

GE current HORT170 Arize Life2 LED Lighting System Installation Guide

Home » GE current » GE current HORT170 Arize Life2 LED Lighting System Installation Guide



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BEFORE YOU BEGIN

Read these instructions completely and carefully.

For the latest North American install guides for your product go to: https://products.gecurrent.com/horticulture/arize-Life

For the latest European install guides for your product go to: https://gecurrent.com/eu-en

Save These Instructions

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

The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

The external flexible cable or cord of this luminaire can not be replaced; if the cord is damaged, the luminaire shall be destroyed.

Contents

- 1 Prepare Electrical Wiring FOR UL ONLY
- 2 Product Length
- 3 Tools Required
 - 3.1 Components Required
- 4 METHOD 1
 - 4.1 Single Luminaire Installation
- 5 METHOD 2
 - **5.1 Directly Interconnected Luminaires**
- 6 METHOD 3
 - **6.1 Wiring Connections**
 - **6.2 M19 Cable Accessories**
 - **6.3 M19 Cable Accessories Installation Example**
 - 6.4 M25 Cable Accessories
 - 6.5 M25 Cable Accessories Installation Example A
 - 6.6 M25 Cable Accessories Installation Example B
- 7 Multiple Bar Installation Details
- **8 Product Codes**
- 9 Troubleshooting
- **10 METHOD 4**
 - 10.1 Replacement Instructions for Directly Interconnected Luminaires
- 11 Documents / Resources
 - 11.1 References
- **12 Related Posts**

Prepare Electrical Wiring FOR UL ONLY



Electrical Requirements

- Acceptable for use in dry, damp and wet locations.
- Follow all National Electric Codes (NEC) and local codes

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.

CAN ICES-005 (A) / NMB-005 (A)

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.

△ WARNING

RISK OF ELECTRIC SHOCK

- Turn power off before inspection, installation or removal.
- The electrical supply for each luminaire must always be connected to the male connector.
- Not to be submerged or used in a marine environment.

RISK OF FIRE

· Follow all local codes.

△ RISK GROUP 1 – CAUTION / ATTENTION – RAYONNEMENT LUMINEUX GROUPE 1

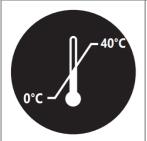
Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eyes

*See table below for risk groups by model.



These photobiological safety markings are based on testing of the light output characteristic of a single horticultural luminaire. Increased exposure risk to facility perso nnel 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 lev el 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.



Suitable for operation in an ambient temperature between 32°F (0°C) and 104°F (4 0°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.

	IEC 62471 UL Only		C 62778 KCA Only			
Part Number	Risk Group	Risk Group	Min viewing distance (mm			
GEHL48HPPR3	RG2 (Lb,Eb)	RG1	N/A			
GEHL48HPPB3	RG2 (Lb)	RG2	447			
GEHL48HPKR3	RG1	RG1	N/A			
GEHL48HPPF3	RG2 (Eb)	RG2	352			
GEHL48HPKB3	RG1	RG2	390			
GEHL48HPKF3	RG1	RG1	N/A			
GEHL48HBRI3	RG1	RG2	359			
GEHL48HBRV3	RG1	RG2	420			
GEHL48HPPV3	RG2 (Eb)	RG2	530			
GEHL96HPPR3	RG0	RG2	325			
GEHL96HPPB3	RG2 (Eb, Lb)	RG2	432			
GEHL96HPKR3	RG0	RG2	257			
GEHL96HPKB3	RG1	RG2	390			
GEHL96HPPV3	RG2 (Eb, Lr)	RG2	482			

Please contact support at arize.support@gecurrent.com with regard to applications other than horizontal. In these applications, luminaires should not be directly interconnected and the male connector (power input) should be in the upward orientation with the female end facing down.

