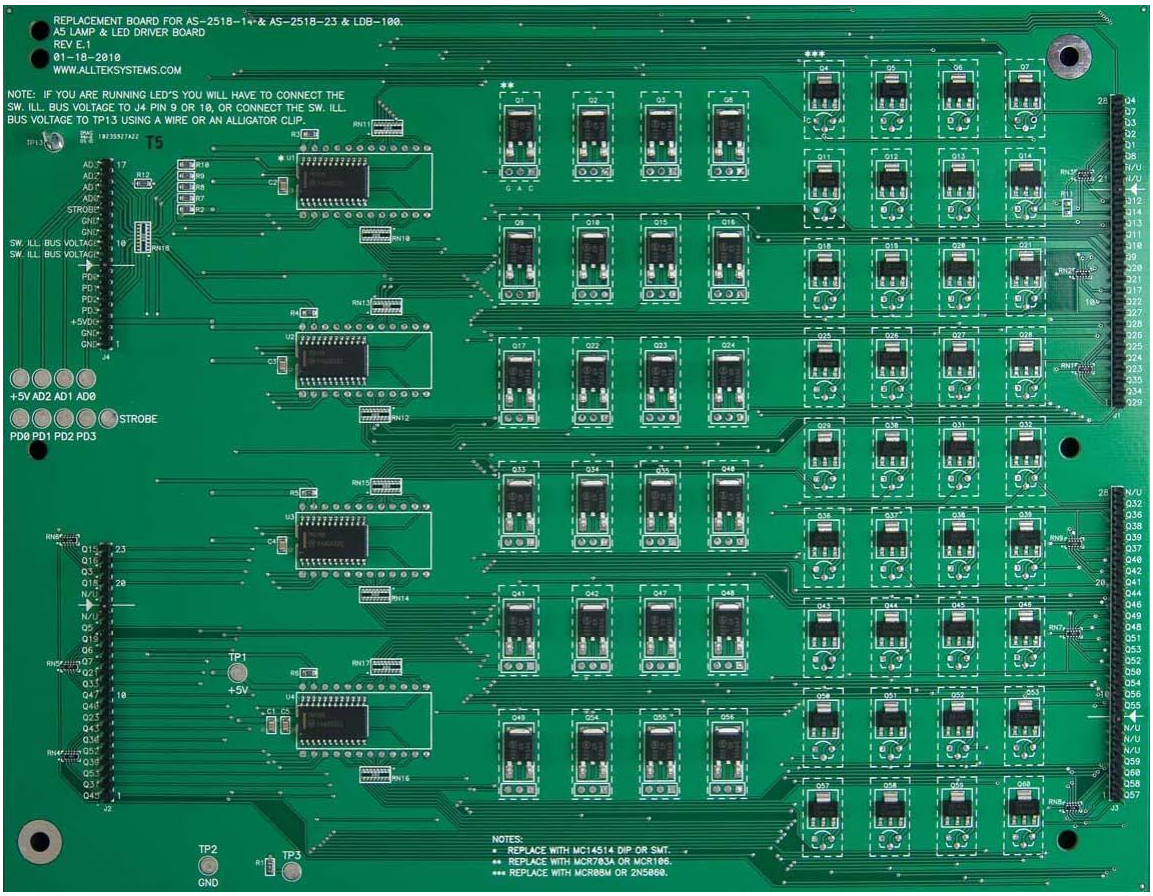

The Ultimate Lamp/LED Driver Board

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Office (757) 546-0742

Manual and Users Guide
Version A.3

Getting Started

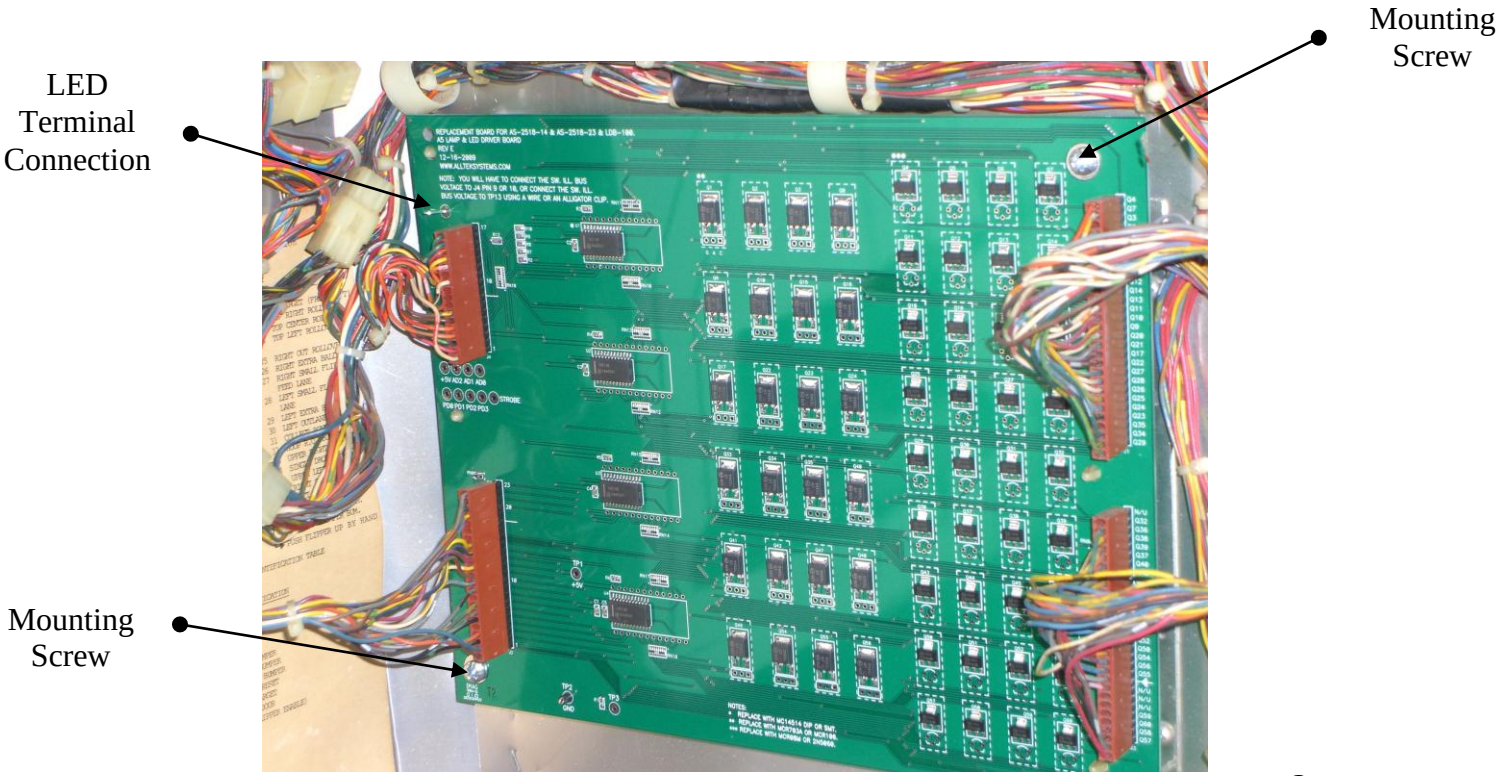
Thank you for purchasing The Ultimate Lamp/LED Driver Board.

The Ultimate Lamp/LED Driver Board includes a limited lifetime warranty. See the website for details if you need to send the board in for repair. Also don't forget to checkout our website for other great replacement board products.

The following instructions will allow you to have your pinball machine setup and ready to play quickly. If at any time you are unsure of how to proceed or have a question, STOP. We offer e-mail support at mpusupport@allteksystems.com with an ever improving technical support page on our website at www.allteksystems.com.

Plugging in the Lamp/LED Driver Board

Pull the new Lamp/LED Driver Board out of the anti-static bag and mount the board. If needed, mounting screws and stubs have been included. Make sure you secure the board using the mounting screws. Plug in the connectors.

