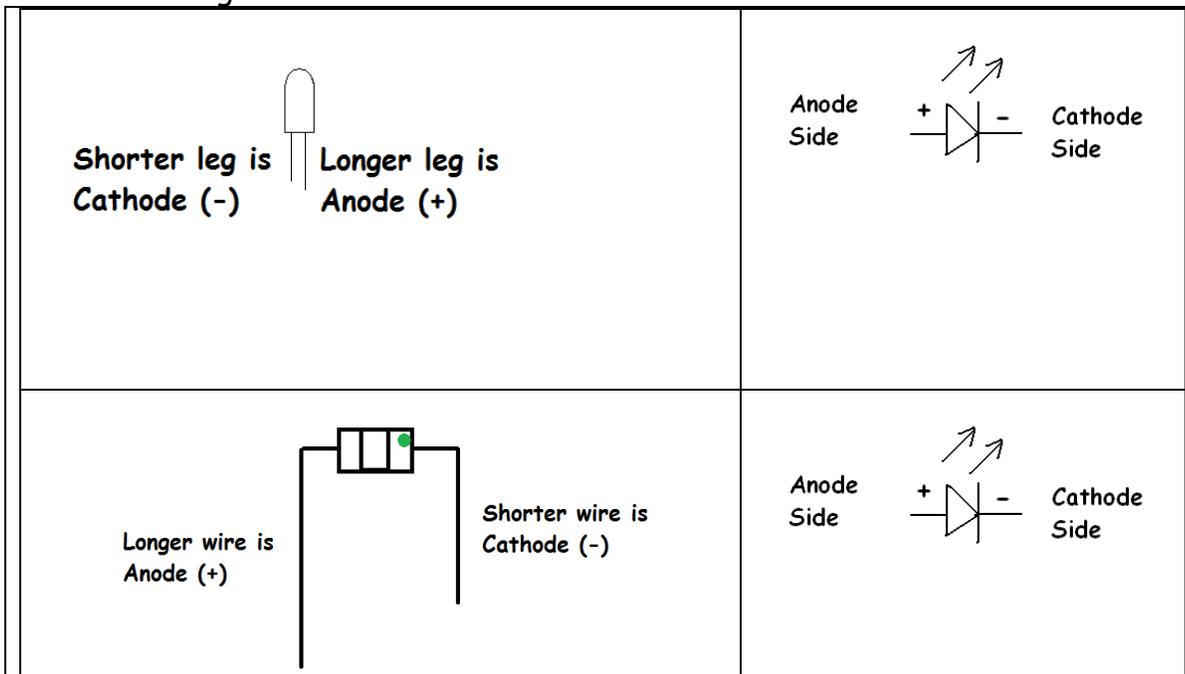# Instructions for Model#: ALNKN-B, the Alien Kane Figure Lighting System

This unit is completely assembled and tested. The only thing you need to do is connect the led's to the connection points as shown below in the Master Wiring Diagram. Then connect the 9 battery (not Provided) into the holder. Hot glue drops on the four sides of the board works well for locking into place.

