

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

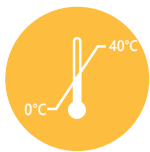
WARNING / AVERTISSEMENT

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.

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.



Suitable for operation in an ambient temperature between 32°F (0°C) and 104°F (40°C).

A mechanical ventilation or cooling system is required to maintain the temperature within the growing space below 104°F (40°C) when the light module is in operation.

Opération compatible avec un environnement à température ambiante contrôlée entre 32°F (0°C) et 104°F (40°C).

l'utilisation d'un système de contrôle de la température sera nécessaire pour garder la serre sous les 104°F (40°C) lorsque le luminaire est en fonction.

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.

Specifications

Driver Specifications

SKU	Description	Weight	Driver Input Ratings		
			Voltage	Current	Power Factor
93064969	GEPSC070-210G-ADFNA	1.5kg (3.3 lbs)	120/208/240 VAC, 50/60 Hz	2.5/1.6/1.2 A	> 0.9
93117154	GEPSC070-210G-AGJNA	1.5kg (3.3 lbs)	277V-480V	0.9A – 0.5A	>0.9

Light Module Specifications

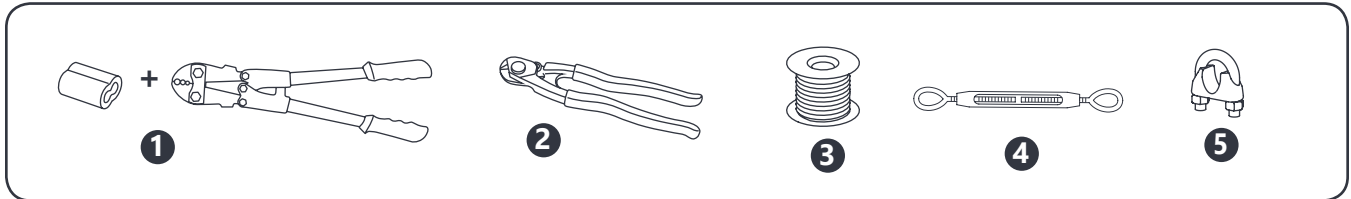
SKU	Description	Detailed description	Weight	LED Module Input Ratings		
				Voltage	Current	Power
93067254	GEHR3007M-N120CH-PPR-1	Top Lighting Light module, Purple Type "R"	1.65kg (3.64lbs)	260 VDC	0.7A	182W
93067255	GEHR3007M-N120CH-PPB-1	Top Lighting Light module, Purple Type "B"		255 VDC	0.7A	179W

Inter-Connection Cables Specification

SKU	Description	Detailed description	Weight
93067607	GECA30A14-AA06B	Inter-Connection cable 6 feet, UL	0.32kg (0.7 lbs)
93067608	GECA30A14-AA12B	Inter-Connection cable 12 feet, UL	0.60kg (1.3 lbs)

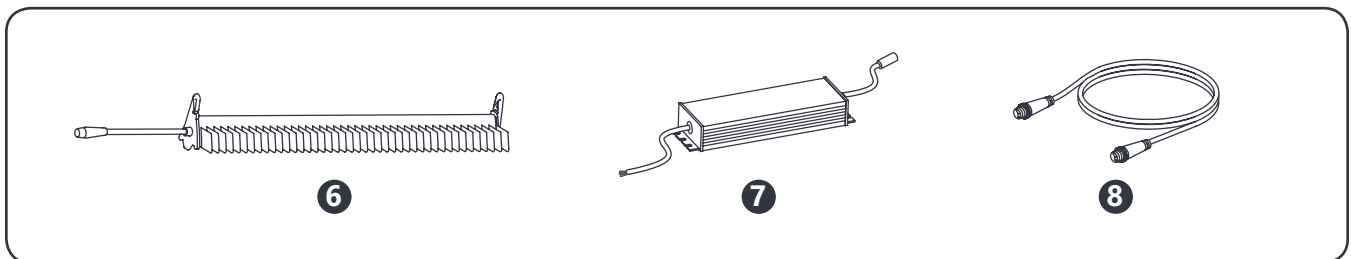
Accessories

SKU	Description	Components
TBD	GEHAK-KN-NA-N0	2 x 1-5/8" square driver brackets and 2 x 1' support cables



- 1 Compression tool and stop sleeves
- 2 Cable cutters
- 3 Suspension cable
- 4 Turnbuckle
- 5 Wire clamp

Components Supplied



- 6 Top Light module (93067254, 93067255)
- 7 Driver (93064969 or 93117154)
- 8 **Optional:** Inter-connection cable (93067607, 93067608)

Important Guidelines

- Minimum 4 inch distance from lighting equipment to any combustible material.
- Minimum 4 inch distance between light module and driver or other light module.
- The light module shall be installed lens down with a minimum 5 inch distance to anything below.
- 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 prior to operation. Do not apply any kind of film on the lens or otherwise cover the driver or light engine in any way.
- Cables 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.
- Installer is responsible for driver bank design and construction.
- Driver bank plate shall be made of non-combustible material.
- Installer must select suspension cable able to support 5 times the weight of Light module.
- Maximum cumulative Inter-connection cable length is 24 feet.

