

IMPORTANT SAFETY PRECAUTIONS

READ CAREFULLY AND UNDERSTAND COMPLETELY BEFORE INSTALLING OR OPERATING THE FIXTURE. Retain this instruction for future reference.

To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels. Installation of the fixture should be performed by a qualified licensed electrician.

Maintenance of the fixture should be performed by person(s) familiar with the fixture's construction and operation and any hazards involved. Regular maintenance programs are recommended.

DO NOT install damaged product! The fixture has been properly packed so that no parts should have been damaged during transit. Thoroughly inspect the fixture for any freight damage; freight damage should be reported to the delivery carrier.

WARNING: RISK OF ELECTRIC SHOCK

- The fixture must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety.
- All wiring connections should be capped with UL approved recognized wire connectors.
- Make sure power supply is OFF before installing or maintaining fixture.

WARNING: RISK OF FIRE

- DO NOT exceed maximum supply voltage or wattage marked on fixture label.
- DO NOT exceed fixture maximum ambient temperature or RH.
- DO NOT operate in close proximity to persons, combustible materials or substances affected by heat or drying.
- DO NOT place operating fixtures face down on a flush surface to avoid the risk of overheating or fire.

CAUTION: RISK OF INJURY

- These photobiological safety markings are based on testing of the light output characteristic of a single horticultural luminaire. Increased exposure risk to facility personnel may be present depending upon the number of horticultural luminaires and their placement and/or positioning within the plant growth facility.
- It is the responsibility of the plant growth facility to address these risks at the facility level and to ensure that people entering the plant growth areas while the lights are on, are aware of these risks and that appropriate safeguards are in place.

Risk Group 1

CAUTION: Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

Product tested against EN62471

CAUTION: RISK OF PRODUCT DAMAGE

- **HANDLE WITH CARE!** Improper installing, operating and servicing might damage the product and void the warranty.
- DO NOT mount or support this fixture in a manner that can cut the outer jacket or damage wire insulation.
- DO NOT touch or clean individual LEDs or other electrical components as this can cause Electrostatic Discharge (ESD), damage the fixture, shorten fixture's life, or alter performance. Personal grounding equipment must be worn during all installation or servicing of the unit.
- NEVER spray or wash the fixture with water or other liquids.
- CHECK for compatibility before wiring any control system for dimming, auto-sensing, or remote control that are not factory-wired.
- NEVER perform maintenance or cleaning while fixture is energized; allow fixture to cool before handling.
- DO NOT conceal or extend power cord through a wall, floor, ceiling, or other parts of the building structure.
- DO NOT locate power cord above a suspended ceiling or dropped ceiling.
- DO NOT permanently affix power cord to the building structure.
- DO NOT route the power cord, which is subject to strain and protected.
- KEEP the entire power supply cord to be visible after installation of the unit.
- KEEP the maximum temperature of jacket shall be not more than 90°C.

GENERAL CARE OF YOUR FIXTURE

The fixture is passively cooled with zero moving components. It is designed for harsh environments and years of maintenance-free performance. Some basic care will keep your system operating at peak performance cycle-after-cycle.

- AT LEAST two inches of space is required between the fixture and the roof of your grow area for purpose of heat dissipation efficiency. Failure to do so may shorten the fixture's lifespan.
- DO NOT have nutrient/fertigation be in contact with the light fixture and/or build up on the light fixture. Failure to do so will void the warranty.
- ROUTINELY check for and remove dust and debris buildup from LED modules, heat sink and LED driver. Cleaning shall be done using low-pressure compressed air to rinse away dirt from the fixture.
- KEEP the ambient temperature to be less than 40°C. The users have to check the temperature by a thermometer before turning on power. If the ambient exceed 40°C within the growing space, the user need use a mechanical ventilation or cooling system before installation and this mechanical ventilation or cooling system is required to maintain the temperature within the growing space below 40°C when the luminary is in operation.

CULTIVATION GUIDE

- ROUTINELY check your plants' growth and health; adjust H₂O, CO₂, nutrients, temperature, RH (relative humidity) accordingly. Many plants prefer higher temperatures when exposed to high PPF; experimenting with higher temperature is recommended to achieve higher yields.
- MAINTENANCE is very important to ensure optimal uniformity and consistent PPF. The fixture shall be adjusted from time to time through the full cycle; At least ONE FOOT is recommended from top of your canopy.
- ALWAYS test at the canopy level to gauge leaf surface temperature, since canopy temperature and room ambient temperature might vary.

