16.5cmx11.5cm（高x宽）

User Manual

Smart Bike Light with Controller

ALL IN ONE

- Left Turn Signal
- Right Turn Signal
- Hazard Light
- Brake Light

Product Model

BL002: A set ofone controller and two bicycle lights

Product Description

The smart bicycle light is designed to work in conjunction with the accompanying controller. Its main features include left and right turn signals, hazard lights, brake lights, and various lighting modes such as white steady, white flashing, red steady, and red flashing. These features significantly enhance riding safety and visibility. The lights and controller are securely attached to the base using a magnetic connection. The base is fixed with silicone straps and can be easily and securely mounted in various positions on the bicycle, such as the handlebars, the ends of road bike drop bars, under the seat, or on the rear wheel stays. The installation process is simple and quick.

Function Description

Turn Signal Function:

- **Left Turn Signal:** Press the left turn button (L key) on the controller to activate the yellow light, indicating a left turn signal.

- **Right Turn Signal:** Press the right turn button (R key) on the controller to activate the yellow light, indicating a right turn signal.

Hazard Light Function:

- **Hazard Light:** Press the hazard button on the controller to activate the yellow lights in a double-flash mode, enhancing visibility and safety during nighttime riding.

Brake Light Function:

- **Brake Light:** When the light is in red mode and detects a braking action, the red light will automatically illuminate in strobe mode, alerting vehicles and pedestrians behind you.

Synchronization Function:

- **Synchronization:** When the lights are powered on and set to flashing mode, there may be inconsistencies in the flashing frequency due to different power-on times. Press the synchronization button on the controller to ensure all lights flash at the same frequency. Please wait 3-5 seconds as the signal synchronizationprocess completes.

Lighting Modes:

- **White Steady Mode:** The white light remains steadily on to improve forward visibility.
- **White Flashing Mode:** The white light flashes to enhance visibility during the day or in low-light conditions.
- **Red Steady Mode:** The red light remains steadily on to improve rear visibility.
- **Red Flashing Mode:** The red light flashes to enhance warning visibility during nighttime or low-light conditions.

Battery Specifications and Runtime:

- **Controller Battery Capacity:** 550mAh
- **Bicycle Light Battery Capacity:** 1200mAh

Runtime:

1.Bicycle light white steady mode (31 LEDs): approximately 3 hours
2.Bicycle light white steady mode (28 LEDs): approximately 3.5 hours
3.Bicycle light white flashing mode (31 LEDs): approximately 6 hours
4.Bicycle light white flashing mode (28 LEDs): approximately 6.5 hours

5.Bicycle light red steady mode (28 LEDs): approximately 5 hours
6.Bicycle light red flashing mode (28 LEDs): approximately 11 hours
7.Controller battery life: approximately 22 hours

Low Battery Warning:

- **Bicycle Light:** When the battery is low, the three center lights will flash red rapidly and then automatically shut down. Please charge the light as soon as possible.
- **Controller:** When the battery is low, the triangle symbol above the hazard button will flash red rapidly and then automatically shut down. Please charge the controller as soon as possible.

Connection Method:

- **Magnetic Connection:** The light is securely attached to the base using an internal magnetic mechanism.This design allows for easy installation and removal while ensuring stability during riding.

Charging Indicator:

- **Bicycle Light Charging:** The indicator light on the power button is red while charging; it turns green when fully charged.

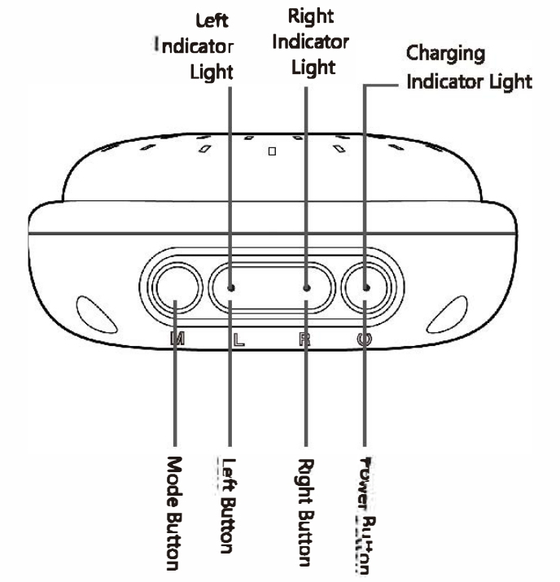
- **Controller Charging:** The indicator light on the power button is red while charging; it turns green when fully charged.

