VooDooFx
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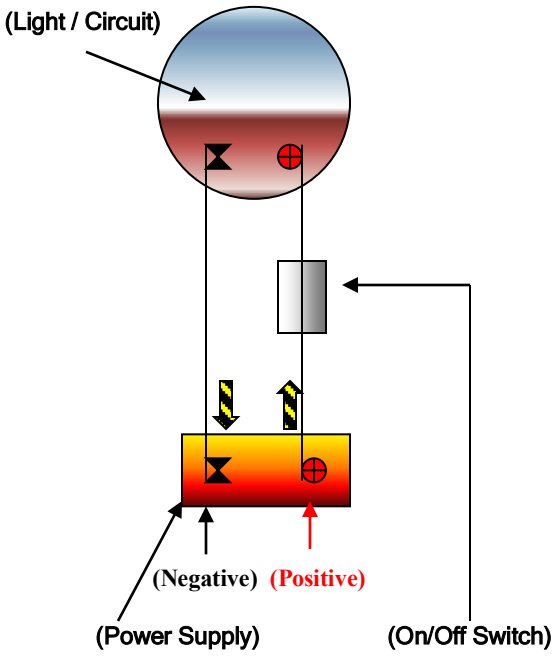
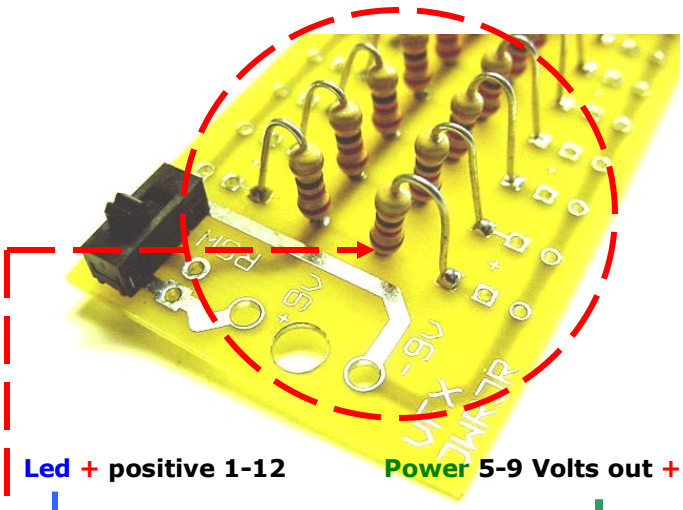
www.voodoofx.com
650-568-3400

