

自行车尾灯通用使用说明书（中英文版）

第一部分：中文版本 自行车尾灯通用说明书

一、产品适用范围

本款自行车尾灯为骑行专用后置安全警示配件，主打夜间、傍晚、雾天、雨天等低能见度环境下的后方车辆与行人警示功能，适配市面上绝大多数自行车、电动助力自行车，可安装于座管、后货架、坐垫下方、车架后置点位等常规位置，不分车型规格，山地车、公路车、通勤车、折叠车、学生单车、休闲单车均可通用。产品分为 USB 充电款、纽扣电池款两大主流类型，部分款式兼具主动 LED 闪光与被动反光警示双重功能，具备防水抗摔、体积小巧、安装快捷、多模式闪光、续航持久的特点，核心作用是提升骑行者后方辨识度，提醒后方车辆、行人及时避让，规避追尾、剐蹭风险，是夜间骑行必须搭配前灯使用的核心安全配件，无灯光环境骑行强制配备，适用于日常通勤、夜骑锻炼、户外长途骑行、校园代步等全场景。

二、产品核心结构与材质

- 灯体主体：**高强度 ABS 环保工程塑胶材质，轻量化一体成型，外壳圆润无棱角，具备 IPX4 级及以上防水性能，可应对雨天、雾天、路面溅水，户外颠簸骑行不易开裂、破损，抗摔耐磨，适配各类复杂骑行路况
- 警示光源：**高亮 LED 灯珠+高反光片组合，LED 灯光穿透力强，被动反光片可反射后方车辆灯光，双重警示更醒目；灯光柔和不刺眼，不会对后方驾驶员造成眩光，能耗低、使用寿命长，支持常亮、快慢闪光、呼吸闪光等多种模式
- 固定配件：**可调节快拆硅胶绑带/卡扣式支架，弹性适配不同直径座管、车架点位，无需工具即可完成安装拆卸，自带防滑硅胶垫，固定后颠簸不松动、不转动、不位移，可灵活调整安装角度
- 功能部件：**单键多功能开关、充电接口（充电款，带密封防水塞）、电池仓（电池款）、电量指示灯（部分款），操作简单，单手即可完成开关与模式切换，防水塞有效阻隔水分、灰尘，防止接口短路损坏

三、使用前准备

- 配件清点与外观检查：取出尾灯主体、硅胶绑带/支架、密封配件，充电款额外核对 USB 充电线，电池款备好对应型号纽扣电池；仔细检查灯体无裂痕、无凹陷、无破损，按键回弹灵敏无卡顿，硅胶绑带无老化断裂，防水塞/电池仓密封垫完好无脱落，灯光无暗斑、无故障，整体功能正常。
- 电量/电池预处理：充电款首次使用前需充满电量，连接 USB 充电线充电时指示灯常亮/闪烁提示，充满后指示灯变色或熄灭，及时断开电源；电池款打开电池仓，按照仓内标注的正负极方向平稳装入电池，盖紧电池仓并确认密封严实，避免缝隙进水进灰。
- 安装位置确认：选择车架后方无遮挡、醒目位置安装，优先推荐座管下端、坐垫后方、后货架侧边，确保灯光完全朝后，无车架、配件遮挡光线，不影响骑行蹬踏、车把转动，折叠车需确认展开后无部件挤压灯体。
- 功能预测试：短按功能按键，依次测试开关与各类闪光模式，确认灯光亮起正常、模式切换顺畅、无频闪异常、无突然熄灭，测试完毕后关闭灯光，等待正式安装。

四、分步安装与使用步骤

（一）快速安装方法

1. 硅胶绑带款：将硅胶绑带绕过选定的安装点位（座管/车架），把绑带卡扣扣入灯体底部卡槽，轻轻拉紧绑带，调整松紧度，确保灯体贴合稳固，轻晃无松动即可。
2. 卡扣支架款：先将支架固定在安装点位，拧紧调节卡扣，再将尾灯主体卡入支架卡槽，听到“咔哒”声代表卡合到位，无需额外螺丝固定，新手也可快速操作。
3. 角度调试：安装完成后，微调灯体角度，确保灯光完全水平朝后，略微向下倾斜，最大化覆盖后方视野，避免灯光朝上或歪斜，降低警示效果。

