



MBPKG-WM-5 Maxa Beam Crew-Served Weapons Light Kit

12,000,000 CandlePower Xenon Searchlight for Heavy Weapon and Vehicle Mounted Applications

Key Features

- 12,000,000 Peak Beam CandlePower Output
- 6.9 km Range (ANSI/NEMA FL1)
- 85 Watt Xenon Short Arc Lamp
- Infrared Illumination Capability (filter sold separately)
- Motorized Beam Width Adjustment
- Strobe Mode
- Backup Battery (115 minutes)
- Picatinny Rail Connection
- Made in the USA




Included Accessories

- 850nm Infrared Filer
- 12VDC Vehicle Power Cable
- Backup LiFePO4 Battery
- Spares Kit
- See page 2 for complete contents

Maxa Beam Searchlight End-Users Include

- U.S. Armed Forces (all branches)
- U.S. Border Patrol
- U.S. Department of Energy
- U.S. Secret Service
- Federal Law Enforcement (FBI, U.S. Marshals)

FEATURES

Output	12,000,000 Peak Beam CandlePower (no maximum threshold; -10% minimum threshold)	 <i>MBA-8406-MMS Controller detail.</i>
Range	0.25 lux @ 6,925 meters 1 lux @ 3,500 meters 12 lux @ 1,000 meters <i>Visible ranges per ANSI/NEMA FL1: Flashlight Basic Performance Standard</i>	
Lamp	85 Watt Xenon Short Arc, Instant hot/cold start and restrike	
Beam Width	1° Spot to 25° Flood, Motorized	
Beam Intensity	3 Levels: 45W (Regular), 85W (High), 35W (Low; User-Programmable)	
Disorienting Strobe Function	Default frequency of 10Hz and default duty cycle of 38%. User-adjustable frequency from 1-31Hz and duty cycle from 3-63%	
Mount Interface	Connects to a 4.0 Inch MIL-STD-1913 "Picatinny" accessory rail (not included)	

CONTROL

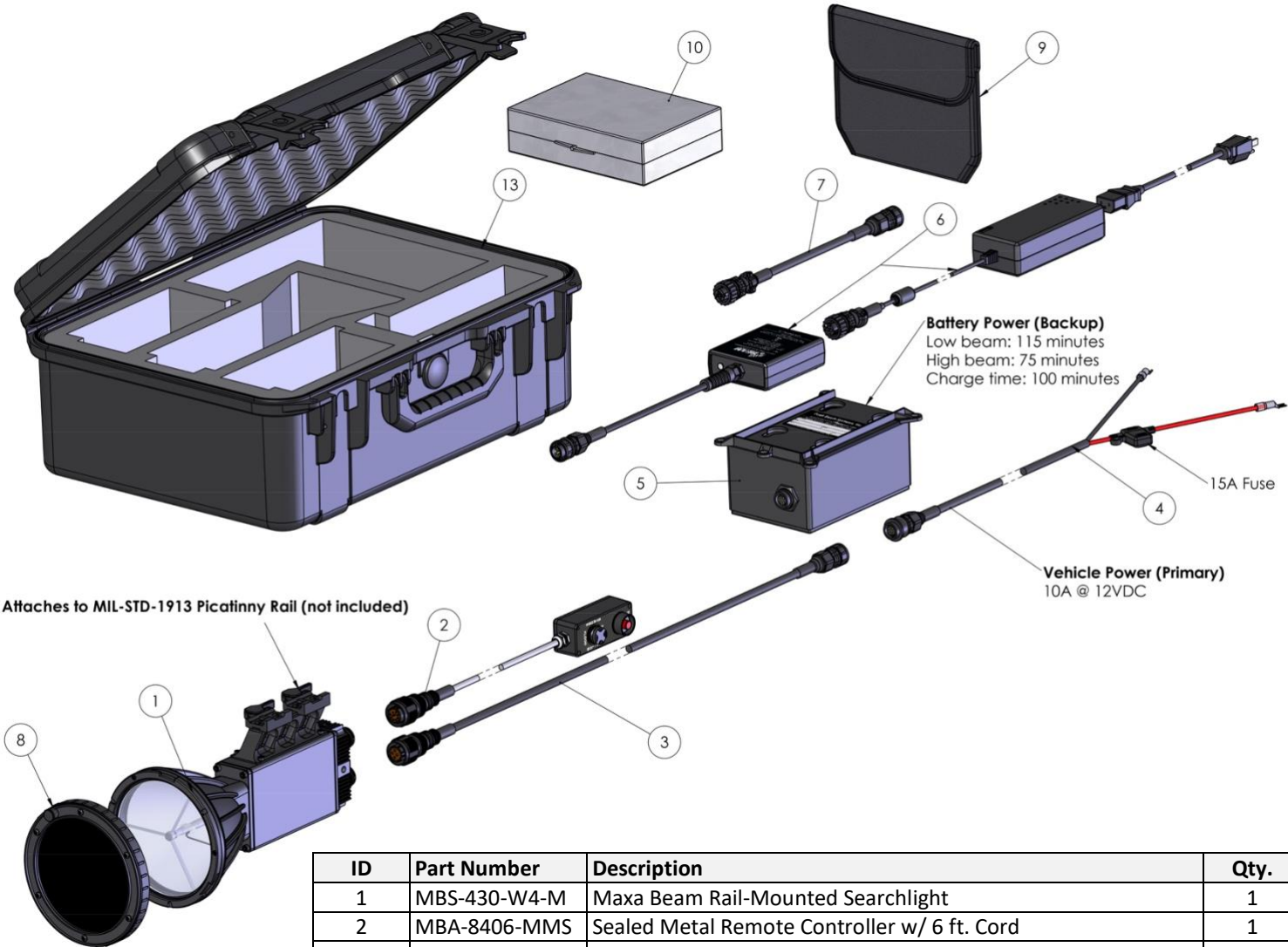
Control Method	Wired Remote Switches (MBA-8406-MMS Controller)
Controllable Functions	On/Off, Beam Intensity, Beam Width, Strobe, Customized Beam Settings
Customizable Settings	Start-Up Beam Mode and Beam Width, Spot Limit, Flood Limit, Strobe Frequency and Duration
<i>Please consult the Operation Manual for complete programming and control options.</i>	

