



# **VSFD LED Grow Light**

## **USER MANUAL**

Love  
what  
you  
grow™

Welcome to **VIVOSUN**

Thank you for choosing VIVOSUN. We are committed to product quality and friendly customer service. If you have any questions or suggestions, please don't hesitate to contact us.

**PRODUCTS INCLUDED IN THIS MANUAL:**

Product	Model	SKU
VSFD4500 LED 450W	VSFD4500	VSFD4500
VSFD6500 LED 650W	VSFD6500	VSFD6500

# CONTENTS

Safety Information .....	1
Product Contents .....	3
Key Features .....	5
Smart Grow System .....	6
Specifications .....	7
Spectrum .....	8
Dimensions .....	9
Installation .....	11
Application .....	18
Warranty Information .....	19

# SAFETY INFORMATION



Please read the following information carefully before using the device. Failure to follow these safety instructions may result in serious injury and will release VIVOSUN of all liability and void all product warranties.

## IMPORTANT SAFETY INFORMATION:

**Installation:** Please read carefully and follow the instructions in this manual and use the included components to install the product.

**Handling:** Set up the light in an operating environment that allows for adequate air circulation. Never allow objects to obstruct or enter the ventilation openings. Avoid looking directly at the Lights when they are turned on. Use shielding and grow room glasses to protect your eyes.

**For Indoor Use Only:** DO NOT use this light outdoors or in any hazardous location such as near flammable, explosive, or corrosive chemicals, or in wet environments. Appropriate temperature range: -10 °C to 40 °C (14 °F to 104 °F).

**Power Cord:** Your AC cord has a three-wire grounding plug (a plug that has a grounding pin). This plug fits only a grounded AC outlet. If you're unable to insert the plug into an outlet because the outlet isn't grounded, contact a licensed electrician to replace the outlet with a properly grounded one. Do not use an adaptor without a grounding element, otherwise you risk a fire in your home.

# SAFETY INFORMATION

**Repairs:** If there is something wrong with your light, please contact us. Opening the light to inspect or repair in accordance with VIVOSUN's instructions and express permission will not affect your existing warranty. However, if you disassemble the light or install add-ons inside without express permission from VIVOSUN, you may damage the light and void warranty.

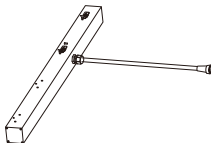
**Cleaning:** DO NOT use water or any detergent to clean this product.

# PRODUCT CONTENTS

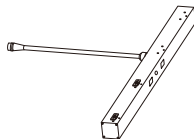
## VSFD4500



LED Light Bar  
x 4pcs



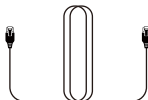
Fixture Bar A  
x 1pc



Fixture Bar B  
x 1pc



Power Cord (120V)  
x 1pc



RJ11 Cable  
x 1pc



Wire Rope  
x 2pcs



Thumb Screw  
x 8pcs



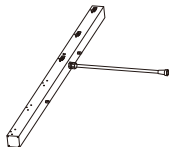
Cable Clip  
x 2pcs

# PRODUCT CONTENTS

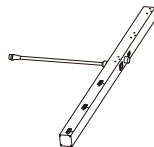
## VSFD6500



LED Light Bar  
x 6pcs



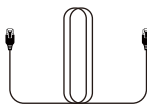
Fixture Bar A  
x 1pc



Fixture Bar B  
x 1pc



Power Cord (120V)  
x 1pc



RJ11 Cable  
x 1pc



Wire Rope  
x 2pcs



Thumb Screw  
x 12pcs



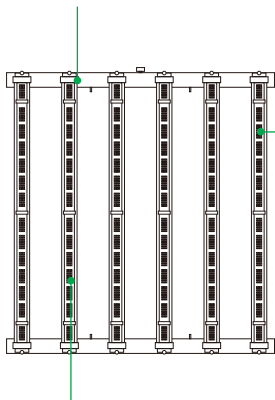
Cable Clip  
x 2pcs



# KEY FEATURES

## DETACHABLE LIGHT BARS

Detachable light bars with reliable quick-plug connectors. Easy to install and replace.



