

Original Battlestar Lighting Kit

By Madman Lighting Inc
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WARNING: This product contains small parts not suitable for children less than 12 years of age. DO NOT SWALLOW! MAY CAUSE CHOKING OR INJURY!

WARNING: Madman Lighting products are shipped in good working condition and are not to be modified or changed by the purchaser. Any change or attempt to repair, change, alter, modify or enhance Madman Lighting products in any way will void any warranty, written or implied.

ESD WARNING: Madman Lighting products contain sensitive electronic components and may be damaged by electrostatic discharge (ESD). Avoid shock, sparks, and static electricity by working on a grounded surface or by using a wrist-grounding strip.

Thank you for purchasing an Original Battlestar Lighting Kit from Madman Lighting. This kit will let you quickly and easily light the Battlestar Galactica kit from Moebius Models.

What You Get:

1 Delux-Flasher 24 circuit card	Four 5mm White LEDs	Five 3mm White LEDs
2 inches of heat shrink tubing	One Red LED	One foot of very fine fiber optic cable.
Instructions on CD ROM	1 Cotton ball diffuser	14 ft red and black hookup wire

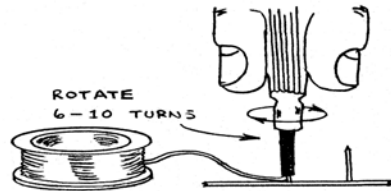
What you will need:

Tools: Xacto knife, Wire Wrap tool (Jameco Electronics), low wattage soldering iron and solder (Jameco Electronics), needle files, pin vise, set of precision drills including #75 and #80, small wire cutters, and a simple volt-ohm meter to measure voltage and continuity.

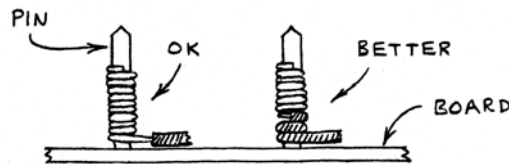
Supplies: Power supply, either an 18-volt battery pack (two 9V batteries) or an 18-volt DC wall transformer able to produce at least 100mA. Glue, putty, paint, etc.

No soldering is required when using the Delux-Flasher 24 circuit card. All connections are made with wire wrap wire, which is safer and easier than soldering. It is also easily changed.

Wire wrapping is easy! The wire wrap tool comes with a handy stripper you can use to remove the insulation from the wire. Remove about an inch of insulation, and then insert



the bare end into the guide groove of the wrapping tool. Slip the tool down onto the post and rotate a few turns while letting it gently push itself upwards as the wire wraps around the post. The figure below shows some examples of finished wraps.



