

Arize L1000 Element Gen2 Horticulture LED Lighting System **Instruction Manual**

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220-240V 50-60Hz 380-415V 50-60Hz



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RISK OF ELECTRIC SHOCK

- Turn the power off before inspection, installation, or removal.
- Properly ground electrical enclosure.

RISK OF FIRE

- Follow all IEC and local building codes.
- Use only IEC-approved wire for input/output connections. Minimum size 3G 0.75mm².
- Minimum 300mm distance from light module & driver to any combustible material.
- Minimum 150mm clearance between light module & driver, light module & light module, driver & driver.
- The light module shall be installed lens down with a minimum of 130mm to anything below.

The LED luminaire must be connected to the mains supply according to its ratings on the product label. **CAUTION**

- Do not operate the product with damaged parts.
- Turn off power before inspection, installation, or removal.
- The luminaire may fall down if not installed properly.
- Wear work gloves to prevent dirt and oil from being transferred to the luminaire.
- · Not for direct exposure to the weather.
- To ensure the product warranty is valid, please ensure all installation instructions and environmental conditions for storage and operation are complied with.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.
- Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.
- 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.
- The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.



Part Number	220–240 VAC Po wer (W)	380–415 VAC Po wer (W)	Risk Group	Min. Viewing Di stance (m)
GEHE-HPPRB2A	585	589	2	5.2
GEHE-HPPBB2A	622	626	2	5.2
GEHE-HPKTB2A	606	610	2	5.2
GEHE-HPKRB2A	623	628	2	5.2
GEHE-HPKBB2A	639	643	2	5.2
GEHE-HPKFB2A	643	647	2	5.2
GEHE-HBRIB2A	656	660	2	5.2
GEHE-HBRVB2A	681	684	2	5.2
GEHE-VPPRB2A	530	533	2	5.2
GEHE-VPPBB2A	575	580	2	5.2
GEHE-VPKTB2A	538	542	2	5.2
GEHE-VPKRB2A	569	573	2	5.2
GEHE-VPKBB2A	590	594	2	5.2
GEHE-VPKFB2A	570	575	2	5.2

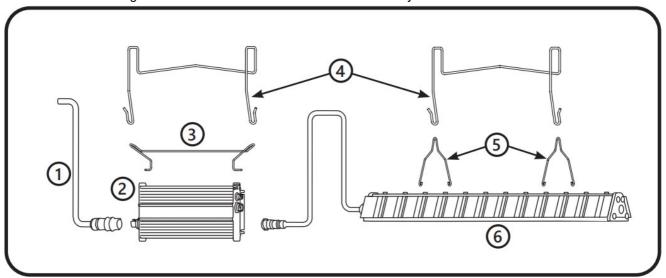


Suitable for operation in an ambient temperature between 0°C and 40°C.

Mechanical ventilation or cooling system is required to maintain the temperature within the growing space below 40°C when the light module is in operation.

System Component Parts

Please refer to order logic to determine whether included or accessory



- 1. AC cable
- 2. Driver
- 3. Driver Bracket
- 4. Hanger (2x)

- 5. Light Module Brackets (2x)
- 6. Light Module

Contents

- 1 Light Module Specifications
- 2 Installation of the Light Module
- 3 Installation of the Driver
- **4 Electrical Connections**
- **5 Connecting Wired Dimming** (Optional)
- 6 Documents / Resources
 - **6.1 References**
- **7 Related Posts**

Light Module Specifications

Product Code	Detailed Description	Weight	Syste m Inpu t Curre nt [A] Low V oltage Driver @ 220– 240 VA C	System Input C urrent [A] High Vo Itage Dr iver @ 380– 415 VA C	Power Factor
GEHE-HPPRB2A	Arize Element, L1000, PPR, XW Optic	4.5 kg	2.56	2.57	> 0.9
GEHE-HPPBB2A	Arize Element, L1000, PPB, XW Optic	4.5 kg	2.73	2.74	> 0.9
GEHE-HPKTB2A	Arize Element, L1000, PKT, XW Optic	4.5 kg	2.66	2.67	> 0.9
GEHE-HPKRB2A	Arize Element, L1000, PKR, XW Optic	4.5 kg	2.73	2.74	> 0.9
GEHE-HPKBB2A	Arize Element, L1000, PKB, XW Optic	4.5 kg	2.8	2.81	> 0.9
GEHE-HPKFB2A	Arize Element, L1000, PKF, XW Optic	4.5 kg	2.82	2.83	> 0.9
GEHE-HBRIB2A	Arize Element, L1000, BRI, XW Optic	4.5 kg	2.88	2.88	> 0.9
GEHE-HBRVB2A	Arize Element, L1000, BRV, XW Optic	4.5 kg	2.99	2.99	> 0.9
GEHE-VPPRB2A	Arize Element, L1000 HE, PPR, XW Optic	4.5 kg	2.32	2.33	> 0.9
GEHE-VPPBB2A	Arize Element, L1000 HE, PPB, XW Optic	4.5 kg	2.52	2.53	> 0.9
GEHE-VPKTB2A	Arize Element, L1000 HE, PKT, XW Optic	4.5 kg	2.36	2.37	> 0.9
GEHE-VPKRB2A	Arize Element, L1000 HE, PKR, XW Optic	4.5 kg	2.49	2.5	> 0.9
GEHE-VPKBB2A	Arize Element, L1000 HE, PKB, XW Optic	4.5 kg	2.59	2.6	> 0.9
GEHE-VPKFB2A	Arize Element, L1000 HE, PKF, XW Optic	4.5 kg	2.5	2.51	> 0.9

