

Ra Twisty™ Flashlight User's Guide

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Introduction

Congratulations on your purchase of the **Ra Twisty Flashlight**. We believe you will find your new Ra Twisty Flashlight to be one of the most versatile flashlights you own. Your flashlight is built to provide you with years of reliable service when used every day.

Basic Operation

Rotate the battery compartment clockwise to increase the brightness level. Your flashlight will sequence from Off to Low to Medium to High.

Caution: do not continue tightening the battery compartment after the High setting turns on as this may damage the switch mechanism.

Rotate the battery compartment counter-clockwise to decrease the brightness level. Your flashlight will sequence from High to Medium to Low to Off.

Note: clockwise and counter-clockwise rotation are relative to the head when the flashlight is pointed away from you.

Low Battery Indication

Your light will momentarily turn off and then back on to half of the previous brightness level when the battery in your flashlight is unable to supply enough power to run the current brightness level. This process is repeated when needed as the battery is used up. After this process starts, your flashlight will double-blink once a minute to remind you that the battery needs to be changed. Selecting a brightness level below the current brightness level will extend the dying battery and turn off the dying battery reminder.

Your flashlight will start blinking once a second when the battery is no longer capable of powering any of the regular brightness levels.

Warning: continued use of a rechargeable battery after your flashlight begins blinking once a second will result in sudden darkness because your flashlight will eventually turn itself off to protect the battery.

Installing the Battery

Unscrew the battery compartment from the head and remove the old battery from the battery compartment. Insert the new battery into the battery compartment with the positive terminal out. Align the head and battery compartment, press them together to overcome the spring pressure and screw the battery compartment and head back together.

The light comes on dimly for two seconds following a battery change to indicate it is functioning correctly. If you do not see this indication when changing batteries, remove the battery for 60 seconds and try again.

Caution: Only install fully charged rechargeable batteries. Using partially charged batteries may result in the batteries not being properly recognized as rechargeable. This can lead to the rechargeable battery being over-discharged and damaged.

Note: your flashlight protects rechargeable batteries from over-discharge under most conditions. However, we still recommend you use batteries with built-in over-discharge protection for an added level of safety.

Cleaning and Maintenance

Periodically clean the flat end of the battery compartment, the threads and O-ring with a clean lint-free cloth lightly moistened with isopropyl alcohol. Apply a coat of non-conductive silicon or petroleum grease to these surfaces.

Replace the O-ring if it becomes worn or damaged. The battery compartment O-ring is: 1.5mm x 20.5mm, 70 durometer Nitrile (Buna-N).

The recessed electrical contacts and interior threads can be cleaned using a lint-free swab lightly moistened with isopropyl alcohol. Recessed contacts and threads should be cleaned in a counter-clockwise direction to prevent snagging the swab. Be sure to remove any particles or fibers that may be left behind. Apply a

coat of non-conductive silicon or petroleum grease to the interior threads.

The exterior can be cleaned with a mild soap and water. Rinse well and dry with a lint-free cotton cloth.

Additional Warnings

Warning: your flashlight on the higher brightness levels is very bright. You should avoid looking directly into the light as the light can be intense enough to injure your eyes.

Warning: a sudden total failure is unlikely but is still possible. We recommend you always carry a second light during critical situations (e.g., caving). We also recommend you carry enough spare batteries to cover your lighting requirements plus a reasonable safety margin. It is not necessary to start each trip with new batteries in your light as long as you have spare batteries along.

Warning: do not recharge a rechargeable battery if you think it has been over-discharged or otherwise damaged. Dispose of the damaged battery immediately. An over-discharged or otherwise damaged battery can vent or explode when the battery is recharged or when the battery is subsequently used.

Warning: water – especially salt water – in the battery compartment will cause electrolysis giving off hydrogen and oxygen – an explosive gas mixture. Electrolysis will also cause corrosion. If water gets inside of the battery compartment, immediately open the battery compartment, rinse the battery compartment and battery with fresh water and dry.

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Warranty

Your Ra Twisty flashlight (Product) is warranted to be free from defects in materials and workmanship for the life of Product to the original owner. This warranty does not include cosmetic blemishes, damage, modifications and normal wear. We will repair Product, replace Product with an equivalent Product or refund the original purchase price for the defective Product - at our discretion. You are solely responsible for determining the Product's suitability for your application and you take sole responsibility for Product's use. In no case shall we be liable for more than the original purchase price of Product.

Specifications

Input voltage: 1.8V to 4.5V
Light source: high efficiency white LED
Maximum light output: 85, 100 or 120 lumens
Runtimes: 1 hour on High setting, 8-10 hours on Medium setting
Regulation: constant power regulation
Battery: 1 – IEC-CR17345, Li-MnO₂ 3.2V non-rechargeable,
Li-CoO₂ Li-ion 4.2V (3.7V nominal) rechargeable
Lens: ultra-clear glass with anti-reflective coatings
Housing: aerospace aluminum, military type III hard anodize,
stainless steel bezel
Waterproof: 20 meters (66 feet) – static
Dimensions: 25.5mm (1 inch) diameter by 89mm (3.5 inches) long
Weight: 88g (3.1 ounces) including batteries

Specifications are subject to change without notice.