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PACKAGE CONTENTS



ID	Part Number	Description	Qty.
1	MBS-430-W4-M	Maxa Beam Rail-Mounted Searchlight	1
2	MBA-8406-MMS	Sealed Metal Remote Controller w/ 6 ft. Cord	1
3	MBA-8215-M-L	Power Cable, 15 ft.	1
4	MBA-7210-L	12VDC Vehicle Power Cable w/ Inline 15A Fuse, 10 ft.	1
5	MBP-1308-FG	Backup Battery, 7.5 AH LiFePO4 w/ Fuel Gauge	1
6	MBP-3200-A	Multi-Voltage Battery Charger w/ MBP-5004 AC Adapter	1
7	MBA-8208-L	Power Cable Adapter, 8 in.	1
8	MBA-1850-L	850nm Covert Infrared Filter, Locking	1
9	MBA-6100	Filter Pouch	1
10	MBA-2400-M	Spare Lamp Kit	1
11	F-115	Spare Fuse, 15A (not shown)	2
12	PS-536	Cable Tie, 17 in., 50 lb. Break Strength (not shown)	25
13	MBA-6200	Storage Case	1

ENVIRONMENTAL

Ingress Protection	IP67 per CEI/IEC 60529:2001
Operating Temperature	-15°C to +60°C Reduced Battery Run Time Below 0°C
Housing	Polyester Powder-Coated Aluminum with Corrosion-Resistant Conversion Coating

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POWER

Primary Power 12VDC Vehicle Battery
Connects to vehicle battery using included cable

Input Power Requirements	Parameter	Value	Unit	Notes
	Operating Voltage	10.0-13.5	Volts	Over Voltage/Reverse Polarity Protected to $\pm 36V$
	Lamp Off	<1	μAmp	25°C, 12VDC Input
	Low Beam Mode	3.35 ± 0.07	Amps	25°C, 12VDC Input
	Normal Beam Mode	4.29 ± 0.08	Amps	25°C, 12VDC Input
	High Beam Mode	8.29 ± 0.09	Amps	25°C, 12VDC Input
	Peak Current at Lamp Start	20.5 ± 3.2	Amps	25°C, 12VDC Input
	Peak Current Pulse Duration	8.1 ± 1.6	mS	Time spent above high beam mode current draw.

Backup Power External Lithium Iron Phosphate (LiFePO4) Battery

Battery Capacity 7.5 Amp-hours (7500mAh)
96 Watt-hours (Wh)

