

## - INSTRUCTIONS -

**Model #: PHSRPHTN-E**

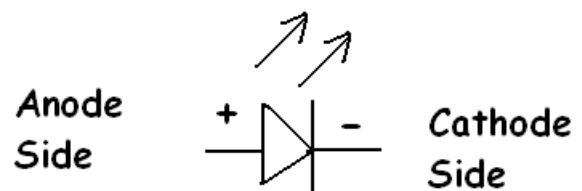
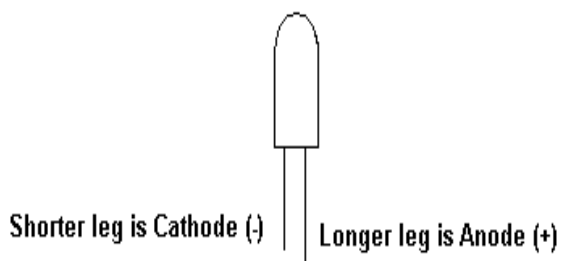
### **Wiring diagram of the Phaser Array and Torpedo Board for the Enterprise E**

This control system is made up of a Phaser Array function and Torpedo function with built in audio sounds of the weapons firing. As a bonus there's one additional output to drive LED Strips for internal window lighting, (**NOT SUPPLIED**). The board will work on 9 volt DC or 12 volt DC 1 Ampere wall power adapter (**NOT SUPPLIED**). Hot glue on the four corners of the printed circuit works to ensure the board is secured. Or use 4-40 screws or bolts to hold in place. TenaControls made this board easy to connect to with Three JST connectors which are plug in type. All the wiring connections will be made to the wires coming off the connectors, therefore no soldering on the actual circuit board.

### **ITEMS YOU WILL NEED:**

Soldering Iron  
Solder  
Cutter  
Wire Stripper

How to distinguish a LED:



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**Refer to the wiring diagram shown below for all external connections.**

Connect the thirteen LED's for the Phaser Array as well as the single LED for the Torpedo as shown below. Next connect the two eight ohms speakers. **Placing the speakers in a case or tube is a must to achieve the proper sound requirement.**

Now connect up SW1 momentary switch, which will enable the Phaser Array function to start simulating the charging and firing of the Phaser Array as well as play the audio sound of the array charging and firing a single burst, at the center, then repeats for right and left position of the saucer. Once the firing sequence is complete you can press the momentary switch button once again to repeat another Phaser Firing sequence.

The LED's are numbered, 1,2,3,4,5,6,7,8,9,10,11,12 and 13. For the placement of the Phaser Array LED's, see below diagram as a guide.

Now connect up SW2 momentary switch, which will enable the Torpedo function to start simulating the firings as well as play the audio sound of the torpedo burst. Once the firing sequence is complete you can press the momentary switch button once again to repeat another Torpedo Firing sequence.

The led number is 14. For the placement of the Torpedo led see below diagram as a guide.

**Feel free to download a digital version of this manual by going to [tenacontrols.com/downloads](http://tenacontrols.com/downloads)**

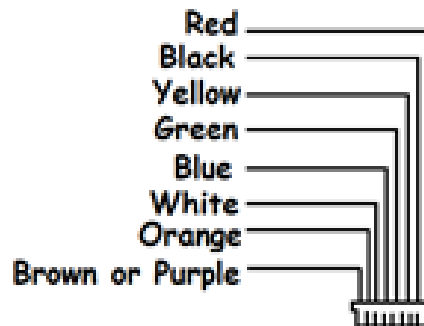
**IMPORTANT. Different cable companies have swapped the Green and White wires location on the JST Connector. Below are two pictures showing the wires and their locations. When you get your board, you will need to look and see which connector type you received. Use the wiring sheets that are only for connector A or use the wiring sheets that are only for connector B. Sorry for this inconvenience, although this is out of our control.**