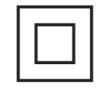


Electrical products must not be thrown out with domestic waste. They must be taken to a communal collecting point for environmentally friendly disposal in accordance with loc al regulations. Contact your local authorities or stockist for advice on recycling. The pac kaging material is recyclable. Dispose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

Conforms to the following standards: IP66 rated











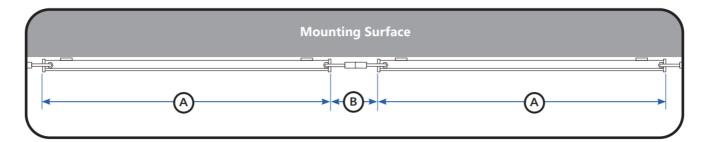
CLASS II LUMINAIRES

Manufacturer:

Current Lighting Solutions LLC, 1975 Noble Road, Cleveland, Ohio 44112 USA **Importer:**

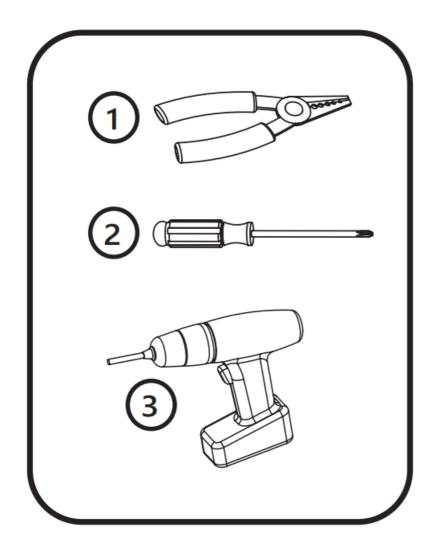
UK: Current Lighting Limited, 3rd Floor, 1 Ashley Road, Altrincham, UK, WA14 2DT **EU:** Current Netherlands B.V., Programmeurstraat 6, 1033MT Amsterdam, Neth

Product Length



	A Luminaire length	B Minimum spacing / Leader cable length
4 ft.	47.3" (120 cm)	0.2" (5 mm) / 23.6" (600 mm)
8 ft.	95" (240 cm)	0.2" (5 mm) / 23.6" (600 mm)

Tools Required



- ① Wire stripper/cutter
- ② Screwdriver

Components Required

- 1 Arize Life² fixtures (4 ft. or 8 ft.)
- 2 Cable Accessories (GECAaabcc-deffg), see page 7
- 3 Optional Jumper cable (93138395 2ft, with dimming wire)
- Mounting clips (88818 standard) or (10734 slim)
- ⑤ #10 (M5) self-tapping flathead screws
- © Approved 18-14 AWG (0.82-2.08 mm2) wire connectors, in-line splice connectors or alternative approved connectors.
- ② End cap for connectors
- ® Optional Cable clamps

METHOD 1

Single Luminaire Installation

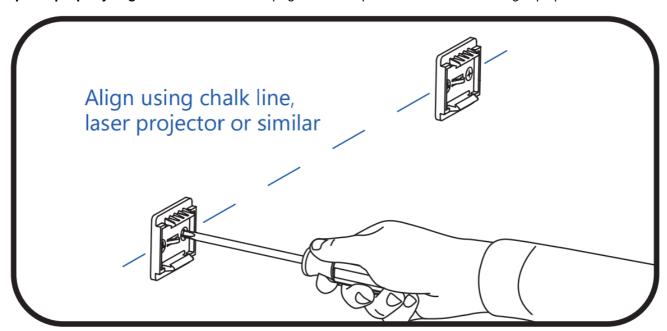
Before starting:

Luminaires must only be mounted using Current's standard or slim mounting clips (see Components Required on page 3).

Mounting instructions using Current's standard and slim mounting clips.

1. Secure each luminaire mounting clip to a rigid flat mounting surface using two #10 (M5) self-tapping flathead screws along the intended run of luminaire.

To avoid stress and damage to luminaire the entire mounting surface should be flat and the mounting clips be properly aligned. Refer to table on page 11 for required number of mounting clips per luminaire.



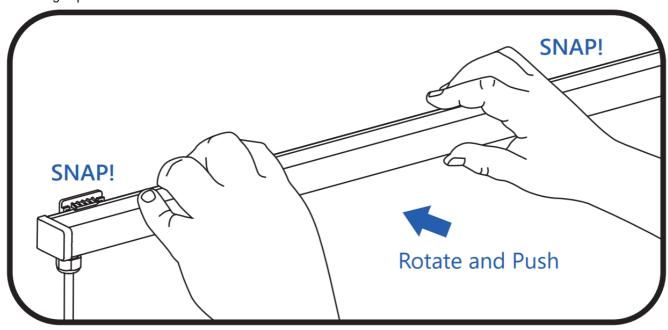
2. Press the luminaire into its mounting clips so that the male connector is oriented towards the intended electrical supply.

TIP: Align luminaire on one side of the mounting clips; then rotate the luminaire until it snaps into other side of the mounting clips.