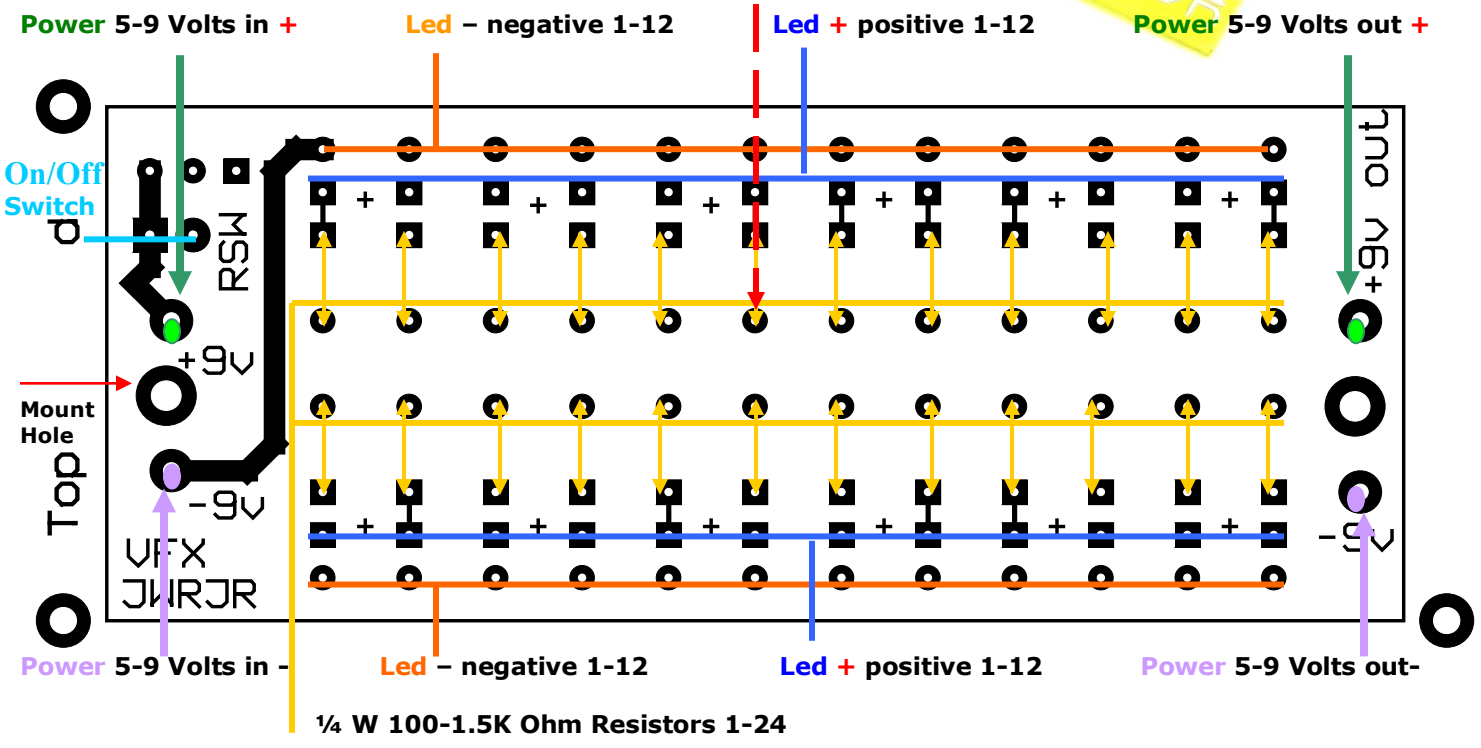
(J2ILK-1)

(General Switch Diagram)

