

## TSL ROI-E420

# TSL ROI-E420 LED Grow Light User Manual

Brand: TSL | Model: ROI-E420

## 1. INTRODUCTION

The TSL ROI-E420 Horticulture LED System is a high-performance lighting solution designed for commercial horticulture applications. This system integrates advanced LED technology to provide a balanced spectrum, utilizing Grower's Choice 3K CMH Full Phase Spectrum for optimal plant growth. It delivers a total output of 1090  $\mu\text{mol/s}$  with a system efficacy of 2.6  $\mu\text{mol/J}$ .

## 2. SAFETY INFORMATION

- Always disconnect the power supply before installation, maintenance, or cleaning.
- Ensure the installation area is dry and free from excessive moisture. This product has a Water Resistance Level of Waterproof, but proper electrical safety precautions should always be observed.
- Do not look directly into the LED lights when the unit is operating, as this may cause eye strain or damage.
- Ensure the mounting structure can safely support the weight of the fixture.
- Keep the light away from flammable materials.
- Only use the provided power cord and accessories.

## 3. PACKAGE CONTENTS

Verify that all components are present in the package:

- TSL ROI-E420 LED Grow Light Fixture
- Mounting Hardware
- Power Cord

## 4. SETUP AND INSTALLATION

The TSL ROI-E420 LED Grow Light is designed for ceiling mount installation. The fixture comes pre-assembled and

does not require complex assembly.

#### 4.1 Unfolding the Fixture

Carefully unfold the LED light bars until they are fully extended. The fixture features a hinge mechanism with an integrated level to assist in proper alignment.



Figure 1: Hinge mechanism with integrated level for precise unfolding.

#### 4.2 Mounting the Light

Use the included mounting hardware to securely attach the fixture to a sturdy ceiling structure. Ensure the light is level and stable before proceeding.



Figure 2: TSL ROI-E420 LED Grow Light in its fully unfolded configuration.

#### 4.3 Electrical Connection

Connect the power cord to the fixture and then to a suitable electrical outlet. The light operates on a Corded Electric

power source.

## 5. OPERATING INSTRUCTIONS

The TSL ROI-E420 LED Grow Light offers multiple control methods for adjusting its operation.

### 5.1 Dimming Control

The fixture is equipped with a dimmer switch, allowing you to adjust the light intensity. Rotate the dimmer knob clockwise to increase brightness and counter-clockwise to decrease it.



Figure 3: Control panel with dimmer knob and ports.

## 5.2 Remote and App Control

The ROI-E420 supports remote control and app control functionalities. Refer to the separate instructions for pairing with a remote control or connecting to the dedicated mobile application for advanced settings and scheduling.

## 6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your LED grow light.

- **Cleaning:** Periodically clean the light fixture and LED surfaces with a soft, dry cloth. Ensure the unit is unplugged and cool before cleaning. Do not use abrasive cleaners or solvents.
- **Inspection:** Regularly inspect the power cord for any signs of damage. Check mounting hardware for tightness.
- **Ventilation:** Ensure adequate airflow around the fixture to prevent overheating.

## 7. TROUBLESHOOTING

If you encounter issues with your TSL ROI-E420 LED Grow Light, refer to the following common 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.
  - Ensure the dimmer knob is not set to the lowest (off) position.
- **Light Flickering:**
  - Check for loose connections in the power cord.
  - Ensure the power supply is stable.
- **Dimming Not Responding:**
  - Ensure the dimmer knob is clean and free of obstructions.
  - If using remote/app control, check battery levels or connection status.

## 8. SPECIFICATIONS

<b>Model Number</b>	ROI-E420
<b>Brand</b>	TSL
<b>Wattage</b>	420 watts
<b>Voltage</b>	10 Volts (DC)
<b>Light Source</b>	LED
<b>Brightness</b>	746 Lumens
<b>Efficiency</b>	2.6 $\mu\text{mol}/\text{J}$
<b>Control Method</b>	App, Remote Control

<b>Switch Type</b>	Dimmer
<b>Indoor/Outdoor Usage</b>	Indoor
<b>Mounting Type</b>	Ceiling Mount
<b>Water Resistance Level</b>	Waterproof
<b>Shade Material</b>	Aluminum
<b>Color</b>	Silver or Gray

## 9. WARRANTY AND SUPPORT

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For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official TSL website. Keep your proof of purchase for warranty claims.