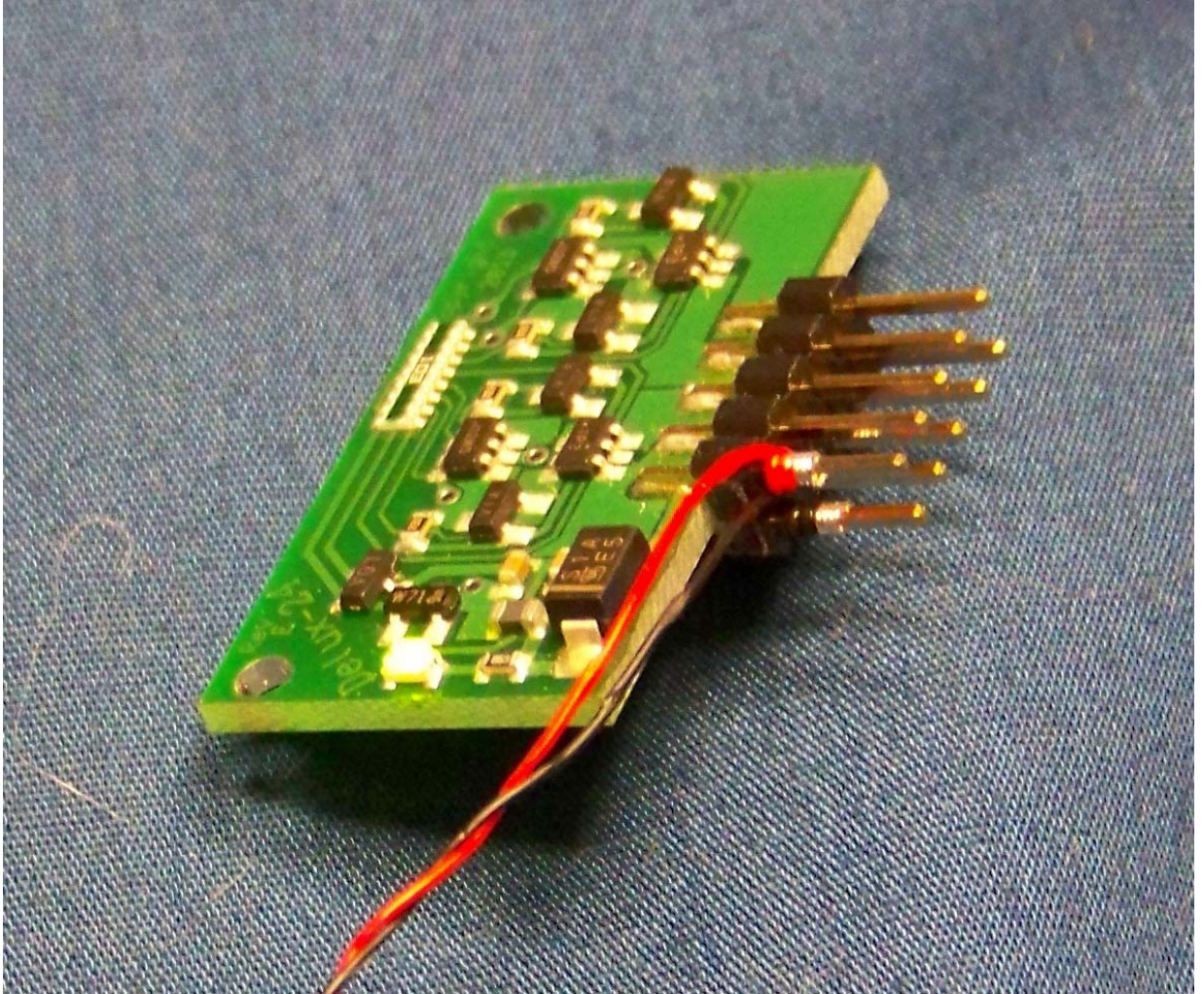
Power wires are provided as part of the kit. One length of twisted red and black wire is available for wiring your Delux Flasher to its LEDs and battery.

Black is for the Negative (-) connection, always the SHORT lead on the LEDs.
RED is for the Positive (+) connection, always the LONG lead on LEDs.

Connecting Power to the Delux-24/Flasher circuit cards



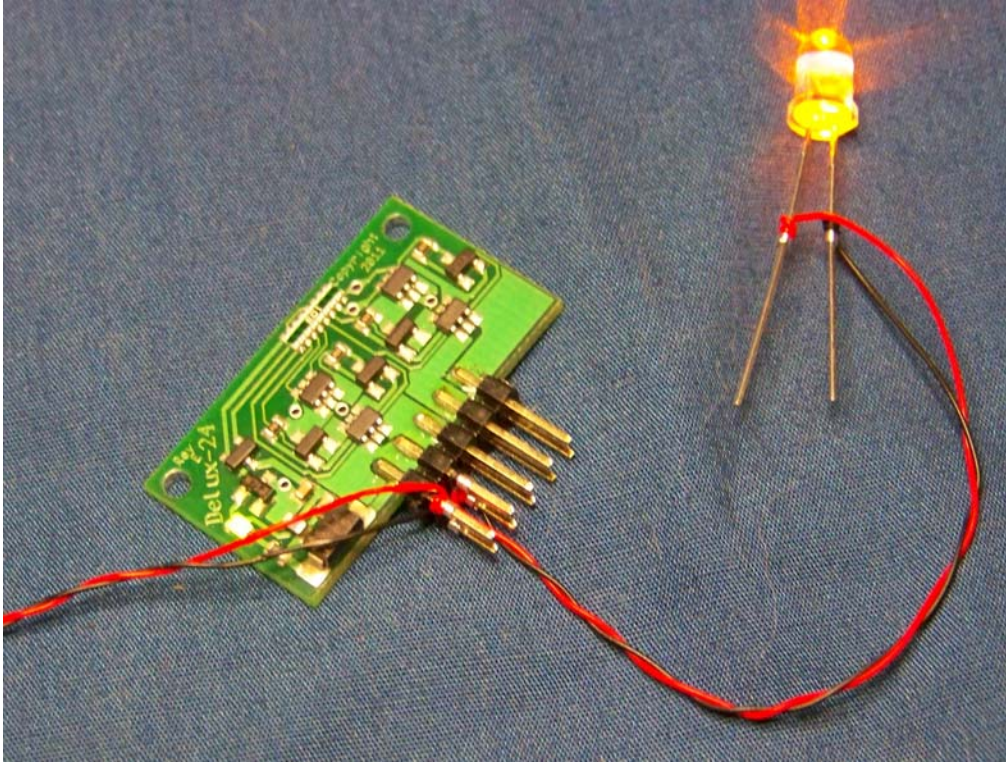
1. First, let's connect power to the Delux-Flasher 24. The Delux-Flasher 24 has a tiny power-on LED built-in to let you know you've hooked up power right. Once we've got power right we can take the power hookup apart and mount it in the model.
2. Turn it on! The tiny LED on-board the Delux-Flasher 24 should now be lit. If not, reverse the wires and check that there are no breaks in the wires. The picture below shows power wires hooked to the Delux-Flasher 24 board and the green LED on.



