# YACHT BEAM

*for vessels 45-200 ft*

# PRODUCT SUPPORT MANUAL
# YACHT BEAM 1MM+

## Searchlight Remote Control System

## TABLE OF CONTENTS

⚠️ **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 - PRODUCT DESCRIPTION

**Introduction**

The Yacht Beam 1MM+ was specially designed for mariners who require a high intensity remote controlled searchlight that can stand up to the tough marine environment.

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.

The Yacht Beam 1MM+ searchlight contains a narrow beam searchlight that produces 1,000,000 peak candle power by combining twin 35W metal halide HD lamps providing over 500K candela (CD) each and 1 million effective CD when combined.

All functions of the searchlight can be electrically operated by remote control from the pilot area or the vessel using the Joystick, Master Controller and interconnect cable supplied with the Yacht Beam 1MM+.

**Unpacking the Yacht Beam 1MM+**

Your new Yacht Beam 1MM+ Remote Control Searchlight System comes with the following components:

1. Yacht Beam 1MM+ searchlight
2. Joystick with Installation Kit
3. Master Controller with Installation Kit
4. Product Support Manual, Warranty Card, Mounting Templates, etc.
5. Wireless Micro Remote OPTIONAL



**Figure 1 - Yacht Beam 1MM+**

## SECTION 2 - SEARCHLIGHT MOUNTING

Make sure the area is clean and dry. The searchlight can be mounted where desired, using appropriate length 5/16" diameter stainless steel fasteners. One set is provided in the mounting kit and four (4) nylon shoulder washers. The nylon washers prevent a galvanic reaction between the mounting hardware and the base of the searchlight. Be sure these washers have been inserted in the base mounting holes and that the mounting base gasket is securely in place before bolting down. Apply silicone grease to the bottom of the gasket to help in waterproofing the unit. When mounting, be sure the searchlight is able to rotate 360° without hitting any obstructions. For the drilling hole pattern, refer to the searchlight Mounting Template.

> ⚠️ **CAUTION:** Do not mount the searchlight upside down. Moisture cannot drain from the inverted light head assembly.