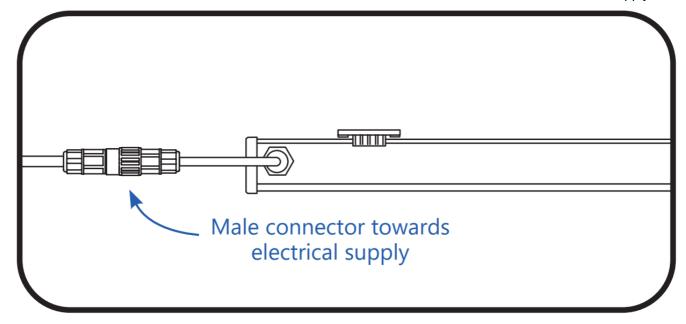
(Only for single luminaire installation)

Alternately: The required mounting clips may first be pressed onto the luminaire, then the luminaire mounting

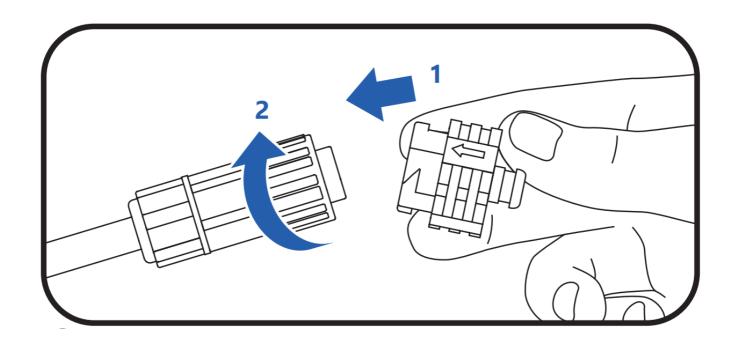
clip assembly may be mounted on to the mounting surface using two #10 (M5) self-tapping flathead screws per mounting clip.



3. Place the luminaire on the surface with the male connector oriented towards the intended electrical supply.



4. If not already covered, insert an end cap into the female connector, and twist the end cap clockwise to secure.

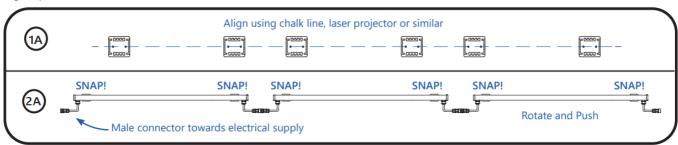


METHOD 2

Directly Interconnected Luminaires

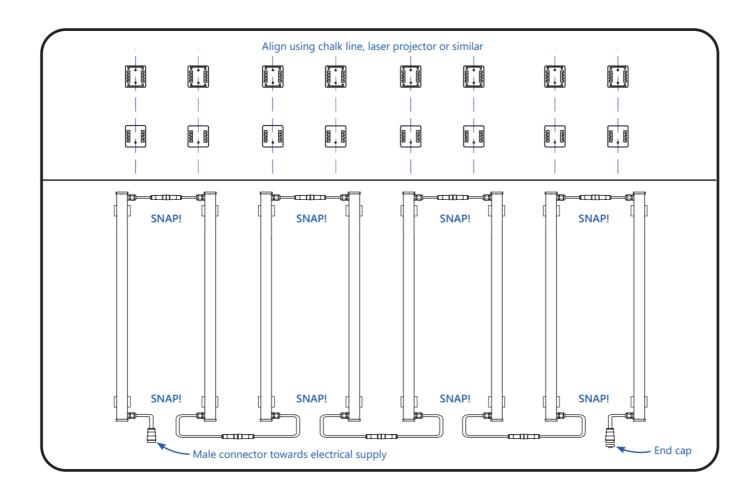
Before starting:

See Multiple Bar Installation Details to ensure you won't exceed the maximum run length per leader cable. Luminaires must only be mounted using Current's standard or slim mounting clips (see Components Required on page 3).

