

KOSCHEAL K6400

KOSCHEAL K6400 640W LED Grow Light User Manual

MODEL: K6400 (KS-08FB)

Introduction

The KOSCHEAL K6400 640W LED Grow Light is engineered to provide optimal lighting conditions for various stages of plant growth. Featuring high-efficiency LM301H LEDs and a full-spectrum design, this grow light is suitable for a 5x5ft grow tent. This manual contains important information regarding the safe installation, operation, and maintenance of your KOSCHEAL K6400 LED Grow Light to ensure its longevity and performance.

Safety Information

Please read all safety instructions before operating the KOSCHEAL K6400 LED Grow Light. Failure to follow these instructions may result in electric shock, fire, or other injuries.

- Always disconnect power before installation, maintenance, or moving the fixture.
- Do not look directly at the operating LEDs. Eye protection is recommended.
- Ensure the grow light is installed in a well-ventilated area to prevent overheating.
- Keep the light away from water or other liquids. This product is not waterproof.
- Do not attempt to modify or disassemble the fixture. This will void the warranty.
- Use only the provided power cord and accessories.
- Ensure the hanging system is securely fastened and can support the weight of the fixture.

Package Contents

Verify that all components are present in your package:

- KOSCHEAL K6400 LED Grow Light (x1)
- Power Plug (x1)
- Lifting Rope (x2)
- RJ12 Signal Daisy-chain Cable (x1)
- Hanging Kits (x2)
- User Manual (x1)



Package Contents

K600 LED GROW LIGHT X1

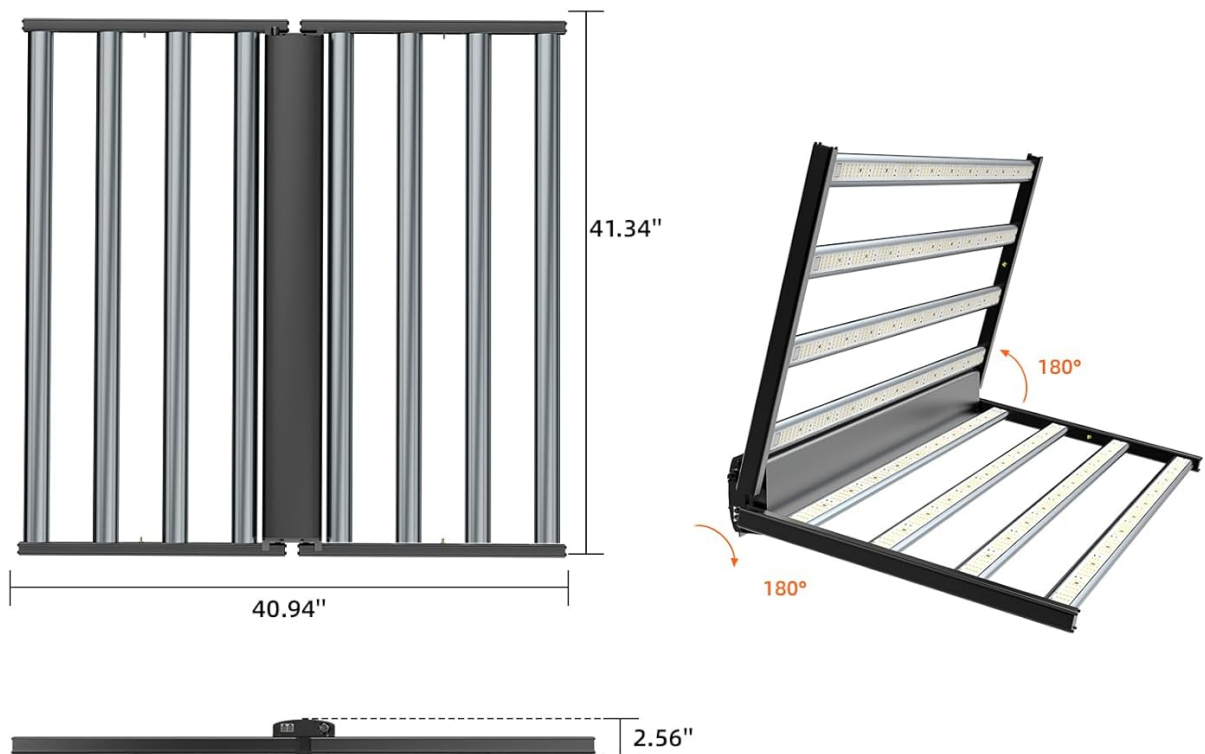
Power Plug X1

Lifting Rope X2

RJ12 signal Daisy-chain Cable X1

Hanging Kits X2

User Manual X1



This image displays the package contents of the KOSCHEAL K6400 LED Grow Light, including the light fixture, power plug, lifting ropes, RJ12 signal daisy-chain cable, hanging kits, and user manual. It also provides a diagram with the product dimensions: 41.34 inches (length), 40.94 inches (width), and 2.56 inches (height), and illustrates the 180° foldable design.