（二）灯光模式操作规范

1. 开机与关机：短按功能按键一次，即可开机进入默认闪光模式；开机状态下，长按按键 3-5 秒，或连续短按切换至关机模式，即可关闭灯光，禁止频繁快速开关机，避免按键失灵。
2. 模式循环切换：开机后，每短按一次按键，依次循环切换模式：**常亮模式→慢闪模式→快闪模式→呼吸闪模式→关机**，部分款式新增 SOS 求救模式，可根据场景灵活选用。
3. 场景适配建议：夜间无路灯路段、郊区骑行选用快闪模式，警示性最强；市区有路灯、车流密集路段选用慢闪/呼吸闪模式，兼顾警示与续航；雾天、雨天视线差时，全程保持高频闪光，提升后方辨识度。

五、日常使用规范

- 强制使用要求：夜间、傍晚、阴雨雾天、隧道等低能见度环境骑行，必须开启尾灯，且需搭配自行车前灯同步使用，实现前后双重警示，全方位保障骑行安全，严禁只开前灯、不开尾灯。
- 使用禁忌：严禁遮挡尾灯灯光，严禁将尾灯朝向侧面、前方，失去后置警示意义；骑行过程中不要随意触碰按键，避免误触关机或切换模式；到达目的地后，可拆下尾灯随身携带，防止丢失或被盗。
- 防水使用说明：本产品具备基础生活防水性能，可应对雨天骑行、路面溅水，但严禁长时间浸泡在水中、暴雨中直冲，严禁水下使用，防止水分渗入灯体导致短路损坏。
- 日常携带：硅胶绑带款可快速拆卸，体积小巧不占空间，方便放入口袋、骑行包内，户外骑行随时取用安装，无需反复拆装绑带支架。

六、日常充电/换电池与保养

（一）充电款专属保养

- 充电操作：充电时抠开充电口防水塞，连接 USB 充电线与常规电源，指示灯亮起代表正常充电，充满后及时拔掉充电线，务必盖紧防水塞，防止灰尘、雨水进入接口造成氧化损坏。
- 续航养护：长期不使用时，每 1-2 个月补充充电一次，避免内置锂电池亏电老化，缩短使用寿命；禁止使用大功率快充、非原装充电线充电，防止损伤电池。

（二）电池款专属保养

- 电池更换：灯光变暗、闪烁异常时，及时打开电池仓，更换同型号全新纽扣电池，严格遵循正负极标识安装，严禁新旧电池混用、不同型号电池混用；长期闲置前，务必取出电池，防止电池漏液腐蚀灯体内部零件。

（三）整体通用保养

- 日常清洁：每次骑行后，用干净软布擦拭灯体表面灰尘、泥沙、雨水，保持表面干燥清洁，禁止使用强酸强碱清洁剂、酒精、钢丝球擦拭，避免腐蚀外壳、损伤反光片与灯珠。
- 定期检查：每次骑行前检查灯光亮度、模式切换是否正常，绑带/支架固定是否牢固，防水塞、电池仓是否密封；长途骑行前确认电量/电池充足，避免途中灯光熄灭失去警示作用。

- 收纳存放：不使用时，放置在干燥、通风、阴凉的位置，避免高温暴晒、靠近明火、重物挤压、摔落磕碰，防止灯体变形、电池鼓包、配件损坏。

七、重要注意事项（核心安全警示）

强制性安全警示： 1. 本尾灯仅为骑行后置警示配件，不可替代交通信号灯，无法杜绝所有交通事故，骑行时需时刻观察后方路况，主动避让车辆，不可完全依赖尾灯； 2. 灯光变暗、闪烁异常、无法开机时，需立即充电或更换电池，故障状态下严禁继续使用，避免失去警示引发追尾风险； 3. 严禁拆解、改装灯体内部结构，禁止私自更换灯珠、电池，防止短路、漏电、电池漏液伤人； 4. 儿童需在成人监护下安装、使用，避免儿童玩耍尾灯、误食纽扣电池、直视强光损伤视力； 5. 尾灯出现进水、外壳开裂、电池鼓包等问题，必须立即停止使用，更换新品，切勿带病使用。

