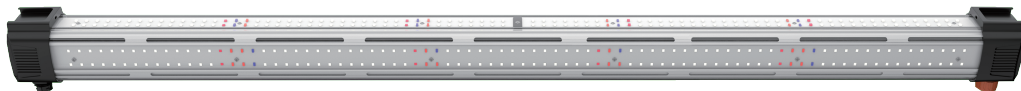


Inner Canopy LED Bar User Manual



ICL-300 | 120W 300° Light Angle Inner Canopy LED (4 Spectrum)

• SAFETY PRECAUTIONS

Read the installation and operation instructions carefully before installing and operating this device. Proper adherence to these instructions is essential.

• WARNING

- Users are responsible for the connection and safe installation and usage of the devices.
- Before installing, servicing, or performing routine maintenance, follow these general precautions.
- It is highly recommended to have a certified personnel or licensed electrician to install your grow light.
- If you are unsure about the installation or maintenance of the fixture, consult certified personnel, licensed electrician and check your local electrical code.
- Tightly secure the light fixtures using appropriate mounting hardware to ensure the fixtures are safe to work under. Please read and follow the instructions.
- Ensure the building structure, mounting solutions and components being used are rated to support the weight of the light fixtures.

- DO NOT make or alter the enclosure of internal wiring or the electrical components during light fixture installation.
- Turn off the power and unplug the fixture when you perform any maintenance.
- Verify if the electrical system can support the voltage and current requirements correctly by referring to the information on the specification labels.
- Avoid hitting, bending or causing mechanical stress to the fixture.
- DO NOT cover or block any part of the fixture during operation.
- To clean the LED bar, use a mild soap or detergent (e.g. common dishwashing liquid) and lukewarm water by gently using a clean soft damp cloth.
- Always provide a well-ventilated environment where ambient temperatures do not exceed 104 °F (40 °C) regardless of whether the fixtures are in operation or not. Excessive temperatures can inhibit performance and may cause damage or shorten the life of the fixtures and void the warranty.

• CAUTION

Read all instructions carefully before installation.

This product is not intended for use by any persons and children with reduced physical, sensory or mental capabilities or lack of experience and product knowledge.

The device is designed to be installed INDOORS IN A SPACE THAT IS PROTECTED FROM RAIN AND FLOODING.

General maintenance is not required. DO NOT clean the interior, with any chemicals that might cause damage. To clean the light fixture, use a damp cloth only.

• 5 YEARS LIMITED WARRANTY

ThinkGrow warrants its LEDs to be free from defects in materials and workmanship. The product is warranted 5 years from the date of purchase. Misuse, abuse, or failure to follow instructions is not covered under this warranty. The warranty liability extends only to the replacement cost of the product. ThinkGrow will not be liable for any consequential, indirect, or incidental damages of any kind, including lost revenues, lost profits, or other losses in connection with the product. Some states do not allow limitation on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitation or exclusions may not apply to you. ThinkGrow will, at our discretion, repair or replace its products covered under this warranty if it is returned to the original place of purchase.

• OVERVIEW

The ThinkGrow ICL-300 is a Light Angle Inner Canopy LED featuring 4 light spectrums and a built-in 120-Watt driver. ICL-300 revolutionizes high-density indoor growing. When applying light to plants only from above the plants, the leaves and sections of the plant below the top “canopy” of the plant suffer from low light levels. That is the exact problem the ICL-300 is designed to fix. The ICL-300 emits light in a 300-degree pattern so that when positioned below the canopy, the sections of the plant under the canopy can also get the light they need to produce higher quality and yields. By applying some light to the middle of the plant structure, the user can eliminate lower-quality flower formation and replace it with healthy flowers. The modular design of the ICL-300 allows it to be used in all installations regardless of the shape or size of the growing area.

