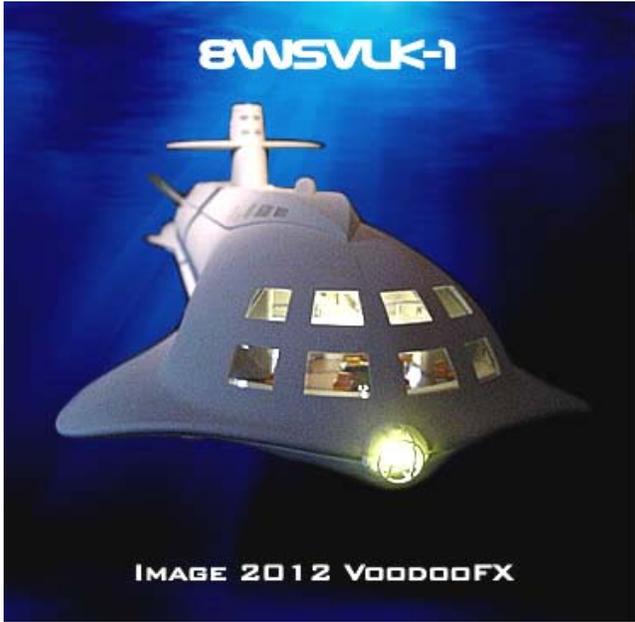


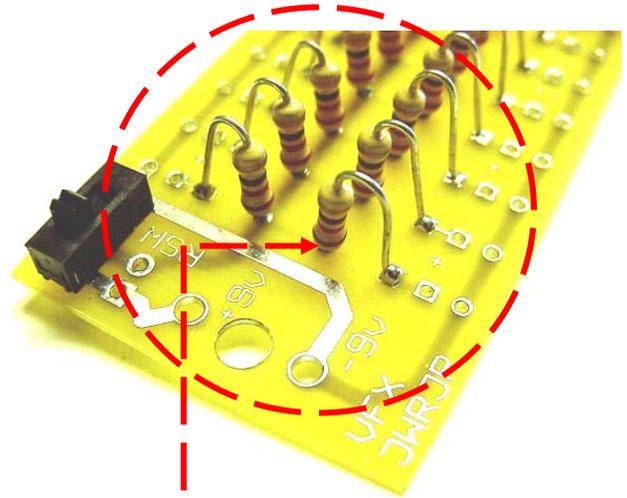
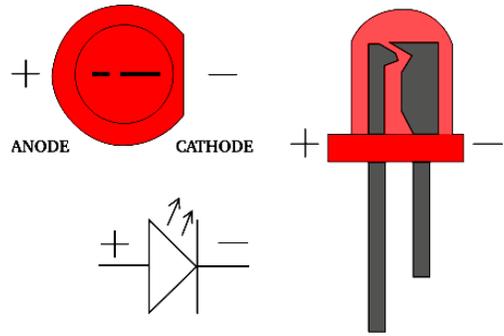
VooDooFX