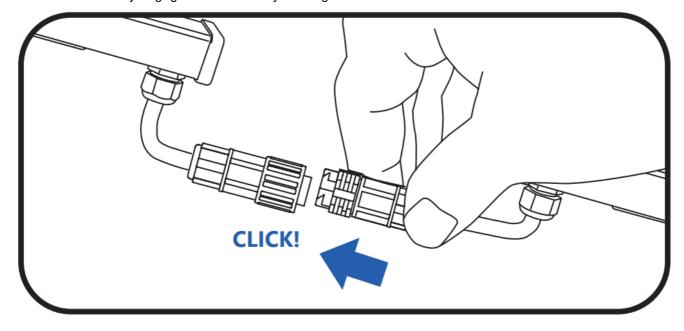


Linear Layout

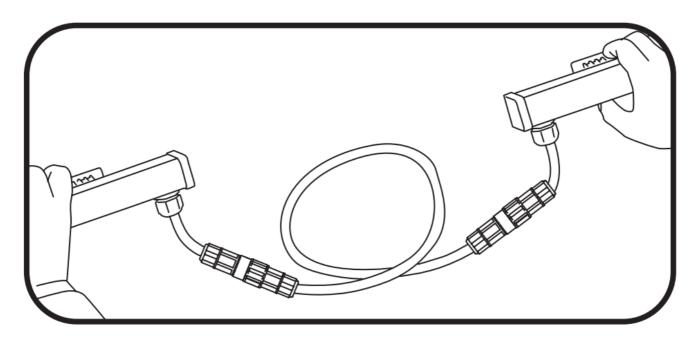
NOTE: the recommended distance between two ends should be no more than 0.8" (20mm) for better optical uniformity.



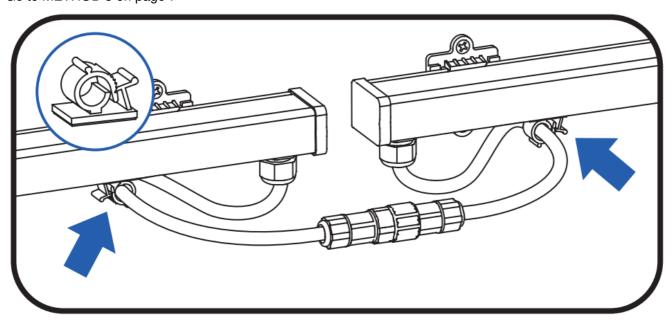
- 1. Secure each luminaire mounting clip to a rigid flat mounting surface using two #10 (M5) self-tapping flathead screws along the intended run of luminaire. To avoid stress and damage to luminaire the entire mounting surface should be flat and the mounting clips properly aligned. Refer to table on page 8 for the required number of mounting clips per luminaire.
- 2. Press the luminaire into its mounting clips so that the male connector is oriented towards the intended electrical supply. TIP: Align luminaire on one side of the mounting clips, then rotate the luminaire until it snaps into other side of the mounting clips.
- 3. A Remove end cap from the female connector. Insert the male connector to the female connector. Make sure the connector is fully engaged as indicted by hearing a click.



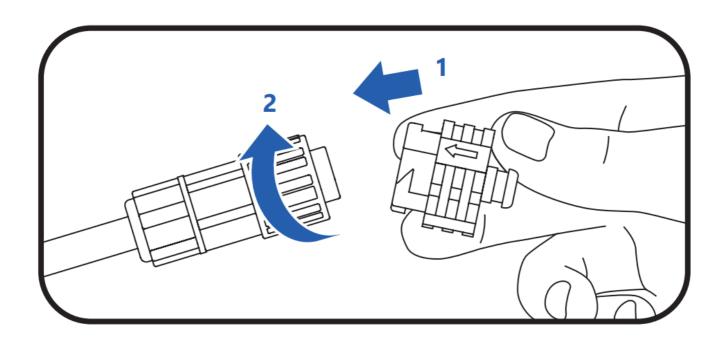
B Use a jumper cable to connect luminaires if the distance between them is too long.



C Optional: Secure the cables using the optional cable clamp accessory. Go to METHOD 3 on page 7



4. Insert an end cap into the female connector on the last luminaire in the run, and twist the end cap clockwise to secure.



METHOD 3

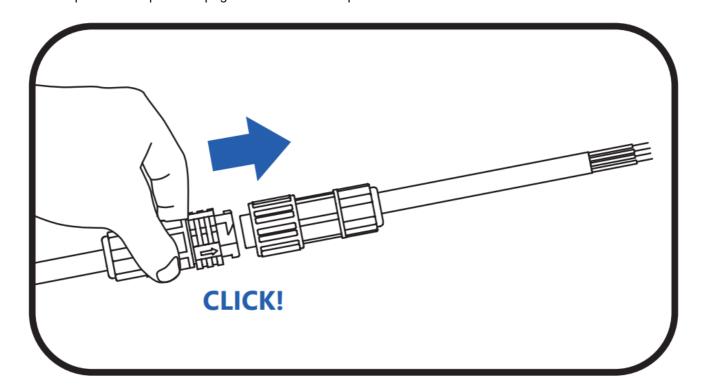
Wiring Connections

1. Insert the female connector of the leader cable so that it fully engages the male connector of the first luminaire in the run as indicated by hearing a click.