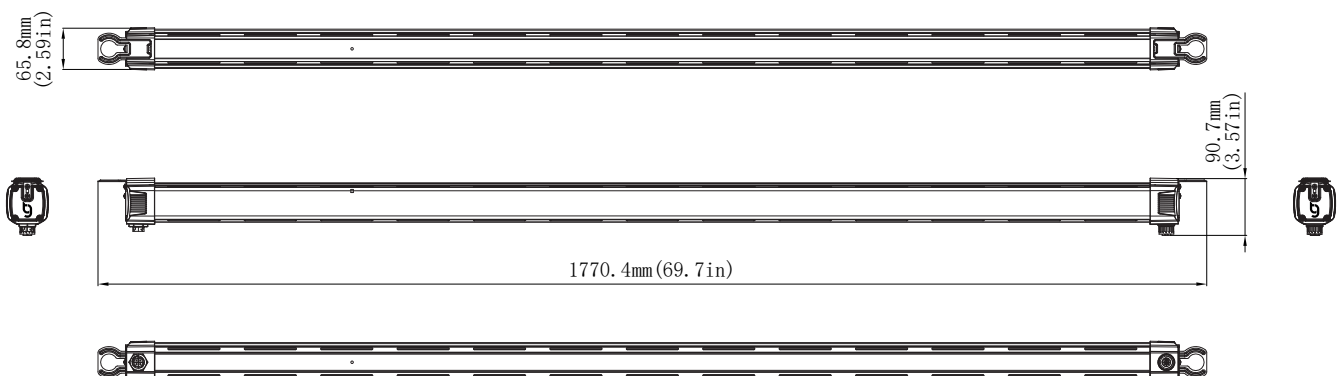
• FEATURES

- Auto-Sensing Voltage
- Four Spectrum Channel (Full Spectrum, Deep Red, Far Red, UV)
- 3-side LED surface
- 300° Lighting Coverage
- Sealed Cover for Lamp Bead Protection
- IP56 Rating
- High power factor and light efficiency
- Flexible installation

• PACKAGE CONTENT

1 x ICL-300 Light Angle Inner Canopy LED

• PRODUCT DIMENSIONS



• SPECIFICATION

PPF:	Up to 360 $\mu\text{mol/s}$
Efficacy:	Up to 3.0 $\mu\text{mol/J}$
Input Power:	120 W
Input Voltage:	100-277V~, 50/60Hz
LED LM Rating and Lifetime:	L90: >54,000 hours
Ingress Protection (IP Rating):	IP56
Working Environments:	Temperature: 32~104°F (0~40°C) Humidity: $\leq 90\%RH$
Dimming mode:	RS485
Dimming range:	0-100%
Dimming protocol:	Modbus
Lighting Scheme:	Indoor Non-stacked and Greenhouse
Use Case:	Supplemental
Lighting Position	Inner Canopy Light
Product Dimensions:	1770mm(L) x 90.7mm(W) x 65.8mm(H) 69.7"(L) x 3.57"(W) x 2.59"(H)
Package Dimensions:	1180mm(L) x 95mm(W) x 83mm(H) 46.46"(L) x 3.74"(W) x 3.27"(H)
Product Weight:	6.61lbs / 3kg