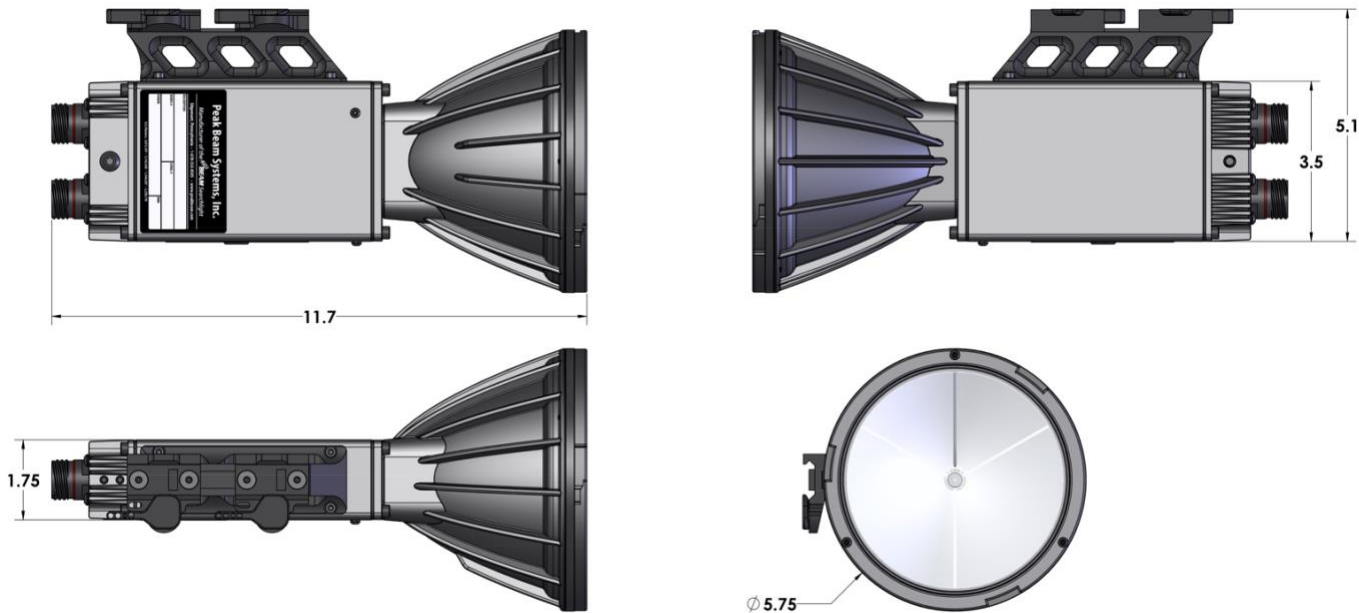
Battery Charge Cycles 2500

Battery Run Times	Beam Mode	Run Time
	Continuous Default Beam Mode	115 minutes
	Continuous High Beam Mode	75 minutes

Battery Charging	Input Type	Charge Time
	100-240VAC	100 minutes
	10.0-13.5VDC	100 minutes

Battery Safety Data Sheet (SDS) is available upon request.

PHYSICAL CHARACTERISTICS



Searchlight Weight 3.6 ± 0.1 lbs.

Battery Weight 3.1 lbs.

Dimensions are in inches.

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MAINTENANCE

Lamp	Field Replaceable Xenon Short Arc Lamp (Kit # MBA-2400-M Included)
MTBF	1500 hours (Lamp); Maintenance/Replacement Recommended at 1000 hours
Warranty	90 days (Lamp and Battery); 1 year (All Other Components)

SAFETY WARNINGS

ANSI Risk Group 3. Warning.
Visible and infrared radiation emitted from this searchlight.
Permanent eye damage can result. Avoid direct exposure to the beam.

Do not look directly into the searchlight beam. Exposure of the eye to either the direct searchlight beam or a beam reflected from a flat mirror-like surface can cause permanent eye injury to the unprotected eye. Follow the same precaution even when an Infrared Filter is installed on the searchlight.

Nominal Ocular Hazard Distance (NOHD), Visible Light: 10 meters
NOHD, Infrared Light: 30 meters for exposures greater than 10 seconds

- Do not operate searchlight if the front lens is damaged or removed. Ultraviolet injury to skin and cornea can occur if the searchlight is operated with a damaged front lens or if the lens is removed.
- Do not allow the concentrated beam of light to be focused on flammable materials at close distances for prolonged periods of time.
- Do not operate light in an explosive environment.
- Do not touch lamp connections during operation as high voltage is present.
- Do not touch the quartz envelope of the lamp. If the lamp is accidentally touched, clean with rubbing alcohol and allow it to dry completely before operating the searchlight.
- Always wear protective eyewear, long sleeves, and gloves if removing the front lens cover. The lamp is under positive pressure and should be handled with care.
- Always disconnect searchlight from battery when not in use, when placed in storage or when being transported to prevent accidental activation.
- Never charge a battery that is cooled below 0°C (32°F). Allow battery to return to room temperature before connecting it to charger.
- Do not expose battery to fire or open flame. Do not puncture, deform, incinerate or heat battery above 85°C (185°F).
- Do not open or disassemble battery. Batteries are sealed in a waterproof case with no user-serviceable components. Do not attempt to use a battery that has a damaged case; please contact the factory about our re-casing service.
- Do not dispose of battery in fire. Disposal must be conducted in accordance with applicable local, state, or national regulations. Batteries contain recyclable materials; recycling is encouraged over disposal.
- If storing battery for long periods of time, store battery at 75% charge level and recharge once every six months. Do not store batteries above 60°C (140°F) or below -20°C (-4°F). Store in a cool, dry location not subject to frequent temperature fluctuations.

REVISION HISTORY

4/2014	MBS-430-W4 Series released.
5/15/2014	Serial Interface V3.5 released; Interface Control Document V3.5 released.
5/2016	Continuous High Beam function added (applicable to switch control only) (G3-26).
8/2017	Phased transition begins for D38999 connectors from military service class W (Cadmium plated) to military service class Z, Zinc-Nickel plated over Aluminum shell.
2/20/2020	Serial Interface V4.0 released; Interface Control Document V4.0 released.
2/4/2022	MBPKG-WM-5 package configuration released.
5/18/2022	New reflector coating with improved visible and infrared reflectivity released (G3-26A); rail grabbers updated.
9/1/2024	Searchlight programmable settings updated, including power-up on high beam option (G3-34). Input power requirements updated. Serial Interface V4.2 released; Interface Control Document V4.2 released.



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