Joystick

(+) To power supply

30 Amp fuse

(-) Ground
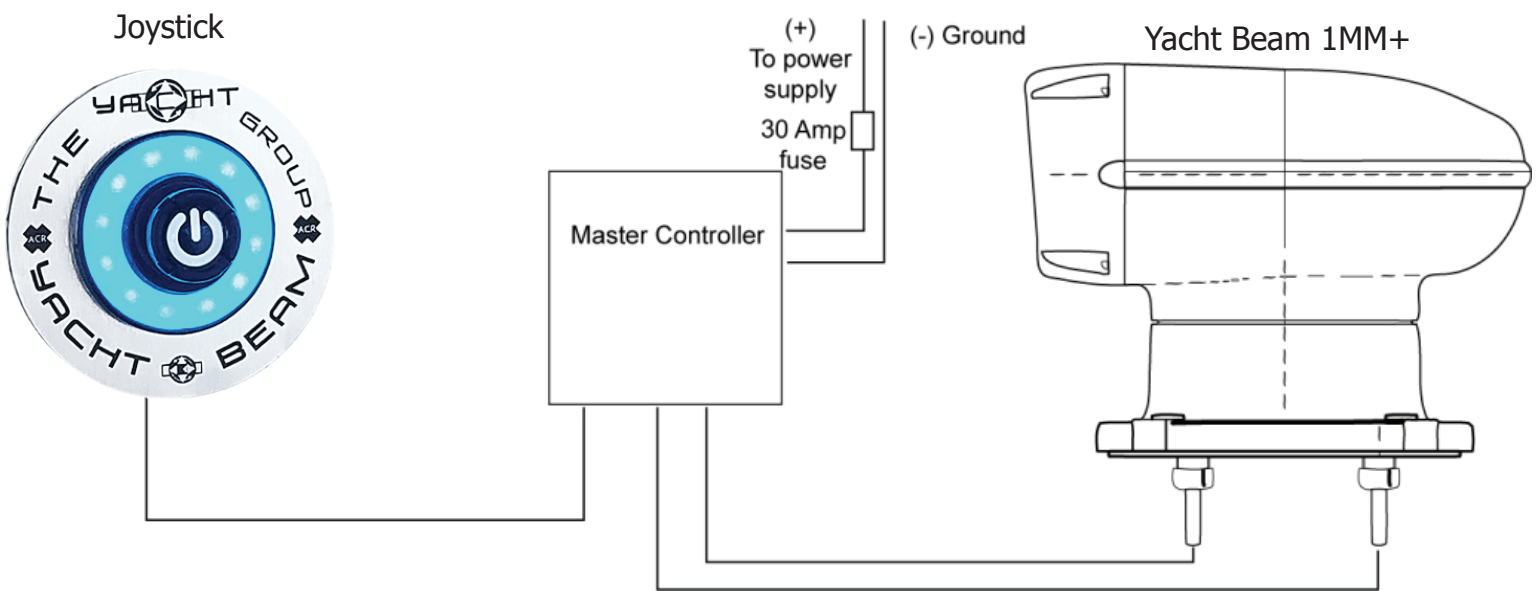
Yacht Beam 1MM+

Master Controller

**Figure 2 -** Master Controller unit (mounted upright)
Joystick connection configuration

## SECTION 3 - REMOTE CONTROL SYSTEM

The Remote Control System consists of the Master Controller and the Joystick. This system is compatible with 12 VDC through 24 VDC systems without modification.

## SECTION 4 - JOYSTICK

**Flush Mount**
Cut a round hole of 7/8" in the surface, peel off protective covering of hi-bond tape from the mounting plate. Use the supplied prep on the mounting surface, place and press the Joystick in place.

**Connecting to the Master Controller**
The Joystick communicates with the Master Controller via its supplied cable.

Simply connect it in place on the Master Controller.

Additional Joysticks (up to three) may be used with one (1) Master Controller.



**JOYSTICK TOP VIEW**



**JOYSTICK CONNECTION**

# SECTION 5 - MASTER CONTROLLER

## Mounting

The Master Controller can be mounted in any position near the searchlight that is protected from the weather. Check in advance that the coax cable from the Joystick and the wiring harness from the searchlight can be routed to this location. Mount the Master Controller with the wires and coax facing down. Use an appropriate fastener for your mountinglocation. Use a sealant in fastener holes to prevent moisture intrusion.

**Yacht Beam Master Control Box**


**1- Install the Thumb switch with LED Halo in dash.**

**2- Mount Yacht Beam Master Control box within 6 Feet of Thumb switch.**

**3- Connect Red and Black wires (12/2) from the Master control box (Power In), to 12 or 24 Volts D/C and install appropriate Fuse:**
   **12 Volts install a 30 Amp fuse**
   **24 Volts install a 15 Amp fuse**

**4- Connect White and Black wires (12/2) from the Master control box to the White and Black wires that feeds the Bulb power.**

**5- Connect the 16/4 wires from the Master control box to the 16/4 wires from the spotlight (direction control wires) matching colors, the Yellow and Green wires are not used.**

**6- Connect Thumb switch harness to Master Control Box, Align Keyway on Socket, press in and turn clockwise to lock.**

**WARNING:** The Yacht Beam 1MM+ has a unique wiring scheme. Special attention must be paid to the following chart.

**WARNING:** Failure to follow this arrangement may damage components.

## DIRECTION CONTROL WIRING

| Wiring from Interface box | 16/4 | Spotlight harness |
|---|---|---|
| Red | | Red |
| White | | White |
| Black | | Black |
| Brown | | Brown |

**Red and White      Up and Down**
**Black and Brown    Left and Right**

**If the Up and Down direction is opposite, reverse the Red and White wires.**
**If the Left/Right direction is opposite, reverse the Black and Brown wires.**

## BULB WIRING

| Wiring from Interface box | 12/2 | Spotlight harness |
|---|---|---|
| White | | White |
| Black | | Black |

**Knob on bottom adjusts speed of movement.**

## SYSTEM OPERATION

**Pressing the Thumb Joystick straight down (toward Dash) will turn the system on.**
**Pressing the Thumb Joystick Left, Right, Up or Down will move the spot light in that Direction.**
**Pressing the Thumb Joystick stright down (toward the Dash) again will turn the system off.**

