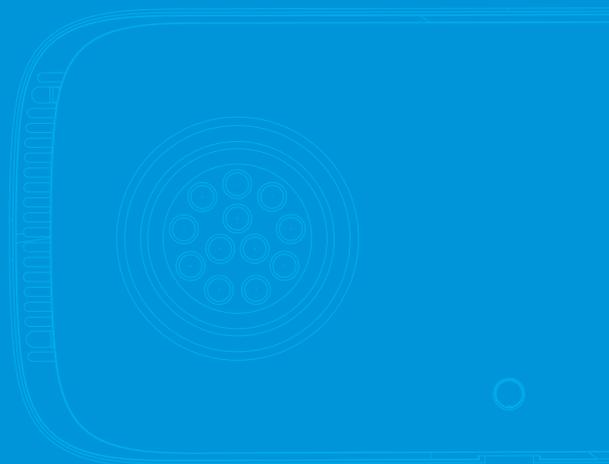


# Keloray



# User Manual

## AR150

[www.kelolight.com](http://www.kelolight.com)

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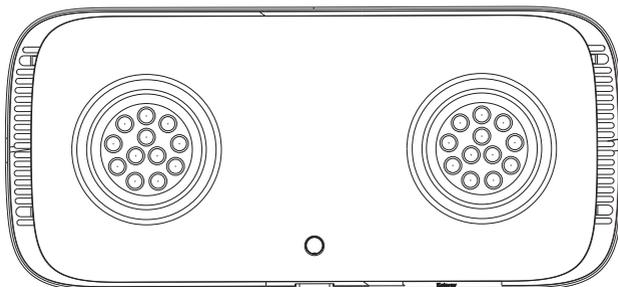
# Get Started

Thank you for choosing Keloray AR150 series as your LED lighting system.

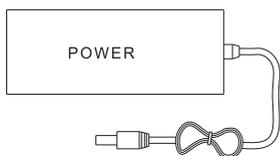
## SAFETY INSTRUCTIONS

- Never look directly at the LEDs, as the light emits from LEDs can cause eye or skin damage. UV emits from this product can cause permanent damage to eyes or skin. Please minimize exposure of your eyes and skin directly to the LEDs.
- A drip loop must be used with all electrical aquarium devices. A drip loop is self-made by installing part of the power cord looping down below the power socket.
- Keloray is not responsible for problems, your personal safety or equipment damage caused by your mishandling of the product.
- Check the power cord, plug and socket are intact.
- Before installing, please read all state and local laws, make sure you use a compliant power adapter.
- Ask a qualified person for the wiring installation.
- Install the light fixture securely so no risk of contact with water.
- Do not put anything on the product.
- Avoid objects entering the unit. Keep the slot and ventilation openings clean, they should not be blocked or covered.
- Do not allow water to splash, or place unit in the water.
- If the light fixture or power supply becomes damaged, please have it repaired or replaced by a professional person.

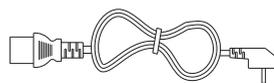
# INSIDE THE BOX



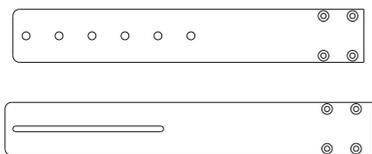
AR150 X 1



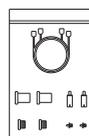
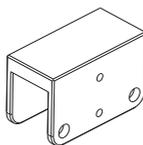
Power Adapter X 1



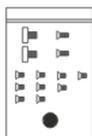
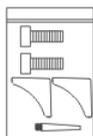
Power Cord X 1