Conseils Importants

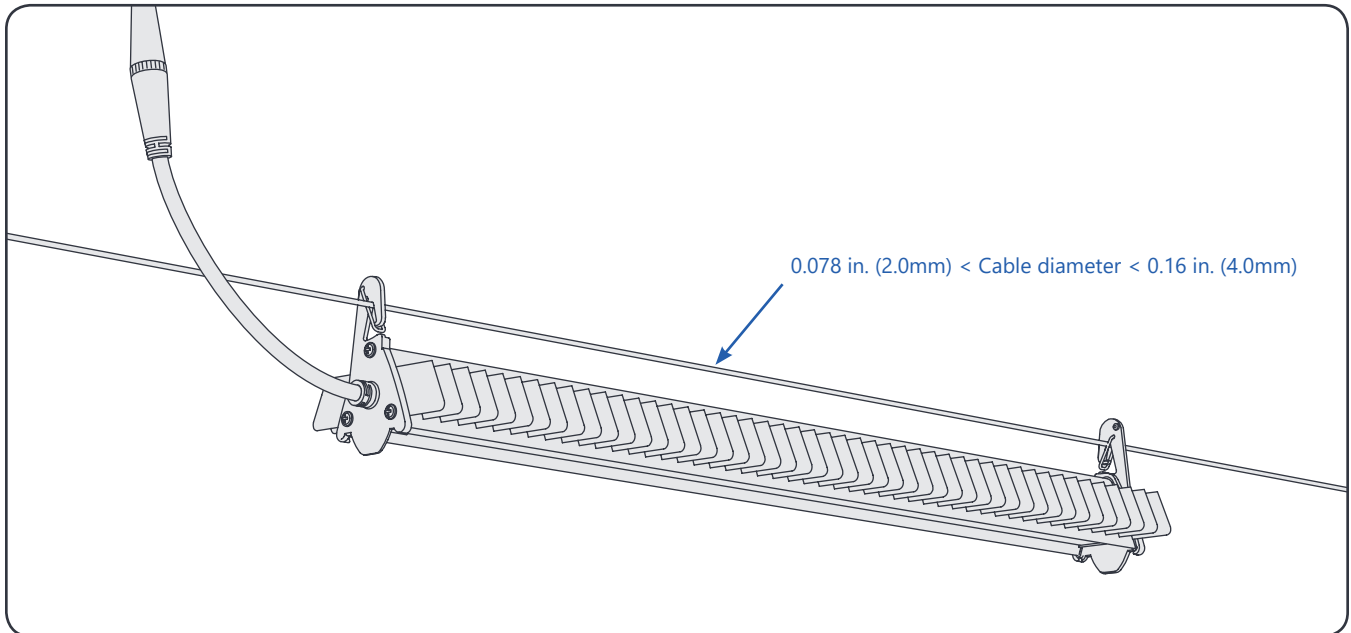
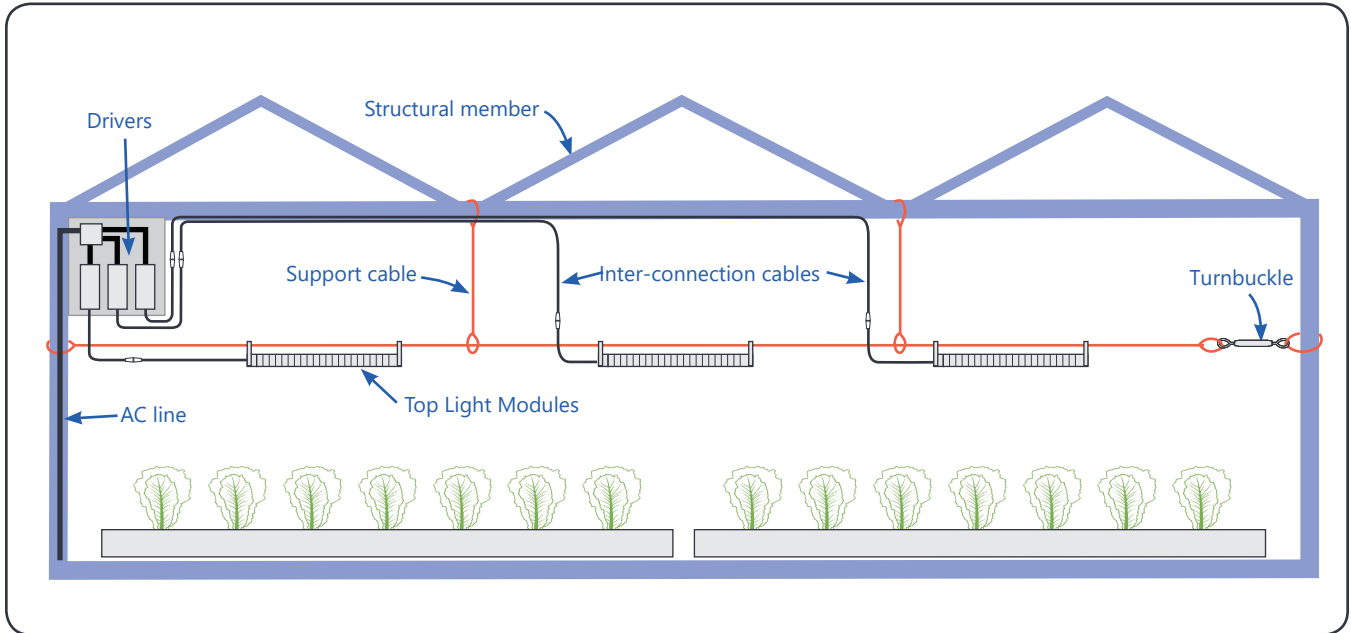
- Distance minimale de 4 pouces entre l'équipement d'éclairage et tout matériau combustible.
- Distance minimale de 4 pouces entre le module d'éclairage et le module d'alimentation ou un autre module d'éclairage.
- Le luminaire doit être installé avec l'objectif pointé vers le bas avec une distance minimale de 5 pouces entre le luminaire et tout objet.
- 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 avant l'opération. 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.
- Les câbles ne doivent pas être cachés à l'intérieur ou passer à travers un mur, un plancher, un plafond ou d'autres parties 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 dommage; être visibles sur toute leur longueur; utilisés dans la limite de leur capacité électrique, déterminée pour les limites de température de l'environnement spécifiée dans ce document.
- L'installateur est responsable de la conception, construction et installation du panneau de module d'alimentation.
- La panneau de module d'alimentation doit être fait d'un matériau non-combustible.
- L'installateur doit sélectionner un câble de suspension capable de supporter 5 fois le poids du module d'éclairage.
- La longueur cumulative maximale du câble d'interconnexion est de 24 pieds.

