**Operating Instructions for Waterproof Beam Light**



**Special Notes**

* While resetting, press the touch screen or the “OK” button and hold for 5 seconds to stop resetting.
* After power is on, press the “Confirm” button, or press the touch screen and hold to stop resetting and enter testing mode.
* Set DMX address as 512 and return to the interface. Press “512” on the touch screen and hold for 5 seconds, or press the “OK” button and hold for 5 seconds to either “Display” or “Hide” the logo.
* The pattern plate and color plate have automatic magnetic detection and error correction functions. When a Hall sensor is being installed and the channel value is 0, or when resetting calibration is used for fine tuning, make sure that it is magnetized. When resetting calibration range of the pattern plate and color plate exceed +/-20, zero-point error correction function will be disabled. If it can be magnetized, the user may find the pattern plate or color plate of a lamp losing its steps and pushes channel value to 0, the system will then perform resetting error correction for the pattern plate or color plate.
* Signal indicator:
  + Flickering of the ERR red indicator indicates an error. You may enter “Information”-> “Wrong system information” to view the error.
  + Normal lighting up of the DMX blue indicator indicates that DMX signal is received. Normal switching off of the DMX blue indicator indicates that there is no DMX signal.
  + If the blue indicator on the motor driver board flickers rapidly at an interval of 1 second, serial port signals transmitted from the display board are received. If it flickers slowly at an interval of 2 seconds, there is no serial port signal. Flickering of the lamp indicates that the system is running. Normal switching on/off of the indicator indicates a fault in the motor driver board.

Color temperature: 8000K

Lens: JING SAI optical lens

Horizontal: 540° Vertical: 270°

Light source:421W

Total power:650W

Waterproof grade: IP66

DMX512 signal control

Color plate: 14colors plus white light, and bidirectional speed change rainbow effect is available.

Rotary pattern plate: 17 fixed pattern plates plus white light

Atomization: 1 Atomization mirror

Biprism: 8 prisms and 8+16 prisms for bidirectional speed change rotation

Light dimming: 0-100%

Strobing: 1-13 times/second

Focusing: Electronic focusing

Light output angle: 1.9°-3°

Panel: LCD sensitive button

Appearance: Patented product of full PV+ fiber plastic outer shell

Hanging: Can be hung

Net weight: 26KG

Dimension: 43\*26\*63

## Channel function

## 3.1 Channel Table

|  |  |  |
| --- | --- | --- |
| **Channels** | **Channel mode** | |
| **16** | **20** |
| 1 | Color Wheel | Color Wheel |
| 2 | Dimming | Dimming |
| 3 | Shutter | Shutter |
| 4 | Gobo | Gobo |
| 5 | Prism 1 | Prism 1 |
| 6 | Prism 1 Rotation | Prism 1 Rotation |
| 7 | Prism 2 | Prism 2 |
| 8 | Frost | Frost |
| 9 | Focus | Focus |
| 10 | X | X |
| 11 | X Fine | X Fine |
| 12 | Y | Y |
| 13 | Y Fine | Y Fine |
| 14 | Prism 2 Rotation | Prism 2 Rotation |
| 15 | Reset | Reset |
| 16 | Lamp | Lamp |
| 17 |  | XY Speed |
| 18 |  | Color wheel Speed |
| 19 |  | Dimming - Prism - Frost Speed |
| 20 |  | Gobo Speed |
|  |  |  |

