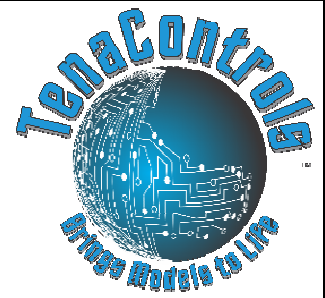


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MODEL#: RMTBD-FRNKLN-NX **NAVIGATION, IMPULSE ENGINES, THRUSTERS AND PLASMA** **BUSSARD EFFECT BOARDS FOR STAR TREK FRANKLIN-NX-326** **1:350 SCALE FROM MOEBIUS**

The integrated Control and Remote board comes completely assembled and tested. The only thing you need to do is connect the LED's, use 9 or 12volt DC, 2 Ampere power adapters (**not supplied**). Additionally, hot glue on the four corners of the printed circuit works to ensure the board is secured. When the ship is powered up, all the lights will be on.

For additional assistance see below instructional Video Link.

<https://www.youtube.com/watch?v=d2V-88F1I0k&feature=youtu.be>

ITEMS YOU WILL NEED:

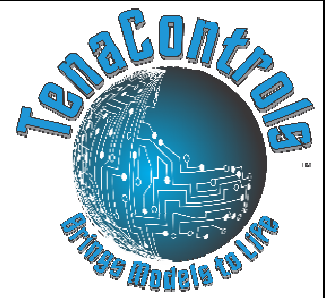
Soldering Iron
Solder
Cutter
Wire Stripper

****Note:** When using the shrink tubing, only slide the shrink tubing over one leg of the LED to keep it from shorting against the other leg. Then use a heat gun or solder iron tip to heat the shrink tubing until it shrinks around the wire connected to one of the LED legs.

Now we can connect up one side of the on/off switch (**Not Supplied**) to the positive power input, the other side of switch to the Red wire on C1 of the 8 pin JST Connector, then the Minus power

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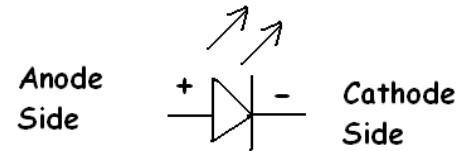
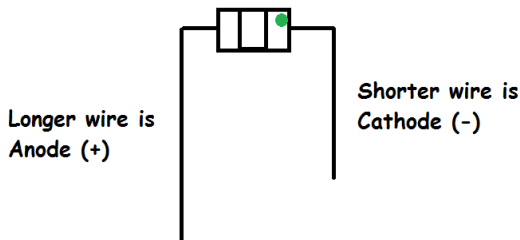
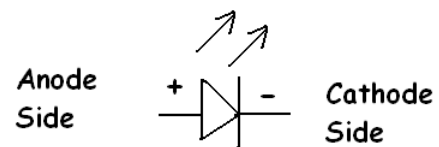
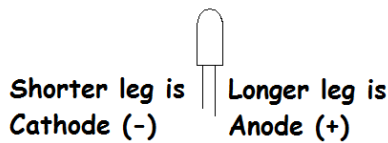


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input to the Black wire on C1 of the 8 pin JST Connector. This kit is designed to be used with the Remote Control System.

***A digital version of this Manual can be requested, email, sales@tenacontrols.com ***

HOW TO DISTINGUISH A LED:



Very important to make sure that the colored wires from each round board connects correctly to their respective wire from the 8 pin JST Connector, C1 or you will not see the proper effect.