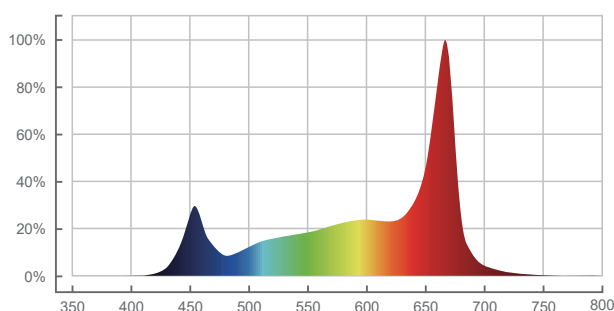


CONFORMS TO UL
STD.8800
CERTIFIED TO UL
STD.8800

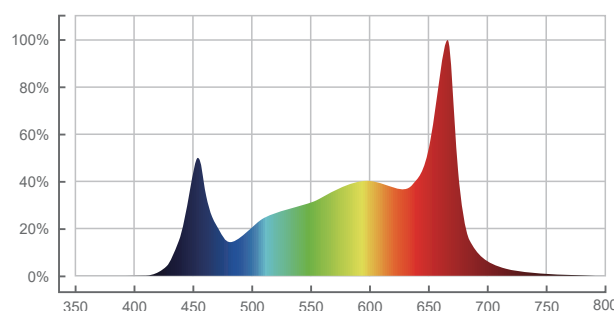


• LIGHT SPECTRUM

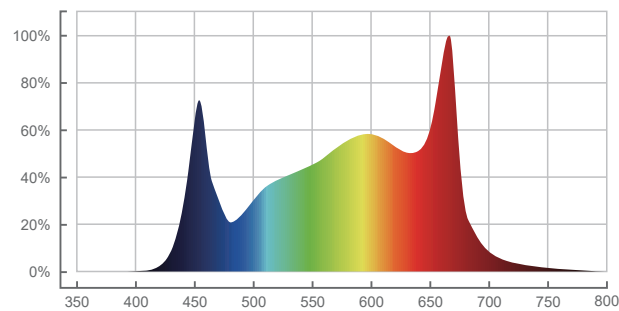
Efficacy: Up to 3.0 $\mu\text{mol/J}$



Efficacy: Up to 2.9 $\mu\text{mol/J}$

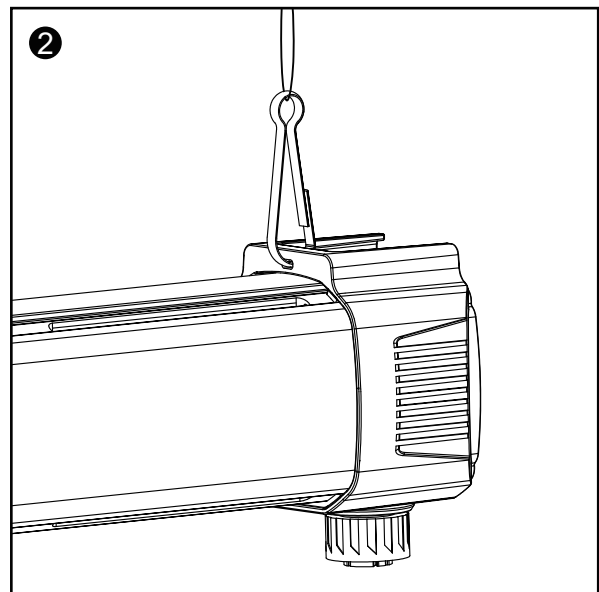
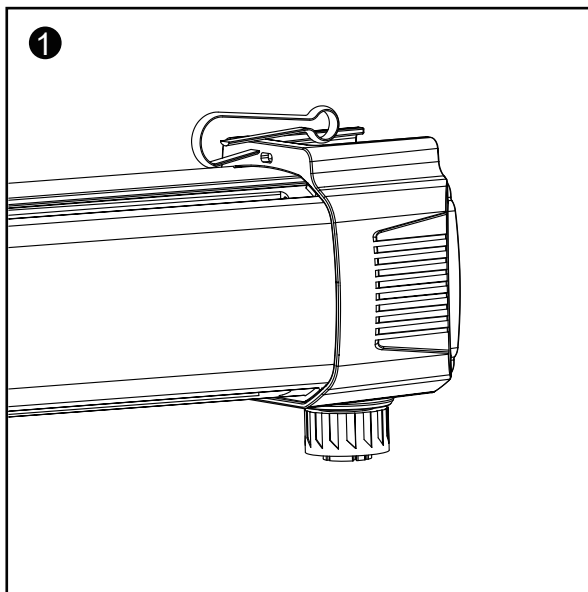


