



# **USER MANUAL**

## LED GROW LIGHT SERIES

# SAFETY INFORMATION



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

## **Important safety information:**

**Handling.** Set up our light in the operating environment that allows for adequate air circulation. Never let objects into the ventilation openings.

**Indoor use only.** Non-waterproof, protect your lights from dampness. Do not expose to water drip or spray. Do not expose the lights to physical harm such as impact or severe environmental conditions. Working temperature is -20°C to 40°C.

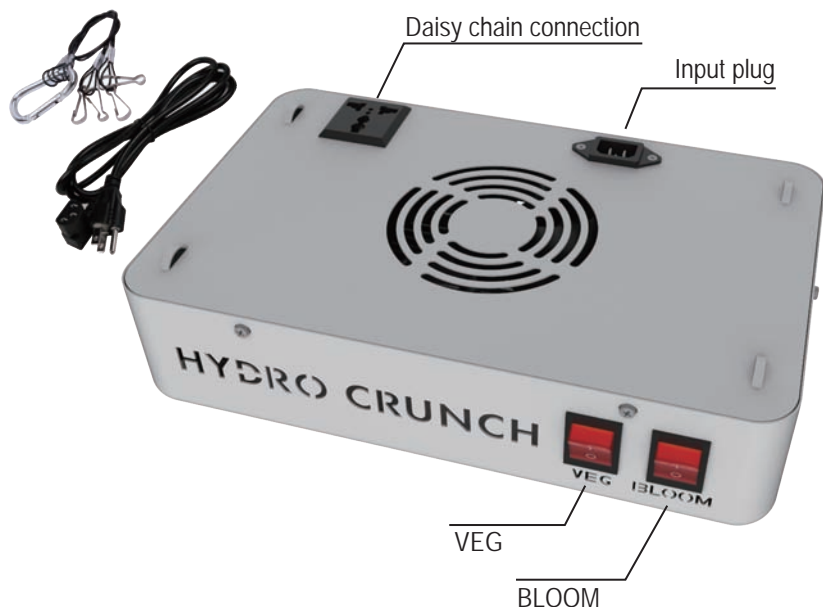
**Power cord.** Your AC cord has a three-wire grounding plug (a plug that has a grounding pin). This plug fits only a grounded AC outlet. If you're unable to insert the plug into an outlet because the outlet isn't grounded, contact a licensed electrician to replace the outlet with a properly grounded one.

**Repairing.** If there is something wrong with your light, please contact us. Opening the light to inspect or repair with permission will not affect your existing warranty. However, if you open the light or install items in it without our permission, you risk damaging your light. This type of damage isn't covered by the limited warranty.

**Cleaning.** When cleaning the outside of your light and its components, first shut down your light, then unplug the power cord. Then dampen a clean, soft, lint-free cloth to wipe the light. Avoid allowing moisture in any openings.

**Warning.** LED grow lights can cause eye damage. Avoid looking directly at the lights when they are on. Use shielding and light blocking glasses to protect your eyes.

## SPECIFICATIONS



- VEG FUNCTION - VEG POWER ON;
- BLOOM FUNCTION -VEG & BLOOM POWER ON AT THE SAME TIME.
- Input plug: We recommend you to use a standard three-wire grounding plug.
- Daisy chain connection: To ensure safe operation,do NOT exceed 1000-Watts.
- MAXIMUM 300W LED Fixture allowed to daisy chain is 8 units.

### Specifications:

Model:	B350200200	HID Replacement:	400W HPS/MH
LED Power:	300W	Max Coverage at 24" Height:	3x3ft
VEG. Power:	90W +/-5%	Core Coverage at 24" Height:	2x2ft
BLOOM Power:	120W +/-5%	Use for:	Vegetative and Bloom
LED Quantities:	60PCS 5W EPISTAR LED	Dimensions:	12.6x7.8x3 in
Input Voltage:	AC100-240V	Item Weight:	6.4lbs
Frequency:	50-60Hz	Lifespan:	50,000 hours

### Package includes:

1 x 300W LED Lighting

1 x Hanging Kits

1 x 6ft Power Cord

## APPLICATION

Hydro Crunch LED Hydro Grow Light Series is a high performance hydroponic grow light capable of outperforming HID technology by nearly 50%. The LED Hydro Grow Light Series sets a new level for hydroponic lighting. Previous LED technology has been unable to seriously compete with HID lighting solutions and has been used as a supplementary solution to increase yield.