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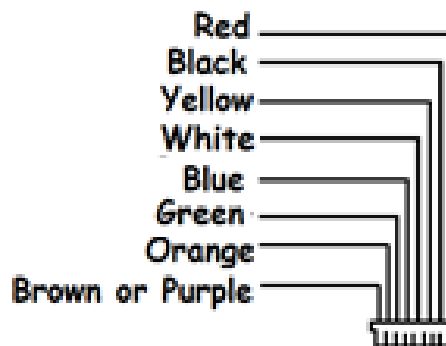
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## Position and Wire colors from Company A

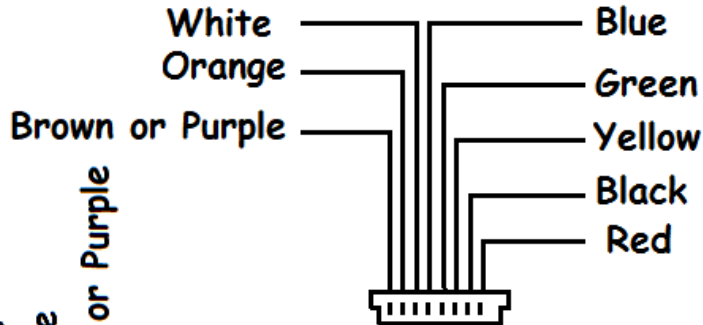


## Position and Wire colors from Company B

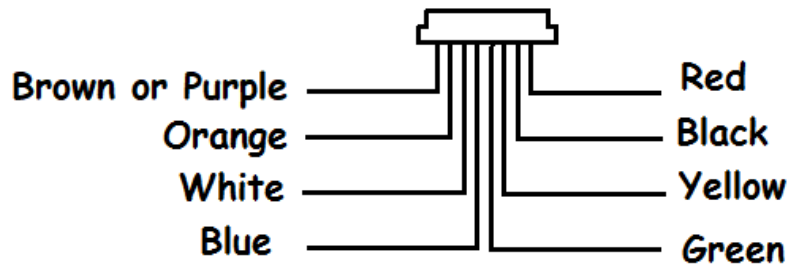
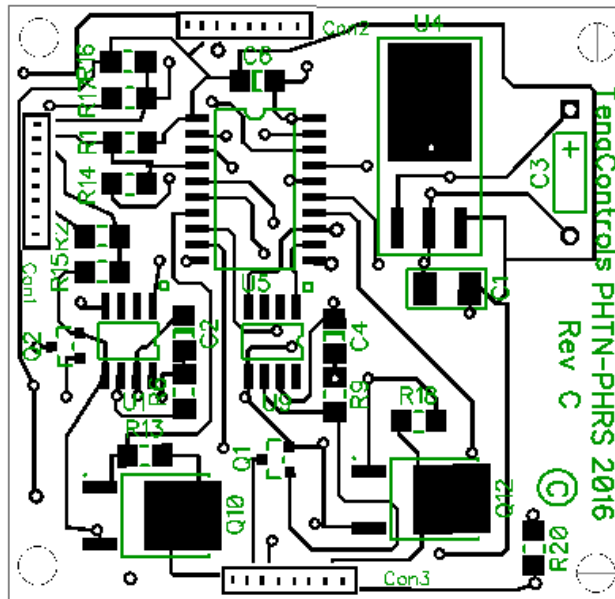
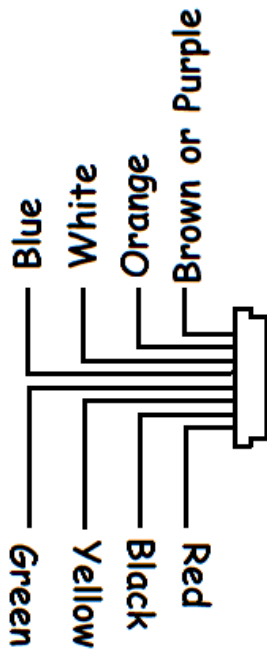




