%) | 0 | 255 |
|  |  | 8 | Yellow in 16 bit |  |  |
| Yellow 16bit adjustment | 0 | 255 |
| 6 | 7 | 9 | Magenta |  |  |
| Magenta (Linear 0-100%) | 0 | 255 |
|  |  | 10 | Magenta in 16bit |  |  |
| Magenta 16 bit adjustment | 0 | 255 |
| 7 | 8 | 11 | CTO |  |  |
| Linear CTO from high t low | 0 | 255 |
|  |  | 12 | CTO in 16 bit |  |  |
| CTO 16 bit adjustment | 0 | 255 |
| 8 | 9 | 13 | Color wheel |  |  |
| Continuous positioning |  |  |
| Indexing 0-360° | 0 | 63 |
| Positioning |  |  |
| Open | 64 | 67 |
| Open /Color1 | 68 | 71 |
| Color 1 | 72 | 75 |
| Color1/Color2 | 76 | 79 |
| Color2 | 80 | 83 |
| Color2/Color3 | 84 | 87 |
| Color3 | 88 | 91 |
| Color3/Color4 | 92 | 95 |
| Color4 | 96 | 99 |
| Color4/Color5 | 100 | 103 |
| Color5 | 104 | 107 |
| Color5/Color6 | 108 | 111 |
| Color6 | 112 | 115 |
| Color6 /Open | 116 | 119 |
| Open | 120 | 127 |
| Clockwise rainbow effect from slow to fast | 128 | 191 |
| Anti-clockwise rainbow effect from slow to fast | 192 | 255 |
|  | 10 | 14 | Color wheel in 16bit |  |  |
| Color wheel continuous positioning ,16bit adjustment | 0 | 255 |
| 9 | 11 | 15 | Iris |  |  |
| Linear iris from big to small | 0 | 255 |
|  |  | 16 | Iris in 16bit |  |  |
| Iris 16 bit adjustment | 0 | 255 |
| 10 | 12 | 17 | Iris macros |  |  |
| Disable iris macro | 0 | 10 |
| Iris macro1：Iris from big to small（speed from slow to fast） | 11 | 74 |
| Iris macro2：Iris from small to big（speed from slow to fast） | 75 | 138 |
| Iris macro3 : Iris contracts from slow to fast | 139 | 202 |
| Iris macro4(Macro1 at random) （from slow to fast） | 203 | 210 |
| Iris macro5(Macro2 at random) （from slow to fast） | 211 | 218 |
| Iris macro 6(Macro3 at random) （from slow to fast） | 219 | 226 |
| Open | 227 | 255 |
| 11 | 13 | 18 | Rotating gobo wheel 1 |  |  |
| Open | 0 | 31 |
| Gobo1 | 32 | 47 |
| Gobo2 | 48 | 63 |
| Gobo3 | 64 | 79 |
| Gobo4 | 80 | 95 |
| Gobo5 | 96 | 111 |
| Gobo6 | 112 | 127 |
| Clockwise rotation from slow to fast | 128 | 143 |
| Anti-clockwise rotation from slow to fast | 144 | 159 |
| Gobo1 shakes from slow to fast | 160 | 175 |
| Gobo2 shakes from slow to fast | 176 | 191 |
| Gobo3 shakes from slow to fast | 192 | 207 |
| Gobo4shakes from slow to fast | 208 | 223 |
| Gobo5shakes from slow to fast | 224 | 239 |
| Gobo6shakes from slow to fast | 240 | 255 |
| 12 | 14 | 19 | Gobo rotation |  |  |
| Indexing 0-360° | 0 | 128 |
| Clockwise rotation from slow to fast | 129 | 188 |
| Stop | 189 | 195 |
| Anti-clockwise rotation from slow to fast | 196 | 255 |
|  | 15 | 20 | Gobo rotation in 16bit |  |  |
| Gobo rotation 16 bit adjustment | 0 | 255 |
| 13 | 16 | 21 | Rotating gobo wheel 2 |  |  |
| Open | 0 | 31 |
| Gobo1 | 32 | 47 |
| Gobo2 | 48 | 63 |
| Gobo3 | 64 | 79 |
| Gobo4 | 80 | 95 |
| Gobo5 | 96 | 111 |
| Gobo6 | 112 | 127 |
| Clockwise rotation from slow to fast | 128 | 143 |
| Anti-clockwise rotation from slow to fast | 144 | 159 |
| Gobo1 shakes from slow to fast | 160 | 175 |
| Gobo2 shakes from slow to fast | 176 | 191 |
| Gobo3 shakes from slow to fast | 192 | 207 |
| Gobo4shakes from slow to fast | 208 | 223 |
| Gobo5shakes from slow to fast | 224 | 239 |
| Gobo6shakes from slow to fast | 240 | 255 |
| 14 | 17 | 22 | Gobo rotation |  |  |
| Indexing 0-360° | 0 | 128 |
| Clockwise rotation from slow to fast | 129 | 188 |
| Stop | 189 | 195 |
| Anti-clockwise rotation from slow to fast | 196 | 255 |
| Gobo rotation in 16bit |  |  |
|  | 18 | 23 | Gobo rotation 16 bit adjustment | 0 | 255 |
| Gobo rotation |  |  |
| 15 | 19 | 24 | Prism |  |  |
| No | 0 | 16 |
| Prism in | 17 | 255 |
| 16 | 20 | 25 | Prism rotation |  |  |
| Prism indexing | 0 | 127 |
| Stop | 128 |  |
| Clockwise rotation from slow to fast | 129 | 191 |
| Stop | 192 |  |
| Anti-clockwise rotation from slow to fast | 193 | 255 |
| 17 | 21 | 26 | Effect wheel |  |  |
| No | 0 | 19 |
| Effect wheel in | 20 | 255 |
| 18 | 22 | 27 | Effect wheel rotation |  |  |
| Clockwise rotation from fast to slow | 0 | 127 |
| Anti-clockwise rotation from slow to fast | 128 | 255 |
| 19 | 23 | 28 | Frost |  |  |
| Linear frost 0% - 100% | 0 | 255 |
| 20 | 24 | 29 | Focus |  |  |
| Linear focus | 0 | 255 |
|  |  | 30 | Focus in 16 bit |  |  |
| Focus 16 bit adjustment | 0 | 255 |
| 21 | 25 | 31 | Zoom |  |  |
| Linear Zoom | 0 | 255 |
|  |  | 32 | Zoom in 16 bit |  |  |
| Zoom 16 bit adjustment | 0 | 255 |
| 22 | 26 | 33 | Power/Special function |  |  |
| No function | 0 | 4 |
| Reserved | 5 | 19 |
| The following function must stay in the DMX range for more than 5s to activate it |  |  |
| Display on | 20 | 24 |
| Display off | 25 | 29 |
| Reserved | 30 | 44 |
| Reserved | 45 | 46 |
| Fan standard mode | 47 | 48 |
| Fan theater mode | 49 | 50 |
| Reserved | 51 | 52 |
| Fast dimmer speed | 53 | 54 |
| Medium dimmer speed | 55 | 56 |
| Slow dimmer speed | 57 | 58 |
| Gamma curve 2.0 | 59 | 60 |
| Gamma curve 2.2 | 61 | 62 |
| Gamma curve 2.4 | 63 | 64 |
| Gamma curve 2.6 | 65 | 66 |
| LED fresh rate 1200Hz | 67 | 68 |
| LED refresh rate 2400Hz | 69 | 70 |
| LED refresh rate 4800Hz | 71 | 72 |
| LED refresh rate 10000Hz | 73 | 74 |
| LED refresh rate 12000Hz | 75 | 76 |
| LED refresh rate 15000Hz | 77 | 78 |
| LED refresh rate 20000Hz | 79 | 80 |
| LED refresh rate 25000Hz | 81 | 82 |
| Reserved | 83 | 89 |
| Reserved | 90 | 94 |
| Reserved | 95 | 99 |
| Reserved | 100 | 129 |
| Reserved | 130 | 139 |
| Reserved | 140 | 149 |
| Color system reset | 150 | 159 |
| Gobo wheel reset | 160 | 169 |
| Reserved | 170 | 179 |
| Zoom/Focus/Frost/Prism reset | 180 | 189 |
| Other（effect wheel, iris）reset | 190 | 199 |
| Total reset | 200 | 209 |
| Reserved | 210 | 229 |
| Reserved | 240 | 255 |