Product Overview and Features



This image displays the KOSCHEAL K6400 640W LED Grow Light from a top-down perspective, showcasing its bar design. Below the light, a full spectrum graph, RJ45 ports, a dimmer knob, and hanging ropes with carabiners are visible, representing the light's features and accessories.

High-Efficiency Lighting

The K6400 utilizes LM301H EVO LEDs, each rated at 2.9 $\mu\text{mol/J}$ PPE, delivering an industry-leading efficiency of 235 lumens per watt. With a real output power of 640W, it supports a maximum yield of 2.6g per watt.

Superior Heat Dissipation

Designed without fans, the K6400 operates silently. A large, solid aluminum heat sink is integrated into the fixture, ensuring efficient heat dissipation and contributing to the long lifespan of the LED bars. This design also helps reduce electricity consumption compared to traditional HID lights.

Full Spectrum for All Growth Stages

The K6400 provides a professional, customized full spectrum of light, optimized for all plant growth stages, from germination to flowering and fruiting.



PPE
2.9 $\mu\text{mol/J}$

PPF
1856 $\mu\text{mol/s}$

Coverage
4x4' $120 \times 120 \text{cm}$

RED Light (660-665nm)
For higher yields

Warm White Light(2800-3000K)
Promote plant
flowering and fruiting

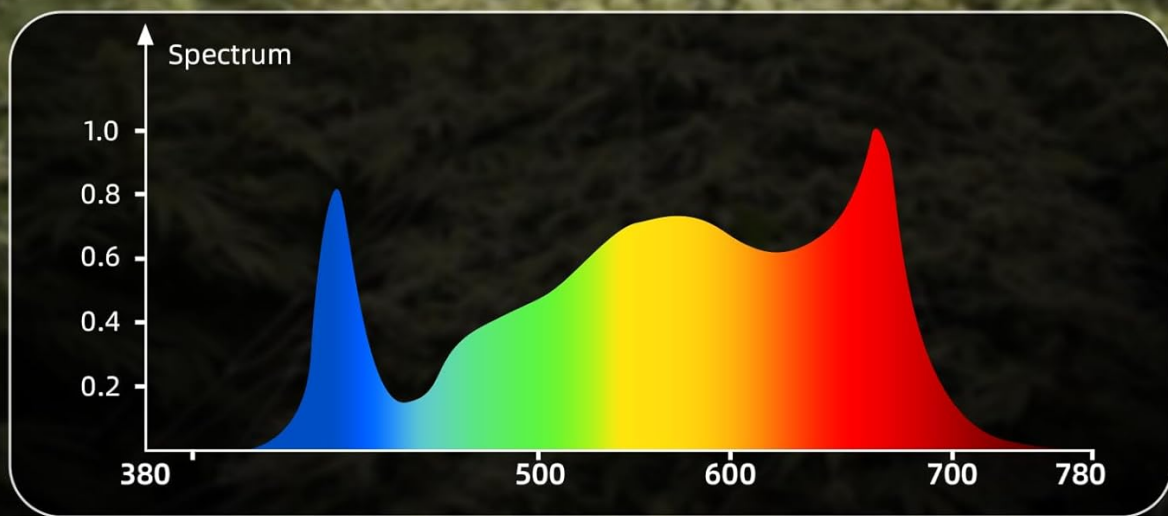
White Light (4800-5000K)
Promote plant
germination and growth



A detailed view of the KOSCHEAL K6400 LED bars, highlighting the different types of LEDs: Red Light (660-665nm) for higher yields, Warm White Light (2800-3000K) to promote flowering and fruiting, and White Light (4800-5000K) for plant germination and growth. The image also indicates PPE of 2.9 $\mu\text{mol/J}$, PPF of 1856 $\mu\text{mol/s}$, and a coverage area of 4x4 feet (120x120cm).



