

JABSCO®



60233

**233SL
Remote Control
Dual Beam
Searchlight**

- FR** 233SL Remote Control Dual Beam Searchlight
- DE** 233SL Remote Control Dual Beam Searchlight
- IT** 233SL Remote Control Dual Beam Searchlight
- NL** 233SL Remote Control Dual Beam Searchlight
- SE** 233SL Remote Control Dual Beam Searchlight
- ES** 233SL Remote Control Dual Beam Searchlight



ITT

Engineered for life

Dual Beam Wireless Remote Control Searchlight

- Powerful dual beam halogen bulb configuration giving 225,000 candlepower
- Patent protected focus mechanism giving true Spot/Flood capability
- Wireless searchlight control system allowing up to 4 easy to install control stations
- Infinite motion capabilities due to 8 way touch pad directional control
- Rugged anodized & painted aluminum housing for total corrosion resistance
- Continuous rotation capabilities while eliminating slip ring corrosion
- 70° vertical capabilities using rugged delrin components and heavy duty gear motor
- Patent protected sweep feature giving accurate and constant +/- 20 degree from starting location
- Fast and Slow capabilities for accurate marker identification and fine tune
- Patent protected easy to install bayonet base with security locking mechanism.

APPLICATION

A marine searchlight has to be capable of performing a range of tasks from locating buoys to illuminating a narrow channel and occasionally, searching for a man overboard. The features of the 233SL have been designed to offer the best combination of beam spread (width) and intensity (length), for both shorter and longer range work giving the user total flexibility when tackling any of the above applications.

This product can also be used on medium to larger motor homes for illuminating driveways to campsites, road signs and as a back up light.

PERFORMANCE DATA

Jabsco quotes performance data in two ways: Candle power & Lux. Candle power is a useful guide to actual light produced but does not measure the efficiency of the reflector design to project that light at the target. The most relevant comparison guide is LUX, which is the measurement of actual light available at a given distance. In order to be able to distinguish a reasonable level of detail, a level of one lux is generally considered to be necessary



CandlePower

The first standard for the measurement of light consisted of a spermaceti candle of standard dimensions burning at a certain rate, giving off light in one direction. This was known as a standard candle, and it's light from any one direction was said to have an intensity of one candlepower. This is also know as one candela. A candle emits one candlepow-



LUX

LUX is a unit of measurement of the intensity of light. It is equal to the illumination of a surface one meter away from a single candle. The International System unit of illumination, equal to one lumen per square meter.

SPECIFICATIONS

Part Number	Voltage	AMPS	WAT
60233-0012	12 VDC	TBD	TBD
60233-0024	24 VDC	TBD	TBD

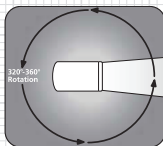
SEARCHLIGHT FUNCTION AND OPERATION

The advantage of the Remote Control is that it allows you to direct the light in the best location for maximum effectiveness. They are an increasingly popular addition on power boats, help. Secondary remote control kits can be bought for most models which allow control from either the flybridge or main helm.



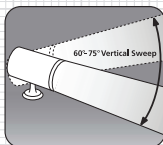
8 Way Controller

The 8 way controller allows for easier and faster location of an object due to the ability to move this light in any of the diagonals.



Horizontal Range

The horizontal range for this light is a continuous 360 degrees. There is no hard stop on this light.



Vertical Range

The vertical range for this light is 70 degrees. This means you have 35 degrees from the horizontal in both the up and down ward motion of the light.



Auto Sweep

With the light on in either fast or slow mode, pushing this button will continuously sweep the light 10 degrees each side of the initial target spot. If the light was in fast mode when hitting the sweep button the light will automatically place the unit into slow mode. Simply press the auto sweep button again to finish the cycle. The light will return to its initial starting point and the directional controls will become available for use again.



Speed

The 233SL has the option to run the light in all motion axis's in FAST or SLOW mode. For fast simply hit the Hare button, and for slow hit the Tortoise Button.



