



HIGH PERFORMANCE LIGHTING EQUIPMENT

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FX3 USER INSTRUCTIONS

The FX3 is a development of the very popular FX2 caving lamp. It is just as easy to use and maintain and its greater battery power and very efficient main bulb give twice the light output of the FX2.

BULBS

The tungsten/halogen main bulb (marked 4v 0.85a) is of great efficiency. Since, "There is no such thing as a free lunch" its filament will have a shorter life (60 hrs. av.) than the FX2 (120 hrs. av.) so it is even more important to carry a spare. When used for any hazardous activity (caving etc.) a separate backup lighting system should always be carried.

We strongly recommend that the plug is disconnected from the FX3 battery before changing bulbs to reduce the danger of short circuits occurring in the headpiece.

Although the cells in the FX3 are closely matched, for capacity, variations can occur after long service so it is advisable to AVOID COMPLETE DISCHARGE. As soon as the lamp starts to dim SWITCH OFF.

CHARGING

A range of Unichargers is available for the FX3 which will also charge the FX2 and FX5. The output plug on these is coded yellow.

Most of the multi-way FX2 chargers (red output plugs) will also charge the FX3 (but not as many because of the FX3's greater width) if they are modified to take the twin studs of the FX3 (and new FX2) - a leaflet is available on request. The very earliest of these (identifiable by having one voltage regulator attached to a large heat sink at right angles to the main charger box) will NOT charge the FX3.

NONE OF THE FX2 SINGLE MAINS CHARGERS (red or black output plugs) WILL CHARGE THE FX3 but no damage will result.

TOP-UP CHARGING with an occasional full discharge cycle is the preferred charging regime. The charge duration will be 1 1/2 times the duration for which the lamp has been used. A full charge takes 15 hours.

This does not need to be precise and no harm will be done to the battery by occasional moderate overcharging so it is advisable to err on the overcharge side to avoid running out of light in the cave. If the lamp has not been used recently it is better to give a full 15 hour charge to be on the safe side. This particularly applies as your lamp gets older. However consistent heavy overcharging is one of the very few ways in which it is possible to damage ni-cads. DO NOT charge the battery below freezing point without prior consultation with Speleo Technics.

STORAGE

Short-term storage of the FX3 is simple. Just disconnect the cable from the battery, clean the contacts with plain water if dirty, dry and forget!. For longer term storage a full charge is an advantage.

SAFETY VENT

The unique Speleo Technics safety vent (pat. app. for) can be seen as a small red plastic plug in the base of the battery and it should only be replaced with the type supplied by Speleo Technics for the purpose. This seals a petroleum jelly filled vent which is connected to the individual safety valves on each of the cells within the battery. If a cell should vent the plug and petroleum jelly are ejected allowing the gas to escape harmlessly to atmosphere. This may very occasionally happen when charging especially when a battery has been overdischarged or stored for a long period fully discharged. If this occurs simply melt a little petroleum jelly over a pan of hot water, pour into the vent hole and replace the plug to re-seal. If the plug refuses to stay in the vent a SHORT piece of fuse wire between plug and vent will allow excess petroleum jelly to escape.