

# **30W UV** SUPPLEMENTAL LIGHT LED BAR

ENGLISH





## 30W UV SUPPLEMENTAL LIGHT LED BAR LED MANUAL

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#### 1. INTRODUCTION

Thank you for purchasing the Lumatek 30W UV supplemental LED Light Bar. This manual describes how to install and use the light bar; please read this manual thoroughly before attempting to install or operate any Lumatek system. If you are not comfortable with the installation of high performance lighting systems, you should seek the services of a qualified installation professional.

#### 2. PRODUCT DESCRIPTION

The Lumatek 30W UV supplemental LED Light Bar has been specifically designed to augment Lumatek Zeus series full-spectrum LED grow light systems during the plant's flowering growth stage. Designed to fit directly on the Lumatek Zeus LED fixtures, this unit has an independent power source and can also be connected together in series with daisy-chain link cables.

Recent research shows strategic exposure of indoor-grown plants to UVA & UVB light can increase secondary metabolite and essential oil production as well as inhibiting mold, mildew & pest infestation, minimizing the need for chemical intervention.

The 30W UV bar was specially designed to provide the ideal UV-B [280-315 nm] and UV-A [315-400 nm] radiation doses to your plants based on scientific support. A single fixture can provide 2.2 kJ/day (12 hours) of UV-B energy and 518 kJ/day (12 hours) of UV-A output. This translates to a fixture output of 100 mW of UV-B and 12000 mW UVA. Lumatek ensures that this fixture does not produce UV-C radiation.

Daisy-chain link cable will allow you to easily connect several fixtures together in series. To ensure unit performance, this LED bar has a single input and output socket for the Power Cable or Daisy Chain link Cable, depending on the use of that bar. For this reason, the Power (4m) and Daisy Chain (1.5m) cables are sold separately.

## 3. PRODUCT INFORMATION AND SPECIFICATIONS

## 3.1 General Product Information

PRODUCT NAME	30W UV supplemental LED Light Bar
PRODUCT CODE	LUMLED013
MANUFACTURER	Lumatek Ltd
EAN	5060560031611
PLUG TYPE	UK/EU

## 3.2 Technical Specifications

UV-A (315-400NM)	12000 MW
UV-B (280-315NM)	100 MW
INPUT VOLTAGE	220-240V AC 50-60HZ
DRIVER	30W, 220-240V AC 50-60HZ INTEGRATED
INPUT POWER	30W (+/- 5%)
FOOTPRINT	1.2 X 0.6 M
WATERPROOF/DUSTPROOF	IP65
LIFE SPAN	L90 > 8500 HRS
LIGHT DISTRIBUTION	140°
LIGHT SOURCE	UVA & UVB LED
DIMENSIONS	1000 X 48 X 42 MM
WEIGHT	1.2KG
THERMAL MANAGEMENT	PASSIVE HEAT SINK
POWER FACTOR	>0.98
MAX AMBIENT TEMPERATURE	25°C
WORKING TEMPERATURE	-10° +40°C
WORKING HUMIDITY	20% - 90% NON-CONDENSING
DIMMABLE	NO
DAISY-CHAIN CAPABILITY	YES (MAX 30 PCS)

## 3.3 Fixture Dimensions



## 3.4 Spectral Quantum Distribution Graph

The 30W UV bar has been developed for use with Lumatek Zeus full spectrum LED fixtures. It is recommended to use two UV bars to supplement each fixture.



## 3.5 Light distribution curve



#### 3.6 Environment

The LED fixture is intended to be used in climate-controlled grow rooms and indoor farms. The product may be used in damp environments but may not be used in wet environments or outdoors. The product will operate in ambient temperatures from -10°C to 40°C but will function at optimal level between 20°C to 30°C.

The product will operate in 20% – 90% humidity, non-condensing.

## 3.7 **Legal**

This product is CE & UKCA certified compliant with LVD and EMC directive test standards.