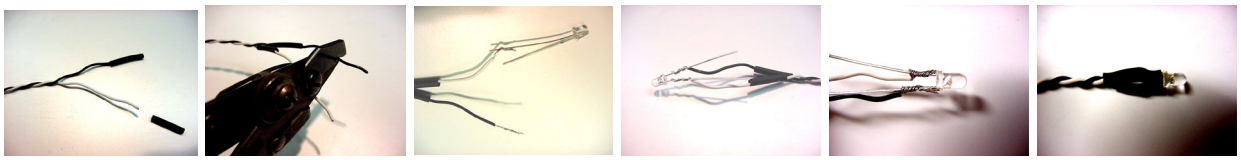




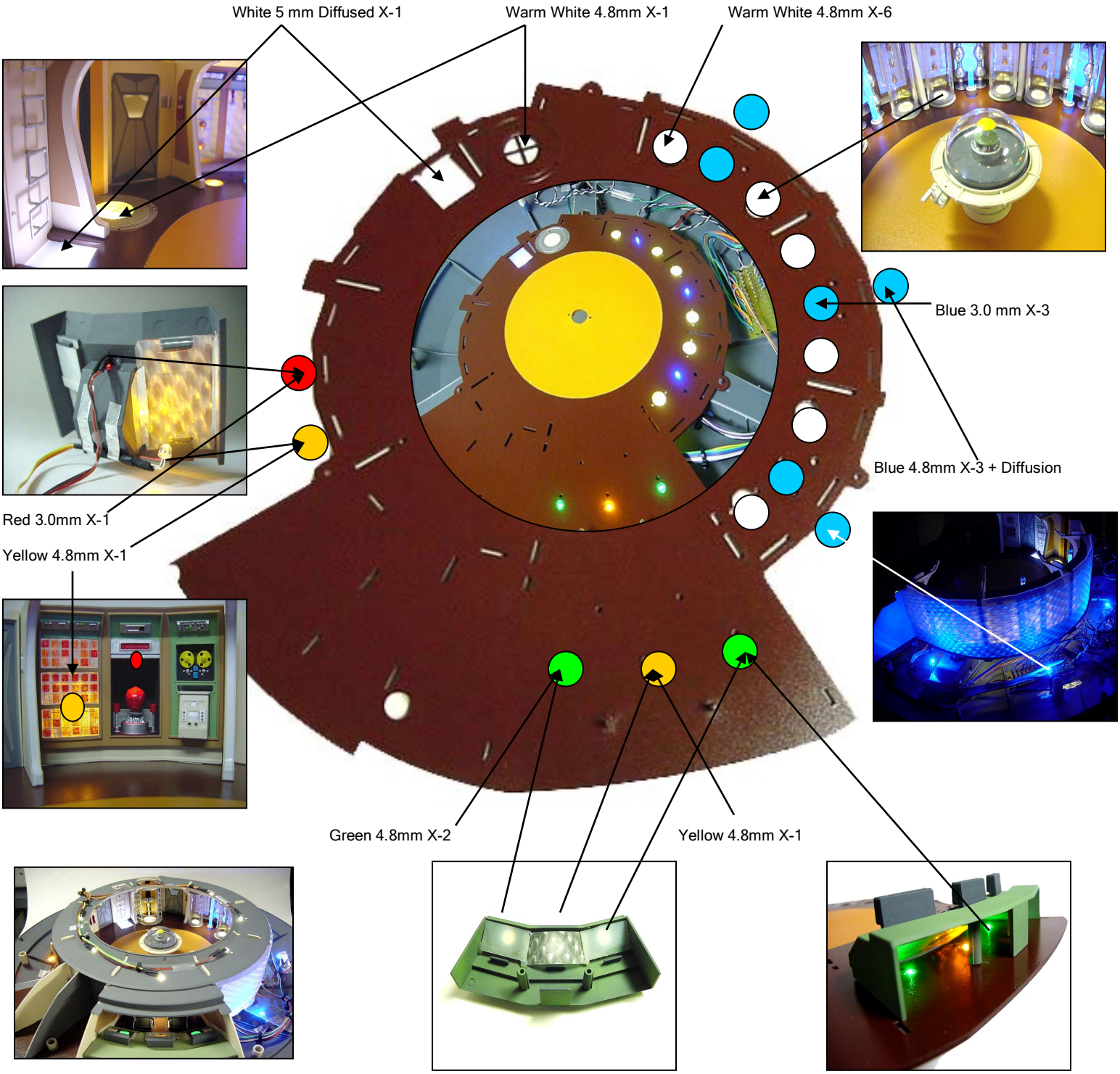
(Main Driver Board Top Side - Diagram A)
X-2 All Main Lighting



(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 - ¼ "long, Slide past area where wire coating will be stripped off.
3- Strip back the protected coating and expose the bare wire, 1/8 – ¼" is 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.



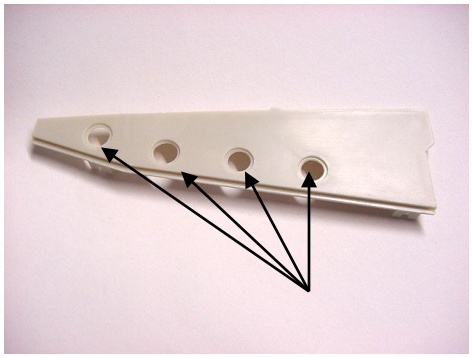
(General Lighting Locations Layout)