Efficacy: Up to 2.8 $\mu\text{mol/J}$



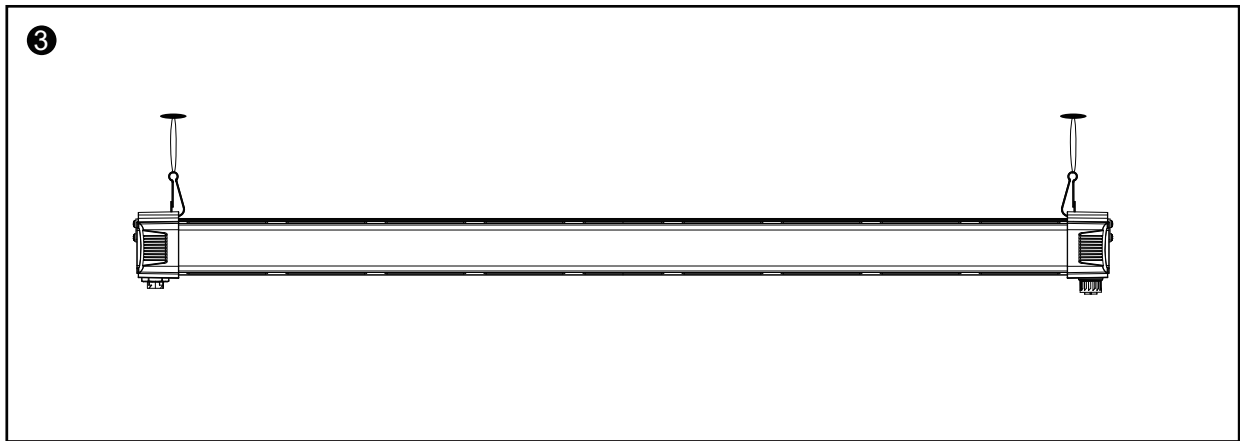
• INSTALLATION

Option 1 - Hang the LED from Above



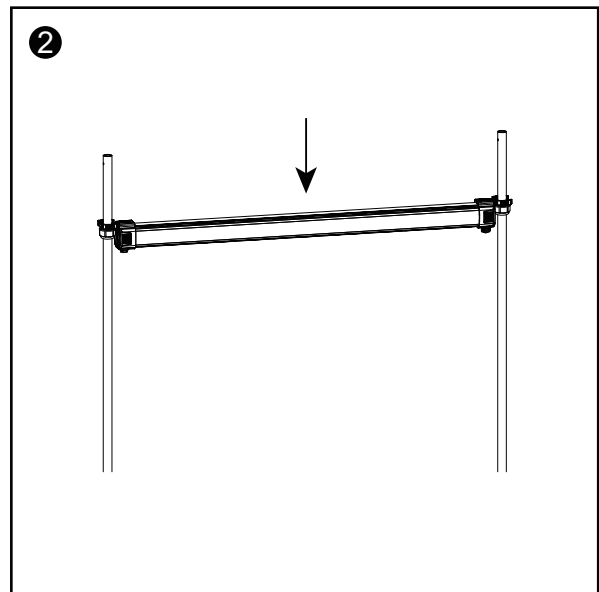
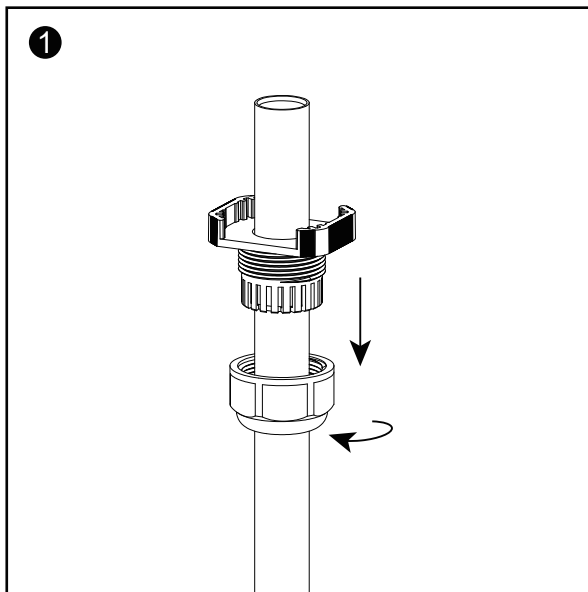
Step 1: Carefully insert the hooks into the two mounting holes located on the opposing sides of the light bar. Ensure that the hooks are firmly secured in place, providing a secure connection for the subsequent steps.