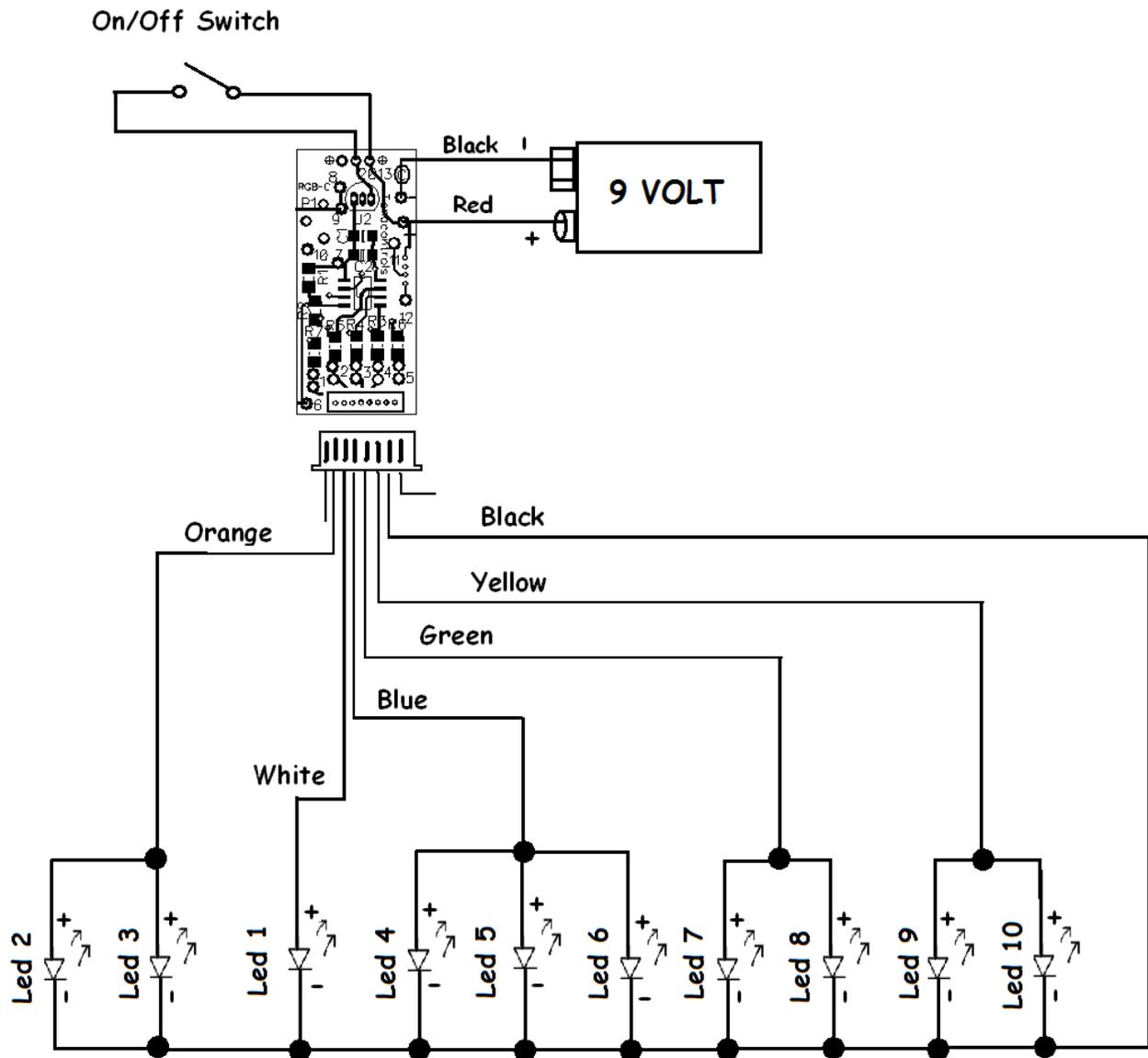Items you will need: Soldering Iron, solder, cutter, wire stripper and additional wiring.

**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:

Shorter leg is Cathode (-) Longer leg is Anode (+)	Anode Side + ▷⊢ − Cathode Side
Longer wire is Anode (+) Shorter wire is Cathode (-)	Anode Side + ▷⊢ − Cathode Side

Master Wiring Diagram

Alien Moving Light

1. **LED2-LED3**. The Anodes (+) of the Flicker led, LED2-LED3 connects to the Orange wire from the pc board. Then connect the Cathodes (-) of LED2-LED3 to the Black wire from the pc board.   See above diagram.

Flashing Light

2. **LED1**. The Anode (+) of the Flashing led, LED1 connects to the White wire from the pc board. Then connect the Cathode (-) of LED1 to the Black wire from the pc board. See above diagram.

Egg & Back Pack Lights

3. **LED4-LED6**. The Anodes (+) of the Egg and Back Pack led's, LED4-LED6 connects to the Blue wire from the pc board. Then connect the Cathodes (-) of LED4-LED6 to the Black wire from the pc board. See above diagram.

