

Thank You for buying the LionHeart, which is likely the most advanced yet intuitively utilitarian handheld flashlight available at this time.

There is a “Belleville Spring” included with your light, which is similar to a very low dome-shaped washer in appearance. The wide part of the dome should face the bottom of the battery tube. For convenience you may want to apply a dab of **conductive** grease at the bottom of the battery tube to prevent the Belleville Spring from tipping out when changing/recharging batteries.

DO NOT DISASSEMBLE THE HEAD without reading this first –

- 1) The reflector only fits over the Luxeon star one way. If you look at the bottom of the reflector around the hole you will see two curved ridges. The two breaks between these ridges are where the leads of the Luxeon must fit into, BUT WAIT – there are also three legs, and the leg that aligns with the CENTER of one of those two curved ridges is the leg that MUST go into the cutout between the two soldered wire points on the Luxeon star.
- 2) Then place UCL lens on the reflector
- 3) Then screw bezel down over the lens/reflector, first making certain the lens o-ring is in place.
- 4) ANY deviation to the above procedure may result in mis-focusing or even permanent damage to your LionHeart. In fact if there is no need to open up the head, it is strongly suggested that you do not.

Lastly, the LionHeart is designed to run with one Pila 150A (or S, but A is preferred) cell ONLY. In a pinch a disposable CR123 battery w/spacer (wadded up aluminum foil will do) can be used, but any attempt to drive it with a power source other than these mentioned may result in long term, if not immediate, damage to your light. When the “long tube” battery accessory becomes available then the Pila 168A (or S, but A is preferred) is the specified battery to be used for significantly extended run times.

1 Basic Operation (this is all you need to access the power, range, and versatility of the dimming feature)

a-Click the button once from OFF and it turns ON.

b-Click the button again and it turns OFF.

c-PRESS and HOLD from OFF and light goes into momentary ON, release and it turns OFF.

d-Press and hold while light is already ON, and it will scroll through all 64 brightness levels (release and repress to get it going the other way).

However, the LionHeart can be user configured to operate in one of two different modes. The user can change the modes as often as desired. Now with that said...

***DISCLAIMER: IF ALL THE FUNCTIONS YOU NEED ARE DESCRIBED IN STEPS “a” THROUGH “d” ABOVE, PLEASE STOP HERE (yeah like That’s gonna work). THE LIONHEART IS CAPABLE OF MUCH MORE, BUT WILL REQUIRE MORE READING AND FOLLOWING DIRECTIONS AND COMPLICATED STUFF LIKE THAT. THE THING TO KEEP IN MIND IS THAT YOU CANNOT HURT ANYTHING AND YOU CAN ALWAYS REVERT TO THE ORIGINAL DEFAULT DIMMING MODE BY FOLLOWING STEP 5, AND THEN 5.2, BELOW...**

2 Definitions

- Click – a short, less than 0.3 seconds press and release.
- Press – a longer, greater than 0.3 seconds press and hold.

3 Default configuration (continuously variable levels)

There are 4 operating modes for this configuration. They are described below.

3.1 On/Off Mode

To turn on the light, click the switch. The light will turn on at the previous level.

To turn off the light, click the switch.

3.2 Momentary Mode

To turn on the light in momentary mode, press the switch, the light will turn on at the previous level.

To turn off the light in momentary mode, release the switch.

3.3 Adjustment Mode

To adjust the brightness of the light, turn on the light, then press.

The light will begin adjustment in the dimming direction unless it was already set to the dimmest level. If set at the dimmest level, adjustment will begin in the brightening direction.

Release the switch and the light adjustment will cease and the new level will be stored in the EEPROM.

Pressing the switch again will start the light adjustment in the opposite direction (the direction toggles each time).

When the light reaches the dimmest or brightest level it will stay there until the switch is released.

3.4 Autosleep Mode (default off)

If Autosleep is enabled (covered later in Menu Mode), the timer will reset and start counting whenever a switch click or press occurs. When 15 minutes goes by without a click or press, the Autosleep function will commence dimming the light. The brightness level will visibly drop after each subsequent minute until the lowest light level is reached. After a total of 60 minutes elapses from the last button action the light will turn itself off.

A click or press during any time prior to 60 minutes elapsing will return the light to its original brightness level.

Note: if a press is used, the light will not return to the original brightness level until the switch is released.

If the light is set to the dimmest level, the Autosleep function will be temporarily disabled. This allows the light to be left in a low power locator mode or as a nightlight. Current consumption is <10mA in this mode.

4 Configuration 1 (optional) 5 Discrete Levels

There are 6 operating modes for this configuration. They are described below.

4.1 On/Off Mode

To turn on the light, click the switch. The light will turn on at the previous level or the Force level if Force is enabled.

To turn off the light, click the switch.

4.2 Adjustment Mode

To adjust the brightness of the light start with the light off, then press the switch.