## CONNECTOR # 2



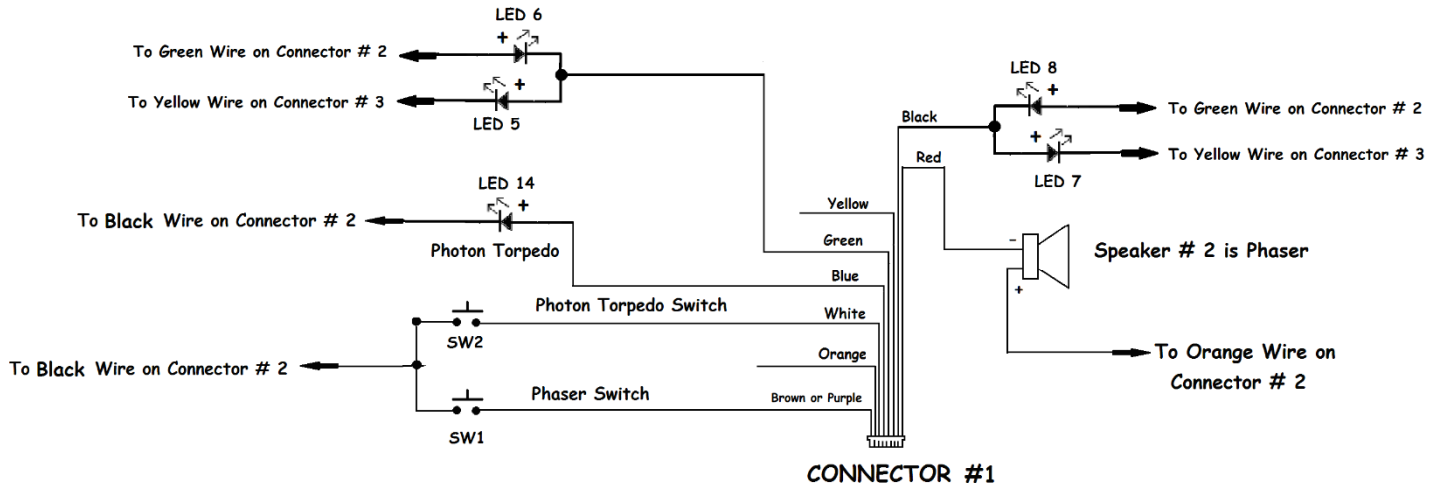
## CONNECTOR # 1



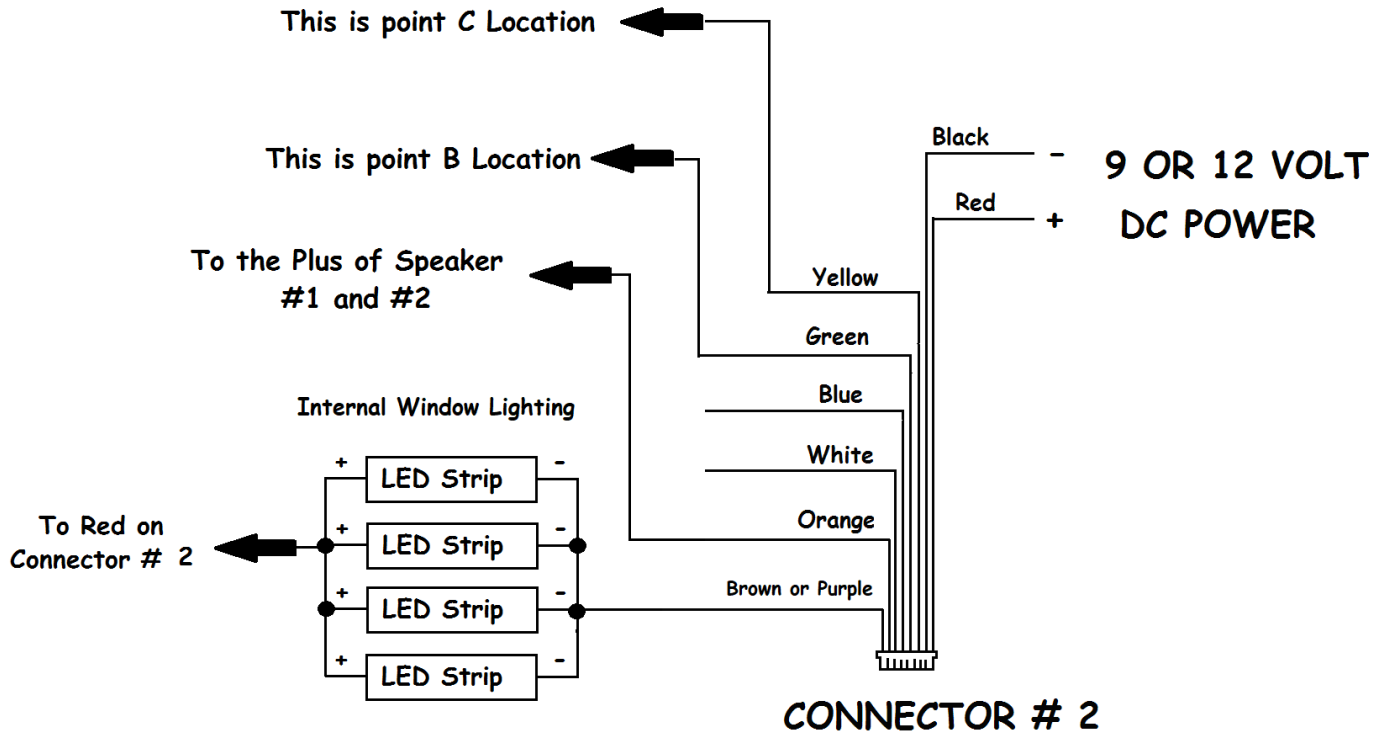
## CONNECTOR # 3



## Connector #1 Wiring Connections For Company A

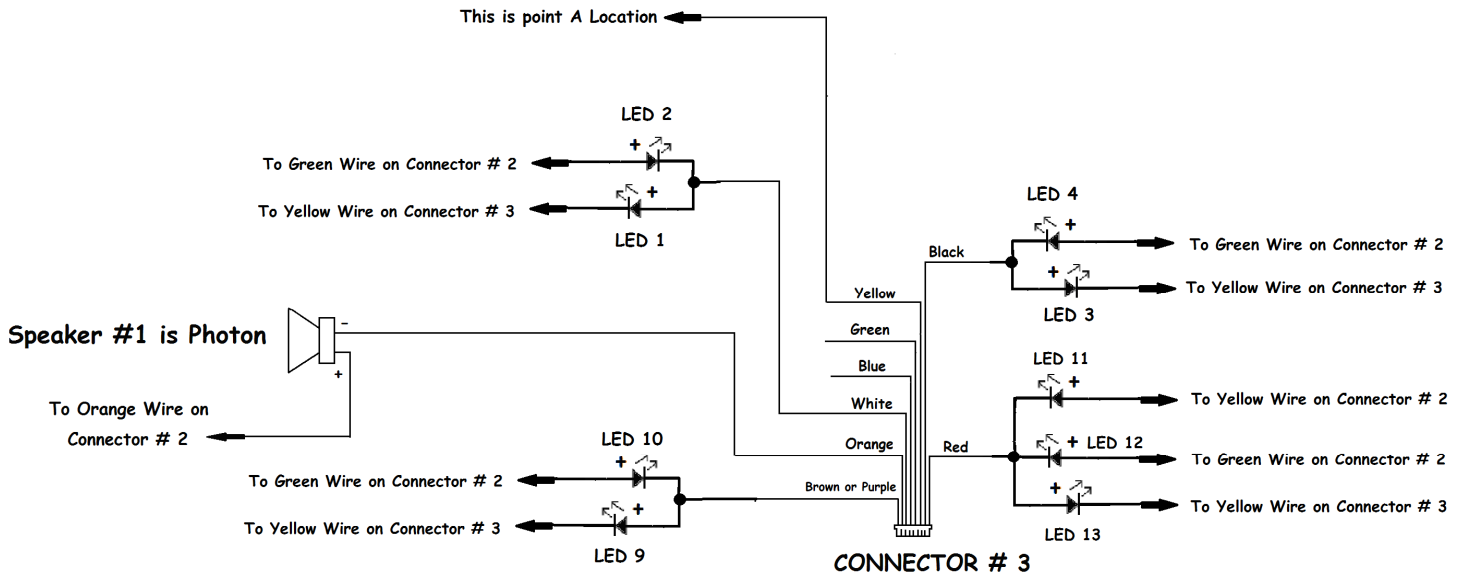


