



Signature Series Instruction Manual for
FoxFury Model FF261, Intrinsic Safety Headlamp
Manufactured by FoxFury LLC



UL-913
Listing No. E112432

UL Class 1, Div 1, Grps C & D; T6
UL Class 1, Div 2, Grps A, B, C, & D; T6

INSTRUCTIONS

1. Unscrew the cap on the battery holder.
2. Install four (4) each 1.5V size AA batteries inside the cavity following the orientation markings inside the battery holder and screw the cap back on. (See diagram below).
Unit accepts: Duracell Copper-Top Alkaline AA (good), or Duracell Ultra (M3) Copper-Top Alkaline AA batteries (best), or Eveready Alkaline AA batteries (acceptable).
3. To get the cap started, press against the battery pack in order to develop the seal on the first set of 'O'-rings.
4. After a couple of turns you will feel increased friction. This is the second 'O'-ring engaging, providing you with a Waterproof & explosion-proof seal.
5. The cap is also the ON-OFF switch. To turn "ON", rotate the cap CLOCKWISE. Turn the cap 1/2 to 3/4's of a turn past when the LED's initially turn ON.
6. To turn "OFF" rotate the cap COUNTER-CLOCKWISE.
7. Make sure to turn the unit "OFF" when not in use. Turn the cap at least 1/2 a turn past when the LED's initially turn off to insure that the unit stays off.
8. The first (lower) 'O'-ring is necessary to create a water seal. The unit becomes 100 % WATERPROOF when just the first 'O'-ring is installed. For repairs or replacement, simply slip the old 'O'-ring off and install a new one onto the threaded neck of the battery pack. The cap will become stiffer to turn until a small amount of silicone grease is applied. Applying a small amount of silicone grease is required after cleaning, or replacement, and as part of normal user maintenance.
9. The second (upper) 'O'-ring makes the unit explosion proof. After placing this second 'O'-ring on the battery pack, the cap will be slightly more difficult to turn even with the proper amount of silicone grease applied. When the difficulty of turning the cap increases again during use, take it as notice to apply more silicone grease – **to keep the unit rated as intrinsically safe**. This also makes it easier for you, as the user to turn the unit ON or OFF.
10. Adjust the head-band for proper fit.

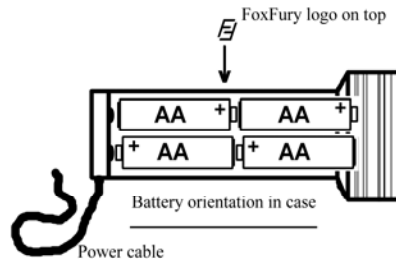


Fig.1 - Battery pack with batteries installed

BATTERIES

- Inside the battery case cavity is a set of orientation markings for battery polarity. Install both battery pairs as shown, one pair on top of the other.
- 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.
- 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, & 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, & finally, a hair dryer placed on low and held at least 6" away – will help finish up with the removal of any remaining moisture.

REFLECTIVE STICKER

- For your safety, the holographic lensed reflector (chrome sticker) enclosed can be placed on the back of the battery pack. The reflector will glow in response to a lighted vehicle (or any other source of light) from behind.



Warnings !

- Warning! To reduce the risk of ignition of a flammable or explosive atmosphere, batteries must be changed only in a location known to be non-hazardous.
- Warning! 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.
- Warning! To reduce the risk of explosion, do not mix old batteries with new batteries, or mix batteries from different manufacturers.
- Warning! This unit contains no user serviceable parts in the electrical circuits. Do not attempt repairs to the battery pack, cable, or headpiece printed circuit board. The unit must be returned to the factory for all electrical or PCB coating repairs.
- Warning! 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, return the unit for repair.
- Warning! **Due to the nature of where the Intrinsic Safety Model FF261 may be used, DO NOT operate or use the unit in a hazardous location with a broken or cracked LED. Quickly rotate the battery pack switch to OFF if a LED 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.**
- Warning! **If the unit is dropped from a height of more than 8 feet, it is recommended that the unit be turned off until it can be inspected for cracked or broken LED's outside of any hazardous location areas.**
- Warning! **Do not subject the unit's headpiece to bending or twisting motions.** It contains a printed circuit board (PCB) that is conformally coated, while the coating is flexible; excessive bending or twisting can cause the coating to fail and lose its integrity. This is most important when exposed to temperatures, below freezing.
- Warning! Any motion or drop that is severe enough to pop out the back-plate from the headpiece, is cause to remove the unit from use (remove from service) and return it to the factory. Where the unit can be inspected and repaired as necessary, before the unit is returned to normal use.
- Warning! 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).
- FoxFury LLC is not responsible for the incorrect use of the 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.