**Channel parameter values (full version) :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Channel** | | **Features** | **Channel values** | **Effects** |
| 1 | | Color Wheel | 000-004.  005-009  010-014  015-019  020-024  025-029  030-034  035-039  040-044  045-049  050-054  055-059  060-064  065-069  070-074  075-079  080-084  085-089  090-094  095-099  100-104  105-109  110-114  115-119  120-124  125-129  130-134  135-139  140-200.  201-255 | White Light  White light + Color 1  Color 1  Color 1+ Color 2  Color 2  Color 2+ Color 3  Color 3  Color 3+ Color 4  Color 4  Color 4+ Color 5  Color 5  Color 5+ Color 6  Color 6  Color 6+ Color 7  Color 7  Color 7+ Color 8  Color 8  Color 8+ Color 9  Color 9  Color 9+ Color 10  Color 10  Color 10+ Color 11  Color 11  Color 11+ Color 12  Color 12  Color 12+ Color 13  Color 13  Color 13+ white light  Positive flowing water (from fast to slow)  Backward flow (slow to fast) |
| 2 | | Dimming | 000-255. | Dark to light |
| 3 | | Shutter | 000-003.  004-250.  251-255. | Shutter off  Stroboscopic from slow to fast  Light gate on → (controlled by dimmer channel) |
| 4 | | Gobo | 000-004  005-009  010-014  015-019  020-024  025-029  030-034  035-039  040-044  045-049  050-054  055-059  060-064  065-069  070-074  075-079  080-084  085-089  090-094  095-099  100-104  105-109  110-114  115-119  120-124  125-129  130-134  135-139  140-200  201-255 | Gobo 1  Gobo 2  Gobo 3  Gobo 4  Gobo 5  Gobo 6  Gobo 7  Gobo 8  Gobo 9  Gobo 10  Gobo 11  Gobo 12  Gobo 13  Gobo 14  Gobo 1 Shake(from slow to fast)  Gobo 2 Shake(from slow to fast)  Gobo 3 Shake(from slow to fast)  Gobo 4 Shake(from slow to fast)  Gobo 5 Shake(from slow to fast)  Gobo 6 Shake(from slow to fast)  Gobo 7 Shake(from slow to fast)  Gobo 8 Shake(from slow to fast)  Gobo 9 Shake(from slow to fast)  Gobo 10 Shake(from slow to fast)  Gobo 11 Shake(from slow to fast)  Gobo 12 Shake(from slow to fast)  Gobo 13 Shake(from slow to fast)  Gobo 14 Shake(from slow to fast)  Backward running water (fast to slow)  Forward flow (slow to fast) |
| 5 | | Prism 1 | 000-127.  128-255. | None  Prism 1 Cut in |
| 6 | | Prism 1 Rotate | 000-127.  128-190.  191-192.  193-255. | Prism Angle adjustment  Reverse rotation (from fast to slow)  Stop  Forward rotation (slow to fast) |
| 7 | | Prism 2 | 000-127.  128-255. | None  Prism 2 Cut in |
| 8 | | Frost | 000-127.  128-255. | None  Frost cut in |
| 9 | | Focus | 000-255. | Gobo clarity from far to near |
| 10 | | X | 000-255. | Horizontal 540 degree scan |
| 11 | | X Fine | 000-255. | Horizontal 1.2 degree fine tuning |
| 12 | | Y | 000-255. | Vertical 270 degree scan |
| 13 | | Y Fine | 000-255. | Vertical 1.2 degree fine trim |
| 14 | | Prism 2 Rotate | 000-127.  128-190.  191-192.  193-255. | Prism Angle adjustment  Reverse rotation (from fast to slow)  Stop  Forward rotation (slow to fast) |
| 15 | | Reset | 000-025.  026-076.  077-127.  128-255. | None  Reset Effect  Reset XY  Reset All |
| 16 | | Lamp | 000-025.  026-100.  101-255. | None  Lamp Off  Lamp On |
| Expansion channel | | 17 | XY Speed | 000-255. |
|  | 18 | Color wheel Speed |  | Speed from fast to slow |
| 19 | Dimming - Prism - Frost Speed |
| 20 | Gobo Speed |
|  |  |

Common faults

According to some common faults, the corresponding solutions are put forward. Any problems that cannot be solved should be dealt with by professionals. Disconnect the light fixture from the power supply before maintaining it.

#### The light bulb is not working

* Check that the voltage that matches the light fixture is installed;
* Check whether the lamp power supply connection or control switch is in poor contact;
* Check whether the power supply is insufficient;
* Check that the DMX512 controller is sending instructions.

#### The light fixture does not accept control from the console after normal reset

* Check luminaire digital start address value and function options are correct;
* Check whether the connection of the communication control line is correct, the communication line is too long or has been interrupted;
* Check whether the control equipment is invalid, check whether the signal amplifier connected to the series is invalid;
* Check whether the communication line is too long or other devices interfere with each other;
* Optimize wiring, shorten the length of the control signal line, high-voltage and low-voltage lines separate wiring;
* Add signal amplifiers;
* Signal line using high quality shielded twisted pair wire;
* Connect the signal terminal resistor (120 ohms) at the end of the lamp.

#### Luminaire does not start

* Check that the power supply parameters are consistent with the luminaire;
* Check the lamps in the long distance transportation process due to extrusion deformation, internal parts vibration, moisture and other reasons, resulting in poor contact

Or fall off.

* Please check whether the internal wire integration connector of the lamp has fallen off and is loose.
* Check whether the electronic components of the lamp (such as electronic transformer, PCB board, motor control board, etc.) are loose, short circuit and burned out.

#### When working, the action of the X axis or Y axis of the luminaire is abnormal

* Check them one by one by following the previous step;
* Check whether the transmission belt corresponding to the X and Y axis direction in the lamp falls off and breaks;
* Check whether the data feedback receiver (optocoupler) corresponding to the X and Y directions in the lamp is damaged;
* Restart and reset once.