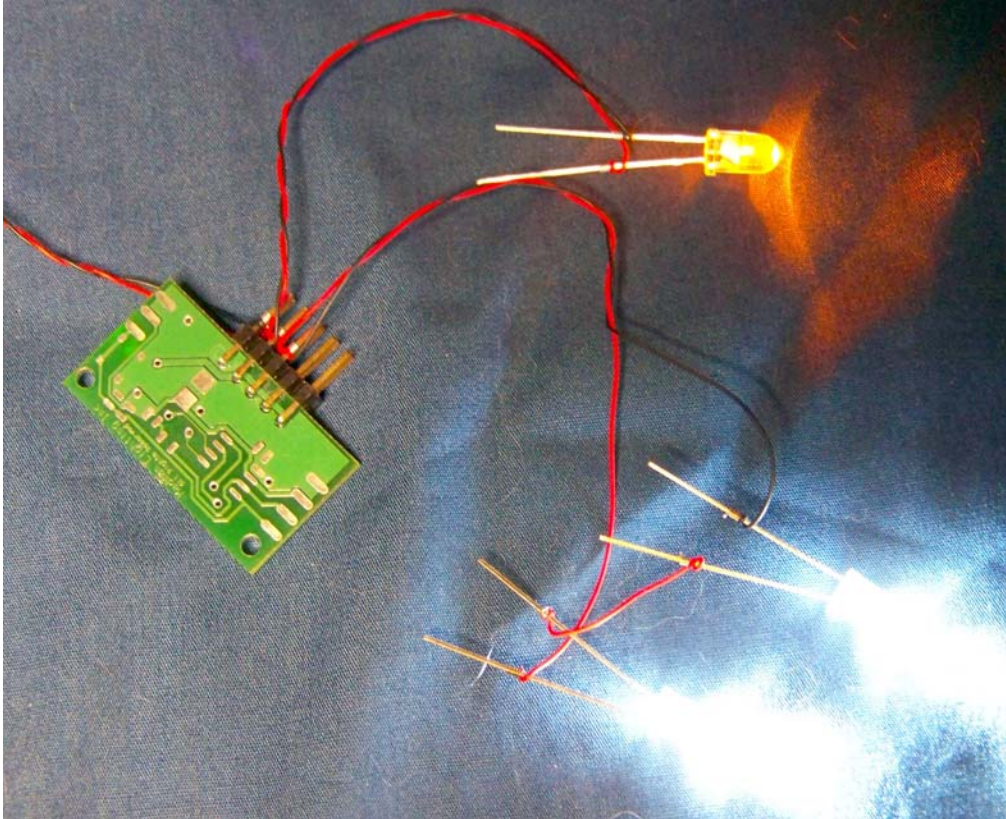
Power and Ground hookups, Red wire is battery positive (+) , Black is battery negative (-), ie ground

