



LX20+ Cordless Primary Light

User Manual

www.diverite.com

386-752-1087



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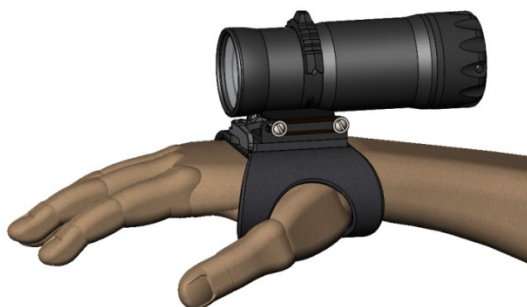
Table of Contents

Product Description	1
Tech Specs.....	2
Important WARNINGS.....	3
Installing the Batteries	4
Adjusting the Hand Mount.....	6
Attaching the LX20+ to the Hand Mount.....	7
Turning the LX20+ On and Off	8
Care and Maintenance.....	9
Dealing with a Flooded Light.....	9
Travelling with the LX20+.....	10
Warranty Information.....	11



Product Description

The LX20+ takes cordless primary lights to the next level. Now 36% brighter and with additional power modes, the LX20+ delivers a maximum of 1500 lumens of 6500 kelvin light in a concentrated 6 degree spot beam. Its compact and robust design makes it an ideal handheld primary light and perfect travel companion. A new self-cleaning rotary magnetic switch allows easy operation of the light with a smooth twist action. With a dependable double O-ring sealed tail cap and 500 foot (152m) depth rating, the LX20+ excels under the most demanding diving conditions.



The LX20+ is powered by 4 user-replaceable high output 18650 rechargeable Li Ion batteries. Designed around an industry leading Cree LED chip to maximize output and efficiency, the LX20+ has four power modes to match a variety of diving conditions plus a strobe mode for when you really need to get someone's attention:

- Full Power (100%) – 2.25 hours
- Medium Power (50%) – 4.5 hours
- Low Power (25%) – 9 hours
- Power Saver (5%) – 45 hours
- Strobe Mode (100%) – 22.5 hours

A true constant current LED driver provides unparalleled efficiency and ensures constant light output as the battery is depleted. The integrated microprocessor control unit monitors battery voltage and automatically steps down the light output before the batteries are completely drained, designed to never leave you in the dark. The step down is indicated by a series of flashes after which the LX20+ will continue to provide an additional 3+ hours of useable light.



Tech Specs

- LED: Cree XM-L2 U4 driven at 16 watts
- Light color temperature: 6500 Kelvin
- Beam angle: 6° spot
- Light Output and Burn Times:

Power Mode	Lumen Output	Burn Time
100%	1500 lumens	2.25 hours
50%	750 lumens	4.5 hours
25%	375 lumens	9 hours
5%	75 lumens	45 hours
Strobe	1500 lumens (10% duty cycle)	22.5 hours

- Batteries: Four Lithium Ion rechargeable 18650 3500mAh protected-circuit
- 3+ hour burn time after light output step down from full power
- Strobe cycle time: 100ms on / 900ms off
- Mount: Locking QRM (quick release) with soft hand mount
- Activation: Self-cleaning rotary magnetic on/off switch
- Size: 5.8 in. (15cm) length, 2.15 in. (5.5cm) diameter
- Weight: 1.25 lbs. (0.56kg)
- Buoyancy: 8 ounces (227g) negative in water
- Charging time: Up to 9 hours from complete discharge
- Depth rating: 500 feet (152m)
- Compliance: RoHS compliant
- Made in the USA



Important WARNINGS

- Read this manual carefully before diving with the LX20+ Handheld light. You should fully understand how this dive light works and that you are proficient in its use prior to diving.
- The LX20+ Handheld is an electronic device and electronic devices can fail. NEVER dive this light without suitable back up lights for the environment you are diving in.
- Never short the two contact rings on the battery pack with a metal object. This can cause a shock hazard.
- Before using your LX20+ Cordless Primary Light it is extremely important that you read and understand each warning, as well as warnings and cautions that appear throughout the manual. Failure to do so could result in damage to or loss of equipment, serious personal injury, or death.
- Before diving, you should have the proper training from a qualified instructor and obtain certification from a recognized training agency.



Installing the Batteries

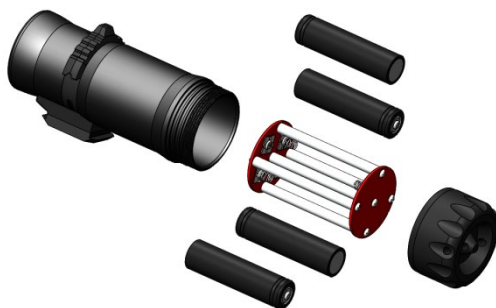
The LX20+ is powered by four rechargeable lithium-ion batteries. The batteries must be charged and installed in the battery carrier before being inserted in the LX20+.

NOTE: Charge the batteries before installing them using the provided charger. Follow the included manufacturer's instructions to charge the batteries.

WARNING: Never short the two contact rings on the battery carrier with a metal object. This can cause a shock hazard.

To install the batteries:

1. Unscrew the cap from the end of the LX20+.
2. Remove the battery carrier.
3. Install the batteries into the carrier lining up the plus (+) and minus (-) indications on the batteries and the carrier.



4. Slide the battery carrier into the LX20+ with the contact rings on the top of the carrier being inserted first.



5. Make sure the O-rings and O-ring sealing surface on the cap are clean and free of any debris.

Screw the cap back on making sure it is tightened snugly. Ensure that the O-rings are not pinched between the cap and the body.



Adjusting the Hand Mount

The hand mount can be mounted on your left or right hand. It secures to the hand using an elastic strap. The circular opening on the side of the hand mount is for the thumb and helps to keep the light secure and in place on your hand while diving.

