



**Aerix**

Grow Light

**User Manual**



## READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

Thank you for purchasing the Aerix LED grow light. AEssenseGrows has strived to build a high-quality, long-lasting grow light designed to give growers excellent yield. Please read and understand this manual completely before installing and using this product. Incorrect installation or use can lead to failure and damage to the grow light. Damage to the grow light as a result of incorrect installation or use may void your warranty.

**THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.**

## ASSEMBLY INSTRUCTIONS

### SAFETY PRECAUTIONS

- **Always** assemble the grow light fully before switching on mains power
- **Always** switch off mains power before replacing any component

### HARDWARE COMPONENTS INCLUDED IN THE BOX

- |                                   |                             |
|-----------------------------------|-----------------------------|
| 1. (1) Main Body                  | 5. (20) Thumb Screws        |
| 2. (2) Side Brackets              | 6. (8) T-Screws and Nuts    |
| 3. (8) LED Bars                   | 7. (4) Right-Angle Brackets |
| a. (2) with straight connector    | 8. (4) Screw Eyes           |
| b. (6) with right-angle connector | 9. (3) Connector Caps       |
| 4. (1) Power Cord (NEMA L7-15P)   |                             |



### REQUIRED TOOLS

1. Size 13 combination wrench \*
2. Size 2 mm hex key (included)
3. Size 6 mm hex key (included)

### ASSEMBLY INSTRUCTIONS

1. Assemble the AErix grow light either on a hard surface or directly on to the AEtrium System \*
2. Install one Right-Angle Bracket on each vertical bar around the growth tray \*
  - a. See recommended installation height on page 8
  - b. The Right-Angle Brackets along the long sides of the growth tray should be facing each other
  - c. Use a T-Screw and a Nut to hold the Right-Angle Bracket in place
  - d. Tighten the Nut with the wrench
  - e. Firmly place the Side Brackets on the Right-Angle Brackets along each long axis of the growth tray



1. AEtrium-4 Daughter with Light Gantry

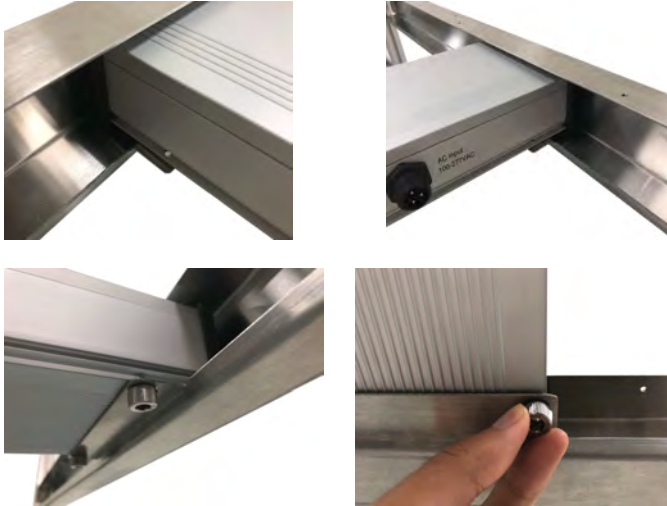


2. Side Brackets installed

\* Applicable only when mounting the grow light on the AEtrium-4 System

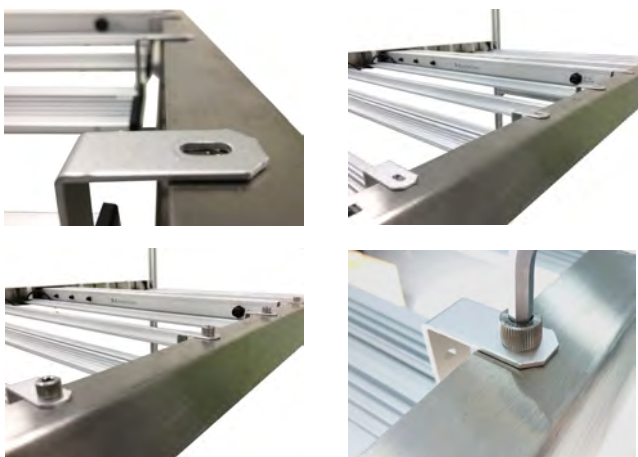
## ASSEMBLY INSTRUCTIONS (CONT'D)

3. Place the Main Body across the two Side Brackets
  - a. Use Thumb Screws to hold the Main Body in place
  - b. (optional) Tighten the Thumb Screws with the matching hex key. If you use a power drill, limit the torque to the lowest setting to prevent thread damage.