OPERATIONAL MODES & BATTERY LIFE:

- The FoxFury Lighting System will transition through three different Operational Modes, as the batteries run down to their end-of-life condition. These modes are: **Normal**, **Reserve**, & **Emergency**.
- Fresh batteries will provide the 24 LED's with 6 to 8 hours of **Normal** mode operation (in constant use).
- At the end of this period, the system enters **Reserve** Mode (50% or slightly less of the initial starting brightness) where **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, like with a standard flashlight, normally alerts you that it is time to change the batteries, or head back to do so. A shorter amount of **Reserve** time is typical for cold weather.
- From **Reserve** Mode, the unit transitions into **Emergency** Mode over a period of approximately 1/2 an hour to 1 hour. During this transition time the unit will decrease its light output about 66%.
- In **Emergency** Mode, a few more of the LED's may dim or go out completely during this period. Most LED's will remain ON and continue to output a useful light level for an additional 30 hours, and even 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 (3 to 12 Foot-candles).

When in **Emergency** Mode, (while the batteries seem to be almost expended), the brightness can be temporarily increased: Turn the Foxfury unit 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.

# of Modes	# of LED's lit	Hours of use	Total hrs	Battery type
Normal	24	6 to 8	6 to 8	Alkaline
Reserve	22 - 24	1 to 2	7 to 10	Alkaline
Emergency	16 - 24	24 to 36	31 to 46	Alkaline

Under ideal conditions, a fresh set of Duracell batteries and warm temperatures FoxFury Signature series can output light for over 80 hours. The table above reflects actual conditions typically found in the real world and a cut-off limit of 2.5 foot-candles. FoxFury lighting system units 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.

CARE & CLEANING

Treat FoxFury Lighting Systems the same way you would an expensive pair of glasses or goggles.

- **Before each use of the unit. Check that both 'O'-rings are present, have no nicks and are greased. If additional grease is required, use a silicone-based lubricant grease around the grooves and both 'O'-ring seals on the battery pack, to ease turning of the battery cap, and to insure a gas-tight seal.**
- A new set of replacement 'O'-rings may be ordered from FoxFury LLC; or on-line from www.FoxFury.com. Use ONLY 'O'-rings supplied by FoxFury LLC or via FoxFury.com to keep the unit rated as Intrinsically Safe, UL-913. Order P/N FF261-BPOR for the replacement 'O'-ring set of two.
- Do not subject the unit's headpiece to bending or twisting motions. The headpiece contains a printed circuit board (PCB) that is conformally coated, while the coating is flexible; excessive bending or twisting can cause the coating to fail and lose its integrity. This is more important when the unit is used in cold weather or temperatures below freezing.
- Any motion or drop that is severe enough to pop out the back-plate from the headpiece, is cause to remove the unit from use (remove from service) and return it to the factory, where an additional coating layer can be applied and tested, before the unit is returned to normal use.

CLEANING

- Be sure that the battery pack is sealed before washing. Wash your FoxFury headpiece using a damp cloth and a mild soap. Pat dry with a soft cloth. Do not use paper towels to dry around the LED's.
- Be sure to reapply a small amount of silicone-based lubricant grease onto battery pack 'O'-rings after cleaning.

Important --- In case an LED 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 or protruding object that could crack an LED.
- **If the unit is dropped from a height of more than 8 feet, it is recommended that the unit be turned off until it can be inspected for cracked or broken LED's outside of any hazardous location areas. Use an almost exhausted set of batteries when checking for cracked LED's - 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 FF261-x units are used, DO NOT operate or use the unit in a hazardous location with a broken or cracked LED. Quickly rotate the battery pack switch to OFF if a LED 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.

Important --- Replacement & Repair

- Due to the 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.
- The battery pack contains a fast-acting fuse and a fusible resistor, neither of which can be replaced by a user, return the unit to FoxFury for replacement of the battery pack section.

WARRANTY INFORMATION

FoxFury LLC warrants FoxFury Action Lighting Systems to be free from any defects in materials and workmanship for a period of one (1) year for all Editions from the date of original purchase. FoxFury, LLC is not responsible for damage due to use, abuse and accidents. This warranty is subject to the following limitations in addition to any others as imposed by applicable law.

For warranty claims please read the following procedures:

1. The damaged part or product must be returned to either FoxFury or a designated representative for inspection prior to any repair or replacement. Shipping costs are the responsibility of the claimant. You must obtain a return authorization (RMA) number from FoxFury LLC prior to returning products. FoxFury LLC is not responsible for any damage incurred while in transit.
2. All warranty claims must be accompanied by the original purchase receipt.
3. Call FoxFury Customer Service for warranty claim procedures.

RESPONSIBILITY

Under no circumstances shall FoxFury LLC or its authorized representative be liable for any personal loss, injury, or direct consequential damage resulting from the use of this product.

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