# Your Pixel Store - Starlight 350w

Please read the instructions carefully before use

# catalogue

# 1. Precautions and installation precautions and installation

1.1 statement

Thank you for choosing our companys products! The product leaves the factory in good condition with complete packaging. To ensure your safe and effective use, please read this user manual carefully and thoroughly before using the product. This manual contains important information about installation and usage. Please follow the instructions for installation and operation. Also, keep this manual properly for easy reference at any time. Our company does not assume responsibility for any damage to the lamps or other performance issues caused by personal failure to follow the instructions during installation, use, or maintenance.

## 1.2 Maintenance and maintenance

- Please disconnect the power before maintenance.
- The lamp should be kept dry and should not be used in a humid environment.
- Intermittent use will effectively extend the life of this lamp.
- In order to obtain good ventilation and lighting effect, attention should be paid to regular cleaning of fans, fan nets and lenses. Units should be cleaned during the off-season to extend the life of the unit
- Do not use alcohol and other organic solvents to wipe the lamp shell, so as not to cause damage.

- IT IS HIGHLY RECOMMENDED NOT TO LEAVE THE UNIT OUT YEAR-ROUND IN THE ELEMENTS. WE HIGHLY RECOMMEND THEY ARE BROUGHT IN WHEN NOT IN USE TO PREVENT DAMAGE TO THE UNITS AND TO DO MAINTAINCE ON THE UNITS.

## 1.3 Product precautions

- This lamp is for professional use only.
- Ensure that the power supply voltage is consistent with the required power supply voltage before operation.
- Do not store this product in a place where it is easy to loosen or shake.
- During use, if the lamp is abnormal, stop using the lamp in time.
- To ensure the service life of the product, do not place the product in a damp or water leakage place, and do not work in an environment with a temperature of more than 120 degrees Fahrenheit.
- After power failure, the lamp should be fully cooled after 20 minutes before being re-powered.
- When the bulb is used, the power supply voltage should not change more than ± 10% during use. If the voltage is too high, the life of the bulb will be shortened; if the voltage is too low, the color of the bulb will be affected.
- The rotating parts and bonding accessories of the lamp must be checked regularly, and the loosening and shaking should be reinforced in time to prevent accidents.
- Please read this manual carefully to ensure the normal use of this product.

## 1.4 Product Introduction

- Light source power: 380W;
- Voltage:AC90~240V/50~60 Hz;
- Color disk: each color disk consists of 13 color pieces + white light;
- Pattern disk: 14 pattern effects;
- 540° translation, 270° tilt.
- overheat protection;
- Control mode: DMX512/main/sub/auto;
- IP 65 protection class

## 1.5 Signal line connection

The lamp is equipped with standard DMX input and output 3-pin or 5-pin XLR sockets. Please use a DMX 512 shielded twisted pair signal cable; the signal cable is generally connected over a distance of 150 meters, and a DMX 512 signal amplifier must be added for long-distance signal transmission.

Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and then from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lights are connected. Then install a terminal plug on the last 3-pin socket of each connection. (Weld a 4/1W, 120 Ω resistor between pins 2 and 3 of the 3-pin XLR connector). https://yourpixelstore.com/product/dmx-xlight-compatible-cables/

This cable will work with xLights controllers: https://yourpixelstore.com/product/dmx-xlight-compatible-cables/

Important note: The wires should not touch each other or the metal casing.

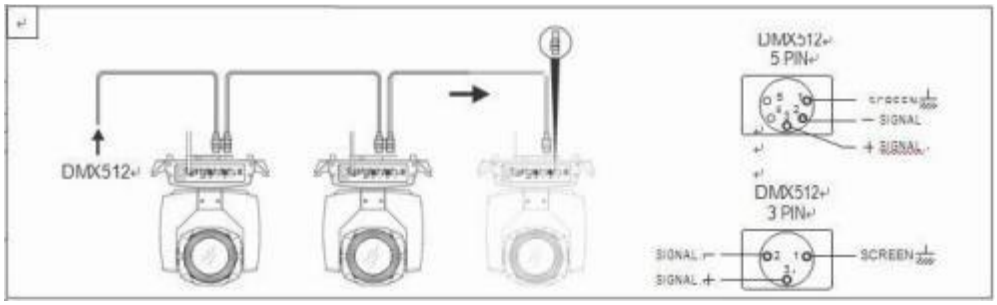


Figure 1 DMX signal line connection diagram

- Lamp starting address code calculation method:

The starting address code of the current lamp is equal to (the starting address code of the previous lamp) + (the number of channels of the lamp)
Note:

1: The starting address code value of the first lamp is A001.

