

MARS HYDRO FC-E6500, ADLITE RB55

MARS HYDRO FC-E6500 & ADLITE RB55 LED Grow Light Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient installation, operation, and maintenance of your MARS HYDRO FC-E6500 LED Grow Light and ADLITE RB55 Supplemental Light. Please read this manual thoroughly before use to ensure optimal performance and plant health.

2. SAFETY INFORMATION

- Always disconnect power before installation, cleaning, or maintenance.
- Do not operate the light in wet or damp conditions. Ensure the environment is dry.
- Avoid direct eye exposure to the LED lights when operating. Wear protective eyewear if necessary.
- Ensure proper ventilation around the fixture to prevent overheating.
- Keep the light away from flammable materials.
- This product is designed for indoor use only.

3. PRODUCT OVERVIEW

The MARS HYDRO FC-E6500 is a high-performance LED grow light designed for full-cycle plant growth. The ADLITE RB55 is a supplemental deep red light bar intended to enhance flowering and fruiting stages when used in conjunction with a main grow light.

FC-E6500 UNIFORM PPFD MAP

Even light distribution, promoting uniform plant growth

Seedling:



100-300
 $\mu\text{Mol}/\text{m}^2/\text{s}$

Vegetation:



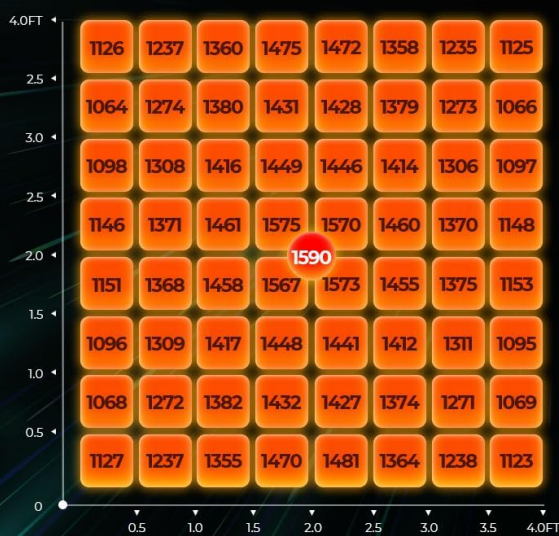
400-600
 $\mu\text{Mol}/\text{m}^2/\text{s}$

Flower:



800-1000
 $\mu\text{Mol}/\text{m}^2/\text{s}$

Height: 8"



Height: 12"

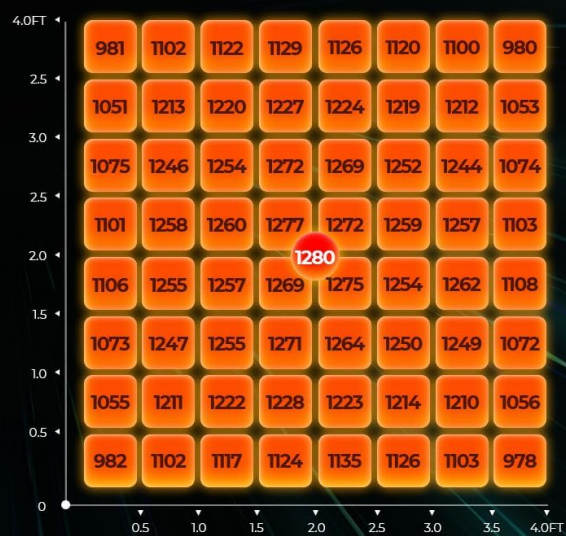


Image 3.1: Overview of the MARS HYDRO FC-E6500 LED Grow Light fixture.