## FULL SPECTRUM & UV/FR

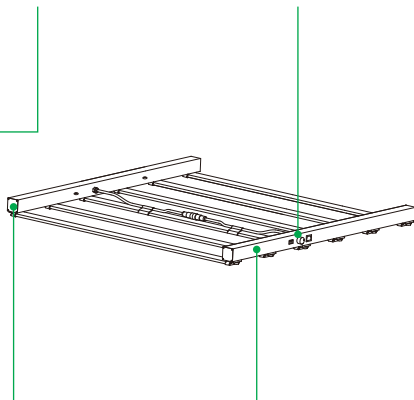
380-780nm of full spectrum coverage with 450nm, 660nm 730nm and UVA rich for photosynthesis.

## HIGH EFFICACY

High quality diodes and power supply mean high PPE, up to 2.8 $\mu$ mol/J.

## DIMMING CONTROL

0-100% light dimming on light or by controller with daisy-chain.



## BUILT-IN DRIVER

Built-in drivers hidden inside the fixture bars make light slim and easy to install.

## SMART CONTROL

Compatible with the VIVOSUN GrowHub Controller that opens advanced functions and remote controls through the VIVOSUN App.

# SMART GROW SYSTEM

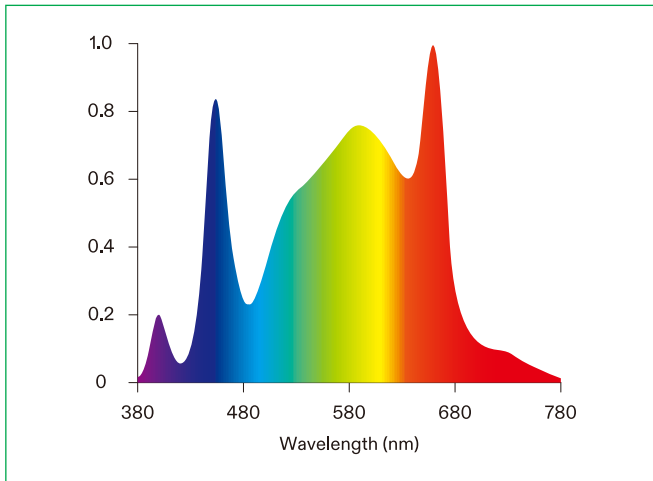
The VIVOSUN Smart Grow System is a fully automatic grow system empowering growers by making growing easier and more convenient. The system includes the VIVOSUN GrowHub Controller, the VIVOSUN App, the AeroLight, the VS Grow Light series, the AeroZesh, the AeroWave E6 circulation fan, and a number of forthcoming smart devices. The VIVOSUN SGS provides automatic equipment and climate control, remote monitoring, personalized recipes, all with an intuitive UI that helps everyone grow what they love.



# SPECIFICATIONS

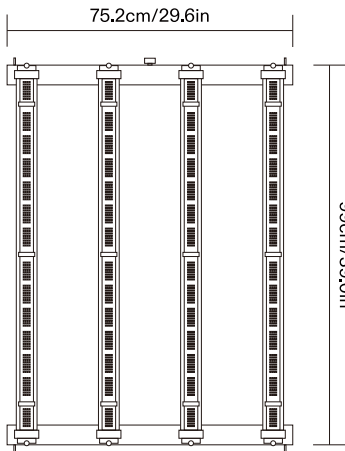
	VSFD4500	VSFD6500
Spectrum	Full Spectrums: 380-780nm, rich 660nm&730nm, UVA included	
Input Voltage	120-277Vac	
Frequency	50/60Hz	
Input Power	450W	650W
Power Factor	>0.9	
Dimensions (L)	29.6"/75.2cm	42.8"/108.7cm
Dimensions (W)	39"/99cm	39"/99cm
Dimensions (H)	2.8"/7cm	2.8"/7cm
Weight	15.4 lb./7 kg	22 lb./10kg
Dimming	0-10V/PWM, 25%/50%/75%/100%/OFF/EXT	
Daisy-Chain (Control)	Up to 5 Lights	
Lifetime	>50,000 hours	
Certifications	ETL, FCC and IP65	
Warranty	5-Year Standard Warranty	