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 www.voodooofx.com
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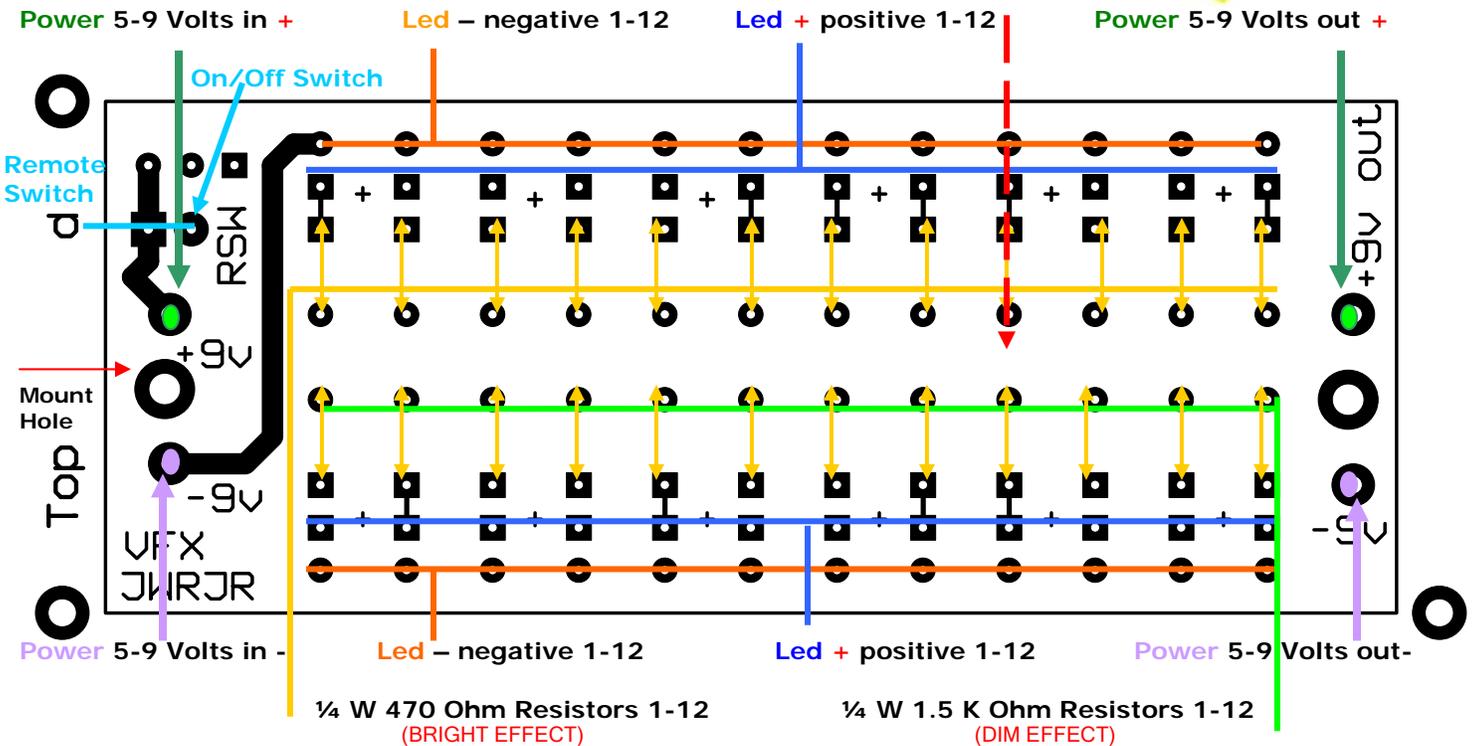


(8WSVLK-1)

(General Led Diagram)



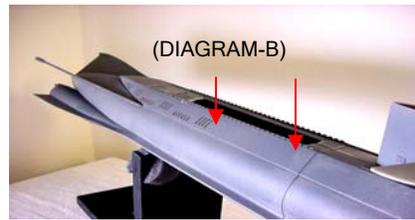
(Main Driver Board Top Side - Diagram A)



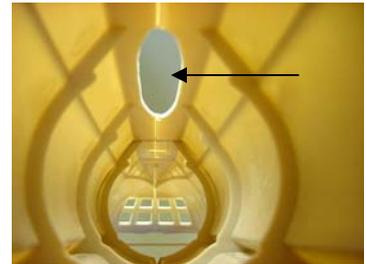
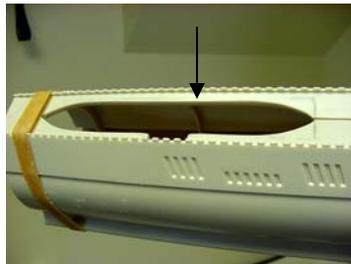
(General Lighting Instructions Ver-1)

Overview

- 1- Start by studying the main circuit diagram A.
- 2- Unpack model kit & dry fit the main body parts together.
- 3- Locate all locations you would like to light up.
- 4- Plan out routes for wiring through out the model.
- 5- Prepare a location to work on the model kit.