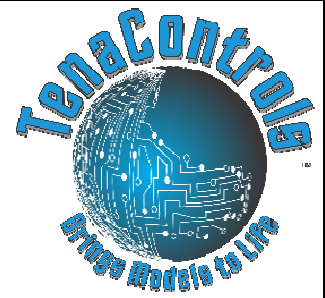
Connect the Black wire from the Clock Wise Board and the Counter Clock Wise Board to the Black Wire of the 8 pin JST Connector, C1. Connect White wire from the Clock Wise Board and the Counter Clock Wise Board to the Blue Wire of the 8 pin JST Connector, C1. Connect Gray wire from the Clock Wise Board and the Counter Clock Wise Board to the White Wire of the 8 pin JST Connector, C1, Connect Purple wire from the Clock Wise Board and the Counter Clock Wise Board to the Orange Wire of the 8 pin JST Connector, C1. **This takes care of the Plasma Bossard Board connections.**

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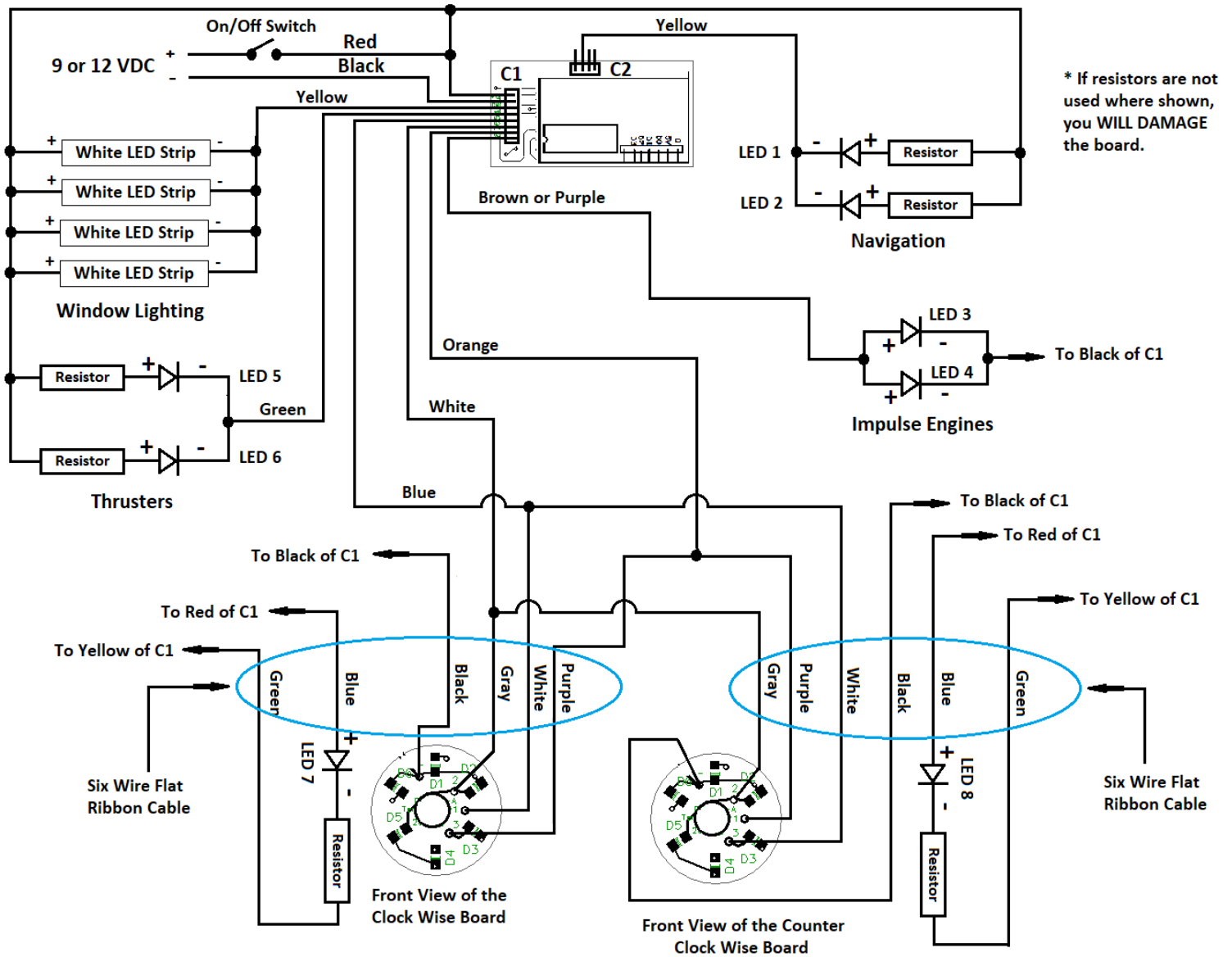
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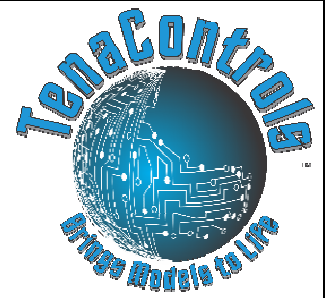


