**Fluval 14521**

# Fluval Plant 3.0 LED Planted Aquarium Lighting Instruction Manual

Model: 14521 (32 Watts, 24-34 Inches)

## 1. INTRODUCTION

The Fluval Plant 3.0 LED lighting system is designed for planted aquariums, providing a customizable light spectrum to support robust plant growth. This unit integrates FluvalSmart App technology, allowing control and customization directly from a mobile device. Key features include a programmable 24-hour light cycle with gradual sunrise, sunset, and night settings, mimicking natural light conditions. The light unit incorporates six unique LED band waves for comprehensive full-spectrum results. Engineered in Germany, this product is built for quality and performance.

Image 1: Fluval Plant 3.0 LED Lighting product packaging, showing key features and specifications.
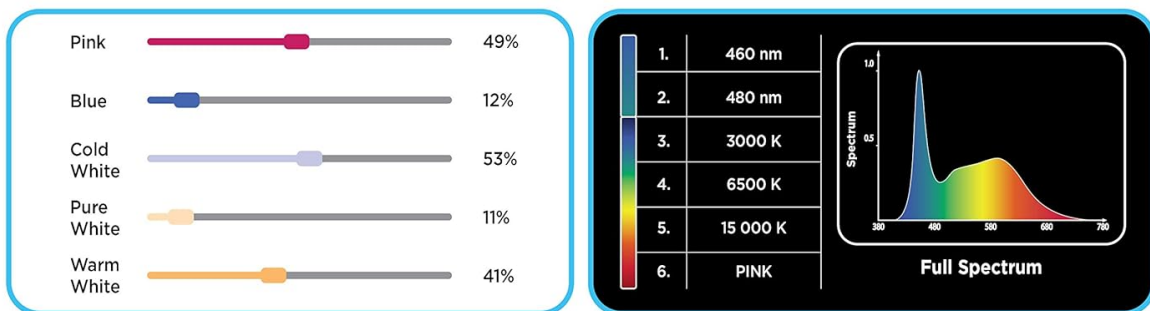
## 2. PRODUCT FEATURES

- **Programmable 24-Hour Light Cycle:** Features gradual settings for sunrise, midday, sunset, and night to simulate natural light conditions.

- **Full Spectrum LED:** Includes six unique LED band waves for optimal plant growth and vibrant coloration.

- **FluvalSmart App Technology:** Allows control and customization of light settings via a mobile device.

- **Pre-set Habitat Configurations:** Offers optional pre-set light modes such as Lake Malawi, Tropical, and Planted for convenience.

- **Wide Light Dispersion:** 120-degree light dispersion ensures full area coverage and uniform lighting

without dark spots.

- **Extendable Mounting Brackets:** Facilitates easy installation on various aquarium widths.
- **IP67 Waterproof Rating:** Unit can be safely mounted directly above the water surface for enhanced light penetration.



# FULL SPECTRUM
# FLEXIBILITY

Independently control color to suit your lighting needs.

| | | |
|---|---|---|
| Pink | | 49% |
| Blue | | 12% |
| Cold White | | 53% |
| Pure White | | 11% |
| Warm White | | 41% |

| 1. | 460 nm |
| 2. | 480 nm |
| 3. | 3000 K |
| 4. | 6500 K |
| 5. | 15 000 K |
| 6. | PINK |

**Full Spectrum**

**Plant spectrum LED features 6 unique band waves for full spectrum results.**

**FOR ULTIMATE PLANT GROWTH**

Image 2: Diagram illustrating the full spectrum flexibility of the Fluval Plant 3.0 LED, showing independent color controls and a spectral graph with six unique band waves.

## 3. SETUP AND INSTALLATION

### 3.1 Unpacking

Carefully remove all components from the packaging. Inspect the light unit and accessories for any signs of damage. Retain packaging for future transport or storage.

### 3.2 Mounting Options

The Fluval Plant 3.0 LED light offers versatile mounting options to suit different aquarium setups.

