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› PopBloom Hertz 54 LED Planted Aquarium Lighting User Manual

PopBloom FK4BP1-A

PopBloom Hertz 54 LED Planted Aquarium Lighting User Manual

Model: FK4BP1-A | Brand: PopBloom

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of your PopBloom Hertz 54 LED Planted Aquarium Lighting system. This 60-watt light is specifically designed for 24-inch (60cm) freshwater aquariums, offering advanced smart-APP control for comprehensive lighting management. It features a full spectrum output with four adjustable channels to mimic natural light cycles, promoting optimal plant growth and fish coloration.

2. SAFETY INSTRUCTIONS

- Always disconnect power before performing any maintenance or installation.
- This product is designed for indoor use only and is not water resistant. Avoid direct contact with water.
- Ensure the power supply is compatible with your local voltage (100-265V).
- Do not operate the light if the power cord or plug is damaged.
- Keep out of reach of children.
- Do not attempt to disassemble or modify the light fixture. This will void the warranty.
- Ensure proper ventilation around the light to prevent overheating.

3. PACKAGE CONTENTS

Verify that all components are present in the package:

- 1x PopBloom Hertz 54 LED Light Panel (54cm)

- 1x Arm Kit for mounting
- 1x Power Supply
- 1x Power Plug
- 1x User Manual (this document)

4. PRODUCT OVERVIEW

The PopBloom Hertz 54 LED light is engineered for freshwater planted aquariums, providing a comprehensive lighting solution with smart control capabilities.

Key Features:

- **Full Spectrum Output:** Mimics natural sunlight for optimal aquatic plant growth and vibrant fish colors.
- **4 Independent Channels:** Allows precise control over red, moonlight, day white, and vivid color LEDs.
- **Smart-APP Control:** Manage settings, schedules, and special effects via the SmartLife or Tuya Smart app (2.4GHz Wi-Fi required).
- **Natural Simulation:** Features sunrise, sunset, moonlight, 24-day-night cycle, and 4 seasons simulation.
- **DIY Mode:** Customize up to 8 time points for brightness and channel settings.
- **Efficient Heat Dissipation:** Aluminum chassis design ensures silent operation without a fan.
- **Daisy Chain Capability:** Control up to 10 light panels simultaneously with one system.

Light Panel Dimensions:

The light panel measures 54cm (21.3 inches) in length, 12cm (4.7 inches) in width, and 3.6cm (1.4 inches) in height.

Professional Detail Setup



Ultra-thin



Fit in cover/lid



Image: Detailed view of the PopBloom Hertz 54 LED light panel with its precise dimensions indicated.

LED Channels and Functions:

Channel	LEDs	Wattage	Function
Channel 1	Red	10 W	Plant Growth Red
Channel 2	Blue	8 W	Moonlight
Channel 3	White	33 W	Day White Adjust
Channel 4	Mixed Color	12 W	Vivid Color

