Spider Farmer Spider Farmer SE4500

Spider Farmer SE4500 LED Grow Light User Manual

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Spider Farmer SE4500 320W LED Grow Light. Designed with advanced Samsung LM301H EVO Diodes and smart app control, this grow light offers full-spectrum illumination for all stages of plant growth, ensuring high efficiency and optimal yields.



Image: The Spider Farmer SE4500 LED Grow Light, showcasing its bar-style design.

2. Key Features

- **Samsung LM301H EVO Diodes:** Equipped with horticultural-specific diodes for remarkable efficacy of 3.14 µmol/J, consuming 320 watts to produce 913 µmol/s.



Image: Close-up of Samsung LM301H EVO Diodes, highlighting their efficiency.

- **Dimmable with Digital Display:** Precise control over brightness levels with a clear digital display for easy adjustments.



Image: The digital dimming control panel showing brightness percentage.

- **Full Spectrum Lighting:** Provides 2800-3000K, 4800-5000K, and 660-665nm light, ideal for all plant growth stages from seedling to harvest.

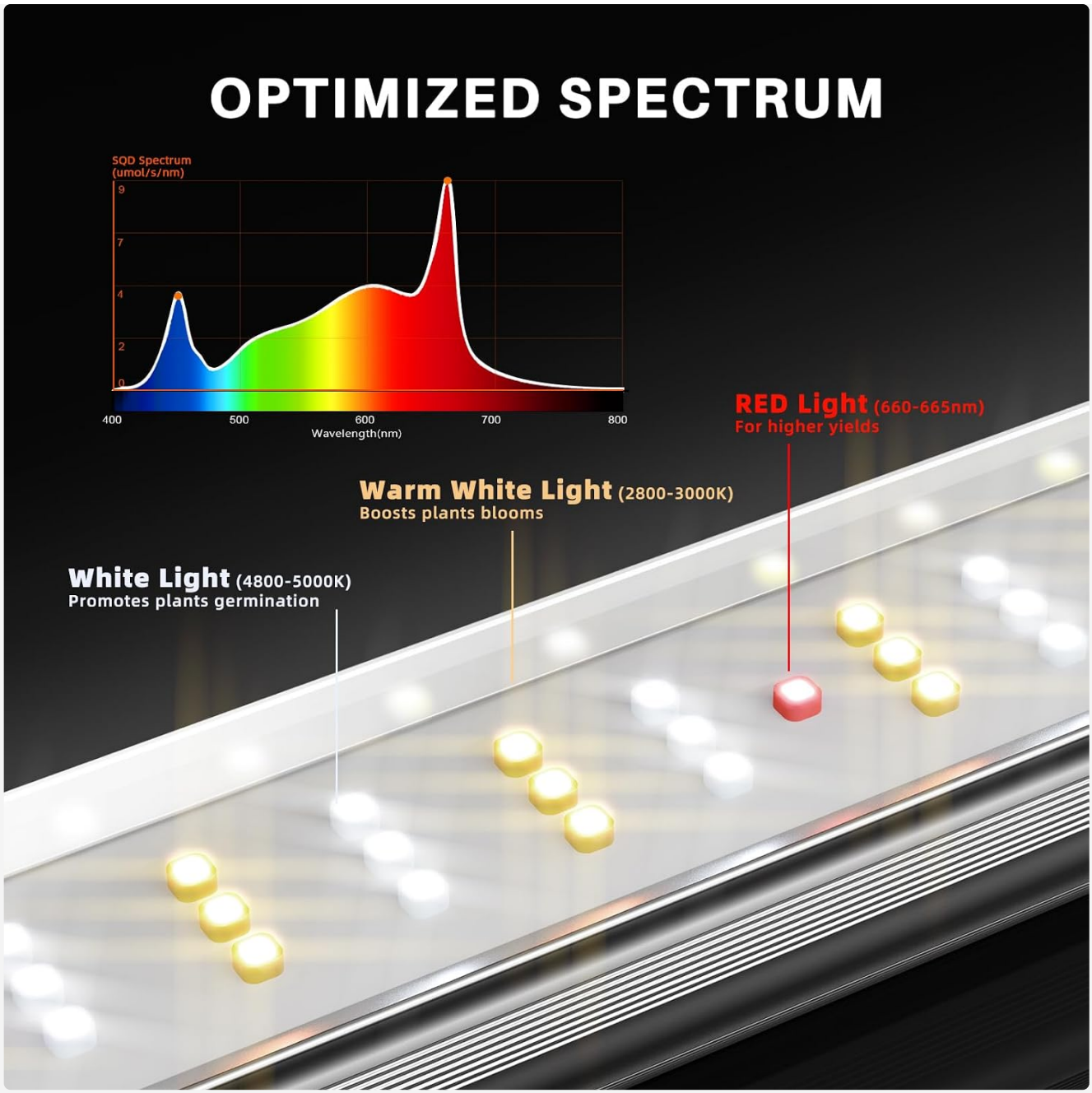


Image: Diagram illustrating the full spectrum light output, including warm white and red light.