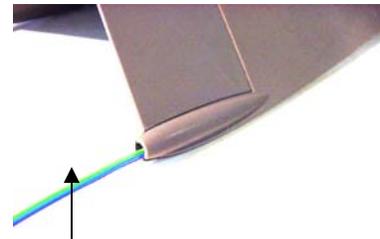
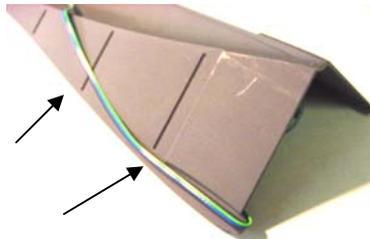
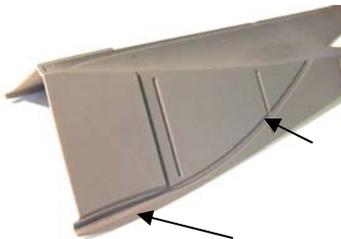


- 1- Start by drilling out areas for wiring to pass through. A good area to open up for the electronics is under the missile bay. (DIAGRAM-B) You will need to open up the main deck below the sail area in order to run wiring for the sail lights. (DIAGRAM 1-A) (DIAGRAM -1-B)

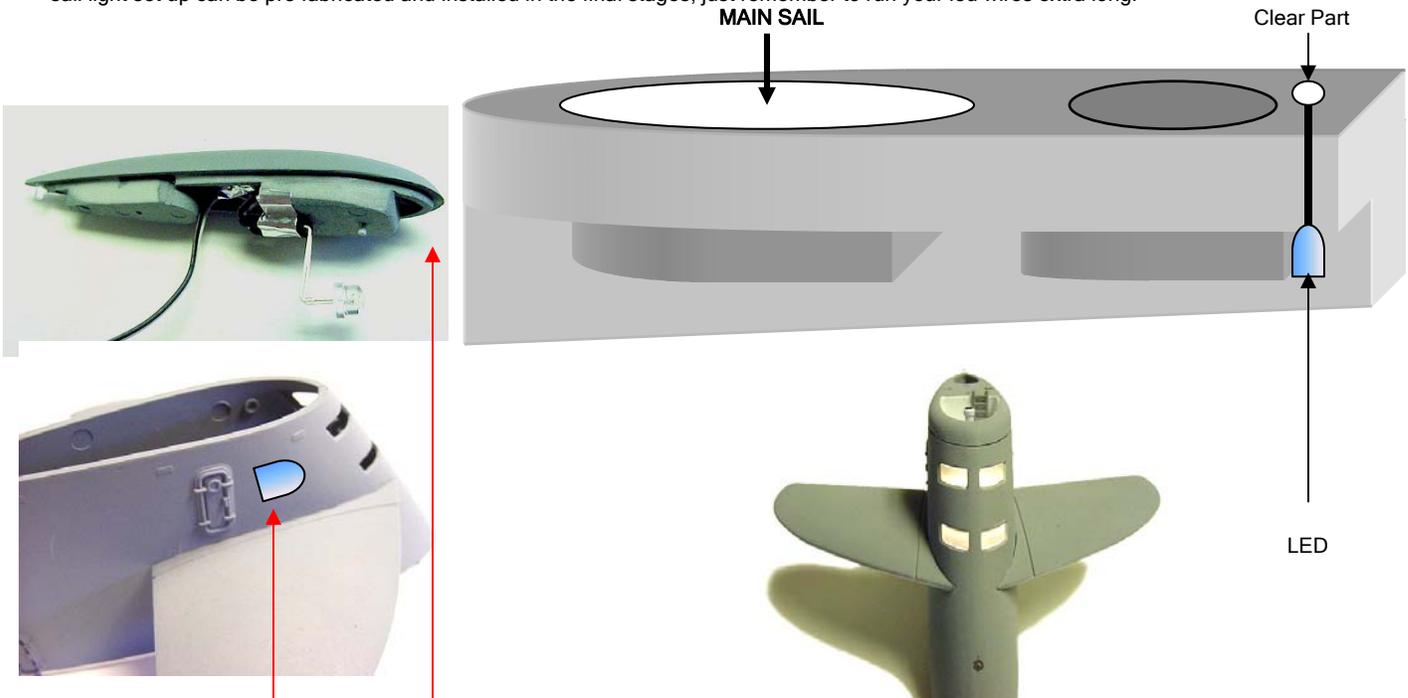


- 2- The tail fin area will also need to be modified for wire and led. You will need to carefully grind your way down both sides of the main channel on both of the tail fins in order to fit the ribbon cable through the chase. Note: Apply extra caution when removing material from channel, avoiding braking through. (DIAGRAM 1-B)

(DIAGRAM -1-B)