## 4. SAFETY RECOMMENDATIONS AND WARNINGS

#### Warning! Carefully read the warnings below before using or working with the product! •

The LUMATEK 30W UV Supplemental LED light Bar produces UVB (near UV Erythemal) and UVA (near UV-black light) electromagnetic radiation with wavelengths from 280 to 400 nm.

To avoid any biological affects in physical human body, please switch the power off when installing and/or during the maintenance processes on your grow system.

If turning Off UV Bars won't be possible, all exposed skin should be covered with opaque material including face, neck, head, hands, and arms. It is assumed that other body parts are covered if wearing proper laboratory attire; long pants, closed toe shoes, gloves, long sleeve lab coats and protective glasses.

Do not look directly at the light as the UVB radiation from the light fixture can damage eyes and skin.

Do not restrict the airflow across the fixtures to avoid any heat build-up which may reduce drastically the lifetime of your UV supplemental LED bars.

Do not put the UV Supplemental LED Bar in contact with any surface while still ON.

Only use on plants.

- CAUTION! Ultraviolet Radiation (UV)
- Do not look directly into the UV light during operation
- Wear protective eyewear to avoid exposure to UV light
- Avoid direct skin & eye exposure to UV light
- Keep out of reach of children

• Do not open or disassemble the LED fixture as it contains no serviceable parts inside. Opening or modifying the LED fixture can be dangerous and will void the warranty.

• Do not use the LED fixture when either the LED fixture or its power cable are damaged. Replace the power cable with correctly rated cable only.

• Modifications to the cables can lead to unwanted electromagnetic effects which may make the product not comply with legal requirements.

• Do not expose the LED fixture to:

Condensing humidity, heavy mist or direct spray;

Ambient temperatures outside the specified range;

Dust and contamination;

Direct sunlight during use or HID light that may heat up the driver.

• Always disconnect the LED fixture from mains before performing any maintenance.

• Always allow for a cool down period of at least 20-30 minutes before touching the LED fixture. Touching the LED fixture when the fixture is lit or immediately after may result in burns!

• Natural convection removes heat away from the heatsink. In order for the system too properly cool itself, at least 5cm of space is required between the fixture and the roof of your grow area.

• Do not use abrasive materials or aggressive cleaning agents to clean the LED fixture as this may damage the secondary optics. Instead use a clean damp or dry fabric/cloth.

• Do not use the LED fixture near flammable, explosive or reactive substances. The LED fixture can reach temperatures of 40°C.

• Do not use sulphur vaporizers or water misters.

• The installation and use of the LED fixture is the responsibility of the end user. Incorrect use or installation can lead to failure and damage to the LED fixture. Damage to the LED fixture and electronic circuitry as a result of incorrect installation and use revokes the warranty.



## 6. INSTALLATION

Warning! Mounting and installing the LED fixture must be in accordance with the applicable local laws and regulations.

Warning! The installer is responsible for correct and safe installation.

Warning! Ensure the local cabling can support the voltage and current requirements of the LED fixture.

Warning! Avoid coiled cables and keep mains leads separated to help prevent electromagnetic interference.

Warning! Do not connect or disconnect the LED fixture under load.

#### 6.1 Fixture assembly & installation

WARNING! The light bar is shipped with a protective plastic cover over the diodes. Please ensure this protective cover is removed before use!



Insert the metal hanger hooks into the mounting holes on each side of the light bar, at both ends.

The UV bar can be placed between the Zeus fixture full spectrum bars and supported with the metal hangers placed over the Zeus frame end pieces.

#### 6.2 Recommended Coverage

The Lumatek 30W UV Supplemental LED Bar was designed to fit directly into the Zeus fixtures. To make sure you achieve the best light spread over the canopy, we recommend: Integrate a minimum of 2 units of 30W UV Supplemental Light LED Bar, with:

- ZEUS 465W 2.6 1.2 x 1.2 m footprint
- ZEUS 600W 2.6 1.4 x 1.4 m footprint
- ZEUS 465W PRO 2.9 1.2 x 1.2 m footprint
- ZEUS 600W PRO 2.9 1.4 x 1.4 m footprint
- ZEUS 1000W Xtreme CO2 1.5 x 1.5 m footprint w/ CO2 Supplement



Integrate a minimum 3 units of 30W UV Supplemental Light LED Bar, with:
ZEUS 1000W PRO - 2.0 x 1.5 m footprint

#### 6.3 Recommended UV-B + UV-A Radiation Application

Always mix the supplemental UVB + UVA radiation with the Lumatek Zeus Full Spectrum LED Range.

