






(English) BC28R Smart Control Bicycle Light Combo

Technical Parameters

Mode	Front Light General Mode				Front Light Flash Mode	Tail Light Warning Mode				
	Turbo	High	Med	Low	Flash	Low	Low Slow	Low Fast	High	High Slow
 Output	2500 lumens	1400 lumens	600 lumens	50 lumens	600/50 lumens	10 lumens	10 lumens	10 lumens	20 lumens	20 lumens
 Runtime	2 hours 36 minutes*	7 hours	12 hours	52 hours	/	6 hours	10 hours	15 hours	3 hours 43 minutes	6 hours 38 minutes
 Distance / Warning	180 meters	127 meters	82 meters	23 meters	/	100 meters				
Intensity	8083 candela	4017 candela	1675 candela	137 candela	/	/				
 Impact Resistant	1.5 meters									
 Waterproof	IP66									

Note: The above specifications are from the results produced by Fenix through its laboratory testing using one Fenix ARB-L21-5000 V2.0 battery (front light)/one built-in 400mAh battery (tail light) under the temperature of 21±3°C and humidity of 50% - 80%. The true performance may vary according to different working environments and the actual battery used.

*The Turbo output is measured in total of runtime including output at reduced levels due to temperature or protection mechanism in the design.

FCC Statement

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.

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

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Warning

©Do NOT look directly at the light sources, stare at the beams for a long time, or shine this product directly into the eyes of anyone!

©Do NOT place this product in the reach of children!

©Do NOT place light heads near flammable objects, high temperatures can cause objects to overheat and become flammable/ignite!

©Do NOT use this product in inappropriate ways such as holding the product in your mouth, doing so could cause serious personal injury or death if the lights or internal batteries fail!

©This product will accumulate a significant amount of heat while operating, resulting in a high temperature of the light shells. Pay close attention to avoid burns!

©Turn off this product or remove the battery to prevent accidental activation when the product is placed in a closed and flammable environment such as pockets and backpacks!






©The LEDs of this product are not replaceable; so the whole product will need to be replaced when any one of the LEDs reaches the end of its lifespan.

Product Features

- ©Maximum output 2500 lumens, maximum beam distance 180 meters.
- ©Equipped with high-quality light sources: 1 × Cree XHP50D white LED, 1 × red COB.
- ©Smart linked-control solution for front and tail lights, efficient and convenient to operate.
- ©Front light displays the tail light mode status in real time, making riding safety indications clear at a glance.
- ©Uses an anti-glare cut-off facula line design to effectively reduce glare, meeting the needs of safe and courteous riding.
- ©Front light is powered one replaceable ARB-L21-5000 V2.0 battery.
- ©Tail light features a built-in 400 mAh battery.
- ©USB Type-C standard charging port.
- ©Battery level indication and low-voltage warning.
- ©IP66-rated protection and 1.5 meters impact resistance.
- ©Size: front light 4.33" × 1.14" × 1.57"/110 × 29 × 40 mm, taillight 1.38" × 1.42" × 1.30"/35 × 36 × 33 mm (excluding mounts).
- ©Weight: front light 8.47 oz/240 g, taillight 1.98 oz/56 g (including mount, battery, and accessories).

Operating Instructions

Front And Tail Light Pairing

By default, press and hold the tail light switch  for about 5 seconds; the tail light indicator  will flash red and green alternately, indicating it has entered the pairing mode; then single click the front light switch , the tail light indicator  will turn steady green, indicating it has received the front light signal; single click the tail light switch  again to confirm, and pairing is complete.

*Note:



1. After the initial pairing is completed, the front light automatically remembers the paired tail light, and no further pairing is required.

2. During pairing, the straight-line distance between the front light and the tail light should not exceed 1.5 meters.

3. The pairing wait time for both the front light and the tail light is 60 seconds; if there is no operation within 60 seconds, the pairing mode will automatically exit.

Front Light Operation



On/Off

Press and hold the front light switch  for 0.5 seconds to turn on the front light; press and hold its switch  for 0.5 seconds again to turn off the front light.

Output Selection

With the front light turned on, single click the switch  to cycle through Low→Med→High→Turbo.



Flash Mode

With the front light turned on, double click the switch  to enter the Flash mode; single click the switch  again to return to the previously used output of the General mode.



*When the front light battery level is below 10%, the flash mode does not work.


Tail Light Operation

On/Off


Press and hold the tail light switch  for 0.5 seconds to turn the tail light on; press and hold the tail light switch  again for 0.5 seconds to turn off the tail light.



Output Selection



With the tail light turned on, single click the tail light switch  or the front light switch  to cycle through Low→Low Slow-flash→Low Fast-flash→High→High Slow-flash.

The front light switch  indicator will simultaneously display the tail light's current output status, steady-on status, or flash frequency.