## Connector #2 Wiring Connections For Company A

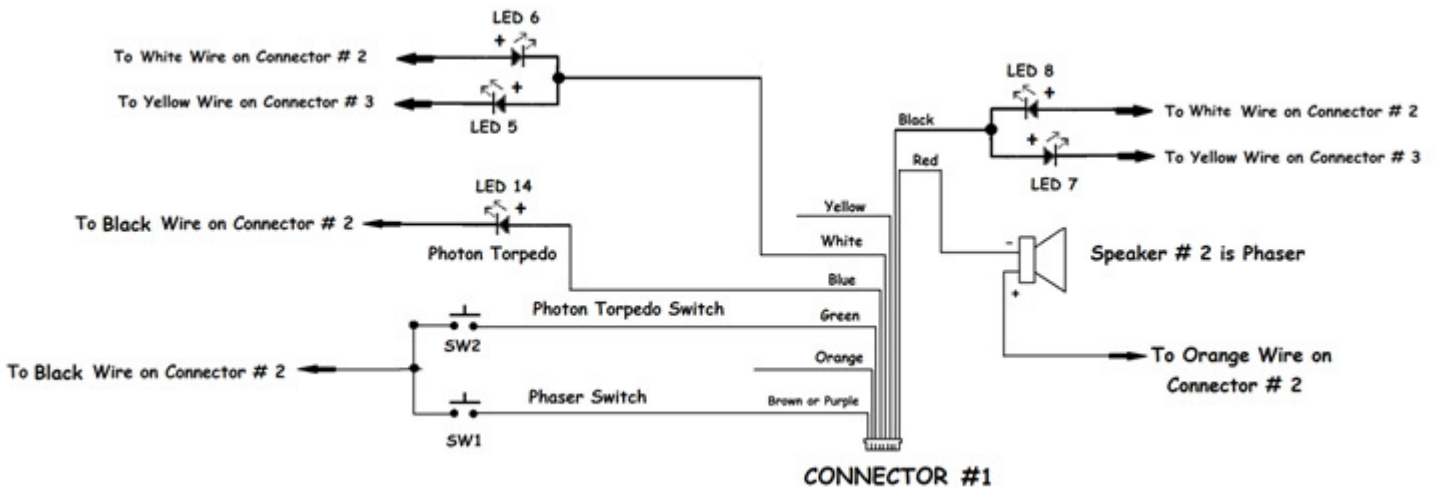




## Connector #3 Wiring Connections For Company A

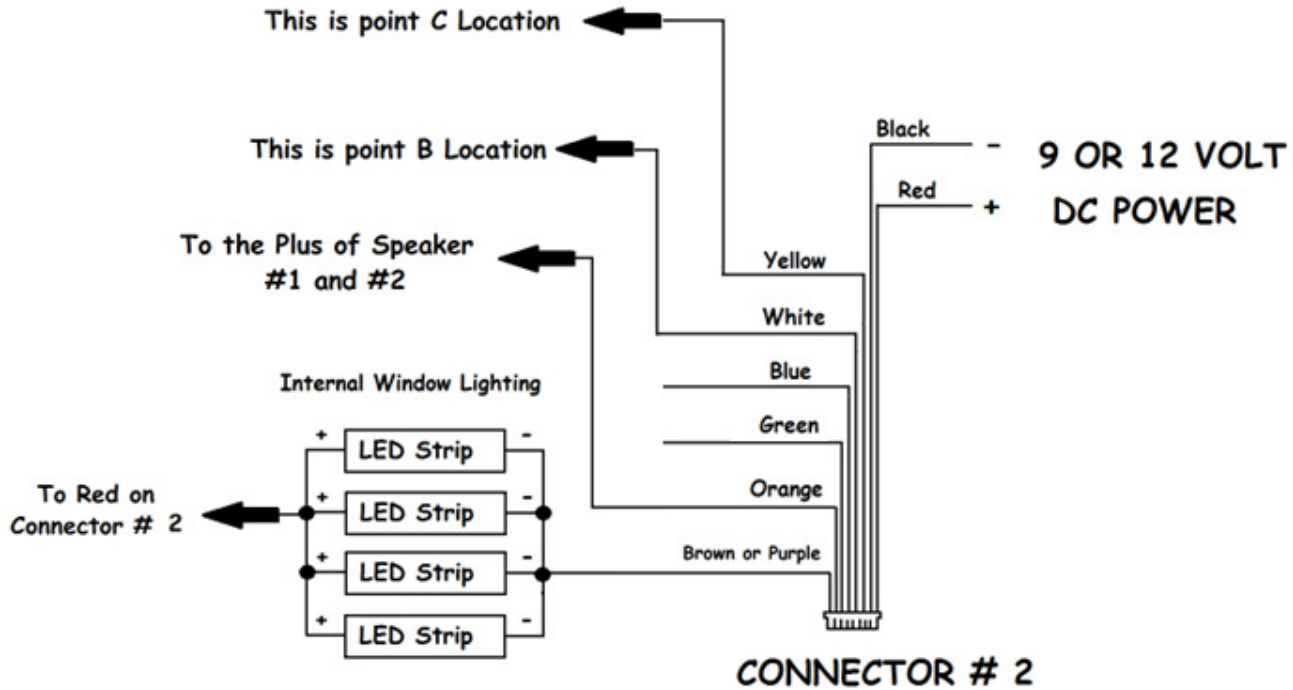


## Connector #1 Wiring Connections for Company B