# SPECTRUM



# DIMENSIONS

VSFD4500



Top View

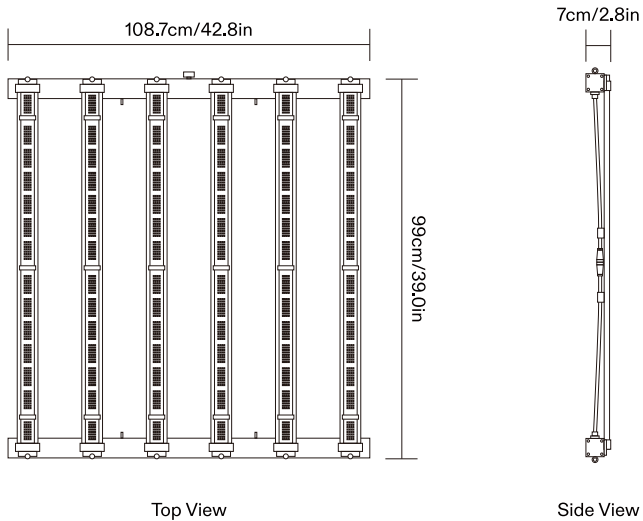
7cm/2.8in



Side View

# DIMENSIONS

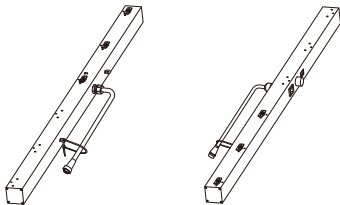
VSFD6500



# INSTALLATION

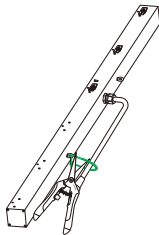
## STEP 1

Set the fixture bars A and B on a flat surface with the side of output cord facing inside as the diagram shows. Keep the distance of two fixture bars about the length of one light bar.



## STEP 2

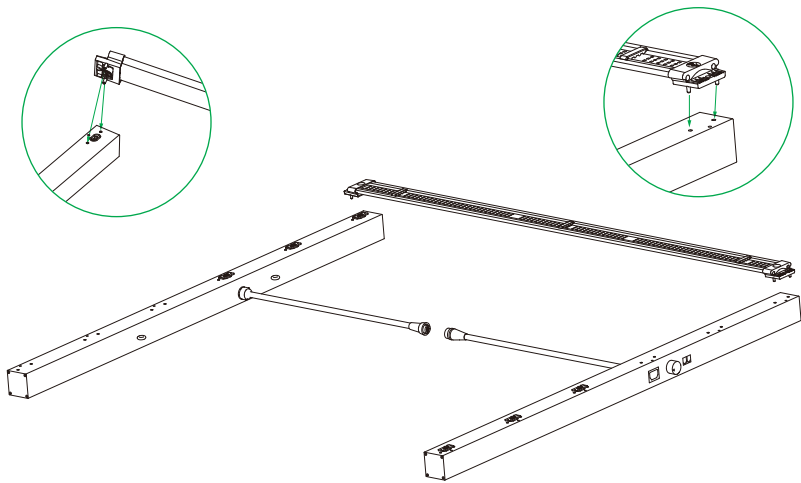
Cut off ties and unlock the output cord on each fixture bar.



# INSTALLATION

## STEP 3

Plug the first light bar onto the fixture bars. Push one end of the light bar with pins into the one of the sockets on the fixture bar A or B, and the other end of the light onto the other fixture bar with mounting holes.

