



Ephesus Altus Series LED Luminaire Installation Manual

Introduction

Welcome to the world of long-lasting high bay LED lighting for commercial wet/dry use. The Ephesus Altus Series LED Luminaire has been designed and engineered to provide quality lighting in a variety of operating environments. The product is UL listed under standards 1598 and 8750, as well as CSA certified under standard CSA C22.2 No. 250.0.

Your new Altus Series LED Luminaire has some very important features:

- Designed, engineered, and manufactured in the U.S.
- Long lifespan
- Simple installation/retrofit
- Low true cost of ownership
- Operates in changing environments
- Environmentally benign

This manual contains information about installing, operating, maintaining, and troubleshooting your new Altus Series LED Luminaire. Direct questions concerning the use and applicability of this Altus Series LED Luminaire to Ephesus Lighting Customer Service, (315) 579-2873, Monday-Friday, 8:00AM to 5:00PM EST. You may also write to:

Ephesus Lighting
ATTN: Customer Service
235 Harrison Street
Syracuse, New York 13202
Or Email: info@ephesuslighting.com

If contacting Customer Service, please record the following information and have available:

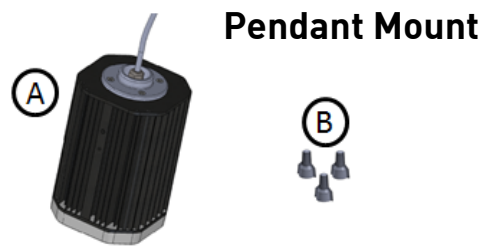
- Model Number: _____
- Serial Number: _____
- Date of Purchase: _____
- Date of Installation: _____

Package Contents

You have received an Altus Series Luminaire specific to the mounting style you selected at the time of purchase. The choices are Free-Hanging, Pendant Mount, Wall Mount and Ceiling Mount. When you open your package, make sure its contents match those in the corresponding diagram below.



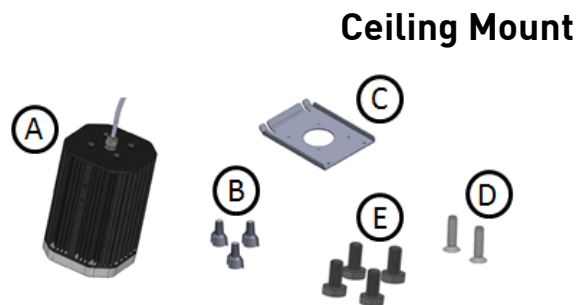
| Part | Description | Quantity |
|------|------------------------|----------|
| A | Altus Series Luminaire | 1 |
| B | Wire Nuts | 3 |



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|------|-------------------------|----------|
| A | Altus Series Luminaire | 1 |
| B | Wire Nuts | 3 |
| C | Ceiling Mount Bracket | 1 |
| D | #10-24 x .75" FH Screw | 2 |
| E | 1/4-28 x 1/2" Cap Screw | 4 |

Tools Required

Before you begin the installation, you will need the following tools:

1. Screwdrivers (Various)
2. Ladder or Lift
3. Pliers
4. Wire Cutters
5. Safety Glasses
6. Electrical Tape
7. Wire Strippers

Warnings and Cautions

Please read and understand this entire manual before attempting to assemble, operate, or install the Altus Series LED Luminaire. If you have any questions regarding the product, please call Customer Service.