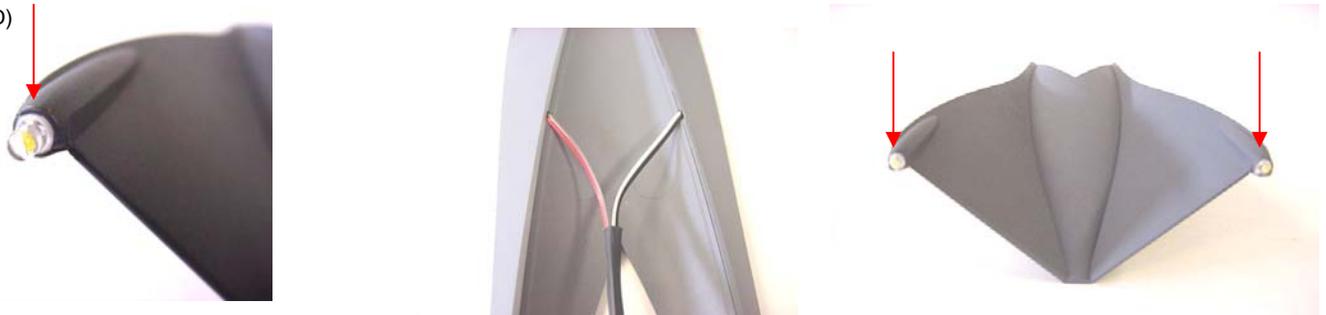
Step- 2 the back running light. Use the white 3.0mm led and mount it on the back side of the sail: shine it vertically towards the clear part. Note: the whole sail light set up can be pre fabricated and installed in the final stages, just remember to run your led wires extra long.



"Optional" dead lights can be added by using one of the 4.8mm warm white leds pre bent like the picture above. The clear glass part can be scuffed with sandpaper to give a more even and diffused light if desired.

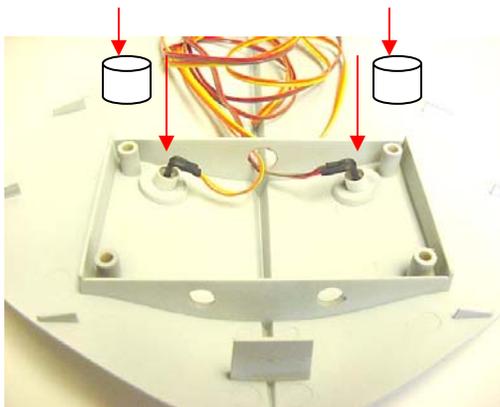
4- After pre fitting the ribbon cable for the tail fins you can glue the two halves together. **"MAKE SURE THE WIRE SLIDES IN AND OUT OF THE CHANNEL"** Before you glue it shut! Prefabricate the 2-3mm white leds on the ribbon cable and send them through the tail light area again make sure your able to slide the led and wire in & out smoothly. After the glue has dried go ahead and pull the led to the back of the tail fin housing and glue in place, You may want to use white glue or clear 100% silicon or hot glue to mount the leds. This also is another part that you can fit loose and glue it if you like in the end. (DIAGRAM-1-D)

(DIAGRAM-1-D)