ATTENTION / ATTENTION

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|---|--|
| <ul style="list-style-type: none">• Suspension cable diameter must be between 0.10 inch (2.5mm) and 0.16 inch (4mm).• Selection of proper common hardware with good quality is the responsibility of installer.• Consider using material having proper strength and corrosion resistance for the environment. | <ul style="list-style-type: none">• Le câble de suspension doit avoir un diamètre entre 0.10 pouce (2.5mm) et 0.16 pouce (4mm).• La sélection du matériel d'installation de bonne qualité est la responsabilité de l'installateur.• Choisissez des matériaux ayant la résistance mécanique et à la corrosion appropriées pour l'environnement. |
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Installation Option A: Hang Luminaires on Horizontal Cable

Option A Overview

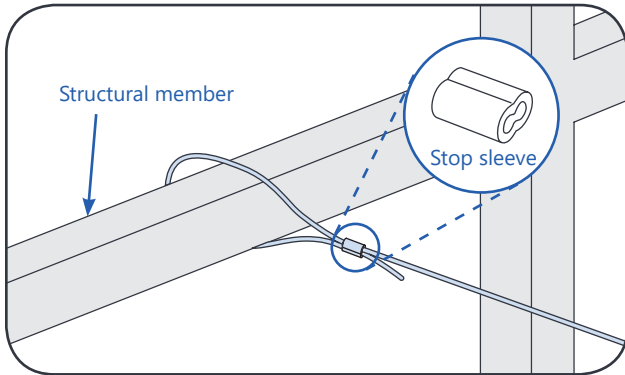


See Page 5 for installation steps.