Close to sunlight spectrum, good CRI for aquatic plants

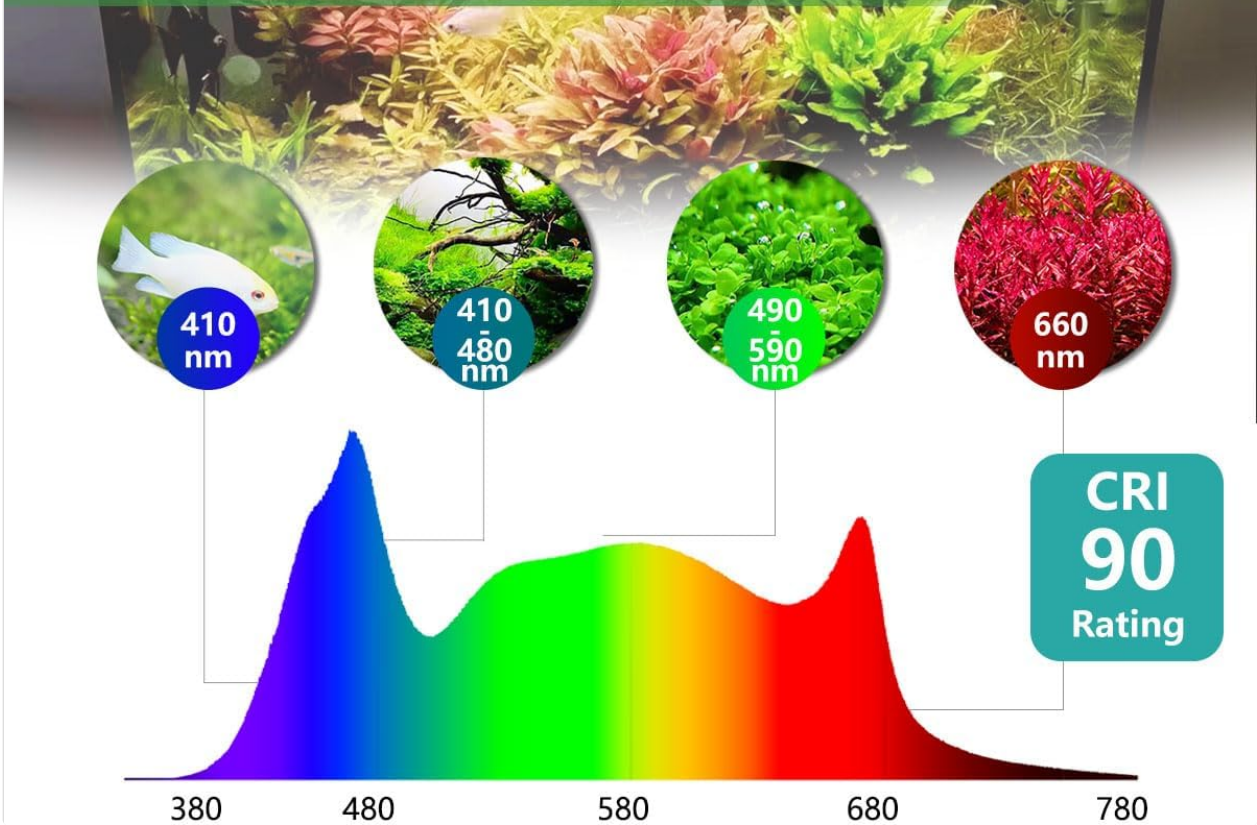


Image: Visual representation of the four distinct LED channels and their specific roles in the lighting system.

Full Spectrum 4 Channels






Channels	LEDs	Watts	Functions
Channel 1		10 W	Plant-growth Red
Channel 2		8 W	Moonlight
Channel 3		33 W	Day white adjust
Channel 4	  	12 W	Vivid color



Image: Technical graphs detailing the spectral output and photosynthetic photon flux (PPF) of the light, both in air and underwater.

New

Update Arm Kit

(adjustable + suitable for all kinds of tanks)

2 install way



length side



width side



Scalable: 2-16cm

Adjustable height: 19-34cm

Rimless

Horizontal

Rimmed

Image: Representation of the light's spectrum, highlighting its high Color Rendering Index (CRI 90) and its benefits for aquatic life.

5. SETUP

5.1 Arm Kit Installation

The included arm kit allows for flexible mounting on various tank types (rimless, horizontal, rimmed). Follow these steps to install the arm kit and mount the light:

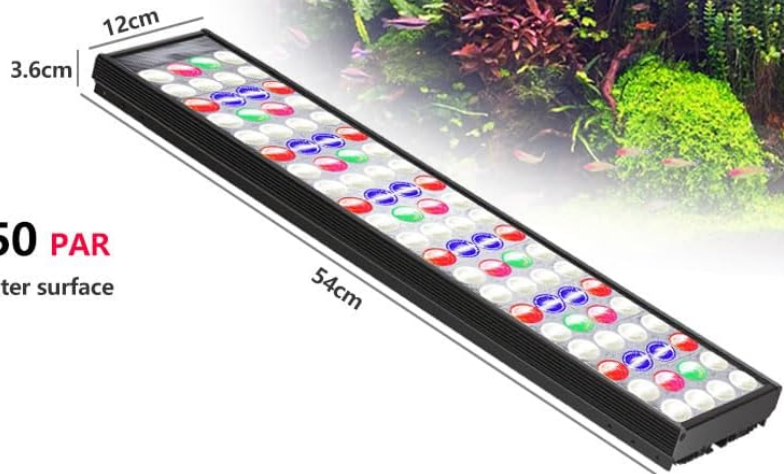
1. Assemble the arm kit components according to the diagram. The arm is scalable from 2-16cm and has an adjustable height of 19-34cm.
2. Attach the mounting clamp to the edge of your aquarium. Ensure it is securely fastened.
3. Slide the light panel onto the arm kit. The light can be installed from either the length side or the width side, depending on your preference and tank setup.
4. Adjust the height and position of the light over your aquarium for optimal coverage.

54cm Freshwater Parameter

60 W
LED Array

3676 lm
Water surface

150 PAR
Water surface



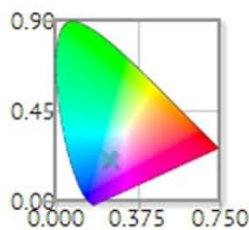
4 Channels

10 W
Plant growth Red

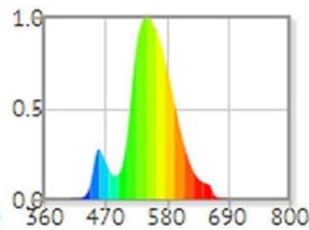
8 W
Moonlight

33 W
Day white adjust

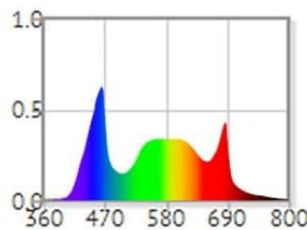
12 W
Vivid color



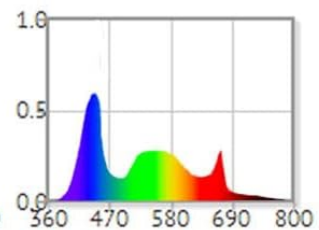
CIE 1931 COLOR GRAPH



PHOTOMETRIC SPECTRUM



PPF (PAR) SPECTRUM IN AIR



PPF (PAR) SPECTRUM
24" UNDER WATER
19.2% ABSORPTION LOSS

Image: Instructions for installing the adjustable arm kit, demonstrating its versatility for different aquarium rim styles and light panel orientations.

5.2 Power Connection

1. Connect the power supply to the light panel.
2. Plug the power supply into a suitable electrical outlet.
3. The light will power on, typically in a default mode.

6. OPERATING INSTRUCTIONS (SMART-APP CONTROL)


This lighting system is controlled via a smart application, offering extensive customization and scheduling options. The app supports both iOS and Android devices.


6.1 App Download and Installation

1. Scan the QR code provided in the product packaging or search for "SmartLife" or "Tuya Smart" in your device's app store.
2. Alternatively, download the app from these links: [SmartLife App](#) or [Tuya Smart App](#).
3. Install the app on your smartphone or tablet.