1. All electrical connections must be in agreement with local codes, ordinances, or the National Electric Code (NEC). Contact your municipal building department to learn about local codes, permits, and/or inspections. **WARNING: RISK OF FIRE – MOST FACILITIES BUILT BEFORE 1985 HAVE SUPPLY WIRE RATED FOR 60°C. CONSULT A QUALIFIED ELECTRICIAN BEFORE INSTALLATION.**
2. **TURN OFF ELECTRICITY** at main fuse box or circuit breaker box before beginning installation by removing the fuse or switching off the circuit breaker.
3. **DO NOT** make or alter any open holes in the luminaire during installation.
4. **DO NOT** connect this luminaire to an electrical system that does not provide a means for equipment grounding. Never use a luminaire in a two-wire system that is not grounded. **WARNING: INSTALLING A LUMINAIRE INTO AN ELECTRICAL SYSTEM NOT HAVING PROPER GROUNDING COULD ALLOW METAL PARTS OF THE LUMINAIRE TO CARRY ELECTRICAL CURRENT IF ANY OF THE LUMINAIRE WIRES, WIRE CONNECTIONS, OR SPLICES BECOME BROKEN, CUT, OR LOOSE. ANYONE COMING IN CONTACT WITH THE LUMINAIRE IS SUBJECT TO ELECTRICAL SHOCK, WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**
5. If you are not sure your lighting system is grounded, **DO NOT** attempt to install this luminaire. Contact a qualified licensed electrician for information with regards to proper grounding methods as required by the local electrical code in your area.
6. **DO NOT** connect the bare or green insulation ground wire to the black (HOT) current-carrying or white (NEUTRAL) supply wire. **WARNING: CONNECTING OF THE BARE OR GREEN LUMINAIRE GROUND WIRE TO THE BLACK OR WHITE SUPPLY WIRES MAY ALLOW ALL METAL PARTS OF THE LUMINAIRE TO CARRY ELECTRICAL CURRENT. UNDER THIS CONDITION ANYONE COMING IN CONTACT WITH THE LUMINAIRE WILL RECEIVE ELECTRICAL SHOCK, WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**
7. **ALWAYS** mount the Altus Series LED Luminaire according to Ephesus mounting instructions. **DO NOT** suspend any luminaire by the supply wires. **WARNING: WIRE CONNECTORS WILL NOT SUPPORT THE WEIGHT OF A LUMINAIRE. SUSPENDING A LUMINAIRE BY THE FACILITY WIRES AND WIRE CONNECTORS WILL RESULT IN THE LUMINAIRE FALLING, WITH THE POSSIBILITY OF PERSONAL INJURY AND THE DANGER OF ELECTRICAL SHOCK OR FIRE.**
8. **BE CAREFUL** not to damage or cut the wire insulation (covering) during installation. **DO NOT** permit wires to contact any surface having a sharp edge. Doing so may damage or cut the wire insulation, possibly causing injury or death from electrical shock.
9. The high intensity light produced by the luminaire can cause severe damage to the eye if viewed directly at close range. **ALWAYS** wear suitable protective goggles.

Equipment Inspection and Storage

Once you have received the Altus Series LED Luminaire, inspect it for any damage. This includes damage to the enclosure, lens, and wiring box. If you find or suspect any damage, file a claim as soon as possible with the carrier and notify the nearest Ephesus sales representative (sales@ephesustech.com).

For long-term storage, put the luminaire in a clean dry place, protected from dirt, water, and sunlight. Provide ample air circulation and heat, if necessary, to prevent condensation. See table below for required storage and operating conditions:

| Storage Temperature | Operating Temperature | Humidity |
|---------------------------------|--------------------------------|--------------------------|
| -40°C to +75°C (-40°F to 167°F) | -40°C to 55°C (-40°F to 131°F) | 5% to 95% non-condensing |

Note: If you stored the luminaire longer than one month, you MUST perform the following:

1. Remove any shipping or storage debris with a vacuum.
2. Verify you have all parts and no part has been damaged or modified.

Preparation

Before beginning assembly and installation, make sure you have all parts. Compare parts with Package Contents. If any part is missing or damaged, do not attempt to assemble, install, or operate the luminaire. Contact Customer Service for replacement parts.

CAUTION: Because of hazardous voltage and current, Ephesus recommends a qualified electrician install and maintain the luminaire.

Installation



DANGER



HAZARDOUS VOLTAGE

(Can Cause Severe Injury or Death)

Turn OFF all power before installing, adjusting, or removing the luminaire or any of its components.

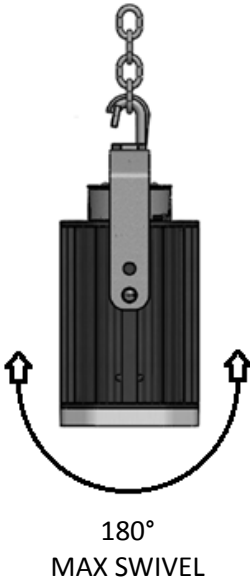
Mounting

You have four mounting options:

- Free Hanging
- Pendant Mount
- Wall Mount
- Ceiling Mount

Select the appropriate mounting option for your site. The installation instructions differ for each mounting style. Below, locate the correct mounting instructions for your style.