CONTROL WIRING DIAGRAM:



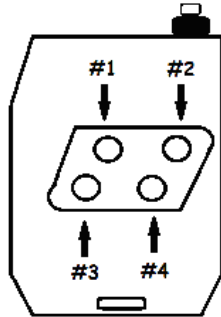
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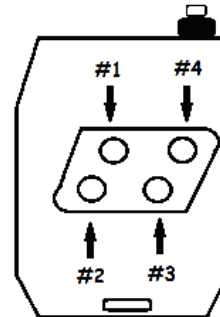


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FOB DIAGRAM:



Transmitter FOB's will come in one of two types. Buttons 2-4 are located differently.



- Some Manufacturer mark button #1 as A or C
- Some Manufacturer mark button #2 as A or B
- Some Manufacturer mark button #3 as C or D
- Some Manufacturer mark button #4 as B or D

HOW TO OPERATE THE REMOTE CONTROL:

NAVIGATION: PRESS BUTTON#1 ONCE TO TURN ON/OFF THE NAVIGATION LIGHTS.

INTERNAL LIGHTS: PRESS BUTTON#1 TWICE TO TURN ON/OFF THE INTERNAL WINDOW LIGHTS AND REAR ORANGE TAIL LIGHTS.

IMPULSE ENGINES: PRESS BUTTON#2 ONCE TO TURN ON/OFF THE IMPULSE ENGINES.

THRUSTERS: PRESS BUTTON#2 TWICE TO TURN ON/OFF THRUSTERS.

BUSSARDS: PRESS BUTTON#3 TO CHANGE THE TIME OF THE PLASMA/ROTATIONAL EFFECT AND ON THE LAST PRESS THEY WILL SHUT OFF.

ON/OFF: PRESS BUTTON #4 TO TURN EVERY FUNCTION ON/OFF.

IF THE REMOTE CONTROL EVER FAILS TO TURN ON OR OFF A PARTICULAR FUNCTION, SHUT THE POWER GOING TO THE CONTROL BOARD OFF. AFTER 5 SECONDS TURN THE POWER BACK ON AND THE PROBLEM SHOULD BE RESOLVED.

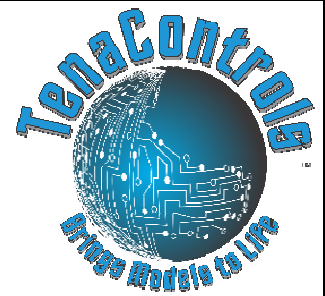
WITH ANY RADIO FREQUENCY DEVICE, IT CAN BE SUBJECTED TO ELECTRICAL NOISE INTERFERENCE FROM THE SURROUNDING ENVIRONMENT OR VOLTAGE FLUCTUATION FROM THE POWER SOURCE.