INTENDED APPLICATION

Input voltage: 120-277VAC, 50/60Hz; consult factory for 347VAC/480VAC option

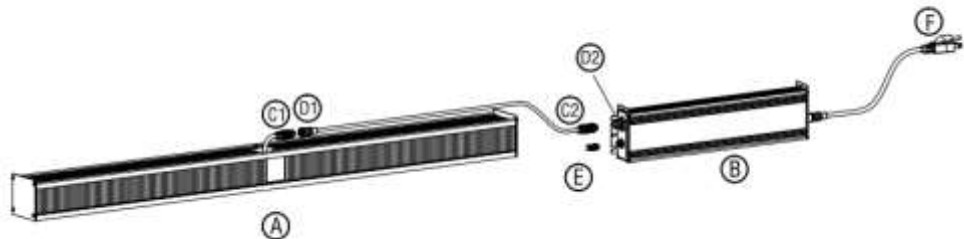
Min. 90°C supply conductors

Operating temperature: -20°C to 40°C

Suitable for dry, damp and wet locations

Product Bulletin

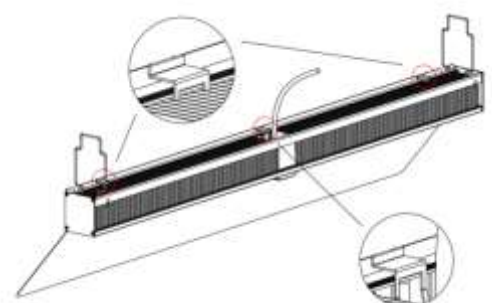
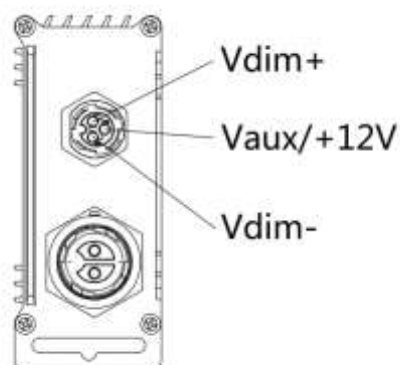
A: Light Fixture
B: Driver Unit
C1, C2, D1, D2: DC Power Cord Connectors
Between Driver Unit and Light Fixture
E1, E2: Data In/Out Ports
F: AC Power Cord

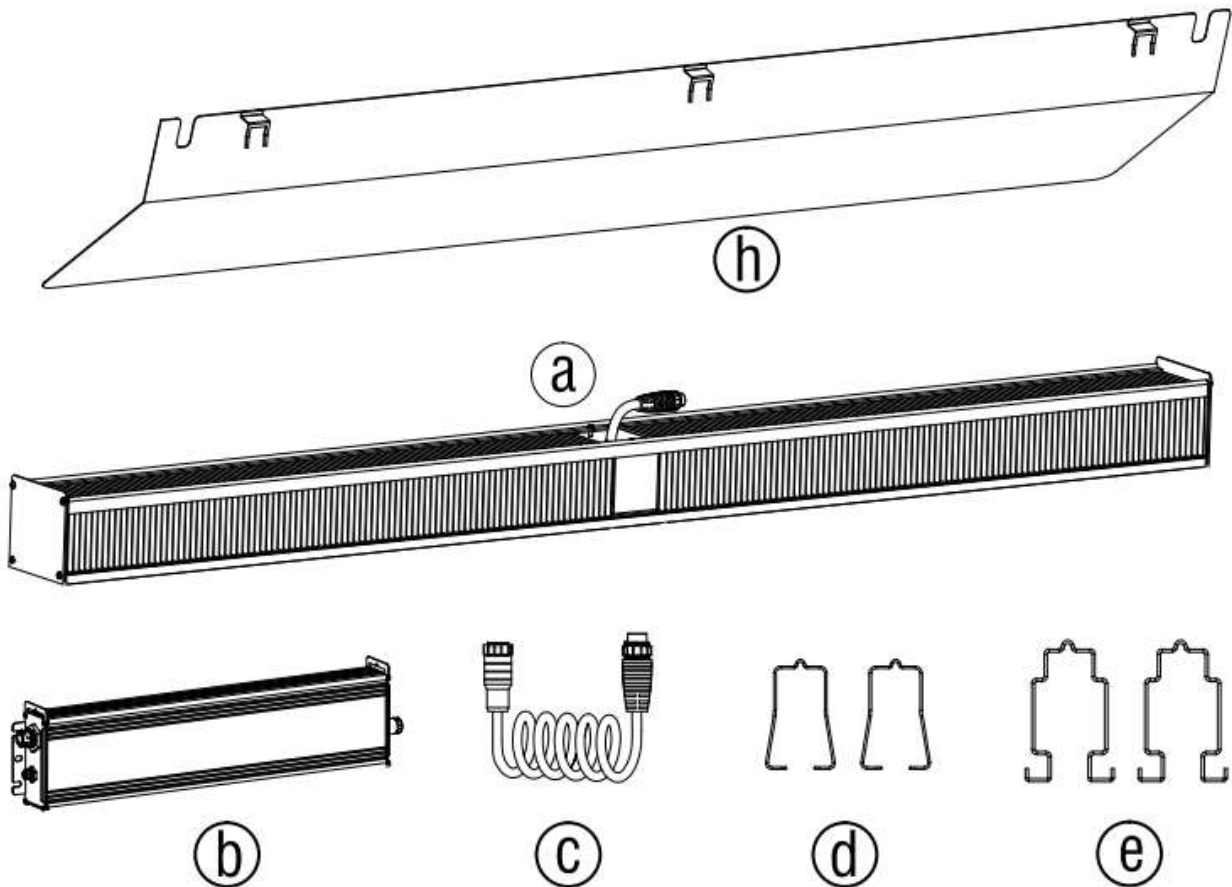


GETTING STARTED

Unpack box and carefully remove contents and ensure your grow light fixture includes the following:

- (1x) LED Grow Light Fixture
- (1x) Driver Unit
- (1x) DC Power Cord
- (2x) Driver Mounting Brackets
- (2x) Light Fixture Mounting Brackets
- (1x) either AC Power Cord with plug or bare wire ends, or AC Linking Cords (may be externally packaged)
- May include M12 Dimming/Data Cord
- May include Side Reflector





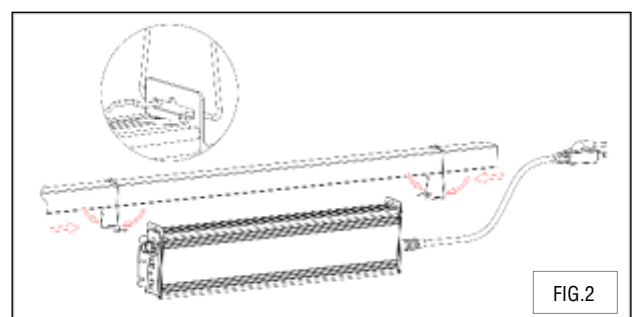
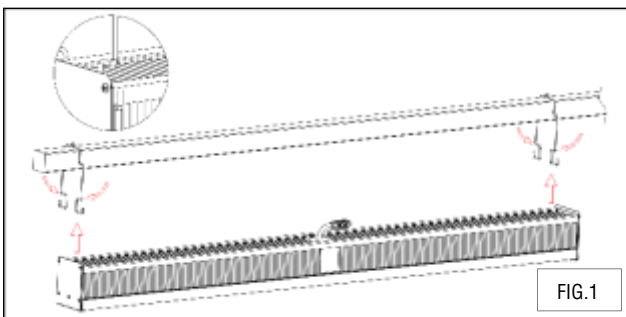
MOUNTING

- LIGHT FIXTURE

1. Take (2x) mounting brackets. Hang a bracket over the support structure and hold up the light fixture under it.
2. While maintaining a firm grip on both, pinch the bottom of the bracket inward and insert it into the top of light fixture heat sink between the fins, release the tension of the bracket. When installed properly, the bracket should hook into both sides of the light fixture heat sink frame to provide a level and secure mount.
3. Repeat steps 1-2 on the other side of the fixture to finish mounting the light fixture. The two brackets should be centered to the fixture and widely spaced out, with 3"-8" to the fixture edge, see FIG.1.

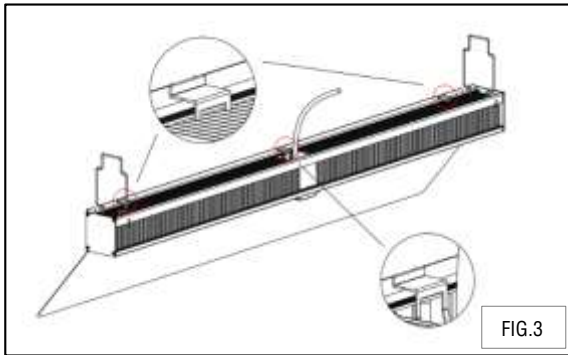
- DRIVER UNIT

1. Take (2x) mounting brackets and hang a bracket over the support structure. Locate the holes for brackets on the narrow side of driver unit, hold up driver unit under the support structure under it.
2. While maintaining a firm grip on both, pinch the bottom of the bracket inward and horizontally insert it into the receiving holes on driver unit, release the tension of bracket.
3. Lift the ends of the brackets up to a 90° angle. Repeat above steps to install another bracket on driver unit.



- SIDE REFLECTOR ATTACHMENT (optional for edge lights)

1. Clip the side reflector onto the outer edge of the light at the front, middle, and end of the light bar as in FIG.3.



WIRING

The fixture comes with (1x) DC power cord, ordered AC power and/or linking cords, and, if ordered, data connection or linking cords.

Connect one end of DC power cord to the light fixture and the other end to the driver power cord connector; plug the driver unit to AC power outlet, see FIG. 4. Alternatively, use a HI-Top Linking Power Cord to connect and share AC input power with nearby lights, see FIG. 5 and contact TotalGrow for cord length options:

AC Linking Limits	120V (120-277V models)	208V	230V	277V	480V (220-480V models)
Maximum Hi-Top 620 Lights Linked for AC Power	2	3	4	4	8

If 0-10V dimming control will be used, connect dimming cord to the driver and the other end(s) to additional lights and/or a dimming controller, see FIG. 6-7.

Check for the maximum daisy chain capability of your controller or dimmer, DO NOT exceed.