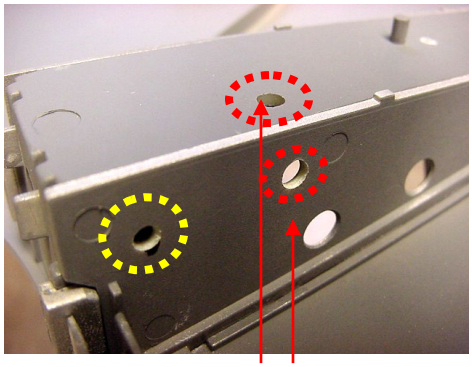


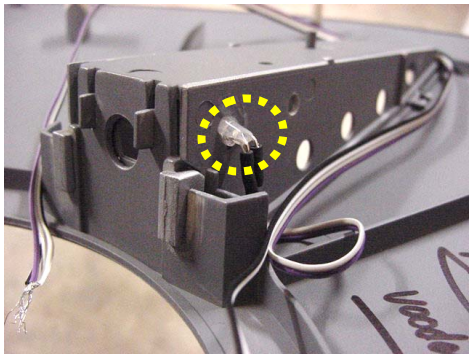
General Lighting Instructions Ver-1

Step 1

Start by unpacking all the interior parts and test fitting them to familiarize your self with locations. The first area that needs to be addressed is the landing well bays; I would suggest drilling out the circular hole patters in the side wall well panels, there are 4 per panel, this will provide proper air circulation for entire model. If you're building in flight mode disregard this step. After all leg wells are mounted and pre painted your ready for preparing for leg well for lighting. Since the upper floor is in the way of preferred straight down lighting effect you will need to come through the side of the leg well.
Drill out 7/32"hole to fit the 3mm white leds, one led per bay, try to mount up high so not to be scene. Each led should be prefabricated on wire with slack. Mount led with a small amount of hot glue to hold in place. Please study photos bellow. **Landing Well Bay Use X3-220 Ohm resistors on circuit board.**



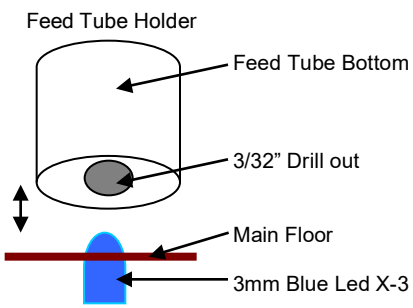


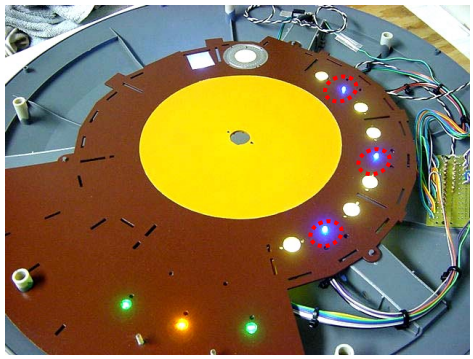


Step 2

NOTE

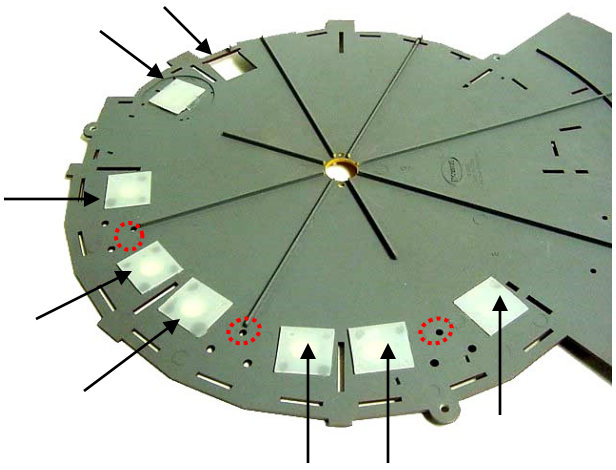
Pre prep main floor, look at floor layout photos, Start with the 3 main inner cooler feed tubes, you will need to drill out a small hole in the bottom side of the feed tube holder. **NOTE: you will need to modify the right landing well bay for wire and led, Look at photo above.** The floor is already sized to fit the 3mm blue led and may just require a small clean up on the hole to fit led. Each led should be prefabricated on wire with slack. Mount led with a small amount of hot glue to hold in place. Please study photos bellow.
Feeder Tubes Use X-3 1-K Ohm resistors on circuit board.

