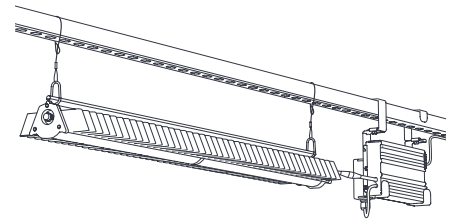


Arize Element™ Top Light



Horticulture LED Lighting System

Installation Guide



BEFORE YOU BEGIN / AVANT DE COMMENCER

Read these instructions completely and carefully. Lisez attentivement ces instructions dans leur intégralité.
For Commercial or Industrial use only.

⚠ WARNING / AVERTISSEMENT

RISK OF ELECTRIC SHOCK

- Turn power off before installation, inspection, cleaning or removal. And follow appropriate lock out/tag out safety procedure.
- Properly ground electrical enclosure.
- Follow all National Electric Codes (NEC) and local codes.
- 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.
- The installation and associated structures are subject to approval by the authority having jurisdiction.
- Use only with components identified in this document.
- Suitable for dry, damp, and wet locations; Do not immerse any component.
- Wear suitable Personal Protective Equipment (PPE) during installation/maintenance. Highly recommend safety glasses, helmet and leather glove for luminaire mounting.
- Luminaire design for Greenhouse only.

RISK OF FIRE

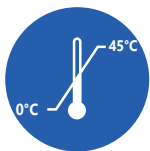
- Minimum 3 inch distance from light module & driver to any combustible material.
- Minimum 3 inch clearance between, light module & driver, light module & light module, driver & driver.
- The light module shall be installed lens down with a minimum 5 inch distance to anything below.
- All cables including connectors shall not be concealed or extended through a wall, floor, ceiling, or other parts of the building structure; located above a suspended ceiling or dropped ceiling; permanently affixed to the building structure.
- Cables shall be routed so that they are not subject to strain and are protected from physical damage; visible over their entire length; and used within their rated ampacity as determined for the maximum temperature of the installed environment specified in the instructions.
- For safe operation, and to maximize the longevity of the luminaire; ensure that the light module and driver are clean and free of dirt, dust, oil, or any other debris. Do not apply any kind of film on the lens or otherwise cover the driver or light engine in any way.

RISQUE DE CHOC ELECTRIQUE

- Coupez l'alimentation avant l'inspection, l'installation ou la désinstallation.
- Reliez correctement le boîtier électrique à la mise à la terre.
- Suivre tous les codes électriques locaux applicables.
- Ce produit doit être installé selon le code d'installation pertinent, par une personne qui connaît bien le produit et son fonctionnement ainsi que les risques inhérents.
- L'installation et les structures associées sont soumises à l'approbation des autorités compétentes.
- Utilisez uniquement avec les composants identifiés dans ce document.
- Convient aux endroits secs, humides et mouillés. Ne doit pas être immergé.
- Portez les équipements de protection individuelle appropriés pendant l'installation et la maintenance. L'utilisation de lunettes de sécurité, d'un casque et des gants de cuir pour le montage du luminaire est fortement recommandée.
- Luminaire conçu pour serres seulement.

RISQUE D'INCENDIE

- Distance minimale de 3 pouces entre l'équipement d'éclairage et toute matière combustible.
- Distance minimale de 3 pouces entre tout équipement d'éclairage, module d'éclairage ou module d'alimentation.
- Le luminaire doit être installé avec l'objectif pointé vers le bas avec une distance minimale de 5 pouces entre le luminaire et tout objet.
- Les câbles et connecteurs ne doivent pas être dissimulés à l'intérieur, ou passer à travers, d'un mur, d'un plancher, d'un plafond ou de toute autre partie de la structure du bâtiment; ne doivent pas être placés au-dessus d'un plafond suspendu; ne doivent pas faire partie intégrante de la structure du bâtiment.
- Les câbles doivent être installés de façon à être protégés contre l'étirement et tout autre bris physique; visibles sur toute leur longueur; utilisés dans la limite de leur courant admissible, déterminée pour les limites de température de l'environnement spécifiées dans le guide d'instruction.
- Pour une opération sécurisée et pour maximiser la longévité du luminaire; S'assurer que le module d'éclairage et le module d'alimentation sont propres et sans saleté, poussière, huile ou autres débris. Ne pas appliquer tout type de film sur les lentilles et ne pas couvrir le module d'alimentation ou le module d'éclairage de quelque manière.



