



Performance Series Instruction Manual for
FoxFury Model 400-FF417-2 & 400-FF417-5 Intrinsic Safety Headlamp
 Manufactured by FoxFury, LLC



<p>FOX FURY, LLC MODEL FF417 - Intrinsically Safe Headlamp - Read Manual plus all included warnings before use!</p> <p>Warning! Risk of Ignition. Do not open in Haz. Loc. Change batteries only in a location known to be non-hazardous. 4x 1.5V "AA" Alkaline Batteries</p>	<p>NRTL LISTED MET US UL-913</p> <p>Listing # E112432 Class 1 Div. 1 Grps A B C D T6, Class 1 Div. 2 Grps A B C D T6</p>
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UL Class 1, Div 1, Grps A, B, C, & D; T6
UL Class 1, Div 2, Grps A, B, C, & D; T6

TURNING YOUR PERFORMANCE INTRINSIC LIGHT ON/OFF:

Tap Switch: Once batteries are installed and the battery cap is securely tightened, the tap switch will then control the ON-OFF function of the headlamp. In case of suspected damage to the headlamp, turn unit off at both the tap switch and the battery pack cap.

The battery cap can also act as an ON-OFF switch:

- To turn ON: rotate CLOCKWISE, 1/2 to 3/4 of a turn past the ON point.
- To turn OFF: rotate COUNTER CLOCKWISE, 1/2 to 3/4 of a turn past the initial OFF point to ensure the light remains OFF.
- Light can be turned ON and OFF more conveniently via the Power Switch on top of the light bar (on left side).

NOTE: Make sure to turn light OFF when not in use.

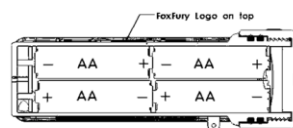
ACCEPTABLE BATTERY TYPES:

The Performance Intrinsic Lights require four (4) AA batteries each. Alkaline or Lithium Iron are acceptable (1.2 to 1.6V each).

- Alkaline battery types (actual run time will depend upon battery quality and charge):
 - Duracell Ultra (M3) Copper-Top Alkaline AA batteries, P/N MX1500 (best)
 - Duracell Copper-Top Alkaline AA, P/N MN1500 or PC1500 (good)
 - Eveready Alkaline AA batteries, P/N E91 (acceptable)
- Approved Lithium Iron (1.5Vdc) battery: (ideal for cold weather operation)
 - Eveready Energizer L91 AA size, Lithium Iron, Li-Iron Disulfide (Li-FeS₂), 1.5Vdc
 - **Caution:** 3Vdc, 3.3Vdc or 3.6Vdc Lithium batteries are not approved

BATTERY INFORMATION & WARNINGS:

- The warmer the batteries remain while in use, the longer their life (room temperature to body temperature is ideal).
- Depending on temperature and battery brand used, an average of eight (8) hours performance is expected with each set of fresh batteries.
- Do not mix different brands of batteries, or new batteries with used batteries.
- **Do not mix battery types** (lithium with alkaline).
- Respect the polarity of the batteries when installing them in the battery pack. Failing to do so may result in gaseous emissions, and/or caustic chemicals from leaking batteries. With just one battery installed backwards, the unit will function for a much shorter time than normal, the reversed battery may become hot and may emit a gas or leak caustic chemicals. If this occurs; using plastic gloves, remove all batteries, and wash/clean the inside of the battery pack with mild soap and lots of water. Afterwards, dry the inside of the battery pack well, first with a dry cloth or paper towel, and finally, a hair dryer placed on Low or Medium heat settings and held at least 6" away – will help finish up with the removal of any remaining moisture.



Battery Orientation in Case

BATTERY INSTALLATION/REPLACEMENT:

For both Performance Intrinsic models:

1. Unscrew the cap of the battery compartment.
2. Install Four (4) each 1.5V AA batteries.
 - a. Respect appropriate polarity when installing (the inside of the battery pack indicates proper battery placement; see diagram at right).
3. Twist cap back on.
 - a. To get cap started, press against the battery pack in order to overcome the Dual-Gasket seal compression. You will notice slightly increased friction as you tighten the cap.
 - b. NOTE: The Dual-Gasket design is necessary to create a gas-tight and waterproof seal, with the required reliability.
4. Adjust head band to properly fit the individual user.

