

# PRODUCT SUPPORT MANUAL YACHT BEAM 6M

Searchlight Remote Control System with Joystick Remote Control Panel



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# PLEASE READ ALL WARNINGS, CAUTIONS AND NOTES CAREFULLY.



**CAUTION:** Before proceeding to install, test or use your new Yacht Beam product, please read this Product Support Manual in its entirety.

#### **SECTION 1 - HOW THE SEARCHLIGHT WORKS**

The Yacht Beam 6M was specially designed for mariners who require a high intensity remote controlled searchlight that can stand up to the tough marine environment.

The Yacht Beam 6M is a xenon arc searchlight that produces six (6) million peak candle power. All functions of the Yacht Beam 6M can be electrically operated by remote control from the pilot area of the vessel. A remote control panel is supplied with the Yacht Beam 6M. An optional slave remote control panel is available (ACR Product No. 1942).

The sleek design and modern construction of the searchlight body makes it attractive for recreational and commercial vessels. The searchlight is totally enclosed and is made of rugged aluminum alloy. It is gasketed and finished to be resistant to the weather.

### **SECTION 2 - PREPARING TO INSTALL**

#### **Unpacking the Yacht Beam 6M**

Before proceeding with the installation of the Yacht Beam 6M, please verify that the content of the box includes the following:

- Light housing with wires, 12V (Product number 1943), OR Light assembly, 24V (Product number 1941)
- Yacht Beam 6M xenon bulb (located inside packing foam)
- Joystick
- Product Support Manual
- Instruction sheet for Yacht Beam 6M upgrade (for Product Number 1943), OR Instruction sheet for Yacht Beam 6M (for Product Number 1941)
- Warranty card

If any of the above is missing, please contact The Yacht Group Technical Service by email at service@yachtbeam.com or by phone at (305) 667-5811. Please be ready to provide the serial number of your unit and location of purchase.

## **SECTION 3 - INSTALLATION**

#### Wiring the unit

The Yacht Beam 6M Remote Control Searchlight consists of searchlight unit and a master remote control panel. The user must supply the cable and/or wire to power the unit (see Appendix A for Cable Selection Tables). The source must be a fused 24 VDC, 10 amp supply (product number 1941) or a fused 12 VDC, 20 amp supply (product number 1943). This cable is to be attached to the searchlight as shown in the connection diagram. See Figure 1.



**CAUTION:** Observe polarities when attaching wires!

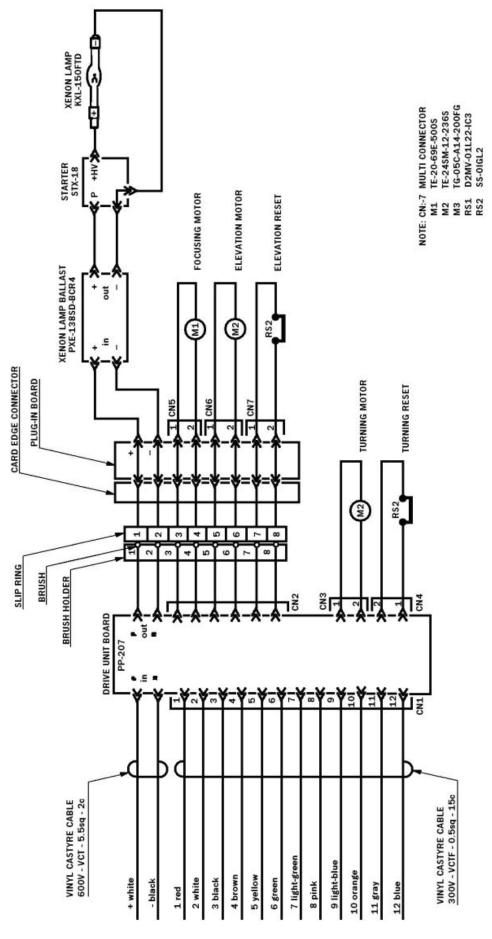
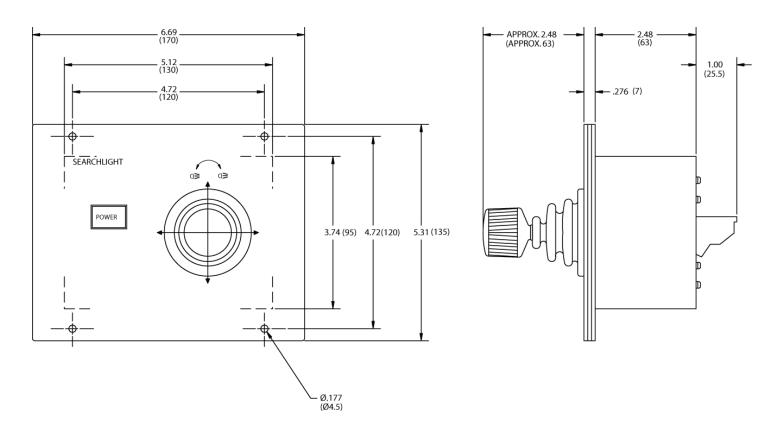


