

ECCO 11-048CAC-E

ECCO LED Light Bar User Manual

Model: 11-048CAC-E

1. PRODUCT OVERVIEW

The ECCO 11 Series RefleXL® LED Light Bar is a compact and low-profile warning lightbar designed for various vehicle applications. It features a durable polycarbonate lens and an aluminum frame, ensuring ruggedness and longevity. This lightbar provides discreet yet powerful warning illumination, suitable for tow trucks, work trucks, and utility vehicles where compact warning is essential.

The light bar is available in single-color or dual-color options, offering up to 91 distinct flash patterns to suit diverse operational needs.



Figure 1.1: ECCO 48-inch LED Light Bar (Off State). This image displays the light bar in its inactive state, showcasing its sleek, low-profile design and the arrangement of individual LED modules.



Figure 1.2: ECCO 48-inch LED Light Bar (Amber/White Illumination). This image shows the light bar with its amber and white LEDs illuminated, demonstrating the powerful warning light output.

2. KEY FEATURES

- Compact and powerful warning illumination.
- Up to 35 flash patterns for single-color models.
- Up to 91 flash patterns for dual-color models.
- Multiple mounting options for versatile installation.
- Constructed with a robust aluminum frame and durable polycarbonate lens.
- Includes stainless steel mounting feet for secure installation.
- Wide operating temperature range: -40°F to +149°F (-40°C to +65°C).
- Waterproof design for reliable performance in various weather conditions.

3. WHAT'S IN THE BOX

Upon unpacking, please verify that all components are present and undamaged.

- ECCO 11 Series RefleXL® LED Light Bar (Model: 11-048CAC-E)
- Mounting Hardware (including stainless steel mounting feet)

4. SPECIFICATIONS

Attribute	Value
Brand	ECCO
Model	11-048CAC-E
Color	Amber/White
Wattage	99 watts
Dimensions (L x W x H)	49 x 6 x 3 inches
Item Weight	10.28 pounds
Lens Material	Polycarbonate
Special Feature	Waterproof
Vehicle Service Type	Truck (Universal Fit)
Operating Temperature	-40°F to +149°F (-40°C to +65°C)
Flash Patterns	Up to 91 (dual-color), 35 (single-color)
Mounting	Permanent (with included feet), optional headache rack, or magnetic
UPC	758379110553



Figure 4.1: ECCO 48-inch LED Light Bar Dimensions. This image illustrates the key dimensions of the light bar, including its length of 48 inches and height of 1.3 inches, along with the model number and key electrical specifications.

5. SETUP AND INSTALLATION

The ECCO RefleXL® light bar is designed for versatile mounting. Professional installation is recommended for optimal performance and safety.

5.1 Mounting Options

- **Permanent Mount:** Utilize the included stainless steel mounting feet for a secure, permanent installation on a flat surface. Ensure the mounting surface is robust enough to support the light bar's weight and withstand vehicle vibrations.
- **Headache Rack Mount:** The light bar can be adapted for mounting on an optional headache rack. Consult the headache rack manufacturer's instructions for compatible mounting hardware and procedures.
- **Magnetic Mount (Optional):** For temporary installations, magnetic mounting options may be available (sold separately). Ensure magnetic mounts are rated for the light bar's weight and intended vehicle speed.

5.2 Wiring Instructions

1. **Disconnect Power:** Before beginning any wiring, disconnect the vehicle's battery to prevent electrical shorts or damage.
2. **Identify Wires:** The light bar will have wires for power, ground, and potentially control wires for flash pattern selection or color changes (for dual-color models). Refer to the wiring diagram provided with your specific light bar model.
3. **Connect Power:** Connect the positive (+) wire from the light bar to a fused 12-24 volt DC power source in the vehicle. Ensure the fuse is appropriately rated for the light bar's wattage (99W).