Driver Specifications

Description	Weight	Input Voltage
GEPSC240-680D-BDGGL-D1	3.2 kg	220-240 VAC
GEPSC240-680D-BGJGL-D1	3.2 kg	380-415 VAC

Interconnection Cable Specifications

Description	Detailed Description
GECA60D16-OL04B	AC Leader Cable, 1219 mm, CE
GECA60FNA-NL00B	AC Field Installable Connector, UL and CE (Wieland P.N. 96.031.4155.7)
GECA30G14-EN03B	DC Inter-Connection Cable, 914 mm, UL, and CE
GECA30G14-EN06B	DC Inter-Connection Cable, 1828 mm, UL, and CE
GECA30H20-OO03B	Dimming cable, 914 mm, UL and CE

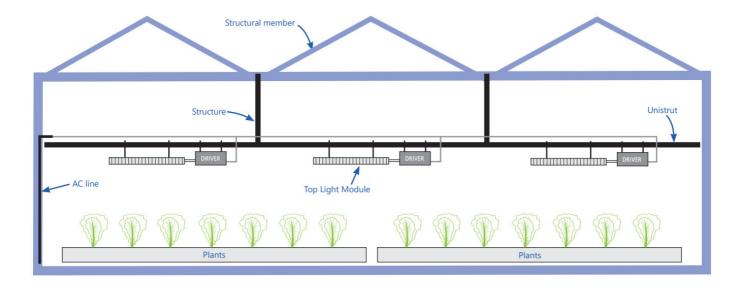
Mounting Accessories Specifications

Description	Detailed Description	Weight	
GEMB-WAS1	Wire bracket mounting kit, square 41 mm	0.4 kg	
GEMB-WAA1	Wire bracket offset mounting kit, square 41 mm	0.6 kg	
GEMB-WAS2	Wire bracket mounting kit, square 70 mm	0.4 kg	
GEMB-CBH1	457 mm, cable universal mounting kit	0.1 kg	
GEMB-CBH2	1524 mm, cable universal mounting kit	0.1 kg	
GEMB-PAU1	Perpendicular (90°) universal mounting kit	0.5 kg	



Installation instructions and specifications for accessories can be found in the accessory package.

Sample Base Installation Diagram

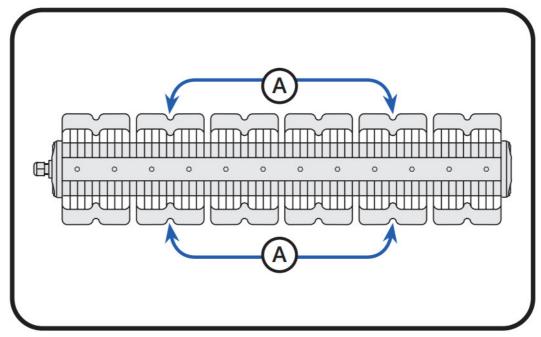


Installation of the Light Module

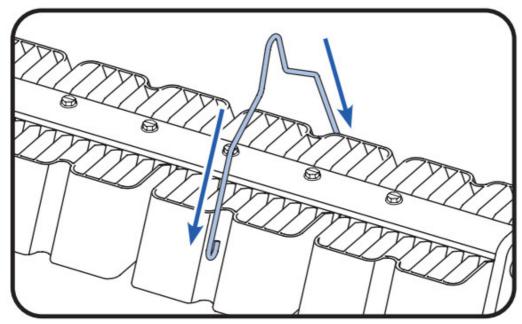
1.1 Installation of Module Brackets

If not preassembled, install light module brackets on the light module.

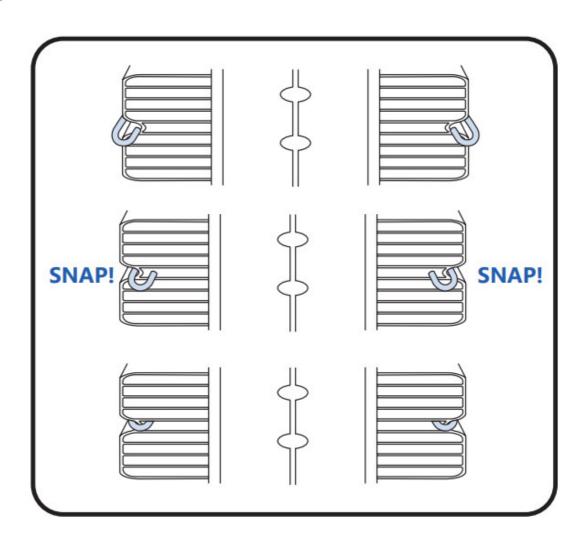
1. Install brackets at location A.