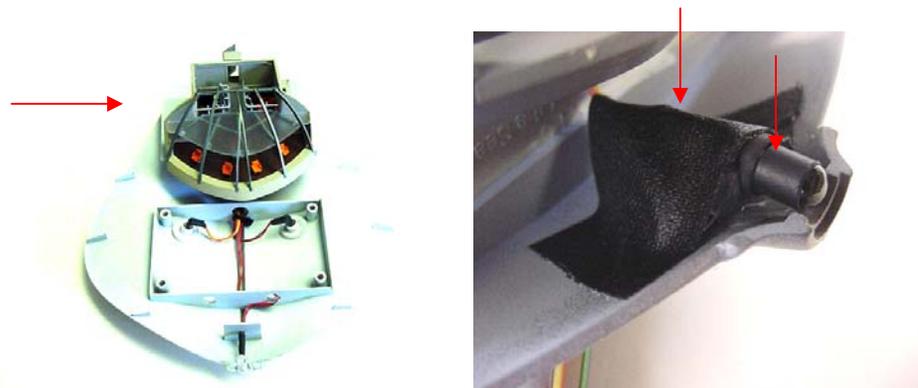


5- You're now ready for the nose light and lower manta fin search lights. Start with the lower search lights first, take the 9/32" plastic tubing and cut it in half, one for the left and one for the right. After cutting the tubing clean up the ends and test fit the tube with the 4.8mm warm white leds, if they slide in easy go ahead and take your pre made wire and led and glue them in place with a few dabs of hot glue, this should hold them in place for the full build. (DIAGRAM-1-) Step 2 the nose light is also straight forward, prefabricate a 5mm warm white led on wire and mount it in the center of the nose light housing, Its best to mount the light on the lower half of the wing section, which will make it accessible when interior is removed for viewing or service. Note: You might want to black out the area around the led except for the very front half, this will help prevent light leak around the nose seam. (DIAGRAM-2-E)

(DIAGRAM-1-E)



(DIAGRAM-2-E)



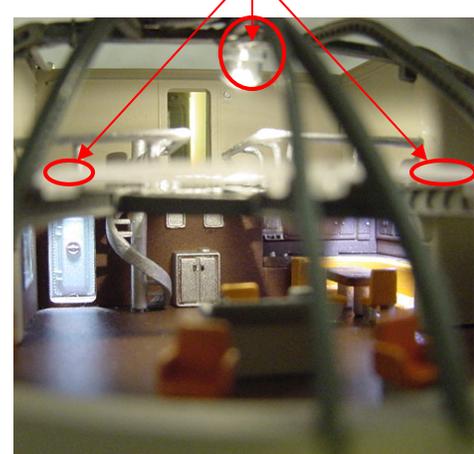
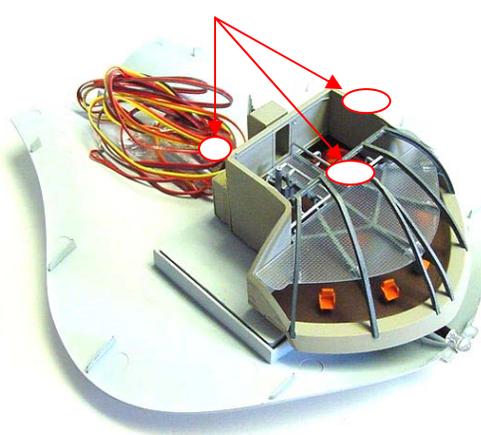
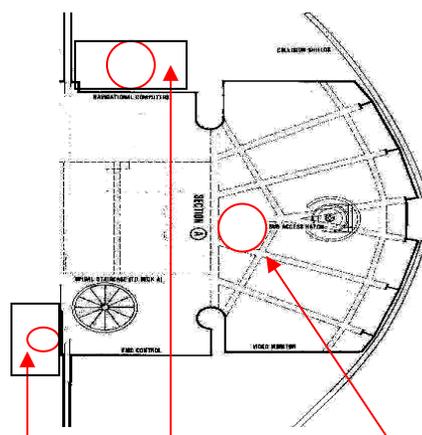
6- Interior lighting, start by laying out locations where you want the interior to be lit up. There are some many different ways to place the lighting that it's up the model builder to pick the final locations. Make sure to run the wires extra long to the back of the sub, you can pre fabricate the whole interior as a self contained unit and mount it all together as one piece, this makes it an easy fit and serviceable. You might want to black out the areas around the leds to prevent light leak. (DIAGRAM-1-F)

(DIAGRAM-1-F)

(Finished Led Lay Out)