- 避免将尾灯长时间放置在高温环境中（如汽车中控台、暴晒窗台），防止电池老化鼓包、塑胶外壳变形脆化、反光层失效。
- 安装时确保绑带/支架松紧适中，过紧易损坏座管/车架，过松易导致尾灯晃动、脱落，骑行前务必二次检查稳固性。
- 废旧电池、废弃尾灯请勿随意丢弃，纽扣电池属于有害垃圾，需按照环保分类标准处理，避免污染土壤水源；充电款尾灯交由专业回收机构处理。
- 本产品仅适用于自行车及轻型电动助力车后置警示，严禁用于机动车、极限运动、水下作业等其他场景。

八、常见问题与处理方法

- 灯光不亮、无法开机：充电款及时补足电量，电池款更换全新同型号电池，检查正负极安装是否正确，清理按键缝隙杂质，排除卡顿问题。
- 灯光昏暗、闪烁异常：充电款彻底充满电，电池款更换新电池，擦拭灯珠与反光片表面灰尘，长期亏电导致电池老化直接更换尾灯。
- 尾灯松动易脱落：重新拉紧硅胶绑带、扣紧支架卡扣，加装防滑垫片，调整安装位置，确保灯体完全卡合无间隙。
- 充电异常、充不来电：清理充电接口内灰尘杂质，更换原装充电线，检查防水塞是否盖合到位，接口氧化损坏需停止使用并更换新品。

Part Two: English Version General Instructions for Bicycle Rear Light

1. Product Scope of Application

This bicycle rear light is a special rear safety warning accessory for cycling, mainly used for warning vehicles and pedestrians behind in low-visibility environments such as night, dusk, foggy and rainy days. It is suitable for almost all bicycles and electric-assisted bicycles on the market, and can be installed on conventional positions including seat post, rear rack, under the seat and rear frame points, compatible with all types of bikes: mountain bikes, road bikes, commuter bikes, folding bikes, student bikes and leisure bikes.

It is divided into two mainstream types: USB rechargeable type and button battery type. Some models have dual functions of active LED flashing and passive reflective warning, featuring waterproof and drop-resistant, compact size, quick installation, multi-flashing modes and long battery life. Its core function is to improve the rider's rear visibility, remind vehicles and pedestrians behind to avoid in time, and reduce the risk of rear-end collision and scratch. It is a core safety accessory that must be used with a front light for night riding, mandatory for riding in non-light environments, and suitable for all scenarios such as daily commuting, night riding exercise, outdoor long-distance riding and campus travel.

2. Core Product Structure and Materials

- **Light Body:** High-strength ABS eco-friendly engineering plastic, lightweight integrated molding, with smooth and edge-free shell, IPX4 or above waterproof rating, resistant to rain, fog and road splashing, not easy to crack or damage during bumpy outdoor riding, wear-resistant and drop-resistant, adapting to various complex riding road conditions.
- **Warning Light Source:** High-brightness LED lamp bead + high-reflective sheet combination, LED light has strong penetration, and the passive reflective sheet can reflect the light of vehicles behind, realizing dual warning for higher visibility; the light is soft and not dazzling, will not cause glare to drivers behind, with low energy consumption, long service life, supporting multiple modes: steady on, slow flash, fast flash and breathing flash.
- **Fixing Accessories:** Adjustable quick-release silicone strap / buckle bracket, elastically adapting to seat posts and frame points of different diameters, tool-free installation and disassembly, equipped with anti-slip silicone pad, firm fixation without looseness, rotation or displacement during riding, and flexible angle adjustment.
- **Functional Parts:** Single multi-function switch, charging port (rechargeable type, with sealed waterproof plug), battery compartment (battery type), power indicator (some models), simple operation, one-handed switch and mode switching, waterproof plug effectively blocks water and dust to prevent interface short circuit damage.