Remarks:

1. Fan errors can result in LED lamp off automatically
2. DMX channel priority: CMY macro is prior to Magenta , Yellow and Cyan flags; Prism is prior to Frost
3. **ERROR MESSAGE**

The system can detect some errors during the reset, if 主页-错误警告.png displayed, press ENTER button to view the error.

The error messages are as follows:

|  |  |
| --- | --- |
| Name | Correction |
| Cyan | Check if wiring, positioning parts and motors are normal |
| Yellow | Check if wiring, positioning parts and motors are normal |
| Magenta | Check if wiring, positioning parts and motors are normal |
| CTO | Check if wiring, positioning parts and motors are normal |
| Color Wheel | Check if wiring, positioning parts and motors are normal |
| Rot. Gobo Wheel1 | Check if wiring, positioning parts and motors are normal |
| Rot. Gobo Rotation1 | Check if wiring, positioning parts and motors are normal |
| Rot. Gobo Wheel 2 | Check if wiring, positioning parts and motors are normal |
| Rot. Gobo Rotation2 | Check if wiring, positioning parts and motors are normal |
| Prism | Check if wiring, positioning parts and motors are normal |
| Prism Rotation | Check if wiring, positioning parts and motors are normal |
| Focus | Check if wiring, positioning parts and motors are normal |
| Zoom | Check if wiring, positioning parts and motors are normal |
| Effect wheel | Check if wiring, positioning parts and motors are normal |
| Effect wheel rotation | Check if wiring, positioning parts and motors are normal |
| Driver 1 | Check signal wire |
| Driver 2 | Check signal wire |
| Driver 3 | Check signal wire |
| Driver 4 | Check signal wire |
| Fan Board | Check signal wire |
| Time IC |  |