Free-Hanging



1. Remove the existing luminaire, if present, and dispose.
2. Hang the luminaire from the existing chain or steel cable. If there is no chain or steel cable, firmly attach a new chain or steel cable to a building joist or other load-bearing mounting location.
3. Prior to hanging the luminaire, ensure the new attachment mount can hold a minimum of 70 lbs.
4. Hang and position the luminaire to ease the tension on the electrical wiring. A swivel feature on the mounting bracket will simplify your installation. Loosen the nylon thumb screws on both sides of the luminaire, swivel the light to the desired angle, and tighten the thumbs screws. Swiveling should allow you to easily remove the junction box lid, the gasket, and to expose the wiring and wire nuts.
5. Proceed to **Power Connections – Free-Hanging, Pendant Mount, and Wall Mount.**

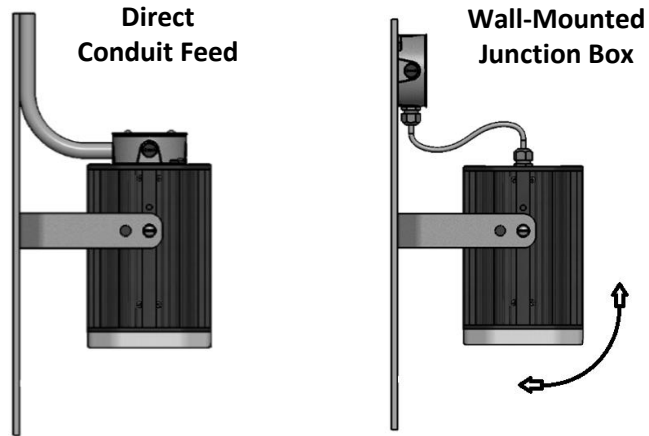
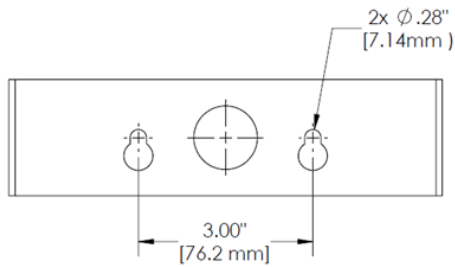
Pendant Mount



1. Remove the existing luminaire, if present, and dispose.
2. Run the luminaire power cable through the 1-½” conduit, leaving sufficient length for wire terminations at the top. The conduit is not supplied in your package.
3. Thread the conduit into the luminaire’s pendant mounting flange.
4. In water-resistant applications, use Teflon® or equivalent thread-sealing tape on all pipe threads.
5. If existing conduit is not 1-½”, you may have to use reducing bushings.
6. Proceed to **Power Connections – Free-Hanging, Pendant Mount, and Wall Mount.**

Wall Mount

Hole Pattern

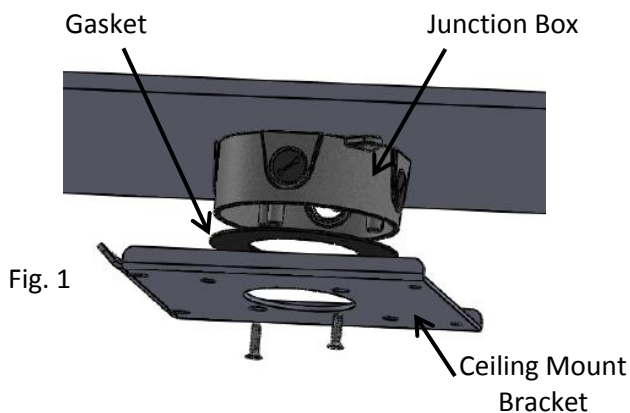


1. Select the appropriate $\frac{1}{4}$ " hex head concrete or drywall wall anchors rated to a minimum of 70 lbs. Then, screw the anchors at the spacings shown in the above hole pattern diagram. Leave a .12 - .25" clearance between the wall and screw head.
 - Mounting screws are not provided.
2. Loosen the thumb screws on both sides of the mounting bracket so the luminaire pivots freely. Hang the mounting bracket over the pre-installed mounting screws.
3. When you have adjusted the luminaire to the proper angle, tighten the mounting screws.
4. If you are installing a direct conduit feed, run the conduit to the luminaire junction box. If you are installing to a wall-mounted junction box, run the luminaire power cable to it.