Bracket X 1



Pendant Cord X 1



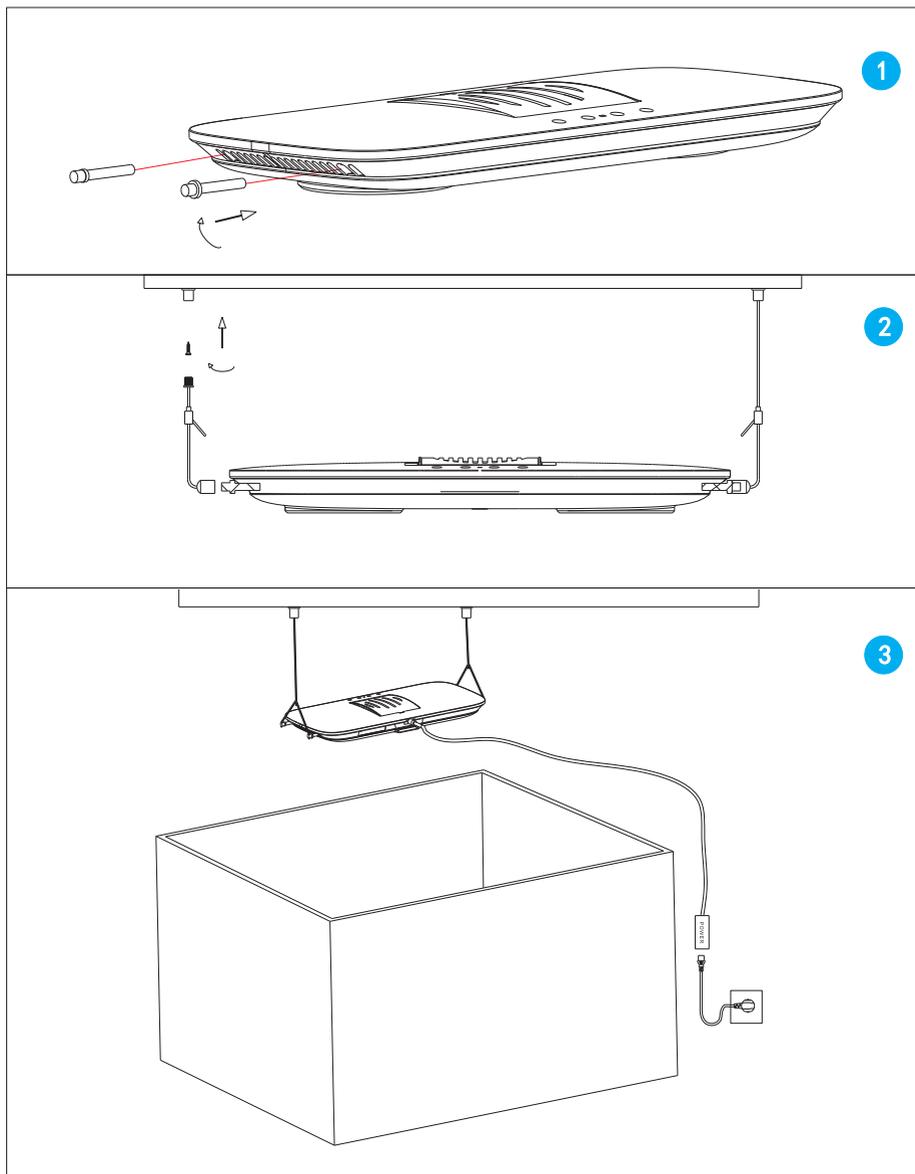
Accessories Bags X 2



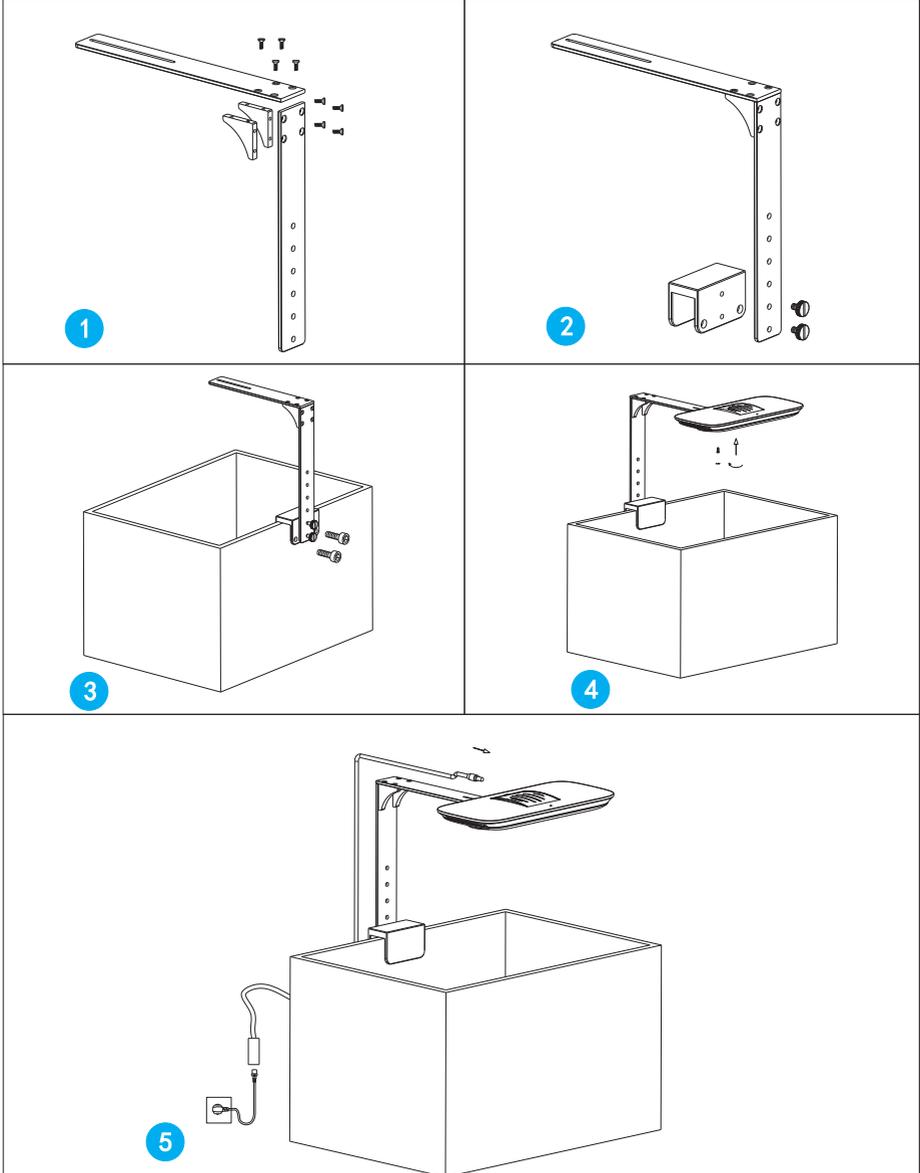
User Manual X 1

# Installation

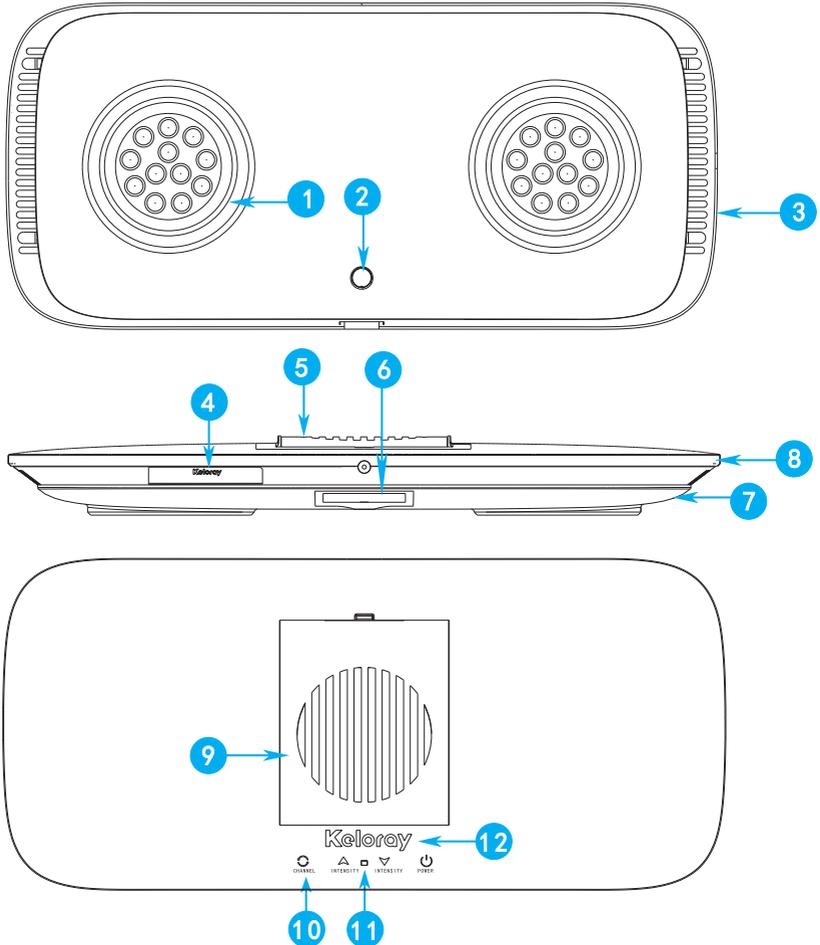
## 1. Mounting the pendant



## 2. Mounting the bracket



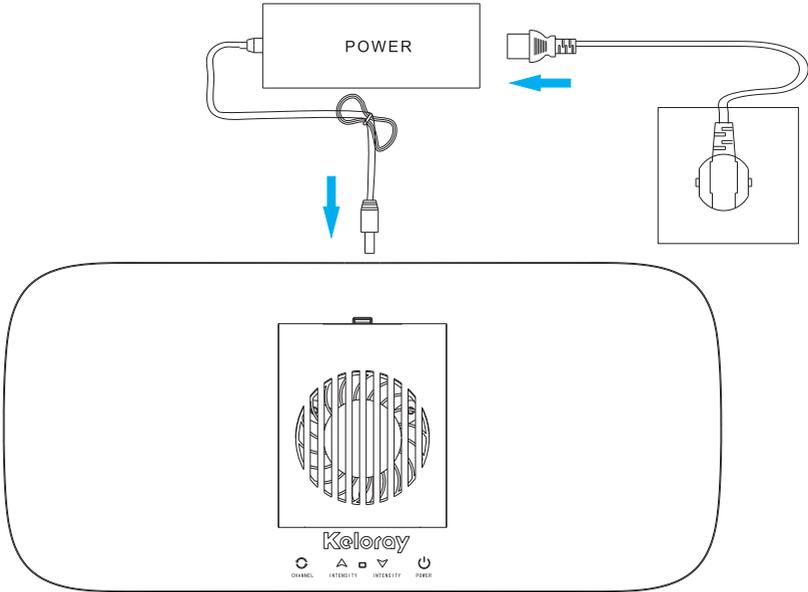
# Description



- |                        |                  |                           |
|------------------------|------------------|---------------------------|
| ① LED Array            | ⑤ Fan(Air Inlet) | ⑨ Dust-proof Net          |
| ② Mounting Fixed Screw | ⑥ Mounting Guide | ⑩ Touch Sensitive Buttons |
| ③ Vent                 | ⑦ Lamp Housing   | ⑪ WiFi Indicator Light    |
| ④ Label                | ⑧ Hanging Hole   | ⑫ Logo                    |

# Start Lamp

Connect the AR150 to the power adapter and plug into a wall outlet.



## Product Specifications

Dimensions and Weight	
Lamp Size	L350*W160*H30 mm
Color Inner Box Size	L480*W280*H65 mm
Outer Canton Size	L500*W300*H80 mm
Net Wight(Lamp Body)	2.7 kg
Gross Wight(Lamp+Accessories)	3.2 kg
Power Supply	
Input Voltage	100-240V AC
Output Voltage	24V DC
Power Consumption	150W

## Touch-sensitive Buttons Operate Instructions

- ▲ Please keep the light buttons clean and dry, also make sure your fingers are dry, otherwise touching keys may fail.

### On/Off Button

Touch the (  ) button to turn on the AR150. Touch the button once more will turn the light off. When you turn on the AR150, brightness will increase step by step in order to protect eyes.



### Color Switch Button

Touch the cycle (  ) button can switch the color, then adjust the color intensity by up and down buttons. Default programs can be customized through the app.



### Cycle Color Up Button

The (  ) button has five cycle brightness steps, brightness from 1-2-3-4-5.