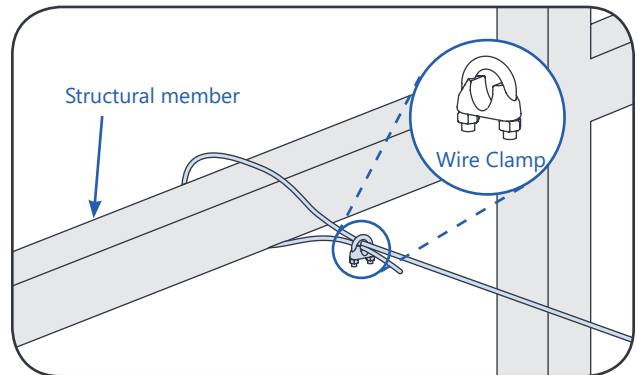
Option A Installation Steps

⚠ ATTENTION / ATTENTION

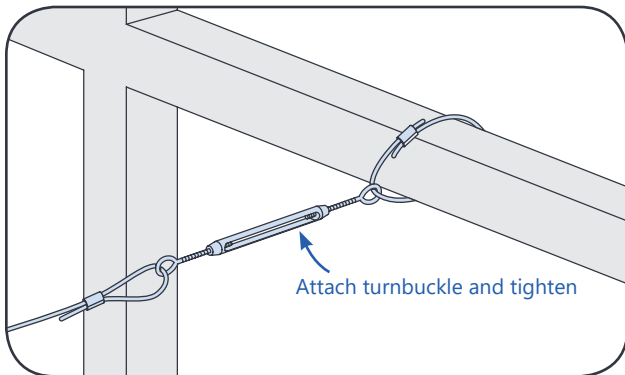
- Installer is responsible for suspension cable assembly.
- Test cable with at least 5x luminaires weight.
- L'installateur est responsable de l'assemblage du câble de suspension.
- Tester le câble avec au moins 5 fois le poids des luminaires.



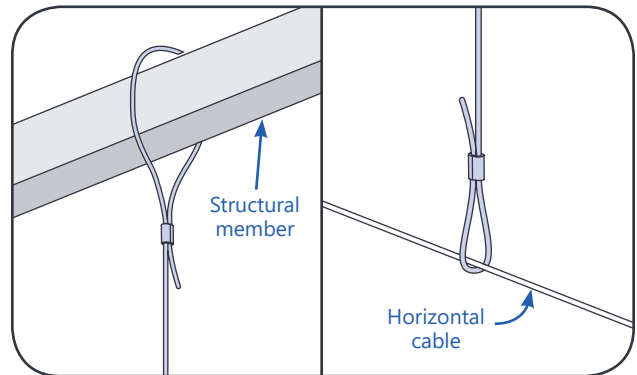
1a Loop one end of cable around a structural member and secure with a stop sleeve.



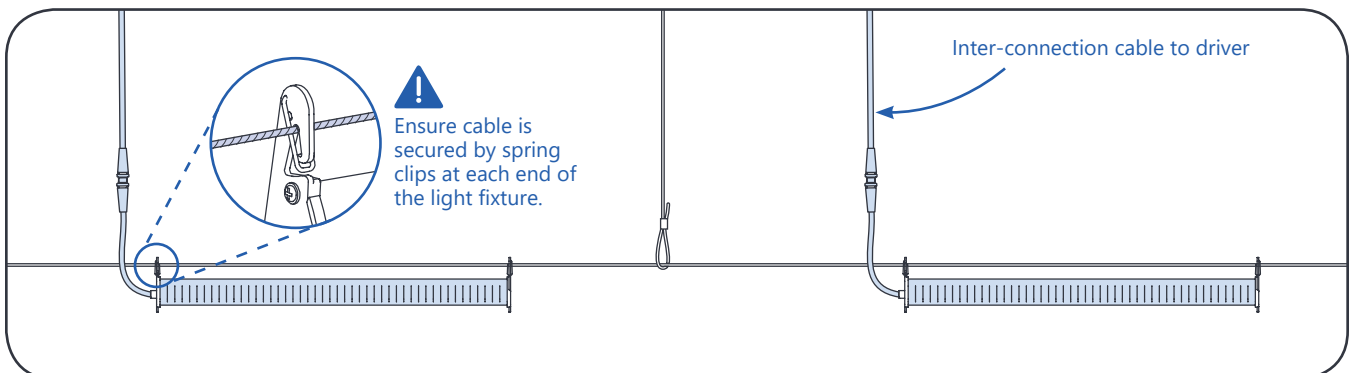
1b Loop one end of cable around a structural member and secure with a wire clamp.



2 Loosen the turnbuckle and secure it to a structural member. Secure opposite end of cable to turnbuckle. Tighten turnbuckle to reduce slack in cable.