Operating Guide:

Button Descriptions:

Bicycle Light Buttons:

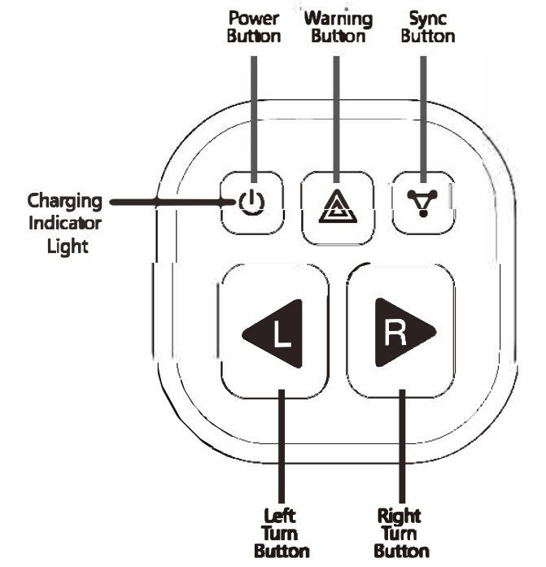
- **Power Button:** Used to turn the light on or off. The indicator light on the power button serves as the charging indicator; it is red while charging and turns green when fully charged.
- **L Button:** Sets the light as the left-side light and fixes it on the left side of the bicycle. When the L button on the controller is pressed, the light will flash yellow.
- **R Button:** Sets the light as the right-side light and fixes it on the right side of the bicycle. When the R button on the controller is pressed, the light will flash yellow.
- **M Mode Button:** Used to switch the lighting modes. Press the M button to cycle through the modes: white steady (28 LEDs), white steady (31 LEDs), white flashing (28 LEDs), white flashing (31 LEDs), red steady (28 LEDs), and red flashing (28 LEDs).



Controller Buttons:

- **Power Button:** Press and hold for 2 seconds to turn the controller on or off. When the controller is turned off, it will simultaneously turn off all the lights. The indicator light is red while charging and turns green when fully charged.
- **Warning Button:** Activates the double flash mode on the lights, causing them to flash yellow in a double flash pattern, providing a warn ingeffect.

- **Sync Button:** Used to synchronize the flashing frequency of the lights. If multiple lights have different flashing frequencies after being turned on, pressing the sync button will ensure all lights flash at the same frequency.
- **Left Turn Button (L Button):** When the L button is pressed, the left-side light on the bicycle will flash yellow, indicating a left turn.
- **Right Turn Button (R Button):** When the R button is pressed, the right-side light on the bicycle will flash yellow, indicating a right turn.



Bicycle Light Usage Instructions:

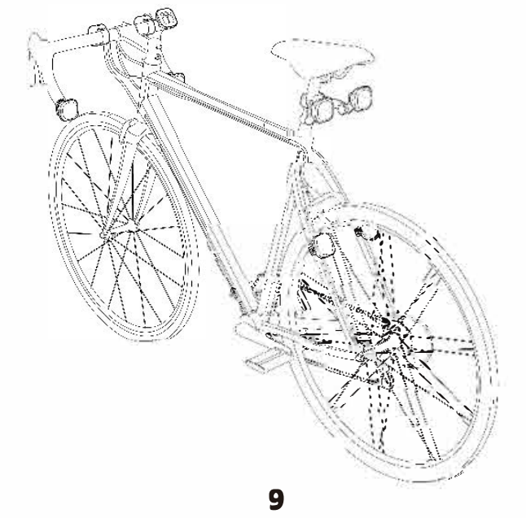
1.Install the base on a suitable position on the bicycle according to your needs, such as the handlebars, the ends of road bike drop bars, under the seat, or on the rear wheel stays.
2.Turn on the controller and the bicycle lights separately.
3.After turning on the bicycle light, press the M mode button to select the desired lighting effect:
  1.**White steady or flashing mode:** Suitable for mounting on the front handlebars as a front warning light.
  2.**Red steady or flashing mode:** Suitable for mounting on the rear of the bicycle as a tail light.
4.After turning on the bicycle light, press the L or R button, and then mount the bicycle light on the corresponding left or right side of the bicycle.
5.In flashing mode, due to different power-on times, the flashing frequency of the lights may be inconsistent. In this case, press the sync button on the controller to synchronize all lights to flash at the same frequency.

Safety Precautions:

- **Waterproof Design:** Avoid exposing the lights to water for extended periods. Although the product is rainproof, prolonged exposure to water may affect its performance.
- **Usage Environment:** When using the lights, ensure that you select the appropriate lighting mode and adjust the light settings according to road conditions and environmental changes to ensure safe riding.

Installation Guide

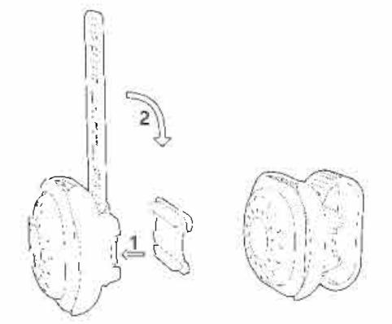
The bicycle light can be installed in various locations on the bike, including the handlebars, the ends of the drop bars on road bikes, under the seat, and on the rear wheel stays.



