

# Manley 20

Performance Headlamp

from Marble Mountain Lights LLC

“See things in a  
different light”



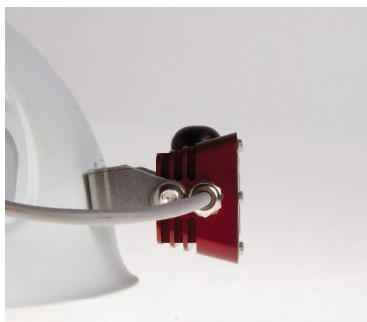
- 910 emitter Lumens\*
- Non-magnetic construction
- Lightweight
- Brighter and lasts longer than the competition

\* All lumen numbers here are emitter lumens; the most common numbers given for headlamps.



The Manley 20 is a high performance headlamp designed for the harshest environments. Two independent LED drivers are coupled with precision optics. The flood optic is a wide 40 degrees providing uniform light throughout the field of view; you can see your feet and objects in your peripheral vision. The spot optic is an 11 degree-wide focused beam that illuminates objects at a distance for finding elusive leads. The mix of flood and spot illumination creates a light pattern unlike any other.

The case is milled from a single block of 6061 aircraft aluminium and hard anodized for military-grade strength. The unit is waterproof-rated at IP67 (1 meter for 30 minutes). Construction materials include stainless steel, nickel, and brass; compasses are unaffected by the headlamp.



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### Specifications:

- Headlamp weight: 151 grams (5.4 oz.) (including all hardware)
- Battery weight: 125 grams (4.4 oz)
- IP67 waterproofing (30 minutes, 1 meter)
- Crush-proof case: rated for 600 lbs.
- Over-discharge protection; pack will disconnect itself to protect battery below 6.0V.
- Available Light Intensity Profiles: Standard, Separate Beam, custom

### Features:

- Synchronous buck converter with efficiency >95%.
- User-replaceable power cable from headlamp.
- Standard 0.062-inch Molex power connector compatible with Sten batteries and chargers.
- Low-battery warning: 3 quick blinks indicates ~4% remaining.
- Open-source hardware and firmware.

Standard Profile					
Intensity	Emitter Lumens*	Flood LED	Spot LED	Run Time for 2200mAh battery	Run Time for 2600mAh battery
Level 1	8	X		12 days (est.)	14 days (est.)
Level 2	72	X		38 hours	45 hours
Level 3	140	X	X	18.4 hours	21.5 hours
Level 4	320	X	X	8.2 hours	9.5 hours
Level 5**	910	X	X	1.8 hours**	2.2 hours**
Safety***	~3		X	36+ hours***	36+ hours***

Separate Beam Profile					
Intensity	Emitter Lumens*	Flood LED	Spot LED	Run Time for 2200mAh battery	Run Time for 2600mAh battery
Level 1	8	X		12 days (est.)	14 days (est.)
Level 2	48	X		46 hours	57 hours
Level 3	120	X		18 hours	22 hours
Level 4	400		X	4.5 hours	5.5 hours
Level 5**	520		X	3.1 hours**	3.5 hours**
Level 6	38	X	X	61 hours	75 hours
Safety***	~3		X	36+ hours***	36+ hours***

### Notes:

- \* All lumen numbers are "emitter lumens", the most common numbers given for headlamps. Table is for cool-white model. Warm-white models are approximately 20% less.
- \*\* Turbo mode will switch to Level 4 when case reaches 55 degrees C, and will return to Level 5 when temperature returns to 45 degree C or lower. Typical continuous time is 15 minutes before switch.
- \*\*\* After the battery is discharged (approx. 6.6V), the headlamp will switch to Safety mode. Typical run time is 36 hours after entering Safety mode.
- \*\*\*\* For 2-cell 18650-type battery packs.

### Pricing: (Mar-2015)

Three color temperatures available: Cool (5500K), Warm (3000K), or High CRI (4500K).

Headlamp: \$230

Li-ion Battery: \$50

1.2A Charger: \$30

Complete System (headlamp, battery, and charger, photo at right): \$310

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