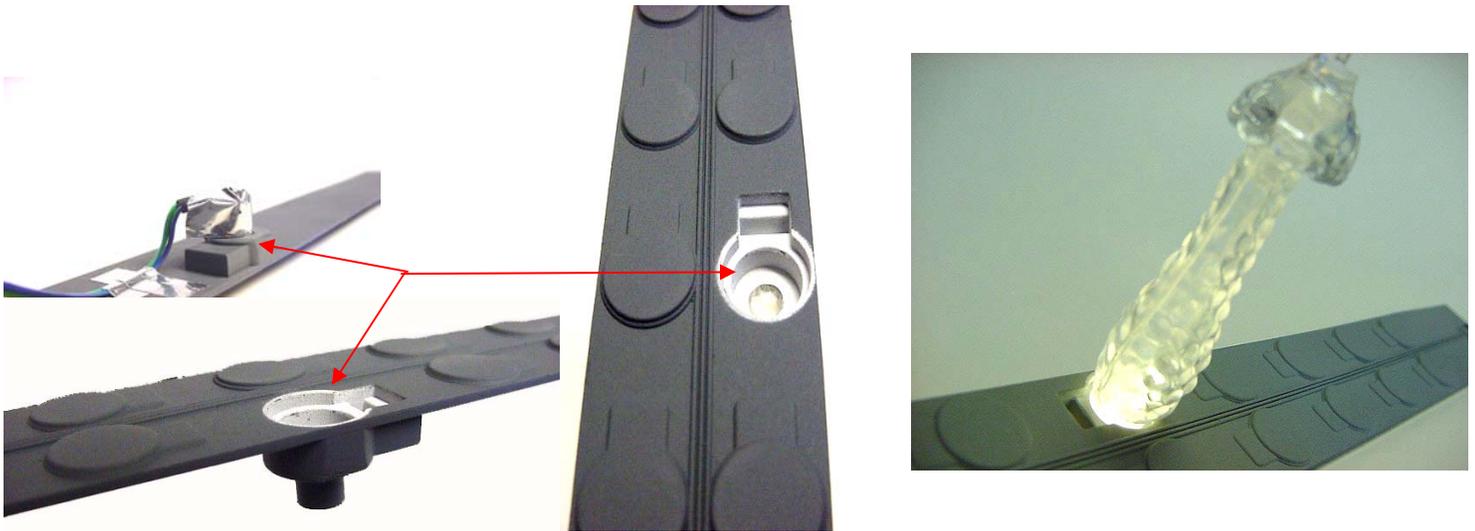
(Complete Interior)

(Light Location Finished)



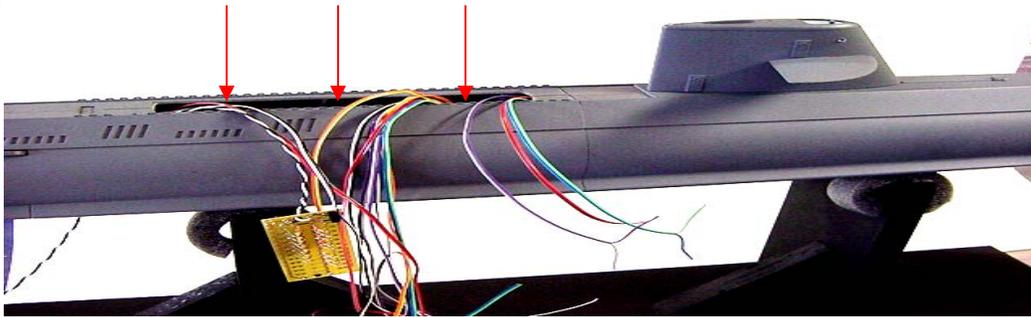
White 3mm X-1 Door Light
 White 4.8mm X-1 Over Table Light
 Warm White 4.8 mm X-1 Main Upper

7- (Optional Missile Bay Light) Drill out missile bay to fit the 3.0mm white leds, use a small piece of 7/32 plastic tubing as a stand off can mount. Mount the pre fabricated 3.0mm led flush to the bottom of the missile bay tube floor. Hook up to main board and test for effect.

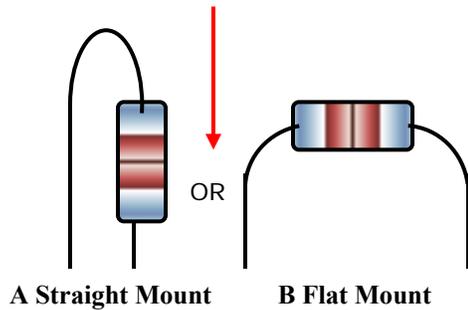


8- Circuit board hook up; Route all wires to back tail fin area or where ever you have decided to mount circuit board and battery, trim any wires at this time and prepare to solder to circuit board. Note: Make sure to give your self enough extra wire outside of the sub to solder the circuit board. Solder each wire lead one at a time, when all connections are soldered turn on and test all lighting locations, if everything tests good, fit the excess wire back into hull and mount circuit board and battery, try to keep the extra wire off the resistors on the circuit board. (DIAGRAM-1-G)