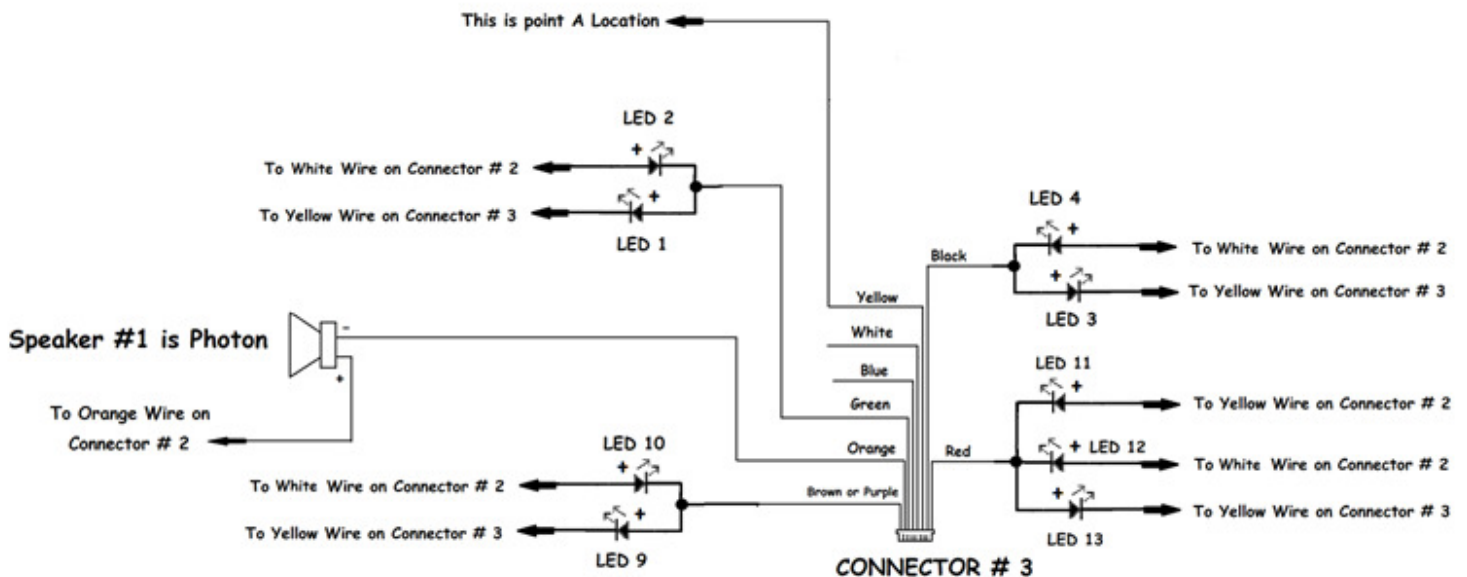




## Connector #2 Wiring Connections for Company B



## Connector #3 Wiring Connections for Company B



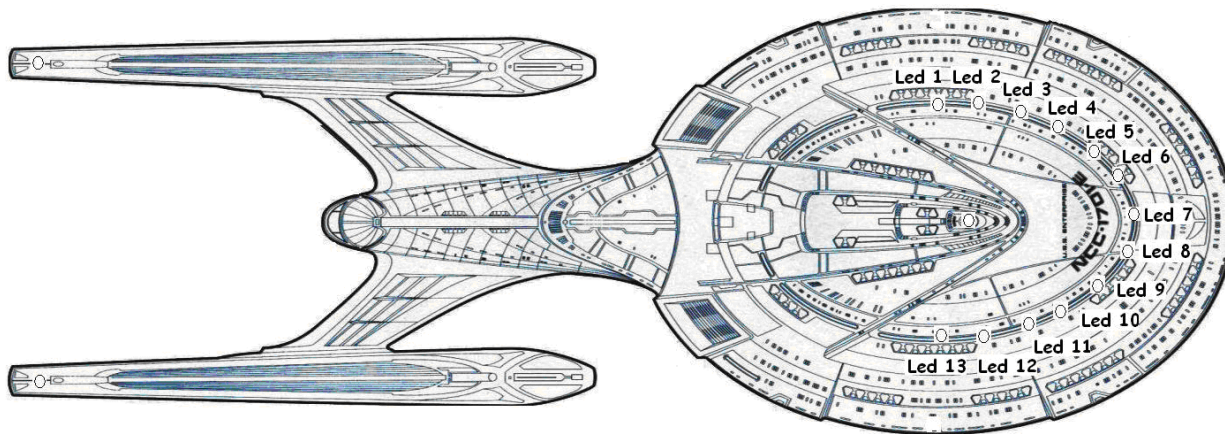
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