2: The basic channel number of the controller should be greater than or equal to the total number of lamps used.

3: Note: When using any controller, each lamp must have its own starting address code. If the starting address code for the first lamp is set to A001, and the number of channels per lamp is 16 CH, then the starting address code for the second lamp should be set to A017; the starting address code for the third lamp should be set to A033; and so on. (This setting method also depends on the specific control panel.)

## 1.6 Lighting installation

The lamp can be placed horizontally, hung at an angle and hung upside down. When hanging at an Angle or upside down, the installation method must be paid attention to.

As shown in Figure 2, before positioning the lamp, the stability of the installation site should be ensured. When the lamp is suspended in reverse, it must be ensured that the lamp does not fall off the support frame. The lamp should be suspended with a safety rope through the support frame and the lamp handle to ensure safety and prevent the lamp from falling and sliding.

When the lamp is installed and adjusted, pedestrians are not allowed to pass under it. Check regularly whether the safety rope is worn out or the hook screws are loose.

If the consequences of the fall of the lamp are caused by the unstable hanging installation, our company shall not be liable for any consequences.

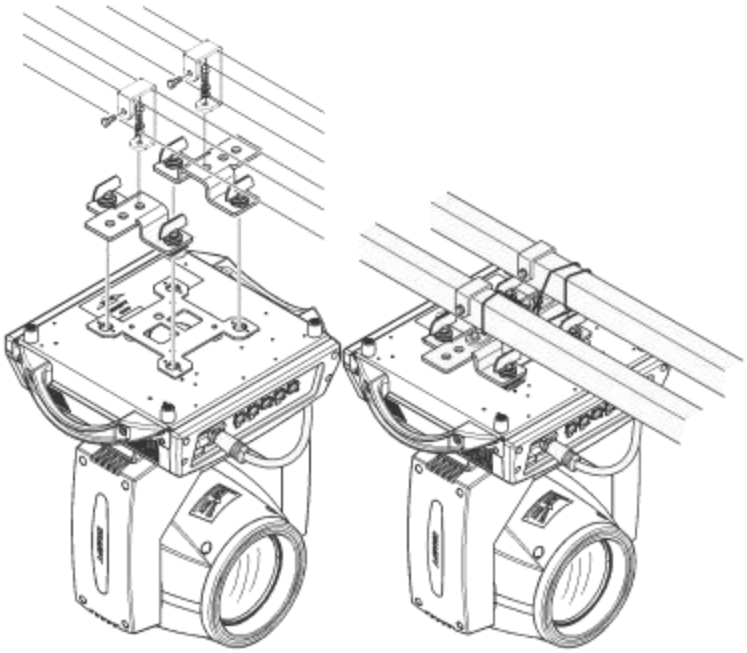

Figure 2 is a schematic diagram of an inverted lamp

# 2. Control panel

## 1. Main menu on the screen:

The lamp uses a TFT 1.77 inch touch display screen. The main highlights of this version of the product:

1: The chip uses the fastest CPU in this series in the world so far, and refuses to flash screen, interface drag and slow phenomenon.

2: The programming gives up mainstream programming languages and refuses the long code of mainstream programming languages, which leads to slow carding. It uses the most lightweight underlying core programming language in the world to write, which mainly emphasizes the exquisite and detailed code, small size and large function, so that the interface can be optimized and the efficiency can be fully utilized. Small size can also run smoothly.

3: Unique user program programming function and interface style, intuitive interface, more flexible and multi-use operation, make the small screen instantly become a large console, so that outdoor landmarks and other occasions can be used without expensive consoles, or console programming online synchronous operation.