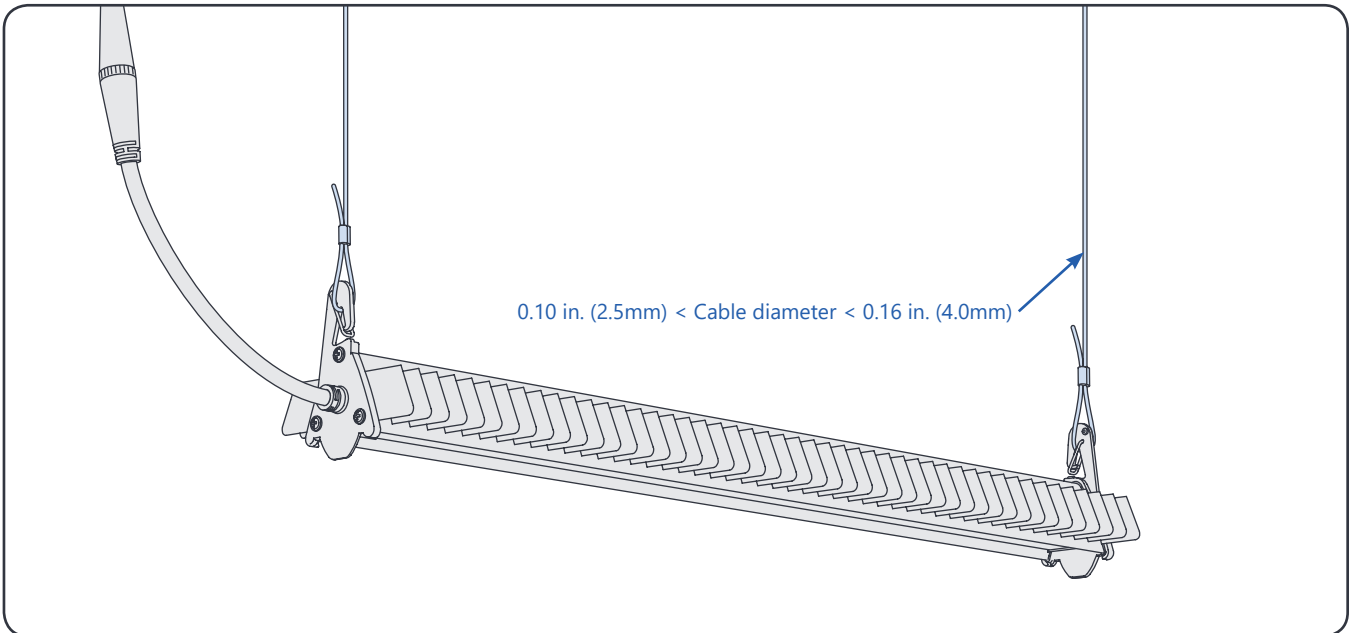
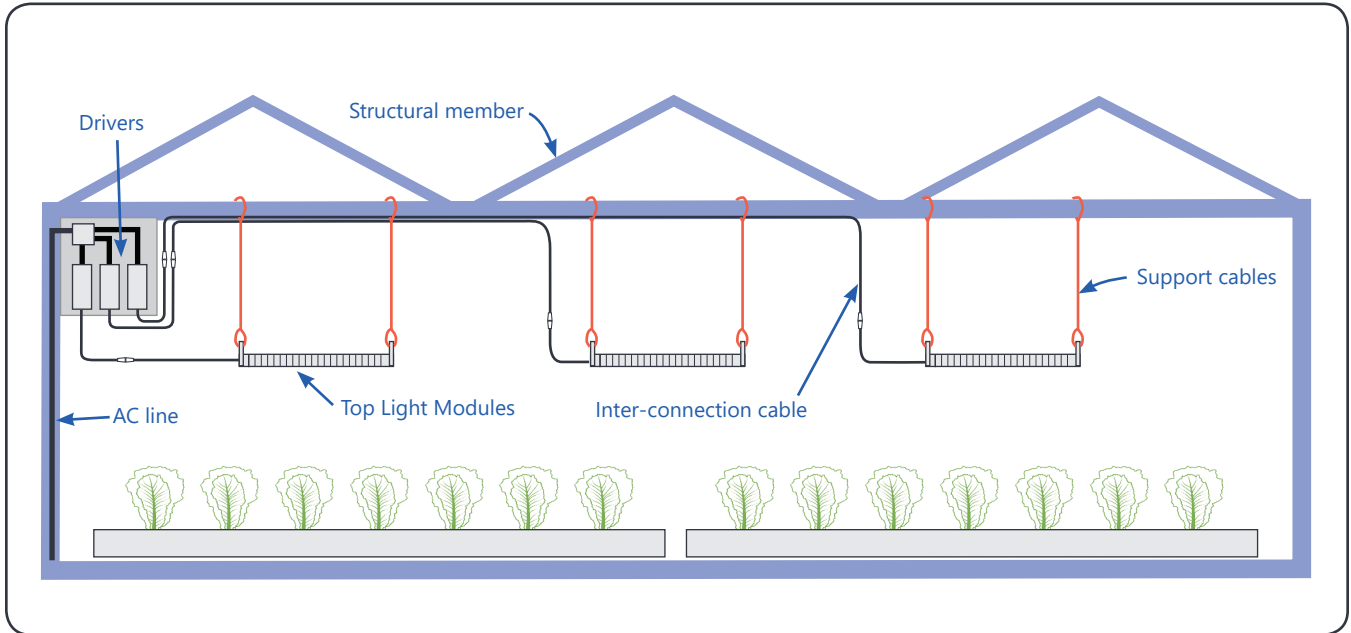
3 Secure upper end of support cables to a structural member at intervals of approximately 16 ft. Secure lower end to horizontal cable. See **Installation Overview** diagram above for reference.