Our new Grow Series lights are powerful enough to be used as the primary source of light in all hydroponic lighting applications. Thank you for purchasing our Hydro Crunch LED Hydro Grow light. We are sure you will be happy with the results you achieve.

You can use this light for both Vegetative and Bloom stages. You just need to adjust the height according to different plants' growth requirements.

**Installation.** Use the included hanging kits and hook them into the top of the light. Hang the light to a hard, stable bracket or the ceiling of a grow tent.

**Hanging height.** For seedlings, we recommend being very careful with a 24"-36" height. After one or two weeks, bring the light down to 24" through the rest of the vegetative stage. For flowering, bring the light down to 15"-18". Adjust height according to desired coverage and how well the individual strain of plant takes the increased intensity. The key is to always watch your plants and be receptive to what they're telling you. If the leaves are pointing hard towards the light, they love it! Give them more! If they shy away and look limp or unhappy, while all your other environmental variables are correct, back off the light! They'll let you know how they feel very quickly.

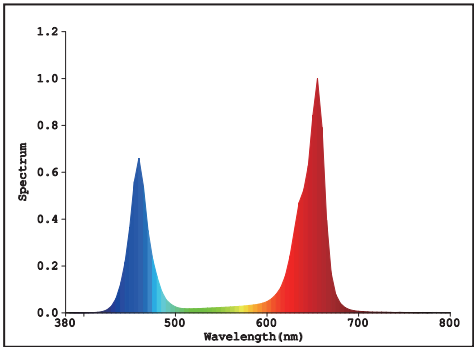
**Time.** We would recommend running the lights in an 18-hour on/6-hour off light cycle for any vegetative growth of any plant.

**How many lights.** This light is designed to cover a 2 by 2 feet area. There is no one size fits all answer to this question. You can always add another light if you desire more lights.

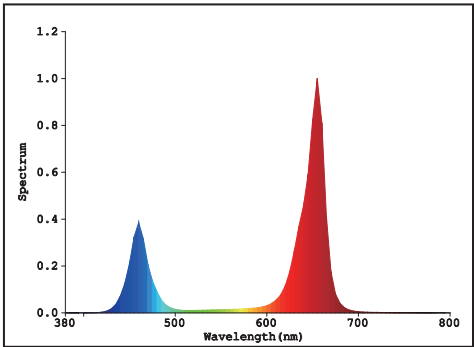


# PHOTOSYNTHESIS

## Output Spectrum Test Report



VEG



BLOOM

## Photo Parameters

Condition	Power	Voltage	Flux	Efficacy	Current	PF
VEG	95.4W	120V	1940.2 lm	20.34 lm/W	0.803A	0.989
BLOOM	123.9W	120V	2348.2 lm	18.95 lm/W	1.042A	0.990

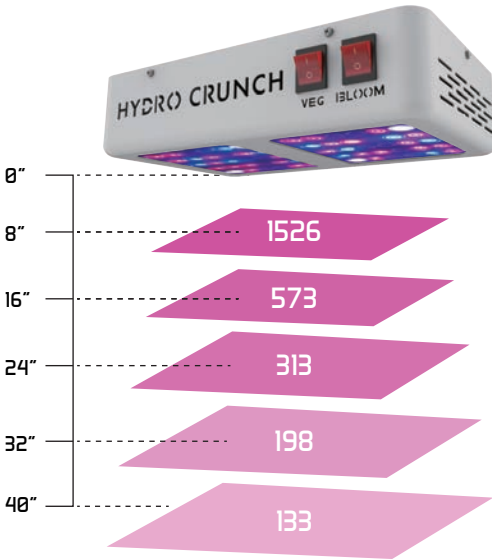
If you are unfamiliar with what photosynthesis is, it’s what enables plants to eat. Plants require light to eat or they will starve and die even with a full nutrient supply to compliment to their root zone.