WiFi Smart Control

 Built-in WiFi, all in one App

 Multiple lights grouping (up to 10 lights)

 APP control anytime & anywhere

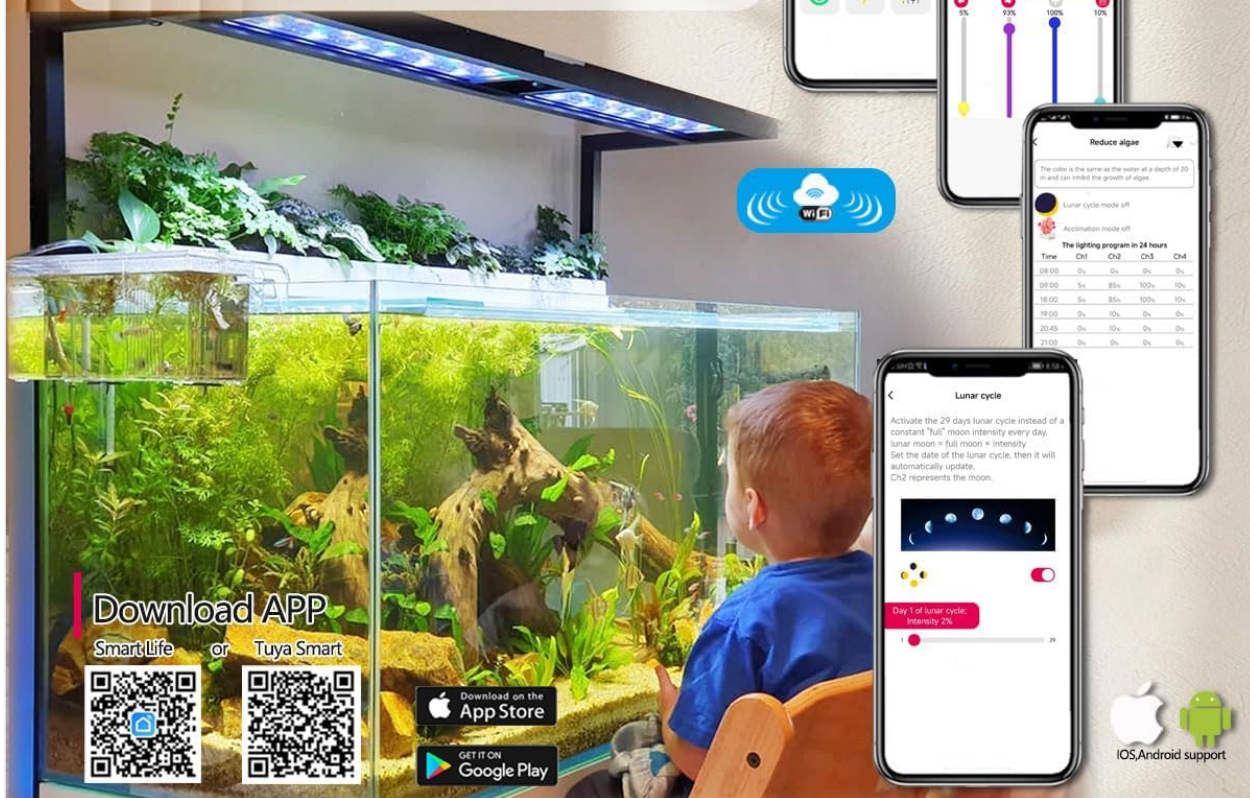


Image: Visual guide for downloading the SmartLife or Tuya Smart app, demonstrating the Wi-Fi control feature and various app interfaces.

6.2 Device Pairing

1. Ensure your smartphone is connected to a **2.4GHz Wi-Fi network**. This light system does not support 5GHz Wi-Fi.
2. Open the SmartLife or Tuya Smart app and create an account or log in.
3. Follow the in-app instructions to add a new device. Typically, you will select 'Lighting' or 'Light Source (Wi-Fi)'.
4. Put the light into pairing mode (refer to the app's instructions for specific steps, usually involving a power cycle or holding a button if available).
5. Confirm the device is found and connected within the app.

6.3 App Functions

The app provides comprehensive control over your aquarium lighting:

- **Master Control:** Adjust overall brightness and color balance.
- **Program Mode:** Create custom lighting schedules with up to 8 time points for each channel.

