Installation of Bi-Color Navigation Light

Items Needed:

Aqua Signal Series 25 Navigation Light - Boat/US 232035
Wood or Plastic to make Standoff pieces
25' 18 gauge red/black two-conductor wire
Single Pole Double Throw (SPDT) Switch - Radio Shack #275-648
Drill
Diagonal Cutters
Soldering Iron
Female Spade Lug Connector
Silicone Adhesive
Epoxy
2 #8 Stainless 1" Screws
About 2 hours

The Light:

Aqua Signal Series 25 10W.

The Prep:

You need to fashion two 7/8" wide by 1/2" thick pieces of wood or plastic as shown in photo below:

There needs to be 3/4" gap between them to allow for the stainless forestay strap. I painted mine white to match the boat. Notice the curvature to imitate prow. Epoxy in place.

The Installation:

Trial Fit the piece to make sure it will clear the strap.

Drill two mounting holes with1/8" drill bit, and one 3/16 (maybe slightly bigger) for wire.

Pass one end of wire from inside of boat about 4 inches to outside.

Pass wire through light mount. Apply silicone to holes, and backs of standoffs. Screw with #8 screws into place. Notice tube of Elmer's Stix All Silicone. Ideal size.

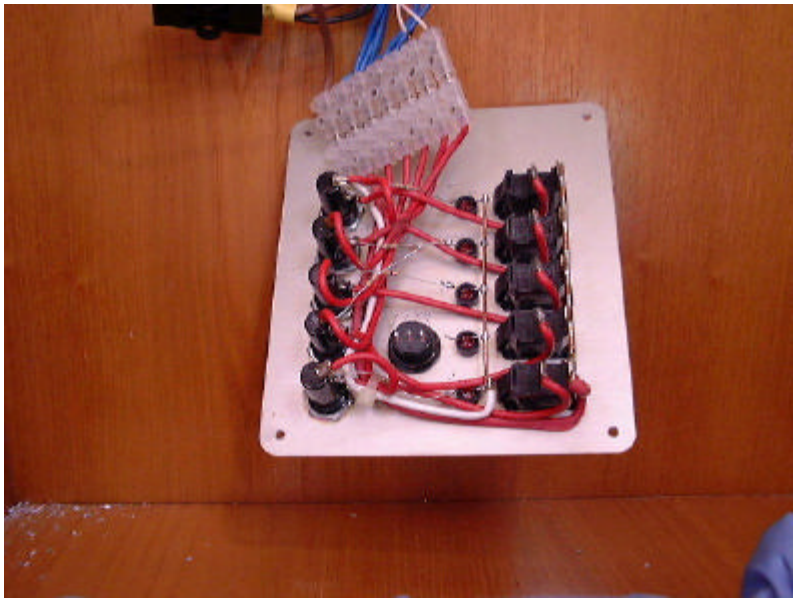
Remove light bulb. Strip and pass one wire (makes no difference) through top terminal screw and the other through the bottom.

Replace light bulb and cover, and tighten cover screws.

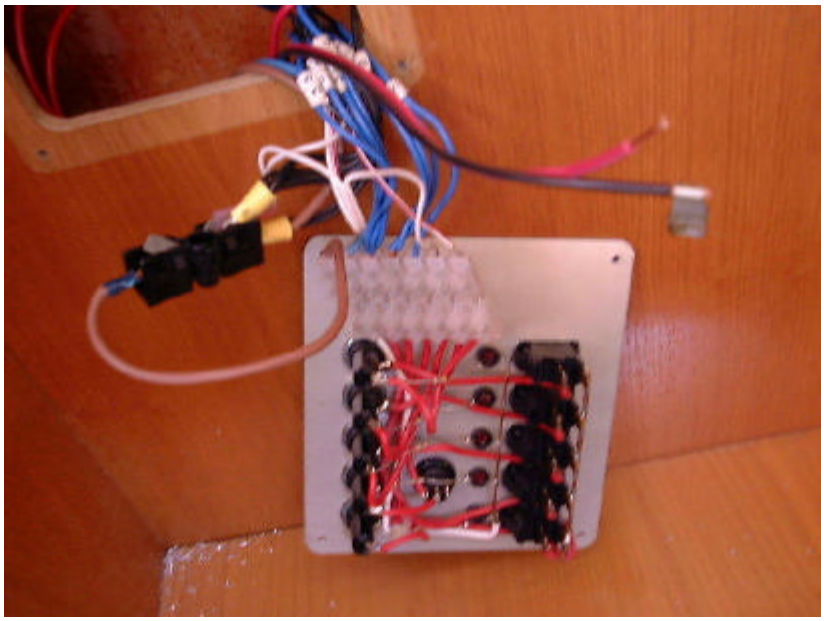
Run wiring inside and under water bladder, through various partitions and up the starboard side. I ran a previous wire for my depth gauge through the head's bulkhead near the bottom where it met the toilet platform. I then ran it through the side panel next to where one of the plumbing lines runs, and passed it up to the open hole, where I had removed the power panel.

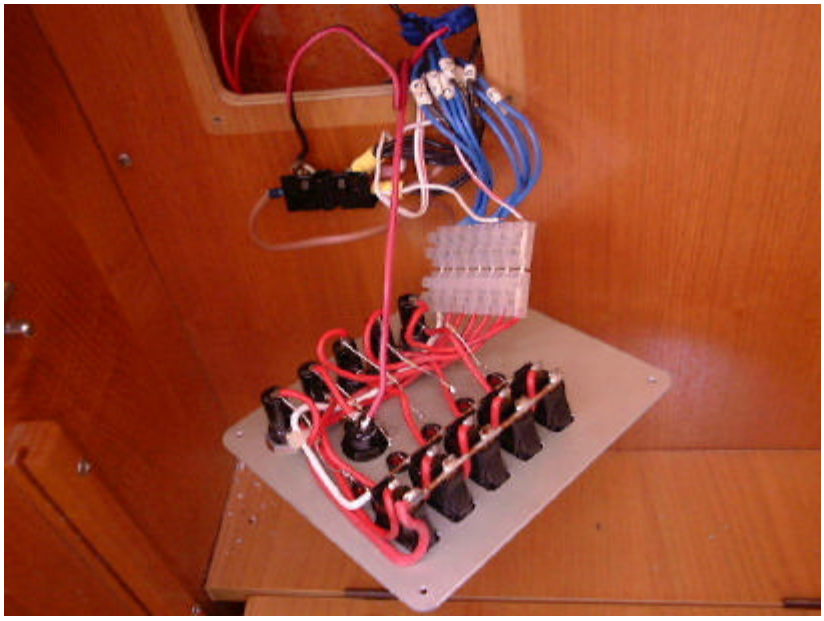
Add Switch to Panel.

I bought a little toggle from Radio Shack, which has three solder tabs. I drilled a hole and positioned it under the Navigation Light Master Switch. I first unsoldered the resistor from the LED so I wouldn't cut it with the drill bit.



I then cut the existing line from the fuse holder that ran to the bus about an inch from the fuse holder (just long enough to barely reach the center terminal), and soldered the short end to center of switch and other to bottom terminal. This would be so that when switch is up, Nav lights on Mast would be on. Next I crimped and soldered a lug to the black wire and added it to the grounding block. I then soldered the remaining red wire to the upper terminal on the switch.





I replaced all panel screws, and flipped the new switch down, and nav light switch on to get this result…