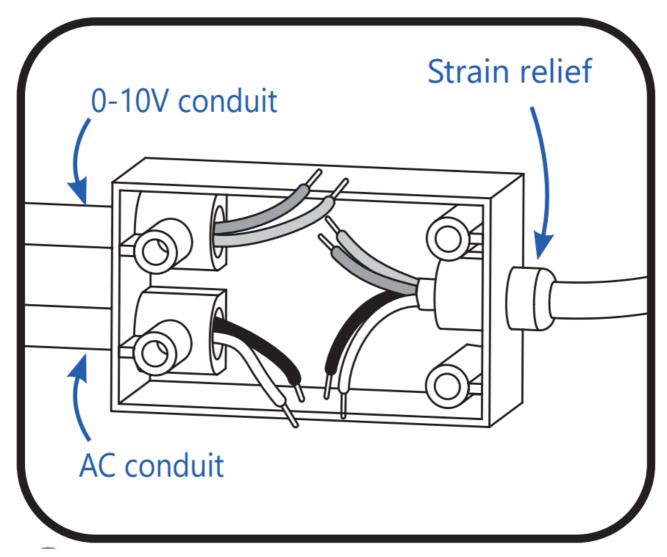
NOTE: the male connector can be cut off if there is no leader cable.

See Multiple Bar Installation Details to not exceed maximum run length for one leader.

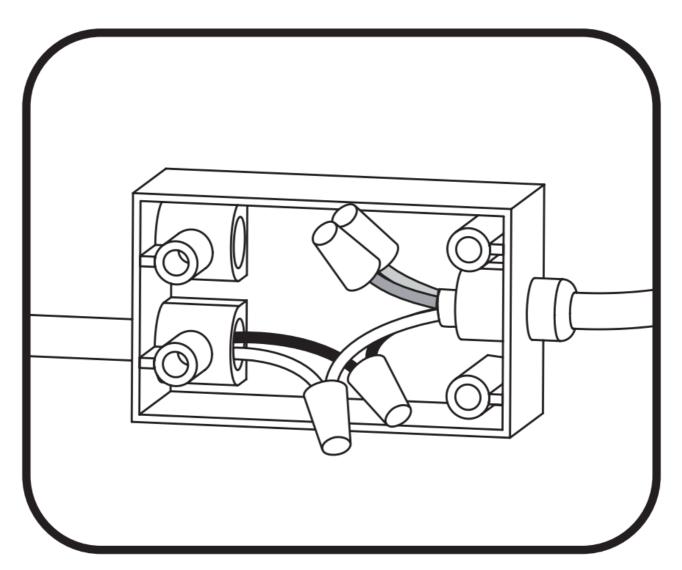
To avoid damage, do not bend or otherwise exert excessive force on the connector during installation. See Components Required on page 3 for leader cable part number.



2. Insert lead wire into junction box.

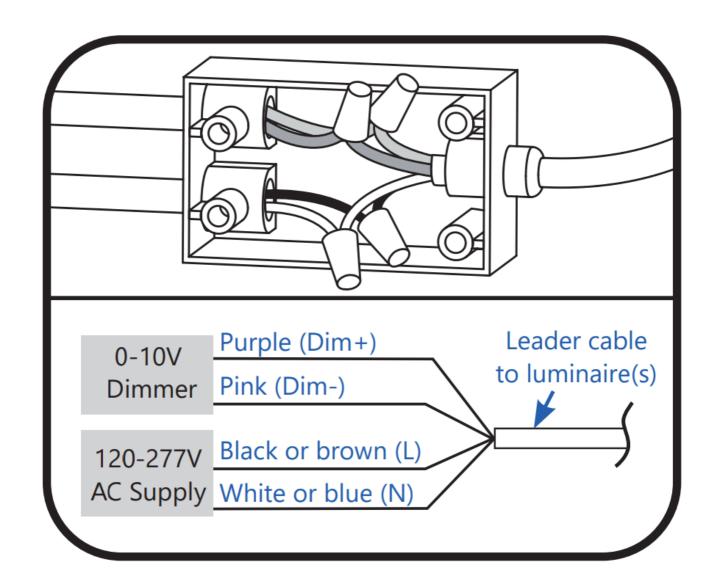


3. Inside the junction box, connect the line and neutral wires of the AC supply source to the line (black or brown) and neutral (white or blue) wires of the leader cable using suitable wire nuts. If 0-10V dimming will not be used, cap the dimming wires (purple and gray) with suitable wire nuts. Do not connect the dimming wires together or to line, neutral, or ground. If 0-10V dimming will be used, proceed to Step 4.