### Cycle Color Down Button

The (  ) button has five cycle brightness steps, brightness from 4-3-2-1-0.



Touch the "intensity up" and "intensity down" buttons simultaneously for 3 seconds until you hear a "beep", release fingers, touch buttons are now unlocked. The touch buttons will automatically lock when they are not operated for five minutes to prevent accidental operation of the unit.

# WiFi Controller App User Manual

Keloray WiFi controller has two different connection modes.

## 1. Connect Light Directly

Press ( ▼ ) and ( Ⓞ ) simultaneously until you hear "beeps" from the light, release fingers. The unit is now operating in "Connect Light Directly" mode.

- Factory default connect mode.
- Wireless router is not necessary.
- Can't use WiFi network or cellular data.
- Can't make group lights programming.

## 2. Connect Wireless Router

Press ( ▲ ) and ( Ⓞ ) simultaneously until you hear "beeps" from the light, release fingers. The unit is now operating in "Connect Wireless Router" mode.

- Phone can connect to internet and control light at the same time.
- Both the mobile phone and aquarium light need to be connected to the wireless router.
- One mobile phone device can program a group of lights at the same time in this mode.

### WiFi Signal Indicator Light

Blue Indicator Light	Means
<b>Indicator light turns off after 3 seconds</b>	Lamp is working under "connect light directly" mode. (When power is turned on, the indicator light will be off a few seconds, indicating that WiFi is working under the "connect to light" mode).
<b>Indicator light flashes twice then turns off</b>	WiFi working under the router mode and waiting for configuration status. (When WiFi is in network mode, but the indicator light is not on, the light needs manual setting to connect light to router).
<b>Indicator light flashes three times then turns off</b>	WiFi working under network mode, error occurred while connecting to the home router, which may be a password error or router is turned off.
<b>Indicator light continuous flashing</b>	Transmitting data.
<b>Indicator light off</b>	No transmitting data.
<b>Indicator light stays on</b>	Normal operation.

# Connection

## Download APP

- iOS Operating System 9.3.1 or above is recommended.
- iOS device opens "Apple store" to search and download the "Keloray" App.
- Android device opens "Google Play" to search and download the "Keloray" App.

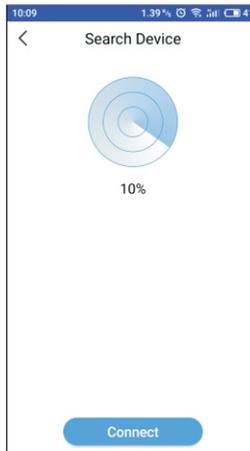


## Connect Light Directly

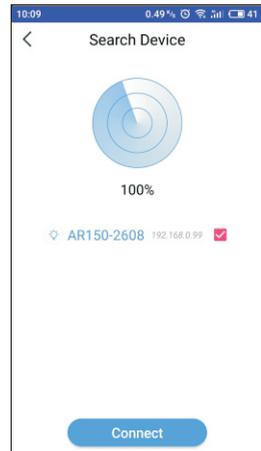
1. Make sure the light is connected to wall outlet through power adapter.
2. Exit the App and access phone "Setting" WiFi to connect Keloray WiFi SSID (default password: 12345678) (picture 1).
3. Select WiFi SSID: AR150-XXXX to link. Make sure there is a WiFi signal icon at top right corner.
4. Go back to App, press "Search Icon" to search light (picture 2).
5. Press "AR150-XXXX-192.168.0.XX" to select light (picture 3).
6. Finish above operations, press "Connect" to control the light.



Picture 1



Picture 2



Picture 3

## Connect Wireless Router

1. Make sure the light is connected to wall outlet through power adapter.
2. Access phone "Settings" WiFi. Connect to select wireless router (household/store). (Make sure there is a WiFi signal icon at top right corner).
3. Touch buttons ( ▲ ) and ( ▼ ) simultaneously until you hear "beeps" from the light, release fingers. The unit is unlock now (picture 4).
4. Press ( ▲ ) and ( 🔁 ) simultaneously for some seconds to turn on "Connect Wireless Router" mode. The light will flash with blue light, light restarts (picture 5).



Picture 4

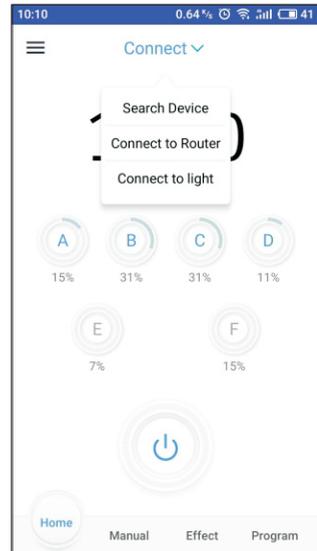


Picture 5

5. After light restarts, the blue WiFi indicator light starts to flash (picture 6).
6. Open "Keloray" App to homepage, press "Connect" and choose "Connect to Router" (picture 7).

