

Installation Instructions



Product Summary:

This high-performance LED engine room light is designed for rugged marine environments, providing reliable illumination with backup functionality for critical situations. With an efficient 18W/36W power consumption, the light operates on a wide input voltage range of DC 10-36V, making it adaptable to various marine electrical systems.

Package Contents:

- (1) Linear light fixture
- (2) 316 Stainless Steel Mounting Brackets and Hardware

Tools Required For Assembly

- Phillips Screwdriver
- Drill, Drill Bits
- Adjustable wrench
- Wire strippers
- Voltage tester
- Wire connectors

Specifications & Certifications:

Technical Information

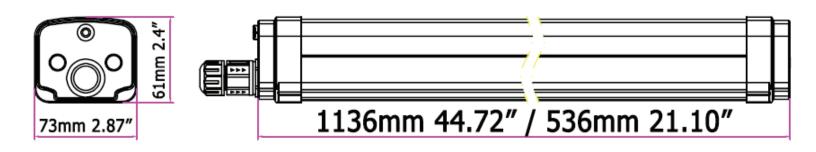
Housing Finish/Material	Aluminum + Polycarbonate
Bracket	316 Stainless Steel
Lens Material	Polycarbonate
Input Voltage	10-36VDC
Power Consumption	600mm / 21.10" (18W / 4W on Battery power) 1200mm / 44.72" (36W / 6W on Battery power)
Luminous Flux	600mm / 21.10" (2000LM / 400LM on Battery power) 1200mm / 44.72" (4000LM / 600LM on Battery power)
Correlated Color Temperature (CCT)	6500K
Beam Angle Options	180°
Ingress Protection	IP65
Battery Capacity	600mm / 21.10" (7.4V 2400mAH) 1200mm / 44.72" (7.4V 3600mAH)
Backup Battery Life	4 Hours
Warranty	5 Years fixture / 2 Years battery



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Fixture Dimensions:

2D Top and Side View (mm/in.)



- **Brightness**: 2000LM 600mm / 21.10" / 4000LM 1200mm / 44.72" of cool white daylight (6500K) ensures visibility in engine rooms.
- **Emergency Mode**: In the event of power failure, the light switches to an emergency mode providing 400 lumens for up to 4 hours, thanks to its built-in rechargeable battery (7.4V, 2400mAh) for the 600mm / 21.10" model and a battery (7.4V, 3600mAh) for the 1200mm / 44.72" model.
- **Durable Materials**: Constructed from a combination of aluminum and Polycarbonate, the light is designed to withstand the harsh conditions of engine rooms.
- Color Rendering: With a CRI (Color Rendering Index) of 80, it provides accurate color perception, ideal for technical maintenance.
- Reflector and Diffuser: The light features a diffused PC reflector to evenly distribute light across the workspace.
- Easy Installation: The light's dimensions (1136mm / 44.72"x 73mm / 2.87"x 61mm / 2.4" and 536mm / 21.10" x 73mm / 2.87"x 61mm / 2.4") fit into most engine room setups without the need for special cut-outs.
- Charging and Battery Life: The battery charges in approximately 3.5 hours 600mm / 21.10" and 5 hours - 1200mm / 44.72" when empty.
- Longevity: The light is rated for 50,000 hours of life, making it a long-term solution for continuous use in engine rooms.



600mm / 1200mm

Engine Room light with Battery Backup

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Fixture Mounting Instructions:

Bracket installation and Mounting

1. Preparing the Surface

- Align the mounting brackets on the desired flat surface.
- Ensure the brackets are parallel, then mark the positions of the four holes to match the bracket holes.

2. Drilling Holes

- Ensure the holes are the correct level and distance apart, then drill four holes at the marked positions on the surface.

3. Mounting the Brackets

- Mount the brackets onto the surface using the provided screws. Ensure the brackets are parallel and securely fastened.

4. Adjusting the Brackets

- Use the two adjustment holes on each bracket to slide them to the desired height.
- Tighten the screws to secure the position.

5. Install the Safety loop onto brackets

- Attach the safety strap loops to the bracket with screws
- Connect safety loops from fixture and brackets together

6. Installing the Light Fixture

- Snap the light fixture into the mounting brackets, making sure the fixture is secured.

Tools Required For Assembly

- Phillips Head or Flat Head Screwdriver
- Drill, Drill Bits
- Adjustable wrench
- Wire strippers
- Voltage tester
- Wire connectors





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Fixture Wiring Instructions:

Wires Functions:

The fixture features a Backup battery disconnect switch located next to the power cable. This disconnect will be engaged during shipping so the battery will not be drained, and will need to be switched after installation to enable the battery backup feature.

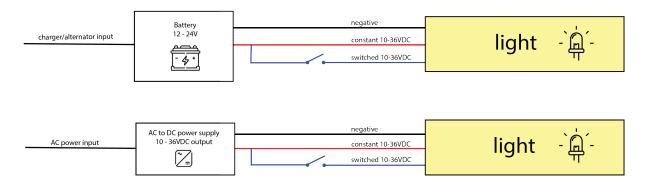
Alternatively, if you plan to leave your vessel with no power supplied to the fixture, you can enable this disconnect to prevent draining the battery.

