

Technical information XL13.2

Material	Aluminium, anodised, Teflon coated
Size (d x l)	65 mm x 247 mm
Weight above water	1450 gram
Weight under water	600 gram
Hyperbaric pressure test	25 Bar
Standard light power	50 Watt Xenophot bulb
Standard reflector	Aluminium, 10 (spot)
Optional light power	20 – 35 Watt Halogen / 24 Watt LED module
Battery pack	Sanyo NiMH 13,2 Volt - 4,5 Ah
Capacity at 100% power, (temperature 20 C)	50 Watt Halogen Xenophot appr. 60 minutes 24 Watt LED module appr. 75 minutes + 8 hours
Securities	- electronic thermal 50 C - mechanical thermal protection 50 C - overpressure valve for any battery gas leakage - lock button on switch
Electronic circuit	3 step variable light power 100%-75%-50% Depth discharging protection; Constant light power during discharging cycle SOS-signal Battery capacity indication Temperature charge controller 42 C
Charger	MP1100 (standard) External charging by two charging plugs Suitable for NiMH cells Fitted with a Delta-V charge controller, detects when the battery pack is full Automatic over switch to pulse charging charge time 5 hour Standard supplied with cord Several AC cords available: EURO/AUS/UK/USA cord

\* Anodised in accordance with American Military Standard MIL-A-8625-E type 3 class 2 and impregnated with Teflon.

**Warranty**  
The Metalsub torch warranty will start on the date of purchase. The warranty period is 24 months and will only count when the torch has been used in the way the manufacture advises and has explained in the outlines. During this warranty period we will repair all problems that are caused by manufacture related mistakes. We will take no responsibility for damage that is done through misuse or normal wear and tear of the Metalsub dive light for whatever reason. The light bulb itself and the o-rings has no warranty! The warranty period of the battery pack is 12 months from production date. Until 36 months from purchase we offer a fair settlement.  
We will give no warranty when any person has carried out any repair or rebuilding on our products by themselves!  
All goods being returned for warranty must be returned prepaid, sufficiently packed under the owners risk to :

dealer:



The Netherlands

MANUAL



METALSUB - HANDLAMP XL13.2 

## SAFETY PRECAUTIONS!

- Read this manual carefully before using the dive light.
- Always carry a backup light in case of dangerous dives
- Prior to air travel the halogen/LED unit must be removed or discharge the battery pack (to prevent overheating if the lamp should be switched on by accidental impact or mishandling). Please enquire from your airline if there are certain conditions or restrictions allowing you to carry the lamp in your luggage
- To prevent loss always clip or tie the lamp to the B.C. with a Lanyard (Metalsub Lanyard Part No. 6020)
- Always use the supplied charger
- Always charge the lamp in a dry and well ventilated place with an ambient temperature between 0 and 30°C and never by open fire

## INSTRUCTIONS FOR USE

### Charging the battery pack

Before the first use, the battery pack must be charged completely. This will extend the life of the battery pack. Please wait until the small light (LED) on the charger lights green before you disconnect the charger from the lamp.

Check that both charging sockets are dry and clean. Securely insert the charger plugs into the charging sockets of the dive light (see photo), polarity does not matter, and connect the power supply cord to a 220 Volt mains. The charger is suitable for mains between 100-240 Volts. The charger is fitted with a Delta-V charge controller, the electronic circuit in the lamp is fitted with a temperature controller (42°C). When one of them is activated, the charger will automatically switch over to trickle charging, which indicates that the battery pack is full.



### The LED indication on the charger (MP1100):

- **Battery test:** the LED indication will flash red 5 sec.
- **Charging:** the LED indication lights red continuously.
- **Battery pack full/trickle charge :** the LED indication lights green continuously.

After charging, first disconnect the power supply cord from the mains. After that disconnect the 2 plugs from the sockets.

**After a full charge do not recharge within 30 min. A thermal switch in the lamp will cut the charging cycle.**

**Warning:**  
**Always use the charger that is delivered with the dive light!!! The use of other chargers can damage the battery cells inside!!!**

**Warning:**  
**Do not separate the battery pack from the housing during the charging cycle, this can damage the electronics!**

### Switching the light on and off

Activate the light by pushing the lock button on the switch and turn the switch to the right. During the first 90° the light power can be changed into the following positions: OFF- 50%-75% -100%. To activate the SOS signal rotate the switch fast (2/second) from the 50% position on to the 100%. The SOS signal can be exited by rotating the switch to the OFF position. By pushing the button and turning the switch to the left (OFF position) the switch will be locked.

The LED battery capacity indicator:

LED green:	100-50% remaining capacity
LED orange:	30-20% remaining capacity
LED red:	20-15% remaining capacity
LED flashes red (1/sec):	10- 0% remaining capacity: the light power drops down to 50% capacity (10 minutes are left before the light switches off)
LED flashes green/orange or red (3/sec):	thermal overheated: switch off the light and wait until it cools down

**Warning:**  
Values are measured in water temperature of 20°C. At lower temperatures (for example 10 °C) the LED indication will change from green into orange within a few minutes.  
The burn time of the light is also dependent upon state of battery charge and type of bulb.  
An annual drop in battery capacity of 5%-10% is normal.

### Warning:

- To prevent overheating of your dive light we strongly advise you not to use the light above water.
- The lamp should be charged as soon as possible after use and always stored in a fully charged condition. An ideal storage temperature is between 15 and 25°C. Under no circumstances should the lamp be subjected to temperatures above 45°C. The rechargeable cells will slowly discharge when not in use (depending on the ambient temperature). We recommend complete discharge and recharging every three months. Never store the light uncharged for a long period. This prevents the battery pack runs down completely, this can damage the battery cells inside!!!
- If you don't use the light, turn the switch to its locked position and check that the LED indicator is off. This prevents the battery pack from running down completely which can damage the battery cells inside.

### Removal of the halogen light unit/LED unit

Turn the lamp ring on the front side of the lamp to the left. Now the unit can be pulled off from the housing. Rinse the O-ring and apply a thin coating of silicone grease. Replace the lamp ring and turn it to the right until it is firmly in place.

### Replacing the bulb

Turn the lamp ring on the front side of the lamp to the left. Now the unit can be pulled off from the housing. Remove the bulb and insert a new bulb. Ensure that the bulb is located all the way in the socket. Assemble the lamp and check for correct operation.

### Remark:

- Always use the light bulb advised by the manufacture.
- Never touch the light bulbs with your bare fingers, this will cause the light bulb to burn out prematurely, use a clean tissue or cloth.

### Replacing the battery pack

Unscrew the handle unit from the rear of the housing and turn the battery pack 90° to the left. Pull off the battery pack.

**Warning:** to prevent the battery pack from short circuiting, never allow contact between the contacts and other metal objects.

### General:

- After each dive, soak the lamp in clean fresh water for a few minutes.
- Rinse the dive lamp under running water to remove all traces of sand and salt.
- Make sure the sockets are dry. After each dive, we suggest blowing in compressed air (from the cylinder).
- Avoid physical impact.