4 Hang light engines on horizontal cable and position them evenly along cable. Connect light engines to drivers directly or by using inter-connection cables (see next section for details).

Installation Option B: Hang Luminaires on Vertical Cables

Option B Overview

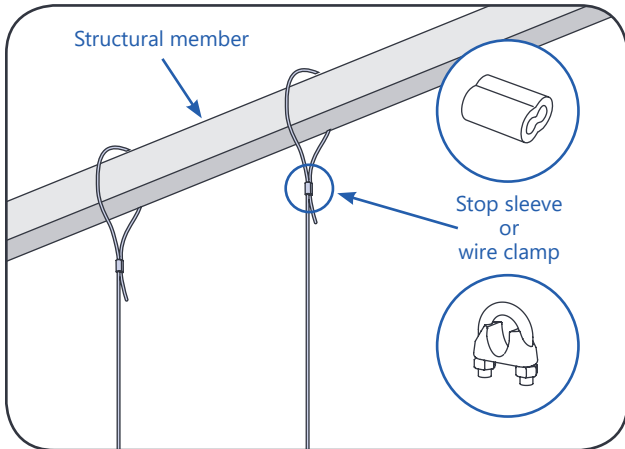


See Page 7 for installation steps.

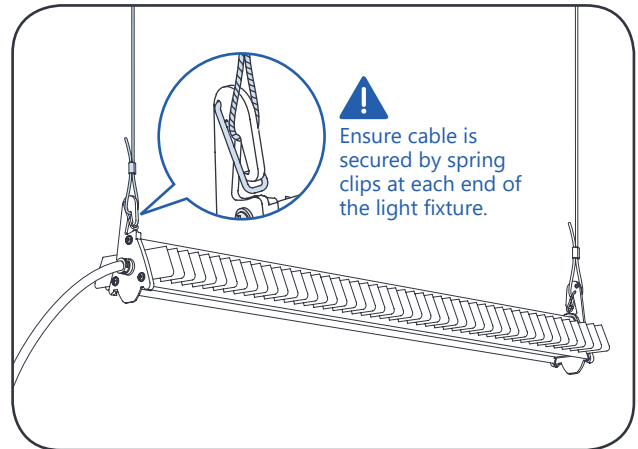
Option B Installation Steps

⚠ ATTENTION / ATTENTION

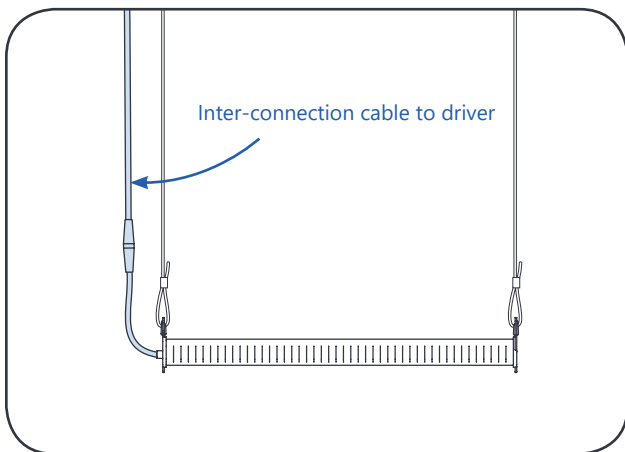
- Installer is responsible for suspension cable assembly.
- Test cable with at least 5x luminaires weight.
- L'installateur est responsable de l'assemblage du câble de suspension.
- Tester le câble avec au moins 5 fois le poids des luminaires.