4. Connect the DIM + (purple) to the incoming dimmer circuit +. Connect the Dim (pink) to the incoming dimmer circuit .

Warning: The class 2 0-10V dimming circuit must be separated from the AC circuit as required by the applicable electric code.



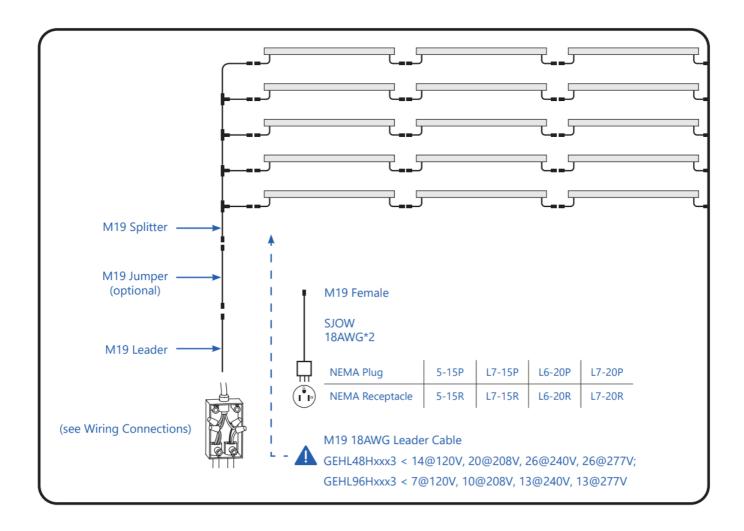
For UL Only \(\triangle \) IMPORTANT GUIDELINES

- Cables shall not be concealed or extended through a wall, floor, ceiling, or other parts of the building structur e; 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 t
 he installed environment specified in the instructions.
- Before applying power, ensure that any open female connectors in the installation are sealed with an end ca p. (see Method 1, step 4)

M19 Cable Accessories

Accessory Type	SKU	Model	Description		
M19 Leader Cable (NA)	93142247	GECA30A18-CC1 0B	10ft (3.0m) Leader with dimming		
	93142232	GECA30A18-BB0 6B	6ft (1.8m) Leader		
	93142234	GECA30A18-BB1 0B	10ft (3.0m) Leader		
M19 Leader Cable (EU/UK)	93142246	GECA30A18-BC0 6B	6ft (1.8m) Leader with dimming		
	93142248	GECA30A18-BC1 0B	10ft (3.0m) Leader with dimming		
	93142249	GECA30A18-CD0 6B	6ft (1.8m) Leader with 5-15P Plug		
M19 Leader Cable with Plug	93142250	GECA30A18-CE0 6B	6ft (1.8m) Leader with L6-20P Plug		
(NA)	93148137	GECA30A18-CP0 6B	6ft (1.8m) Leader with L7-15P plug		
	93142251	GECA30A18-CK0 6B	6ft (1.8m) Leader with L7-20P Plug		
M19 Jumper (NA/EU/UK)	93142252	GECA30A18-CF0 2B	2ft (0.6m) Jumper with dimming		
M19 Splitter (NA/EU/UK)	93142256	GECA30A14-CI04 B	4ft (1.2m) Splitter with 1 M19 male to 5 M19 female connectors with dimming.		

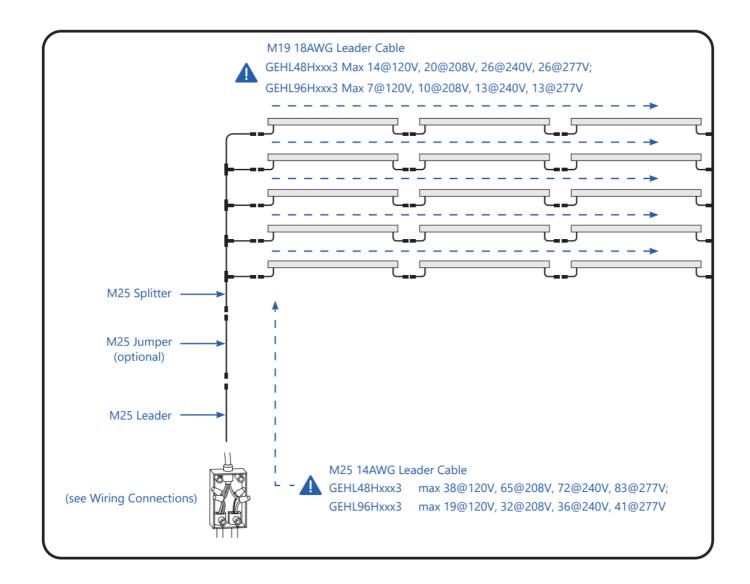
M19 Cable Accessories Installation Example