4: The original ordinary console setting address code function without RDM function, so as to avoid the adventure of climbing up the lamp hanging several meters high to set the address code, and easily achieve different address code setting for each lamp with an ordinary console. (RDM function will be added in the later version)

5: Optional default channel order or optional custom change channel order function.

6: The maximum horizontal/vertical speed can be customized.

7: The interface color is optional, etc.

The main panel is shown in the following figure:

Panel description:

| | |
|---|---|
| DMX | DMX signal indicator light |
| AUDIO | The indicator light when the voice control is triggered |
| Up | Select up on the menu |
| Down | Select the menu from the bottom up |
| Left | Select / return to the left of the menu |
| Right | Select the menu to the right |
| ENTER | Confirm button |
| Time on the left side of the screen | Total system usage time (can be turned off in standard Settings) |
| Time on the right side of the screen | Total power on time (can be turned off in standard Settings) |
| Vertical signal above the screen | Current DMX signal connection signal strength Red: No signal. White: Current signal strength |
| Square icon in the upper right corner of the screen | Green: normal, no error |
| | Red: There is an error (click the icon or Information Menu / Error Information / View to view the error |

## 2. System starts as shown in the following figure:

After the system is powered on, it displays a graphical interface to reset and initialize the entire system. It will also check the functional status of the system. If there are errors or any function is malfunctioning, a red square will appear in the upper right corner of the screen after the reset is complete, indicating an error. You can view the error information under "Information Menu / Error Information / View." Normally, it is green.


After the reset is completed, the main interface is shown as follows. Different UI color styles will have different display effects, which can be set in the standard Settings.


00000:26
00:02:21
BEAM
001


00000:27
00:03:14
BEAM
001





Press any key to enter the system menu, as shown below:



System menu description:

| | | |
|---|---|---|
| opposite direction | Reve | Make the screen display reverse display |
| withdraw from | Exit | Exit to the home screen |
| Lang | language | You can choose between Simplified Chinese and English |
| Standard Settings | Standard | Address code and some commonly used function Settings |
| advanced setup | Advanced | Main debugging parameter setting at factory |
| system info | Info | Display of error, software version and other information |
| manual | Program | Manual control operation, or edit user |

| | | |
|---|---|---|
| programming | | program |
| test run | Perform | Automatic or voice-controlled operation of built-in programs and user programs |
| system reset | Reset | The system is reset to the initial position |
| | | |

password authentification.

# 2. Menu description:

| | | | |
|---|---|---|---|
| Standard Settings Standard | Restore default Default set | confirm? Enter ? | Restore factory default parameters |
| | Address Settings Address | 001-512 | Set the address code of the lamp |
| | channel pattern DMX mode | Pattern 1 Mode 1<br>Pattern two Mode 2<br>Pattern 3 Mode 3<br>Pattern 4 Mode 4 | Select DMX control mode |
| | Shortest distance Effect mode | No/Yes | The effect disk automatically finds the shortest distance to rotate move |
| | Start the lights Started lamp | On / off | Select whether to turn on the bulb each time "close" |
| | Manual lighting Switch lamp | On/Off | Turn on the light bulb manually |
| | No signal No signal | Zero Clear Hold | Keep the DMX value or clear the DMX channel value when there is no DMX signal |
| | Appearance selection UI Color | army green Green<br>sapphire blue Blue<br>Sajin Golden<br>Gray | Select the screen menu color |

| | | | |
|---|---|---|---|
| | Show time<br>Show time | No/Yes | The run time timer is displayed on the main interface |
| | Brightness adjustment<br>Brightness | 000-255 | Adjust screen brightness |
| | Screen protection<br>Screensaver | On / off | Turn off the screen when there is no touch or button operation |
| | XY encoder XY encoder | No/Yes | Cancel or use the XY automatic correction function |
| | The horizontal is reversed<br>X inversion | No / Yes | Select X-axis forward or reverse operation |
| | Vertical reverse Y inversion | No / Yes | Select the Y-axis forward or reverse operation |
| | Adjust focus in reverse<br>Focus inversion | No / Yes | Select the focus axis to run in the forward or reverse direction |
| | Zoom in reverse<br>Zoom inversion | No/Yes | Select the forward or reverse operation of the magnification shaft |
| | | | |
| advanced setup<br>Advanced | This setting is the main parameter setting for the lamp, which requires permission | | |