INCREASE YIELD UP TO 30%

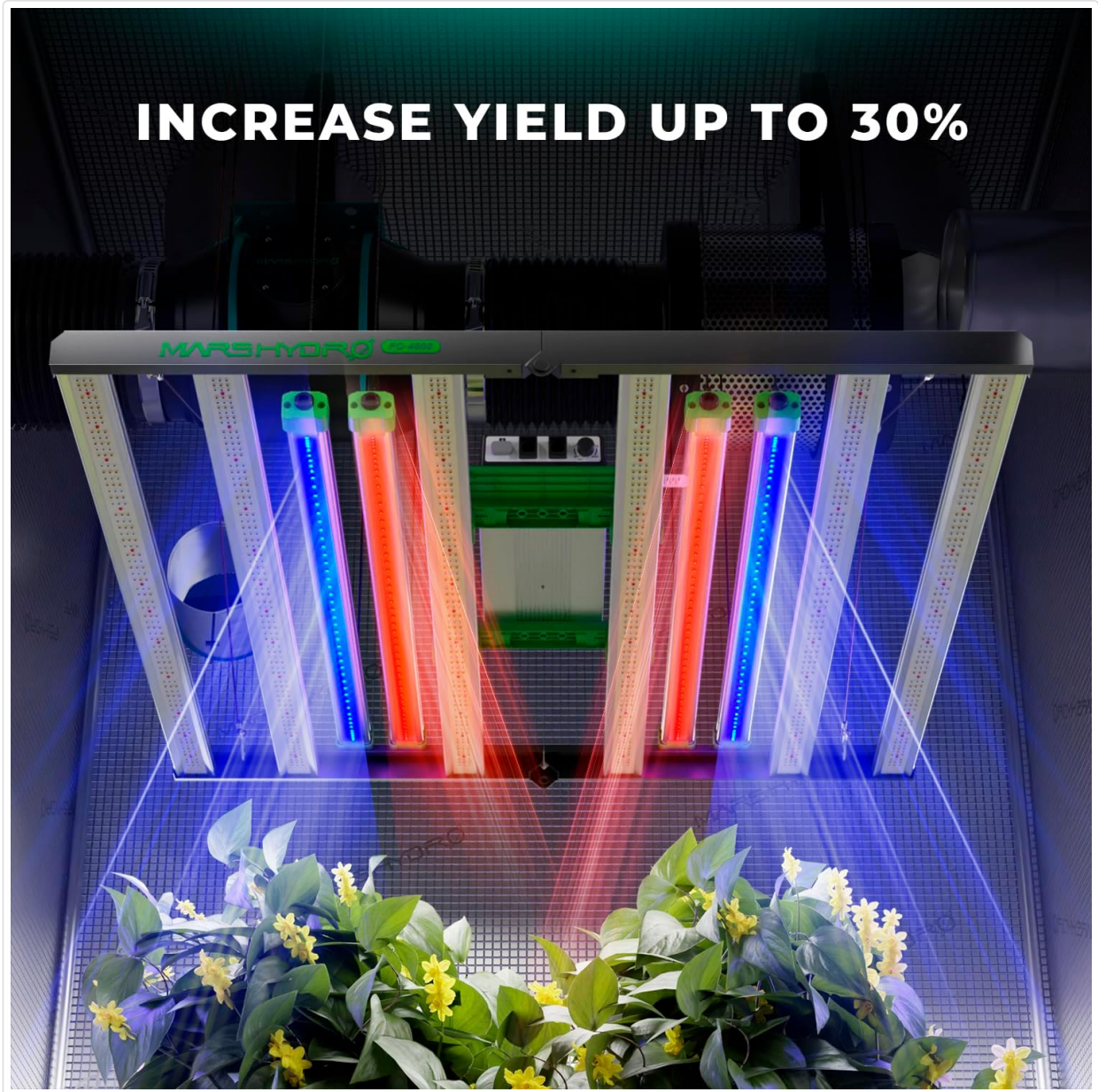


Image 3.2: The FC-E6500 fixture shown with ADLITE RB55 supplemental light bars attached.

4. SETUP INSTRUCTIONS

4.1 Unpacking

Carefully remove all components from the packaging. Verify that all parts are present: FC-E6500 fixture, power cord, hanging kit, and ADLITE RB55 supplemental light bars (if included in your package).

4.2 Assembly and Mounting

1. Attach the hanging cables to the designated points on the FC-E6500 fixture.
2. Securely hang the fixture from a sturdy support structure using the provided hanging kit. Ensure the fixture is level and stable.
3. If using the ADLITE RB55, attach the supplemental light bars to the FC-E6500 frame using the provided clips or mounting hardware. Ensure they are securely fastened.

INTRODUCING ADLITE BLUE- THE NEW MEMBER OF THE ADLITE FAMILY (440NM)

1. Highly effective in regulating key physiological and morphological processes in plants.
2. Promotes compact growth and sturdy stems.



*UV light can enhance plant resistance, but avoid using it with blue light as it may slow plant growth.