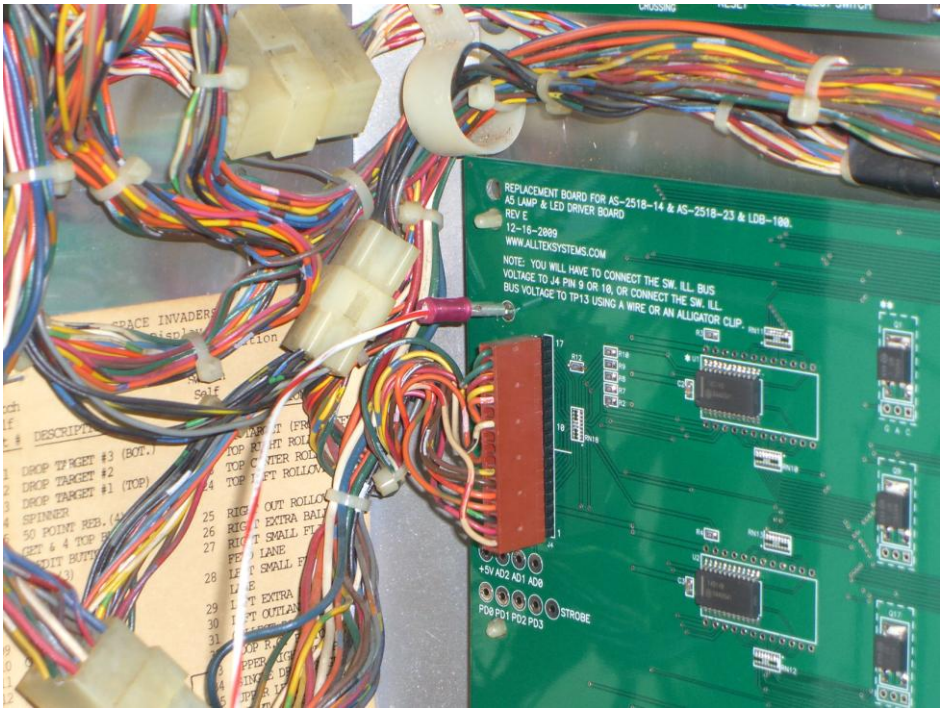


Now the big decision, are you planning on using the new board to control lamps or LED's? If using the new board to drive original lamps then you can stop here. You're done. Turn on the game and have fun.

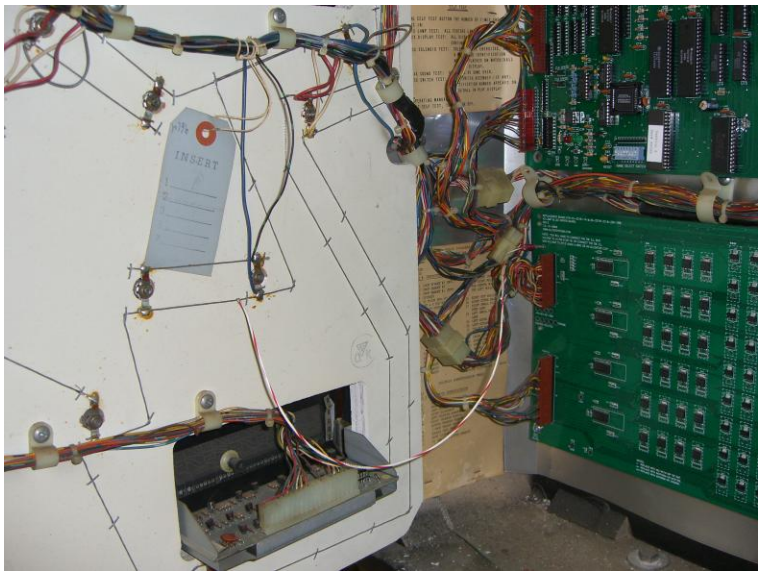
If using the new Lamp/LED Driver Board with the new style LED lights then let's get started. The problem with using LED's is they might flicker. The new board will cure the problem and is most likely the reason you purchased the board. Also if you're installing this board into a Stern machine that has speech, please read the important note on the last page.

Getting Control LED power to your new Board

Since you are using the new driver board for LED's we need to get power to correct the flickering problem. First, find TP13 on the new board. It's located above the J4 connector. Included in the new board packaging is a jumper wire The side that has the terminal connector will get inserted on the TP13 pin but not at this time. We just want you to know where the wire will get connected.



