

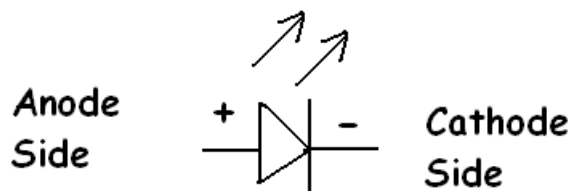
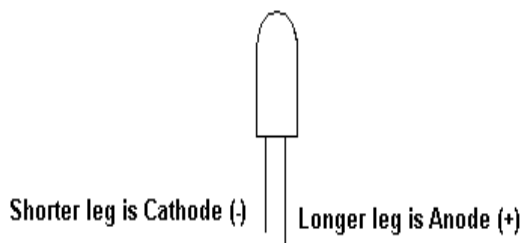
## Instructions of Model# PHSPTMV09-B Photon and Phaser Board for JJ Abrams Star Trek Enterprise Into Darkness 1:500 Scale from Revell

This control board is completely assembled and tested. The only thing you need to do is connect up the led's, Enclosed Speakers, magnetic reed switches, 9-volt battery clip to the two wire mating connectors. Then just plug in a 9-volt battery (not included). Hot glue on four corners of the printed circuit works well for locking into place. Or use the 4 mounting holes for a 4-40 diameter bolt.

Items you will need: Soldering Iron, solder, cutter and wire stripper.

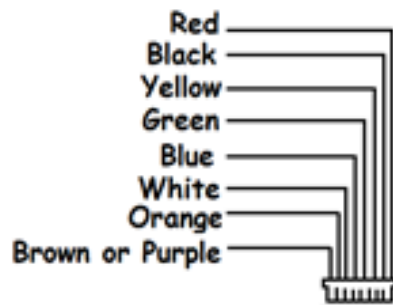
**\*\*Note:** When using the shrink tubing, you need to only slide the shrink tubing over one leg of the led to keep it from shorting against the other leg. Then use heat gun or flame from lighter to heat the shrink tubing until it shrinks around the wire connected to one of the led legs.

How to distinguish a led:

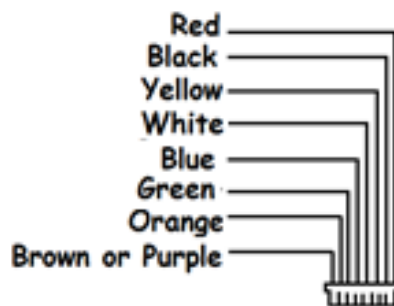


**IMPORTANT.** Different cable companies have swapped the Green and White wires positions on the JST Connector. Below are two pictures showing the wires and their positions. When you get your board, you will need to look and see which connector type you received. Very important to wire the outputs and inputs based on their positions on the connector. Wire it up based on the connector of Company A or Company B. Sorry for this inconvenience, although this is out of our control.