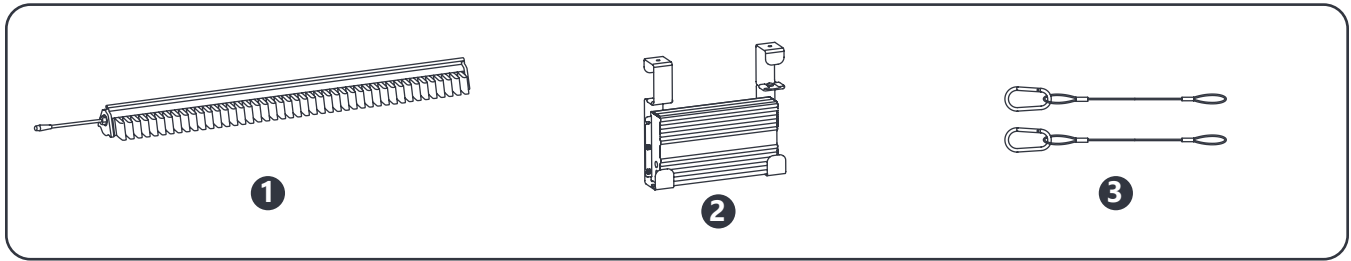
Suitable for operation in an ambient temperature between 32°F (0°C) and 113°F (45°C).

A mechanical ventilation or cooling system is required to maintain the temperature within the growing space below 113°F (45°C) when the light module is in operation.

Opération compatible avec un environnement à température ambiante contrôlée entre 32°F (0°C) et 113°F (45°C).

l'utilisation d'un système de contrôle de la température sera nécessaire pour garder la serre sous les 113°F (45°C) lorsque le luminaire est en fonction.

Base Kit Components Supplied



- 1 Top Light module
- 2 Driver with brackets
- 3 2 x 0.8 ft. support cables with carabiners

