

## Installation Guide

**.READ AND FOLLOW ALL SAFETY INSTRUCTIONS!  
SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER  
INSTALLATION**

- 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.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service of luminaires should be performed by a **qualified licensed electrician**.
- Maintenance of the luminaires should be performed by person(s) familiar with the luminaires' construction and operation and any hazards involved. Regular fixture maintenance programs are recommended.
- It will occasionally be necessary to clean the outside of the refractor/lens. Frequency of cleaning will depend on ambient dirt level and minimum light output which is acceptable to user. Refractor/lens should be washed in a solution of warm water and any mild, non-abrasive household detergent, rinsed with clean water and wiped dry. Should optical assembly become dirty on the inside, wipe refractor/lens and clean in above manner, replacing damaged gaskets as necessary.
- **DO NOT INSTALL DAMAGED PRODUCT!** This luminaire has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.
- Recycle: For information on how to recycle LED electronic products, please visit [www.epa.gov](http://www.epa.gov).
- These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired, or should particular problems arise which are not covered sufficiently for the purchaser's or owner's purposes, this matter should be referred to Acuity Brands Lighting, Inc.



**WARNING  
RISK OF ELECTRIC**

- Disconnect or turn off power before installation or servicing.
- Verify that supply voltage is correct by comparing it with the luminaire label information.
- Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- All wiring connections should be capped with UL approved recognized wire connectors.



**WARNING  
RISK OF BURN**

- Disconnect or turn off power before installation or servicing.
- Verify that supply voltage is correct by comparing it with the luminaire label information.
- Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- All wiring connections should be capped with UL approved recognized wire connectors.



**CAUTION**

- Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.
- Avoid direct eye exposure to the light source while it is on.



**CAUTION**

- Keep combustible and other materials that can burn, away from lamp/lens.
- Do not operate in close proximity to persons, combustible materials or substances affected by heat or drying.

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CAUTION:  
RISK OF PRODUCT

- Never connect components under load.
- Do not mount or support these fixtures in a manner that can cut the outer jacket or damage wire insulation.
- Unless individual product specifications deem otherwise: Never connect an LED product directly to a dimmer packs, occupancy sensors, timing devices, or other related control devices. LED fixtures must be powered directly off a switched circuit.
- Unless individual product specifications deem otherwise: Do not restrict fixture ventilation. Allow for some volume of airspace around fixture. Avoid covering LED fixtures with insulation, foam, or other material that will prevent convection or conduction cooling.
- Unless individual product specifications deem otherwise: Do not exceed fixtures maximum ambient temperature.
- Only use fixture in its intended location.
- LED products are Polarity Sensitive. Ensure proper Polarity before installation.
- Electrostatic Discharge (ESD): ESD can damage LED fixtures. Personal grounding equipment must be worn during all installation or servicing of the unit.
- Do not touch individual electrical components as this can cause ESD, shorten lamp life, or alter performance.
- Some components inside the fixture may not be serviceable. In the unlikely event your unit may require service, stop using the unit immediately and contact an ABL representative for assistance.
- Always read the fixtures complete installation instructions prior to installation for any additional fixture specific warnings.

**Please see product specific installation instructions for additional warnings or any applicable FCC or other regulatory statements.**

**Failure to follow any of these instructions could void product warranties. For a complete listing of product Terms and Conditions, please visit [www.acuitybrands.com](http://www.acuitybrands.com).**

Indoor/Outdoor	Indoor Lighting	Outdoor Lighting	Controls
Lithonia Lighting	Gotham	American Electric Lighting	Dark to Light
Carandini	Mark Architectural Lighting	Antique Street Lamps	Lighting Control & Design
Holophane	Peerless	Hydrel	ROAM
RELOC	Renaissance Lighting	Tersen	Sensor Switch
	Winona Lighting		Synergy

**Acuity Brands Lighting, Inc. assumes no responsibility for claims arising out of improper or careless installation or handling of its products.**

