LED Grow Light User Manual



MODEL-H PLUS 4'



MODEL-H PLUS 5'

• 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 104ºF (40ºC) 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 MODEL-H PLUS, available in 4' and 5' versions, is an advanced series of Horticulture LED Grow Lights engineered for high-density indoor cultivation, including multi-tier vertical farming and single-level indoor horticulture. These fixtures deliver optimal light for plant growth with high efficiency and customizable spectrum control. Four distinct spectrum channels UV, White, Deep Red, and Far Red are fully controllable, allowing users to customize the light spectrum or recipe precisely to their plants' needs (note: Spectrum Control is only available on the HCS-2/3). Additionally, the ThinkGrow patented plug-and-play LED light bar design ensures easy installation and simplifies future maintenance.

- Outstanding Efficiency up to 3.0 μmol/J
- True 4' / 5' wide coverage area
- 4 adjustable spectrum channels
- Patented Plug and Play LED light bars
- External Controllability with unlimited fixtures per channel
- On-board Dimming and Grouping
- Group Control and Spectrum Group Control Capability

• PACKAGE CONTENT

Main Body:
1 x LED Grow Light Driver
8 x H PLUS 4' / 5' LED Light Bars

Accessories:
1 x 12' 240V Power Cord
1 x 16ft 4-Pin Waterproof Extension Cable
2 x Driver Hanger

• SPECIFICATION

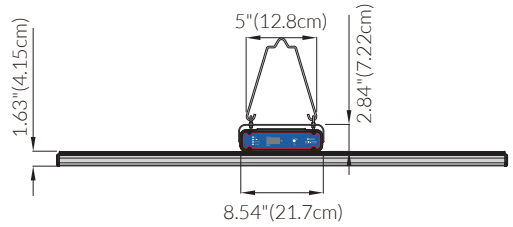
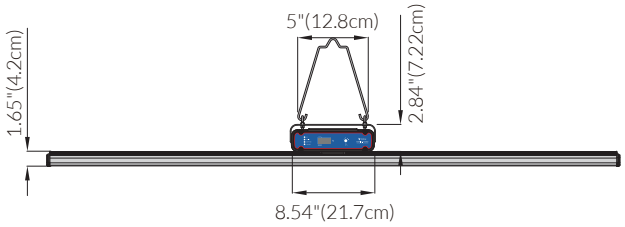
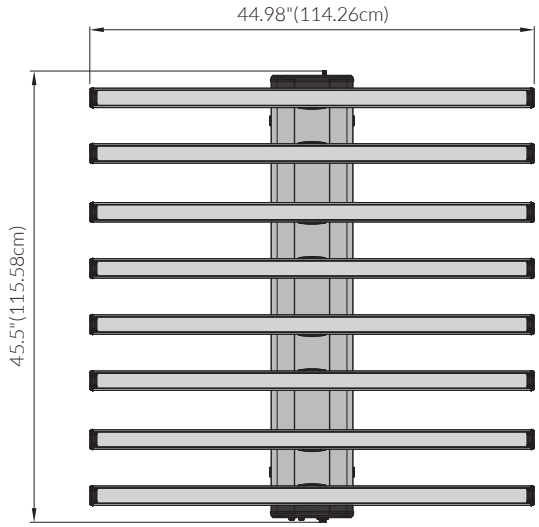
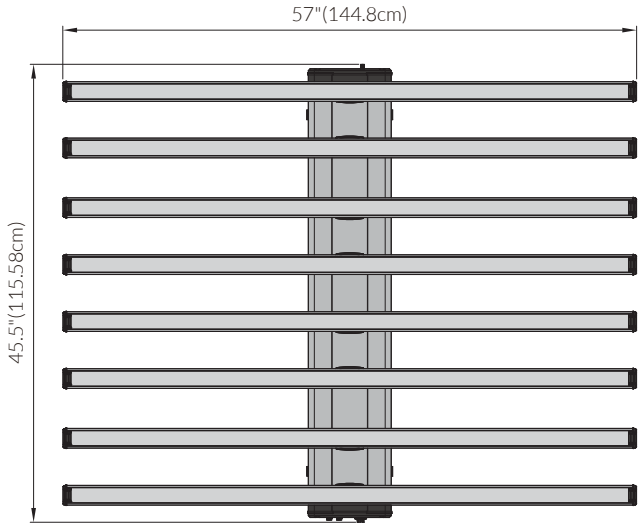
MODEL:	MODEL-H PLUS 4′	MODEL-H PLUS 5′
PPF:	Up to 2160 µmol/s	
Efficacy:	Up to 3.0 µmol/J	
Input Power:	720 W	
Input Voltage:	Autosensing 100-277V~	
Power Factor:	≥ 96%	
Amperage Draw:	6.23A@120V, 3.09A@240V, 2.71A@277V	
LED LM Rating & Lifetime:	L90: > 54,000 hours	
Working Environments:	Temperature: 32~104°F (0~40°C) Humidity: ≤ 90%RH	
Mounting Height:	> 6" (15.2cm) Above Canopy	
Product Dimensions:	1142.5mm x 1155.7mm x 134.6mm 44.98" x 45.5" x 5.30"	1447.8mm x 1155.7mm x 134.6mm 57" x 45.5" x 5.30"
Package Dimensions:	1170mm x 263mm x 244mm 46.06" x 10.35" x 9.61"	1474mm x 263mm x 244mm 58.03" x 10.35" x 9.61"
Product Weight:	31.66lbs / 14.36kg	43.63lbs / 19.79kg