Specifications

Description	Detailed Description	Driver Input Ratings		
		Typical Operating Voltages at 50/60Hz (VAC)	Input Current (A)	Power Factor
GEHTL-HPPR4-2NX1	Top light 4 ft purple reproductive, 641W	120/208/240/277	5.3/3.1/2.7/2.3	> 0.9
GEHTL-HPPB4-2NX1	Top light 4 ft purple balanced, 641W	120/208/240/277	5.3/3.1/2.7/2.3	> 0.9
GEHTL-MPPR4-2NX1	Top light 4 ft purple reproductive, 345W	120/208/240/277	2.9/1.7/1.4/1.2	> 0.9
GEHTL-MPPB4-2NX1	Top light 4 ft purple balanced, 345W	120/208/240/277	2.9/1.7/1.4/1.2	> 0.9
GEHTL-HPPR4-3NX1	Top light 4 ft purple reproductive, 627W	277/347/480	2.3/1.8/1.3	> 0.9
GEHTL-HPPB4-3NX1	Top light 4 ft purple balanced, 627W	277/347/480	2.3/1.8/1.3	> 0.9
GEHTL-MPPR4-3NX1	Top light 4 ft purple reproductive, 337W	277/347/480	1.2/1.0/0.7	> 0.9
GEHTL-MPPB4-3NX1	Top light 4 ft purple balanced, 337W	277/347/480	1.2/1.0/0.7	> 0.9
GEHTL-EPPR4-1NX1	Top light 4 ft purple reproductive, 199W	120/208/240	1.7/1.0/0.8	> 0.9
GEHTL-EPPB4-1NX1	Top light 4 ft purple balanced, 199W	120/208/240	1.7/1.0/0.8	> 0.9
GEHTL-HPKR4-2NX1	Top light 4 ft pink reproductive, 646W	120/208/240/277	5.4/3.1/2.6/2.3	> 0.9
GEHTL-HPKB4-2NX1	Top light 4 ft pink balanced, 646W	120/208/240/277	5.4/3.1/2.6/2.3	> 0.9
GEHTL-HPKF4-2NX1	Top light 4 ft pink flower, 646W	120/208/240/277	5.4/3.1/2.6/2.3	> 0.9
GEHTL-HWTN4-2NX1	Top light 4 ft white industrial, 646W	120/208/240/277	5.4/3.1/2.6/2.3	> 0.9
GEHTL-MPKR4-2NX1	Top light 4 ft pink reproductive, 347W	120/208/240/277	2.9/1.7/1.5/1.3	> 0.9
GEHTL-MPKB4-2NX1	Top light 4 ft pink balanced, 347W	120/208/240/277	2.9/1.7/1.5/1.3	> 0.9
GEHTL-MPKF4-2NX1	Top light 4 ft pink flower, 347W	120/208/240/277	2.9/1.7/1.5/1.3	> 0.9
GEHTL-MWTN4-2NX1	Top light 4 ft white industrial, 355W	120/208/240/277	3/1.8/1.5/1.4	> 0.9
GEHTL-HPKR4-3NX1	Top light 4 ft pink reproductive, 632W	277/347/480	2.3/1.8/1.4	> 0.9
GEHTL-HPKB4-3NX1	Top light 4 ft pink balanced, 632W	277/347/480	2.3/1.8/1.4	> 0.9
GEHTL-HPKF4-3NX1	Top light 4 ft pink flower, 632W	277/347/480	2.3/1.8/1.4	> 0.9
GEHTL-HWTN4-3NX1	Top light 4 ft white industrial, 632W	277/347/480	2.3/1.8/1.4	> 0.9
GEHTL-MPKR4-3NX1	Top light 4 ft pink reproductive, 340W	277/347/480	1.2/1/0.8	> 0.9
GEHTL-MPKB4-3NX1	Top light 4 ft pink balanced, 340W	277/347/480	1.2/1/0.8	> 0.9
GEHTL-MPKF4-3NX1	Top light 4 ft pink flower, 340W	277/347/480	1.2/1/0.8	> 0.9
GEHTL-MWTN4-3NX1	Top light 4 ft white industrial, 347W	277/347/480	1.3/1/0.8	> 0.9