Connecting LEDs to the Delux-Flasher 24

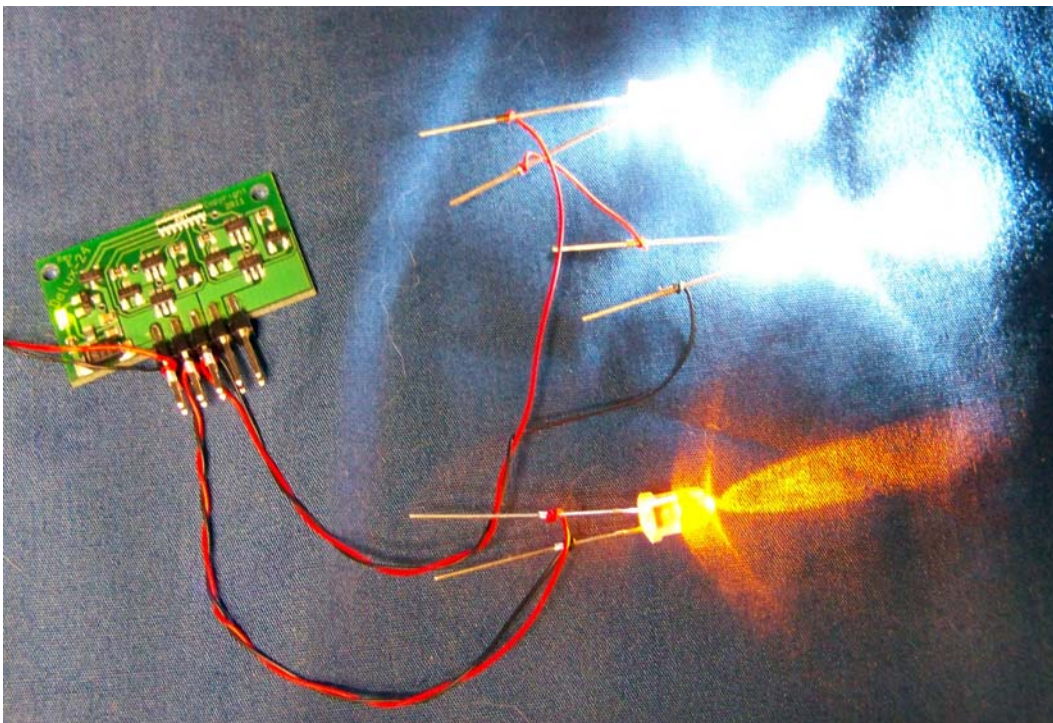
The following pictures show how to hook up wire-wrap wire to the Delux Flasher board.



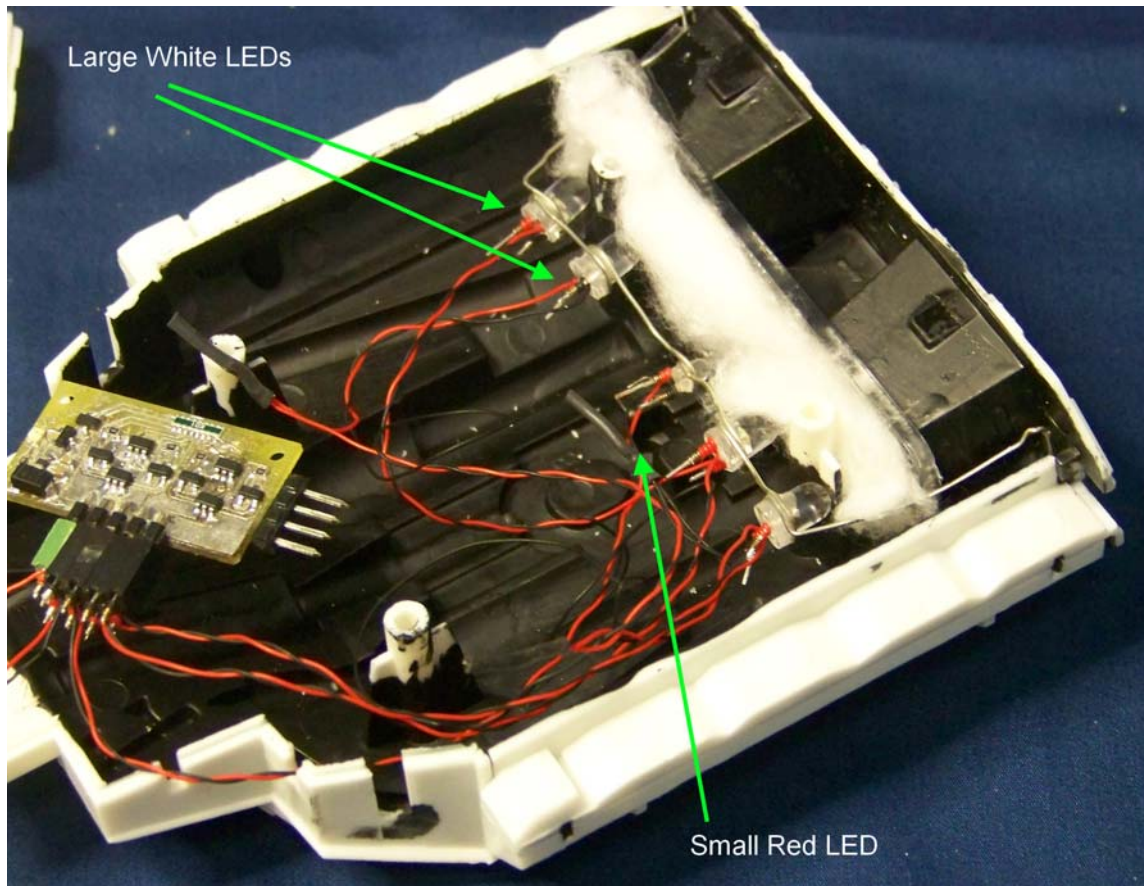
Hookup for one LED, showing the red and black wires for the LEDs. Notice that the wires for the LEDs have the BLACK wire on TOP side and RED wire on BOTTOM side.