PROFESSIONAL CUSTOMIZED FULL SPECTRUM



This graph illustrates the professional customized full spectrum provided by the KOSCHEAL K6400 LED Grow Light. The X-axis represents wavelength in nanometers (380-780nm), and the Y-axis represents relative intensity, showing peaks in blue, green, yellow, orange, and red light, optimized for plant growth.

Foldable Design

The K6400 features a 180° foldable design, making it easy to transport, store, and install without complex assembly.

Setup and Installation

Follow these steps to safely set up your KOSCHEAL K6400 LED Grow Light:

1. **Unpack Components:** Carefully remove all items from the packaging and verify against the package contents list.
2. **Assemble Hanging Kits:** Attach the hanging kits to the designated points on the grow light fixture. Ensure they are securely fastened.
3. **Mount the Light:** Use the lifting ropes and hanging kits to suspend the grow light from a sturdy support structure in your grow tent or cultivation area. Ensure the light is level and at the desired height above your plants.

4. **Connect Power:** Plug the provided power cord into the grow light's power input port. Then, plug the other end into a grounded electrical outlet.
5. **Optional: Daisy Chain Connection:** If connecting multiple K6400 units, use the RJ12 signal daisy-chain cable to link the lights. Connect one end of the RJ12 cable to the 'OUT' port of the first light and the other end to the 'IN' port of the next light. Repeat for additional lights.
6. **Optional: External Controller Connection:** For external control, connect an RJ12 cable from your smart controller (not included) to the 'IN' port of the first grow light in the daisy chain.