- **Acclimation Mode:** Gradually increase light intensity for new setups or sensitive inhabitants.
- **Lunar Cycle:** Simulate a 29-day lunar cycle with automatic intensity adjustments.
- **Lightning Effect:** Simulate lightning storms for a dynamic visual effect.
- **Preset Modes:** Choose from various pre-programmed lighting scenarios (e.g., Tropical Spring).
- **Group Control:** Manage up to 10 PopBloom lights simultaneously from a single app interface.

	Smart-APP Control	Remote Control
Modello		
Modalità di controllo	WiFi + Bluetooth	Telecomando
Connessione	1 gruppo di controllo 10 luci	1 Telecomando solo per il controllo di 1 luce
Funzionamento a distanza	controllo ovunque e in qualsiasi momento	⊗
Display dello schermo	Menu Visualizzazione	⊗
Programmabile	✓	⊗
Supporto WiFi	✓	⊗
IOS/Android	✓	⊗
Simulazione	Fulmini, ciclo lunare, alba/tramonto, luce lunare	Alba/tramonto, luce lunare

Image: Feature comparison between Smart-APP control and traditional remote control, emphasizing the advanced capabilities of the app.

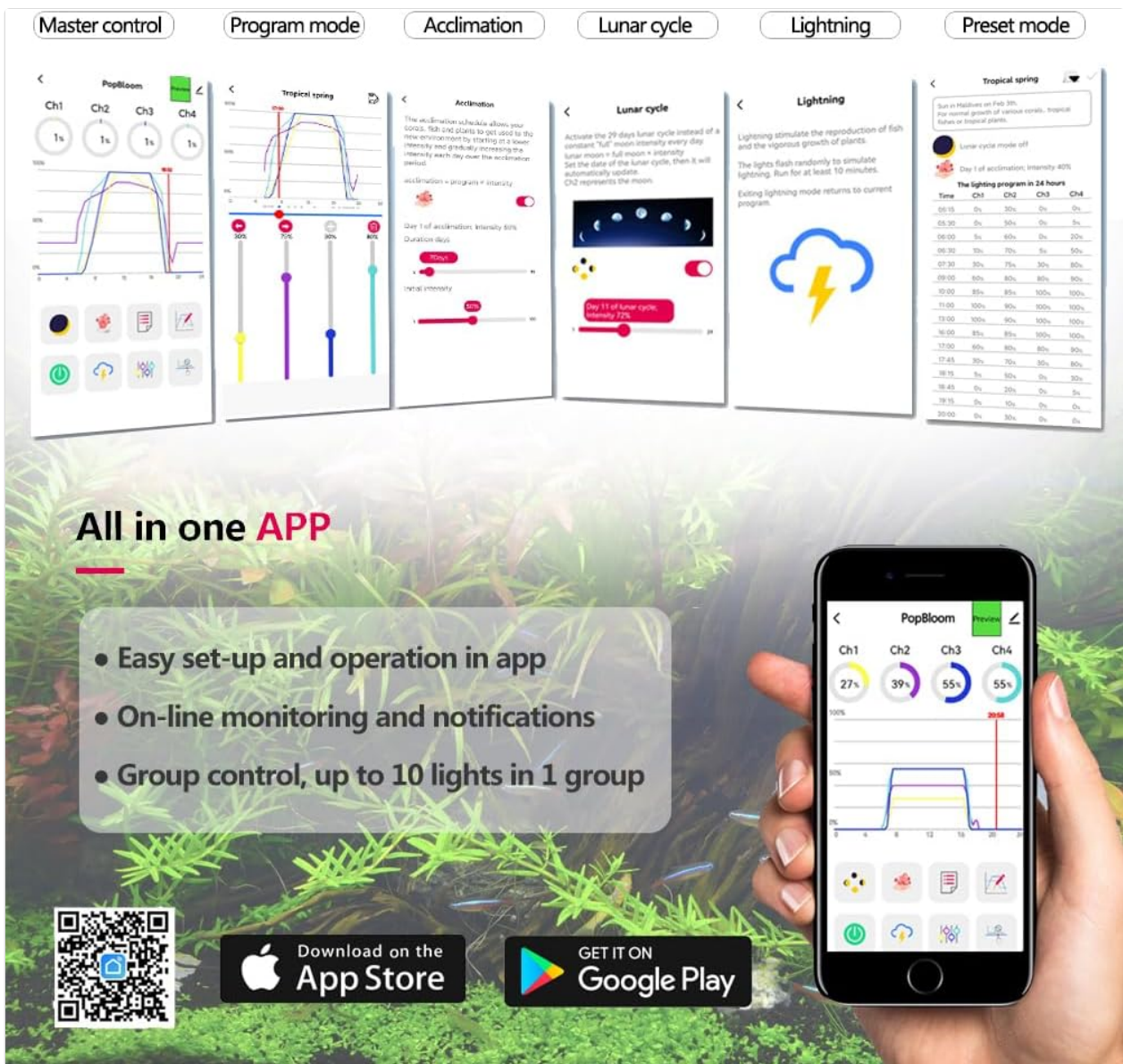


Image: Overview of the PopBloom app's main interface, showcasing different control modes and settings for comprehensive light management.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your PopBloom Hertz 54 LED light.

- **Cleaning:** Periodically wipe the light panel and lenses with a soft, dry cloth to remove dust and water spots. Ensure the light is unplugged before cleaning. Do not use abrasive cleaners or solvents.
- **Ventilation:** Ensure the aluminum chassis remains clear of obstructions to allow for proper heat dissipation.
- **Cable Inspection:** Regularly check the power cord and connections for any signs of wear or damage. Replace immediately if damage is found.

8. TROUBLESHOOTING

If you encounter issues with your PopBloom Hertz 54 LED light, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Light does not turn on.	No power supply. Damaged power cord/adapter.	Check if the power plug is securely connected to the outlet and the light. Inspect the power cord and adapter for damage. Contact support if damaged.