- **Remote App Control:** Manage your grow light anytime, anywhere via the Spider Farmer App (available on Apple Store & Google Play) for custom schedules, sunrise/sunset simulation, and remote brightness adjustments.



Image: A smartphone screen displaying the Spider Farmer app interface for light control.

- **Daisy Chain Functionality:** Ability to daisy chain up to 50 SE4500 grow lights, controlled by a single master light for commercial setups.



Image: Multiple grow lights connected in a daisy chain configuration for synchronized control.

- **Superior Heat Management:** Aluminum cooling fins reduce heat by 30%, ensuring longer-lasting, high-performance lighting.

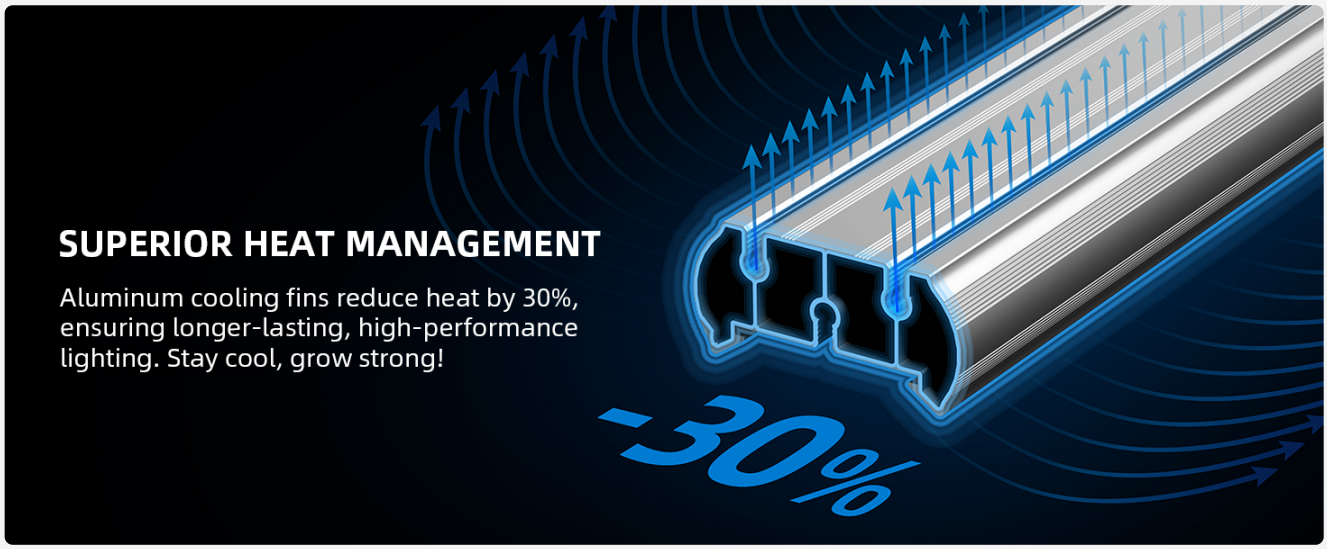


Image: Cross-section diagram illustrating the aluminum cooling fins for heat dissipation.

3. Setup Instructions

1. **Unpack Components:** Carefully remove all components from the packaging. Verify that all parts listed in the packing list are present.
2. **Assemble Light Fixture:** Follow the included assembly guide to connect the LED bars to the driver and frame. Ensure all connections are secure.
3. **Hang the Light:** Use the provided hanging kits to suspend the grow light securely in your grow tent or cultivation area. Ensure it is level and at the recommended height for your plant stage (refer to Section 4.3 for guidance).