| | | | |
|---|---|---|---|
| advanced setup<br>Advanced | This setting is the main parameter setting for the lamp and requires permission | | |
| | | | |
| system info<br>Info | Error list<br>Error List | No errors / View No error / View | Click OK to check if there is no error or there is an error<br>Look at the errors |
| | System version<br>System ver | Vxxxxxxx | System version information |
| | Equipment serial number<br>Serial NO. | xxxxxxxx | Equipment factory number |
| | System total time SYS timer | 00000.0H | Total system operating time (hours) |
| | Start time Run timer | 000:00 | Operating time after power on (hours) |
| | Total lighting time Lamp timer | 00000.0H | Total time (hours) for the bulb to light up |
| | Equipment temperature Equip TEMP | 000 | The temperature of the main parts of the equipment (equipment required<br>support) |
| | Lamp head temperature Head TEMP | 000 | The temperature of the lamp head position of the equipment (equipment is required<br>support) |
| | Fan 1 speed FAN 1 Speed | 0000 RPM | Speed of fan 1 (equipment support required<br>hold) |
| | Fan 2 speed FAN 2 Speed | 0000 RPM | Speed of equipment fan 2 (equipment support required<br>hold) |
| | | | |

| | | | |
|---|---|---|---|
| Test run perform | Run mode Run mode | Automatic /Sound Auto/Sound | Automatically or by voice control, run selected programs |
| | Running speed Run speed | 255 | Set the speed of the automatic operation program |
| | Run the slide Run cross | 255 | Set the automatic or voice-controlled operation of the slide (required Equipment support required) |
| | Built-in program one Built -in 1 | On/Off | Built-in test program 1 |
| | Built-in program two Built -in 2 | On/Off | Built-in test program 2 of the device |
| | User program 1 User PRO 1 | On / off | User self-programmed program 1 |
| | User program 2 User PRO 2 | On / off | User self-programmed program 2 |
| | User Program 3 User PRO 3 | On/Off | User self-programmed program 3 |
| | User program four User PRO 4 | On/Off | User self-programmed program 4 |
| 19 | | | Adjust the speed of the prism and the atomizer |

| | | | |
|---|---|---|---|
| | Figure square Shpae shape | On / off | (continue to have) |
| | Graphic amplitude Shape range | 000 | (continue to have) |

| | | | |
|---|---|---|---|
| | Voice control sensitiv ity Sound DB | 000 | Adjust the sensitivity of the sound control |
| | | | |
| Manual program ming Program | (See details on the next page) | | |
| | | | |
| system reset Reset | The system is reset to the initial position | | |

## 3. Manual control or programming function description:

1: This function can program up to 4 user programs, which can be run in series. That is, the 4 programmed programs can be switched on simultaneously in the "Test Run" function. When running, it starts with Program 1, then moves to Program 2, then to Program 3, followed by Program 4, and finally loops back to Program 1, continuing in this manner. Of course, you can also run them individually.

2: What can be done by the programming function button:



Select program, read program, select step, delete step, manual or console input, copy current step, paste to selected step,

Clear the current step, save

to the selected program

space manual control:

Manually / console operation buttons up, down, left and right and the confirm key to select the mode button to manual position


Then press the up, down, left and right keys and the confirm key to make the corresponding channel red, and press the up and down keys to control manually.

# 4. Manual control programming:

Select PRO1-4 that needs to be saved, set the step channel value manually and click step (digital button is step)

as shown in the figure 

Press the up and down buttons to go to the next step. Then manually control the setting channel value, and the next step is similar.