Step 2: The ICL-300 can be suspended from the ceiling or from above using an appropriate length of rope, wire rope or cable. Select a secure mounting point using appropriate hanging hardware. Exercise caution during this process to ensure that the ICL-300 is correctly positioned and securely fastened.



Step 3: Once the ICL-300 has been installed and is hanging freely, test the support mechanism to ensure it is capable of supporting the full weight of the ICL-300.

Option 2 - Use user-provided tubing ($\frac{3}{4}$ - 1" OD tubing)

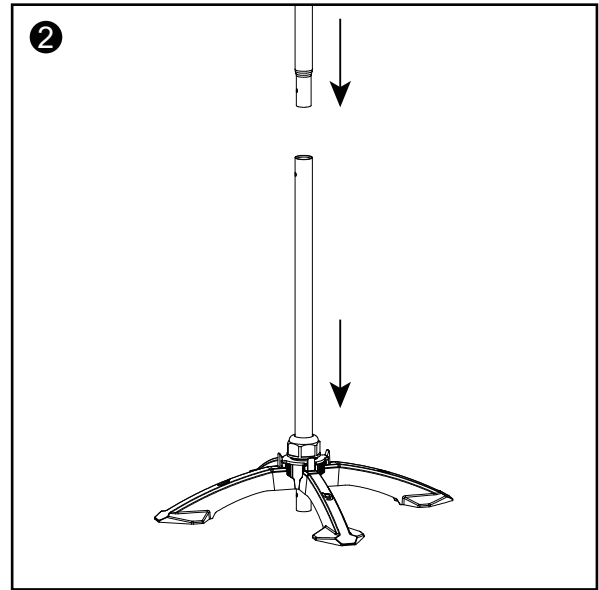
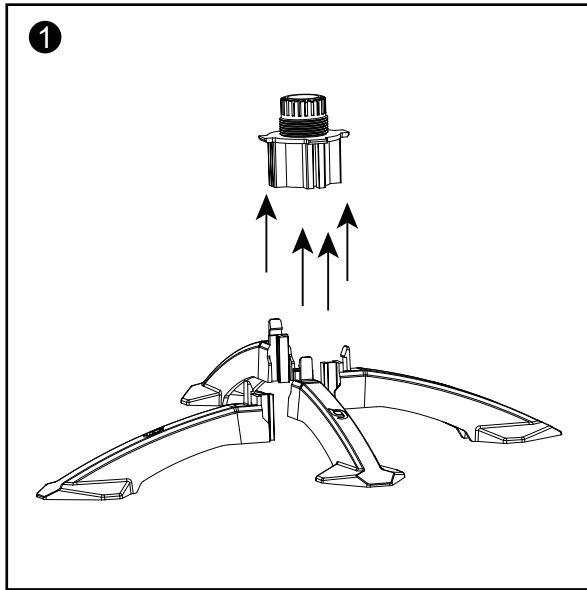


Step 1: Utilize the two Collar Mounts which are provided with each ICL-300 to securely fasten the ICL-300 onto two PVC or metal pipes or conduits with a diameter ranging from $\frac{3}{4}$ " to 1" or 18mm to 25mm. Begin by loosening the screw cap on the adjustment knob, allowing the tubes to pass through the screw cap. Next you can position both ends of the ICL-300 to the desired orientation / height and secure it in place by tightening the screw cap.

Step 2: To install the light bars, align the holes on both sides of the ICL-300 light bar with the vertical tubes. Align the mounting bracket on the vertical tube, with the bracket on the ICL-300 to ensure a secure connection between the light bar and the vertical tubes. It is essential to conduct a thorough inspection to ensure proper alignment and secure installation before proceeding.