C ETL LISTED US
Intertek
5008191

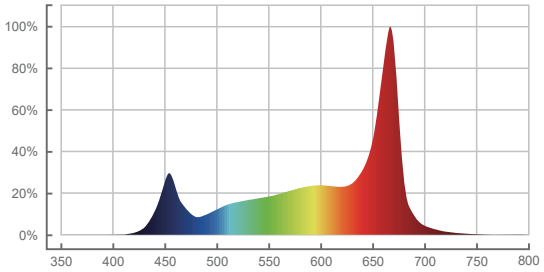
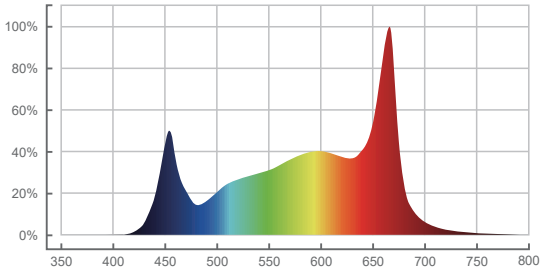
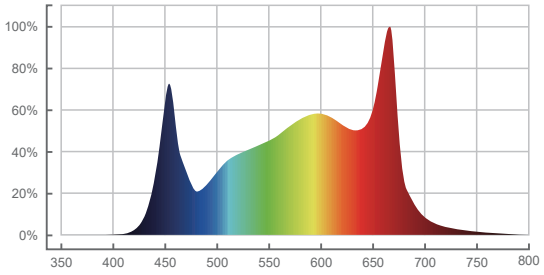
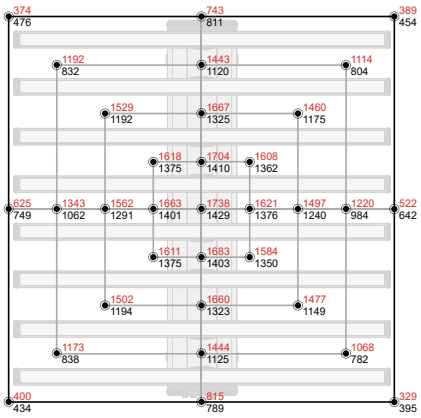
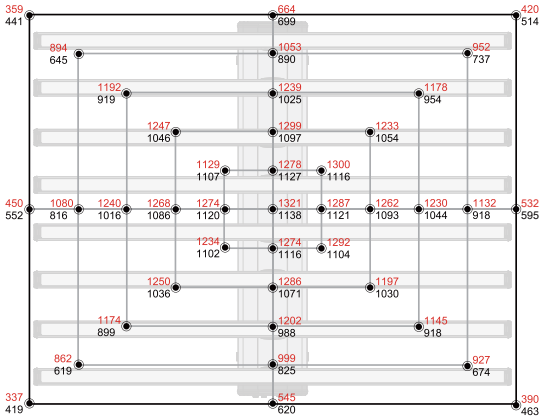
CONFORMS TO UL STD.8800
CERTIFIED TO UL STD.8800