Cannot connect to the app.	Incorrect Wi-Fi frequency. Light not in pairing mode. App issues.	Ensure your phone is connected to a 2.4GHz Wi-Fi network. Follow app instructions to put the light into pairing mode. Restart the app and your phone. Reinstall the app if necessary.
Light intensity or color is incorrect.	App settings are incorrect. Interference.	Check the settings in the SmartLife/Tuya Smart app, including program mode and channel adjustments. Ensure no other devices are interfering with the light's operation.
Light flickers or behaves erratically.	Unstable power supply. Loose connection.	Ensure the power source is stable. Try plugging into a different outlet. Check all cable connections to the light and power adapter.

9. SPECIFICATIONS

Feature	Specification
Model Number	FK4BP1-A
Panel Dimensions (L x W x H)	54 x 12 x 3.6 cm (21.5 x 4.7 x 1.4 inches)
Suitable Tank Size	(60-80) x 60 cm / (24-30) x 24 inches
Electrical Power	60 Watts
LED Quantity	112 pcs
Number of Channels	4 (Plant Growth Red, Moonlight, Day White Adjust, Vivid Color)
AC Adaptor Input	100-265V (Worldwide suitable)
Control Method	Smart-APP (Wi-Fi 2.4GHz)
Material	Aluminum
Water Resistance Level	Not Water Resistant
Indoor/Outdoor Usage	Indoor

10. WARRANTY AND SUPPORT

10.1 Manufacturer Warranty

This PopBloom Hertz 54 LED Planted Aquarium Lighting system comes with **a one-year manufacturer**

warranty from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by misuse, accident, unauthorized modification, or improper installation.

10.2 Customer Support

For technical assistance, warranty claims, or any questions regarding your product, please contact PopBloom customer support through the retailer where you purchased the product or visit the official PopBloom website for contact information.