This fixture requires 10-36VDC power on the red wire for charging and detecting a power loss.

The blue wire is the switched input for turning the light on and off, when power from the same supply as the red wire is applied to the blue wire the light will turn on.

When there is a loss of power on the red wire, the light will go into battery backup mode regardless of the blue wire switch state, it will provide light at a reduced output for 4 hours.

When 10-36VDC is supplied to the red wire the unit will automatically charge the battery to capacity.



Wiring Preparation Instructions:

1. Expose Wiring

- Remove the Cable Gland from the light fixture to access the wiring.

2. Connect Wires

- Refer to the wiring diagram below and connect the wires according to the specified configuration. Ensure all connections are secure.

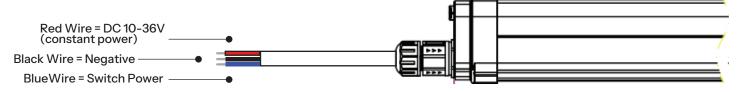
3. Assemble Cable Gland

- Thread the provided cable gland onto the end cap assembly.

4. Secure the Assembly

- Tighten the cable gland using an adjustable wrench.

Wire Definitions:



Red Wire: Connect to 10-36VDC constant power.

Black Wire: Connect to the negative terminal (ground).

Blue Wire: Connect to a switched circuit using the same 10-36VDC power source as the red wire.



600mm / 1200mm

Engine Room light with Battery Backup

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Battery Replacement Instructions:

Tools Required For Battery Replacement:

- Phillips Head Screwdriver
- Zip ties
- Wire Cutter
- Voltage tester
- Wire connectors

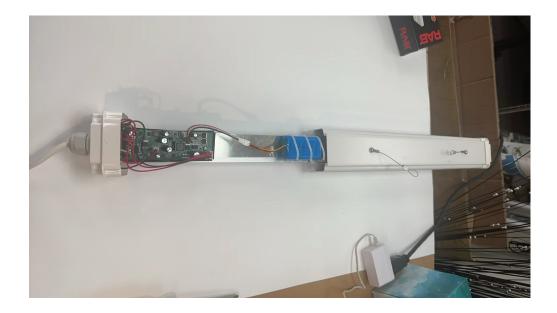
1. Extract the end cap

- Disconnect all power going to the light and make sure with your voltage tester.
- Undo the two Phillips head screws to either side of the of the endcap in order to slide out the end cap from the light fixture to access the internals.



2. Remove the tray

- Turn the light fixture Upside downand finish sliding out the tray to expose the battery.





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3. Extract the Battery

- Cut away the Zip ties and unplug the battery in order to remove it.

4. Install new Battery

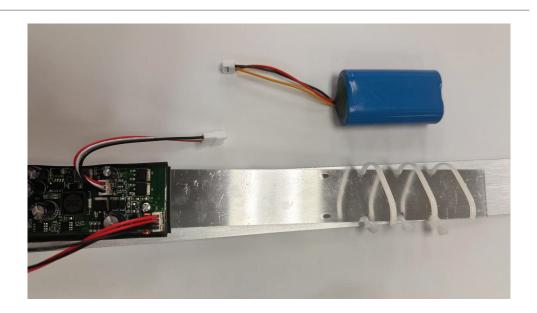
- Connect the plug from the new battery (find more at k2lighting.com) and place it on the tray.
- Secure the new battery to the tray with 3 new zip ties

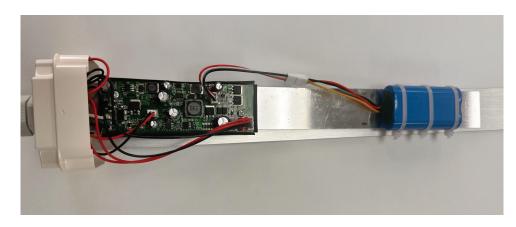


- Insert the tray with the new battery, back into the light fixture making sure it slides into both sides of the channel.
- Secure the two Phillips head screws to either side of the of the endcap making sure it's in all the way.



- Please consult local authorities for disposal.







PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

Safety Instructions:



WARNING: RISK OF ELECTRIC SHOCK

- Installation is intended to be done by a qualified electrician in accordance with the control of hazardous energy (lockout/tagout) safety regulations and procedures.
- Installation must follow the NEC/ABYC/USCG electrical codes set for the specific vessel the fixture is being installed on.
- Ensure ALL POWER SOURCES connected to the room or fixture location are turned
- Verify input voltage is within fixture range before installation.
- The use of safety equipment (safety glasses and gloves) are highly recommended.
- Avoid mounting near any combustible material and/or heating units.
- Any maintenance/repairs to the fixture may only be carried out by a qualified electrician.
- Allow proper cooling time before handling the fixture if it has been installed & powered.
- Any modifications to the fixture will automatically void warranty.
- Always inspect the fixture for any damage prior to installing and DO NOT install if any damage is present.