FC

• PRODUCT DIMENSIONS

MODEL-H PLUS 4′	MODEL-H PLUS 5′
	
	

• LIGHT SPECTRUM

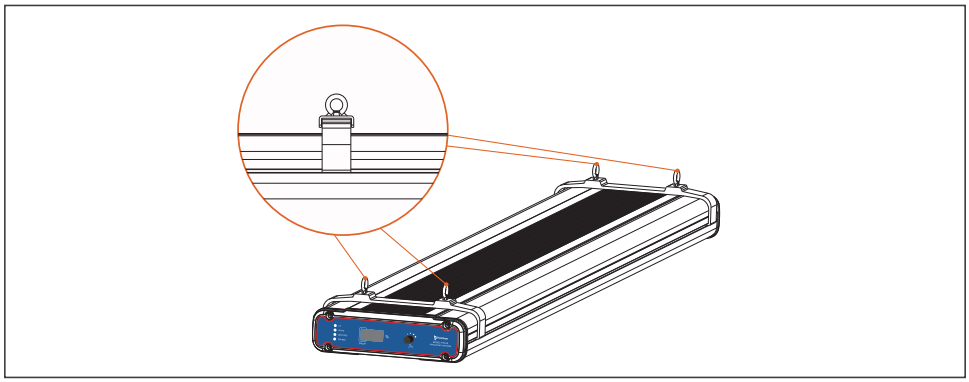
Efficacy	MODEL-H PLUS 4′	MODEL-H PLUS 5′
Up to 3.0 μmol/J		
Up to 2.9 μmol/J		
Up to 2.8 μmol/J		
Average PPFD	(**Tested at 6"** / Tested at 12") Average PPFD **1254** / 1050	(**Tested at 6"** / Tested at 12") Average PPFD **1040** / 896
		

• INSTALLATION

The MODEL-H PLUS LED grow light can be hung to a support system (e.g. unistrut). The included mounting hanger allows users to hang the MODEL-H PLUS Driver to unistrut or on a suspended mounting bar.

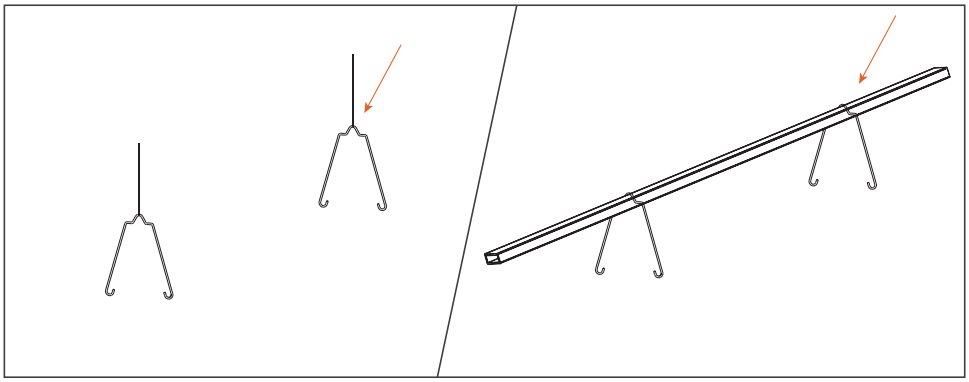
STEP 1

Twist the quick-release locking eyebolts to be oriented as shown below:



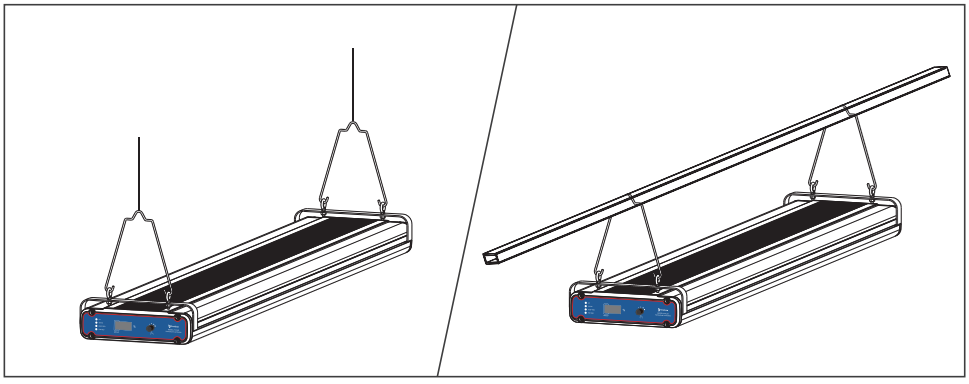
STEP 2

Hang the Strut Mounting hangers onto the unistrut or suspended mounting bar.
Ensure the distance of the hangers and quick release eye bolts are aligned.

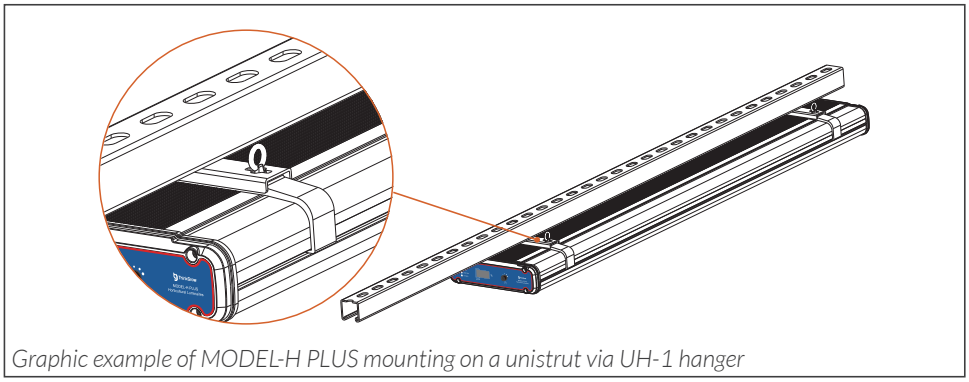


STEP 3

Hang the MODEL-H PLUS driver onto the mounting hanger by hooking mounting hanger hooks into the quick release eye bolts.



***Note:** The ThinkGrow UH-1 Unistrut Hanger (sold separately) can also be used with the MODEL-H PLUS, utilizing its quick release design to achieve a fast and easy installation and maintenance.