## Step to delete:

If there are too many programming steps, you can delete the subsequent ones. Select the step button, press the "Next" button, and go back to the step that is not needed. At this point, the step number will display as> 0 XX. Hold down the confirm key for 3 seconds, and the subsequent steps can be deleted. The display will change to =0 XX. Copy step:

Press the copy button to copy all channel values of the current step and temporarily store them in the memory paste board.

## Paste step:

After completing the copy, you can select any step and paste the channel value of the paste board to the current selected step channel.

## Zeroing step:

Press the zero button to reset the channel value of the current step.

# 5. Console control programming:

This device provides a more convenient console input programming function, and can also use this function to enter the console program step by step, Implement the function of copying the program compiled by the console.

As shown in the figure, select console for manual/control panel input mode.


At this time, all channel values are input by DMX console, manual invalid, paste invalid, zero invalid, and all channel values are displayed in real time DMX values.

At this time, programming only needs to be input on the console or run the programmed steps step by step on the console, that is, input the console program. Here, this device only needs to click the number of the next step and press the arrow to realize programming.

# 6. Save program:

After manually inputting or entering each step through the console, you can save this programming session. Please confirm that the selected save location is PRO1--PRO4. Note that the save step length should be a value where to=0 XX, meaning it equals the step value, not a value where to>0 XX. Any extra steps that follow should first be deleted according to (Delete Steps), and then save again.

# Read out the program and re-edit the program:

As shown in the figure, select PRO1--PRO 4 that needs to be read out, then click the step button and press the <down> button to display "Read". At this time

Press the OK key to read the selected program. The value displayed after reading is the maximum step of the current program. If the program is empty, it will be displayed as "Empty" or "No".



At this point, you can edit the program that has been read out. After editing, save the current program by pressing Save, or save in another PRO1--PRO 4 space.

## 7. Running program:

If you need to run the programmed and saved program, please return to the Test Run / Perform function menu, click the corresponding user program, and switch to Open



Control panel address

code function

description: please

contact the supplier

for this function.

### Channel parameter values (full version):

| 16-channel mode | | | |
|---|---|---|---|
| channel | function | numeric value | effect |
| CH1 | horizontal | 0-255 | 0-540° |
| CH2 | perpendicular | 0-255 | 0-270° |
| CH3 | Level fine- | 0-255 | 0-2.1° |

| | | | |
|---|---|---|---|
| | tuning | | |
| CH4 | Vertical fine-tuning | 0-255 | 0--1.0° |
| CH5 | Horizontal and vertical velocity | 0-255 | Fast-slow |
| CH6 | Fogging + Rainbow | 0-79 | not have |
| | | 80-159 | atomization |
| | | 160-255 | colorful |
| CH7 | strobeflash | 0-3 | close |
| | | 4-103 | Stroboscopic slow-fast |
| | | 104-107 | open |
| | | 108-207 | Pulse flash slow-fast |

| | | | |
|---|---|---|---|
| | | 208-212 | open |
| | | 213-251 | Random flash slow-fast |
| | | 252-255 | open |
| CH8 | aiming | 0-255 | Out-bright |
| CH9 | pigment | 0-3 | white light |
| | | 4-7 | White light + color 1 |
| | | 8-11 | Color 1 |
| | | 12-15 | Color 1 + color 2 |
| | | 16-19 | Color 2 |
| | | 20-23 | Color 2 + color 3 |
| | | 24-27 | Color 3 |
| | | 28-31 | Color 3 + color 4 |
| | | 32-35 | Color 4 |
| | | 36-39 | Color 4+ color 5 |
| | | 40-43 | Color 5 |
| | | 44-47 | Color 5 + color 6 |
| | | 48-51 | Color 6 |
| | | 52-55 | Color 6 + color 7 |
| | | 56-59 | Color 7 |
| | | 60-63 | Color 7 + color 8 |
| | | 64-67 | Color 8 |
| | | 68-71 | Color 8 + color 9 |
| | | 72-75 | Color 9 |
| | | 76-79 | Color 9 + color 10 |
| | | 80-83 | Color 10 |
| | | 84-87 | Color 10 + color 11 |
| | | 88-91 | Color 11 |
| | | 92-95 | Color 11 + color 12 |
| | | 96-99 | Color 12 |
| | | 100-103 | Color 12 + color 13 |
| | | 104-107 | Color 13 |
| | | 108-127 | Color 13+ white light |
| | | 128-191 | The rainbow effect is fast -slow |
| | | 192-255 | Rainbow effect reversed slow-fast |
| CH10 | Color effects | 0-127 | Step and speed adjustment |
| | | 128-255 | Microstepping and speed control |
| CH11 | pattern | 0-8 | Pattern 0 |
| | | 9-17 | Pattern 1 |
| | | 18-26 | Pattern 2 |
| | | 27-35 | Pattern 3 |