**CAUTION:** HID light systems, when first turned on, have a high inrush current requirement of 25 amps. If you activate the light and the lamps flicker on and off repeatedly, check the voltage being supplied.
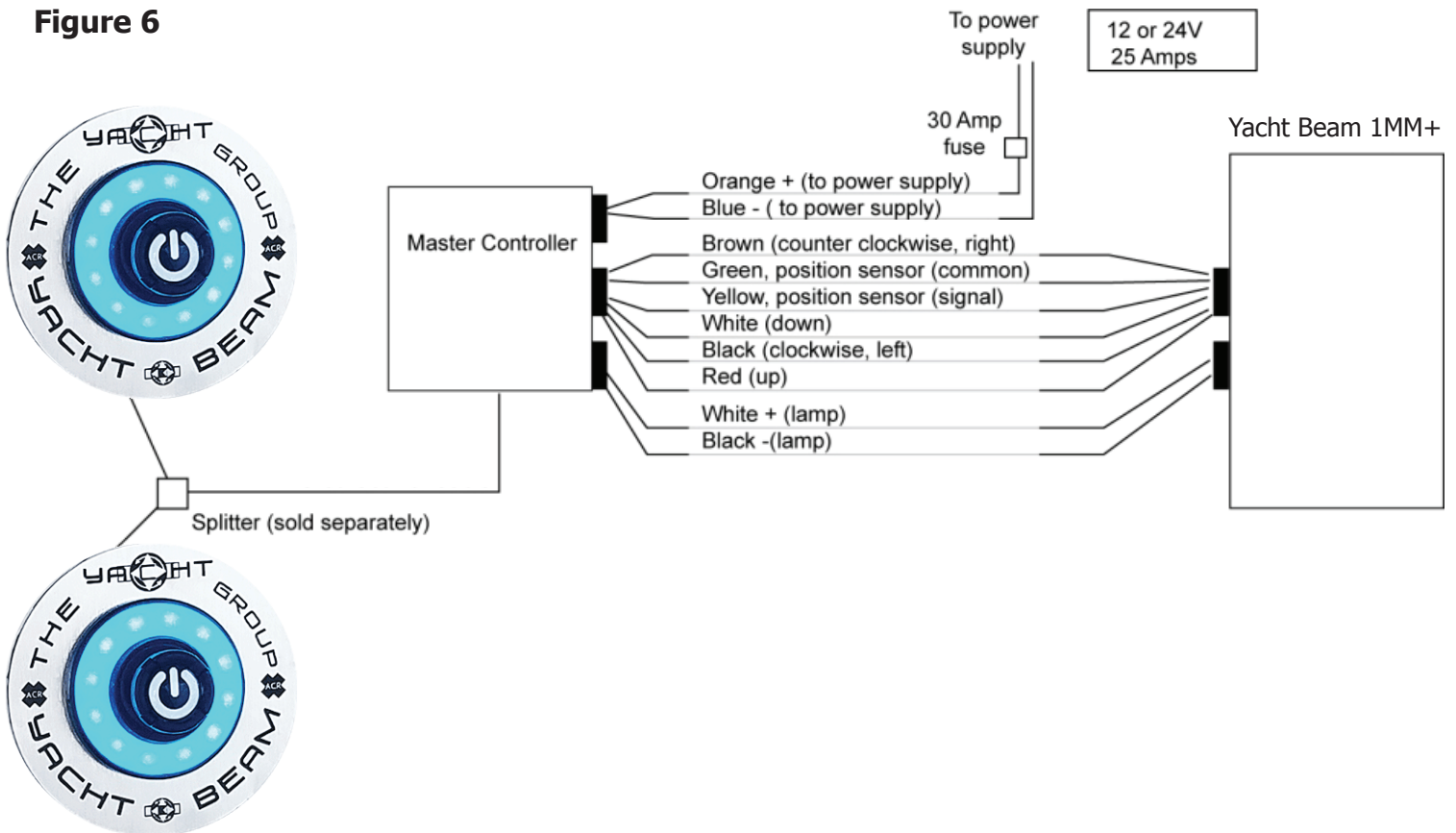This condition can be experienced with voltage input of less than 11.5V.

## FUNCTIONS OF THE MASTER CONTROLLER

The Master Controller is designed to perform up to six different duties on searchlights, winches and other electrical devices. The Master Controller provides optimum voltage to ensure brightest performance and long lamp life, regardless of boat system voltage fluctuations. The Master Controller is compatible with devices requiring 12 VDC through 24 VDC operation.

## SECTION 6 - JOYSTICK OPERATION

• Press the ON/OFF button to turn the lights ON or OFF and the halo light will illuminate.
• Press the Joystick RIGHT or LEFT and the halo ring will light up to confirm the movement.
• Press the Joystick FORWARD or BACK to raise or lower the searchlight beam.