## Position and Wire colors from Company A



## Position and Wire colors from Company B



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## CONNECTOR # 2

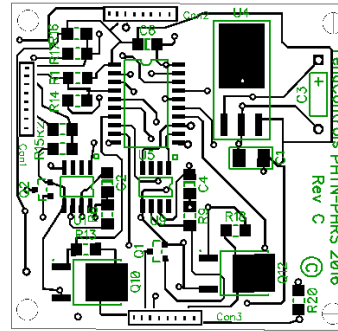
Blue  
 White  
 Orange  
 Brown

Green  
 Yellow  
 Black  
 Red

## CONNECTOR # 1

Blue  
 White  
 Orange  
 Brown

Red  
 Yellow  
 Black  
 Green



Brown  
 Orange  
 White  
 Blue

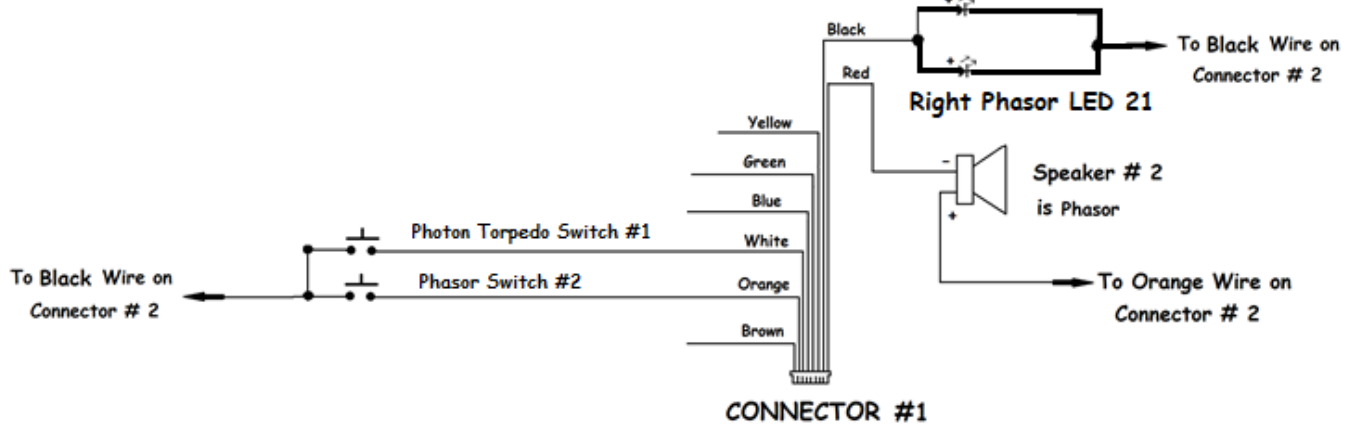
Red  
 Black  
 Yellow  
 Green

## CONNECTOR # 3

### Left Phasor LED 19

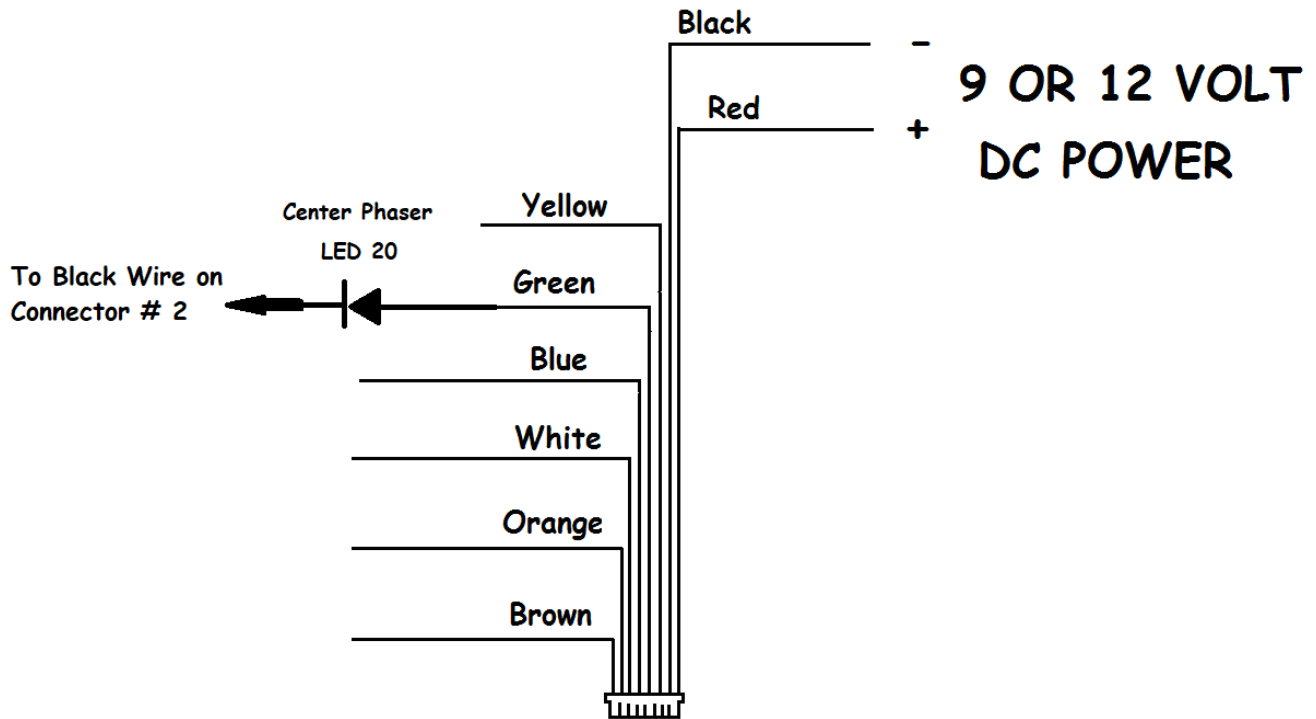
### Right Phasor LED 21

Speaker # 2  
 is Phasor

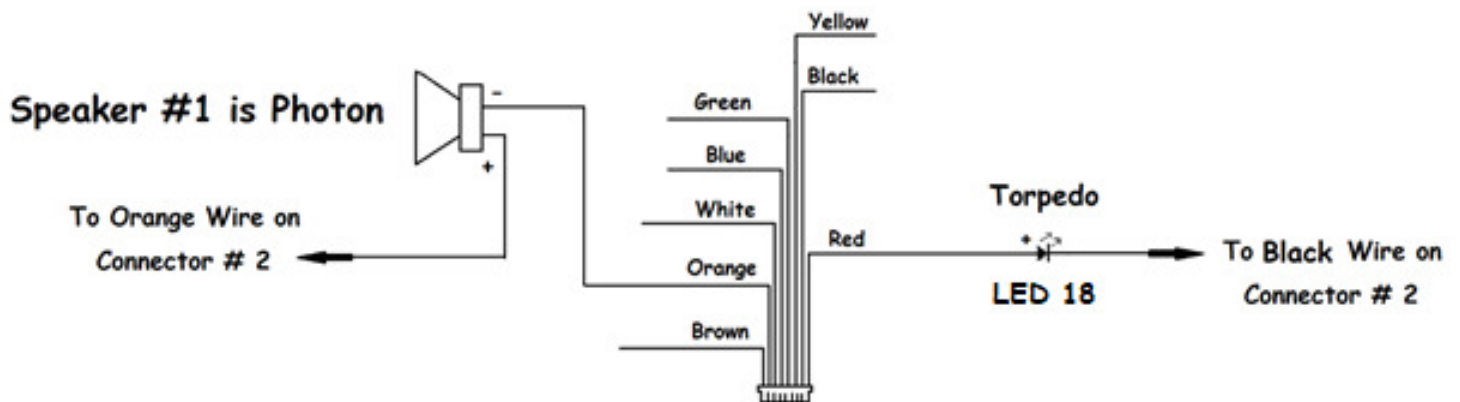


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## CONNECTOR # 2



## CONNECTOR # 3

## Photon Torpedo

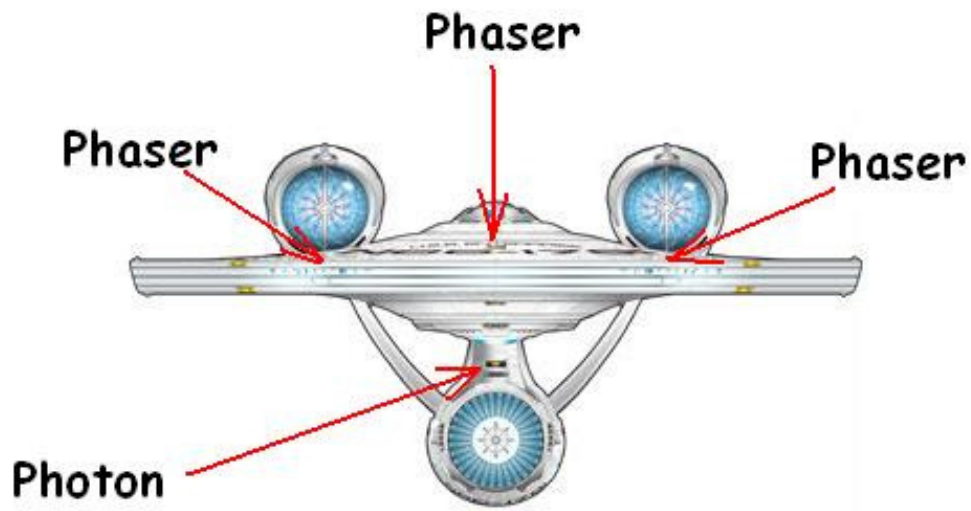
1. **One White led, LED18.** The Cathode (-) of the Photon Torpedo led, LED18 connects to Black wire on mating connector #2. Then connect the Anode (+) of LED18 to the Red wire on mating connector #3. **See above diagram.** Now connect SPKR #1 to the Orange Wire on Connector #3 and the Orange Wire on Connector #2. **See above diagram.** Then connect magnetic reed Switch #1. One side to the Black wire on mating connector #2 and the other side to the White wire on mating connector #1. **See above diagram.** Swiping a magnet over the magnetic reed Switch #1 will activate the Photon Torpedo firing sequence.