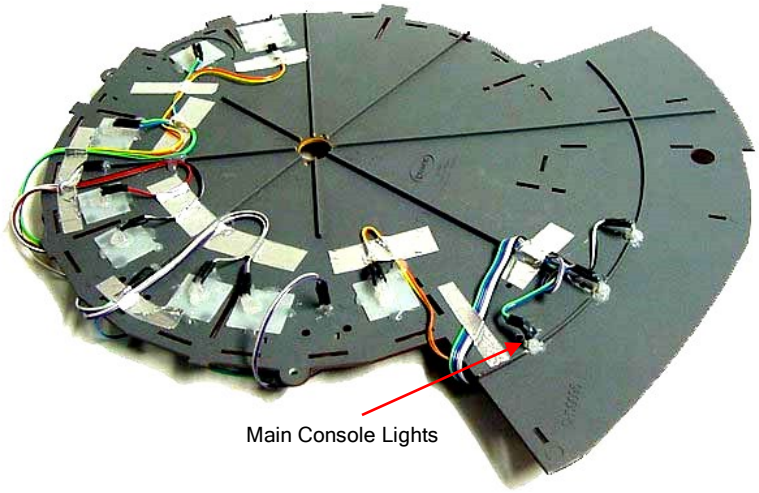




Step 3

Pre prep main floor, Elevator, Stair Way & Freeze tube locations, start with cutting to fit small squares of white diffusion material for all 8 light location, they need to be wide enough to cover pre cut floor locations. Flip the floor upside down and mount plastic diffusion material on bottom side of floor, ca glue or a small amount of hot glue will do the job. After dry and mounted securely in place pre prep X-7 4.8mm warm white leds on wire with slack and X-1 5.0mm white diffused for stair way only, to be mounted on circuit board in the finial stages. Take the premade led on wire and position it in the dead center of the freeze tube, you may want to put a small mark on the center. Wet set the led in small blob of hot glue, hold in place until set, use small strip of metal tape to hold wire in place, repeat this process on all the tubes & elevator floor. The stair way light is can be mounted in many ways so test what looks best for your model. **Freeze Tubes & Elevator Use X-7 470-Ohm resistors on circuit board.**

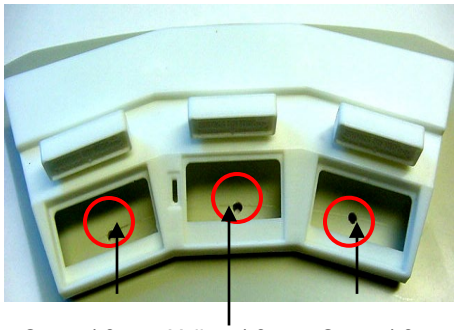




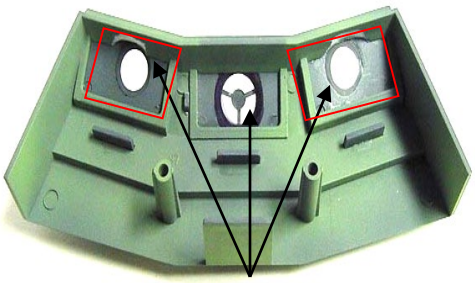
Step 4

Pre prep main floor, Cockpit Control Panel locations, start by drilling out for the main three main control panels, It best to place the main console on the main floor and line it up with the center of the clear control panel. After finding your center mark drill out to fit the 3 light locations for the console lighting effect, you will be using X-1 4.8mm yellow led & X-2 4.8mm green led, yellow is in the center. After mounted cut to fit the two side panels with the white plastic diffusion material mounted on the inside or back of the clear panel, the same process for the center but use the honeycomb material for the yellow or center panel. Each led should be prefabricated on wire with slack. Mount led with a small amount of hot glue to hold in place. Please study photos bellow. **NOTE** you will need to liquid mask the clear areas you want light to penetrate, all other areas will need to be primed and painted and painted in order to prevent light leek.

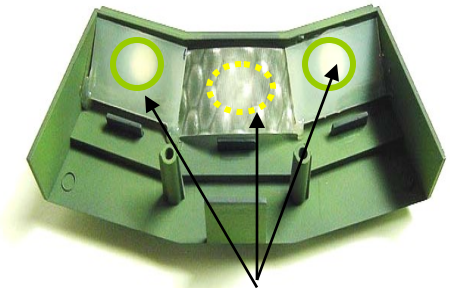
Main Control Panel "Yellow" Use X-1-220 Ohm resistors on circuit board. **Control Panel "Green" Use X-2-470 Ohm resistors on circuit board.**