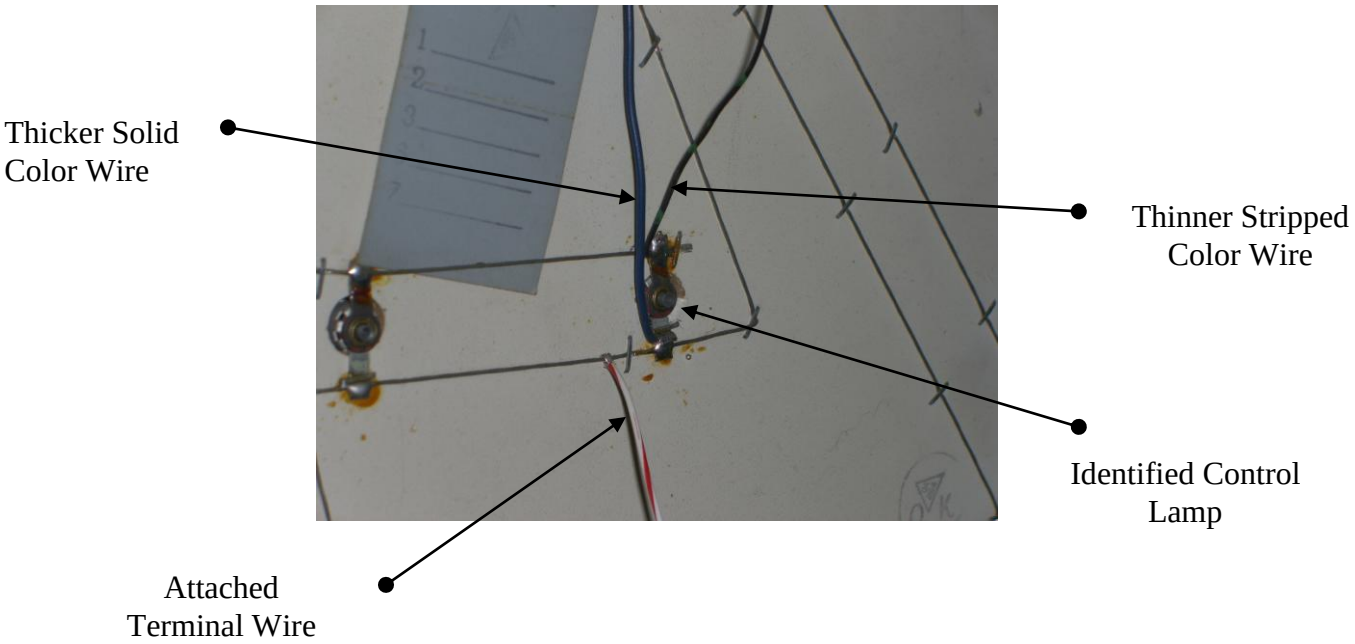
At this point we need to connect the bare wire end and locate a control lamp on the back box. Let me give you some background on the two different types of lamp circuits. The two types of lamps are GI and control. The GI lamps are the lamps that are always on. A control lamp is exactly that, a lamp that is controlled by the lamp driver board. An example of a control lamp on the back box would be player 1-4 lamps or the tilt lamps. The easiest way to identify a control lamp on the back box is to put the game into self-test mode. Make sure your lamp driver board is connected up and turn on the game. Go ahead and push the self-test button located inside the game on the coin door. Just push the button once. The lamps should start flashing on and off. Identify one of the back box lamps that are flashing. This is a control lamp. Now that you have identified a control lamp you now need to attach the bare end of the jumper wire end. Find the back side of the lamp. Turn the game off again.