Standby Mode

With the tail light turned on, press and hold the front light switch  for more than 0.5 seconds, and the tail light will enter the standby mode.

During standby, press the tail light switch  or the front light switch  to wake the tail light and recall the previously used output. If there is no operation within 1 hour after entering standby, the tail light will automatically turn off.

*In standby, the tail light switch  indicator's breathing light flashes green. This indicates the unit is in standby; inserting the charging cable keeps it in standby,  the indicator will give priority to showing the current charging status; if the charging cable is unplugged and it is still in standby, then

 the green breathing light will be shown.

Intelligent Memory Circuit

The front and tail lights both have intelligent memory circuit excluding Turbo and Flash. When turned on again, the previously used output will be recalled.

Battery Specifications

Type	Dimensions	Nominal Voltage	Usability	
Fenix ARB-L21-5000 V2.0	21700	3.6 V	Recommended	√
Fenix ARB-L21 series	21700	3.6 V	Usable	√
Fenix ARB-L18 series	18650	3.6 V	Banned	×
Rechargeable battery	21700	3.7 V	Banned	×

Warning:

*21700 Li-ion batteries are powerful cells designed for commercial applications and must be treated with caution and handled with care. Using low-quality batteries or mishandling batteries (such as short-circuiting or overheating) could lead to combustion and jeopardize the safety of users and property. Any adverse effects resulting from the use of low-quality batteries are not covered by any Fenix warranty or liability. Using quality batteries with circuit protection will reduce the potential for combustion or explosion.

Charging

1. Open the anti-dust cover, and connect the Type-C end of the charging cable to the charging port of the front or tail light.
2. After the front or tail light receives a charging signal, the battery level indicator displays a steady red light, indicating it is charging.
3. When the battery level indicator's green light is steady, the battery is fully charged.

Note:

1. All outputs of the front or tail light can be used normally while charging.
2. When powered off, the normal charging time of the front light is about 3.5 hours from depleted to fully charged; the normal charging time of the tail light is about 1.5 hours from depleted to fully charged.
3. Once charging is complete, be sure to close the anti-dust cover and press it firmly to prevent dust or foreign objects from entering.

4. Power specifications:

Charging voltage: 5 V

Maximum charging power (front light) : 15 W (5 V / 3 A) Maximum charging power (tail light) :
2.5 W (5 V / 0.5 A)

Only use a certified USB charging adapter that complies with the government safety standards of the country or region where this product is sold.

Battery Level Indication

Each time the product is turned on, the indicator will show the current battery level and will last for 3 seconds.

Green light on: saturated 100% - 85%

Green light flashes: sufficient 85% - 50%

Red light on: poor 50% - 25%

Red light flashes: critical 25% - 1%

Note: This feature only works with a Fenix ARBL21 Series rechargeable battery and is only applicable to the front light.

Battery Replacement

Insert the included battery compartment key into the slot on the front light's tail battery compartment cover, and turn it counterclockwise to open the battery compartment cover. Insert the battery in indicated direction (the battery's anode side should face inward), then tighten the battery compartment cover clockwise.

*Note:

1. Using a sharp tool to pry open the battery compartment may damage the compartment and its surface.
2. The tail light battery is non-replaceable.

Intelligent Overheat Protection

The product will accumulate a lot of heat when used at high output levels for extended periods. When the product reaches a temperature of 50°C/122°F or above, it will automatically step down a few lumens to reduce the temperature. When the temperature drops below 50°C/122°F, the product will gradually recall the preset output level.

Low-voltage Warning

When the battery level is low, the battery level indicator will blink red at 3 Hz to remind users to

recharge the battery in a timely manner. To ensure normal use, the product will not turn off automatically, and the battery level indicator will keep blinking till the battery runs out.

Usage and Maintenance

Ⓢ Disassembling the sealed heads can cause damage to the product and will void the warranty.

Ⓢ Fenix recommends using an excellent quality battery.

Ⓢ If the front light will not be used for an extended period, remove the battery, or the front light could be damaged by electrolyte leakage.

Ⓢ Recharge a stored product every three months to maintain the optimum performance of the batteries.

Ⓢ Periodic cleaning of the product and battery contacts improves the product's performance as dirty contacts may cause the product to flicker, shine intermittently or even fail to illuminate for the following reasons:

A: Poor battery level.

Solution: Recharge or replace the battery.

B: The contact or contact point of the battery or the product is dirty.

Solution: Clean the contact points with a cotton swab soaked in rubbing alcohol.

If the above methods don't work, please contact the distributor.

Included

Fenix BC28R front light, BC28R tail light, Front light bicycle mount, Seatpost mount, Mounting strap, ARB-L21-5000 V2.0 battery, Battery compartment key, USB Type-C charging cable, Spare O-ring, Spare bicycle mounting shim, User manual, Warranty card