Figure 1

# Mounting the remote control panel (master)

The remote control panel can be mounted where desired using appropriate marine grade mounting hardware. For water resistant installation, some type of gasketing (neoprene sheet, silicone sealant, etc.) must be used. In all cases, the remote control panel should be mounted in a protected area. Refer to Figure 2 for mounting and wiring details.



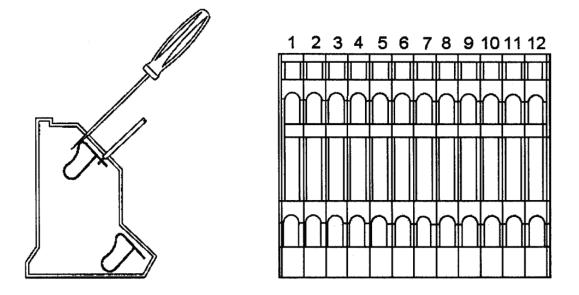


Figure 2

# Wiring of remote control panel

The remote control panel is shipped with a 6-foot (1.83-meter) long, 20 AWG cable. The cable will be attached to the searchlight and should be connected to the corresponding contacts on the remote control panel based on the wire color. Refer to Figure 3.

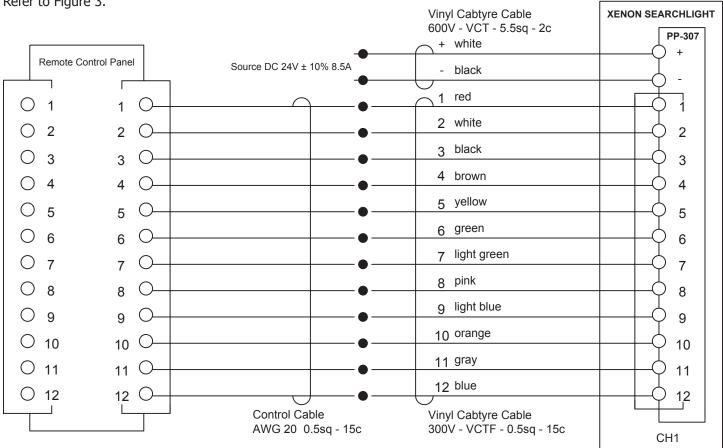


Figure 3

#### Installing the searchlight

The searchlight can be mounted where desired, using 3/8" length stainless steel fasteners. Keep navigational aids, antennas, etc., out of the beam path of the light. It is recommended to mount antennas 10 feet (3.05 meters) above the light, at a minimum. Be sure the 4 nylon shoulder washers, supplied with the searchlight, have been inserted in the searchlight base mounting holes to prevent a galvanic reaction between the mounting hardware and the base of the searchlight. Also make sure that the mounting base gasket is securely in place before bolting down. Silicone grease should be applied to the bottom of the gasket to help in waterproofing the unit.

When mounting, be sure that the unit is able to rotate 360° without hitting any obstructions. Refer to Figure 4 for mounting details. Mount unit so that the ID label on the mounting base faces forward. This is the home position when light is reset.

See instructions on controls. See Section 4 for bulb installation.