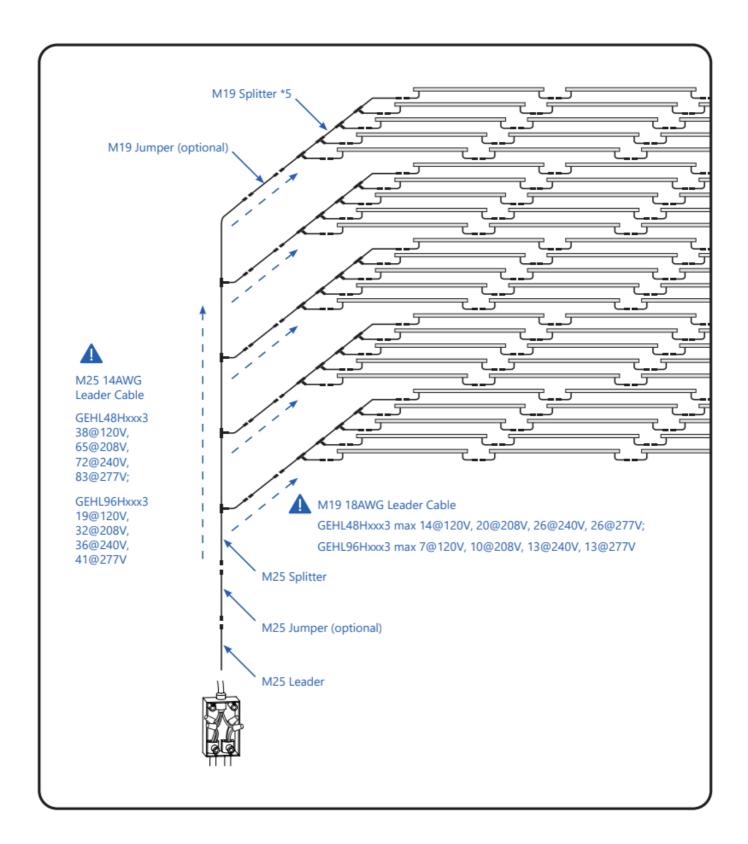
M25 Cable Accessories

Accessory Type	SKU	Model	Description
M25 Leader (EU/UK)	93142254	GECA30A14-BG06B	6ft (1.8m) Leader with dimming, 15A, EU
M25 Jumper (NA/EU/UK)	93142255	GECA30A14-CH02B	2ft (0.6m) Jumper with dimming
M25 Splitter (NA/EU/UK)	93142257	GECA30A14-CJ08B	8ft (2.4m) Splitter with 1 M25 male to 5 M19 female connectors with dimming.
M25 Leader (NA)	93142253	GECA30A14-CG06B	6ft (1.8m) Leader with dimming, 15A, NA

M25 Cable Accessories Installation Example A



M25 Cable Accessories Installation Example B



Multiple Bar Installation Details

Input voltage: 120VAC - 277VAC, 50/60Hz

La mp Product Do		Dogovinti		Maximum Bars Per M25 14AWG Le ader Cable			Maximum Bars Per Interconnected run or M19 18AWG Leader Cable			Qty of M ounting Clips		Electrical Loading D etail Typical Current (A)				
Len gth	Len Code (Descripti on Code	For 120 VA C	For 208 VA C	For 230 VA C	For 277 VA C	For 120 VA C	For 208 VA C	For 230 VA C	For 277 VA C	Pla sti c Cli ps	Me tal Cli ps	For 120 VA C	For 208 VA C	For 230 VA C	For 277 VA C
	9313776 2	GEHL48H PPR3														
	9313776 3	GEHL48H PPF3	-			83	14	20	26	26	2	2	0.3	0.1	0.1	0.1
	9313776 4	GEHL48H PPB3														
	9313776 5	GEHL48H PPV3														
4 ft.	9313793 6	GEHL48H PKR3	38	65	72											
	9313793 7	GEHL48H PKF3														
	9313793 8	GEHL48H PKB3														
	9313793 9	GEHL48H BRI3														
	9313794 0	GEHL48H BRV3														
	9313794 1	GEHL96H PPR3			36	41	1 7	10	13	13	3	2	0.6	0.3	0.3	0.2
	9313794 2	GEHL96H PPB3		19 32												
8 ft.	9313794	GEHL96H PPV3	19													
	9313794 4	GEHL96H PKR3														
	9313794 5	GEHL96H PKB3														