Green 4.8mm Yellow 4.8mm Green 4.8mm



Clear Panels Finished

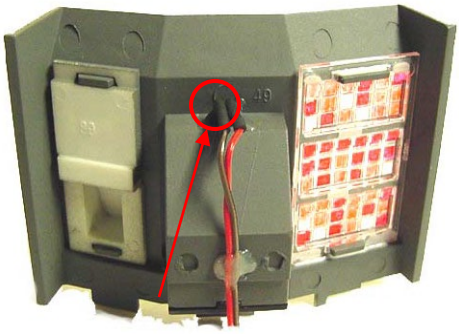


Diffusion Material Finished

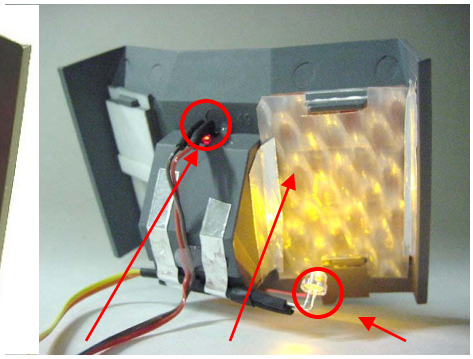
Step 5

Pre prep Wall Control Panel, wall locations, start with the Circuit Wall, this requires X-1 4.8mm yellow led shined at the honeycomb diffusion material, it helps to put a slight bend or curve in the material. Take your prefabricated 4.8mm led with slack in the wire and mount it on the back side of the wall box, after mounted very carefully bend the led up and in looking towards the middle of the diffusion panel, this might take a few tries to get the desired effect. The gyro ball is lit from the top of the box, simply drill out desired location. Each led should be prefabricated on wire with slack. Mount led with a small amount of hot glue to hold in place. Please study photos bellow. Many effects can be done in these areas, personalizing at your own discretion.

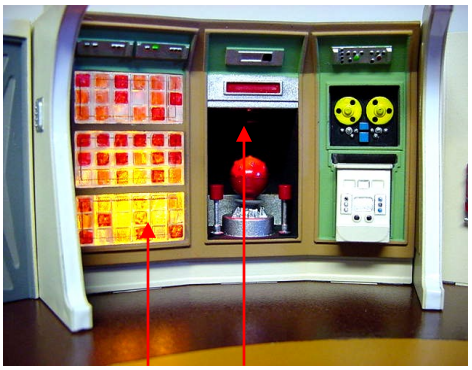
Circuit Control Panel "Yellow" Use X-1-220 Ohm resistors on circuit board. **Gyro Ball "Red" Use X-1-470 Ohm resistors on circuit board.**



Red 3.0mm Gyro Ball



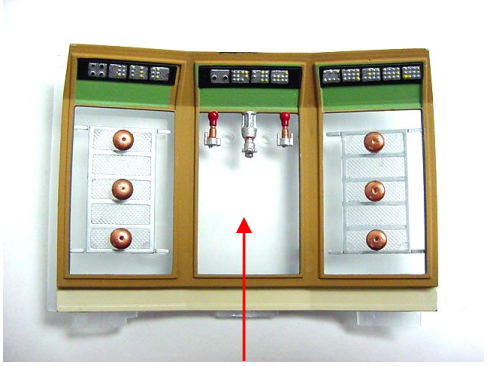
Red 3.0mm Honeycomb Material Yellow4.8mm



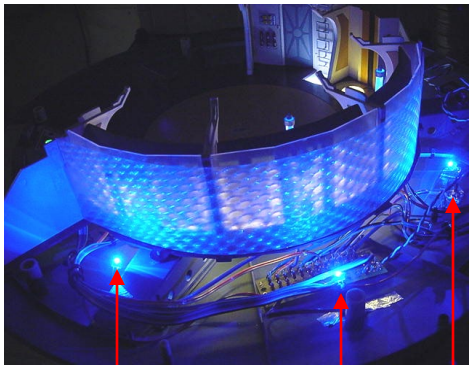
Finished Wall Effect

Step 6

Pre prep Freeze Tube Back Wall, wall locations, start with the diffusing the backside of the clear parts for the walls, use 220 grit sand paper, sanding in one direction. You want a milky white finish when done. Mount all back wall panels in proper location, cut to fit a full strip of the honeycomb material all the way across the entire clear back wall, glue material in place. Each led should be prefabricated on wire with slack. Mount led with a small amount of hot glue to hold in place this requires X-3 4.8mm blue led shined at the honeycomb diffusion material. Point led up towards each main wall in the center of the wall panel. **Freeze Tube Back Wall "Blue" Use X-3-470 Ohm resistors on circuit board.**



