### DESCRIPTION

The OCEAN SEVEN submersible 150-bar and 700-bar rechargeable battery packs are housed in a plastic and a titanium grade 5 container respetively and are composed of 12 NiMH 1.2VDC cells, assembled in series, to create a unique 14.4VDC 4.5Ah battery pack. The battery pack comes complete with a plastic flange (to join the battery pack to the OCEAN SEVEN 3xx probes), with an international battery charger and with the submersible cable needed to connect the battery pack to the Ocean Seven 3xx probes.

Electrical:	Voltage
	Capacity
	Cells
	Charger

14.4 VDC (nominal voltage).
4.5 Ah.
12 cells – 1.2VDC NiMH type HR-4/3FAU international battery charger.

#### Housing:

Material Diameter Length Weight Max pressure Connector <u>150 bar</u> White plastic POM. 75 mm. 315 mm without top connector. 2.5 kg (including batteries). 150 bar. 2-pole **SEA CON**<sup>®</sup> connector.

<u>700 bar</u>
Titanium GR2.
66 mm.
315 mm without top connector.
4 kg (including batteries).
700 bar.
2-pole SEA CON<sup>®</sup> connector.



## INSTRUCTIONS ON HOW TO RECHARGE THE BATTERY PACK

- Dry the battery pack and lay it down on a table.
- Loosen the four closing screws on the cover with the hexagonal wrench included in the probe accessories.
- Pull the screws completely out and gently move the cover to one side of the battery pack.
- Dry any trace of water in the proximity of the external side of the o-ring.
- Connect the battery charger to the top head connector.
- ► Read the below "Battery Charger" instructions.
- Put the cover on the battery pack.
- Check the correct position of the o-ring and close the battery pack again with the four screws.
- Gradually tighten the screws alternating one screw with another. (DO NOT TIGHTEN EXCESSIVELY - PLASTIC POM HOUSING).
- It is enough that you tighten a quarter of a turn of the screw at the end of stroke of the screw thread (plastic POM housing).



## OCEAN SEVEN SUBMERSIBLE 150 bar AND 700 bar RECHARGEABLE BATTERY PACKS





### BATTERY CHARGER

Connecting the battery pack, the charger immediately checks the nominal voltage thus automatically selecting the most appropriate action to carry out as:

- 1. If the battery voltage is lower than 1.2 V x cell, the charger carries out the standard charging procedure which implies the recharging at a moderate current for 30m. Whenever the battery reaches the nominal voltage, the charger automatically starts the quick-charging procedure.
- 2. If the battery voltage is higher than 1.2 V x cell, the charger carries out the quick-charging procedure.
- 3. If the battery voltage is lower than 0.2 V x cell, the charger carries out the standard charging procedure thus inhibiting the quick-charging procedure.

#### <u>Note</u>

At the end of the quick-charging procedure, the charger undertakes a low-current equilibration charging procedure which lasts 30 m. This procedure is also called trickly-charging procedure. The aim of this procedure is to keep the battery cells in good conditions thus compensating for the auto-discharge.

#### LED INDICATORS

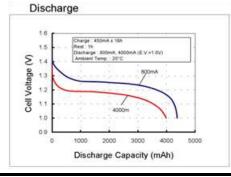
Green ON:	charger powered.
Yellow BLINKS:	standard charging procedure/equilibration procedure.
Yellow ON:	quick charging procedure.
Yellow OFF:	batteries are fully charged. bad battery; immediately stop the charging procedure and disconnect the battery
Red ON:	

#### **SPECIFICATIONS**

Power:	100 – 250 VAC 50/60Hz, 25 W.
Protection:	2 A fuse, transient voltage suppressor.
	Reverse battery polarity.
	Reverse current.
Charge current:	1.1 A quick charge, maximum time 6 hours.
	120 mA standard charging procedure, maximum time 30m.
	120 mA equilibration charging procedure, maximum time 15m.
	40 mA trickily-charging procedure.
Time-out:	8 hours.
Hold-off:	15 m.
Cells:	this charger has been configured for 12 1.2V cells.

#### PRECAUTIONS

- Do not charge warm/hot batteries.
- Do not charge batteries if the air temperature is higher than +35°C.
- Do not charge lead batteries.
- Do not charge primary batteries like: Alkaline, Mercury, Lithium, etc.. they may EXPLODE.
- Do not charge in the field.
- Do not try to recharge a closed battery pack.



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# OCEAN SEVEN SUBMERSIBLE 150 bar AND 700 bar RECHARGEABLE BATTERY PACKS

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