



Peak Beam Systems, Inc.
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TECHNICAL SPECIFICATION

rev. E 9/17

Product Identification:

Part Number:	MBS-430-RSMY
Description:	Maxa Beam Remote-Controlled Searchlight, RS-232, 12VDC Input, Mil. Spec. Metal Connectors
Included with Product:	MBA-2435-M Mating Power Connector Kit, MBA-2445-M Mating Control Connector Kit, Maxa Beam Control Panel Software Disc, Operation Manual, Focus Adjustment Tool, Interface Control and Pin-Outs Document

Performance:

Output:	12,000,000 Peak Beam CandlePower (-10% minimum threshold; no maximum threshold)
Range:	0.25 lux @ 6,925meters 1 lux @ 3,500 meters 12 lux @ 1,000 meters <i>Visible ranges per ANSI/NEMA FL1: Flashlight Basic Performance Standard</i>

Control:

Control Commands:	See 'Maxa Beam RS-232 Interface Control & Pin-Outs v3.5' for complete ASCII command set and interface configuration
Control Method:	RS-232 Protocol (Serial Communication) Wired Remote Switches (Hand Controller)
Control Software:	Maxa Beam Searchlight Control Panel v1.0.3.0

Functional Characteristics:

Controllable Functions:	On/Off, Beam Intensity, Beam Width, Strobe, Customized Beam Settings
Customizable Settings:	Start-Up Beam Width & Intensity, Spot Limit, Flood Limit, Strobe (<i>see below</i>)
Lamp:	Instant hot/cold start and restrike
Beam Width:	1° Spot to 40° 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%

Environmental:

Ingress Protection:	IP67 as per CEI/IEC 60529:2001
Low Operating Temperature:	-15°C to +60°C
Housing:	Alodined Aluminum per MIL-DTL-5541F with Polyester Powder-Coat Finish

Maintenance:

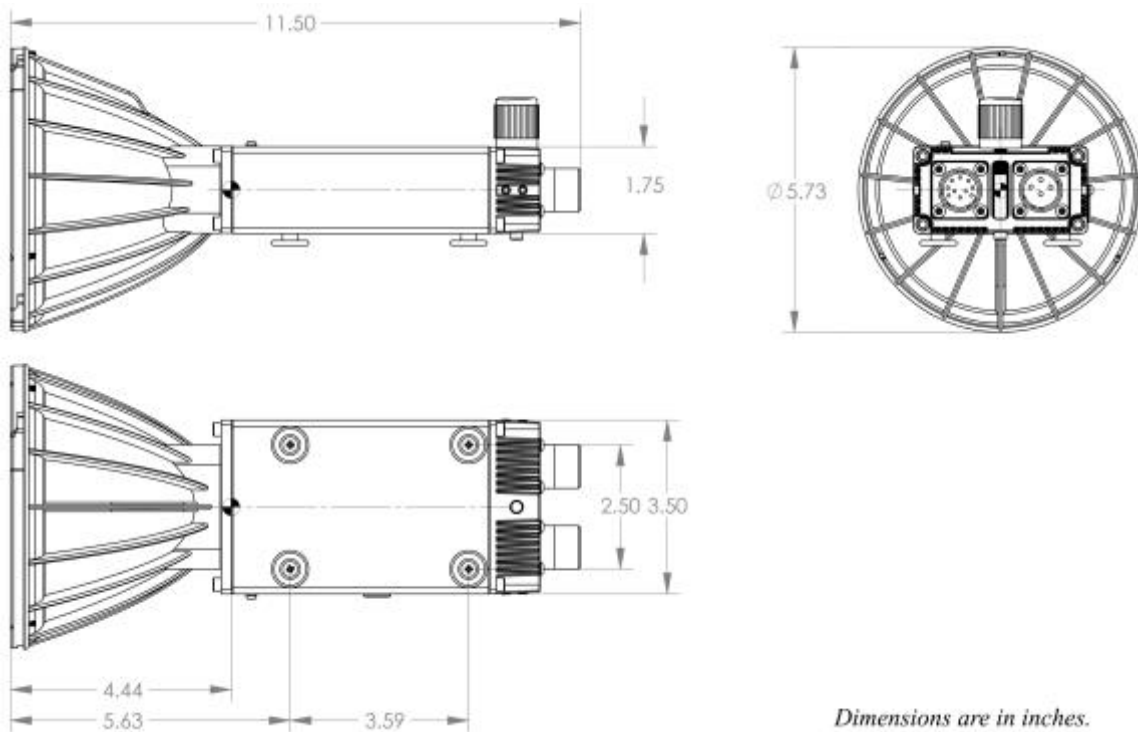
Lamp:	Field Replaceable Xenon Short Arc Lamp (Kit #MBA-2400)
MTBF:	1500 hours (lamp); maintenance/replacement recommended at 1000 hours
Warranty:	90 days (lamp); 1 year (all other components)

Power:

Parameter	Min	Typ	Max	Unit	Notes
Operating Voltage	10.0	13.5	13.5	Volts	Over Voltage/Reverse Polarity Protected to $\pm 36V$
Lamp Off, <i>RS-232 Lights</i>		0.12	0.14	Amps	25°C, 12VDC Input
Low Beam Mode		3.37	3.60	Amps	25°C, 12VDC Input
Normal Beam Mode		4.34	4.60	Amps	25°C, 12VDC Input
High Beam Mode		8.52	9.30	Amps	25°C, 12VDC Input
Peak Current at Lamp Start		18.5	20.0	Amps	25°C, 12VDC Input
Peak Current Pulse Duration		10	12	mS	Pulse duration is the time the searchlight draws more than 10A. The waveform for this current pulse resembles half a cycle of a sine wave.

Dimensions:

Weight: 3.25 lbs.



Dimensions are in inches.

Connector Pin-Out:

Power Connector Part #: D38999/20ZC4PA		
Pin	Color ¹	Function
A	Red	Positive Supply Voltage
B	Red	Positive Supply Voltage
C	Black	Negative Supply Voltage
D	Black	Negative Supply Voltage
Shell	-	Shield
Control Connector Part #: D38999/20ZC98PN		
Pin	Color ¹	Function
A	Red	12 VDC Out ²
B	Black	Focus Narrow ²
C	Green	Strobe/Battery Saver Mode ²
D	Orange	On/Off ²
E	Grey	RS-232 Ground (<i>DB-9 Pin 5 + Drain Wire</i>) ³
F	Blue	Ground (<i>Not connected on MBPKG-E Series</i>) ²
G	Brown	High/Low Beam ²
H	Yellow	Focus Wide ²
J	White	RS-232 Receive (To Computer) (<i>DB-9 Pin 2</i>) ³
K	Purple	RS-232 Transmit (From Computer) (<i>DB-9 Pin 3</i>) ³
Shell	-	Shield

¹ Indicated colors are those used by Peak Beam Systems. Your cable wire colors may vary.

² Used for Hand Controller Only.

³ Used for Serial Communications Only