3. Pre-use Preparation

- **Accessory and Appearance Check:** Take out the rear light body, silicone strap/bracket and sealing accessories. For rechargeable type, additionally prepare a USB charging cable; for battery type, prepare button batteries of corresponding model. Carefully check that the light body has no cracks, dents or damage, the button rebounds sensitively without jamming, the silicone strap has no aging or breakage, the waterproof plug/battery compartment sealing gasket is intact without falling off, the light has no dark spots or faults, and the overall function is normal.
- **Power/Battery Pre-treatment:** Fully charge the rechargeable type before first use, the indicator lights up/flashes during charging via USB cable, and the indicator changes color or turns off when fully charged, disconnect the power in time; for battery type, open the battery compartment, install batteries smoothly according to the positive and negative marks marked in the compartment, close the battery compartment tightly and confirm good sealing to avoid water and dust entering through gaps.
- **Installation Position Confirmation:** Choose an unobstructed and prominent position at the rear of the frame, preferably the lower end of the seat post, behind the seat or on the side of the rear rack, to ensure the light faces completely backward without being blocked by the frame or accessories, and does not affect pedaling or handlebar rotation. For folding bikes, confirm no parts squeeze the light body after unfolding.

4. Step-by-step Installation and Usage Steps

4.1 Quick Installation Method

1. **Silicone Strap Type:** Wrap the silicone strap around the selected installation point (seat post/frame), clip the strap buckle into the slot at the bottom of the light body, tighten the strap gently, adjust the tightness to ensure the light body fits firmly without shaking.
2. **Buckle Bracket Type:** Fix the bracket on the installation point first, tighten the adjusting buckle, then clip the rear light body into the bracket slot, a "click" sound means it is firmly locked, no extra screws needed, easy for beginners to operate.
3. **Angle Adjustment:** After installation, fine-tune the light body angle to ensure the light faces horizontally backward, tilting slightly downward to maximize the rear vision, avoid upward or skewed light which reduces the warning effect.

4.2 Light Mode Operation Specifications

1. **Power On/Off:** Short press the function button once to turn on and enter the default flashing mode; in the on state, long press the button for 3-5 seconds or continuously short press to switch to off mode to turn off the light. Do not turn on/off frequently and quickly to avoid button failure.
2. **Mode Cycle Switching:** After power on, short press the button once to switch modes cyclically in turn: **Steady On** → **Slow Flash** → **Fast Flash** → **Breathing**

Flash → **Off**. Some models add SOS distress mode, which can be flexibly selected according to scenarios.

3. Scenario Adaptation Suggestion: Choose fast flash mode for night non-street lamp roads and suburban riding for strongest warning; select slow flash/breathing flash mode for urban street lamp and heavy traffic areas, balancing warning and battery life; keep high-frequency flashing in foggy and rainy days with poor visibility to improve rear visibility.

5. Daily Usage Specifications

- **Mandatory Usage Requirements: The rear light must be turned on when riding in low-visibility environments such as night, dusk, rainy and foggy days and tunnels**, and must be used synchronously with a bicycle front light to achieve dual front and rear warnings, fully ensuring riding safety. It is strictly forbidden to turn on only the front light without the rear light.
- **Usage Taboos:** It is strictly forbidden to block the rear light or face it to the side or front, which loses the rear warning significance; do not touch the button randomly during riding to avoid accidental power off or mode switching; after arriving at the destination, remove the rear light and carry it with you to prevent loss or theft.
- **Waterproof Instructions:** This product has basic daily waterproof performance, suitable for riding in rain and road splashing, but is strictly forbidden to soak in water for a long time, direct impact in heavy rain or use underwater to prevent water penetration into the light body causing short circuit damage.
- **Daily Carrying:** The silicone strap type can be quickly disassembled, compact and space-saving, easy to put in pockets or riding bags, ready for installation during outdoor riding without repeated disassembly of the strap and bracket.