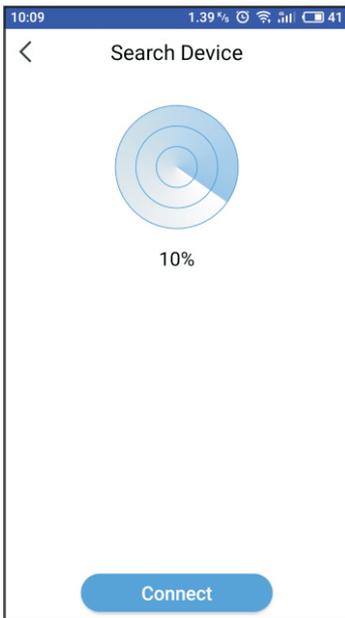


Picture 6



Picture 7

7. Follow the instructions on the App and press "Next" at the end of the instructions to enter (household /store) WiFi network password.
8. Press "Start" to connect(when the blue indicator light stop flashing, it means the unit connect to router successfully).
9. Go back to App homepage, press "Search Icon" to search light (picture 8).
10. Press "AR150-XXXX-192.168.0.XX " to select light (pictures 9).
11. Finish above operations, press "Connect" to control the light you selected.



Picture 8

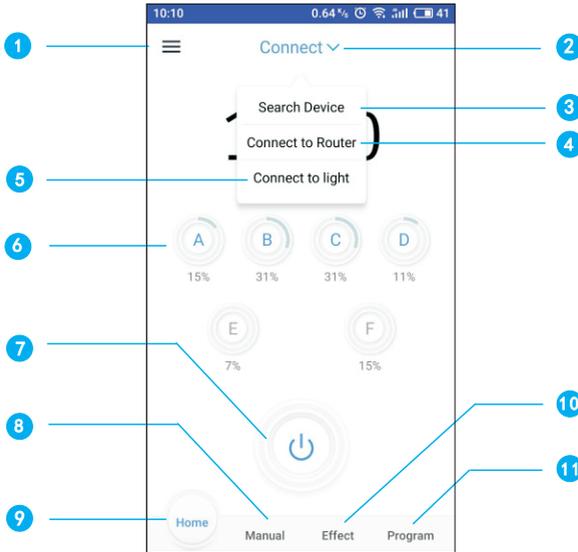


Picture 9

**Remember:** If you want to change back to "Connect Light Directly" mode, please press ( ▼ ) and ( ↻ ) simultaneously, then repeat above operations.

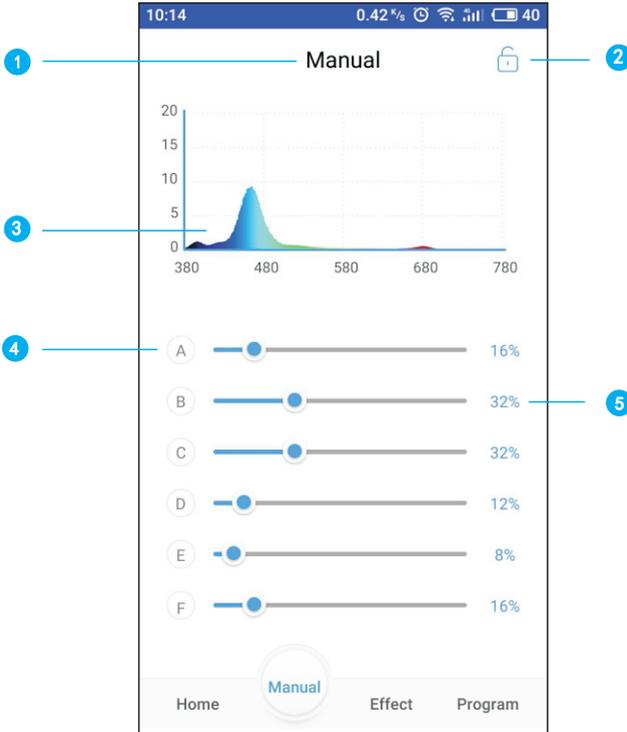
# Controlling & Programming

## Homepage



- 1 Menu**  
Information List: Keloray Logo, Keloray Website, Indicator Light, Restore Default, Update Version, User Manual, Contact Us, Ask for Help, Hardware Version, Software Version.
- 2 Connect List**  
Tap to list connection methods.
- 3 Search Device**  
Tap to search connected lights.
- 4 Connect to Router**  
Tap to "Connect WiFi Router".
- 5 Connect to light**  
Tap to "Connect light directly".
- 6 Color Channels**  
Current brightness of each color channel.
- 7 ON/OFF Button**  
Tap to turn on/off light.
- 8 Manual Page Navigation**  
Tap to Manual program page.
- 9 Homepage Navigation**  
Tap to homepage.
- 10 Effect Page Navigation**  
Tap to effect show page.
- 11 Program Page Navigation**  
Tap to program page.

# Manual Page



## 1 Manual Page

Manual program can change light intensity only, you cannot set time point to make intensity change automatically.

## 2 Lock/Unlock Button

Switch the lock on manual mode, the light is now locked to manual only.

*Note: Please don't lock the manual mode if no need.*

## 3 Spectrogram

Current light spectrum is displayed.