Clear Diffused Completed



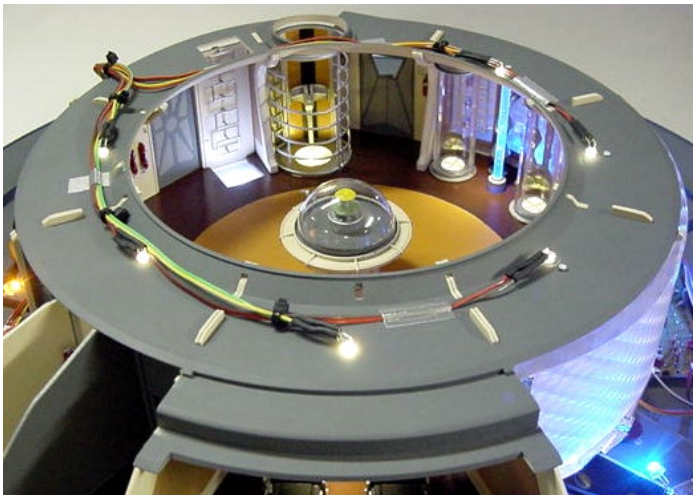
Honeycomb Material & Leds Finished Blue 4.8mm leds

Inside Wall Complete

Step 7

Pre prep Upper Ceiling Soffit Ring, Start by picking out what locations you want to highlight. Start with the cockpit and work your way around the wall areas, these were placed evenly around the centers of each wall division, we avoided the back area to keep better ambient effect. Mark out top side of ring with black pen and drill to fit 3.0mm where ever you want the light to shine, if the led is mounted deep it with in the ring it will give a wide effect, it its more recessed it will give a tight beam of light, customer preference. When making up the leds on wire you will need to pre bend the led 90 degrees in order to not hang up on upper half of model.. Each led should be prefabricated on wire with slack. Mount led with a small amount of hot glue to hold in place this requires X-6 3.0mm warm white. **Soffit Ring "Warm White" Use X-6-470 Ohm resistors on circuit board.**

3mm Warm White Led Lay Out



3.0mm Warm White Bent 90 Degrees' Completed

Step 8

Wiring and Solder to Circuit board. Start by routing all of your wiring evenly to one side or the other, we mount a driver board on each opposite side of the model. Start buy checking each location and finding what wire goes where; this will help you pick the proper resistors for the proper locations, each instructions step has a use guide on color, how many used, and proper resistor value for each led. Now that you have a good idea of what resistors are going to where you can start to prebuilt the resistors on the circuit board. Pick a mounting spot for the boards and start making the connections to the led ports on the circuit board, making sure to get the positive and negative correct. The circuit boards are best designed for 5 Volt @1000mA regulated power supply but can be run on 2-9 volt DC batteries as a separate system for longer life. The kit has 1 9 volt snap and I on/off switch, power can be daisy chained from board to board using power in and power out ports each located on left and right side of board. Please test all locations for proper fit and operation. If you're having any trouble and have questions contact us direct at 1-650-568-3400 for customer support.

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 very 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. Disclaimer Warranty the materials products are provided "as is" without warranties of any kind either expressed or implied. To the fullest extent possible pursuant to the applicable law, Voodoofx disclaim all warranties, expressed or implied, including, but not limited to implied warranties of merchantability, fitness for a particular purpose, non-infringement or their violation of rights. Voodoofx do not warrant or make any representations regarding the use, validity, accuracy, or reliability of, or the results of the use of, or otherwise respecting, the materials. Limitations of Liability Under no circumstances, including, but not limited to, negligence, shall VFX be liable for any direct, indirect, special, incidental or consequential damages, including, but not limited to, loss of data or profit, arising out of the use, or the inability to use, the materials on this site, even if Voodoofx LLC authorized representative has been advised of the possibility of such damages. If your use of the product results in the need for servicing, repair or correction of equipment or data, you assume any costs thereof. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.