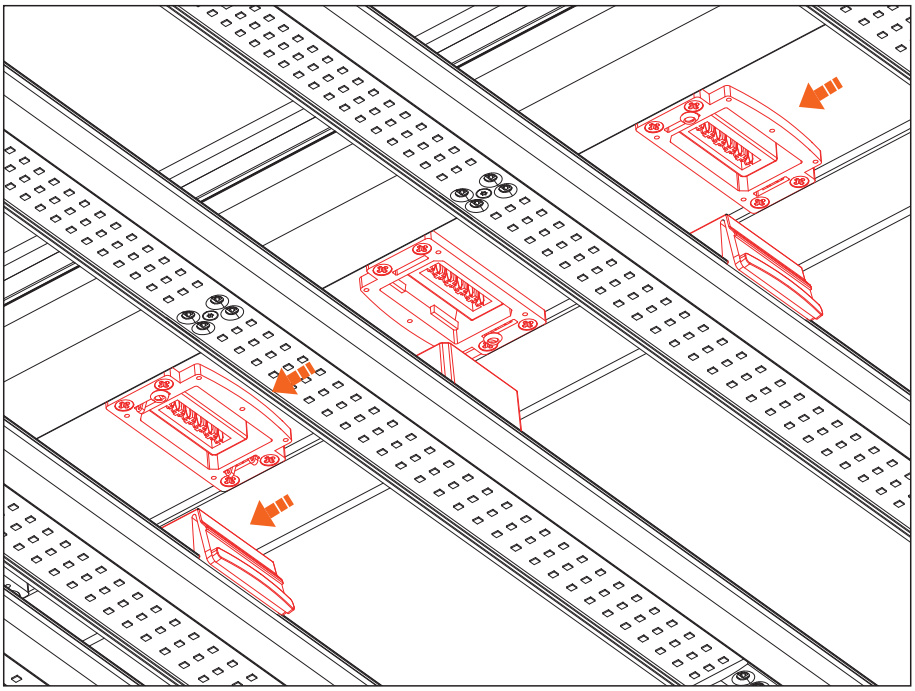


Graphic example of MODEL-H PLUS mounting on a unistrut via UH-1 hanger

• LIGHT BAR INSTALLATION

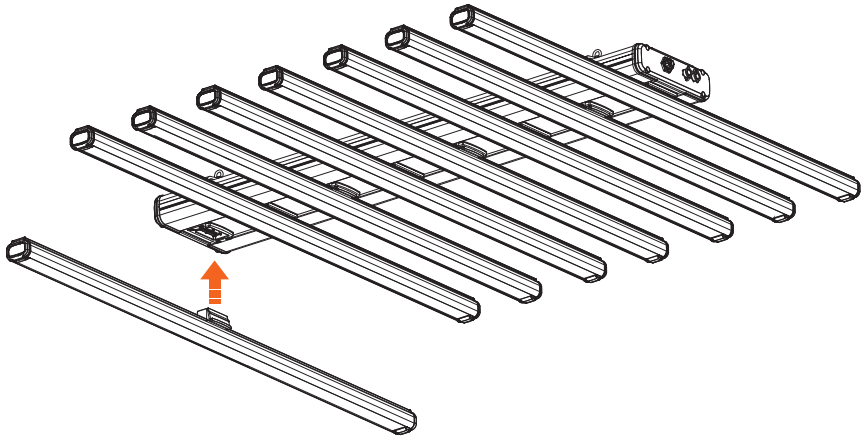
STEP 1

Ensure the orientation of the light bar's release clamp and the driver's mounting plate are facing the same direction. Each bar alternates the orientation.



STEP 2

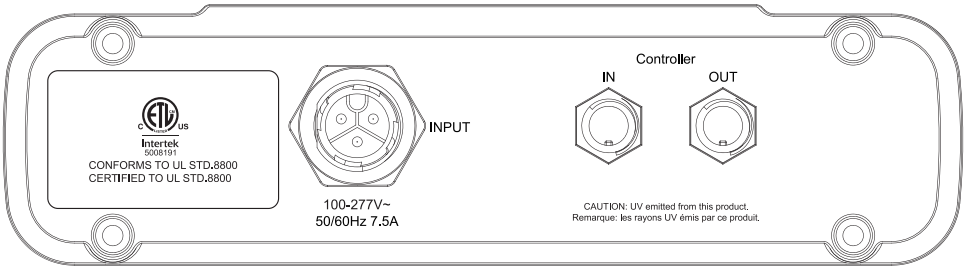
Plug in the light bar to the driver in a straight motion, push until you hear a "click" sound to ensure the light bar is plugged-in and "locked" with the driver.



***Note:** ThinkGrow patented Plug and Play LED light bar design allows users to detach the light bar from the driver while powering on. To detach the light bar, press the release clamp and pull down on the LED bar to unplug the LED light bars.

• POWER

Connect the 240V Push-Lock power cord to the MODEL-H PLUS grow light power input. Ensure the push-lock is completely inserted to achieve IP56 water protection standard.