Product Codes

GEHLxxHyyz3

*Key for xx: 48=48 in., 96=96 in.

*Key for yy: PP=Purple, PK=Pink, BR=Broad Spectrum *Key for z: Type "R", "B", "V", "I", "F"

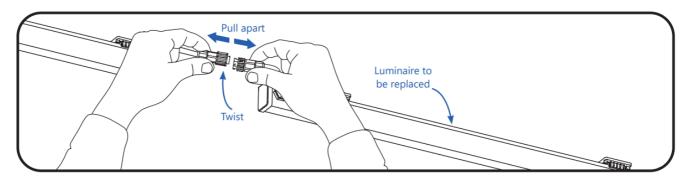
Troubleshooting

Symptom	Solution
All LED fixtures are not illumina ted	 Check leader cable connection and/or check circuit breaker. Check plug connectors on the LED fixtures for improper connections or short circuits. Ensure leader cable is securely connected to the female plug connector on the first LED lu minaire.
Some LED fixt ures are not illu minated	 Check plug connectors on the LED fixtures for improper connections or short circuits. Ensure any jumper cables are securely connected between the male/female plug connectors of the LED fixtures.

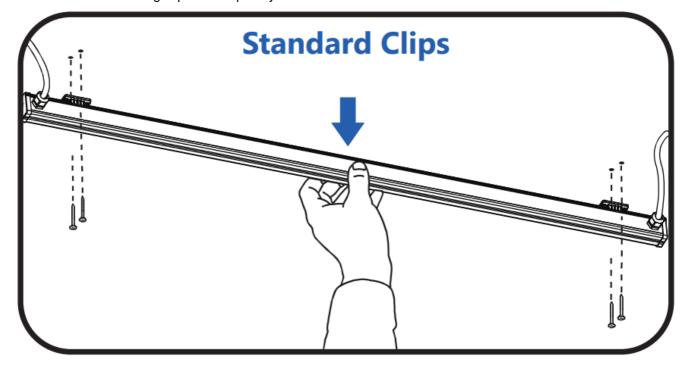
METHOD 4

Replacement Instructions for Directly Interconnected Luminaires

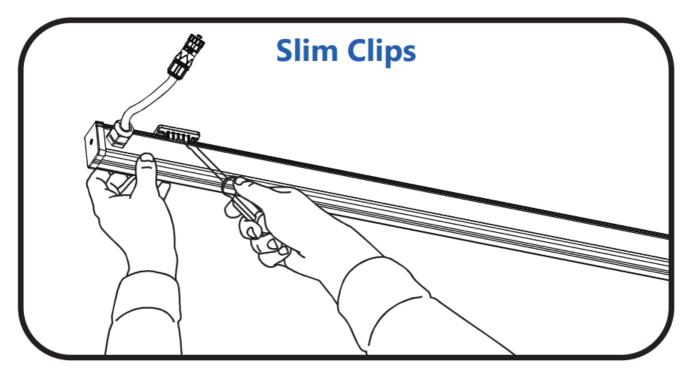
1. Disconnect the connector on both sides of the luminaire.



2. A Unscrew the mounting clips to completely remove the luminaire.



B Using a screwdriver, gently pry the luminaire out of the mounting clips.



3. To insert a new luminaire, see Method

To avoid damage, do not bend or otherwise exert excessive force on the connector during installation.



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HORT170 (Rev 03/30/22) Enovia - A-1027542



Documents / Resources



- C Homepage | Current GLI Brands
- C Commercial Lighting and Lighting Controls | Current GLI Brands
- C Commercial Lighting and Lighting Controls | Current GLI Brands
- C Homepage | Current GLI Brands
- C_Arize® Life Indoor Lighting | Horticulture | Current

Manuals+,