The UV bars have been designed for 12 hours operation to match the flowering photoperiod and can be switched ON/OFF at the same time as the Zeus full-spectrum fixture.

UV strategic exposure to flowering plants can begin from 4 weeks before harvest and particularly the last 2-3 weeks of bloom when flower and resin development is most present.

For a good UV radiation spread, ensure to install the recommended minimum units and follow the distance to canopy referred on the Grow Light Strategies table, download from: https://lumatek-lighting.com/education/

If you notice plant damage, we recommend to increase the distance between fixture and canopy or decrease the UV light output delivered to your plants by reducing the UV photoperiodic time.

#### 6.4 Connecting the UV bar to the mains power

Warning! Make sure mains power is switched off.

Warning! Ensure the power supply cable is not coiled and does not touch any hot surfaces. Warning! Connect the cables according to local rules, safety regulations and electrical code.

#### Warning! Do not connect or disconnect the LED fixture under load.

The Lumatek UV LED bar power cable (4m) and the UV LED bar daisy chain cable (1.5m) are both sold separately.

The power cable should be connected to the UV bar power input port;

Remove dust cap from UV bar Input connector.

Correctly align connectors and push together until 'click-locked'.

Connect mains power plug to switching gear/power supply.

Switch on mains power.

To disconnect;

Switch OFF mains power

turn power cable connector twist-lock anti-clockwise and pull apart from bar connector port.

#### 6.5 Connecting UV bars together in series with daisy chain cables

A UV bar power cable is required to power the first UV bar and then further UV bars can be connected in series from the first bar and powered with the UV daisy chain cables.

Maximum 30pcs UV bar can be daisy-chained from one power source.

Ensure mains power is OFF

Using the Lumatek UV daisy chain cable; connect UV bar [1] power output port to UV bar [2] power input port by correctly aligning connectors and push together until 'click-locked'.

Continue until all UV bars are connected.

Switch on mains power.

To disconnect;

Switch OFF mains power

Turn daisy chain cable connector twist-lock anti-clockwise and pull apart from bar connector port.

Warning! Do not connect or disconnect the UV bars under load.

#### 7. INSPECTION, MAINTENANCE AND REPAIR

Warning! Disconnect the LED fixture from mains before performing any maintenance or repairs.

Warning! Do not connect or disconnect the LED fixture under load.

Warning! Do not open or disassemble the LED fixture, it contains no serviceable parts inside. Opening the LED fixture can be dangerous and will void the warranty.

Warning! Always wait 20 – 30 minutes for the LED light bars to cool down before handling.

#### Caution! Do not clean the LED fixture with detergents, abrasives or other aggressive substances.

Regularly check the LED fixture for dust or dirt build up. Clean if necessary. Contamination may cause overheating and decreased performance. Clean the outside of the LED fixture using a dry or damp cloth.

Regularly check the cables of the LED fixture to ensure it is undamaged.

#### 8. STORAGE AND DISPOSAL

Store the LED fixture in a dry and clean environment, with an ambient temperature of -25°C to 55°C. The product must not be discarded as unsorted municipal waste but must be collected separately for the purpose of treatment, recovery and environmentally sound disposal.

#### 9. WARRANTY

Lumatek warrants the mechanical and electronic components of their product to be free of defects in material and workmanship if used under normal operating conditions for a period of one (1) year from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use Lumatek shall, at its discretion, either replace or repair the product using suitable new or reconditioned products or parts. In case Lumatek decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. one (1) year from the date of purchase of the original product. For service; return the product to your shop with the original sales receipt.





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