2. Slide down bracket along channels.

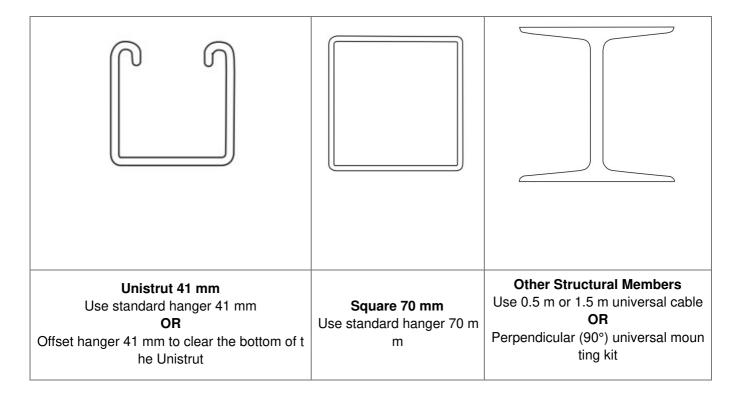


3. Press down on the bracket until hooks snap into place. Ensure bracket hooks catch the bottom edge of the heatsink.



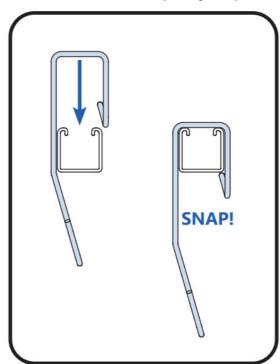
Selection of Mounting Hardware

Based on the cross-section of the structural member select the correct hanger or mounting cable.

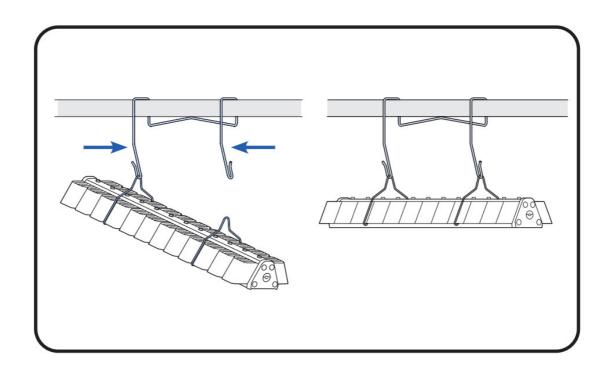


Installation with Standard and Offset Hangers

1. Place light module hanger over structural member and snap hanger in place.

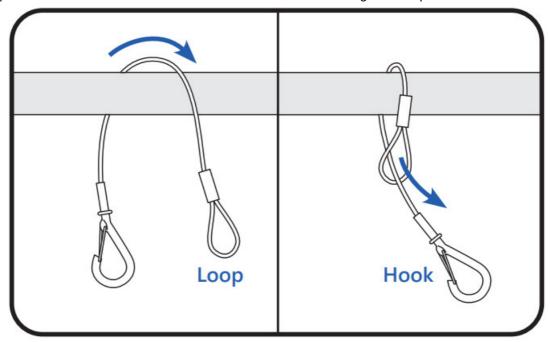


2. Hang one fixture bracket on one hook, and hang the opposite fixture bracket onto another hook by pressing hanger arms together.

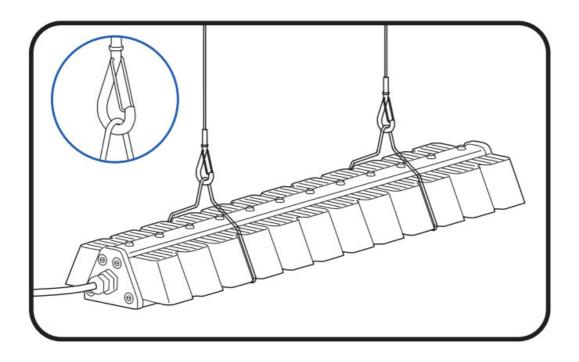


Installation with Universal Cables

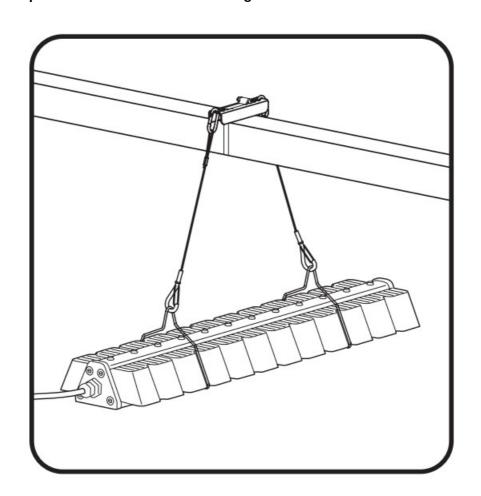
1. Wrap loop end of the cable over structural member. Insert hook through the loop end.