Accessories

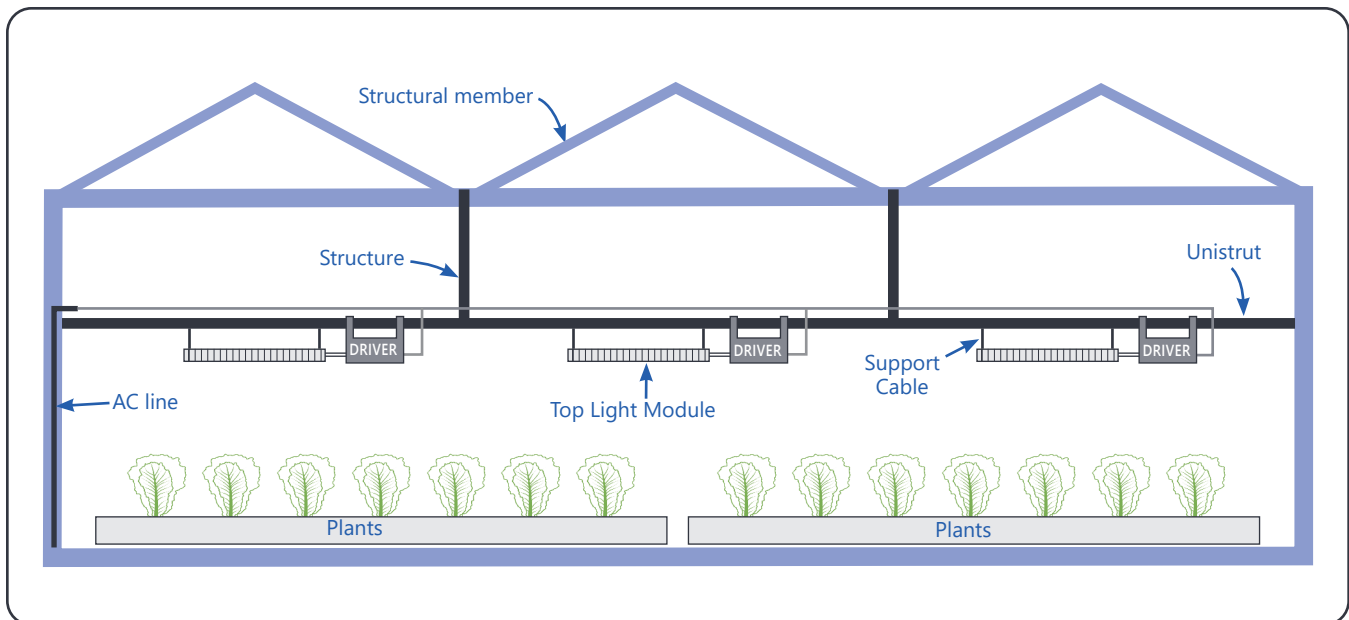
SKU	Nomenclature	Detailed Description	Components
95047382	GEHAK-NN-FB-N0	Light module 2' UL remote mount kit	2 X 2 ft support cable + 3 ft UL DC cable
95047404	GEHAK-NN-CC-N0	Light module 5' UL remote mount kit	2 X 5 ft support cable + 6 ft UL DC cable
95047406	GEHAK-NN-DD-N0	Light module 10' UL remote mount kit	2 X 10 ft support cable + 12 ft UL DC cable
95047408	GEHAK-DN-DD-N0	Driver 2 3/4" square member bracket	2 X 2 3/4" square brackets
95047409	GEHAK-BN-DD-N0	Driver 2 3/4" pipe member bracket	2 X 2 3/4" pipe brackets
95047410	GEHAK-AN-DD-N0	Driver 1 3/8" pipe member bracket	2 X 1 3/8" pipe bracket
95047411	GEHAK-NN-NE-N0	Driver universal 1' remote mount kit	2 X 1ft driver support cable
95047654	GEHAK-NN-NN-J1	*Wire dimming junction box kit	Junction box + 2 cable glands
95047660	GEHAK-NN-NN-D1	*UL wall-mounted dimming switch	Dimming switch

***NOT AVAILABLE WITH 200W LIGHT MODULES (GEHTL-EPPR4-1NX1, GEHTL-EPPB4-1NX1)**

⚠ ATTENTION / ATTENTION

- Installation instructions and specifications for accessories can be found in the accessory package.
- Les instructions d'installation et spécifications pour les accessoires se retrouvent dans le kit d'accessoires.

Sample Base Installation Diagram



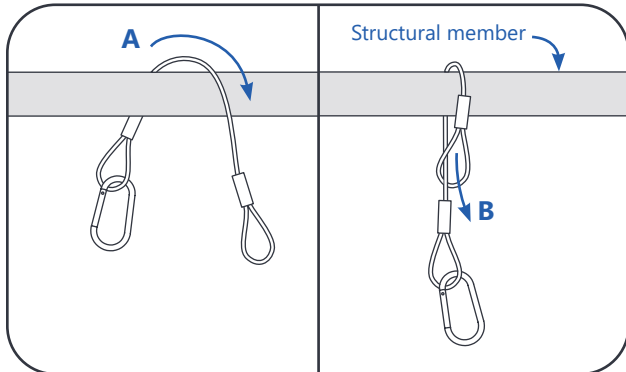
⚠ CAUTION / ATTENTION

Always wear safety gloves while handling light modules.

Portez toujours des gants de protection lorsque vous manipulez les luminaires.