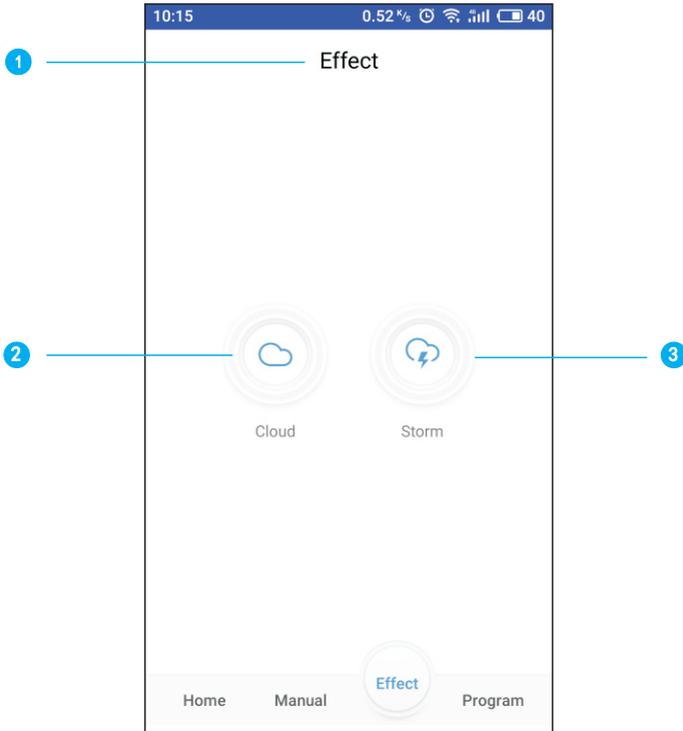
## 4 Color Bar

Slide the bar to change intensity of each color (A : cool white, B: royal blue, C: sky blue, D: violet & UV, E: deep red, F: green).

## 5 Intensity Percentage

Slide the bar, percentage will change between 0%-100%.

## Effect Page



### 1 Effect Options

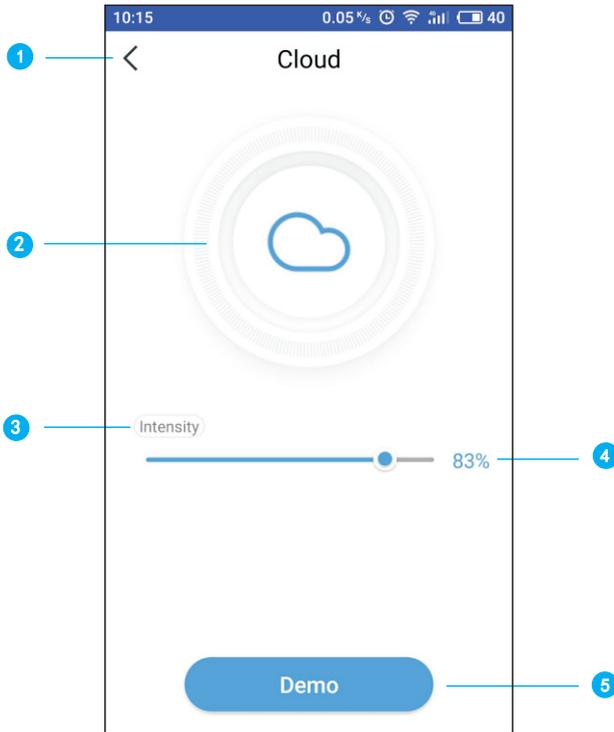
An effect quick show page for functions: Cloud and Storm. Just for demonstration, your program can't be saved on this page.

### 2 Cloud Button

Tap to set cloud.

### 3 Storm Button

Tap to set storm.



**1 Back Button**

Go back to previous page.

**2 Cloud Icon**

Simulated sunlight in cloudy weather.

**3 Set Intensity**

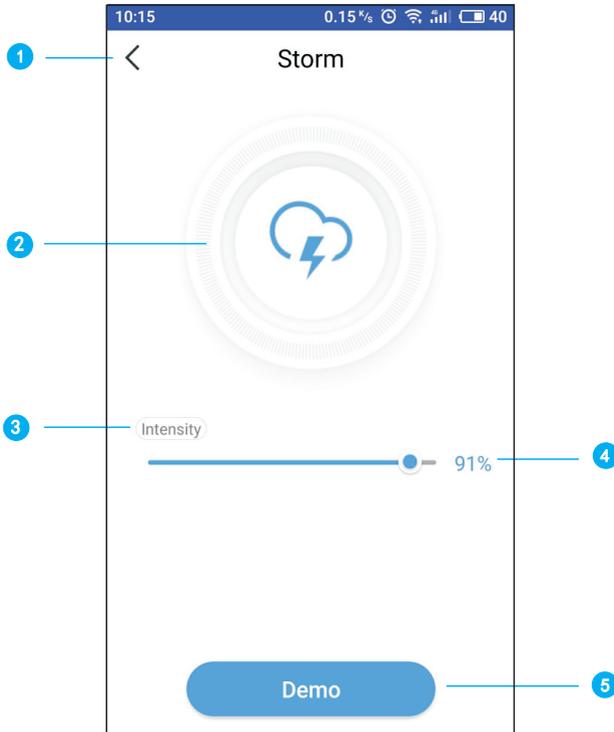
Slide the bar to slightly adjust the intensity of cloud.

**4 Intensity Percentage**

Slide the bar, percentage will change between 0%-100%.

**5 Demo Button**

Tap to preview cloud effect. Tap again to stop.



**1 Back Button**

Go back to previous page.

**2 Storm Icon**

Simulated sunlight in stormy weather.

**3 Set Intensity**

Slide the bar to slightly adjust the intensity of storm.