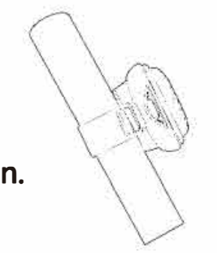
1. Installing the Light Base on the Handlebars

(1) Insert the silicone pad into the back of the light base.

(2) Use the silicone strap to secure the light base to the handlebars. The strap has multiple holes, allowing you to choose the appropriate position based on the handlebar thicknes s,ensuring a secure fit of the base on the handlebars.



(3) Insert the bicycle light into the base. The light is securely attached to the base using magnetic attraction.

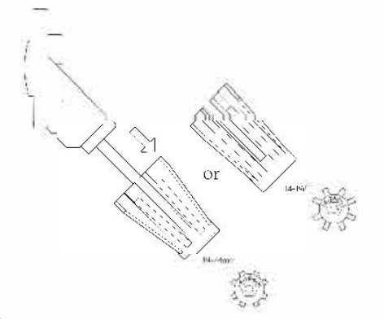


2. Installing the Light Base on the Rear Wheel Stays

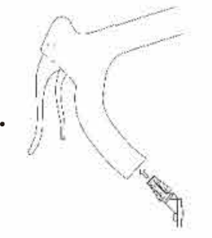
The installation method for the light base on the rear wheel stays is the same as on the handlebars.

3. Installing the Light Base on the Ends of Road Bike Drop Bars

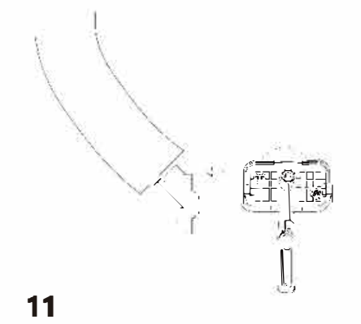
(1) Select the appropriate expansion screws (14-19mm or 19-24mm) and mounting brackets. Use a long screw to slightly connect them together. The screw should only be tightened slightly to avoid over-tightening, which may prevent it from fitting into the handlebars.



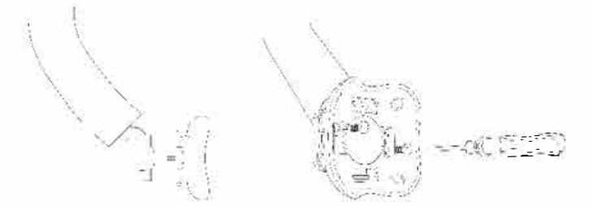
(2) Insert the connected mounting bracket and expansion piece into the handlebars.



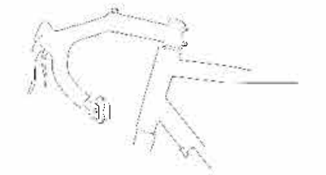
(3) Tighten the screw to expand the expansion piece inside the handlebars and secure it in place.



(4) Place the light base on the mounting bracket and secure it in place with the black screws.

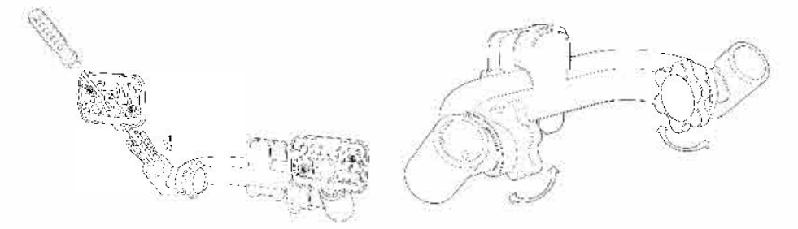


(5) The final result is as shown in the image below.

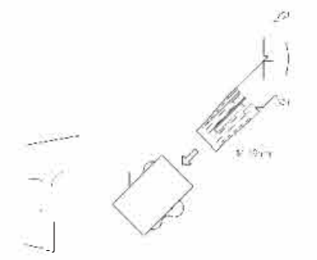


4. Installing the Light Base Under the Seat

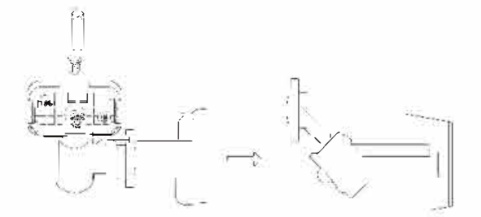
(1) Select the 14-19mm expansion piece and mounting bracket. Use a long screw to slightly connect them together. The screw should only be tightened slightly to avoid over-tightening, which may prevent it from fitting into the tail light bracket.



