

# ***Grade Crossing/Flasher Control***

## Installation Instructions

**Please read instructions completely before beginning your installation.**  
**Do not use the output of a variable throttle.**  
**Use DC voltages from +9 to +18.**  
**Use AC voltages from 6 to 16 volts.**

The ***Grade Crossing/Flasher Control*** comes in four different options.

### **Option # 1**

#### **Flasher with timer control.**

Controls two flashing alternating red lights. It also has a delay timer on it. When the input is triggered, the flashing alternating red lights will come on. When the trigger is removed, it will continue to flash for a period of time. This time is adjustable from 1 to 15 seconds.

### **Option #2**

#### **DPDT Relay and Flasher with timer control.**

Same as option #1, but with a DPDT relay and connections. The relay is energized when the timer is triggered and de-energized when timer is released.

### **Option #3**

#### **Flasher with timer control and stall motor control output.**

Same as option #1, but with an output for control of a stall motor. This stall motor can be used to control the up and down motion of a crossing gate. When the timer is triggered, the stall motor will move to one side. When the timer is released, the stall motor will move to the other side.

### **Option #4**

#### **Flasher with timer control, stall motor control output, and DPDT relay with connections.**

This option has all of the options together.

## **Connections**

There are three input connections to the Control board. Two of these are from a ***Sensa-Trak II™*** or ***Sensa-Bloc™***. They are labeled J3 and J4. See Figure 2. These inputs trigger the control board. Follow Figure 1 for their locations. J3 and J4 will supply power for your ***Sensa-Trak II™*** or ***Sensa-Bloc™***. The power input is J1. Input voltages can be AC or DC.

Figure 1.

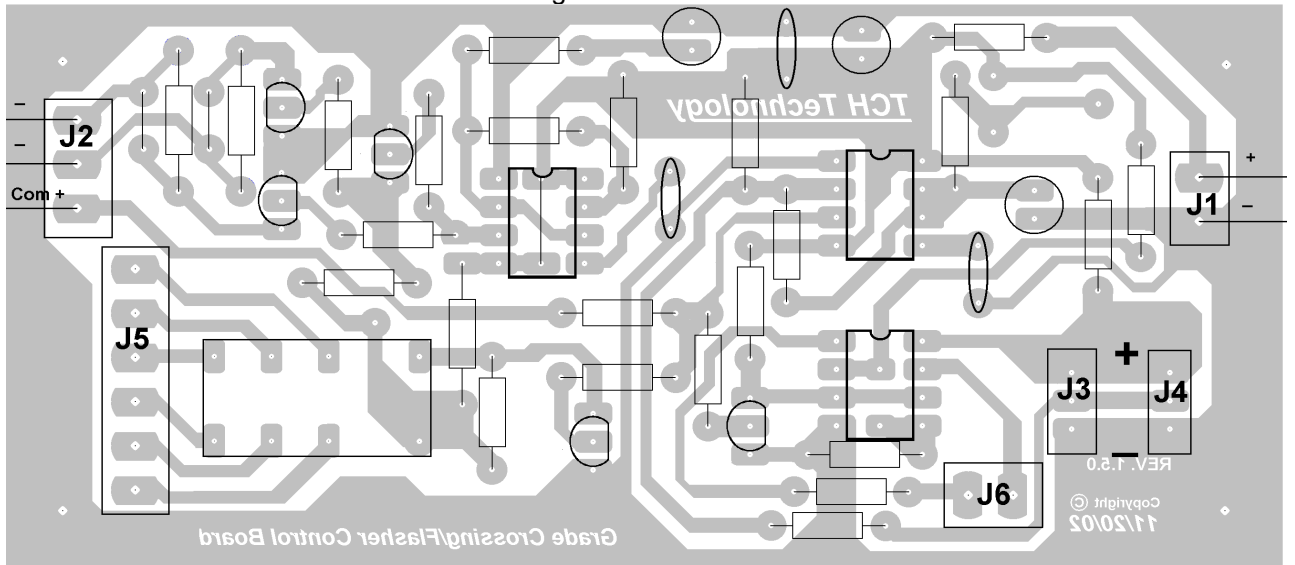
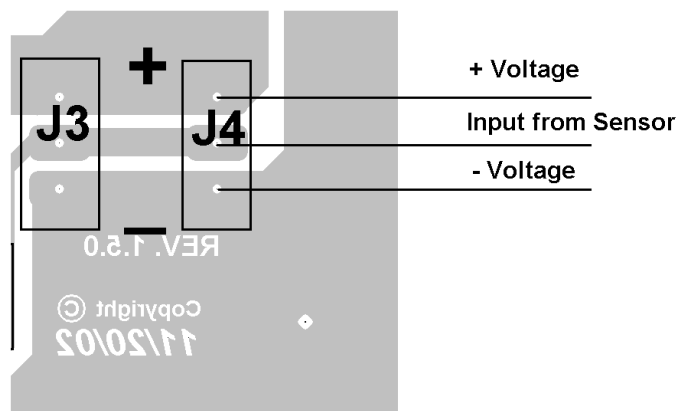
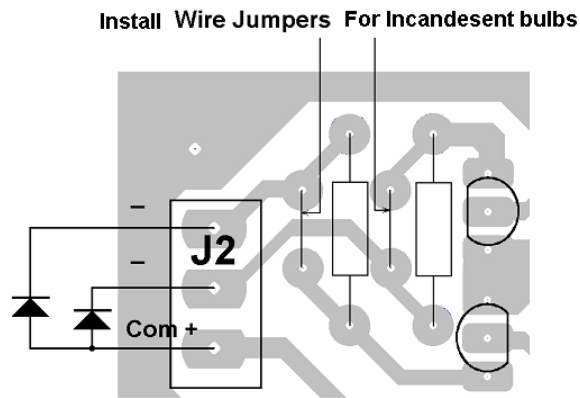