- **On-Rim Mounting:** Use the extendable mounting brackets to securely place the light unit directly on the aquarium rim. Adjust the brackets to fit your aquarium's width.
- **Suspended Mounting:** For higher light penetration or specific aesthetic preferences, the unit can be

suspended above the aquarium. Mounting clips (#14565) and a suspension kit (#14566) are sold separately for this purpose.



Image 3: Illustration of Fluval Plant 3.0 LED mounting options, detailing the use of extendable brackets for on-rim installation and a suspended setup requiring additional accessories.

### 3.3 Power Connection

Connect the power adapter to the light unit and then plug it into a suitable electrical outlet. Ensure the power cord is routed safely to prevent accidental disconnections or water exposure.

## 4. OPERATING INSTRUCTIONS

### 4.1 FluvalSmart App Control

The Fluval Plant 3.0 LED is controlled via the FluvalSmart App, available for mobile devices. Download the app from your device's app store.

1. **Pairing:** Follow the in-app instructions to pair your mobile device with the light unit via Bluetooth.

2. **Manual Mode:** Adjust individual color channels (Red, Green, Blue, White) and brightness levels manually to achieve desired lighting effects.

3. **Programmable 24-Hour Light Cycle:** Set a custom 24-hour light cycle, including gradual sunrise,

midday, sunset, and night phases. This feature allows for precise control over light intensity and spectrum throughout the day.

4. **Pre-set Habitats:** Select from pre-programmed lighting configurations optimized for specific aquarium environments, such as Lake Malawi, Tropical River, or Planted tanks.



Image 4: Screenshot of the FluvalSmart App interface on a mobile phone, demonstrating the customization options for the aquarium light, including manual and automatic settings.

Image 5: Illustration of the Fluval Plant 3.0 LED's programmable 24-hour light cycle, showing how it mimics natural light changes from sunrise to night over an aquarium.
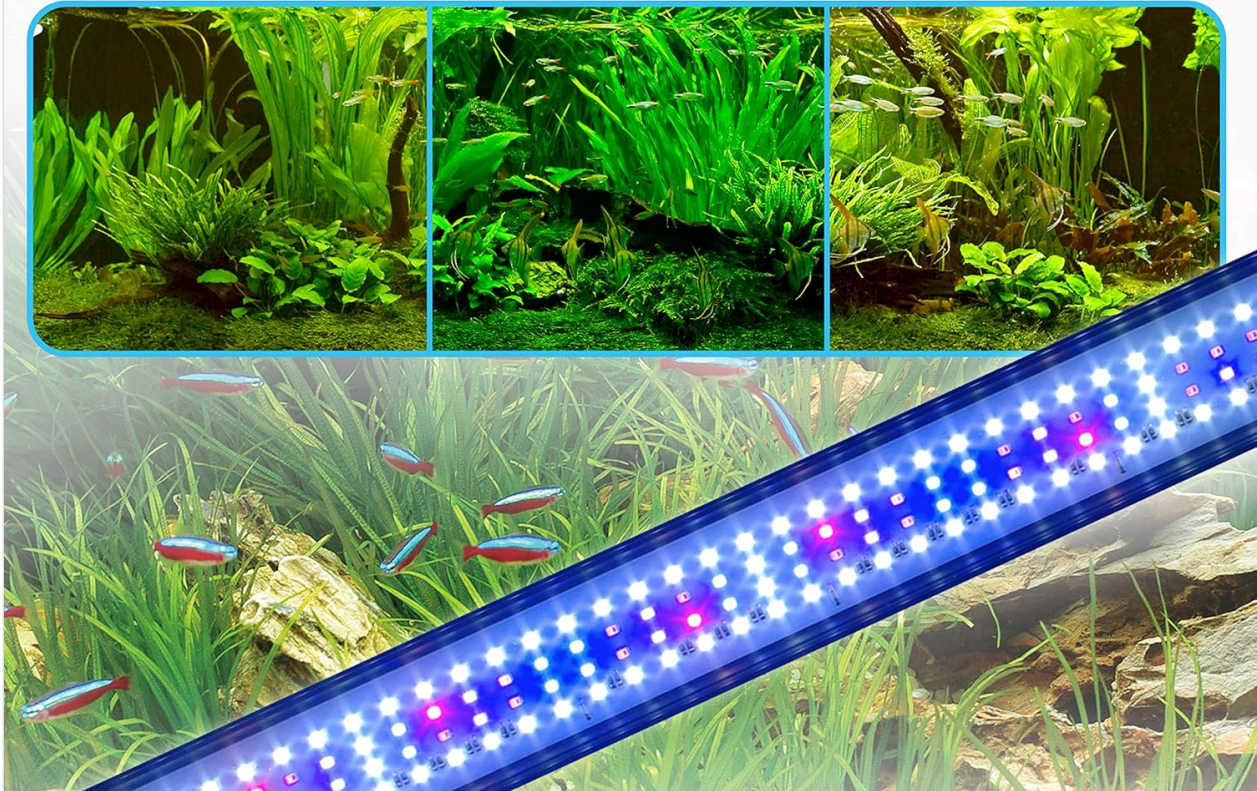
Image 6: Visual representation of Fluval Plant 3.0 LED pre-set habitat lighting options, showcasing different light configurations for Lake Malawi, Tropical River, and Planted aquariums.