**Figure 6**



To power supply

12 or 24V
25 Amps

30 Amp fuse

Yacht Beam 1MM+

Master Controller

Orange + (to power supply)
Blue - ( to power supply)
Brown (counter clockwise, right)
Green, position sensor (common)
Yellow, position sensor (signal)
White (down)
Black (clockwise, left)
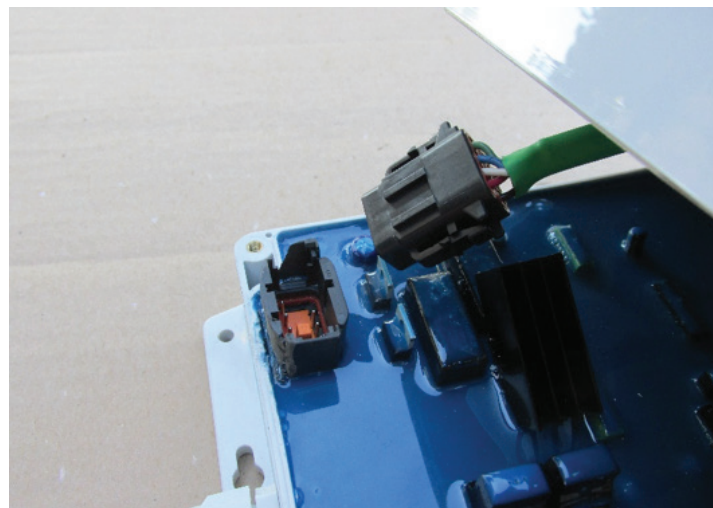Red (up)
White + (lamp)
Black -(lamp)

Splitter (sold separately)

## SECTION 7 - WIRELESS REMOTE CONTROL INSTALLATION & OPERATION INSTRUCTIONS



1- Remove (4) screws at corners of Top cover of Master Control box.
2- Connect Plug from the RC Top Cover to Socket located in the upper Left corner of Master Control Box.



3- Secure new cover with the 4 screws.
4- Test functions of transmitter.



## RC REMOTE OPERATION

The button in center turns system on and off.
The Up, Down, Left and Right buttons move the light in that direction.
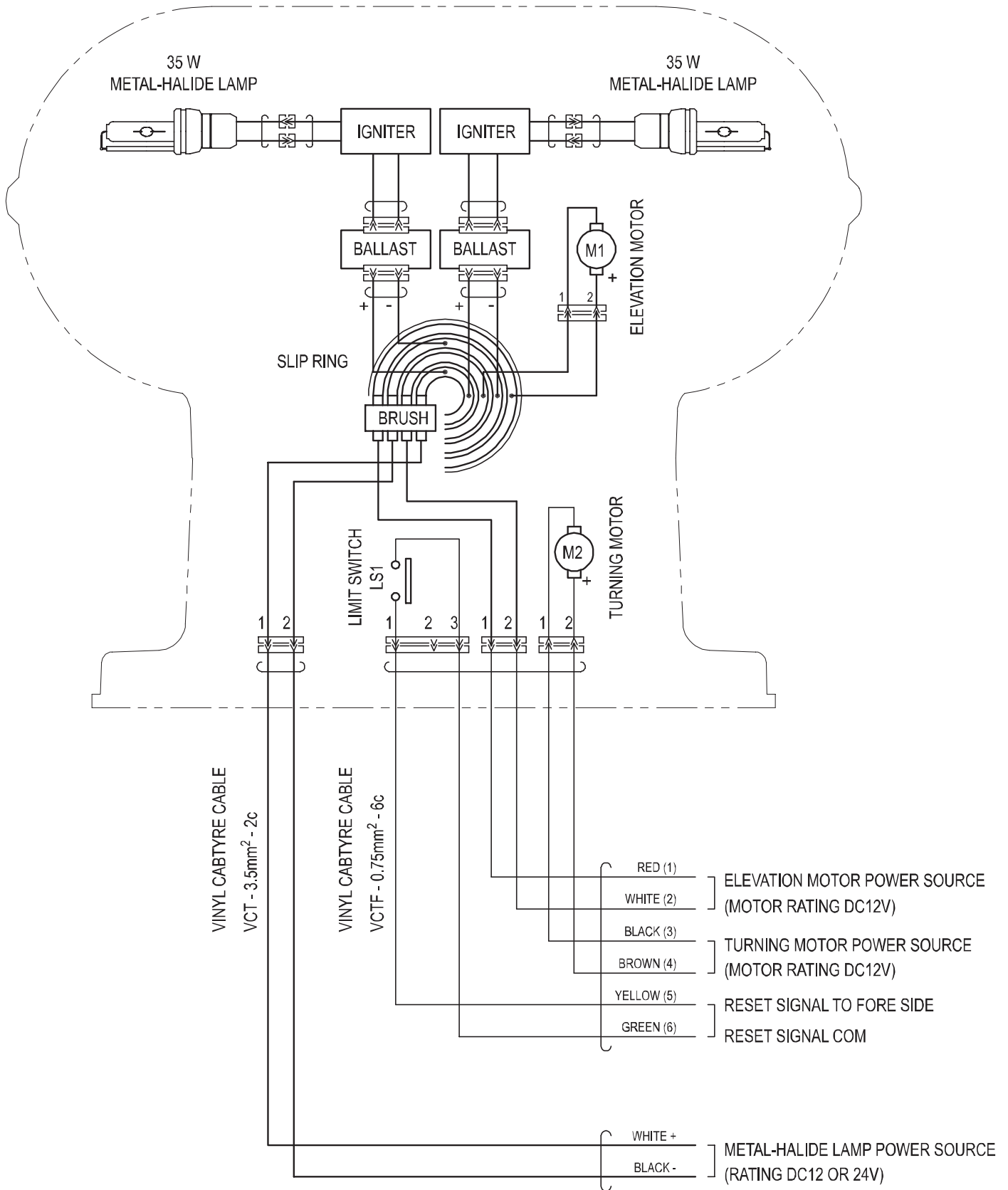
## APPENDIX - SPECIFICATIONS