The light will always turn on at Level 1 (dimmest level) and in the brightening direction.

Release the switch at the desired level, and that new level will be stored in the EEPROM. Pressing the switch again (within 1.5 seconds) will start the light adjustment in the opposite direction (the direction toggles each time).

When the light reaches the dimmest or brightest level it will stay there until the switch is released. Once the switch is released for longer than 1.5 seconds no more brightness adjustment is possible without turning off the light and starting the sequence again.

4.3 Momentary Full Brightness Mode

With the light turned on, a press will momentarily select Level 5 (brightest). Releasing the switch will return the brightness to the original level.

4.4 Lockout Mode

To prevent accidental turn on or unintended use the light can be electronically locked out.

To enter lockout, begin with the light off. Then press and hold the switch. The light will cycle through Level 1 to Level 5 and 5 seconds after reaching Level 5 will flash three times. Release the switch. The light is now in lockout mode and can only be turned on again by three clicks spaced no more than 0.5 seconds apart.

4.5 Autosleep Mode

If Autosleep is enabled (covered later in this thread when we discuss the menu mode), the timer will reset and start counting whenever a switch click or press occurs. When 15 minutes goes by without a click or press, the Autosleep function will commence dimming the light. The brightness level will visibly drop after each subsequent minute until the lowest light level is reached. After a total of 60 minutes elapses from the last switch action the light will turn itself off.

A click or press during any time prior to 60 minutes elapsing will return the light to its original brightness level. Note: if a press is used, the light will return to the original brightness level and then go the Momentary Level 5 mode (as described in Sec 4.3).

If the light is set to the dimmest level, the Autosleep function will be temporarily disabled. This allows the light to be left in a low power locator mode or as a nightlight. Current consumption is <10mA in this mode.

4.6 Force Mode

This mode is selected from the power-on menu (covered later in this thread when we discuss the menu mode). Force mode overrides the initial turn on brightness level that was set via the Adjustment Mode on the previous turn off. The user can always set a new temporary light level by using the Adjustment mode on turn on but it will be overridden the next time the light is turned off and back on.

This is the Menu mode and only needs to be accessed to configure the LH if you're not happy with it's default setting.

5 Power-on Menu Mode

To access the Power-on Menu Mode the battery tube needs to be unscrewed sufficiently to remove power from the LionHeart electronics. The switch is then pressed and the battery tube screwed back in to apply power to the electronics. Each menu item is set in a separate Power-on sequence.

As soon as power is applied (with the switch pressed) the LED will light up dim. This provides visible feedback that the battery tube has been screwed in sufficiently to power up the electronics.

After 1 second the LED will flash bright once to indicate Power-on Menu Mode. The LED will then go off. The switch can then be released.

Click the switch from 1 to 3 times to select one of the three menu modes listed below. If no click occurs within 2.5 seconds or more than 3 clicks are entered, the menu mode is exited, the LED flashes quickly 5 times to indicate a selection error and normal operation of the light commences.

After clicking from 1 to 3 times (it will flash for each click) wait for the LED to light up (dim or bright depending on the menu choice). Then continue as below.

5.1 One click - Autosleep Enable/Disable

Initially the LED will be dim to indicate Autosleep will be active. A click will brighten the LED to indicate Autosleep will be inactive. Each click will cycle from active to inactive. When you are happy with the choice, wait 2.5 seconds and the LED will flash once to indicate the selection has been made and the light will turn off.

5.2 Two clicks - Configuration Selection

Initially the LED will light up bright to indicate Configuration Mode 0 will be active. A click will light the LED up dim to indicate Configuration Mode 1 will be active. Each click will cycle the Configuration Modes. When you have happy with the choice wait and after 2.5 seconds the LED will flash once to indicate the selection has been made and the light will then turn off.

5.3 Three clicks - Force Mode Enable/Adjust/Disable

Note: Force Mode is only applicable to Configuration Mode 1.

Initially the LED will dim to indicate Force Level 1 (dimpest) will be active. Each click will cycle to the next Force setting. The sequence is:

- Force Level 1 (LED dim)
- Force Level 2 (LED med/low)
- Force Level 3 (LED medium)
- Force Level 4 (LED med/high)
- Force Level 5 (LED brightest)
- Force Disabled (LED is off)

The sequence will cycle through all 6 choices. The LED brightness matches the 5 operating levels of Configuration Mode 1. When you are happy with the choice, wait 2.5 seconds. The LED will flash once to indicate the selection has been made and the light will then turn off.

5.4 Menu Selection Complete

Once the above menu procedure is complete and the light turns off the new menu selection is immediately active. The light is ready to be used.

Thanks Again for buying this light!

Regards and Aloha,

A handwritten signature in black ink that reads "Charlie". The signature is written in a cursive, flowing style with a long horizontal line extending to the right.

MR Bulk