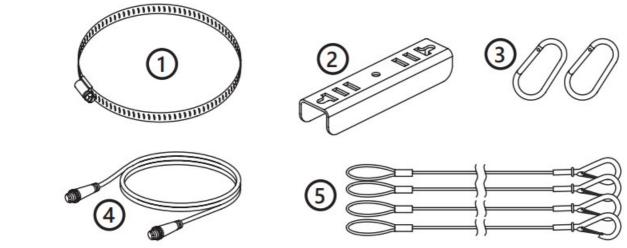
2. Attach hooks to light module brackets. Ensure the hook gate is closed.



Installation with Perpendicular 90° Universal Mounting Kit



Kits Contents (SKU: 93139057)

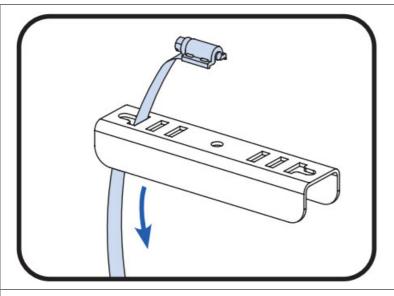


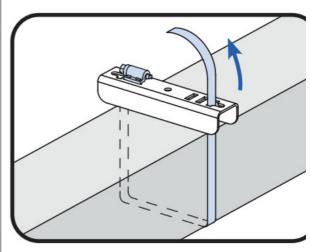
Tools Required



5/16" hex socket or flat-blade screwdriver

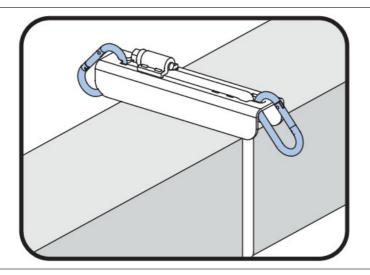
Installation Steps for Perpendicular 90° Universal Mounting Kit



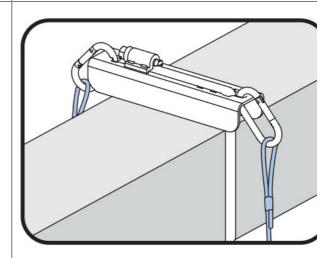


1. First determine which 2 slots on the metal bracket most close ly correspond to the structural member width. Insert strap of the worm drive clamp through the first slot of the metal bracket from the top.

2. Place the metal bracket on top of the structural ember and wrap the strap around the bottom of th structural member and back up through the secon slot.



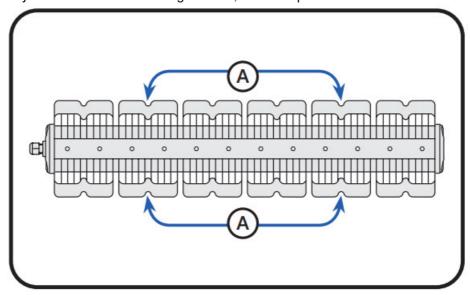
4. Attach a carabiner to each side of the metal bracket.



5. Attach a support cable to each carabiner and elure the gates are closed.

Installation with Custom Brackets

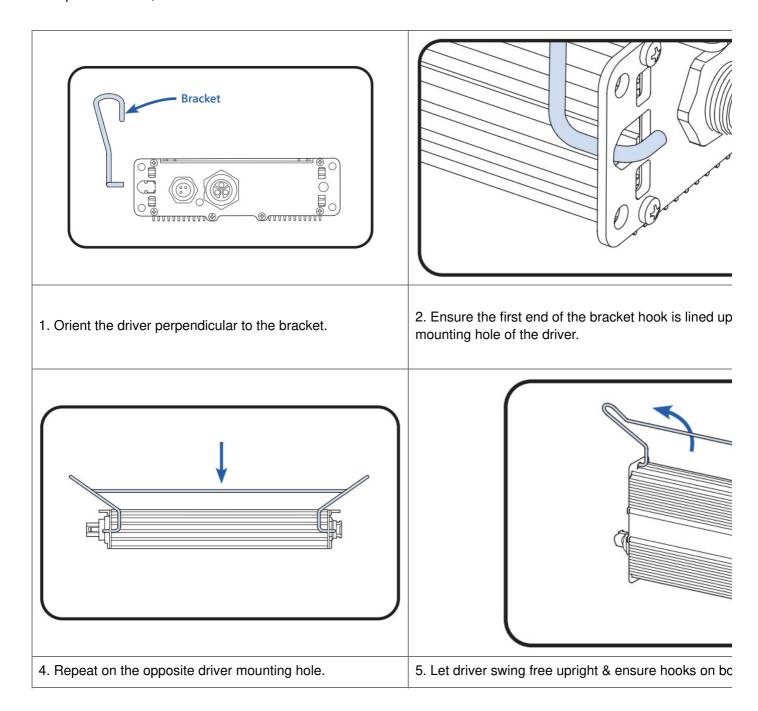
If you choose to use your own custom mounting method, attach to points A.