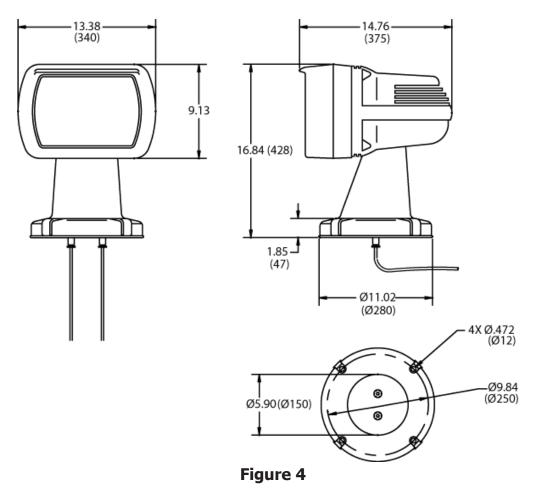
**WARNING:** The searchlight is not designed for inverted mounting.



**WARNING:** Xenon-Arc lights emit electromagnet radiation, which may interfere with some communication or navigation systems mounted on board.

The preferred location for communication and navigation equipment system antennas is at least 3 meters directly above the light.

After the light is installed, all critical communication and navigation systems should be checked for proper operation with the light turned ON and rotated in all directions



# Installing a second remote control panel (slave)

The second remote control panel is optional. This section refers to Product No. 1942 only.

The second Remote Control Panel may be mounted similarly to the first. The second remote control panel is wired parallel to the first remote control panel. Connect cable to sockets on back of control panels. The master panel should have cable plugged into top socket row 2. The slave panel should have the cable plugged into bottom socket row 1 (refer to Figure 5).

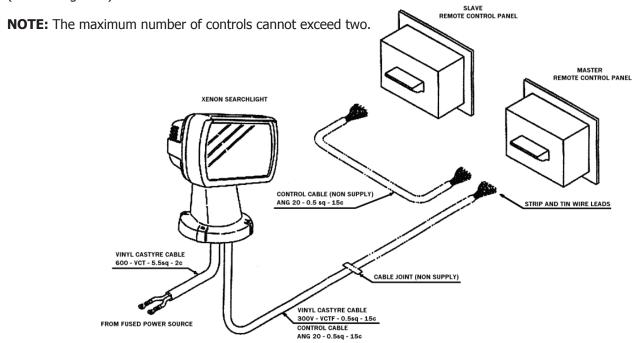


Figure 5

# **SECTION 4 - OPERATION**

# **Instructions on Controls**

# A. Rotation

Up/Down/Left/Right- Move joy stick in the desired direction.

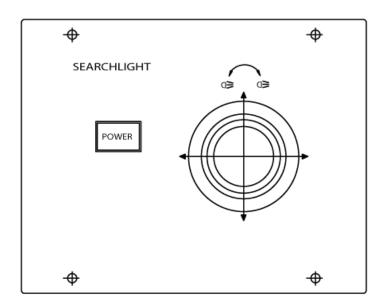
Low Speed Range- 0° to 7.5°

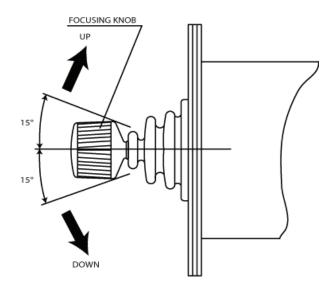
High Speed Range- 7.5° to 15°

## B. Focus

Rotate focusing knob for desired light spot size (wide or narrow)

# C. Operation of CPF99 Control Panel





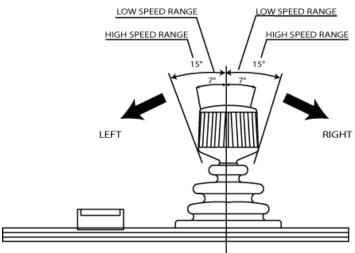


Figure 6

#### **SECTION 5 - CARE AND MAINTENANCE**

#### **General Care**

The Yacht Beam 6M is relatively maintenance free. Clean the exterior of the light with a mild detergent and water if desired. Rotate the light left, then right and up then down periodically to keep motors and turning surfaces clean and operational.



**WARNING:** DO NOT rotate the light manually. This will strip the gear rack.

# **Bulb Replacement**

A 150W xenon short arc lamp is provided with your Yacht Beam 6M. If it should need replacement, it can be ordered through a Yacht Beam dealer or through The Yacht Group. The part number is P/N 6007.



**CAUTION:** Failure to follow replacement instructions carefully can result in damage to bulb and/or lights. All part sales are final.