BATTERY LIFE:

STAGES OF BATTERY LIFE:

The FoxFury Performance Intrinsic Lights will transition through three (3) different stages of battery life as the batteries run down to their end-of-life condition:

STAGES OF BATTERY LIFE	
NORMAL	Fresh batteries provide 6 to 8 hours (constant ON) of Normal mode operation.
RESERVE	This stage begins when 50% or slightly less of the initial starting brightness is present. 22 to 24 LEDs will remain "ON", at reduced brightness, for an additional 1 to 2 hours, when using a set of alkaline batteries. This reduction in brightness is intended to alert you that it is time to change the batteries. A shorter Reserve stage time is to be expected in Cold temperatures.
EMERGENCY	A few additional LEDs may dim or go out completely during this stage. Most LEDs will remain ON and continue to output a useful light level for an additional 30 hours (or longer in warm temperatures). This minimum level of lighting is enough to read a map, act as a beacon or marker, or walk at a moderate pace (4 to 12 Foot-candles).

*The above chart indicates information tested with Alkaline Batteries.

When in the **Emergency** Stage, (while the batteries seem to be almost expended), the brightness can be temporarily increased:
Turn the Foxfury light "OFF" for 3-5 minutes.

When turned back "ON", the unit will come on at about twice the brightness for a short period of time (2 to 4 minutes), and then return to the normal low level output for the remaining time or until cycled again.

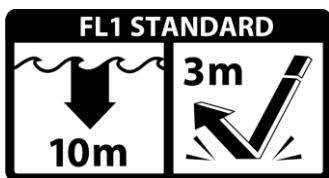
Each successive time will require a longer wait of "OFF" time, resulting in a shorter Higher Brightness period.

Expected Hours of Use according to Stage

STAGE	# of LEDs ON	# OF Hours of Use	Total Hrs
NORMAL	24	6 – 8	6 – 8
RESERVE	22 - 24	1 – 2	7 – 10
EMERGENCY	20 - 24	30 - 45	37 - 55

FoxFury Lights are tested for battery-life using fresh Duracell alkaline batteries and continuous run-times. Battery life can be extended by keeping them warm in cold weather or turning the unit off when it is not needed. Your own body heat can keep a spare set of batteries ready for use, or slightly extend the life of an almost exhausted set when they are cold.

PRODUCT DURABILITY, ENVIRONMENTAL CONSTRAINTS & CERTIFICATIONS:



CE
CE-EMC
IPX-7

- Meets NFPA 1971-2007 Fire Resistant Requirements: 500°F /260°C for 5 minutes

STRAPS:

Both Intrinsic Models include a Silicone Strap.

CABLE GUIDE:

A black cable guide with Velcro is included with your headlamp. It is best used when wrapped around both the strap and cable, which makes the cable less likely to be caught or snagged on any surrounding objects.

CARE/CLEANING:

Your FoxFury is a professional tool, but regular maintenance and care of your headlamp will maximize its performance. As needed, wash your FoxFury using a soft washcloth, clean water and a mild soap. Be sure that the battery pack is sealed before washing. When done, pat dry with a damp cloth. Keep the dual gasket ring seal area lubricated with silicone based grease.

DUAL GASKET CARE

- Use silicone based lubricant grease around the dual gasket seal on the battery pack, and the matching area of the cap's inside.
- Every 3-5 battery changes, re-apply silicone grease to the gaskets and mating surface inside the battery case cap.
- Every 7-10 battery changes, take a thin flat-blade screwdriver (jewelers or similar) at an angle and lift the gasket a short distance. Using a swab or toothpick, apply several dabs spaced apart to create layer of silicone grease underneath it. Remove the screwdriver, and then spin the ring in both directions to effectively spread out the silicone grease. Repeat for the second gasket, on the opposite side of the battery pack. A spare gasket set is included with each purchase, replacements are available.
- It is recommended to replace the gasket as needed or at minimum, every 12 to 24 months.