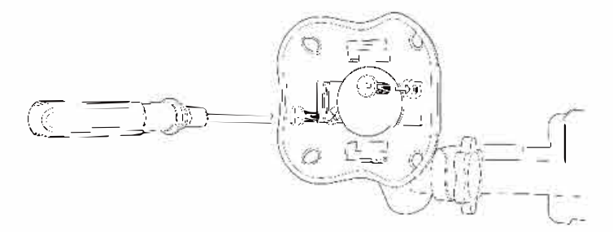
(2) Insert the connected mounting bracket and expansion piece into the tail light bracket.



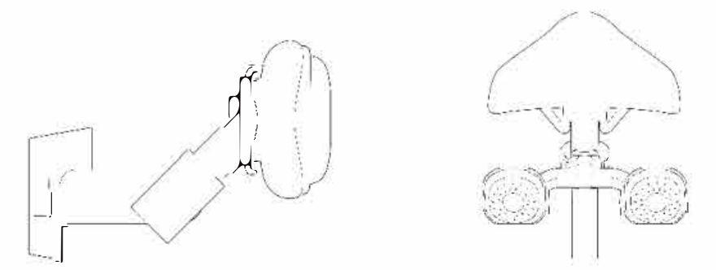
(3) Tighten the screw to expand the expansion piece inside the tail light bracket and secure it in place.



(4) Place the light base on the mounting bracket and secure it in place with the black screws.



(5) The final result is as shown in the image below.



Packing List

BL002 (a set with one controller and two bicycle lights)

Item	Description	Quantity
Smart Bicycle Light	Main light unit with multiple mode functions	2
Controller	Remote control unit with five buttons	1
Mounting Base	Magnetic base for securing the bicycle lights and controller	3
Silicone Pad	Silicone pad attached to the base for increased friction and stability	3
Silicone Strap	Strap for securing the mounting base to various parts of the bike	3

1. Enable and disable Bluetooth
First, users need to enable Bluetooth in the Settings of their phone or other device. This can usually be done in one of two ways:
Find the "Bluetooth" option in the Settings menu and turn on the Bluetooth switch.Swipe down from the top of the screen to open the status bar, and long press the Bluetooth icon in the Control Center to turn on Bluetooth.
The method of turning off Bluetooth is similar,
just find the Bluetooth switch in the above path and turn it off.
2. Device search and pairing
When Bluetooth is enabled, the device will automatically search for nearby Bluetooth devices. Users can see the list of searched devices in the phone's Bluetooth Settings screen. Next, the steps for device pairing are as follows:
Locate the device you want to connect to and click on its name BL002.
Depending on the device's prompts, you may need to enter a pairing code (usually "0000"", but it may also be customized by the device manufacturer).
When pairing is complete, the device will display a "Connected" or "paired" message, indicating that the connection was successful.

FCC ID Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that
interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

The devices has been evaluated to meet general RF exposure requirement，the device can be used in portable exposure condition with restriction

Possible Issues with the Bicycle Light and Solutions

Possible Issues	Cause Analysis	Solution
The light does not turn on	Battery power is insufficient	Check and charge the battery, ensuring the indicator light changes from red to green. If the problem persists, check the battery contacts for cleanliness and reinstall the battery.
The light does not flash	Incorrect flash mode setting or mode button malfunction	Press the M mode button to confirm the flash mode is selected. If this does not work, restart the light or check if the mode button is functioning properly.
The flash frequency is inconsistent	Frequency inconsistency due to different power-on sequences	Press the synchronization button on the controller to ensure all lights flash at the same frequency
The turn signal does not work	L button or R button is unresponsive, or the controller is not synchronized with the lights	Ensure the appropriate L or R button is pressed. If ineffective, try restarting the controller and lights, and ensure synchronization.
Low battery warning	Light flashes yellow three times intermittently, controller' s double flash button rapidly flashes	Charge promptly, ensuring both the light and controller have sufficient power.
The light or controllerdoes not stay fixed to the base	Loose magnetic connection or insecure silicone strap installation	Check the magnetic connection and silicone strap installation, ensuring the base is firmly secured. Reinstall if necessary.
The light does not turn on	Brake detection function malfunction or setting issue	Ensure the light is in red mode and check if the brake detection function is working correctly. If the issue persists, restart the light or contact customer service.
Charging indicator does not light up	Charger or charging cable malfunction, or poor connection	Check if the charger and charging cable are functioning properly, ensuring good connection. Replace charging equipment if needed.
Cannot switch light modes	Mode button malfunction or software issue	Try pressing the M mode button several times. If mode switching still fails, restart the light or contact technical support
Controller buttons are unresponsive	Button damage or insufficient battery power	Check and charge the controller, ensuring sufficient power. If buttons remain unresponsive, the controller or button components may need replacement.

Manufacturer Information

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