Installation

Hanging the Light Module

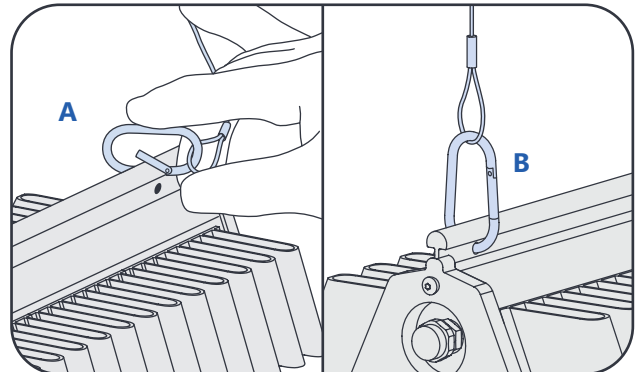


1 Install the support cables

A) At first end of light module, wrap non carabiner end of support cable around structural member.

B) Pass carabiner through support cable loop to create a noose.

Repeat with second support cable at other end of light module.



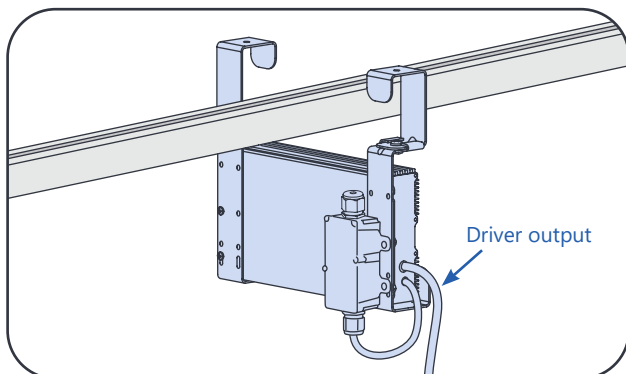
2 Install the light module

A) Attach first carabiner to the 1/4" round hole on one side of the light module. Repeat on other side of light module.

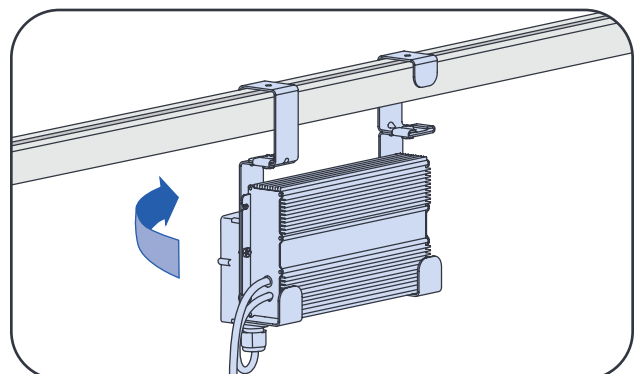
B) Ensure both carabiners are through the hole and both gates are closed.

NOTE: Ensure greenhouse structures and members are rated for loads created by light modules and drivers. Suitable min. 2 mm diameter suspension cable required to complete installation.

Hanging the Driver



3 Lift driver so that the structural member is between the brackets.



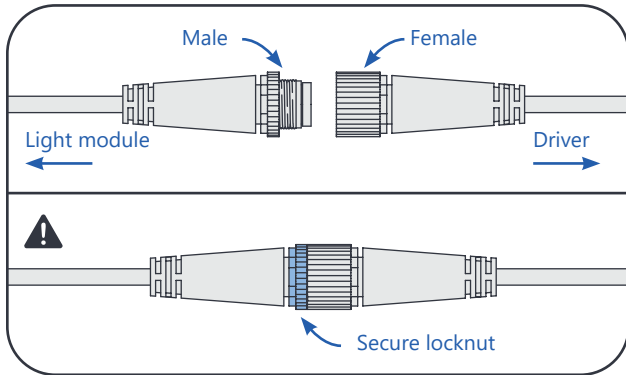
4 Rotate driver so that the brackets can engage with the structural member. Lower driver into position.