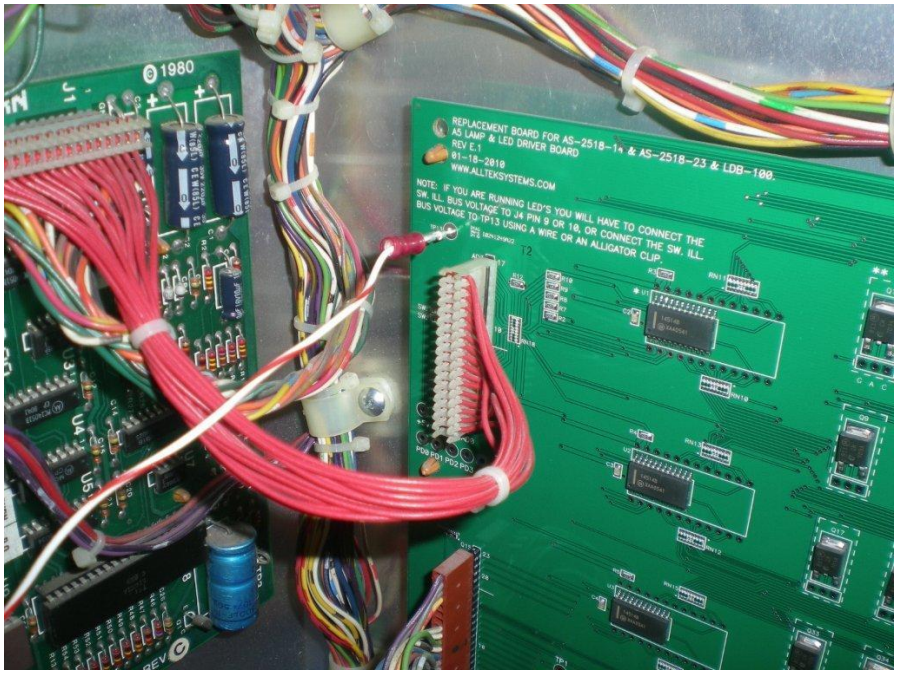
So looking at the lamp socket that you have identified, it should look like the picture below. Look for a fat solid color wire and a smaller striped wire. Take the wire that you just installed on TP13 and let's attach the other end of the wire which has already been

stripped for your convenience. Wrap the bare wire around the braided wire that is attached to the fatter solid wire side.

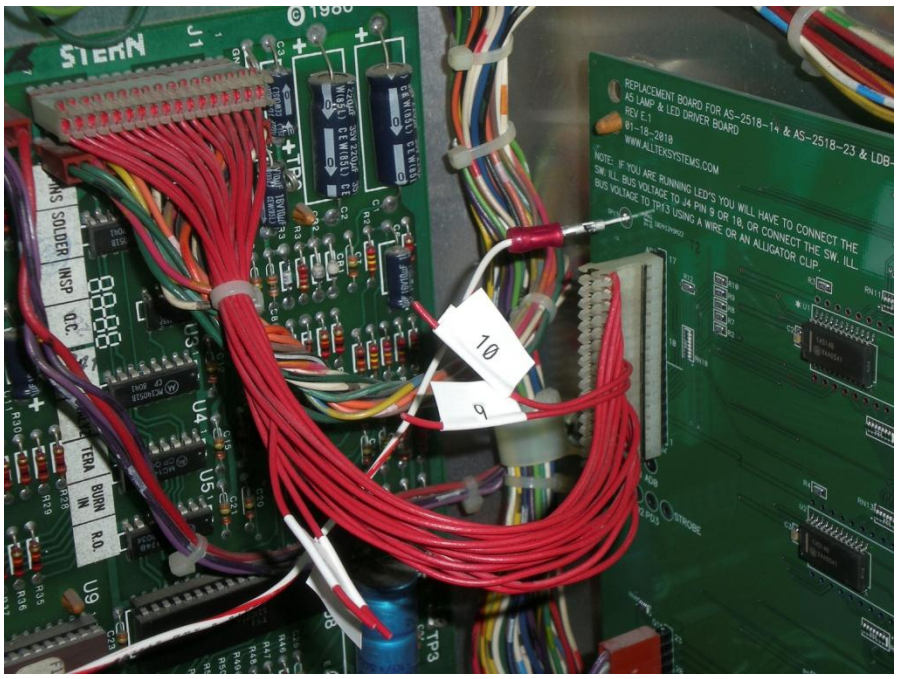
Now that you have the one side attached to the braided wire go ahead at this time and insert the terminal side of the jumper wire on TP13. You're done.



IMPORTANT NOTE: **<u>Installing the Lamp/LED Driver Board in a Stern machine with speech and using LED's.</u>** You will notice that the J4 connector is coming from the speech board instead of coming from the MPU Board. If this is the case than you will have to cut the wires going to the LED/Lamp Driver J4 pins 9 and 10.



Shows the jumpered wire harness from the speech board



Shows the two cut wires.