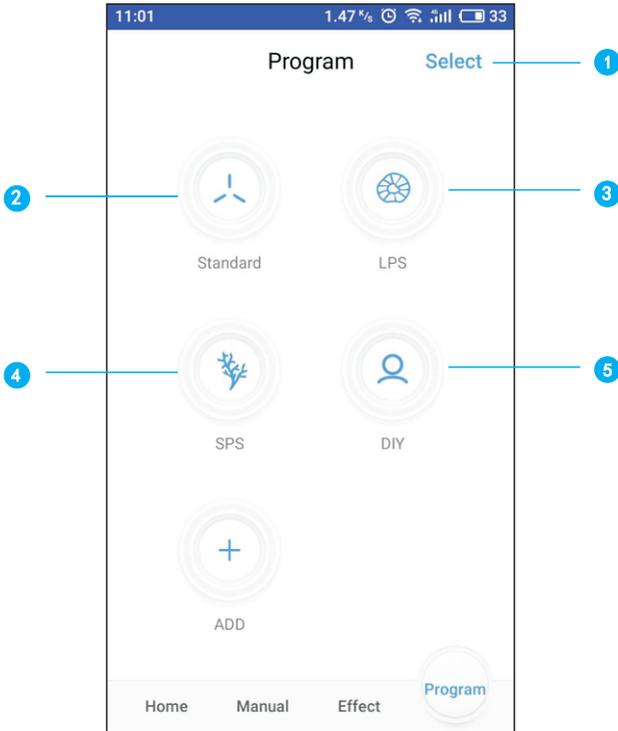
**4 Intensity Percentage**

Slide the bar, percentage will change between 0%-100%.

**5 Demo Button**

Tap to preview storm effect. Tap again to stop.

# Program Page



**1 Select Button**  
Delete customized programs.

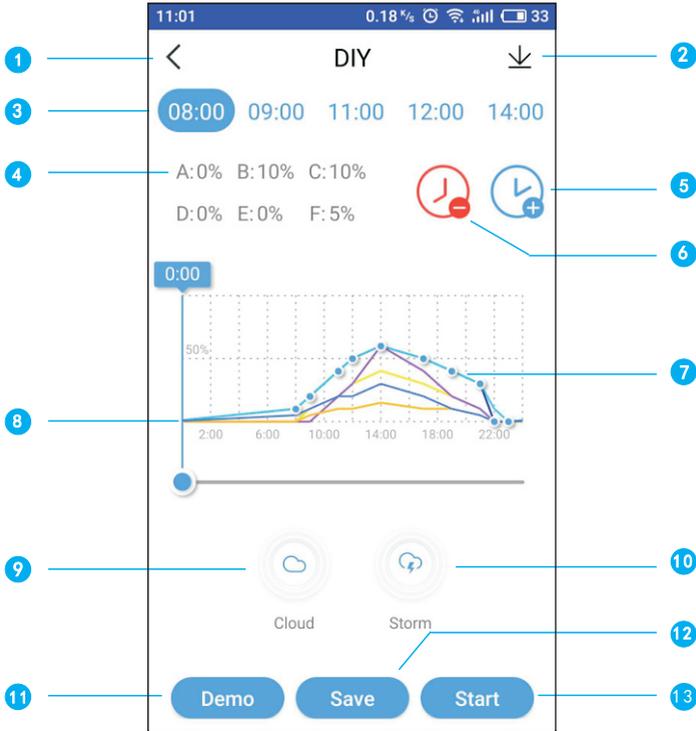
**2 Standard Program**  
Factory program, can't be edited, no need to save. This is for people who don't wish to program the light or have lost user settings.

**3 LPS**  
Program for LPS Reef tank.

**4 SPS**  
Program for SPS Reef tank.

**5 DIY**  
Do it yourself program. Added when you press "Add" button.

## DIY Program



- |   |   |
|---|---|
| <p><b>1 Back Button</b><br/>Go back to previous page.</p> <p><b>3 Time Point</b><br/>Tap to select point, tap again to edit point page.</p> <p><b>5 Add</b><br/>Tap to add a new time.</p> <p><b>7 Intensity Curve</b><br/>Auto generation of intensity curve of each color channel.</p> <p><b>9 Cloud</b><br/>Tap to add cloud effect.</p> | <p><b>2 Download</b><br/>Download program from the light.</p> <p><b>4 Intensity Grade</b><br/>Intensity grade of each color channel.</p> <p><b>6 Delete</b><br/>Tap to delete the selected time.</p> <p><b>8 Time Point Slide Bar</b><br/>Slide to select time.</p> <p><b>10 Storm</b><br/>Tap to add storm effect.</p> |
|---|---|

**11 Demo**

Tap to preview the program on the light. It takes 30 seconds to run the program cycle once. It does not show effect points.

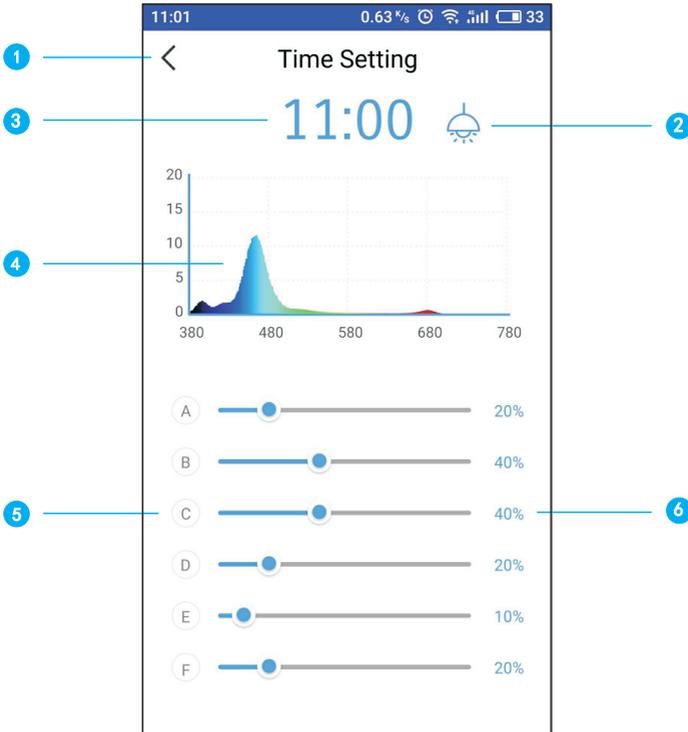
**12 Save**

Tap to save your DIY program.