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NAVIGATION SIDE:

1. **One Green SMD, LED1**, the Anode (+) of the Navigation led LED1, will terminate to one side of the resistor and the other side of resistor to the Red Wire of the 8 pin JST Connector, C1. Then connect the Cathode (-) of LED1, to the Yellow Wire of the 4 pin JST Connector, C2. **See above Control Wiring diagram (pg. 3).**
2. **One Red SMD, LED2**, the Anode (+) of the Navigation led LED2, will terminate to one side of the resistor and the other side of resistor to the Red Wire of the 8 pin JST Connector, C1. Then connect the Cathode (-) of LED2, to the Yellow Wire of the 4 pin JST Connector, C2. **See above Control Wiring diagram (pg. 3).**

Left & Right-Side Impulse Engines:

3. **Two Orange SMD's, LED3 and LED4**. The Two Anodes (+) of the Left & Right side Impulse Engines LED's, LED3 and LED4 will terminate to the Brown or Purple Wire of the 8 pin JST Connector, C1. Then connect the Cathodes (-) of LED3 and LED4 to the Black Wire of the 8 pin JST Connector, C1. **See above Control Wiring diagram (pg. 3).**

Left Side Nacelle Tail LED:

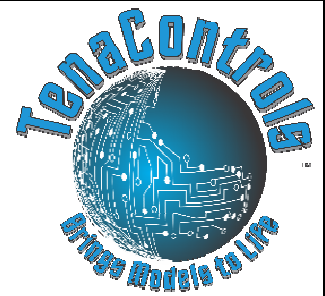
4. **One Orange LED, LED7**. The Cathode (-) of LED will terminate to one side of the resistor and the other side of resistor to one end the Green Wire which is part of the Flat Ribbon Cable from the round board. The other end Green Wire connects to the Yellow Wire of the 8 pin JST Connector, C1. Then connect Anode (+) of LED to one side of the Blue wire which is part of the Flat Ribbon Cable from the round board. The other end of the Blue wire connects to the Red Wire of the 8 pin JST Connector, C1. **See above Control Wiring diagram (pg. 3).**

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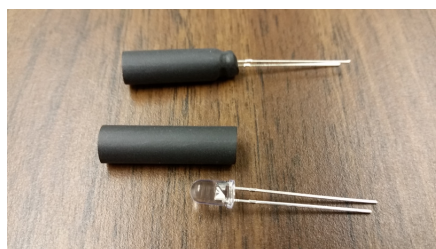


Right Side Nacelle Tail LED:

5. **One Orange LED, LED8.** The Cathode (-) of LED will terminate to one side of the resistor and the other side of resistor to one end the Green Wire which is part of the Flat Ribbon Cable from the round board. The other end Green Wire connects to the Yellow Wire of the 8 pin JST Connector, C1. Then connect Anode (+) of LED to one side of the Blue wire which is part of the Flat Ribbon Cable from the round board. The other end of the Blue wire connects to the Red Wire of the 8 pin JST Connector, C1. **See above Control Wiring diagram (pg. 3).**

Thruster LED's:

6. **One White LED, LED5,** the Anode (+) of the Thruster led, LED5 will terminate to one side of the resistor and the other side of resistor to the Red Wire of the 8 pin JST Connector, C1. Then connect the Cathode (-) of LED5, to the Green Wire of the 8 pin JST Connector, C1. You will use this 5 mm led as the light source for half of the fiber optic strands. **Fiber Strands are not included.** See above Control Wiring diagram (pg. 3).
7. **One White LED, LED6** the Anode (+) of the Thruster led, LED6 will terminate to one side of the resistor and the other side of resistor to the Red Wire of the 8 pin JST Connector, C1. Then connect the Cathode (-) of LED6, to the Green Wire of the 8 pin JST Connector, C1. You will use this 5 mm led as the light source for half of the fiber optic strands. **Fiber Strands are not included.** See above Control Wiring diagram (pg. 3).
8. Below picture shows components of the white emitter for fiber optic strands, **(not supplied).**

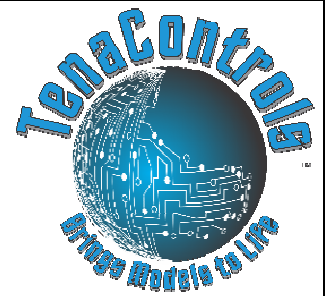


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Warranty

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.