4. **Connect Ground:** Connect the negative (-) wire from the light bar to a reliable chassis ground point on the vehicle.
5. **Connect Control Wires (if applicable):** If your model has control wires for flash patterns or color selection, connect them according to the provided wiring diagram to a suitable switch or control module.
6. **Secure Wiring:** Route all wiring safely, away from hot or moving parts, and secure it with cable ties or clamps to prevent chafing or damage.
7. **Test Functionality:** Reconnect the vehicle's battery and test the light bar's operation, including all flash patterns and color options (if applicable).

Note: Always adhere to local and national regulations regarding the installation and use of warning lights on vehicles.

6. OPERATING INSTRUCTIONS

The ECCO RefleXL® light bar is operated via external switches or control modules connected during installation.

6.1 Power On/Off

Activate the light bar by turning on the main power switch connected to its power supply. Turn the switch off to deactivate the light bar.

6.2 Flash Pattern Selection

For models with multiple flash patterns (up to 35 for single-color, up to 91 for dual-color), a dedicated control wire or switch is typically used to cycle through the available patterns. Consult your specific wiring diagram and control module instructions for detailed operation.

- **Momentary Switch:** A momentary switch connected to the pattern control wire will typically advance to the next flash pattern with each brief activation.
- **Dedicated Controller:** Some installations may use a multi-button controller to directly select patterns or activate specific functions.

6.3 Color Selection (Dual-Color Models Only)

Dual-color models (Amber/White) will have additional control wires to switch between colors or activate combined color patterns. Refer to your specific model's wiring and control instructions for details on how to change or blend colors.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your ECCO LED Light Bar.

- **Cleaning:** Periodically clean the polycarbonate lens with a soft cloth and mild soap and water. Avoid abrasive cleaners or solvents that could damage the lens. Rinse thoroughly with clean water.
- **Inspection:** Regularly inspect the light bar for any signs of physical damage, loose mounting hardware, or frayed wiring. Tighten any loose fasteners.
- **Wiring Check:** Ensure all electrical connections remain secure and free from corrosion.
- **Environmental Protection:** While the light bar is waterproof, extreme conditions (e.g., high-pressure washing directly at seals) should be avoided.

8. TROUBLESHOOTING

If you encounter issues with your ECCO LED Light Bar, refer to the following common troubleshooting steps:

Problem	Possible Cause & Solution
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Problem	Possible Cause & Solution
Light bar does not turn on.	<ul style="list-style-type: none"> ◦ No Power: Check the vehicle's battery connection. Ensure the power switch is on. ◦ Blown Fuse: Inspect the inline fuse on the power wire. Replace if blown with a fuse of the correct rating. ◦ Loose Wiring: Verify all electrical connections (power, ground, switch) are secure and free from corrosion. ◦ Faulty Switch: Test the switch for proper operation.
Light bar flickers or dims.	<ul style="list-style-type: none"> ◦ Insufficient Power: Ensure the vehicle's electrical system can provide adequate power. Check for voltage drops. ◦ Loose Connections: Re-check all wiring connections for tightness and corrosion. ◦ Grounding Issue: Ensure the ground connection is solid and free of paint or rust.
Flash patterns do not change.	<ul style="list-style-type: none"> ◦ Control Wire Issue: Verify the flash pattern control wire is correctly connected and the switch/controller is functioning. ◦ Controller Malfunction: If using an external controller, consult its manual or test its functionality.

If these steps do not resolve the issue, please contact ECCO customer support for further assistance.

9. WARRANTY AND SUPPORT

The ECCO 11 Series RefleXL® LED Light Bar comes with a **5-Year No-Hassle Warranty**, reflecting ECCO's commitment to quality and durability.



Figure 9.1: ECCO 5-Year No-Hassle Warranty and Product Certifications. This image highlights the 5-year warranty badge and various industry certifications such as SAE Class 1, California Title 13, R10, R65, CISPR 25, and IP69K, indicating compliance with high standards for performance and durability.