Installation of the Driver

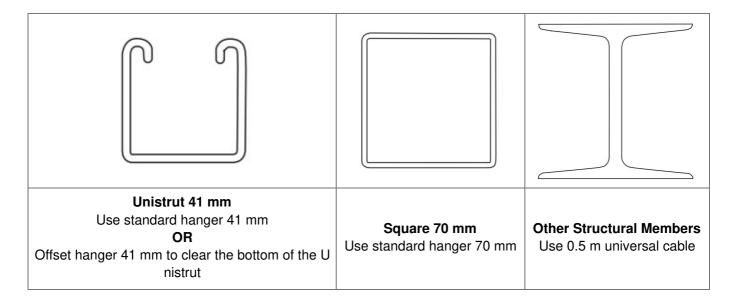
Installation of Driver Bracket

If not preassembled, install a driver bracket onto the driver.



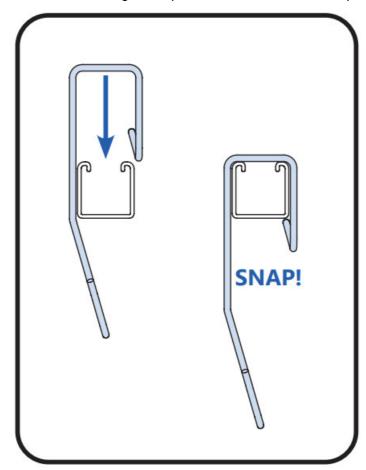
Selection of Mounting Hardware

Based on the cross-section of the structural member select the correct hanger or mounting cable.

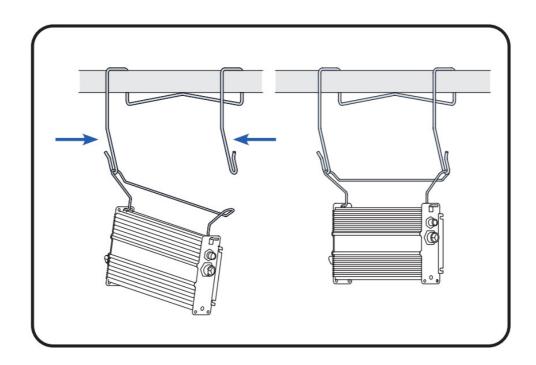


Installation with Hangers

1. Hang brackets of driver module onto the hanger and push down until brackets snap into place.

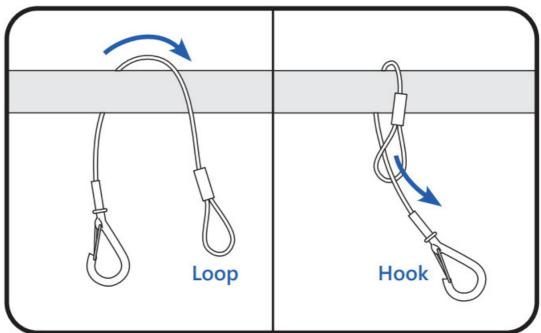


2. Hang driver bracket from one hook, then hang other driver bracket end by pressing hanger arms together.

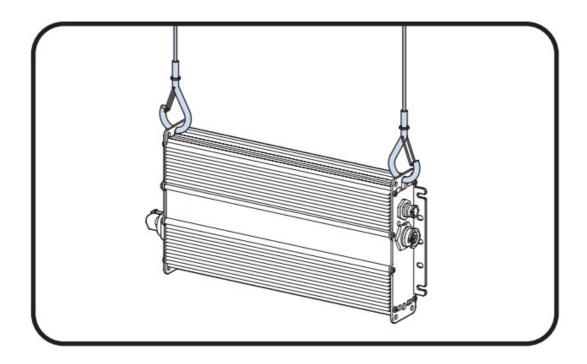


Installation with Universal Cables

1. Wrap loop end of the cable over structural member. Insert hook through the loop end.



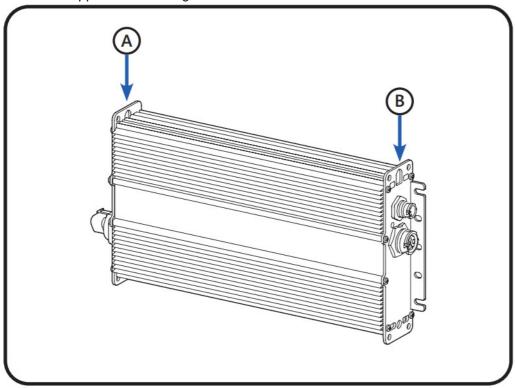
2. Attach hooks to oval driver mounting holes. Ensure the hook gate is closed.



