

EDC Basic™ Flashlight User's Guide
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Introduction

The EDC Basic flashlight is your best-of-class everyday carry pocket flashlight that provides a regulated light output at a user-selected brightness. Matching the amount of light to the task will maximize battery life - yet can still provide an intensely bright light when you need it. A single button activates your light and easily selects the desired brightness.

Installing the Battery

Unscrew the battery compartment from the head, remove the old battery from the battery compartment, insert the new battery into the battery compartment so the positive terminal is out and the negative terminal is toward the button, screw the head and battery compartment back together.

Note: you will know it is time to replace the battery when your light blinks down two brightness levels - that is, your light momentarily turns off and then turns back on two brightness levels lower, repeating as needed until your light finds a brightness level that the battery can handle.

Note: you should perform a soft reset when changing battery packs or battery chemistries. This will ensure the new battery configuration is properly detected.

Note: rechargeable batteries must be fully charged before installation. Never install partially charged rechargeable batteries in your light. Once you have installed fully charged batteries, do not open the battery compartment until a replacement set of batteries becomes available.

Note: if you insert the batteries backwards in the battery compartment, your light will not light. Remove the batteries and insert them into the battery compartment correctly - with the the positive terminal out and the negative terminal toward the button.

Note: do not disassemble the push button end of the battery compartment.

Using the Single Push Button

Your light has a single push button which is used to turn your light on and off and to access its other functions. The following concepts are important to understanding the operation of your light:

Click: a quick push and release of the button. A click is any push of the button lasting less than half a second.

Press: a long push of the button. A press is any push lasting more than half a second.

N-click: a sequence of 2 or 3. The time between clicks - that is, when the button is up - must be less than half a second.

N-click-press: a sequence of 2 clicks followed immediately by a press. The time between clicks and between the final click and press - that is, when the button is up - must be less than half a second.

Note: you must pause between commands to ensure the button pushes from the second command are not interpreted as being part of the first command. The pause between commands must be greater than half a second.

Note: if you provide an invalid input sequence, your light tries to handle the error in the best manner possible. Depending on the context, the best (or safest) thing to do is to ignore excess or extraneous clicks.

Turning Your Light On and Off

Click or press the button once to turn your light on. It stays on until you turn it off. Click the button again to turn your light off.

When you turn your light on, it turns on to the Primary setting for the standard model and to the Maximum setting for the LE model.

Your light has 4 brightness settings: Maximum, Primary, Secondary and Minimum, in order of decreasing brightness.

When your light is on, you can toggle between the Primary and Secondary settings by double-clicking the button. If the brightness was on the Minimum or Maximum setting, the light is return to the last Primary or Secondary setting used. Your light will momentarily turn off between the clicks but this is normal.

When your light is on, you can momentarily set your light to the Maximum setting by pressing the button. Releasing the button returns your light to the previous setting. You can make your light stay on the Maximum setting by double-click-pressing the button. Your light will momentarily turn off between the clicks but this is normal. You can return to the previous Primary or Secondary setting by double-clicking the button. Your light will momentarily turn off between the clicks but this is normal.

When your light is on, you can set your light to the Minimum setting by triple-clicking the button. Your light will momentarily turn off between the clicks but this is normal. You can return to the previous Primary or Secondary setting by double-clicking the button. Your light will momentarily turn off between the clicks but this is normal. A very low brightness level will help preserve night vision adaptation without using a red filter.

Note: you may notice a slight flicker on the Minimum brightness setting. This is normal.

Note: when your light turns off, you may see a dim light momentarily before it goes completely off. This is normal.

Resetting Your Light

The only time the design of your light requires you to reset your light is: 1) when changing battery packs or 2) when changing battery chemistries. However, if your light ever gets into a non-responsive state, a reset can be used to regain control.

There are two kinds of resets. A soft reset retains all of your settings. A hard reset returns your light to the factory settings.

To perform a soft reset, remove the batteries, wait for 1 minute and reinstall the batteries. A successful soft reset is indicated by your light turning on dimly for 1 second and then turning Off.

To perform a hard reset, start by performing a soft reset. Before your light turns off, press and hold the button down for 10 seconds. Your light will come on steady while you hold the button and then turn off when it is time for you to release the button.

If you do not hold the button down until the the light turns off or if there is insufficient power to save the settings, your light will not restore the factory settings and displays the error flash sequence consisting of rapid flashing.

Note: since you cannot change the factory settings, a hard reset is the same as a soft reset.

Low Battery Indication

As your batteries are used up, the batteries will not be able to supply enough power to run your light at the selected brightness. As a result, your light will blink down to 50% of the previous brightness - that is, your light will momentarily turn off and then turn back on to a brightness level that is half of the previous brightness level, repeating as needed as the batteries are used up. When the lowest brightness level is reached, your light will blink continuously until the batteries can no longer power your light. You should replace your light's batteries before the lowest brightness level is reached.

Your light remembers the restricted brightness level and will not allow you to use a higher brightness level as long as your light remains on. Turning your light off and then back on resets the restricted brightness level and allows you access to all brightness levels if your batteries are capable of supplying the power.