ABL LED General Warnings, Form No. 503.203

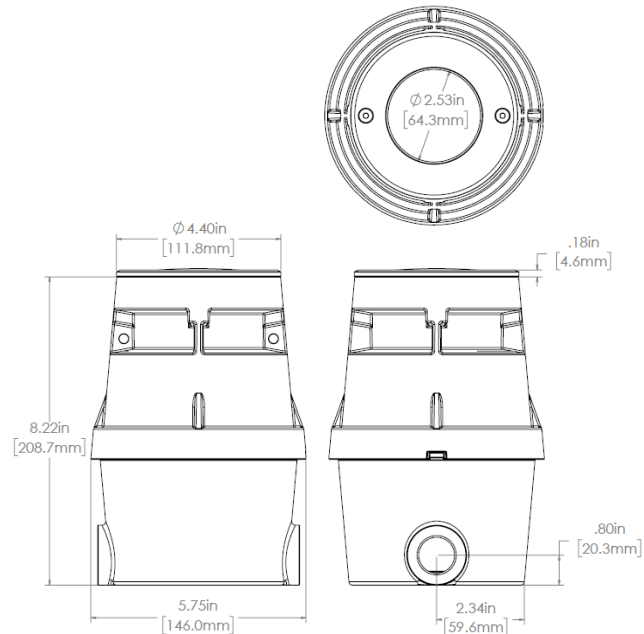
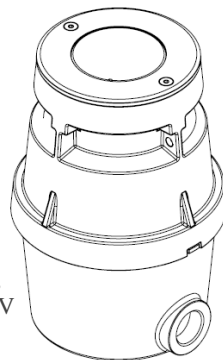
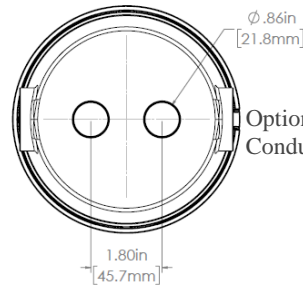
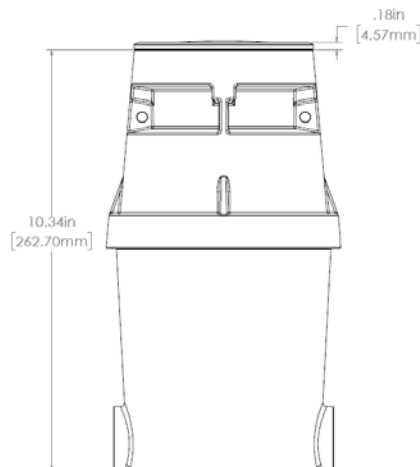
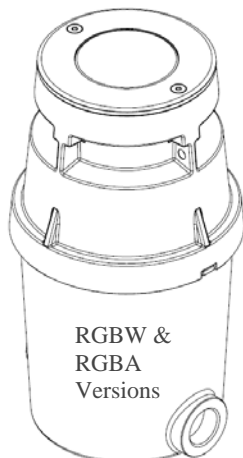
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## Installation Guide

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### 1. INTRODUCTION

 Architectural In-Grade  
Model IGF4

 Static White,  
Amber & 12V  
Versions

 Optional Bottom  
Conduit Entries

 RGBW &  
RGBA  
Versions


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## 1.1 Product Description

LED Architectural In-Grade Luminaires listed to applicable U.S., Canadian & Mexican safety standards by the Canadian Standards Association (CSA). This luminaire series is suitable for outdoor in-ground & wet location applications. These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) Device may not cause harmful interference, and (2) Device must accept any interference received, including interference that may cause undesired operation.

## 1.2 Technical Information Sources

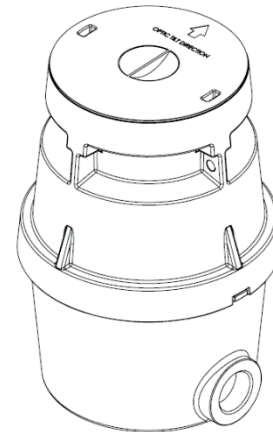
If additional questions arise relative to these luminaires that this document or your supplier cannot answer, please refer them to: Architectural Technical Support – Hydrel (888) 834-5684, Press #5 for Hydrel

## Installation Guide

### 2. Install the Rough-in-Section

*Installation should be performed by a qualified electrician in accordance with the National Electrical Code (NEC) and relevant local codes.*