Installation with Custom Brackets

If you choose to use your own custom mounting method, attach to oval driver mounting holes A and B for hanging.

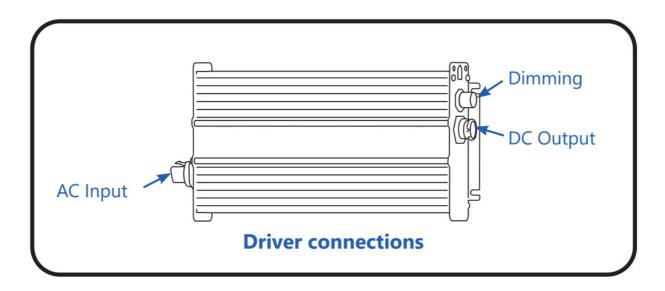
No side forces should be applied to mounting holes A and B.



Electrical Connections

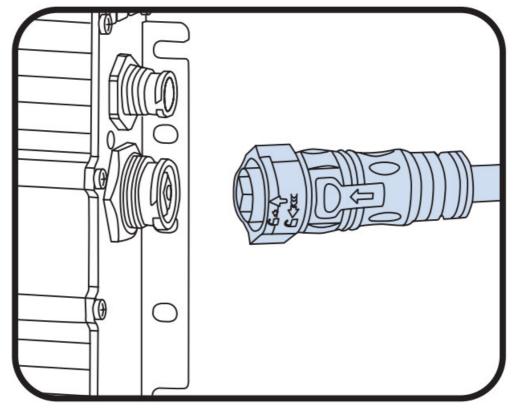
≜WARNING RISK OF ELECTRIC SHOCK

Turn power OFF before inspection, installation, or removal.

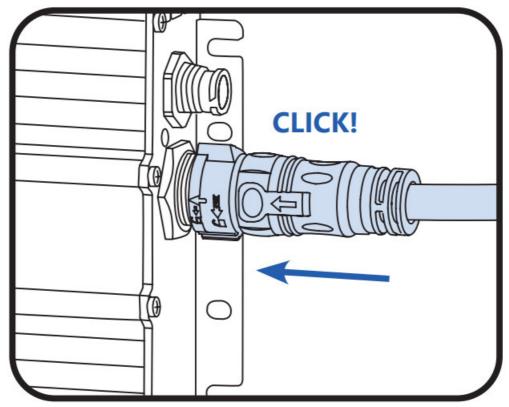


Connect the Driver Output to Light Module

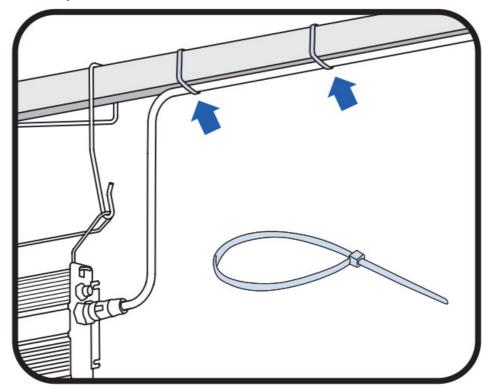
1. Align keying features of a larger output connector on the driver with the connector on the light module cable.



2. Push connectors together until the lock ring has snapped into place and a click is heard.



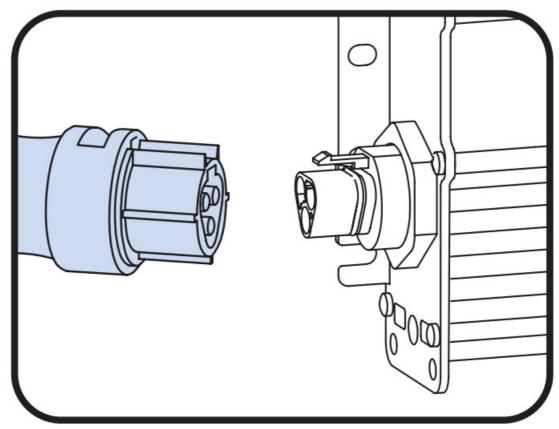
3. Recommended: secure light module cable.



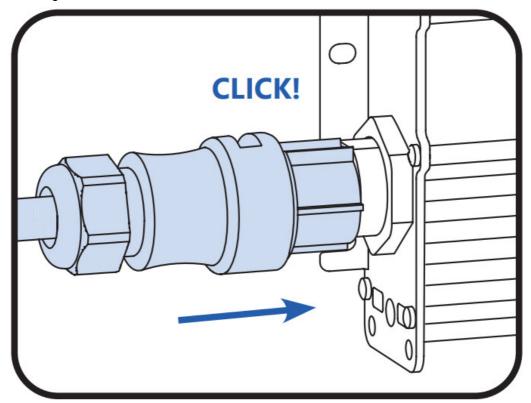
NOTE 1: Use 914 mm or 1828 mm extension cables if the driver and light module are more than 0.6 m apart. **NOTE 2:** To disassemble connectors, turn the locking ring 1/8 of a turn counter-clockwise and separate connectors.