## 5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your Fluval Plant 3.0 LED light.

- **Cleaning:** Periodically wipe the LED surface with a soft, damp cloth to remove dust, water spots, or algae buildup. Ensure the unit is unplugged before cleaning. Do not use abrasive cleaners or solvents.

- **Inspection:** Regularly check the power cord and connections for any signs of wear or damage. If any damage is observed, discontinue use and contact customer support.

- **Water Exposure:** While the unit has an IP67 waterproof rating, prolonged submersion or direct water jets should be avoided. Ensure the power adapter remains dry.

## 6. TROUBLESHOOTING

If you encounter issues with your Fluval Plant 3.0 LED light, refer to the following common troubleshooting steps:

- **Light Not Turning On:**

- Check if the power adapter is securely plugged into both the light unit and the electrical outlet.
- Verify that the electrical outlet is functional by plugging in another device.
- Ensure the light is not set to a "night" or "off" period within the FluvalSmart App's programmed cycle.

- **App Connectivity Issues:**

  - Ensure Bluetooth is enabled on your mobile device.
  - Make sure your mobile device is within range of the light unit.
  - Try restarting the FluvalSmart App or your mobile device.
  - Unplug the light unit for 30 seconds and then plug it back in to reset its Bluetooth module.

- **Inconsistent Light Output:**

  - Check the programmed light cycle in the FluvalSmart App for any unintended settings or conflicts.
  - Clean the LED surface to ensure no obstructions are affecting light output.

If problems persist after attempting these steps, please contact Fluval customer support.

## 7. SPECIFICATIONS

The following table details the technical specifications for the Fluval Plant 3.0 LED (Model 14521, 32W):

| Specification | Value |
| --- | --- |
| Model Name | FL Plant 3.0 LED 32w 24-34in |
| Item Model Number | 14521 |
| Wattage | 32 watts |
| Brightness | 2350 Lumen |
| Color Temperature | 6500 Kelvin |
| Unit Dimensions (approx.) | 24"L x 2.5"W x 0.63"H (61cm L x 6.35cm W x 1.6cm H) |
| Extendable Size Range | 24 - 36 inches (61-91 cm) |
| Number of LEDs | 168 |
| Light Source Type | LED |
| Control Method | App (Bluetooth) |
| Water Resistance Level | IP67 (Not Water Resistant for submersion) |
| Item Weight | 1.63 pounds (0.74 Kilograms) |
| Material | Aluminum, Plastic |
| Lifetime | 50,000 hours |
| Voltage | 230 Volts (AC) |
| UPC | 015561145213 |

For detailed energy efficiency information, please refer to the EPREL database:

- EPREL Product Information Sheet (QR Code: 598660)



| | 14520 | 14521 | 14522 | 14523 |
|---|---|---|---|---|
| UPC | 015561145206 | 015561145213 | 015561145220 | 015561145237 |
| EXTENDABLE SIZE RANGE | 15 - 24"<br>(38-61 cm) | 24 - 36"<br>(61-91 cm) | 36 - 48"<br>(91-122 cm) | 48 - 60"<br>(122-153 cm) |
| LEDs | 99 | 168 | 252 | 336 |
| WATTAGE | 22 W | 32 W | 46 W | 59 W |
| LUMENS | 1450 lm | 2350 lm | 3300 lm | 4250 lm |
| COLOR TEMPERATURE | 6500 K | 6500 K | 6500 K | 6500 K |
| LIFETIME | 50 000 hrs | 50 000 hrs | 50 000 hrs | 50 000 hrs |

Image 7: Comparison table of Fluval Plant 3.0 LED models, detailing specifications like UPC, extendable size range, LEDs, wattage, lumens, color temperature, and lifetime for various sizes.

# 8. WARRANTY AND SUPPORT

## 8.1 Warranty Information

The Fluval Plant 3.0 LED lighting system is covered by a **3-year limited warranty** from the date of purchase. This warranty covers defects in material and workmanship under normal use. Please retain your proof of purchase for warranty claims.
For full warranty terms and conditions, please refer to the official Fluval website or contact customer support.
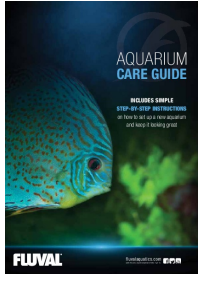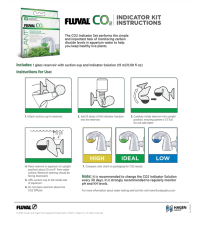
## 8.2 Customer Support

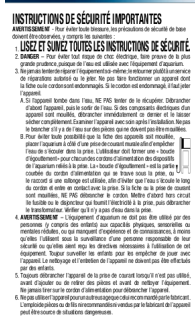For technical assistance, troubleshooting, or warranty inquiries, please contact Fluval customer support:

- **Manufacturer:** Rolf C. Hagen (USA) Corp.

- **Website:** www.hagen.com

- **Email:** customer.service.de@hagen.com (for Germany, contact details may vary by region)

- **Phone:** +49 4103 960-0 (for Germany, contact details may vary by region)

When contacting support, please have your product model number (14521) and proof of purchase readily available.

## Related Documents - 14521

[Fluval Plant 4.0 LED Aquarium Light - Instruction Manual](#)
Comprehensive instruction manual for the Fluval Plant 4.0 LED aquarium light, covering installation, operation, maintenance, troubleshooting, specifications, warranty, and safety instructions.

[Fluval Vicenza & Venezia Aquarium Kits: Instruction Manual](#)
Comprehensive instruction manual for Fluval Vicenza and Venezia aquarium kits, covering setup, installation of filters and heaters, decoration, lighting, and maintenance. Includes safety guidelines and technical specifications.

[Fluval Aquarium Care Guide: Setup, Maintenance, and Fish Keeping](#)
A comprehensive guide from Fluval on setting up, maintaining, and enjoying a healthy aquarium. Covers essential equipment, plant care, water quality, fish introduction, feeding, disease prevention, and algae control.

[Fluval CO₂ Indicator Kit: Aquarium CO₂ Monitoring Instructions & Guide](#)
Learn how to use the Fluval CO2 Indicator Kit to monitor carbon dioxide levels in your aquarium, ensuring optimal conditions for live plants. This guide provides step-by-step instructions and color chart interpretation for maintaining healthy aquatic environments.

[Manuel d'instructions Aquarium Fluval Flex 2.0](#)

Guide complet pour l'installation, l'utilisation et l'entretien de l'aquarium Fluval Flex 2.0 (34 L et 57 L), incluant les instructions de sécurité, les composants et la garantie.

[Fluval FLEX 2.0 Aquarium Kit Instruction Manual - 9 & 15 Gallon Models](#)

Comprehensive instruction manual for the Fluval FLEX 2.0 Aquarium Kit, covering safety guidelines, setup, installation, filtration, remote control operation, maintenance, and warranty information for both 9 US Gal (34 L) and 15 US Gal (57 L) models.