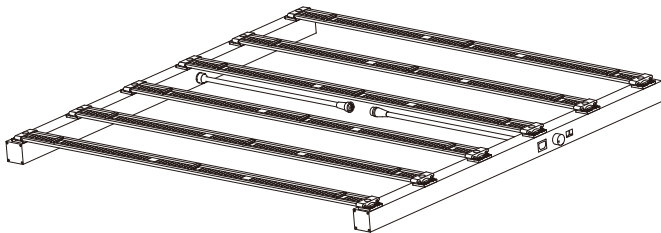




# INSTALLATION

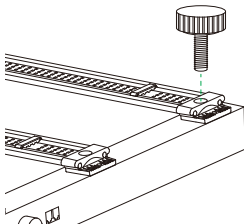
## STEP 4

Repeat step 3 to plug the remaining light bars onto the fixture bars in the appropriate positions.



## STEP 5

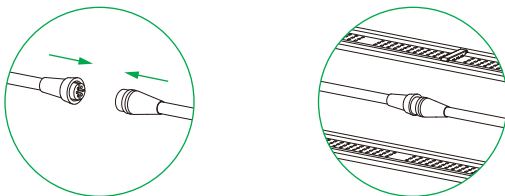
Mount all the light bars on the fixtures with thumb screws. Use one thumb screw on each end of the light bar.



# INSTALLATION

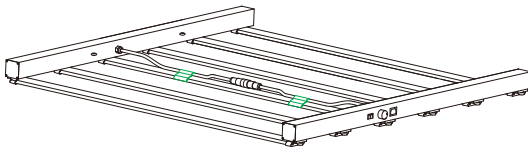
## STEP 6

Connect the power cords from the two fixture bars. Screw the cap to ensure the water-proof performance.



## STEP 7

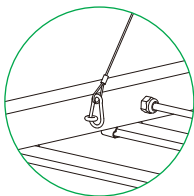
Fix the power cord on one of the nearby light bars with two cable clips.



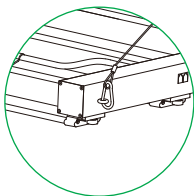
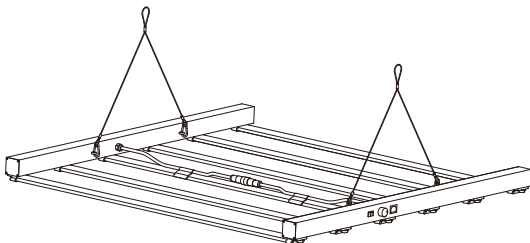
# INSTALLATION

## STEP 8

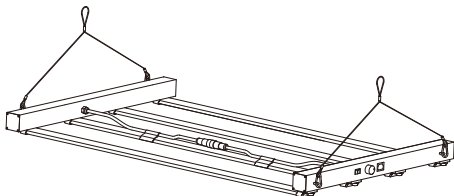
Clip the wire ropes on the rings of each fixture bar. Plug the AC power cord on the fixture bar and the light is ready to use.