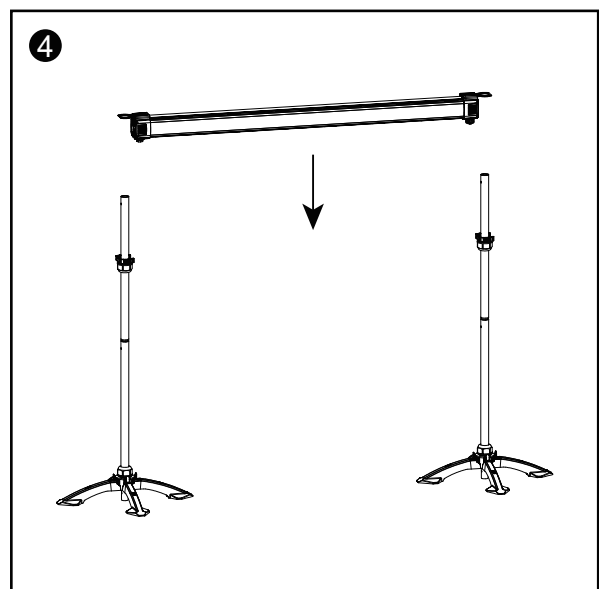
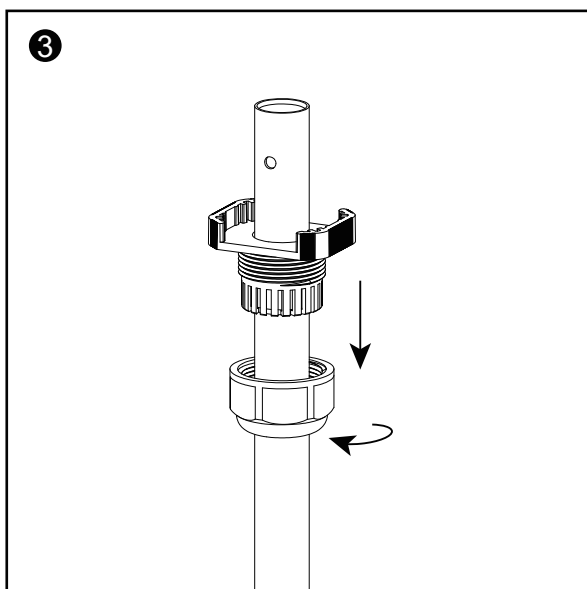
Option 3 - ThinkGrow TSD-1 vertical LED stand

ThinkGrow offers a 3rd convenient solution, the ThinkGrow LED Stand for ICL-300 (Single Unit), known as TSD-1. The TSD-1 is an optional accessory that allows a single ICL-300 to be installed within the growing area. Two TSD-1 stands are required to install a single ICL-300. Add one more TSD-1 to add each additional ICL-300. The TSD-1 stand comes with the support bracket, and two sections of aluminum tubing. To install the stand, follow these steps:



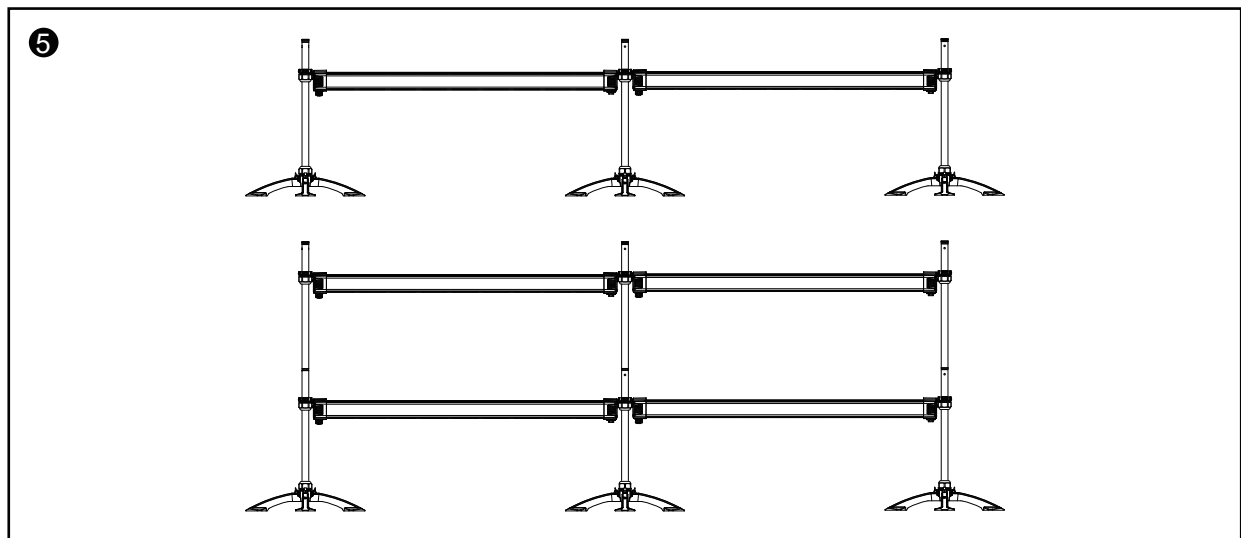
Step 1: Begin by inserting each of the 4 molded legs into the central mounting bracket. Ensure that all 4 legs are securely installed and have “snapped” into place.

Step 2: Loosen the screw cap to create an opening, allowing the aluminum tube to pass through the screw cap at the top of the central mounting bracket. Make necessary adjustments and firmly tighten the screw cap. Users have the option to utilize one or two sections of aluminum tubes.



Step 3: Utilize the two Collar Mounts which are provided with each ICL-300 to securely fasten the ICL-300 onto the aluminum tubing. Begin by loosening the screw cap on the adjustment knob, allowing the tubes to pass through the screw cap. Next you can position both ends of the ICL-300 to the desired orientation / height and secure it in place by tightening the screw cap.

Step 4: To install the light bars, align the holes on both sides of the ICL-300 light bar with the aluminum tubes. Align the mounting bracket on the tube, with the bracket on the ICL-300 to ensure a secure connection between the light bar and the tubes. It is essential to conduct a thorough inspection to ensure proper alignment and secure installation before proceeding.



Step 5: To validate the stability of the installation, double-check that all of the screw-nuts have been tightened and all of the ICL-300 brackets are aligned and joined to the TSD-1 correctly. Then gently push and shake the stand. If the stand remains steady without any notable movement, the installation can be considered successful and complete. Make adjustments or tighten hardware if the assembly seems loose or unstable.

***The TSD-1 ThinkGrow LED Stand for ICL-300 (Single Unit) is not included in ICL-300 package contents. It is an optional accessory.**

• POWER

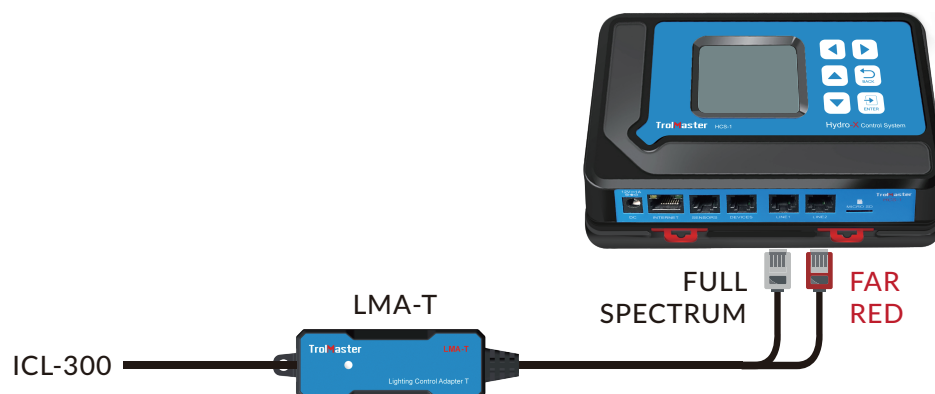
A single daisy-chain configuration can power 8 to 20 fixtures, depending on the main power source. Refer to the table above for specific capacities. After daisy-chaining, connect the power cord to the power source to energize all fixtures.