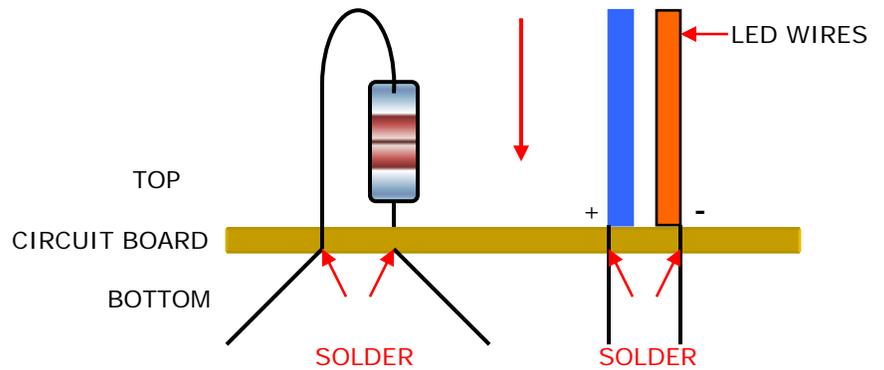
(DIAGRAM-1-G)



A & B STYLE PRE BEND RESISTORS LIKE THIS

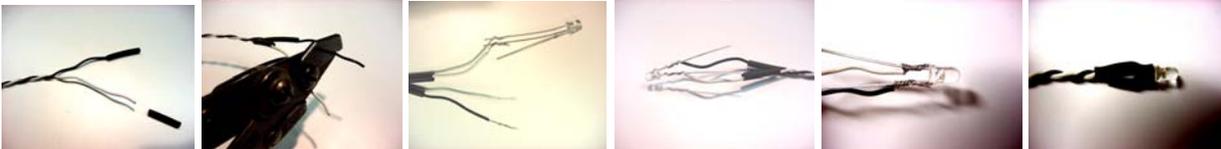


SOLDER THROUGH BOARD LIKE THIS



(How to Make a Wired Led)

- 1- Separate the two wires. Pick what color will be positive+ and what color will be negative-.
(Example) Lighter color is positive+, darker color is negative-. This will apply to any color, you make the choice.
- 2- Slide on two pieces of shrink tubing 1/8 – 1/4 "long, Slide past area where wire coating will be striped off.
- 3- Strip back the protected coating and expose the bare wire, 1/8 – 1/4" is about enough to wrap around the led leads. Twist bare wire together until it is a tight, stray wire or fray will get in your way later, the tighter the better.
- 4- Wrap wire around led leads and slide forward to led base. Solder and cut off excess leads.
- 5- Slide shrink tubing over soldered wire and led, heat shrink tubing to finish process.



Please Do Not Contact Distributor

If you are having problems call VoodooFX.
Phone 650-568-3400 M/F 8-5 pm P.S.T
Email fxshop@yahoo.com
VoodooFX is not responsible for improper installation.
There are no refunds on electrical parts or components.
All sales are final. Batteries not included.

WARNING: To guard against injury, basic safety precautions should be observed, including the following:

1. Read and follow ALL safety warnings, instructions and notices.
2. Do not use equipment for other than its intended purpose.
3. Do not alter design or construction.
4. **DANGER:** To prevent the risk of severe or fatal electrical shock. Always disconnect power before performing any maintenance.
5. Do not operate if power cord or plug is damaged.
6. Electrical power supplied **MUST** match power requirements listed.
7. **CAUTION:** Do not operate without proper electrical ground.

GENERAL LED HANDLING PRECAUTIONS:

CAUTION: The LED can cause permanent damage to eyes at close range. You should never look directly at the light source of the LED.

CAUTION: LEDs are static sensitive devices. Wear grounding wrist strap. When attaching leads, the leads should be at a point at least 3mm from the base of the LEDs. Avoid damage to LEDs by not soldering more than 3 seconds with a 700° iron. Do not use LEDs without a current limit resistor. The forward voltage rating is typical and can vary from part to part. LEDs may work fine connected to a battery of proper voltage, other LEDs will be over driven and destroyed! Always use a resistor in line with LEDs.

CAUTION: This kit contains small parts which may be hazardous to children under 12 years. Adult supervision is required.

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