Image: The Spider Farmer SE4500 installed inside a grow tent, ready for operation.

4. **Connect Power:** Plug the power cord into the grow light's driver and then into a suitable power outlet.
5. **Download the App:** Download the Spider Farmer App from the Apple App Store or Google Play Store.
6. **Pair with App:** Follow the in-app instructions to pair your SE4500 grow light with the application for remote control and advanced features.

4. Operating Your Grow Light

The Spider Farmer SE4500 offers multiple modes of operation, accessible via the integrated digital display and the Spider Farmer App.

4.1. App Control Overview

The Spider Farmer App provides comprehensive control over your grow light. Below is a video demonstrating its features:

Video: Demonstration of the Smart App Control for Spider Farmer SE & G Grow Lights. This video illustrates how to use the app to control brightness, set schedules, and utilize advanced features.

4.2. Control Modes

- **Manual Mode:** Adjust brightness manually from 11% to 100% using the physical dimmer knob or the app.
- **Time Slot Mode:** Set precise on/off times for each day through the app. This mode ensures your plants receive the exact amount of light needed. You can also enable the High Temperature Protection feature, which automatically dims or turns off the light if the temperature exceeds a set limit.
- **PPFD Mode (with GGS Sensor Pro):** If you have a GGS Sensor Pro (sold separately), you can set a target PPFD level. The light will automatically adjust its brightness to maintain the desired PPFD, providing consistent light for your plants.
- **Sunrise/Sunset Simulation:** This feature, when enabled in the app, simulates natural light patterns by gradually changing the brightness at sunrise and sunset, promoting a more natural growth cycle.

4.3. Growing Tips (Reference)

The following table provides general guidelines for light duration, distance, and dimming settings for different plant growth stages. These are reference values and should be adjusted based on specific plant needs and environmental conditions.

Stage	Time (ON)	Distance (from canopy)	Dimming
Seedling	18H	12" (30cm)	20% - 25%
Vegetative	18H	12" (30cm)	45% - 50%
Flowering	12H	12" (30cm)	85% - 100%

Table: Recommended light settings for different plant growth stages.

5. Maintenance

- **Cleaning:** Regularly wipe the light fixture with a soft, dry cloth to remove dust and debris. Ensure the light is unplugged before cleaning. Do not use harsh chemicals or abrasive cleaners.
- **Ventilation:** Ensure adequate airflow around the light to prevent overheating. Keep cooling fins clear of obstructions.
- **Cable Inspection:** Periodically inspect power cords and connections for any signs of damage or wear. Replace damaged cables immediately.

6. Troubleshooting

- **Light Not Turning On:**
    - Check if the power cord is securely plugged into both the light and the outlet.

- Verify the power outlet is functional.
- Ensure the dimmer is not set to 0%.

- **App Connection Issues:**
  - Ensure your smartphone's Bluetooth is enabled.
  - Restart the Spider Farmer App.
  - Try re-pairing the device in the app settings.
  - Ensure your Wi-Fi network is stable if using Wi-Fi features.

- **Flickering Lights:**
  - Check all cable connections to ensure they are tight.
  - Ensure the power supply is stable and meets the light's requirements.
  - If issues persist, contact customer support.

7. Specifications

Attribute	Detail
Model Number	Spider Farmer SE4500
Power Source	Corded Electric
Light Source Type	LED (Samsung LM301H EVO Diodes)
Light Source Wattage	320 Watts
Maximum Compatible Light Source Wattage	430 Watts
Voltage	120 Volts (AC)
Product Dimensions	45.38"L x 14.51"W x 3.03"H
Item Weight	12.47 pounds
Material	Aluminum
Color	Black & Orange
Bulb Features	Dimmable, Remote Control
Certification	ETL Listed

8. Warranty and Support

The Spider Farmer SE4500 LED Grow Light comes with a**5-year warranty**. During this period, any product issues can be repaired at authorized local repair centers in the USA, Canada, UK, and Germany.

For product issues, technical support, or warranty claims, please contact Spider Farmer customer service directly. Refer to the official Spider Farmer website or your purchase documentation for the most current contact information.

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