2. **Putting the speaker in a case or tube is a must to get the proper sound requirement.**

## Phasers

3. **Three Red led's, LED19-LED21.** The Three Cathodes (-) of the Phaser leds, LED19-LED21 connect to Black wire on mating connector #2. Then connect the Two Anodes (+) of LED19 and LED21 to the Black wire on mating connector #1. Then connect the Anode (+) of LED20 to the Green wire on mating connector #2. **See above diagram.** Now connect SPKR #2 to the Red wire on Connector #1 and Orange of Connector #2. **See above diagram.** Then connect magnetic reed Switch #2. One side to the Black wire on mating connector #2 and the other side to the Orange wire on mating connector #1. **See above diagram.** Swiping a magnet over the magnetic reed Switch #2 will activate the Phaser firing sequence.
4. Then place the Photon Torpedo and Phaser led's in the locations shown on the LED Locations drawings shown below.

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## Warranty

TenaControls LLC warrants that the control boards sold meet TenaControls LLC specifications and are adequately contained, packaged and labeled and conform to the promises and affirmations of fact made on the container and label. THE FOREGOING WARRANTIES ARE EXCLUSIVE, AND ARE IN LIEU OF ALL OTHER WARRANTIES (WHETHER WRITTEN, ORAL OR IMPLIED) INCLUDING WARRANTY OR MERCHANTABILITY IN OTHER RESPECTS THAN EXPRESSLY SET FORTH ABOVE AND WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

In the event that there is a breach of express warranty by the manufacturer made in connection with the purchase of this product, if any, the sole remedy of any buyer shall be to return the product along with original sales receipt, at **buyer's expense** for repair (or replacement of the product if repair is impossible) to the manufacturer's facility in the Commonwealth of Massachusetts, located at 22 Hancock Street, Milford, MA 01757. Some states do not allow the exclusion or limitation of any incidental or consequential damages, so the above limitation may not apply to you. Nothing herein contained shall be construed to be a waiver by the manufacturer of any of the obligations imposed upon said buyer under the laws of the Commonwealth of Massachusetts except as herein specifically stated.

This warranty is enforceable only by the buyer of the product or a person in the buyer's immediate family. This warranty is enforceable for a period of **FIVE YEARS** from the date of purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above warranty may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

### Warranty Void if:

- A) Product is altered in any way.
- B) Used for other than its intended use.
- C) Buyer mishandling.