Hookup for two LEDs on the BACK side of the card. LED RED wires connect on the BACK side of the card.

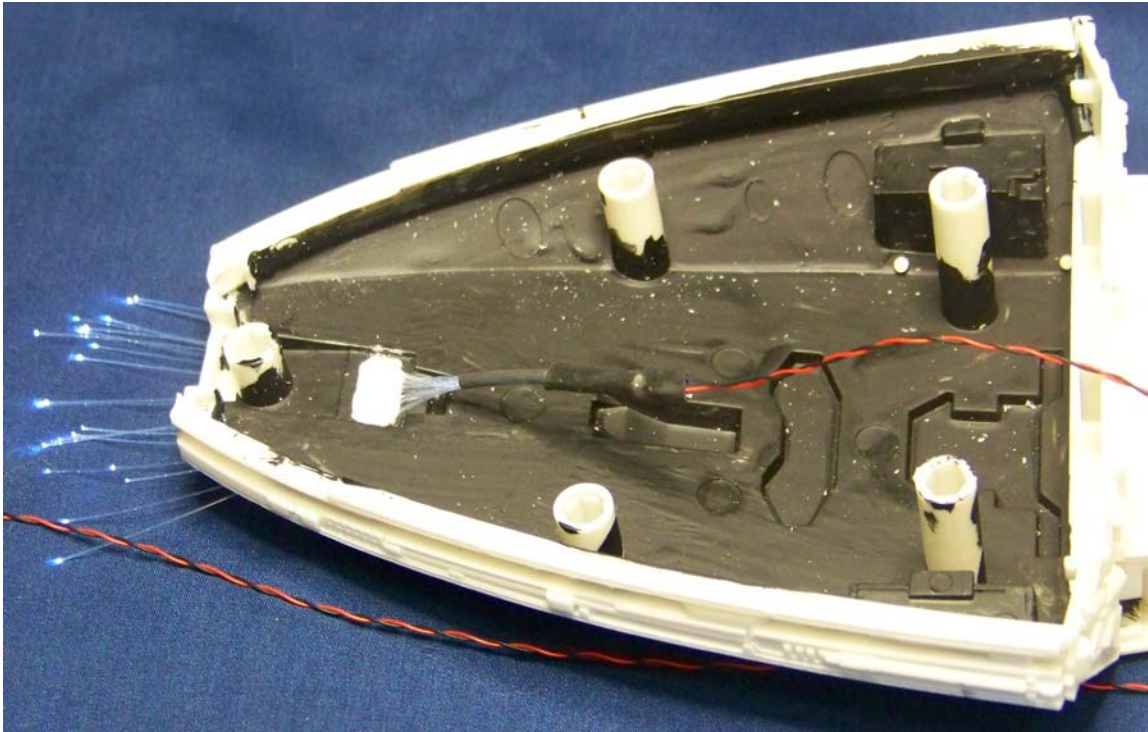


Installing the Engine LEDs



This shows the rear engine section of the model, upside down, with the LEDs attached to the controller in a mock-up. A length of wire (not included) has been used to hold the LEDs in place behind the clear engine grill and the cotton ball diffuser. Just wrap the wire firmly around each LED, bend to shape, and use a drop of glue to hold the LEDs to the wire. Notice that the inside of the model has been painted flat black to prevent light leakage.