Connect the Driver Input

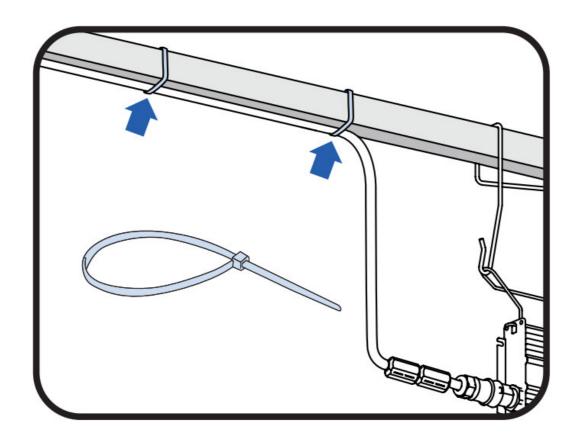
1. Align keying features on the driver with the connector on the selected leader cable.



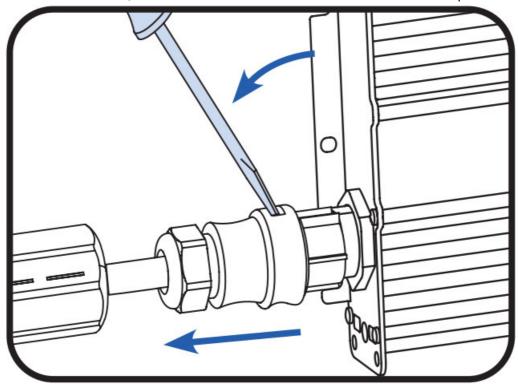
2. Push connectors together until a click is heard.



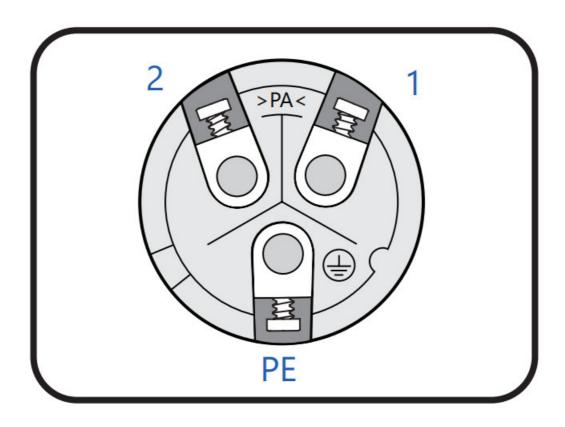
3. Secure AC input leader cable, away from driver and light module.



NOTE: To disassemble connectors, insert and twist a small blade screwdriver and then separate connectors.

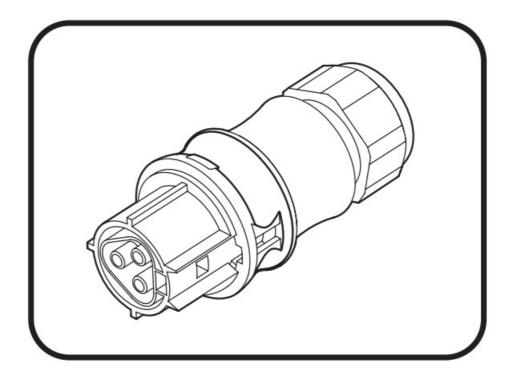


Connector pin-out



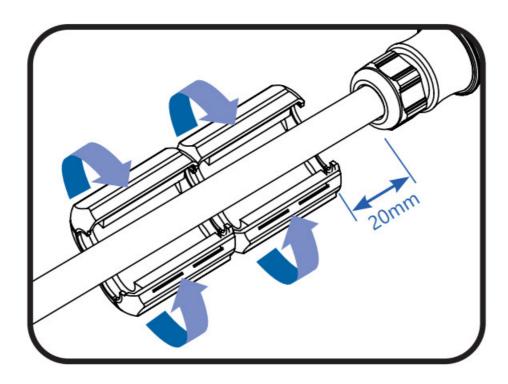
Pin	Line-to-Line Voltage		Line-to-Neutral Voltage			
1	L2	L1	L1	L1	L2	L3
2	L3	L2	L3	N	N	N
PE	PE	PE	PE	PE	PE	PE
L=Line / N=Neutral / PE=Protective Earth						