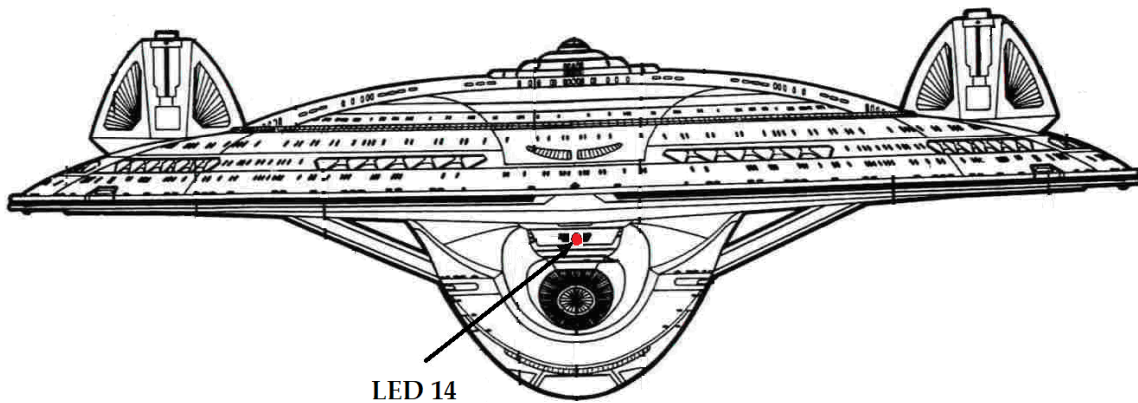


**TenaControls**  
Bringing Models to Light™

**LED location for the Phaser Array, LED 1 - LED 13. These are 1.8 mm Orange LED's.**



**LED location for the Torpedo LED 14. This is 1.8 mm Red LED**





# TenaControls LLC

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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 75 Mowry Street, Mendon, MA 01756. 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.