9.1 Warranty Coverage

This warranty covers defects in materials and workmanship under normal use for a period of five (5) years from the date of purchase. It does not cover damage caused by improper installation, accident, abuse, misuse, natural disaster, or unauthorized modification.

9.2 Returns and Replacements

For returns or replacements, please refer to the retailer's return policy (e.g., Amazon's 30-day refund/replacement policy if purchased via Amazon). For warranty claims beyond the retailer's return period, please contact ECCO directly.




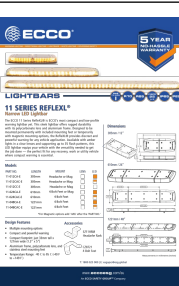
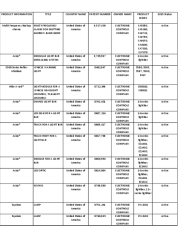
9.3 Customer Support

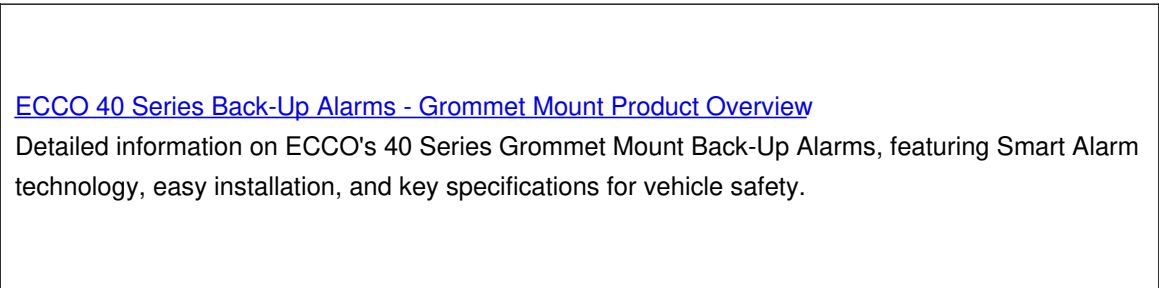
For technical assistance, warranty claims, or general inquiries, please visit the official ECCO website or contact their

customer support department. You can also visit the [ECCO Store on Amazon](#) for more information and product resources.



Related Documents - 11-048CAC-E

	<p>ECCO Connect Kit EC101 Installation and Operation Instructions</p> <p>Comprehensive guide for installing and operating the ECCO Connect Kit EC101, detailing safety precautions, product specifications, kit contents, wiring diagrams, flash pattern configurations, and warranty information for ECCO vehicle warning systems.</p>
	<p>ECCO 12 Series Vantage Lightbars: Installation and Operation Instructions</p> <p>Comprehensive guide for installing and operating ECCO 12 Series Vantage™ Lightbars, covering specifications, mounting, wiring, maintenance, and troubleshooting.</p>
	<p>ECCO 12+ Pro Vantage™ Series Lightbars: Installation and Operation Manual</p> <p>Comprehensive installation and operation guide for ECCO 12+ Pro Vantage™ Series Lightbars. Covers safety, mounting, wiring, maintenance, troubleshooting, and parts. Essential for emergency vehicle lighting systems.</p>
	<p>ECCO 11 Series ReflexL® Narrow LED Lightbar - Compact Warning Light</p> <p>Discover the ECCO 11 Series ReflexL® Narrow LED Lightbar. Compact, durable, and versatile warning light with multiple mounting options, 35 flash patterns, and SAE Class 1, R10, R65, IP65/IP69K ratings. Ideal for work and utility vehicles.</p>
	<p>ECCO Product Catalog and Patent Information</p> <p>A comprehensive list of vehicle lighting and accessory products from Electronic Controls Company (ECCO), detailing product series, patent numbers, and status. Includes information on light bars, beacons, sounders, and more.</p>



Detailed information on ECCO's 40 Series Grommet Mount Back-Up Alarms, featuring Smart Alarm technology, easy installation, and key specifications for vehicle safety.