Spot / Flood

The spot and flood buttons allow you to change the beam configuration from a spot to a flood, and allow you to choose any beam configuration you desire between these two extreme limits. Simply hold one of the buttons down until you reach your desired beam configuration. For full spot simply hold the spot button down until it comes to a hard stop. Likewise for flood.

INSTALLATION & SET UP INSTRUCTIONS

The installation instructions will take you through 3 stages of installation and set up. These stages will be as follows

- 1: Mounting the light
- 2: Mounting the controller
- 3: Learning the controller to the light

Further information is included on page 3 of this data booklet on the controller features and the process required to install additional control stations to this light.

TS	Bulb Configuration	Weight	Standard Carton
	Spot / Flood	TBD	1
	Spot / Flood	TBD	1

1. MOUNTING THE STAINLESS STEEL BAYONET MOUNTING BRACKET AND DECK SEAL

- a. Select a location that will allow for clear beam projection. Searchlight base should be mounted on level, flat surface.
- b. The mounting template should be used to locate the stainless steel bayonet mounting plate and deck seal supplied. An xx hole for the 12v supply needs to be drilled in the location also highlighted on the mounting template. 4 3/16" mounting holes also need to be drilled for fixing the light to the deck. It is recommended that stainless steel mounting bolts be used with lock washers.
- c. Mount light so that the Jabsco name on the base is facing to the rear.
- d. Fasten light in place with XX (XX) #10 x 1" screws provided or applicable screws for your particular application.

2. MOUNTING THE SEARCHLIGHT

- a. Feed the power cables through the central holes in the bayonet base deck seal. If possible have someone snake the wires from the inside of the boat to minimize the amount of cable between the light and the bayonet base fitting.
- b. Place the light on the bayonet base fitting with the security locking grub screw located at 5 o'clock. Rotate the light into the bayonet base fitting while applying reasonable pressure until the security locking grub screw is at 6 o'clock
- c. Using the security locking grub screw key. Lock the light in place by rotating the security locking grub screw.

3. MOUNTING THE CONTROLLER

- a. Select a location, which will allow for fit and convenient operation of control.
- b. Drill one hole (see Panel Cutout Template enclosed) for running the power supply cables through
- c. Run power cables through hole drill, if possible have someone snake the wires from the inside of the boat to minimize the amount of cable between the controller and the mounting surface.
- d. Fasten control using the installation kit included

Please note that if this unit is being used to upgrade an existing searchlight, Jabsco has available to its customers a retro fit kit that will allow the controller to be seated in a mounting bracket designed to cover existing holes from previous installations. This kit number is xxxxx-xxxx.

3: LEARNING MODE PROCEDURE

Note: The controller included with this product was initialized at the factory to talk with the searchlight it was supplied with. It is not necessary to conduct this procedure unless adding or replacing a controller.

- a. Disconnect battery power to the receiver.
- b. Press and hold the "on/off" button on the controller while reconnecting power to the searchlight. The searchlight will turn "on" within (2) seconds.
- c. Code synchronization is then complete.

LEARNING ADDITIONAL CONTROLLERS TO THE UNIT

The Jabsco 233SL can support up to (4) separate controllers. Each time a controller is added to the system or is replaced; all controllers require re-initialization using the above procedure. Power to the searchlight must be disconnected then reconnected while pressing the controllers "on/off" button for each controller added in turn.

ELECTRICAL INSTALLATION

It is suggested that the Searchlight and controller (s) be wired together in an independent circuit. Consult the wiring diagram for connections

Although Internal Fuses are present it is suggested that external fuses be installed on both the searchlight & the controller (s) Consult the Wiring Table for fuse and wire size.

DANGER! - REDUCE THE RISK OF ELECTRIC SHOCK



Disconnect power from the system before working on the unit to avoid personal injury, damage to the surrounding environment and/or damage to the unit.