- 1** Loop two cables around a structural member and secure ends with stop sleeves or wire clamps.

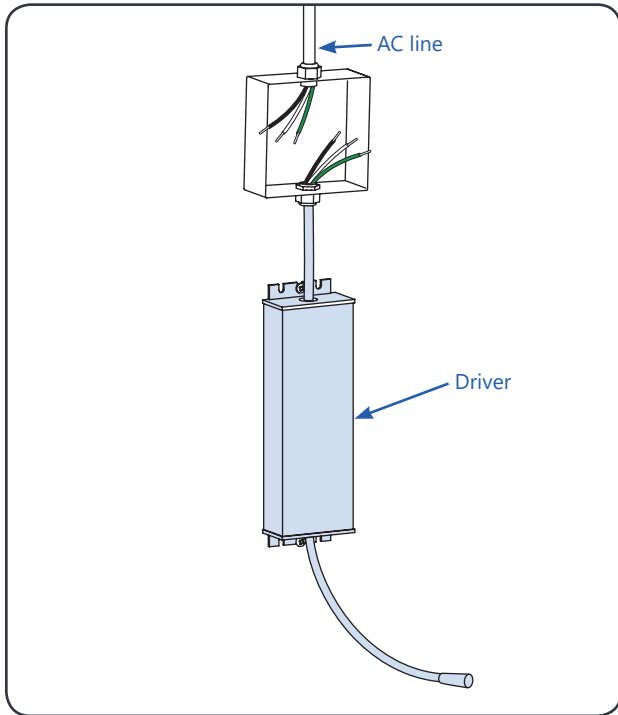


- 2** Loop opposite end of cables through top light hangers and secure with stop sleeves or wire clamps.

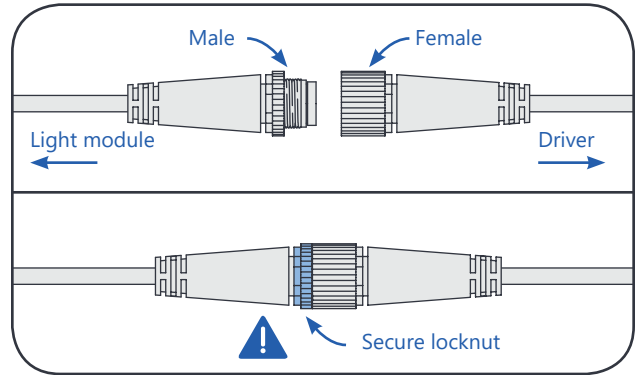


- 3** Connect light engines to drivers directly or by using inter-connection cables (see next section for details).