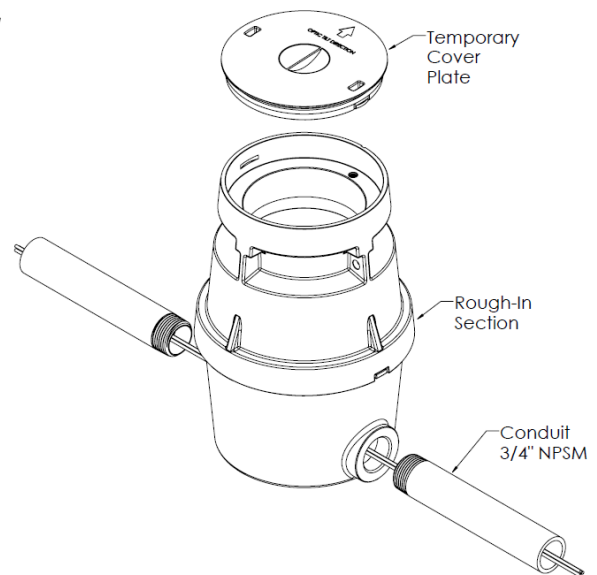
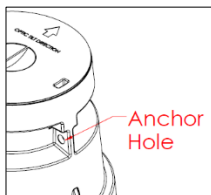
- a. **For Installation in Concrete:** Dig a hole to appropriate depth allowing for rough-in-section to be secured to conduit. Mount the Rough-in-Section with top of Temporary Cover Plate at grade level (flush with finish grade of concrete).
- b. **For Installation in Earth or Soil:** Dig a hole to appropriate depth allowing for rough-in-section to be secured to conduit or direct burial cable. Mount the Rough-in-Section with top of Temporary Cover Plate  $\frac{1}{4}$ " to  $\frac{1}{2}$ " (0.64cm to 1.27cm) above grade level.  
**Temporary Cover ARROW shows Light Tilt Direction.**



**CAUTION:** WHEN INSTALLING IN ORGANIC MULCH, SURROUND ROUGH-IN-SECTION WITH APPROX. SIX INCHES (15.2cm) OF SAND OR OTHER NON-ORGANIC SUBSTANCE.

**CAUTION:** TEMPORARY COVER MUST REMAIN IN THE ROUGH-IN-SECTION DURING INSTALLATION.

- c. Connect  $\frac{3}{4}$ " NPSM conduit(s) to lower section of Rough-in-Section (side or bottom entry). Seal conduit entry using suitable thread sealing compound to ensure conduit is watertight and to prevent moisture penetration from conduit system.
- d. Anchor the Rough-in-Section using provided holes.



- e. Pour concrete to finish grade or backfill with dirt (ensure Temporary Cover Plate is placed properly on the Rough-in-Section).
- f. Remove temporary cover & clean any debris accumulated under it. Pull electrical supply conductors and make wire splice in accordance with NEC. **IMPORTANT ! Use silicone filled wire nuts.**

## Installation Guide

### 3. Install the LED Module

- a. Pull electrical supply conductors from lower section of the Rough-in-Section and connect to LED Module conductors.

Use provided silicone filled, waterproof, wire nuts:



For Power Conductors  
Conductors  
(3 Provided)  
Hydrel P/N 80188-3



For Dimming or DMX  
Conductors  
(4 Provided)  
Hydrel P/N 81078-4

**Static White, or Amber, LED Module Conductors:**

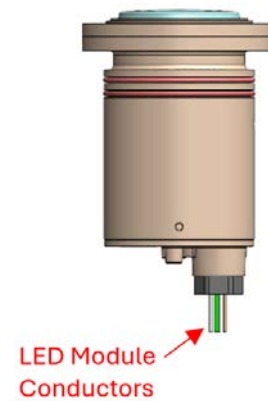
White Conductor: Power (Neutral)  
Black Conductor: Power 120V to 277V  
Green Conductor: Ground  
Purple Conductor: Dimming +  
Gray (or Pink) Conductor: Dimming -

**RGBW LED Module Conductors:**

White Conductor: Power (Neutral)  
Black Conductor: Power 120V to 277V  
Green Conductor: Ground  
Purple Conductor: DMX -  
Gray Conductor: DMX Common  
Red Conductor: DMX +

**12V LED Module Conductors:**

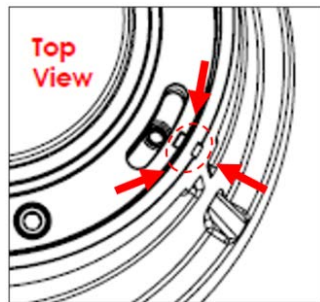
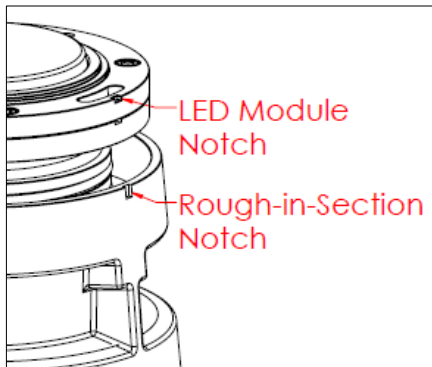
White Conductor: Power (Neutral)  
Black Conductor: Power 12Vac