PERIODIC LIGHT INSPECTION

The headpiece contains a printed circuit board (PCB) that is conformally coated, as a back-up; but, often repeated impacts or excessive bending or twisting can cause the lens seam to crack and lose its integrity. **This is more important when the unit is used in cold weather or temperatures below freezing.** Inspect seam after 20 battery sets have been used, or after 40 uses, or every 3 months, whichever your safety officer deems to be the minimum. Or, before next use, if subjected to a hard drop, or severe bending or twisting motions. Any motion that is severe enough to pop out the headlamp from the tilt-plate, is cause to remove the unit from use (remove from service) and carefully inspect the lens seam and tilt-plate attachment locations. If separated or cracked, return it to the factory, where a replacement unit will be sent out via return post during the warranty period.

BATTERY PACK MAINTENANCE:

DEALING WITH CORROSION FROM LEAKING BATTERIES

Battery leakage or outgassing may cause "corrosion" to build on the battery pack contacts, causing light not to function properly. In case of any presence of corrosion on the battery pack contacts, please follow the suggested steps listed below:

1. Mix 50% vinegar and 50% water.
2. Remove batteries from the battery pack.
3. Pour the combination into the battery pack and let soak for 5 minutes.
4. Remove fluid from inside the battery pack and dry it properly with a paper towel, and a blow drier (make sure no liquid residue is left inside battery pack). Don't use drier on High heat settings, Medium or Low heat are preferred.
5. Replace your batteries and test the light's function.
6. Repeat as needed.
7. For the metal contact disc inside the cap, a moistened vitamin C tablet can be used to scrub the disc inside the cap.
8. Rinse well after using the vitamin C tablet, dry as noted above.
9. Re-apply silicone grease to the gasket set.

NOTE: Corrosion from leaking batteries is not covered by warranty.

AVAILABLE ACCESSORIES:

- *Silicone Strap, Black, P/N 600-027*
- *Silicone Strap, GLOW, P/N 600-026*
- *Elastic Strap, P/N 60-019*
- *Helmet Hold Down (set of 2), P/N 50-023*
- *Overhead Strap, P/N 600-002*



Warnings

Lights are strong enough to cause damage to the human eye. Do not stare into LEDs for long periods of time or from a close range (less than 2 feet).

When a fresh set of batteries are installed, if all 24 LED's do not light up DO NOT use the product in a hazardous area. Rather, return the unit for repair.

Due to the nature of where the Intrinsic Safety Model 400-FF417-x unit may be used, DO NOT operate or use the unit in a hazardous location with a broken or cracked front lens. Quickly rotate the battery pack switch to OFF if a LED lens cover is

broken while in a hazardous area or zone, by both using the tap switch (for units with tap switch) and for all units, by turning the battery pack cap to "OFF" - rotate cap COUNTER-CLOCKWISE, at least a half-turn past when the unit shuts down.

If the unit is dropped from a height of more than 8 ft / 2.4 m, it is recommended that the unit be turned off until it can be inspected for a cracked or broken LED lens cover outside of any hazardous location areas.

Do not subject the unit's headpiece to repeated hard impacts.

- While the unit is constructed using polycarbonate, a high strength plastic, it contains a seam along the clear lens mating surface with the rear case that can separate and cause the unit to lose its integrity.

WARNING: Substitution of components may impair intrinsic safety.

WARNING: TO PREVENT IGNITION OF A HAZARDOUS ATMOSPHERE, BATTERIES MUST ONLY BE CHANGED IN AN AREA KNOWN TO BE NONHAZARDOUS.

WARNING: TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTIBLE ATMOSPHERE, DISCONNECT POWER BEFORE SERVICING.

FoxFury, LLC is not responsible for the incorrect use of a FoxFury Lighting product. Usage of this product must be supervised by an adult when used by a minor.

FoxFury, LLC is not responsible for any injury or damage caused during the use of this product.

Any FoxFury product should be operated at speeds safe enough to maneuver around surrounding obstacles.

Do not use under the influence of drugs or alcohol.

Important --- In case an LED lens gets broken:

The FoxFury unit is designed to take a fall, even several, from a height of 30 feet or less onto a concrete floor. However, it may hit a small object that could crack the front clear LED lens, or its seam with the back case half.