NOTE: The base driver mounting kit is for a 1 5/8" square structural member. For other structural members, see accessories or contact your account manager.

⚠ WARNING / AVERTISSEMENT

RISK OF ELECTRICAL SHOCK: Turn power OFF before inspection, installation or removal.
RISQUE DE CHOC ELECTRIQUE: Coupez l'alimentation avant l'inspection, l'installation ou la désinstallation.

**Driver Output
Electrical Connections**

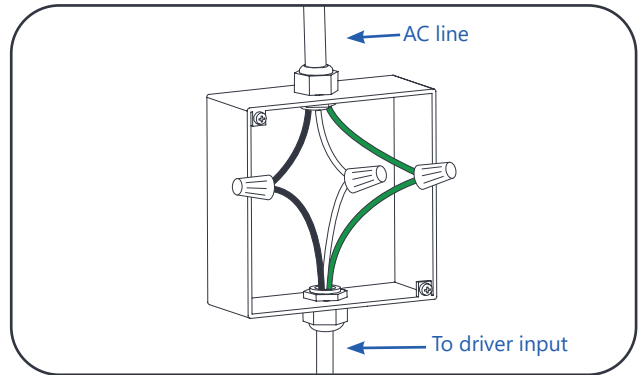


5 Connect light module to driver output

Mate male connector from module with female connector from DC output of driver.

⚠ Secure blue lock nut by turning counterclockwise until tight ensuring water tight seal and good connection.