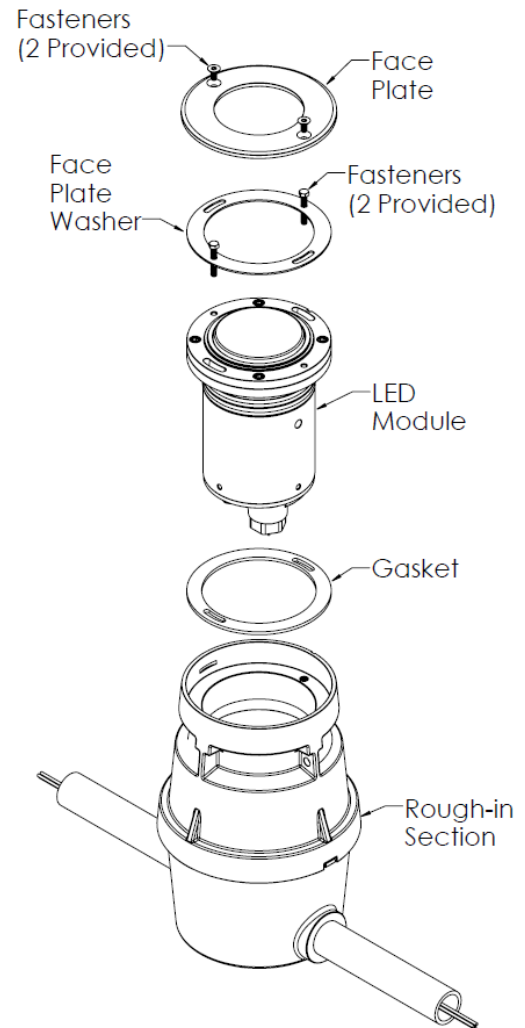
## Installation Guide

### 3. Install the LED Module (Continues)

- b. Position the Gasket on the top section of the Rough-in-Section.
- c. Position the LED Module inside the Rough-in-Section (use two Installation Fasteners).  
**Align LED Module Notch to Rough-in-Section Notch.**



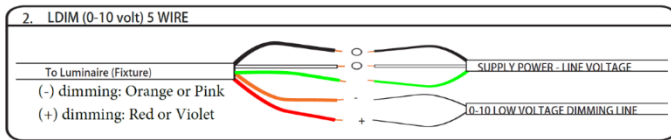
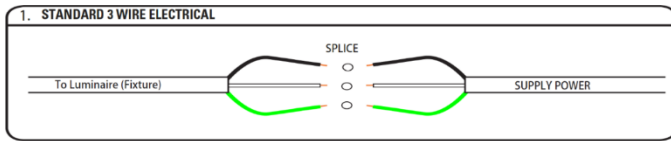
- d. Place the Face Plate Washer over the upper section of the LED Module and secure both, LED Module & Face Plate Washer, to the upper section of the Rough-in-Section using two provided fasteners (Torque Fasteners to 20 in-lb).
- e. Secure the Face Plate over the LED Module using two provided fasteners (Torque Fasteners to 7 in-lb).



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### 5. Electrical Connections

**Warning:** Turn Off supply power prior to making any electrical connections.

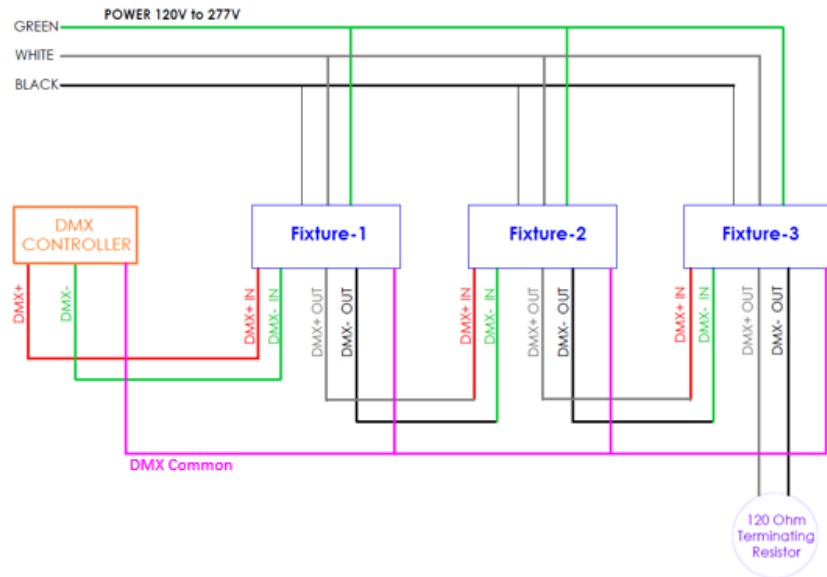


### 3. RGBW Luminaire Wiring / Daisy Chaining:

**WARNING:**

MAINTAINING CORRECT POLARITY OF THE DMX CONTROL LEADS TO THE FIXTURE IS CRITICAL.