If the unit is dropped from a height of more than 8 ft/2.4 m, it is recommended that the unit be turned off until it can be inspected for cracked or broken LED lens outside of any hazardous location areas. Use an almost exhausted set of batteries when checking for a cracked LED lens or seam- a dim light output makes checking easier, a pair of sunglasses may help.

A broken or malfunctioning LED can cause a decrease in battery life.

Due to the nature of where the Intrinsic Safety Model 400-FF417-x units are used, DO NOT operate or use the unit in a hazardous location with a broken or cracked LED lens or lens seam. Quickly rotate the battery pack switch to "OFF" if a lens is broken while in a hazardous area or zone, by turning the battery pack cap to "OFF", rotate cap COUNTER-CLOCKWISE, at least a half-turn past when the unit shuts down. Next, for units with a tap switch, tap it once to place the switch in the off position.

Due to the lens sealed seam and sealants coating the electronics, your FoxFury Lighting Product must be returned to FoxFury in order to assess how best to proceed in fixing the unit. Do not attempt to repair the unit yourself.

Due to the double sealed tap switch button, a tear or a hole in the top switch seal will not violate the units seal integrity. If a unit's tap switch button seal becomes damaged, return it to the factory for replacement or repair. Safety Agencies do not allow user repairs to this section of the headlamp.

LIMITED WARRANTY:

FoxFury Limited Warranty & Customer Care Information

FoxFury, LLC ("FoxFury") warrants to the purchaser of this product ("Buyer") that for a period of two years following purchase, this product will be free from defects in material and workmanship and will function in substantial compliance with FoxFury's written specifications for this product as specified in the instruction manual or on FoxFury's website located at www.foxfury.com. Buyer's exclusive remedy shall, in any case, be limited, at FoxFury's election, to: A) repair or replacement of the defective product; or B) refund of the purchase price for this product. THE FOREGOING WARRANTY IS THE ONLY WARRANTY MADE BY FOXFURY WITH RESPECT TO THIS PRODUCT. TO THE EXTENT ALLOWED BY APPLICABLE LAW, THERE ARE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND BY THE FOXFURY, EXPRESS OR IMPLIED, WITH RESPECT TO THE CONDITION OR PERFORMANCE OF THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. **This limited warranty shall not apply if this product is not stored, handled, installed or used in strict accordance with manufacturer's specifications and instruction manuals, or which has been subject to misuse, alteration, negligence or accident.**

1. The damaged part or product must be returned to FoxFury **PRIOR TO** any repair or replacement. Shipping costs are the responsibility of the claimant.
2. You must obtain a return authorization (RMA) number from FoxFury prior to returning products. FoxFury is not responsible for any damage incurred while in transit.
3. Buyer will be required to show proof of purchase – No Exceptions.
4. Any modifications to light, cable or battery pack automatically voids all warranties on this product.

All warranty inquiries should be directed to FoxFury's Customer Service Department to handle all warranty or repair related inquiries.

TO THE EXTENT ALLOWED BY APPLICABLE LAW: (A) IN NO EVENT, WHETHER DUE TO BREACH OF WARRANTY HEREUNDER OR ANY OTHER CAUSE WHATSOEVER, SHALL FOXFURY BE LIABLE FOR OR OBLIGATED IN ANY MANNER TO PAY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, COST OF SUBSTITUTE PRODUCTS AND PERSONAL INJURY OR PROPERTY DAMAGE, WHETHER SUCH CLAIM IS BASED ON CONTRACT OR TORT OR ANY OTHER THEORY OF LAW, AND (B) FOXFURY'S ONLY DUTIES IN CONNECTION WITH THE SALE OF THIS PRODUCT SHALL BE TO HONOR THE LIMITED WARRANTY SET FORTH HEREIN. TO THE EXTENT THAT THIS LIMITED WARRANTY IS INCONSISTENT WITH APPLICABLE LAW, THIS STATEMENT SHALL BE DEEMED MODIFIED TO BE CONSISTENT WITH SUCH APPLICABLE LAW.



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