| CHARACTERISTICS | SPECIFICATIONS |
|---|---|
| Size | 12 X 13 X 9.3 in (31 X 33 X 23.5 cm) |
| Weight | 31 lb (14.06 kg) |
| Material | Cast aluminum, tempered glass |
| Input voltage* | 12V- 24V |
| Amp draw | Startup 25A @ 12V, Running 8A @ 12V |
| Color | White |
| Operation | Remote controlled Joystick |
| Beam spread | 6° |
| Elevation angle | 12° up, 38° down |
| Rotation | 360° continuous |
| Rotation speed | Fast 30° per second, Slow 12° per second |
| Elevation speed | 7° per second |
| Lamp | - Twin 35W metal halide lamps<br>- 1,000 hours operating life |
| Accessories | - Secondary Joystick for remote control<br>- Micro Wireless Remote<br>- Replacement 35W halide lamp (ACR P/N 6009) |
| Footprint diameter | 9 in (23 cm) |
| Limited warranty | 1 year |
| Carton dimensions | 20.5 X 14.25 X 19.25 in (52.07 X 36.20 X 48.90 cm) |
| Carton weight | 40 lb (18.14 kg) |

**\*CAUTION:** HID light systems, when first turned on, have a high inrush current requirement of 25 amps. If you activate the light and the lamps flicker on and off repeatedly, check the voltage being supplied. This condition can be experienced with voltage input of less than 11.5V.

# APPENDIX - WIRING DIAGRAM

## YACHT BEAM 1MM+

35 W
METAL-HALIDE LAMP

35 W
METAL-HALIDE LAMP

IGNITER

IGNITER

ELEVATION MOTOR

M1

BALLAST

BALLAST

+  −

+  −

SLIP RING

BRUSH

LIMIT SWITCH
LS1

TURNING MOTOR

M2

VINYL CABTYRE CABLE
VCT - 3.5mm² - 2c

VINYL CABTYRE CABLE
VCTF - 0.75mm² - 6c

RED (1)   ELEVATION MOTOR POWER SOURCE
WHITE (2)  (MOTOR RATING DC12V)

BLACK (3)   TURNING MOTOR POWER SOURCE
BROWN (4)  (MOTOR RATING DC12V)

YELLOW (5)   RESET SIGNAL TO FORE SIDE

GREEN (6)   RESET SIGNAL COM

WHITE +   METAL-HALIDE LAMP POWER SOURCE
BLACK −   (RATING DC12 OR 24V)

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## APPENDIX - 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

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