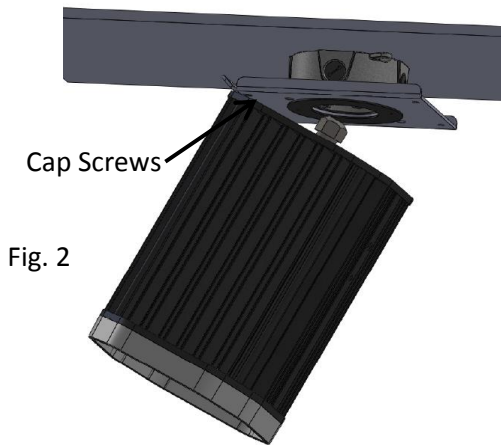
NOTE: If you use the luminaire in a wet environment, use the appropriate NEMA- or IP-rated conduit fittings at the entrance and exit of the junction box to maintain the product's integrity.

5. Proceed to **Power Connections – Free-Hanging, Pendant Mount, and Wall Mount.**

Ceiling Mount



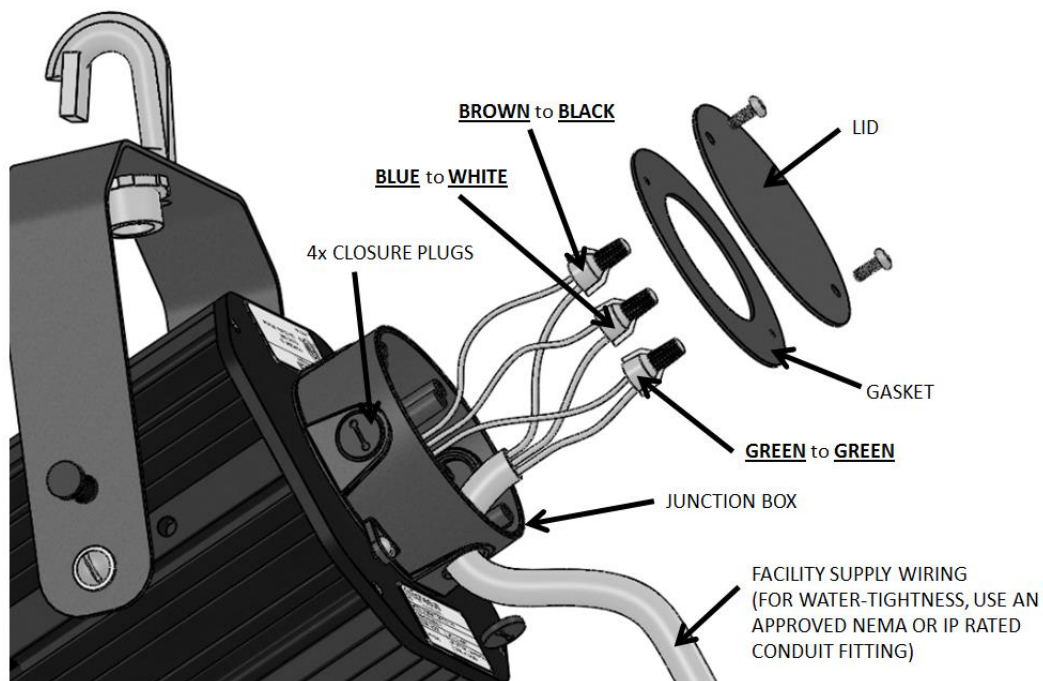
1. Remove existing luminaire, if present, and dispose.
2. Mount a 4" round or square junction box to ceiling, if one is not already in place.
 - Mounting hardware and junction box are not supplied.
3. Attach the ceiling mount bracket to the junction box using the flat head machine screws provided. Make sure one gasket is in place for water-resistant applications. See Fig. 1.
4. Insert two of the four cap screws, leaving .12-.25" clearance between the head of the bolt and the luminaire. Use a thread locker (not provided) in any areas of high vibration.
5. Hang the luminaire from the ceiling mount bracket as shown in Fig. 2. At this point, the luminaire is only loosely supported by the bracket until you fasten all mounting screws. Do not push the luminaire off of the bracket. If necessary, temporarily fasten it to the bracket by other means (e.g. wire ties, rope, etc.).
6. Proceed to **Power Connections – Ceiling Mount.**



Power Connections

Free-Hanging, Pendant Mount, and Wall Mount

Once you've completed the mounting, you can connect the wires.