Electrical Connections

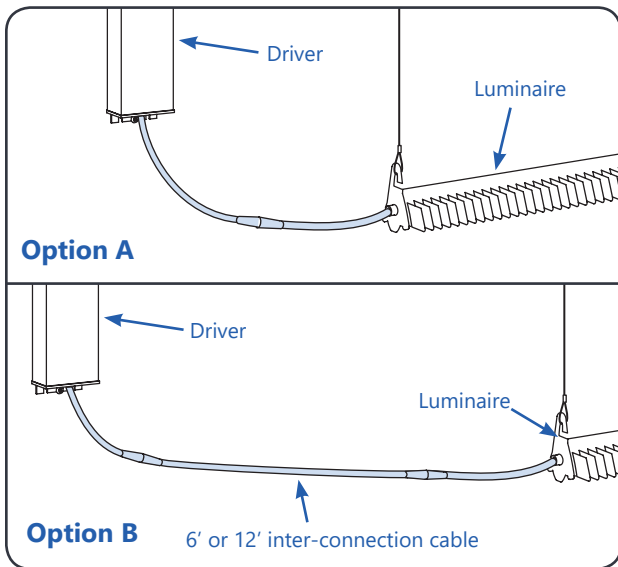


1 Connect driver(s) to junction box.



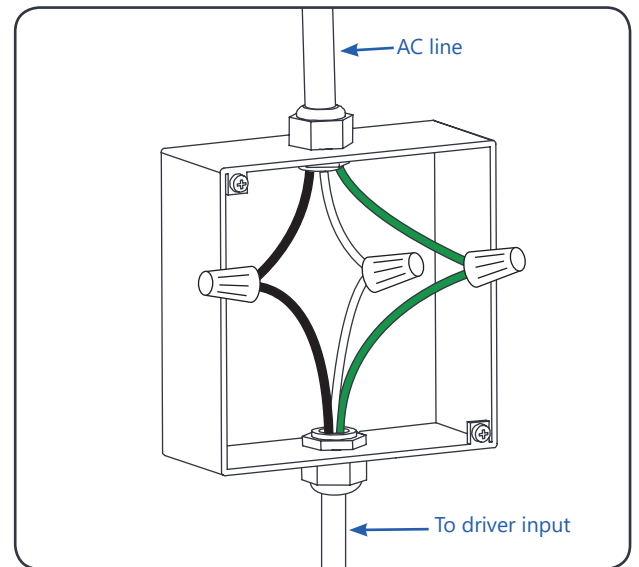
2 Mate male connector from module with female connector from DC output of driver.

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



3 **Option A:** Connect driver output directly to luminaire.

Option B: Connect driver output to luminaire using inter-connection cable.



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

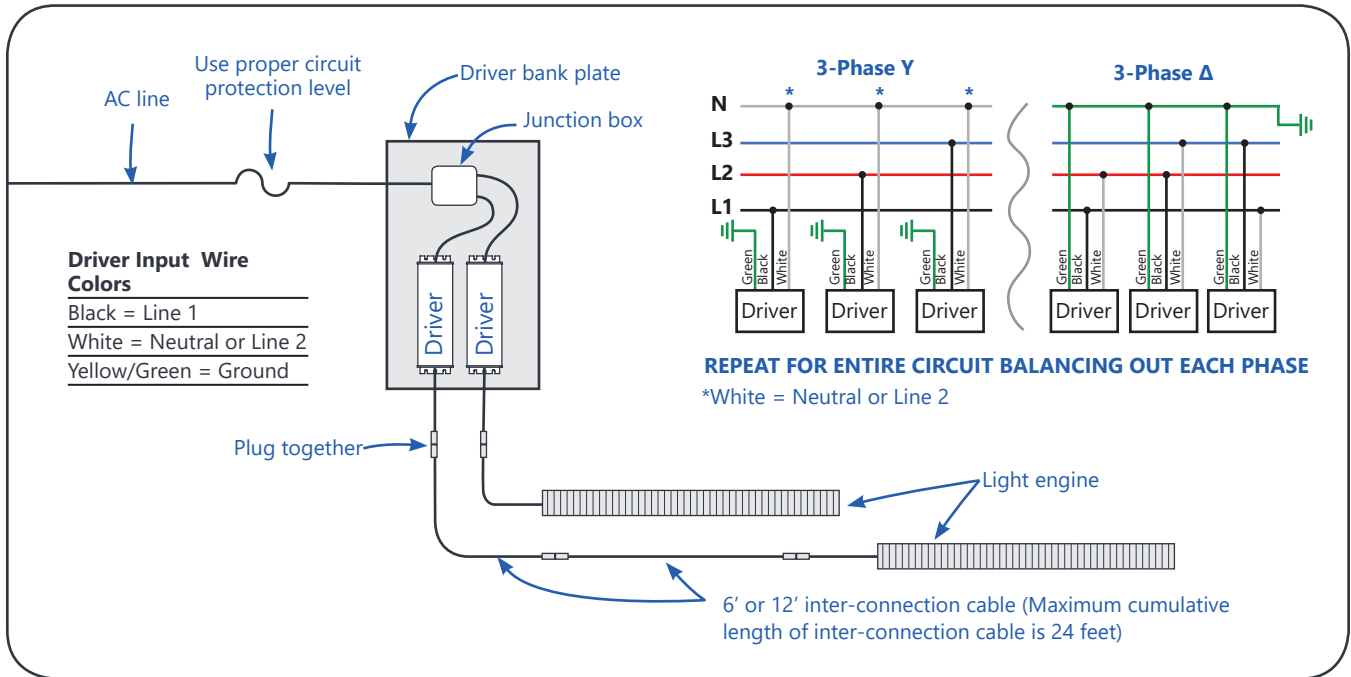
Connection Schematic

⚠ 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.

Ambient temperature surrounding each driver must be lower than 104°F (40°C). / La température ambiante autour de chaque module d'alimentation ne doit pas excéder 104°F (40°C).



Connect the light engine to driver prior to powering the driver. Plug together cables between light engine and driver. For longer distances between light engine and driver, use an inter-connection cable (6 or 12 feet long) to complete connection.

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

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.



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.



Conforms to the following standards: **cULUS LISTED**

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