3. Main Body installed

4. Place the LED Bars across the two Side Brackets
  - a. Place the two LED Bars with the straight connectors at the two sides, farthest from the Main Body
  - b. Use Thumb Screws to hold the LED Bars in Place
  - c. Remove protective film from LED Bars
  - d. (optional) Tighten Thumb Screws with hex key



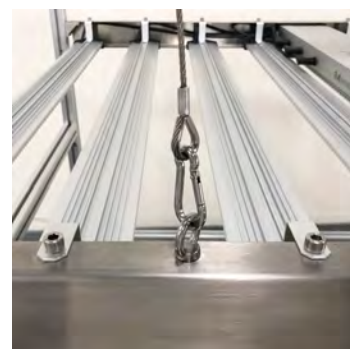
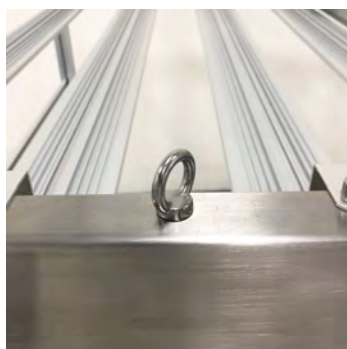
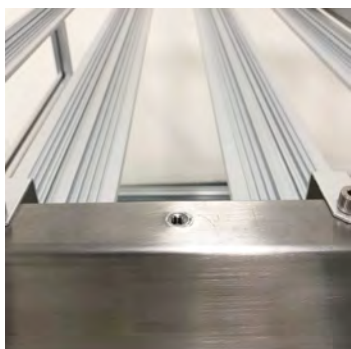
4. LED Bars installed

## ASSEMBLY INSTRUCTIONS (CONT'D)

5. Connect the LED Bar cables to the Main Body by attaching each male connector on each LED Bar cable to the corresponding female connector on the Main Body
  - a. Route the LED Bar cables in the hollow space within the Side Brackets



6. Fasten the Screw Eyes to the Side Brackets \*\*
  - a. Hang the Ærix grow light in the desired location and adjust the mounting height to about six inches from the plant canopy. Use fire resistant wire suspension with 60 lbs (27 kg) load rating or higher.



7. Connect AES Link cables to the AES Link connectors
  - a. Follow the commissioning steps on page 7
  - b. Cover unused connectors with Connector Caps for water resistance



\*\* Applicable only when hanging the grow light on strings

## AMBIENT OPERATING CONDITIONS

This grow light is only intended for indoor environments with climate control. It is **suited for damp locations** but should not be used outdoors or in wet environments with direct exposure to strong jets of water. Installation of grow lights should always follow local installation and safety regulations. **DO NOT INSTALL YOUR AERIX LBR003 GROW LIGHT OUTDOORS OR IN A WET ENVIRONMENT.**

LED grow lights generate heat. **Maintain the temperature within the growing space below 104 °F (40 °C).** Exceeding this temperature may stress the electronic components, leading to shortened lifetime and decreased reliability.

## POWER ROUTING

**Only connect the AErrix grow light to power sources with the correct voltage** (100-277 V AC, 50/60 Hz) using one of the provided power cords. Protect the power cords from being damaged in any way. **Only connect the AErrix grow light to an electrical outlet of appropriate type and rating.** Be particularly cautious when routing the power cords.

1. The power cords must not be secured to the building structure
2. The power cords must not be concealed or routed through ceilings, floors, walls, or other parts of the building structure
3. The power cords must not be located above a suspended ceiling or dropped ceiling
4. The power cords must be routed so that they are not subject to strain and are protected from physical damage
5. The power cords must be visible over their entire length
6. If you use extension power cords, they must be used within their rated ampacity as determined for the maximum ambient temperature of 104 °F (40 °C). The AErrix grow light may draw up to 8A current, depending on the light intensity setting and the voltage of the power source.

