

Ravemen FR300, CL01

RAVEMEN FR300 and CL01 Bike Lights Instruction Manual

Models: FR300 (Front Light), CL01 (Rear Light)

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1. INTRODUCTION

Thank you for choosing the RAVEMEN FR300 and CL01 Bike Lights bundle. This manual provides essential information for the safe and effective use of your new bike lights. Please read it thoroughly before installation and operation, and retain it for future reference.

Package Contents:

- 1 x RAVEMEN FR300 Front Bike Light
- 1 x RAVEMEN CL01 Rear Bike Light
- Mounting accessories for CL01 (saddle rail mount, seatpost strap, zip ties)
- USB charging cables



Image 1.1: The RAVEMEN FR300 front light (bottom) and CL01 rear light (top) included in the bundle.

2. SETUP AND INSTALLATION

2.1 CL01 Rear Light Mounting

The CL01 rear light offers two primary mounting options: under the saddle rail or on the seatpost.

Saddle Rail Mount:

1. Ensure your saddle rails have sufficient spacing. Refer to the diagram below for required dimensions (approximately 42.3mm to 49.15mm).
2. Attach the saddle rail mount to the underside of your saddle rails using the provided zip ties.
3. Slide the CL01 light onto the mount until it clicks securely into place.

Seatpost Mount:

1. Secure the seatpost strap to the back of the CL01 light.
2. Wrap the strap around your bicycle's seatpost and fasten it securely.
3. Adjust the angle of the light for optimal visibility.

Two Ways to Mount

Saddle Rail Mount



Seatpost Mount



* confirm your saddle rail spacing before purchase

Image 2.1: Illustration of the two mounting methods for the CL01 rear light: saddle rail mount (left) and seatpost mount (right).

Small Size

confirm your saddle rail spacing before purchase



Image 2.2: Diagram showing the required saddle rail spacing (42.3mm to 49.15mm) for the CL01 saddle rail mount. Please confirm your saddle rail spacing before purchase.

2.2 FR300 Front Light Mounting

The FR300 front light typically mounts to your bicycle's handlebars. Specific mounting instructions will depend on the included bracket type. Generally, secure the bracket to your handlebars and then slide the FR300 light onto the bracket until it locks into place. Ensure the light is firmly attached and pointed forward, slightly angled downwards to illuminate the road without blinding oncoming traffic.

3. OPERATION

3.1 Power On/Off

To power on or off either the FR300 or CL01 light, press and hold the power button for approximately 1-2 seconds. A short press typically cycles through light modes.

3.2 CL01 Rear Light Modes

The CL01 rear light features multiple modes to suit various riding conditions and optimize battery life. Short press the power button to cycle through the modes:

- **High:** 5 Lumens, approximately 5 hours runtime
- **Low:** 2 Lumens, approximately 10 hours runtime
- **Warning Flashing:** 30 Lumens, approximately 9.5 hours runtime
- **Rapid Flashing:** 5 Lumens, approximately 11 hours runtime
- **Slow Flashing:** 0.5 Lumens, approximately 45 hours runtime



Image 3.1: Visual representation of the CL01 rear light's five modes and their approximate runtimes.

3.3 Smart Auto On/Off Feature (CL01)

The CL01 rear light includes an intelligent auto on/off mode to conserve battery. When activated, the light will automatically turn off after two minutes of stillness. It will then automatically power back on when it detects vibration, indicating you have resumed your ride. This feature is particularly useful for urban cycling with frequent stops.



Image 3.2: Illustration of the CL01's auto on/off functionality, showing it powers off after 2 minutes of idle time and powers on with vibration.

3.4 Brake Detection Feature (CL01)

For enhanced safety, the CL01 features a brake detection system. When the light senses a reduction in speed (braking), it automatically increases its brightness for 2 seconds. This alerts following vehicles or cyclists to your deceleration, reducing the risk of rear-end collisions. **Note: This braking mode does not function when the light is set to 'Slow Flashing' mode.**

Brake. Brighten. Be Seen.

Auto-boosts the light for 2s
when you brake to warn cars behind



Image 3.3: Depiction of the CL01's brake detection feature, showing the light automatically boosting brightness for 2 seconds upon sensing braking.

3.5 Battery Level Indicator (CL01)

To check the battery level of the CL01, single-click the power button when the light is off. The indicator light will show the current battery status:

- **Green:** Battery level above 40%
- **Red:** Battery level between 5% and 40% (charge soon)
- **Flashing Red:** Battery level below 5% (charge immediately)

Lightweight & Handy

Blends in without weighing your ride down



Single click while
off to see the power level



○ >40%

○ 5%-40%

★ charge your
light soon

22g
0.78 oz

Image 3.4: The CL01 light in hand, illustrating how to check the power level with a single click when off, and the corresponding indicator colors.