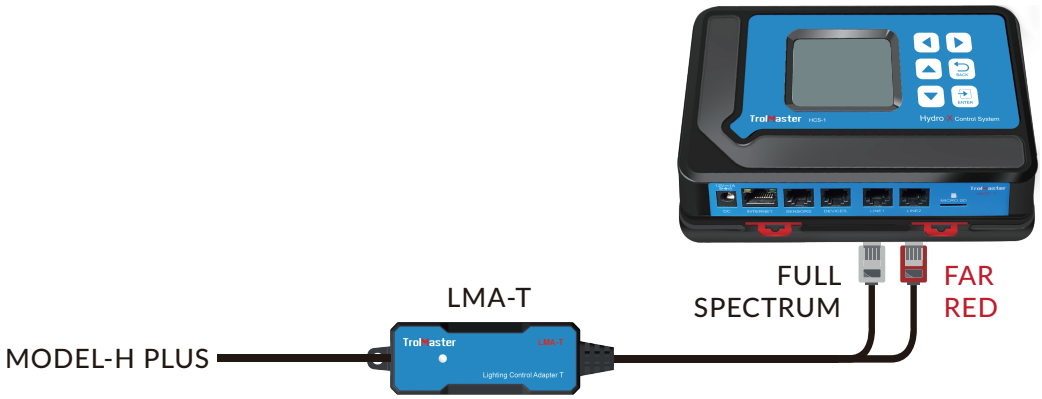
***Caution:** Remember to close the water-proof cap on the input, output jacks that are not utilized.

• DATA WIRING

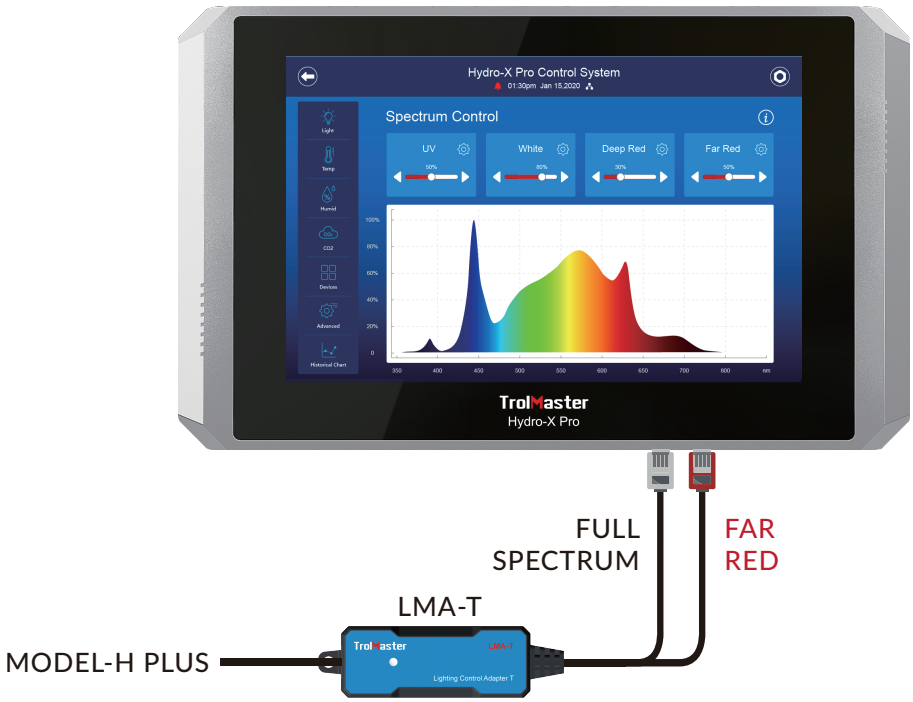
The MODEL-H PLUS LED is compatible with all of TrolMaster's Hydro-X control systems which includes the HCS-1, HCS-2 and HCS-3. Up to 256 light fixtures can be controlled by using a single LMA-T adaptor connected to your Hydro-X controller.

In order to use the Hydro-X main controller to control the MODEL-H PLUS Grow Lights, connect the first MODEL-H PLUS LEDs input jack to the LMA-T using the included control cable. Then to connect more of the MODEL-H PLUS to the first MODEL-H PLUS LED, use the control cable to interconnect LED output jack to the next LED fixture input jack.

When connected to the original HCS-1 controller, the Far Red channel can be controlled independently on Line #2 settings. Allowing the Far Red channel to be turned on for 10-15 minutes after Full Spectrum light is off, will help to speed up plant's flowering cycle.