## FUSE REPLACEMENT

**The fuse MUST be replaced by AEssenseGrows or a qualified service agent to avoid any hazards.**

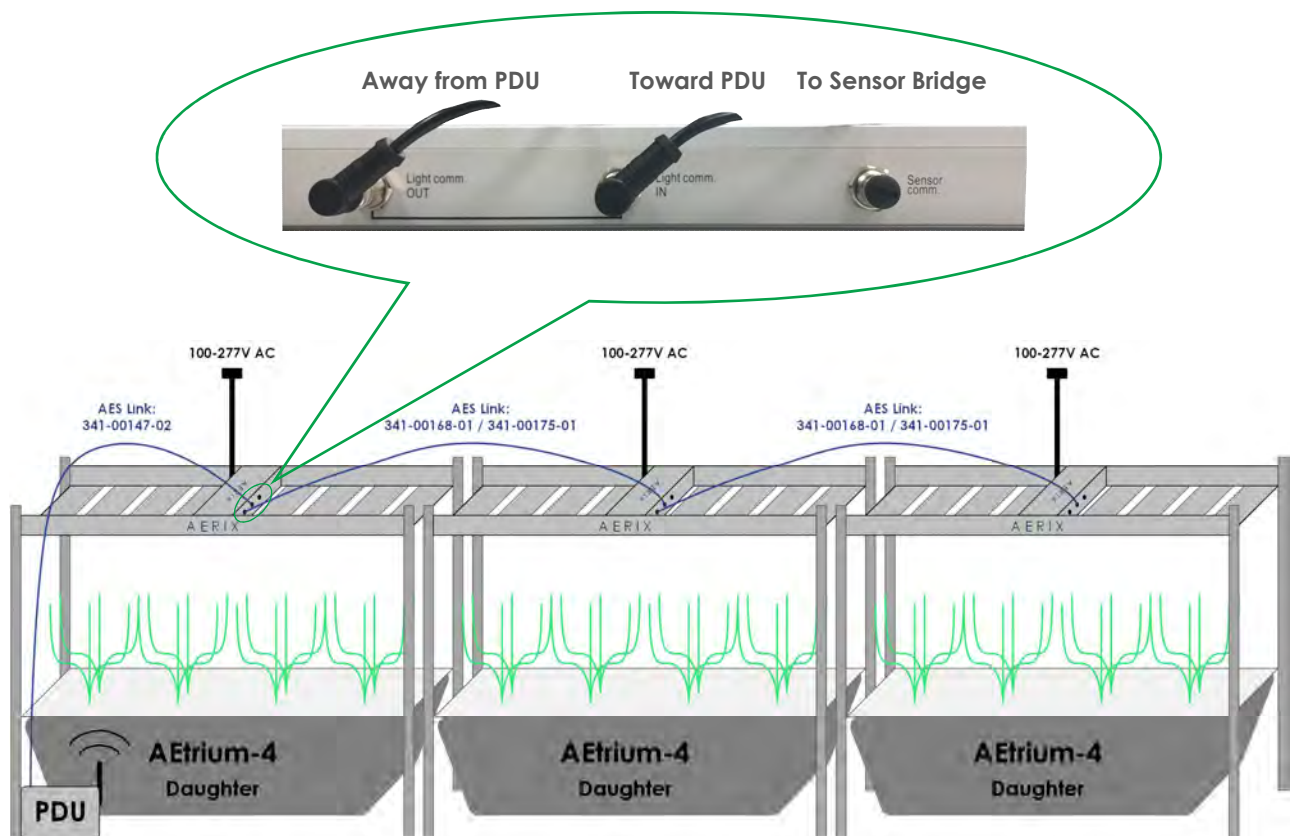
1. Disconnect power
2. Remove the Main Body side panel adjacent to the AC power connector
3. Disconnect the fuse holder and replace the fuse with type 10A/500V/5x20mm (Littelfuse 477 series or similar)