To adjust the hand mount:

1. Loosen the elastic strap.
2. Slide your hand into the hand mount placing your thumb through the open end on the side of the hand mount.
3. Tighten the elastic strap so that the hand mount is secure and comfortable on your hand.



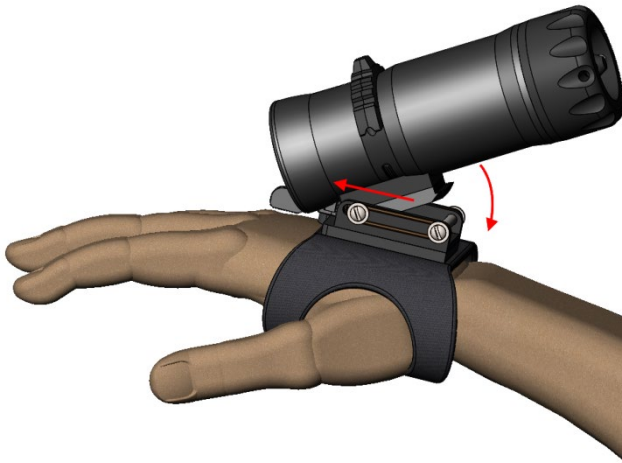


Attaching the LX20+ to the Hand Mount

The LX20+ can be attached to the hand mount with it on or off of your hand. The light mount is spring-loaded to hold the light in place, and makes it easy to attach and remove the light.

To attach the LX20+ to the hand mount on your RIGHT hand:

1. Unlock the locking lever on the front of the receiver by swinging it open.
2. Line up the clip on the base of the LX20+ with the receiver on the hand mount.
3. Slip the front of the clip on the LX20+ under the front bar of the receiver on the hand mount.
4. Push the LX20+ forward and then push down on the LX20+ until it snaps into place in the receiver.
5. Lock the receiver by closing the locking lever.



To attach the LX20+ to the hand mount on your LEFT hand:

1. Unscrew the two flat head screws holding the receiver and locking lever plate to the hand mount.
2. Turn the assembly 180 degrees and reattach to the hand mount.
3. Follow the instructions above for attaching the LX20+ to the hand mount.



Turning the LX20+ On and Off

The LX20+ has a rotary magnetic on/off switch that can easily be used underwater with gloves.

To Turn the Light On or Off:

1. Rotate the magnetic switch to the right to turn the light on.

The white line on the switch must line up with the white line on the light's body.

2. Rotate the magnetic switch to the left to turn the light off.



To Switch the LX20+ Power Mode:

1. With the LX20+ on, rotate the magnetic switch off, and back on within three seconds. The LX20+ will cycle to the next mode. The modes are activated in the following order: 100% > 50% > 25% > 5% > Strobe.
2. If the light is turned off for 3 seconds or more, the light will start back at 100% power mode when turned on again.



Care and Maintenance

With proper care and service, your LX20+ can provide you with years of safe, enjoyable use. Without proper care, your LX20+ can become damaged and either be unserviceable or dangerous to use.

- Always rinse the light and hand mount after use in saltwater.
- Periodically clean and lightly lubricate the double O-rings on the battery compartment with silicone lubricant.
- Store the light in a cool and dry environment.
- Always charge the batteries following the instructions provided by the manufacturer of the charger.

Dealing with a Flooded Light

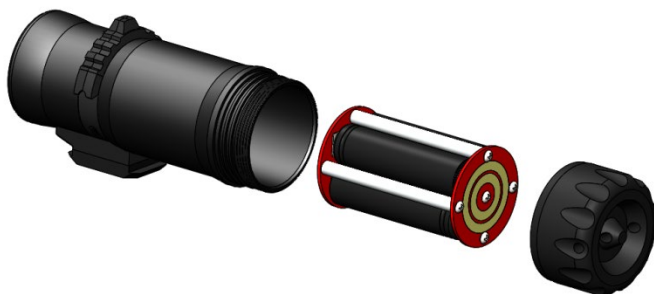
If your light floods, there are a few things you need to do:

- Do not continue to use the light.
- Turn the light off and remove the back cap and battery pack. Drain any excess water and allow it to dry. **DO NOT REINSTALL THE BATTERIES.** Storing damaged or flooded batteries inside of a sealed light can lead to an explosion.
- **DO NOT TAKE THE LIGHT APART.**
- Arrange with your dealer to return the light to Dive Rite for repair. Flooding damage cannot be fixed or corrected in the field. Attempting to repair the light in the field voids your warranty.



Travelling with the LX20+

When travelling with the LX20+, the battery pack must be installed backwards so that there is no chance of activation. Simply remove the battery pack, turn it around, and put it back in with the contact rings facing towards the back cap.





Warranty Information

Dive Rite offers the original purchaser a one-year warranty against manufacturer defects on all of our products. To take advantage of this warranty the original purchaser must retain their original purchase receipt from an authorized dealer. Unauthorized modifications or repairs will VOID the manufacturer's warranty. Negligence, accidental damage, commercial/rental use, or abuse are not covered under warranty.

Lights carry Dive Rite's general one-year warranty. Floods, broken bulbs, broken lenses, or punctured cords are not covered under warranty unless they are the direct result of a manufacturer defect.

Battery packs and individual battery cells are covered by a 90-day warranty from time of purchase.

Making a Warranty Claim

Warranty claims must be made directly with Dive Rite headquarters in Lake City, FL. It is the responsibility of the original purchaser to send in the suspected warranty item along with a completed Return Authorization Form and the original purchase receipt. Once the product is received Dive Rite will evaluate it to determine if a warranty claim is valid.