The same behavior can also occur if the battery contacts become dirty. Gently wiping the battery contacts with a clean dry cloth is normally sufficient to remove dirt. If in doubt, please replace your batteries.

Note: if you must extend dying batteries - for whatever reason - you should immediately select a lower brightness setting. The lower the setting selected the longer the batteries will last.

Note: if you continue to use your light after it has dropped to the lowest brightness level - where it blinks continuously - it is assumed you are in an emergency situation. In an emergency situation, your life is more important than your rechargeable batteries and your light will sacrifice the batteries to keep the light on.

Note: if your batteries have an excessively low voltage when you turn your light off, your light will delay turning completely off until the battery voltage has recovered

sufficiently to enable it to turn back on. While waiting for your batteries to recover, the light will glow dimly.

Note: the length of time your batteries will last depends on how you use your light, the type and quality of battery you are using and how cold it is. Due to the LED tolerances, you will see flashlight to flashlight runtime variations when operated under the same conditions.

High Temperature Indication

Your light can get quite warm on the higher brightness levels. If you hold on to your light with a bare hand during operation, your body will conduct away any excess heat and prevent your light from getting too hot. However, if you place your light on a table or hold it with a gloved hand, the excess heat is not easily conducted away and your light can get hot. Before your light becomes dangerously hot, a thermal sensor detects the increasing temperature and reduces the power and brightness. Your light's temperature is regulated so you can always pick it up safely and to prevent damage to the LED.

Your light remembers the restricted brightness level and will not allow you to use a higher brightness level as long as your light remains on. Turning your light off and then back on resets the restricted brightness level and allows you access to all brightness levels if your light is cool enough to allow them.

Cleaning and Maintenance

Periodically clean the threads and O-ring with a clean lint-free cloth and apply a thin coat of silicon or petroleum-based grease to threads and O-ring. If the O-rings become worn or damaged, they should be replaced.

The exposed electrical contacts can be cleaned using a cotton swab moistened with isopropyl alcohol. Be sure to remove any cotton fibers that may be left behind.

The exterior can be cleaned with a mild soap and water. Rinse well and dry with a lint-free cotton cloth. Paper towels or tissues should be avoided when cleaning plastic lenses as scratching will result.

The battery compartment O-ring is: 1mm x 22mm, 70 durometer Nitrile (Buna-N).

Warnings

Caution: LEDs on the higher brightness levels are very bright. Looking directly into the LEDs must be avoided. Your light can be intense enough to injure your eyes.

Caution: Whereas a sudden total failure is unlikely, it is still possible. Therefore, 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 stay 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.

Caution: Not all lithium-ion battery over-discharge circuits are compatible with your flashlight and can cause sudden darkness when the circuit activates. Only use approved batteries with your flashlight. Your flashlight includes over-discharge protection and will protect batteries that do not include over-discharge protection.

Factory Settings

Your light is configured at the factory with the following settings:

- Maximum setting: 42 or 60 lumens (turn-on setting - LE)
- Primary setting: 10 lumens (turn-on setting - standard)
- Secondary setting: 2 lumens
- Minimum setting: 0.3 lumens

Specifications

Voltage: 1.8V to 7.3V

Light Source: white LED

Light Output: 42 or 60 lumens maximum, 0.3 lumens minimum, visually even spacing

Regulation: constant power regulation with tint control, 4 levels

Battery Pack: 1x CR123A lithium-manganese dioxide

Runtime (normal): 20 minutes on Maximum, 8 hours on Primary

Runtime (extended runtime): 30 minutes on Maximum, 10 hours on Primary

Beam: narrow with good side spill

Housing: aerospace aluminum, military specification type III hard anodize

Lens: ultra-clear coated glass

Dimensions: 25mm (1 inch) diameter by 82mm (3.2 inches) long, excluding pocket clip

Weight: 86g (3 ounces) including batteries, excluding pocket clip

Waterproof: 2 atmospheres

Primary Features: simple single button user interface, four (4) directly accessible brightness settings, rechargeable battery protection, reverse battery protection without diode penalty, graceful power reduction for weak batteries, thermal regulation, intrinsically safe design.

Accessories:

- 2x CR123A lithium-manganese dioxide battery pack
- 2x AA battery pack
- 1x 18650 Li-ion battery pack
- 18650 Li-ion battery and charger
- Ultra clear coated glass lens
- Polycarbonate lens
- Mild diffuser
- Lens nut tool
- Lanyards (wrist and neck)
- Battery pack cap

Battery configurations supported by the power supply:

Primary cells - non-rechargeable:

- Li-FeS₂: 2 cells (3.3), 4 cells (6.6V)
- Li-SO₂: 1 cell (3.0V), 2 cells (6.0V)
- Li-MnO₂: 1 cell (3.2V), 2 cells (6.4V)
- Li-SOCl₂: 1 cell (3.6V), 2 cells (7.2V)
- Alkaline: 2 cells (3.3V), 4 cells (6.6V)

Secondary cells - rechargeable:

- NiCad: 2 cells (2.5V), 3 cells (3.75V), 4 cells (5.0V)
- NiMH: 2 cells (2.6V), 3 cells (3.9V), 4 cells (5.2V)
- Li-ion/polymer: 1 cell (4.2V)

Specifications are subject to change without notice.