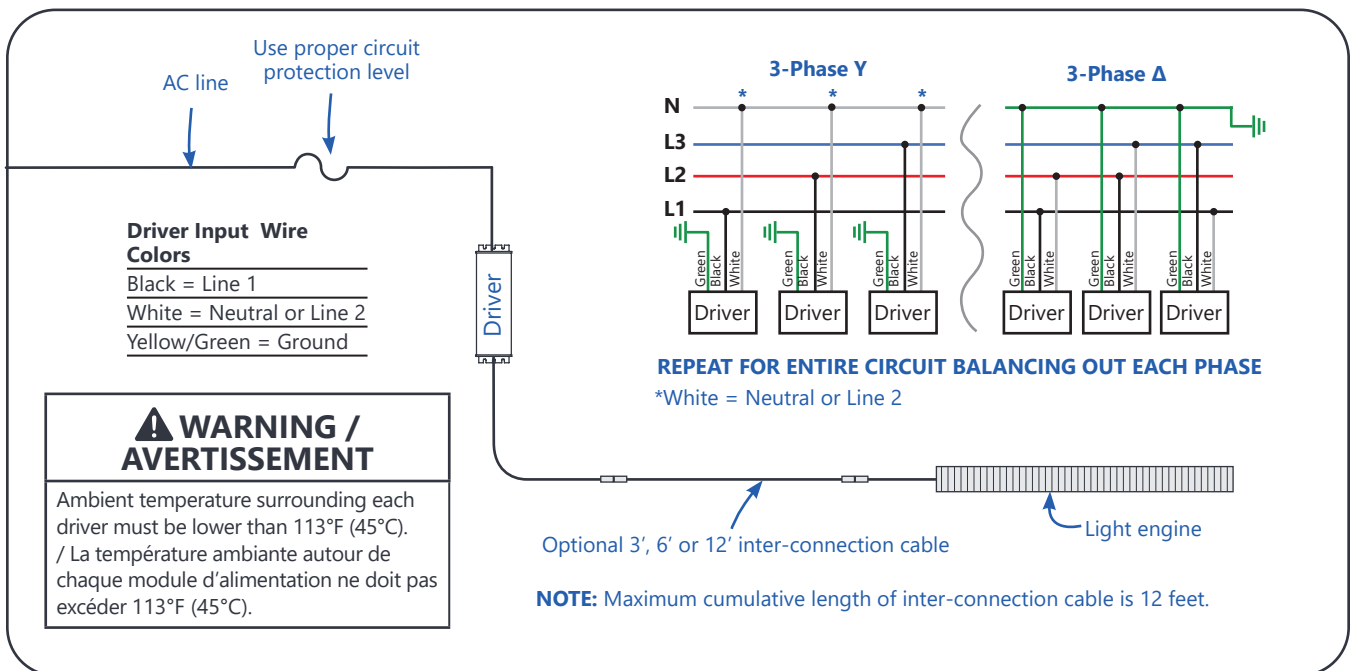
**Driver Input
Electrical Connections**



6 Connect driver input to AC line

Connect the green wire to the incoming ground conductor. Connect the black wire to Line 1 and white wires to Neutral or Line 2 of the incoming AC line.

Connection Schematic



Wired Dimming Connections (Optional)

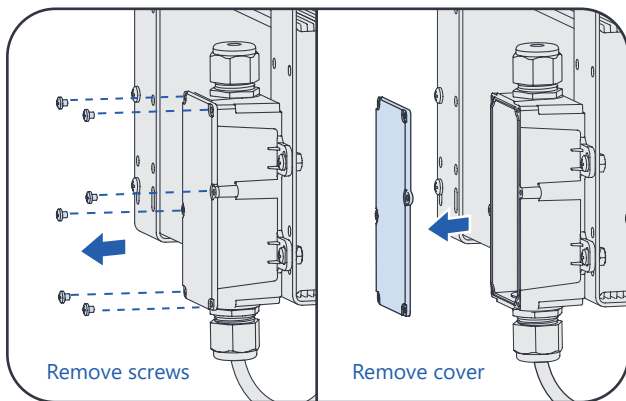
⚠ WARNING / AVERTISSEMENT

RISK OF ELECTRIC SHOCK

- Turn power off before installation, inspection, cleaning or removal. And follow appropriate lock out/tag out safety procedure.
- 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.

RISQUE DE CHOC ELECTRIQUE

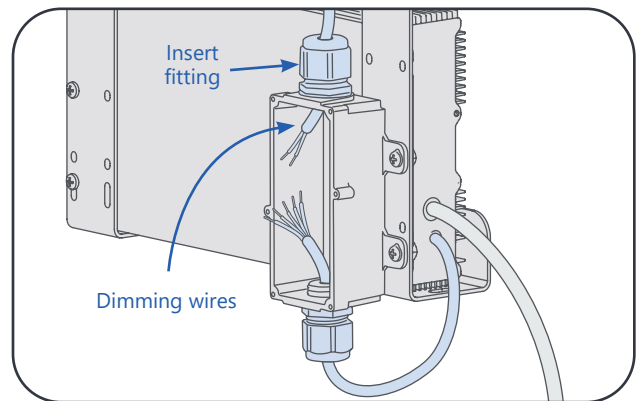
- Coupez l'alimentation avant l'inspection, l'installation ou la désinstallation.
- Ce produit doit être installé selon le code d'installation pertinent, par une personne qui connaît bien le produit et son fonctionnement ainsi que les risques inhérents.



1 Junction Box Cover Removal

- Using a #1 Phillips screwdriver, unscrew the 6 screws on the junction box cover.
- Remove the junction box cover from the junction box enclosure.

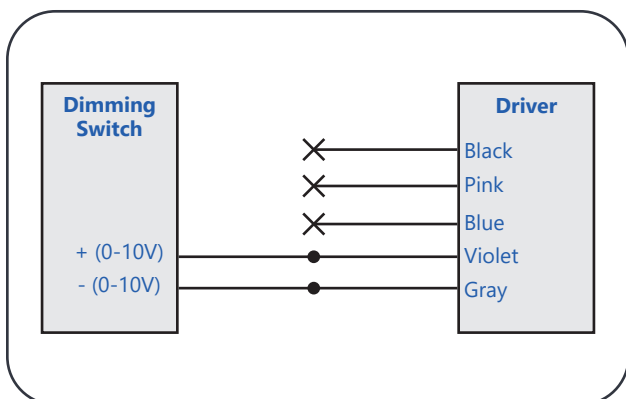
NOTE: Be sure to hold on to the screws, junction box cover, and gasket for future use.