Figure 2.



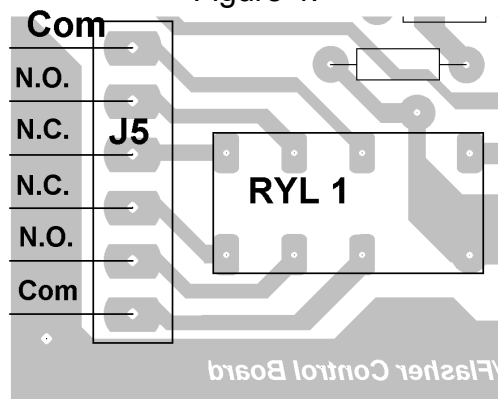
There are three output connections to the control board. J2 is the output for the flashing lights. Follow the connections in figure 3. The board is set up for the use with LED's. Modifications can be made to make the board work with incandescent bulbs. **Do not connect LED's to the board after making modifications or the LED's will be destroyed.**

Figure 3.



J5 is used for connection of the relay. Option #2 and #4.  
Make connections to the relay using these six pins. See figure 4.

Figure 4.

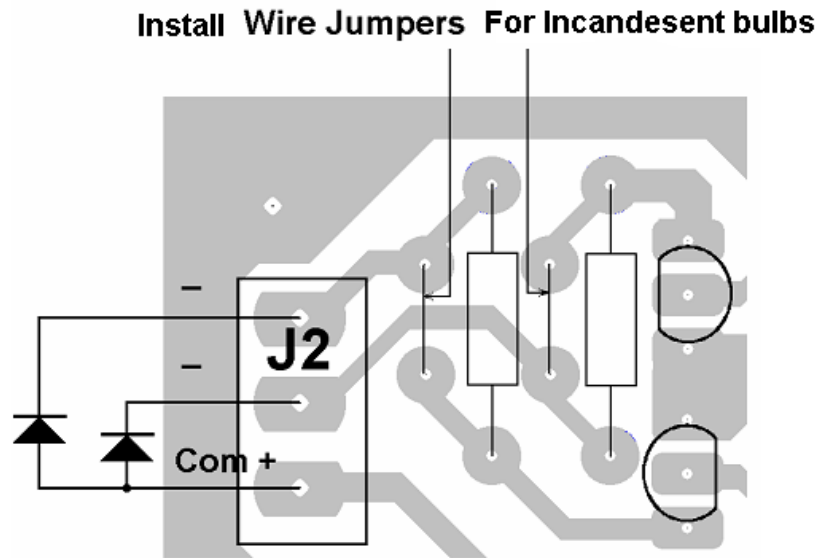


J6 is used for connection of a stall motor. Option #3 and #4.  
Make connection to your stall motor with these two pins.

## Modification for use with incandescent bulbs

Install two wire jumpers located next to J4. See figure 5. Cut off resistor leads will work.

Figure 5.



## Timer adjustment

The control pot R1 is used to adjust the time the controller is activated. Set this to the desired time. It has an adjustment range of 1 to 30 seconds.