WIRING TABLE

VOLTAGE	AMP FUSE		WIRE SIZE PER FEET OF RUN*				
	DRAW	SIZE	0"-10"	10"-15"	15"-25"	25"-40"	40"-60"
12 Vdc	16	20	#16 (1.5)	#14 (2.5)	#14 (2.5)	#12 (4)	#6 (16)
24Vdc	8	15	#18 (1)	#16 (1.5)	#16 (1.5)	#14 (2.5)	#10 (6)

* Length of run is total length of the circuit from the power source to product and back to ground. Wire sizes listed are AWG gauge and metric millimeters.

CLEANING OF EXTERIOR SURFACES

Recommendation for cleaning exterior surfaces is a solution of warm water and a mild detergent soap

CAUTION!



Do not use cleaners that contain esters, halogenated solvents, aromatic solvents, ketones and strong acids or bases.

CAUTION! - BURN HAZARD



Burn hazard. Do not touch lens when light is "on".

BULB REPLACEMENT

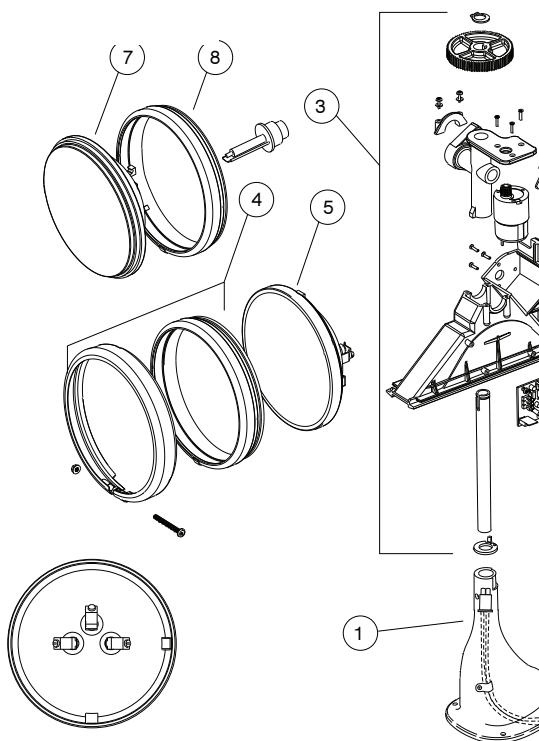
Bulb replacement kit included 2 x H7 halogen bulbs and a replacement decal

- Disconnect all power to the searchlight and controllers before starting bulb replacement process
- Using a small watchman's screwdriver carefully lever the decal holder plate at the rear of the searchlight. Exposing the 2 locking nuts.
- Loosen the lock nuts being careful to support the front bezel ring of the searchlight. Note – the internal chassis is connected to the bezel and glass and is all pulled in from the rear, loosening these nuts will allow the internal chassis to be pulled out from the front.
- Once the nuts have been removed (and stored safely) the chassis is able to be pulled from the front. The chassis will need to be twisted to an angle of 10 degrees or so with the left side moving upwards (if you are looking from the front) this is to allow the rotational gear mechanism to separate.
- Once the chassis has been removed from the housing the H& connectors on the rear of the bulbs can be removed.
- The bulb holder springs can be opened and the bulbs can be removed.

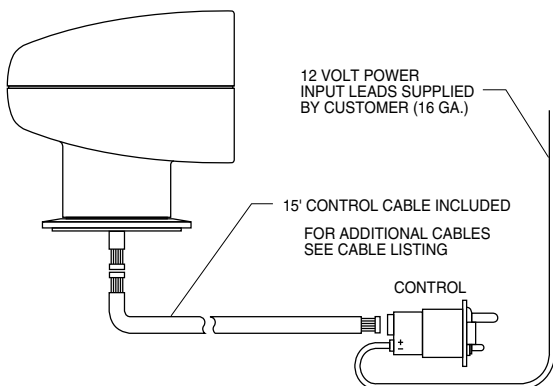
PART LIST

Key	Description	Part Number
1	Upper Housing	60016-1000
2	Lower Housing	60017-1000
3	Base with Gasket	60088-1000
4	Lens with Gasket	60015-1000
5	Bulb (2 Req'd)	18753-0336
6	Bulb Housing	60018-1000
7	Cable Assembly	60063-1000
8	Motor Kit Vertical (Upper)	18753-0458
9	Motor Kit Horizontal (Lower)	18753-0350
10	Drive Arm/Gear	18753-0457
11	Bulb Clip Kit	18753-0459
12	Screws	18753-0471