10A AWG#18 branch circuit	Max # LED in a string	LED Amps	LED Watts	Total Circuit Amps	% circuit load
120V~	8	1A	120W	8.00A	80%
208V~	14	0.58A	120W	8.08A	81%
230V~	16	0.52A	120W	8.35A	83%
240V~	16	0.50A	120W	8A	80%
277V~	19	0.43A	120W	8.23A	82%

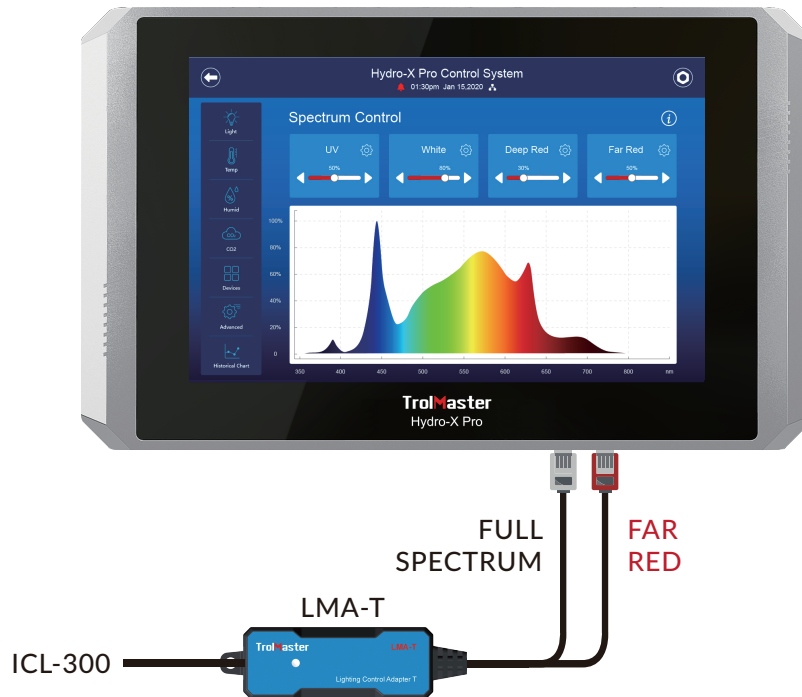
• DATA WIRING

ThinkGrow LED is compatible with all of TrolMaster's Hydro-X control systems. Up to 256 light fixtures can be controlled by using a single LMA-T adaptor connected to your Hydro-X controller.

To control the ThinkGrow Light Fixtures with the Hydro-X main controller, connect the LMA-T to the first LED fixture's input jack using the provided connection cable. Subsequent fixtures can then be connected by linking the LED output jack of one fixture to the input jack of the next, using the same connection cable.



When connected to HCS-2 or HCS-3 controllers, the same function can be achieved, with the addition of an advanced spectrum tuning function also becoming available for creating special light recipes.



WARNING : **DO NOT** allow the grow light to be exposed to water or excessive heat. **DO NOT** open or attempt to repair or disassemble the LED, as there are no user-serviceable parts inside. Opening the controller will void the warranty.

If the surface of the grow light is dirty, wipe it with a dry or slightly damp towel. The grow light operates under natural ventilation conditions.

AVERTISSEMENT : **NE laissez PAS** la lampe de croissance être exposée à de l'eau ou à une chaleur excessive. **NE PAS** ouvrir ni tenter de réparer ou de démonter le LED, car il ne contient aucune pièce réparable par l'utilisateur. L'ouverture du contrôleur annulera la garantie.

Si la surface de la lampe de culture est sale, essuyez-la avec une serviette sèche. La lampe de culture fonctionne dans des conditions de ventilation naturelle.

For any issues or concerns with our products, **DO NOT** return them to the store. Please contact our tech support department at **support@thinkgrow.com** or call **877-420-9876**.