IMPROPER POLARITY CONNECTIONS COULD RESULT IN UNEXPECTED CONTROL RESULTS OR DAMAGE TO FIXTURE DMX CONTROL CIRCUIT.



### 4. 12V Luminaire Voltage Drop Formula:

Cable Size Constant Chart*	
CABLE SIZE	CABLE SIZE CONSTANT
#18	1380
#16	2200
#14	3500
#12	7500
#10	11,920
#8	18,960
#6	30,150

VOLTAGE DROP FORMULA	
Total Watts on Cable	
X Length of Run	
-----	
CABLE SIZE CONSTANT*	
= VOLTAGE DROP	

\* Refer to Hydrel Transformer Specifications



## Installation Guide

### 6. MAINTENANCE

**6.1 Cleaning of Luminaire** - Use a soft, clean cloth with mild detergent and water to clean and remove debris from the exterior portions of the luminaire's housing and lens.

**Caution** – Do not use abrasive or organic cleaners such as acetone or ammonia on luminaire's housing or lens. Their use may damage painted surfaces or affect optical performance.

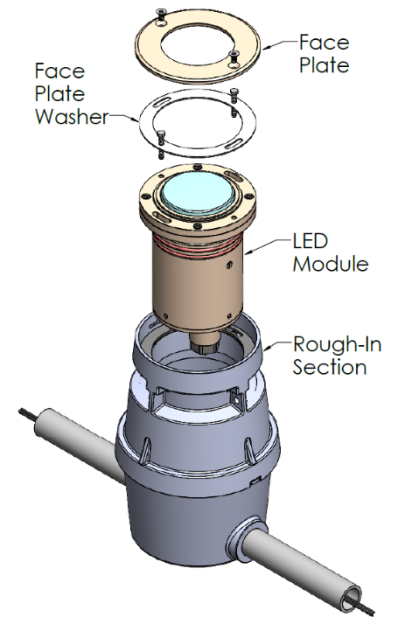
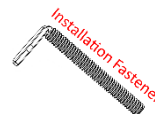
#### 6.2 Electrical Component Replacement

6.2.1 Replacement of any electrical component requiring access to the interior of the luminaire housing will require power being shut off before entering the luminaire. All work should be performed by personnel qualified to work on solid state luminaires.

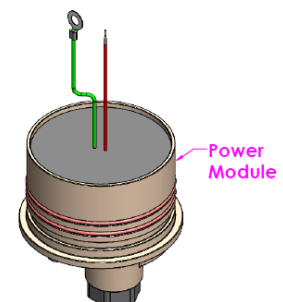
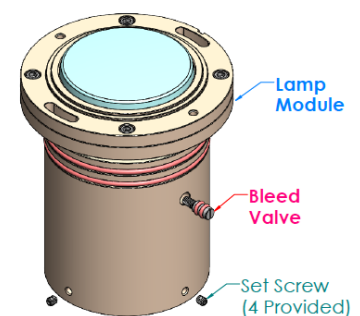
6.2.2 Disconnect power to the luminaire prior to performing any maintenance.

#### 6.2.3 Power Module and/or Lamp Module Replacement:

- Remove the Face Plate & Face Plate Washer by removing applicable fasteners.
- Pull LED Module from Rough-in-Section (use two Installation Fasteners) & disconnect LED Module electrical conductors from the Rough-in-Section conductors.
- Remove Power Module from the Lamp Module:** Remove Bleed Valve and four Set Screws. Pull Power Module from the Lamp Module. Disconnect Power Module's ground & power conductors.
- Replace Lamp Module or Power Module with new one. Connect Power Module ground & power conductors to the Lamp Module. Apply provided grease to O-ring areas and insert the Power Module into the Lamp Module. Secure the Set Screws & Bleed Valve back to the Lamp Module and Torque to 6 in-lb.
- Connect Rough-in-Section conductors to the LED Module (See Section 3a).
- Position LED Module on the Rough-in-Section (align LED Module Notch to Rough-in-Section Notch, see Section 3c), place Face Plate Washer on the LED Module & secure it using applicable fasteners (Torque Fasteners to 20 in-lb).
- Position the Face Plate & secure it using applicable fasteners (Torque Fasteners to 7 in-lb).



LED Module = Lamp Module + Power Module



Contractor Resources - Check out helpful programs, tools, installation videos and more!

Ressources pour entrepreneurs - Accédez aux programmes, outils, vidéos et plus encore!

Recursos del contratista - ¡Vea programas útiles, herramientas, videos de instalación y más!

Model IGF4 | 3/21/2024

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