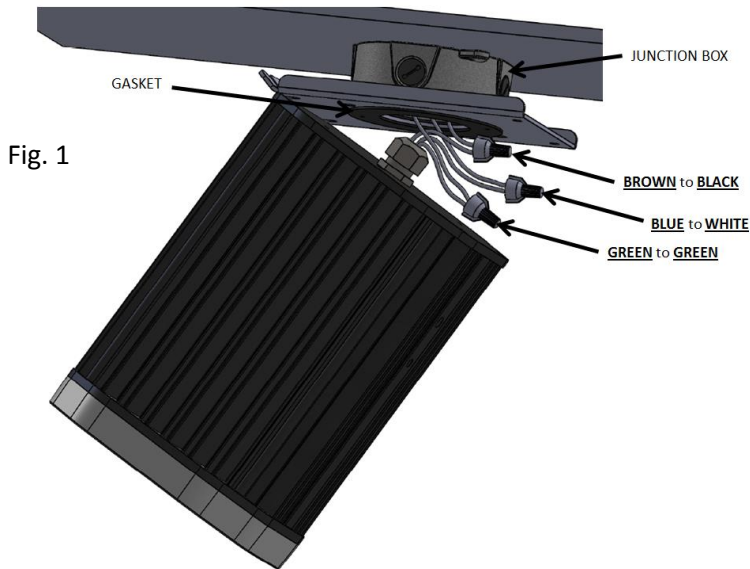


1. Remove the screws from the junction box. Set them aside with the junction box lid and the gasket.
2. Mate the wires as shown in diagram above (BROWN to BLACK, BLUE to WHITE, and GREEN to GREEN) and screw them into the provided wire nuts. Make sure that the wires are properly connected and that no wire hairs are exposed.
3. Insert all wire and wire junctions inside the junction box, replace the gasket, and close the lid.
4. For dust- and water-tightness, the gasket, located between the junction box and lid, must be evenly compressed.
5. For water-tightness, bring facility wiring into the junction box through an appropriate NEMA- or IP-rated conduit fitting.
6. For water-tightness, apply silicone sealing compound to the junction box closure plugs.

Power Connections

Ceiling Mount

Once you've completed the mounting, you can connect the wires.



1. Secure the gasket to the underside of the ceiling mount bracket as shown in Fig. 1.
2. Mate the wires as shown in Fig. 1 (BROWN to BLACK, BLUE to WHITE, and GREEN to GREEN) and screw them into the provided wire nuts. Make sure that the wires are properly connected and that no wire hairs are exposed.
3. Insert all wire and wire junctions inside the junction box.
4. Close the lid. Secure with the four provided hanging bolts. See Fig. 2.
5. For dust- and water-tightness, make sure the gasket are evenly compressed.
6. For water-tightness, bring facility wiring into the junction box through an appropriate NEMA- or IP-rated conduit fitting.
7. For water-tightness, apply silicone sealing compound to the junction box closure plugs.

Care and Maintenance

All aluminum luminaires are prepared with a durable lacquer finish or a powder-coated painted finish. Please note the painted finish on exterior luminaires will weather or tarnish over time, depending on the environmental conditions at the installation site. Proper care of the luminaires will enhance both their life and appearance. We do not recommend using post treatments, such as a clear lacquer.

To maximize the appearance of the aluminum luminaire, periodically remove dust and debris from the luminaire's surface. Additionally, we recommend you wipe down the luminaire weekly using a soft, dry or damp cloth. ←Insert section on water washing of wet luminaires→}

DO NOT use any abrasives such as car wax, brass cleaners or other polishes, glass cleaners, or chemicals. These will scratch, remove, or damage the protective coating, allowing moisture and pollutants to come in contact with the aluminum, possibly discoloring or pitting the finish.

IF YOU FAIL TO FOLLOW THE ABOVE CARE INSTRUCTIONS, YOU WILL VOID THE LUMINAIRE WARRANTY.

Troubleshooting

Minor problems often can be fixed without an electrician. Before doing any work on the luminaire, shut off the power supply to avoid electrical shock.

| Symptom | Possible Cause | Corrective Action |
|-------------------------------------|--|------------------------------|
| No light output | Power is off. | Check if power supply is on. |
| | Bad wire connection. | Check wiring connections. |
| | Bad switch. | Test or replace switch. |
| Fuse blows or circuit breaker trips | Crossed wires or a supply wire is grounding out. | Check wiring connections. |

Technical Service

If you continue to experience problems, please call (315) 579-2873 8:00 AM to 5:00 PM EST (M-F).

If contacting Technical Service, please have the following information available:

- Model Number: _____
- Serial Number: _____
- Date of Purchase: _____
- Date of Installation: _____