4. Reconnect fuse holder and reinstall side panel

## COMMISSIONING – AES LINK CONNECTION (AETRIUM SYSTEM)

1. Use the AES Link cable to connect the grow light to the AES Link daisy chain
  - a. Make sure the Power Distribution Unit (PDU) is on
  - b. Make sure the grow light is not connected to power
  - c. Connect the “Light comm. IN” to the PDU (with a “341-00147-02” cable) or to the adjacent grow light closer to the PDU (with a “341-00168-01” or “341-00175-01” cable)
  - d. Connect the “Light comm. OUT” to the adjacent grow light farther from the PDU (if any) (with a “341-00168-01” or “341-00175-01” cable)
  - e. Connect “Sensor comm.” to the Sensor Bridge (if any)
  - f. Turn on the grow light by plugging the AC power cord into the wall outlet – make sure no one is looking directly at the LEDs when power is connected)
  - g. It may take the network up to one minute to index the light
2. If the PDU loses power, it may not be able to reconnect to the grow lights. If this happens, just turn the grow lights off and on again



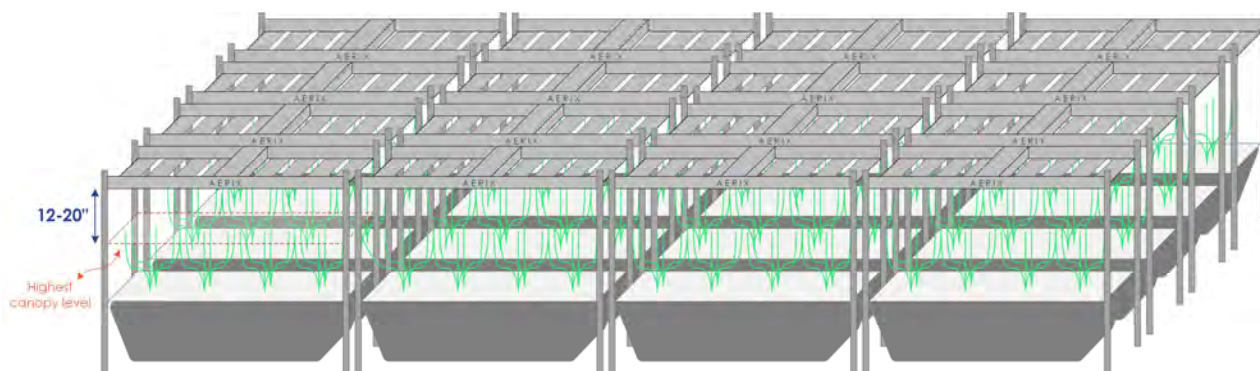
## GENERAL CARE

Regularly clean the grow light with a dry cloth to ensure optimal cooling. Switch off mains power before cleaning. Check your electrical connections regularly.

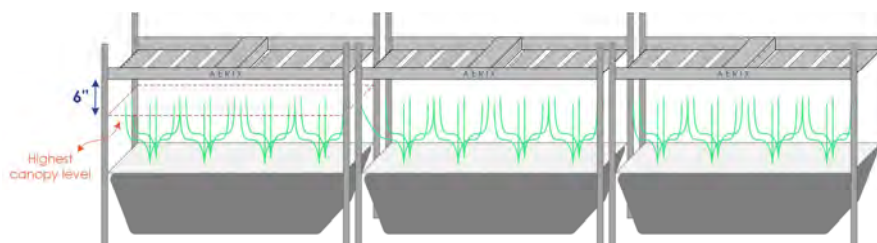
## RECOMMENDED INSTALLATION HEIGHT

Selecting the right installation height is a careful balancing act. The goal is to maximize light uniformity, minimize light losses, and avoid creating hot spots (areas with too much light intensity). The plants reach their maximum height just before harvest. You should install the AERix grow light relative to this expected mature plant height ("highest canopy level"). You can increase the light uniformity by mounting the grow lights higher but this will increase light losses as well. Hot spots can be avoided by making sure the plants are never closer than 6" to the AERix grow light.

1. In **Large Scale Cultivation** light losses aren't critical due to significant light overlap from adjacent grow lights so we recommend that you optimize light uniformity by mounting the AERix grow lights **12" to 20"** above the expected highest canopy level.



2. In **Evaluation Grows** we recommend that you minimize light losses by mounting the AERix grow lights **6"** above the expected highest canopy level.





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