3.6 FR300 Front Light Operation

The FR300 front light operates similarly to the CL01. Press and hold the power button to turn it on or off. Short press the power button to cycle through its various light modes (e.g., High, Medium, Low, Flashing). Refer to the specific instructions provided with the FR300 for detailed mode specifications and runtimes.

4. MAINTENANCE

4.1 Charging

Both the FR300 and CL01 lights are rechargeable via USB. Use the provided USB cables to connect the lights to a standard USB power source (e.g., computer, wall adapter). The indicator light will typically show red during charging and turn green when fully charged. Avoid overcharging by disconnecting once fully charged.

4.2 Cleaning

Clean the light bodies and lenses with a soft, damp cloth. Do not use abrasive cleaners or solvents, as these can damage the plastic components or lens coating. Ensure the charging port cover is securely closed to prevent water ingress.

4.3 Storage

When storing the lights for extended periods, ensure they are fully charged. Recharge them every 3-6 months to maintain battery health. Store in a cool, dry place away from direct sunlight.

5. TROUBLESHOOTING

- **Light does not turn on:** Ensure the battery is charged. Press and hold the power button for 1-2 seconds to power on.
- **Light does not charge:** Check the USB cable and power source. Ensure the charging port is clean and free of debris.
- **CL01 Auto On/Off not working:** Ensure the light is in a mode that supports auto on/off. The feature relies on vibration detection; ensure the light is securely mounted.
- **CL01 Brake Detection not working:** This feature is not active in 'Slow Flashing' mode. Ensure the light is in a compatible mode and securely mounted to detect deceleration accurately.
- **Light flickers or turns off unexpectedly:** This may indicate a low battery. Recharge the light. If the issue persists, contact customer support.

6. SPECIFICATIONS

6.1 CL01 Rear Light

Feature	Detail
Max Output	30 Lumens (Warning Flashing)
Beam Angle	300 degrees
Modes	High, Low, Warning Flashing, Rapid Flashing, Slow Flashing
Max Runtime	45 hours (Slow Flashing)
Weight	22g (0.78 oz)
Special Features	Brake Detection, Smart Auto On/Off, Battery Indicator
Mounting	Saddle Rail, Seatpost

Streamlined Build Ultra Wide Side Visibility

keep you visible to others, not just from behind



Image 6.1: The CL01 rear light mounted on a bicycle, highlighting its 300-degree wide-angle visibility for safety.

6.2 FR300 Front Light

Feature	Detail
Output	Typically 300 Lumens (specifics may vary by mode)
Modes	Multiple steady and flashing modes
Mounting	Handlebar mount
Charging	USB Rechargeable

7. WARRANTY INFORMATION

RAVEMEN products are covered by a limited warranty against manufacturing defects. The warranty period typically begins from the date of purchase. Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, please refer to the official RAVEMEN website or contact customer support.







8. CUSTOMER SUPPORT

If you encounter any issues or have questions regarding your RAVEMEN FR300 and CL01 bike lights that are not covered in this manual, please contact RAVEMEN customer support. You can typically find contact information on the official RAVEMEN website or through your retailer.

Website: www.ravemen.com (Example link, please verify official website)

Email: support@ravemen.com (Example email, please verify official support email)

Related Documents - FR300, CL01

	<p>RAVEMEN FR300 ANT+ Bicycle Light User Manual</p> <p>Comprehensive user manual for the RAVEMEN FR300 ANT+ bicycle light, detailing features, operation, pairing, charging, and warranty information for cyclists.</p>
	<p>RAVEMEN FR300 ANT+ Bike Light User Manual</p> <p>Comprehensive user manual for the RAVEMEN FR300 ANT+ bike light, detailing features, operation, specifications, and warranty information.</p>
	<p>RAVEMEN CL01 Bicycle Light User Manual</p> <p>User manual for the RAVEMEN CL01 bicycle light, covering features like power button operation, auto on/off and brake detection modes, mode memory, battery status, USB-C charging, and warranty details.</p>
	<p>Ravemen FR300 Bike Light User Manual</p> <p>Comprehensive user manual for the Ravemen FR300 bike light, covering operation, features, battery indicator, charging, warranty, and exclusions in multiple languages.</p>
	<p>RAVEMEN TR500 Bicycle Rear Light User Manual</p> <p>Comprehensive user manual for the RAVEMEN TR500 rear bicycle light, covering technical specifications, performance, mounting, safety, and warranty information.</p>
	<p>Ravemen CL05 Bicycle Rear Light - User Manual, Specifications, and Operation</p> <p>Comprehensive user manual for the Ravemen CL05 bicycle rear light. Includes technical specifications, performance parameters, operating instructions, charging guide, mounting tips, safety warnings, and warranty information.</p>