| | | | |
|---|---|---|---|
| | | 36-44 | Pattern 4 |
| | | 45-53 | Pattern 5 |

| | | | |
|---|---|---|---|
| | | 54-62 | Pattern 6 |
| | | 63-71 | Pattern 7 |
| | | 72-80 | Pattern 8 |
| | | 81-89 | Pattern 9 |
| | | 90-98 | Pattern 10 |
| | | 99-107 | Pattern 11 |
| | | 108-116 | Pattern 12 |
| | | 117-127 | Pattern 13 |
| | | 128-191 | The rainbow effect is reversed, slow-fast |
| | | 192-255 | Rainbow effect reversed slow-fast |
| CH12 | Pattern jitter | 0 | No jitter |
| | | 1-191 | Shake slow-fast |
| | | 192-2 | No-jitter |
| CH13 | focus | 0-255 | Near-far |
| CH14 | Prism 1 | 0-4 | No prism |
| | | 5-19 | prism |
| | | 20-139 | angle |
| | | 140-197 | clockwise rotation |
| | | 198-255 | contrarotate |
| CH15 | Prism 2 | 0-4 | No prism |
| | | 5-19 | prism |
| | | 20-139 | angle |
| | | 140-197 | clockwise rotation |
| | | 198-255 | contrarotate |
| CH16 | reset Switch the bubble | 0-99 | Invalid area |
| | | 100-105 | Delay the switch |
| | | 106-199 | not have |
| | | 200-205 | Half power on (if applicable) |
| | | 206-249 | not have |
| | | 250-255 | Delayed opening |

## 3. Common faults

For some common faults, corresponding solutions are proposed. Any problems that cannot be solved should be handled by professionals. Before maintaining the lamp, please disconnect the power first.

1. The bulb does not light up

- Check whether the voltage matching with the lamp is installed;
- Check whether the power supply connection or control switch of the lamp is in poor contact;

- Check if the power supply is insufficient;
- Check if the DMX 512 controller has sent a command.

### 2. The lamp does not accept the control of the console after normal reset

- Check whether the digital start address value and function options of the lamp are correct;
- Check whether the connection of communication control lines is correct, and whether the communication lines are too long or have been interrupted;
- Check whether the control equipment is failed, check whether the serial connection signal amplifier is failed;
- Check whether the communication line is too long or there is interference from other equipment;
- Optimize wiring, shorten the length of control signal lines, high voltage and low voltage lines are separated;
- Add signal amplifier;
- Signal lines are made of high quality shielded twisted pair;
- Connect a signal terminal resistor (120 ohms) at the end of the lamp.

### 3. The lamp cannot start

- Check whether the power supply parameters are consistent with the lamp;
- Check that the lamp is deformed due to compression, vibration of internal parts, moisture and other reasons during long-distance transportation, resulting in poor contact or falling off.
- Please check whether the internal wires of the lamp are loose or disconnected.
- Check whether the electronic components of the lamp (such as electronic transformer, PCB board, motor control board, etc.) are loose, short circuit and burn out.

### 4. When working, the X-axis or Y-axis of the lamp does not work properly

- Check each step in turn;
- Check whether the transmission belt corresponding to the X and Y axis direction in the lamp is fallen off or broken;
- Check whether the data feedback receiver (optocoupler) corresponding to X and Y direction in the lamp is damaged;
- Restart and reset once.