6. Daily Charging/Battery Replacement and Maintenance

6.1 Exclusive Maintenance for Rechargeable Type

- **Charging Operation:** Pry open the charging port waterproof plug during charging, connect the USB charging cable to a regular power supply, the indicator lights up for normal charging, unplug the charging cable in time after full charge, and make sure to cover the waterproof plug tightly to prevent dust and rain from entering the interface causing oxidation damage.
- **Battery Life Maintenance:** Recharge every 1-2 months when not in use for a long time to avoid over-discharge aging of the built-in lithium battery and shorten service life; do not use high-power fast charging or non-original charging cables to avoid battery damage.

6.2 Exclusive Maintenance for Battery Type

- **Battery Replacement:** When the light dims or flashes abnormally, open the battery compartment in time and replace with new button batteries of the same model, install strictly according to the positive and negative marks, do not mix old and new batteries or different models; take out the batteries before long-term idling to prevent battery leakage from corroding internal parts of the light body.

6.3 General Overall Maintenance

- **Daily Cleaning:** Wipe dust, sediment and rainwater on the surface of the light body with a clean soft cloth after each ride, keep the surface dry and clean. Do not use strong acid and alkali cleaners, alcohol or steel wool to wipe, so as not to corrode the shell, damage the reflective sheet and lamp bead.
- **Regular Inspection:** Check the light brightness, mode switching and strap/bracket fixation before each ride, and ensure the waterproof plug and battery compartment are sealed; confirm sufficient power/battery before long-distance riding to avoid light extinction and loss of warning during the trip.
- **Storage:** Store in a dry, ventilated and cool place when not in use, avoid high-temperature exposure, open flames, heavy extrusion, falling and bumping to prevent light body deformation, battery bulging and accessory damage.

7. Important Safety Notes (Core Safety Warnings)

Mandatory Safety Warnings: 1. This rear light is only a cycling rear warning accessory, cannot replace traffic lights, and cannot eliminate all traffic accidents. Riders must always observe the rear road conditions and take the initiative to avoid vehicles, not rely entirely on the rear light; 2. Charge or replace batteries immediately when the light dims, flashes abnormally or fails to turn on, and it is strictly forbidden to continue using in faulty state to avoid loss of warning and rear-end collision risk; 3. It is strictly forbidden to disassemble or modify the internal structure of the light body, and privately replace lamp beads and batteries to prevent short circuit, electric leakage and battery leakage injury; 4. Children need to be supervised by adults to install and use, avoid children playing with the rear light, ingesting button batteries or looking directly at strong light to damage eyesight; 5. Stop using immediately and replace with a new product if the rear light has water ingress, shell cracking or battery bulging, do not use with faults.

- Avoid placing the rear light in a high-temperature environment (such as car center console, exposed windowsill) for a long time to prevent battery aging and bulging, plastic shell deformation and embrittlement, and reflective layer failure.
- Ensure moderate tightness of the strap/bracket during installation, too tight will damage the seat post/frame, too loose will cause the rear light to shake and fall off, conduct a second check of firmness before riding.
- Do not discard waste batteries and rear lights at will. Button batteries are hazardous waste and should be disposed of in accordance with environmental

protection classification standards to avoid soil and water pollution; rechargeable rear lights should be handed over to professional recycling institutions.

- This product is only suitable for rear warning of bicycles and light electric-assisted vehicles, and is strictly prohibited for motor vehicles, extreme sports, underwater operations and other scenarios.

8. Troubleshooting

- **Light Not Working, Failure to Turn On:** Recharge the rechargeable type in time, replace with new batteries of the same model for the battery type, check correct positive and negative installation, clean impurities in the button gap to eliminate jamming.
- **Dim Light, Abnormal Flashing:** Fully charge the rechargeable type, replace with new batteries for the battery type, wipe dust on the lamp bead and reflective sheet surface, replace the rear light directly if the battery is aged due to long-term over-discharge.
- **Loose and Easy to Fall Off:** Retighten the silicone strap and buckle the bracket, add anti-slip gaskets, adjust the installation position to ensure the light body is fully engaged without gaps.
- **Abnormal Charging, Unable to Charge:** Clean dust and impurities in the charging port, replace the original charging cable, check if the waterproof plug is closed properly, stop using and replace with a new product if the interface is oxidized and damaged.