Installing the Bridge Lighting



This shows the front section of the ship, upside down, with the LED and fiber optics installed for the bridge. A motorized tool was used to cut away the plastic beneath the bridge piece to allow the fiber optics to enter the hull. A #80 drill bit and pin vise were used to drill the holes in the front of the bridge for the fibers. The LED is attached to the bundle of fibers by “butt-joining” the two together with some heat shrink tubing. Again, the interior of the model is painted flat black to block light.

Insulating your Wiring

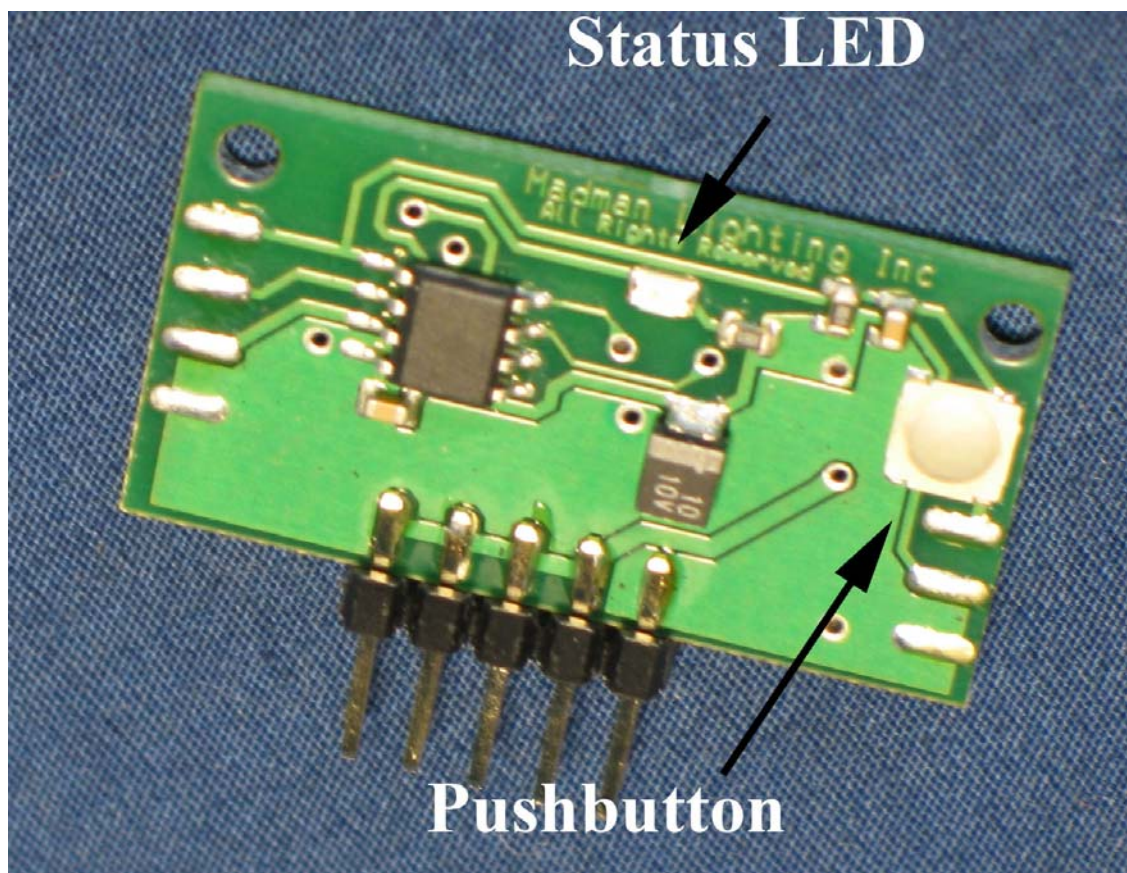
The kit includes small diameter heat shrink tubing to insulate your wire connections. Madman recommends clipping your LED wires to about ¼ inch long, wrapping the wire, then covering the exposed wire with the included heat shrink tube.

Flashing Speed Control

The Delux Flasher features adjustable speed control that is easy to use and stays set even after a power loss. Just press and hold the speed control button on the back of the board

The speed control button works like a clock radio button: Hold it and the speed slows more and more until its released. Each time the button is pressed, the Status LED on the back side of the board will light. The lighting effect will slow more and more with each press until it suddenly is going at full speed again. This is a simple loop: blinking starts at full speed, goes slower,

slower, slower, then full speed again as the button is pressed and held. You do not have to set this each time you turn it on, the Delux Flasher will remember your chosen speed until you change it by pressing the button again.



Closeup of backside of Delux Flasher board, Speed control button in upper right corner.