2 Wall Dimming Wire Insertion

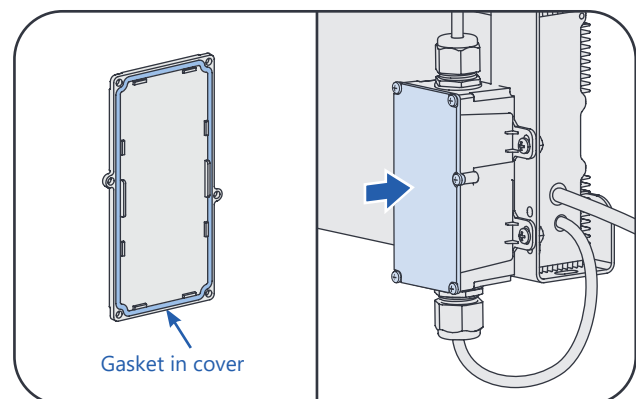
- Remove the sealed gland in the top of the junction box enclosure, and install an appropriate Listed 1/2" NPT fitting rated for the environment into the open threaded open conduit connection.
- Bring the conductors for the building dimming network into this fitting.

NOTE: Customer is responsible for the 1/2" NPT-14 thread per inch fitting.



3 Wire Dimming Electrical Connection

Connect the appropriate wiring to Dim + (0-10V) and Dim - (0-10V) from driver. Insulate the black, pink & blue wires. Follow dimming switch instructions for rest of connection.



4 Junction Box Cover Replacement

- Ensure gasket is sitting in place on the inner edge of the junction box cover.
- Fasten all 6 screws to ensure water tight seal.

NOTE: Be careful not to strip out the junction box enclosure by over tightening the screws.

⚠ RISK GROUP 2 - CAUTION* / ATTENTION - RAYONNEMENT LUMINEUX GROUPE 2*

⚠ RISK GROUP 1 - CAUTION / ATTENTION - RAYONNEMENT LUMINEUX GROUPE 1****

Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eyes.
Le rayonnement lumineux émis par ce produit est potentiellement dangereux. Ne pas regarder la lumière émise directement car elle pourrait occasionner des dommages aux yeux.

* All models except GEHTL-MWTN4-2NX1 and GEHTL-MWTN4-3NX1. / Tous les modèles sauf le GEHTL-MWTN4-2NX1 et le GEHTL-MWTN4-3NX1.

** GEHTL-MWTN4-2NX1 and GEHTL-MWTN4-3NX1 models only. / Seulement les modèles GEHTL-MWTN4-2NX1 et GEHTL-MWTN4-3NX1.

- 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.
- Ces avertissements de sécurité photobiologiques sont basés sur des tests du rendement lumineux d'un seul luminaire horticole. Les employés risquent de souffrir d'une exposition accrue selon le nombre de luminaires horticoles et leur placement et / ou positionnement au sein de la serre / chambre de culture.
- Il relève de la responsabilité de l'opérateur de l'installation de gérer les risques au niveau de l'installation et de s'assurer que les personnes qui pénètrent dans les zones de croissance des plantes pendant que les lumières sont allumées soient conscientes des risques et que des mesures de protection appropriées soient en place.

Save These Instructions

Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This Class [A] RFLD complies with the Canadian standard ICES-005. /CeDEFR de la classe [A] est conforme à la NMB-005 du Canada.



Electrical products must not be thrown out with domestic waste. They must be taken to a communal collecting point for environmentally friendly disposal in accordance with local regulations. Contact your local authorities or stockist for advice on recycling. The packaging material is recyclable. Dispose of the packaging in an environmentally friendly manner and make it available for the recyclable material collection-service.



For the latest install guides for your product go to:
<https://products.currentbyge.com/horticulture/arize-element>
arize.support@gecurrent.com



Visit www.LED.com
Call us today! **1-888-MY-GE-LED**
Email us: horticulture.info@gecurrent.com

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