Photosynthesis converts light into chemical energy within the plant which then gives the plant fuel to perform certain activities, much like solar panels generating electricity to allow you to perform certain activities within the household.

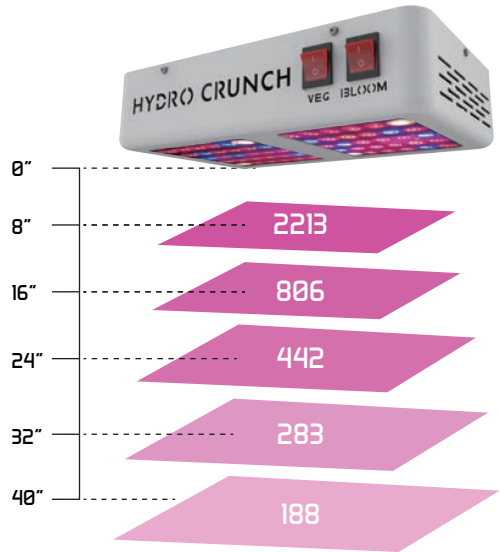
Think of your leafs as your plant’s solar panels. The more leafs it has, the more it can photosynthesize and therefore the more food it can absorb.

## PAR VALUE ( $\mu\text{mol m}^{-2} \text{s}^{-1}$ )

### VEG



### BLOOM



For decades now, growers have been obsessed with the lumen output of their lamps, misguidedly thinking that the more lumens, then the better the light is for the plant. Lumens is how we started to measure light back in the day and is a measurement by its availability to the human eye curve and is the industry standard way of measuring any lamp.

Plants do not even recognize what a lumen is, but instead rely on photons hitting the surface of the leaf to make them grow, these photons we call PAR (photosynthetic active radiation). PAR is measured in micromoles ( $\mu\text{mol m}^{-2} \text{s}^{-1}$ ) and is basically the number of photons hitting a surface that are available for use by the plant.

## 3 Year Limited Warranty Service

If the product will not work after you have read the troubleshooting guide and practiced the troubleshooting options, you are advised to return the Hydro Crunch™ light system to the retailer you purchased it from. The dealer will be able to examine the light and test its components. If they are not able to repair the light, they will return it to us for examination and repair/replacement. Do not attempt to repair any product on your own, as serious injury or death may result. If the retailer is not able to help you and the light is still under manufacturer's warranty, you may contact us for technical support. In some cases, you will be issued an RMA# (return merchandise authorization number) to return the unit for factory repair. Complete the warranty form below and return the light with all original packaging, your receipt of purchase, and a valid RMA# to the address below. Please pack and ship the light in its original packaging. If it is damaged in shipment we cannot be responsible and the warranty may be voided. Once we receive RMA package, it will be repaired or replaced and shipped back to you. Please note if an additional warranty was purchased and include the extended warranty sales receipt with your return.

### RETURN FORM

**Include the following if returning:**

- ✓ Proof of purchase
- ✓ This completed form
- ✓ RMA# on the outside of the box
- ✓ Extended warranty receipt

Return Merchandise Authorization Number (Required): \_\_\_\_\_

Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone #: \_\_\_\_\_

Email Address: \_\_\_\_\_

Please give a brief description of your technical issue: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### SEND TO:

RMA Dept.  
17128 Colima Road Suite 510  
Hacienda Heights, CA 91745  
714-516-8176



## **IMPORTANT!**

The following pages contain important safety and operating instructions. Please read and follow all instruction in this manual. Carefully read and review all safety instructions, warnings and cautions contained in this manual. Failure to read and follow these instructions, warnings and cautionary statements may result in severe injury or death to persons and pets or damage to personal property.



Do not dispose product or any other part of it as unsorted municipal waste – instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.