**VSFD6500**

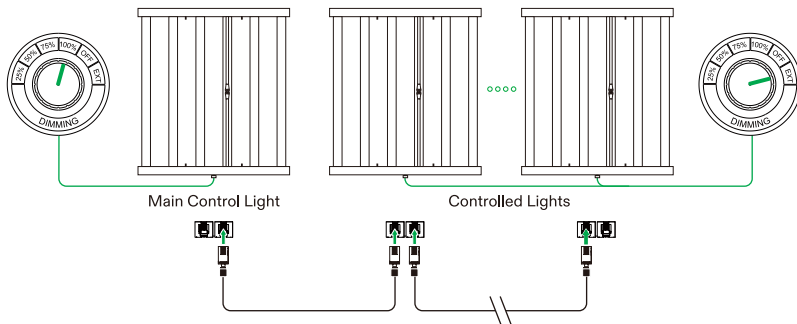


**VSFD4500**



# INSTALLATION

## CONNECTING MULTIPLE LIGHTS (MAIN CONTROL LIGHT MODE)

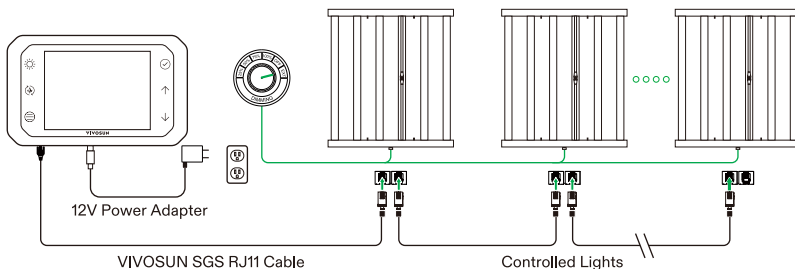


Choose a light as the Main Control Light and use the RJ11 cables to connect other lights (Controlled Lights) as showed above. Turn the dimming knob to the "EXT" on the Controlled Lights and they will be controlled by the Main Control Light. A Main Control Light can control up to 5 lights.

**Note:** Ensure all the Controlled Lights turned to "EXT" and work normally. If connected to a timer, ensure the total power of all the lights (including the Main Control Light and Controlled Lights) conform the rated power of the timer.

# INSTALLATION

## CONNECTING MULTIPLE LIGHTS (CONTROLLED BY GROWHUB E42/E42A)



Connect the 1st light to the RJ11 port (E) of the VIVOSUN GrowHub E42/E42A (sold separately) with the VIVOSUN SGS RJ11 Cable. Turn the dimming knob to the "EXT" on all the lights. Plug the 12V power adapter (included with GrowHub E42/E42A) to the controller and the nearby AC outlet to provide power to the controller. Plug all the controlled lights to the nearby AC outlets and they will be controlled by the GrowHub controller. Now you can use the controller to set light cycles, dimming levels, starting time, etc. Use VIVOSUN app to remotely control through Wi-Fi. Please see more information in the GrowHub E42/E42A manual.

**Note:** Ensure all the controlled lights turned to "EXT" and work normally. The 12V power adapter is not needed when the GrowHub controller is connected with VIVOSUN SGS device such as an AeroLight or an AeroZesh fan.

# APPLICATION

## SUGGESTED HANGING DISTANCE, LIGHTING TIME AND DIMMING LEVEL

Stage	Light Time	Distance	Dimming
Germination/Clone	18 Hours ON	24"-32" / 61-81cm	25%-50%
Seeding	16 Hours ON	24"-32" / 61-81cm	25%-50%
Veg	18 Hours ON	14"-24" / 36-61cm	50%-75%
Flower	12 Hours ON	12"-18" / 30-46cm	75%-100%
Note: This suggestion is for reference only, and can be freely adjusted according to the actual situation.			

Set the LED power on high and place the light further away from your plants to cover a wider area or set the LED at a lower power and place the light closer to your plants for less coverage but a more eco-friendly solution.

# WARRANTY INFORMATION

## WARRANTY TERMS

1. We offer a 5-year warranty against manufacturing defects for all of our products from the date of purchase. If you need warranty assistance, please contact us as soon as possible.
2. The warranty does not cover damage due to high moisture levels, water damage, power surges, improper hanging/mounting, improper use, dust build-up, or users' unauthorized modifications.
3. In the USA, if any light ceases working within 30 days of use, you can choose:
  - (A) Exchange: We will email you a pre-paid return label. Please ship the light back to our USA warranty center and a replacement will be sent to you free of charge as soon as we receive the defective product.
  - (B) Refund: We will email you a pre-paid return label. Please ship the product to our USA warranty center and we will issue a refund as soon as the light has been received. Refund periods may depend on the processing time of your bank or institution—usually, a refund takes about 5 business days to be processed.
4. Our company reserves all rights to the final explanation of this warranty structure. If you have any questions about our warranty policy, please contact us.

Designed by **VIVOSUN** in California.  
Made in China.