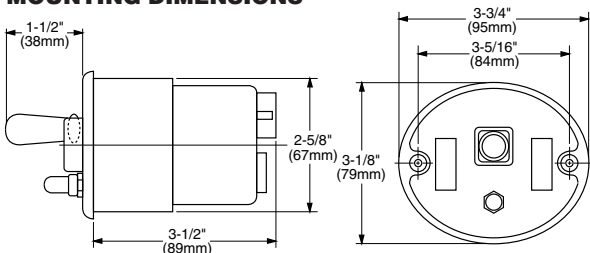
Exploded View

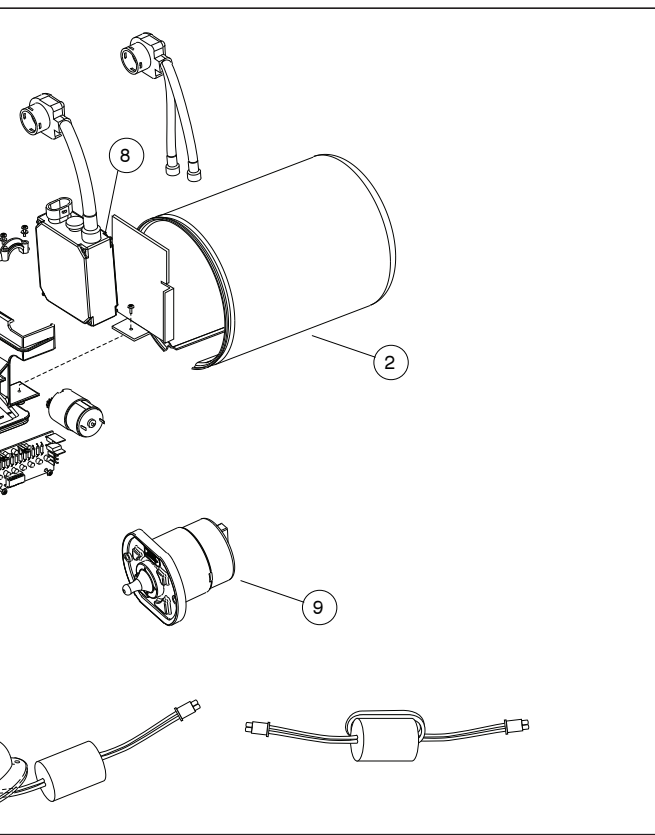


Wiring Diagram, Single Control



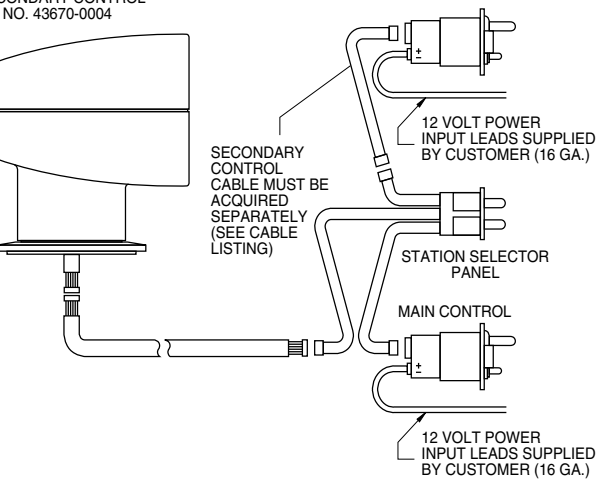
REMOTE CONTROL MOUNTING DIMENSIONS





Wiring Diagram, Optional Secondary Remote Control

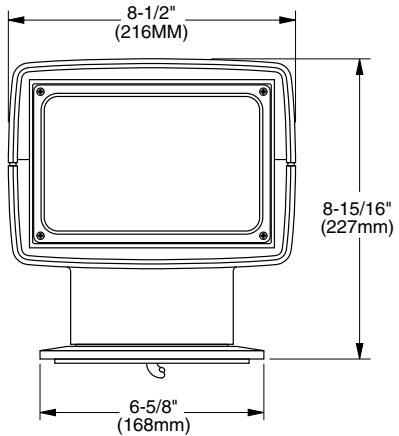
SECONDARY CONTROL
NO. 43670-0004



Wiring Diagram



Dimensional Drawings



TROUBLESHOOTING

All lights are thoroughly inspected before shipping and are warranted to operate properly. **AND WIRE HARNESS CONNECTIONS BEFORE PROCEEDING WITH THE**

PROBLEM

Control lever works in reverse in all directions.

Light moves in only three of the possible four directions.

Dim light (low voltage)

Bulb operates - no light movement

or

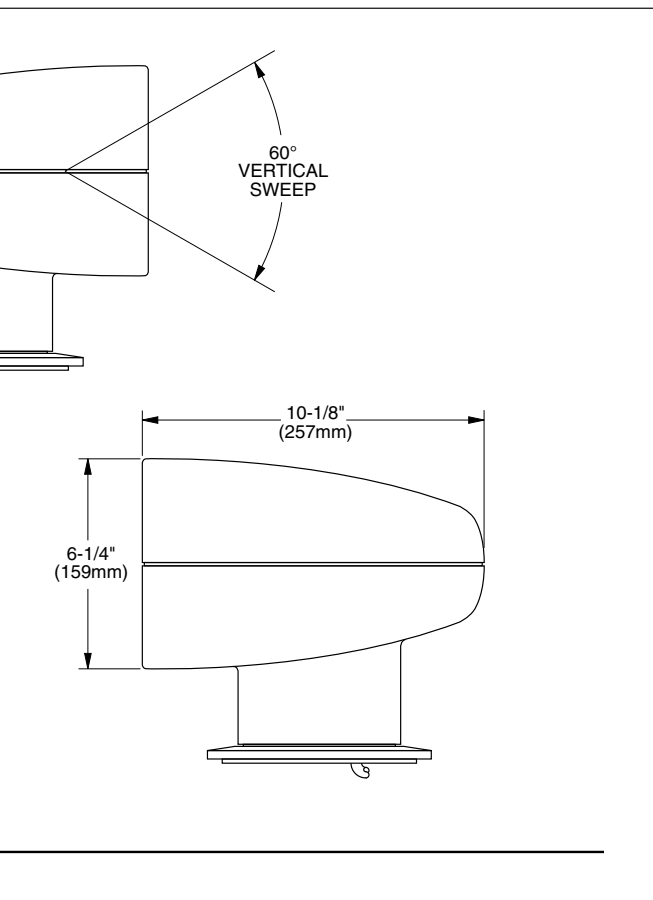
Light moves - bulb does not operate.

FCC REGULATIONS

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation. Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to the equipment. Such modifications could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular



rate within specifications. If light does not operate correctly, **CHECK FUSES, AND TROUBLESHOOTING.**

SOLUTION

See wiring instructions.

- A. Check connectors.
- B. Replace control.
- C. If problem persists, return light & control for service.

- A. Check voltage at power source.
- B. Refer to cable listing for proper wire gage and length.

- A. Check fuses on front of control.
- B. Check bulb.

installation. If this equipment does causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

ITT declares that this device is in compliance with the essential requirements and adheres to relevant provisions of Directive 1999/5/EC



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Warranty: All products of the company are sold and all services of the company are offered subject to the company's warranty and terms and conditions of sale, copies of which will be furnished upon request