To replace the lamps, follow these steps:

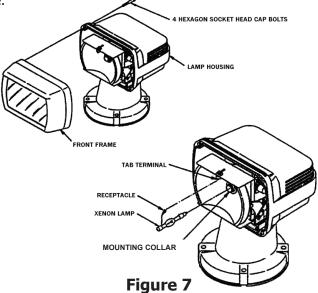


**WARNING:** Turn OFF the power switch when installing lamp.



**WARNING:** DO NOT touch glass or parabolic reflectors with fingers or tools! Use cloth gloves.

- 1. Disconnect unit from power source and allow cooling.
- 2. Remove four screws holding front frame and glass with provided 6mm hex wrench.
- 3. Loosen mounting collar of lamp by turning collar counter clockwise. Unhook wire from opposite end of lamp. Pulllamp out of mounting collar. Installation is done in reverse order.
- 4. Replace front frame and glass and install the four retaining screws. Be sure gasket is properly lubricated and securely in place.
- 5. Reconnect unit to power source.





**CAUTION:** If you handle the xenon lamp with dirty hands, wipe off the stain on the glass with alcohol.

# **APPENDIX A - CABLE SELECTION TABLES**

**TABLE 1- Cable Selection Table, Yacht Beam 6M, 12V** 

Source cable size		
0 – 30 ft run	AWG 12	
30 – 50 ft run	AWG 8	
50 – 100 ft run	AWG 6	
Control cable size		
0 – 100 ft run	AWG 16	
Remote panels cable size		
0 – 100 ft run	AWG 16	

TABLE 2- Cable Selection Table, Yacht Beam 6M, 24V

Main cable and source cable size		
0 – 30 ft run	AWG 14	
30 – 50 ft run	AWG 12	
50 – 100 ft run	AWG 10	
Control cable size		
0 – 100 ft run	AWG 16	
Remote panels cable size		
0 – 100 ft run	AWG 16	

# **APPENDIX B - YACHT BEAM 6M SPECIFICATIONS**

Characteristic	Specification
Lamp housing	Aluminum alloy die casting
Base	Aluminum alloy die casting
Power source, 24V	21.6 – 26.4 V
Power source, 12V	12V
Fuse, 24V	10 amp
Fuse, 12V	20 amp
Reflector	High quality parabolic glass
Lamp	150W Xenon short arc lamp
Peak beam candle power	6,000,000 CD
Beam spread	About 1°
Operation method	Electric remote control
Elevation angle	Up 18°, down 30°
Turning angle	360° (Continuous)
Elevation speed	About 7.5°/sec.
Turning speed	Low about 11°sec., High about 27° sec.

# **APPENDIX C - ACCESSORIES**

The following are options and replacement parts that can be ordered for your searchlight:

ltem	Product Number (P/N)
Replacement bulbs: 150W, 12V or 24V lamp	6007
Joystick, for second station for 24V Yacht Beam 6M (no cable)	1942

# **APPENDIX D - WARRANTY, NOTICES**

#### **WARRANTY LENGTH: 1 YEAR**

This product is warranted against factory defect in material and workmanship for a period of 1 (one)\* year from date of purchase or receipt as a gift. During the warranty period Yacht Beam will have repaired, or at its option, replaced at no cost to you for labor, materials or return transportation.

For further assistance, please contact our Technical Service Department at:

#### **The Yacht Group**

4545 Ponce de Leon Blvd. Coral Gables, FL 33146

Questions about this warranty should be sent to us through our contact form or via Email: service@yachtbeam.com Fax: +1 (305) 663-5551, Telephone: +1 (305) 667-5811.

This warranty does not apply if the product has been damaged by accident or misuse, or as a result of service or modification by other than the manufacturer. The COMPANY MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER WITH RESPECT TO THIS PRODUCT, except as otherwise expressly stated in the previous paragraph.

The Company shall not be liable for consequential or special damages. In order to place the warranty in effect, choose a form above and complete it entirely. Or you may fill out the registration card accompanying your product (if applicable) which must be returned to the Yacht Group within ten days of purchase.

For information on product returns, please review our Returns Policy at www.YachtBeam.com

#### **Notices**

The Yacht Group diligently works to provide a high quality Product Support Manual, however, despite best efforts, information is subject to change without notice, and omissions and inaccuracies are possible. The Yacht Group cannot accept liability for manual contents. To ensure that you have the most recent version of the Product Support Manual, please visit the Yacht Beam website at www.YachtBeam.com