1. **TECHNICAL DATA**

|  |
| --- |
| **ELECTRIC PARAMETERS**  Input voltage 100V~240V AC，50/60Hz  Input power 1040W@220V AC  1090W @ 100V AC  Maximum current 11.0 A (100V)  Power factor PF>0.9 |
| **THE SPECIFICATIONS OF THE LIGHT SOURCE**  Power 800W  Color temperature 8000K  Rated life 20000hrs |
|  |
| **COLORS**  CMY linear mixing system with macros  1 color wheel: 6exchangeable colors+ Open  Half color effect, rainbow effect with bi-directional and variable speeds,  Stepping/linear color changing  **CTO**  0-100% linear CTO  **GOBO**  2Rotating Gobo Wheels: 6 replaceable gobos+ Open, Glass or Metal Gobo  Bi-directional Rotation with variable speeds  With Indexing Function  Gobo Shake Effect with Variable Speeds  Bi-directional Scrolling with Variable Speeds  Gobo outer size:37.5mm Gobo image size: 24mm |
|  |
| **PRISM** |
| 1pc of 4 facet prism , Bi-directional rotation with variable speeds and indexing function  **FROST**  1pc frost filter, linear frost effect( 0%-100%) |
| **EFFECT WHEEL**  1pc graphic effect wheel , replaceable, bi-directional rotation with variable speeds  **FOCUS**  DMX linear Focusing  **DIMMER**  0-100% Linear adjustment |
| **IRIS**  5-100% linear iris  With macros |
| **STROBE**  Double shutter blades, 0.3~25 F.P.S  TILT  270° |
|  |
| **BEAM ANGLE** |
| linear zoom 6°～ 56°(open hole)with 16 bit function |
| **CONTROL** |
| DMX512, 5 pin interfaces  RDM control protocol |
| 22channels in short mode,26channels in standard mode and33channels in extended mode  Master/Slave synchronized mode  Stand-alone mode |
|  |
|  |
| **OTHER FUNCTION**  Total hours displayable |
| English and Chinese menus  Built-in sensor diagnostic system  Software versions displayable  Input signal isolation |
| Modular Structure for easy maintenance |
|  |
| **HOUSING**  High temperature ABS+ High tensile cast aluminum , IP66 |
|  |
| **NET WEIGHT**  40Kg |
| **OPERATION TEMPERATURE**  -20℃～45℃  Note: If the ambient temperature is below -20°C, reset a projector before pre-heating it for more than 30 minutes |
| **SIZES (unit: mm)**    **SIZE OF MOUNTING HOLES IN THE BASE (Unit mm)**    **LIGHT OUTPUT** |

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1. **COMPONENT ORDER CODES**

|  |  |  |  |
| --- | --- | --- | --- |
| NAME | CODE NO. | QTY. | REMARKS |
| SWITCHING POWER SUPPLY | 6190000014A | 1 |  |
| SWITCHING POWER SUPPLY | 192010220A | 1 |  |
| LED MODULE | 150020323 | 1 |  |
| LED MODULE FAN | 030060109 | 4 |  |
| BLOWER FOR COLOR WHEEL | 030060094A | 1 |  |
| BLOWER FOR IRIS MODULE | 030060072A | 1 |  |
| FAN FOR SMALL POWER SUPPLY IN THE BASE | 030060052A | 1 |  |
| LED DRIVER FAN | 030060084 | 2 |  |
| FAN FOR BIG POWER SUPPLY IN THE BASE | 030060084 | 2 |  |
| FAN FOR LENS ACCESSORY 8025 | 030060112 | 1 |  |
| BLOWER FOR LENS ACCESSORY(ZOOM LENS ) | 030060072A | 1 |  |
| FOCUS MOTOR | 030040213A | 2 |  |
| ZOOM MOTOR | 030040154A | 2 |  |
| PRISM MOTOR | 030040203 | 1 |  |
| FROST MOTOR | 030040220A | 1 |  |
| PRISM ROTATION/ROTATING GOBO WHEEL MOTOR | 030040132A | 3 |  |
| GOBO ROTATION MOTOR | 030040293 | 2 |  |
| EFFECT WHEEL ROTATION MOTOR | 030040060 | 1 |  |
| COLOR WHEEL MOTOR | 030040221A | 1 |  |
| EFFECT WHEEL IN/OUT MOTOR | 030040236 | 1 |  |
| CMY MOTOR | 030040211A | 3 |  |
| CTO MOTOR | 030040211A | 1 |  |

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PR lighting will try its best to offer accurate and overall information about a product’s technical data. Any changes won’t be notified if necessary. Patented Products. Counterfeiting Will be Prosecuted!

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