Left & Right Side of Face Lights

4. **LED7-LED8**. The Anodes (+) of the Left and Right side of face led's, LED7-LED8 connects to the Green wire from the pc board. Then connect the Cathodes (-) of LED4-LED6 to the Black wire from the pc board. See above diagram.

Flash Light & Helmet Spot Light

5. **LED9-LED10**. The Anodes (+) of the Flash Light and Helmet Spot Light led's, LED9-LED10 connects to the Green wire from the pc board. Then connect the Cathodes (-) of LED9-LED10 to the Black wire from the pc board. See above diagram.

Below are guideline Instruction from Boyd Crompton how he built up Officer Kane

Here is the list of what I used for the lighting and the building guide for the Officer Kane model.

Lighting components needed

4 X regular white 0805 SMD's

6 X warm white 0805 SMD's

1X Tenacontrols control board

Assembly instructions

First the resin figure parts such as the torso, and one of the legs must be drilled out to allow for passing the wiring through from the bottom to the top of the figure inside the helmet area. You will need to make connecting "tunnels" while drilling due to the 90 degree bend of the leg of the figure.

Drill one hole through the back pack panel lighting area and also into the back of the figure which connects to the "tunnel" you have drilled out from top to bottom.

When finished you should have a connecting tunnel that leads from the bottom of the foot all the way up to inside the helmet with a branch off to the back pack area of the figure.

Now you need to pull the wiring through. I used 30 gauge wrapping wire in red and black for this. You will need a pair of wires pulled through from the foot of the figure to the back pack. Then two pairs of wires pulled through up to the helmet area. One pair is for the helmet spot light on top and the internal helmet lighting. The other pair is for the indicator lights in the front of the helmet under the figures chin.

Next, drill a small hole in the housing for the spot light on the helmet top just large enough to fit the wires for a 0805 SMD through it. You will mount 1 X regular white SMD here to light the top helmet light.

Mount 2 X regular white SMD's inside the helmet to the sides of the figures head. This provides the helmets interior lighting.

Mount 1 X warm white SMD in the chin area of the helmet underneath the clear plastic panel indicator light piece that comes with the kit. Light block paint the clear piece and paint on the colors you want for the indicator lights with Tamiya clear. Mount the clear piece over the top of the SMD used here.

Working inside the helmet, connect the top light and the two interior lights together and terminate the connection to one pair of wires that you have pulled through here. Next, terminate the chin indicator light to the other pair of wires that were pulled through here. Mark the wires at the foot to make sure you have them separated.

Mount 1 X warm white SMD into the back pack area and install the clear plastic indicator light panel the kit comes with over the top of it. Light block the clear indicator light panel and then paint the indicator lights in your choice of colors again using the Tamiya clear colors.

Connect the SMD wiring here to the same wiring pulled through to the helmet which was used for the top light and interior lights. The wiring for the figure is now complete.

Next drill out the flashlight provided with the kit and install 1 X regular white SMD into it passing the wires out through the bottom. Drill out a hole in the spot on the base where the flashlight mounts and pull the wires from the flashlight through and out the bottom.

Drill out two holes on the base, one on each side, close to the spot where the face hugger figure mounts inside the egg.

Mount 2 X warm white SMD's on the base here facing up to light the egg itself. Next mount the face hugger figure and then mount 2 X warm white SMD's one on each side of the face hugger figure on the mount he is attached to. Tuck the wires in close on the mount and glue them down and then paint over them to help them be hidden. Pull the wires for all the egg and face hugger lighting out through the bottom of the base.

Connect the wires from the flash light, the egg and the pair of wires that lights the helmet and back pack together. This completes the static lighting circuit.

Next, connect the wires from the helmet indicator lights to the appropriate output from the control board. Then, connect the pair of wires from the face hugger SMD's to the appropriate output of the control board.

Connect the control board to a switch and power and you are are all finished up with the lighting install.

Warranty

TenaControls warrants that the control boards sold meet TenaControls 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.

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Warranty Void if:

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