Using Custom AC Inputs

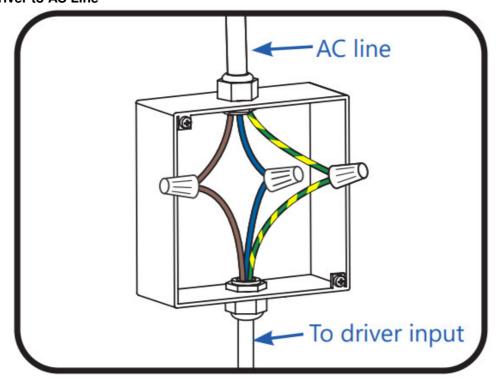


If you choose to use your own custom AC input connection, use a Wieland RST20i3 green connector $(96.031.4055.7\ OR\ 96.031.4155.7\ OR\ 96.031.0055.7\ OR\ 96.031.1055.7)$ and plug into the male AC connector of

Connect Bead to AC Input Leader Cable

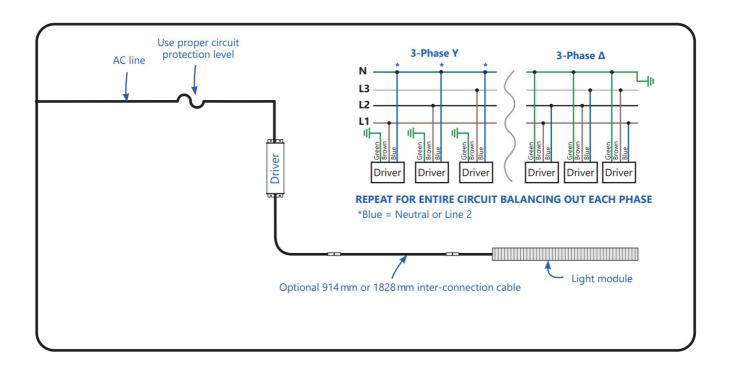


Connect 2 beads provided, the first bead should be no more than 20 mm from the input connector. **Connecting Driver to AC Line**



Connect the yellow/green wire to the incoming ground conductor. Connect the brown wire to Line 1 and blue wires to Neutral or Line 2 of the incoming AC line.

Connection Schematic



Driver Input Wire Colors

Brown = Line 1

Blue = Neutral or Line 2

Yellow/Green = Ground



The ambient temperature surrounding each driver must be lower than 40°C.

NOTE: Maximum cumulative length of inter-connection cable is 3.6 m.

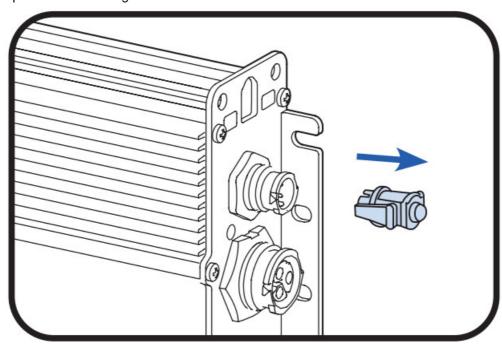
Connecting Wired Dimming (Optional)

AWARNING

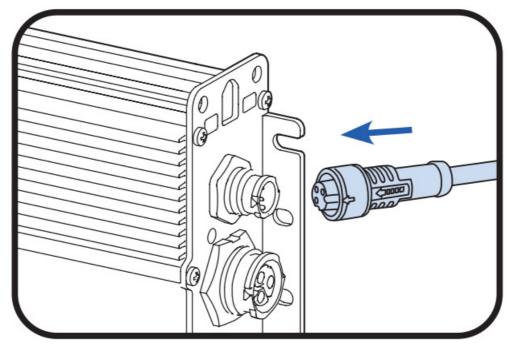
RISK OF ELECTRIC SHOCK

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

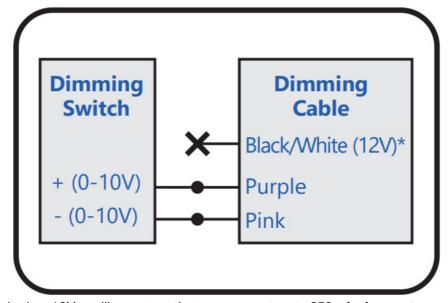
1. Remove the cap from the dimming connector.



2. Plug dimming cable: align keying features and push connectors together until the lock ring has snapped into place and a click is heard. To remove the dimming cable, turn the locking ring 1/8 of a turn counter-clockwise and separate connectors.



3. Connect the appropriate wiring to Dim+(0-10V) and Dim – (0-10V) from the driver. Insulate the black wire. Follow dimming switch instructions for the rest of the connection.



^{*}The black/white wire is a 12V auxiliary output that can support up to 250mA of current.

Save These Instructions

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

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://www.gecurrent.com/eu-en/indoor-lighting/horticulture-led-grow-lights



https://www.gecurrent.com/eu-en/indoor-lighting/horticulture-led-grow-lights

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Documents / Resources



Arize L1000 Element Gen2 Horticulture LED Lighting System [pdf] Instruction Manual L1000, Element Gen2 Horticulture LED Lighting System, LED Lighting System, Lighting System, L1000, Element Gen2

References

- Commercial Lighting and Lighting Controls | Current GLI Brands
- C Horticulture | Current

Manuals+,