**13 Start**

Tap to start running current DIY program.

## Time Setting



**1 Back Button**

Go back to previous page.

**2 Visual Switch**

Turn on the switch, user can see brightness changing on the light when sliding the color bar.

**3 Time**

Tap to set time.

**4 Spectrogram**

Current spectrum of the light.

**5 Color Bar**

Slide the bar to change intensity of each color.

**6 Intensity Percentage**

Slide the bar, percentage will change between 0%-100%.

# Troubleshooting

- **Lost lamp(s) after setting up WiFi.**

Pull down the list to refresh.

Make sure the WiFi indicator light is solid blue.

Make sure the phone is connected to the correct light WiFi SSID/Wireless router. If it is still not working, repeat WiFi set up.

- **Can't find light's WiFi name on your mobile device signal list.**

Make sure light didn't connect to household WiFi router.

Make sure mobile phone is not too far away from light.

- **App crashes during connection.**

Make sure you connect to the right network.

Pull down the list to refresh.

- **One or more lamp(s) is missing.**

Make sure you connect to the correct light WiFi SSID/Wireless router.

Pull down the list to refresh.

- **How to sync multiple lamps?**

Choose "connect WiFi router", search all lights near your household/store WiFi router. Select group lights you want to control at the same time.

- **Electric power shut down.**

Make sure light is connected to the AC outlet.

Make sure you connect to the correct light WiFi SSID/Wireless router, then pull down the list to refresh.

- **The App and the lamp(s) is not synchronizing under Program Mode.**

Make sure your phone is at real time setting.

Make sure mobile phone connect to the correct light WiFi SSID/Wireless router, then pull down the list to refresh. Enter Program Mode and make sure your customized program is "saved" and "started".

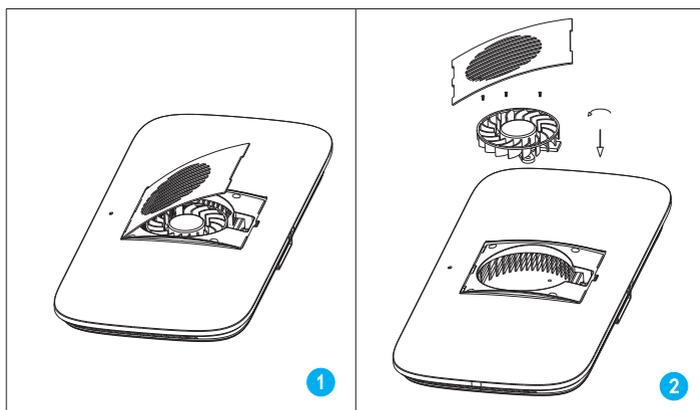
# Maintenance

In order to make your lamps work in a optimal temperature and prolong the service life, please read the following carefully and form the habit of regular maintenance.

- Please pay attention to moisture-proof, waterproof and dust-proof when using lamps.
  - Please regularly clean up the dust and salt stain of fan inlet and outlet.
  - Please regularly clean the salt stain on the bracket to prevent corrosion.
  - Please regularly check whether the power is damp, or plug is in the power outlet.
  - Please use dry cloth to clean the transparent glass on the surface of LED light source, avoiding being covered by dust and salt stain.
- ▲ When the fan inlet and outlet of the lamp are covered with sundries and dust, the lamp will start its prevent high temperature system. The control system will reduce the brightness of lamp and enter the protection state. At this time, the lamp actively dissipate heat by the radiator, the control system is locked, and the lamp can not be controlled. When the temperature is reduced to 40 degrees, the control system automatically unlocks, and the lamp recover the previous operation state.

## Fan Replacement

If you need to replace the fan, take off the dust-proof net according to the following pictures, remove the three screws with a screwdriver, and pull out the terminal line. Then you can fix the new fan on the lamp.



# Warranty

## ● Dear User

In order to let you familiarly use our product and enjoy excellent after-sale service. Please read carefully the product instruction and installation diagram, and keep properly this card.

## ● Product Warranty

This warranty card is the only proof for warranty, which should be stamped with distributor's seal. Customer enjoys 12 months warranty since the purchase of product(subject to the purchase date on sales receipt).

## ● Limited Warranty

- a. Cannot provide the certificate or valid sales document, or it is altered, or does not match the product.
- b. Damaged by misuse, abnormal use, taking apart by yourself, altering the appearance and other human factors.
- c. Damaged as a result of mistaken assembling, using and maintaining due to failure to follow instruction and diagram.
- d. Normal wear and tear of consumable parts.
- e. Break downed or damaged by natural disaster or other force majeure, such as earthquake, fire, typhoon, thunder and so on.

We are disclaimed responsibility for relevant equipment, tank creatures or furniture from other company. The service covered by the warranty is free. We will charge the service when the warranty card passes its last effective date or the service is not covered by warranty. The warranty card and sales receipt should be provide for repairing. Please keep it properly! Thanks!

## Product Warranty Card

Product Model Number	
Item Serial Number	
Customer	
Address	
Dealer	
Purchase Date	

