

FX-ion USER INSTRUCTIONS

The FX-ion battery is designed to be mounted on the back of a caving helmet or, via an elastic headcradle directly on the head. An appropriate helmet should always be worn for caving or any activity where head injury may result. Figure 1 illustrates the method of attachment using either. Please note that the plug should be fully inserted into the socket before tightening the strap. The buckle should be against the lower half of the battery and the strap should be brought over the retaining grooves in the battery top, down through the security loop, into the buckle and back through the loop. The strap can then be tightened which will retain the plug on the battery and keep the the whole assembly in place on the head. The security loop is to ensure that a slightly slack strap will not result in the loss of the battery. In low risk situations where fast battery change is required the fixing strap can be passed over rather than through but care will have to be taken so that the strap does not become slack.

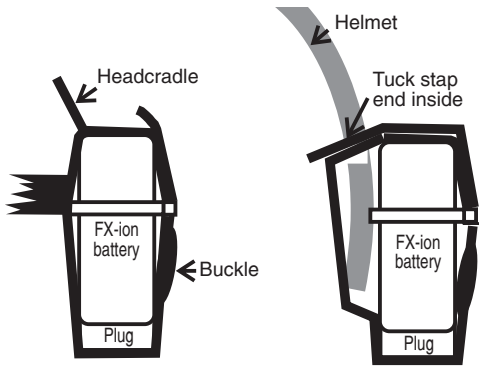


Fig 1

Figure 2 is a, full size, marking out template for drilling two 8 mm holes on 50 mm centres. Position will depend on individual preference but the cable to the headlamp should be a little slack so that any blows to the battery do not tend to pull the plug from the socket. **VERY GREAT CARE SHOULD BE TAKEN THAT NONE OF THE INTERNAL FASTENINGS OF THE HELMET**

Headpieces

The FX-ion battery is normally supplied with one of two types of headpiece.

The LX1 headpiece is a lightweight, single bulb, focusing, model which is normally attached to an elastic headcradle but with a bracket can be semi-permanently attached to a helmet. Bulb replacement is a simple matter of unscrewing the lens and changing the bulb.

The model "C" headpiece is a twin bulb mining type headpiece which is normally fitted to a helmet but with an elastic headcradle can be used directly on the head. When replacing the bulb, with the glass lens and reflector removed, the bulb

Safety Advice

- Do not crush**
- Do not heat or incinerate**
- Do not short-circuit**
- Do not dismantle**
- Use only FX-ion chargers**

Two main bulbs are available for the FX-ion:-

0.5 A screw fitting halogen which will give approx. 11 hours light from a full charge

0.85 A screw fitting halogen which will give approx. 6 hours light.

These are simply interchangeable and the 0.85 A bulb will give a brighter light if required

Lithium-ion cells must operate within a strict voltage "window" and your FX-ion battery has an under/over voltage protection circuit incorporated. As a result **NO BULB GREATER THAN 0.85 A SHOULD BE USED.**

When used for any hazardous activity (caving etc.) not only spare bulbs but a separate, backup lighting system, should always be carried.

WARNING:-

AS YOUR FX-ion BATTERY NEARS FULL DISCHARGE IT WILL DIM SLIGHTLY AND THEN SWITCH OFF SUDDENLY

This is due to its under voltage protection circuit

Charging

The "smart" FX-ion charger will charge the cell automatically. It should be switched off or disconnected from both the mains and the cell for 10 seconds before charging to re-set its logic circuits. Connect to the mains and the green LED will illuminate. When the cell is fully charged the red LED will illuminate.

Charging will take approximately 6 hours.

DO NOT charge the battery below freezing point without prior consultation with Speleo Technics.

OBSERVE POLARITY. DO NOT SHORT-CIRCUIT

Storage

Short-term storage of the FX-ion battery is simple. Just disconnect the cable from the battery, clean the contacts with plain water if dirty, dry and forget!

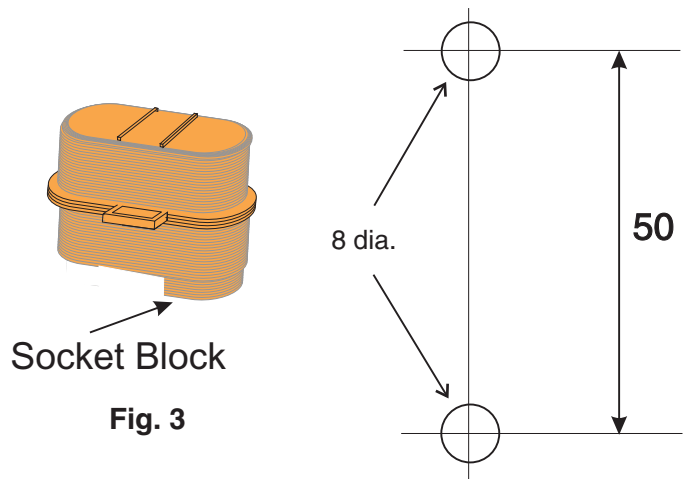


Fig. 3

All dimensions in millimeters

Fig. 2