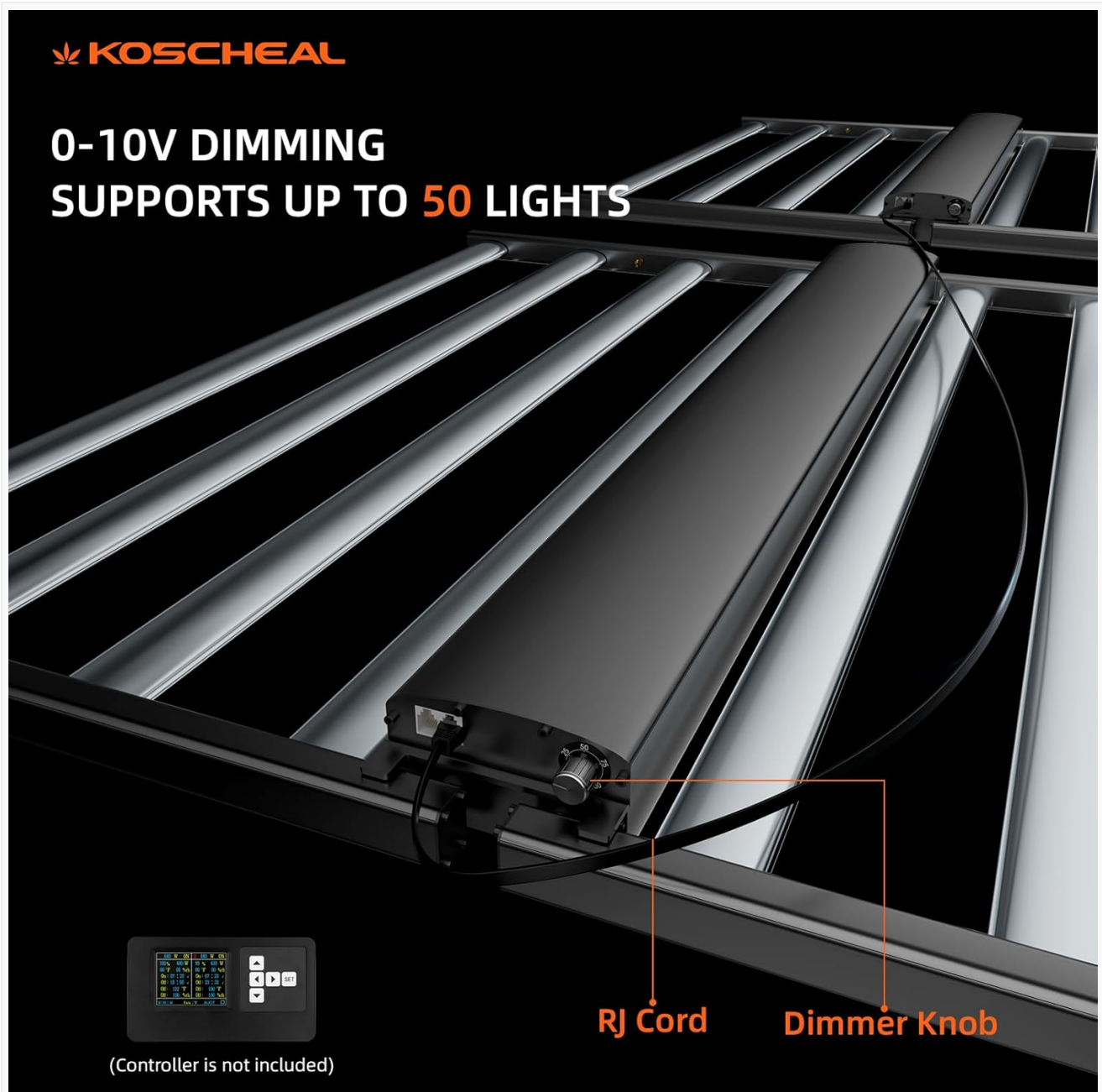
Operating Instructions

Power On/Off

Once connected to power, the light will turn on. To turn off, disconnect the power cord or use an external timer/controller.

Dimming Control

The K6400 features an integrated dimmer knob for manual intensity adjustment from 0% to 100%. Rotate the knob clockwise to increase brightness and counter-clockwise to decrease it.



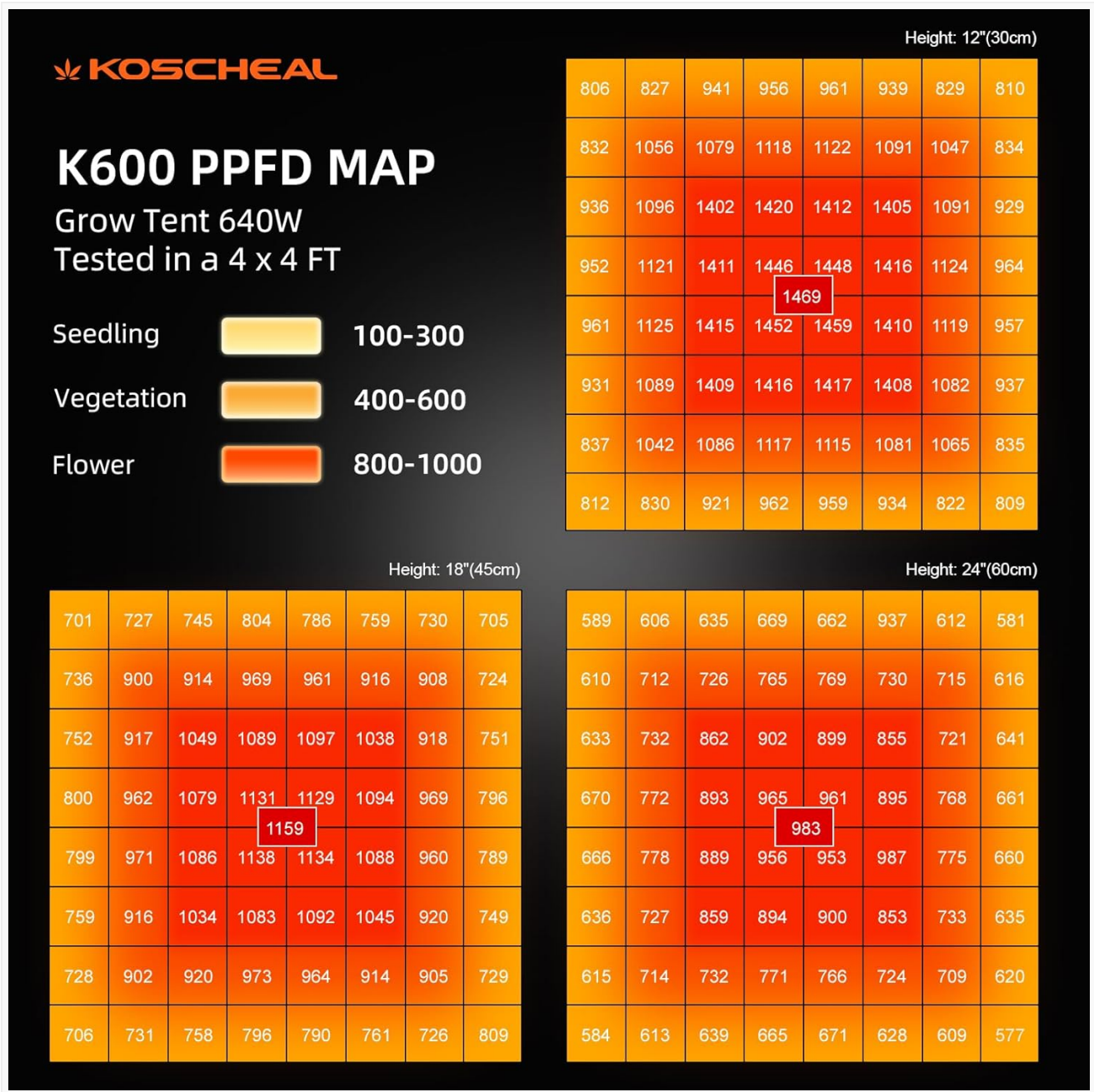
This image highlights the dimming and control features of the KOSCHEAL K6400 LED Grow Light. It shows the RJ cord ports for daisy-chaining and connecting to an external controller (not included), along with the integrated dimmer knob for manual intensity adjustment. The light supports 0-10V dimming and can control up to 50 lights in a daisy chain.