Image 4.1: The FC-E6500 grow light installed within a grow tent environment.

4.3 Electrical Connection

1. Connect the power cord to the FC-E6500 fixture.
2. Plug the power cord into a grounded electrical outlet. Ensure the outlet matches the voltage requirements of the fixture.
3. If using the ADLITE RB55, connect its power cable to the designated port on the FC-E6500 or to a separate power source as instructed.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off and Dimming

To power on the FC-E6500, plug it into a live outlet. The fixture may include a dimmer knob or switch to adjust light intensity. Rotate the knob or toggle the switch to achieve the desired brightness level. For the ADLITE RB55, follow its specific power instructions, which may involve connecting to the main light or a separate power supply.

5.2 Recommended Light Cycles and PPFD

The optimal light intensity (PPFD - Photosynthetic Photon Flux Density) and duration vary depending on the plant's growth stage. Refer to the PPFD map below for general guidelines. Adjust the hanging height and dimmer setting to achieve the recommended PPFD values.



Image 5.1: FC-E6500 Uniform PPFD Map showing recommended light intensity at different heights for seedling, vegetation, and flower stages.

- **Seedling Stage:** 100-300 $\mu\text{Mol}/\text{m}^2/\text{S}$ (typically 18 hours on / 6 hours off)
- **Vegetation Stage:** 400-600 $\mu\text{Mol}/\text{m}^2/\text{S}$ (typically 18 hours on / 6 hours off)
- **Flower Stage:** 800-1000 $\mu\text{Mol}/\text{m}^2/\text{S}$ (typically 12 hours on / 12 hours off)

5.3 Utilizing ADLITE RB55 (Deep Red)

The ADLITE RB55 provides supplemental deep red light (660nm) which is beneficial during the flowering and fruiting stages. Integrating the ADLITE RB55 can promote enhanced crop and fruit quality, leading to larger and denser yields.



Image 5.2: Visual representation of improved fruit sweetness and development when using ADLITE Deep Red supplemental lighting.



Image 5.3: The MARS HYDRO FC-E6500 and ADLITE RB55 in operation, demonstrating their role in enhancing plant yield.

6. MAINTENANCE

6.1 Cleaning

Ensure the light is unplugged and cool before cleaning. Gently wipe the LED bars and fixture housing with a soft, dry cloth. Do not use abrasive cleaners or solvents. Keep the cooling fins free of dust and debris to maintain optimal heat dissipation.

6.2 Inspection

Periodically inspect the power cord for any signs of damage. Check hanging hardware for security. Ensure all connections are tight. If any damage is observed, discontinue use and contact customer support.

7. TROUBLESHOOTING

- **Light Not Turning On:**
Check if the power cord is securely plugged into both the fixture and the electrical outlet. Verify the outlet has power. Ensure the dimmer is not set to the lowest (off) position.
- **Light Flickering:**
Ensure all connections are secure. If flickering persists, contact customer support.
- **Overheating:**
Ensure adequate ventilation around the fixture. Clear any obstructions from the cooling fins. Verify ambient room temperature is within acceptable limits for grow lights.

8. SPECIFICATIONS

| Feature | Description |
|-------------------------------|--|
| Model | FC-E6500 & ADLITE RB55 |
| Light Type | LED Grow Light (Full Spectrum) + Supplemental Deep Red |
| Recommended PPFD (Seedling) | 100-300 $\mu\text{Mol/m}^2/\text{S}$ |
| Recommended PPFD (Vegetation) | 400-600 $\mu\text{Mol/m}^2/\text{S}$ |
| Recommended PPFD (Flower) | 800-1000 $\mu\text{Mol/m}^2/\text{S}$ |
| ADLITE RB55 Spectrum | Deep Red (660nm) |
| Input Voltage | <i>(Refer to product label for specific voltage range)</i> |
| Power Consumption | <i>(Refer to product label for specific wattage)</i> |

9. WARRANTY INFORMATION

MARS HYDRO products are covered by a limited warranty. Please refer to the official MARS HYDRO website or your purchase documentation for detailed warranty terms and conditions. Keep your proof of purchase for warranty claims.

10. CUSTOMER SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please contact MARS HYDRO customer support through their official website or the contact information provided with your product packaging. When contacting support, please have your model number and purchase date available.

Website: www.marshydro.com