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

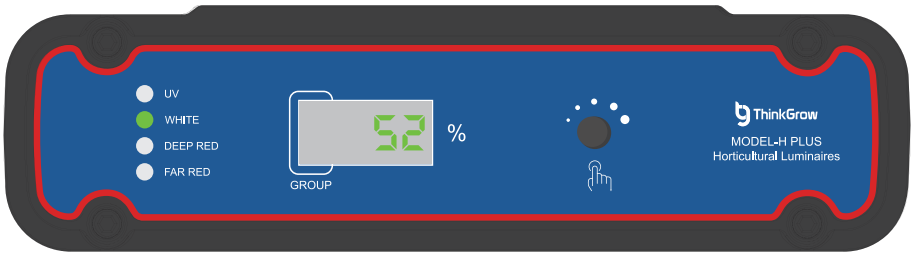


• OPERATION INSTRUCTIONS

On-board Light Control:

MODEL-H PLUS Grow Light enables adjustable spectrum on UV, White, Deep Red and Far Red spectrums via the control knob. To use the onboard light control features:

1. Press the controller knob to illuminate the small LED circle next to the selected light spectrum you want to adjust.
2. Rotate the controller knob to increase/ decrease the light intensity.



On-board Light Group, Spectrum Group assignment:

MODEL-H PLUS Grow Light can be assigned to up to 10 different light groups or 10 different spectrum groups. The user can only select Group control OR Spectrum Group control on the HCS-2 or HCS-3 controller. When Group or Spectrum Group mode is selected, the user can specify settings for up to 10 separate groups of LEDs and control those LEDs groups with individual spectrum settings, or standard power settings.

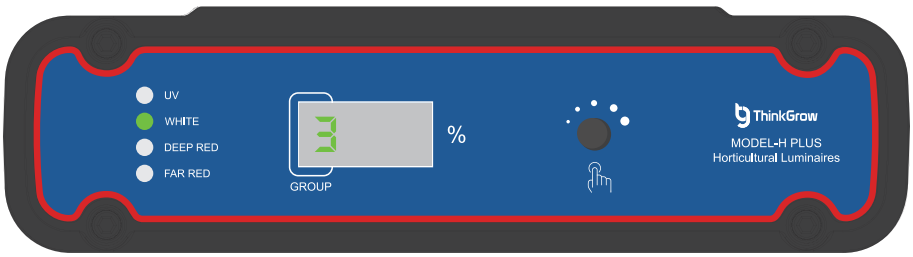
To use the on-board grouping features:

Press and hold the adjustment knob on the end of the LED for 5 seconds. The LED number on the panel will indicate the LED driver's current assigned group. (Default is group 0)
Rotate the controller wheel to the desired group "0" to "9" for the light groups, or you can select groups "0-" to "9-" for the spectrum group selection.

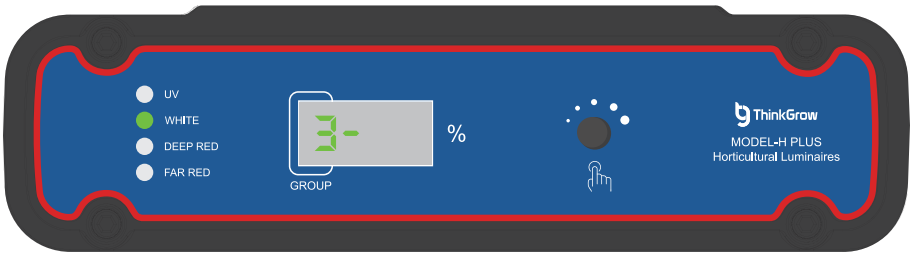
Press the controller knob to select the group and return to light control.

***Note:** The "-" after the group number indicates it is a Spectrum Group number.

***Note:** On-board grouping on the MODEL-H PLUS is used for group assignment only. Users must use the Hydro-X Pro (HCS-2) or Hydro-X Plus (HCS-3) main controller to enable group control features.



Example of user selecting light group "3".



Example of user selecting spectrum group "3-".

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**.

October 2025 ©2025 ThinkGrow™ All rights reserved.