External Controller and Daisy Chain

The grow light includes a smart controller port (RJ12) for connecting to universal controllers (not included). This allows for advanced timing and dimming functions. Up to 50 K6400 units can be controlled simultaneously through a daisy-chain connection using RJ12 cables.

PPFD Map and Coverage

The KOSCHEAL K6400 is designed to provide uniform PPFD levels across a 5x5 ft coverage area. Refer to the PPFD map below for recommended light intensity at different heights and growth stages.



- **Vegetative Stage:** Maintain PPFD between 400-600 $\mu\text{mol}/\text{m}^2/\text{s}$.
- **Flowering Stage:** Maintain PPFD between 800-1000 $\mu\text{mol}/\text{m}^2/\text{s}$.

Adjust the hanging height of the fixture or use the dimmer knob to achieve the desired PPFD levels for your plants' specific growth requirements.

Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your grow light.

- **Cleaning:** Periodically wipe the LED bars and heat sink with a soft, dry cloth to remove dust and debris. Ensure the light is unplugged and cool before cleaning. Do not use liquid cleaners.
- **Inspection:** Regularly check the power cord, hanging kits, and connections for any signs of wear or damage. Replace any damaged components immediately.
- **Ventilation:** Ensure adequate airflow around the fixture to maintain proper operating temperatures.

Troubleshooting

If you encounter issues with your KOSCHEAL K6400 LED Grow Light, refer to the following common problems and solutions:

- **Light Not Turning On:**
 - Check if the power cord is securely plugged into both the fixture and the electrical outlet.
 - Verify that the electrical outlet is functional by plugging in another device.
 - Ensure the dimmer knob is not set to 0%.
- **Light Flickering:**
 - Check all power connections for looseness.
 - If using a daisy chain, ensure all RJ12 cables are securely connected.
 - If connected to an external controller, check the controller's settings and connections.
- **Reduced Brightness:**
 - Adjust the dimmer knob to increase brightness.
 - Ensure the light is clean and free of dust accumulation on the LEDs.

If the problem persists after attempting these solutions, please contact KOSCHEAL customer support for assistance.

Specifications

| Feature | Specification |
|----------------------|-----------------------------------|
| Brand | KOSCHEAL |
| Model Number | KS-08FB |
| Light Source Type | Light Emitting Diode (LM301H EVO) |
| Light Source Wattage | 640 Watts |

| Feature | Specification |
|-------------------------|---|
| PPE | 2.9 μmol/J |
| Coverage Area | 5 x 5 ft |
| Color Temperature | 3500 Kelvin (Full Spectrum) |
| Dimming | 0-10V Dimmable, Daisy Chain, Multiple Control Modes |
| Material | Aluminum |
| Product Dimensions | 41.34"L x 40.94"W x 2"H |
| Item Weight | 34 Pounds |
| Power Source | Corded Electric |
| Number of Light Sources | 8 Bars |

Warranty and Support

KOSCHEAL offers a **3-year warranty** for the K6400 LED Grow Light, along with a**30-day free return policy** from our US warehouse. For any questions, concerns, or technical support, please do not hesitate to reach out to our dedicated customer support team. We are committed to providing a solution tailored to your needs within 24 hours.