

SPIKE Dimming LED Backbox Board Installation Instructions

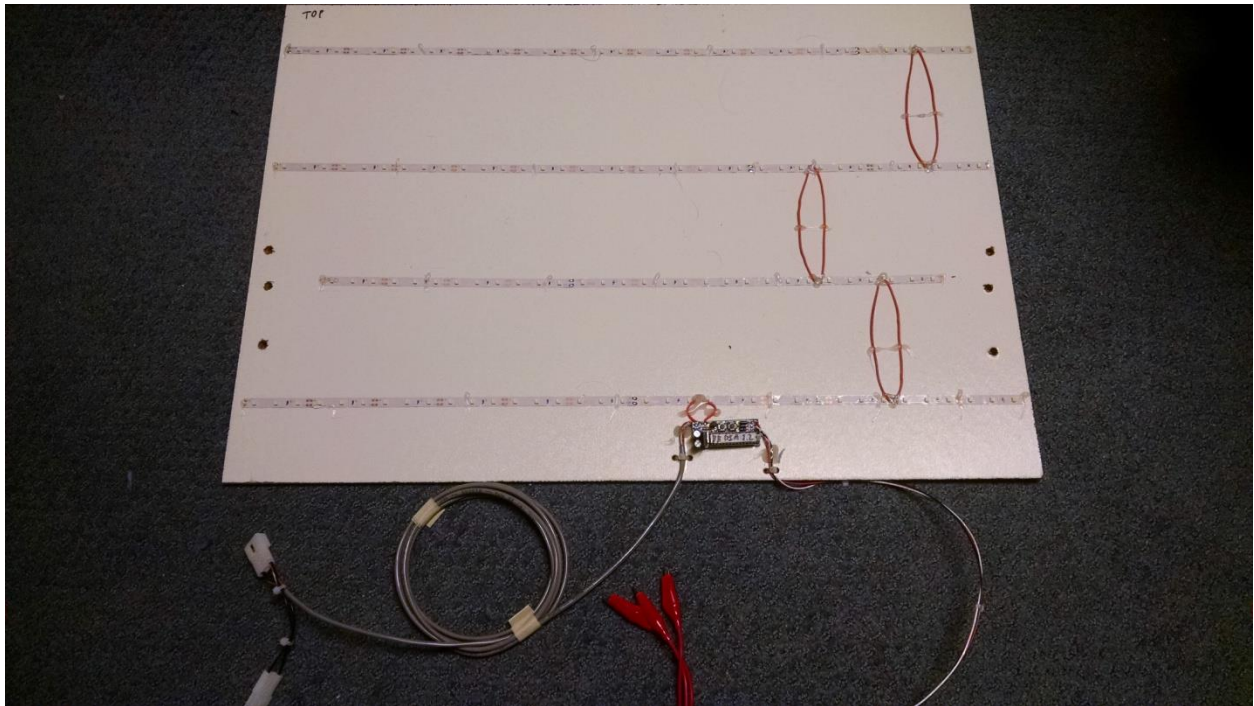
Created by Arcade Upkeep

Email: Brandon@arcadeupkeep.com

Thank you for purchasing the Dimming LED Backbox Board made for SPIKE and SPIKE 2, if you have any questions about these instructions, feel free to email me, and I'll be glad to help!

Tools you'll need: An adjustable wrench or a pair of pliers.

Step 1: Unpack everything; you should have the LED backbox board with the dimmer module attached and a bag with some treaded rods, nuts and washers. Note which edge is the top of the board, it may be marked "TOP" if not then it is the side furthest from the dimmer board, and the wires going to the connector and alligator clips should be coming off the bottom, as shown below.



Step 2: Before we begin go into the machines adjustments and turn both the regular and service mode brightness setting down to 0%. They don't need to run any more. Now turn your machine off and remove the backglass and fold down the display section.

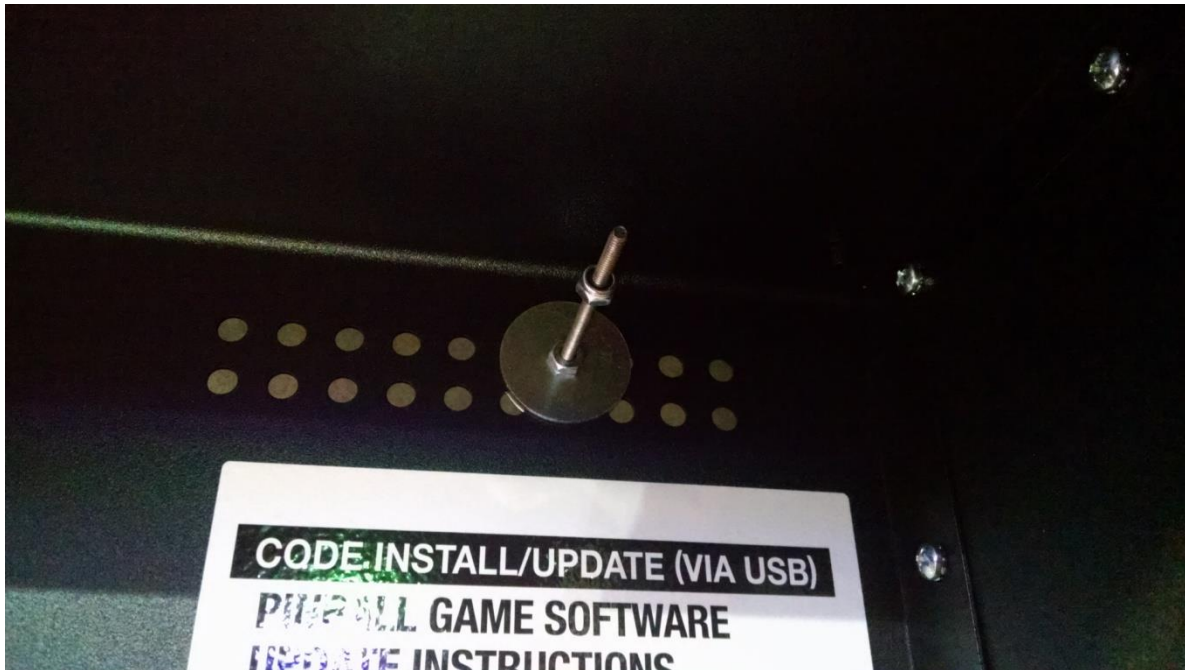
Step 3: Look at the contents of the bag that came with the kit, it should contain two threaded rods, eight washers, four wing nuts, two regular nuts and two lock nuts, the picture below differs from these numbers but the parts are the same.



First look in the head of your machine, at the top of the back metal panel there should be two rows of vent holes punched into the metal panel. We will use two of these holes to mount the LED panel.

Next thread one of the regular nuts onto one of the threaded rods about a half inch or so and put a washer on the rod. Then place the rod through the fourth hole in from the outside. If your machine has a DMD display use the lower row of holes, if it has an LCD display use the upper set of holes.

Now, with your free hand place another washer on the threaded rod that is sticking through the back side of the head and tighten a wing nut down on the rod, holding it all in place. It should look like the picture below.

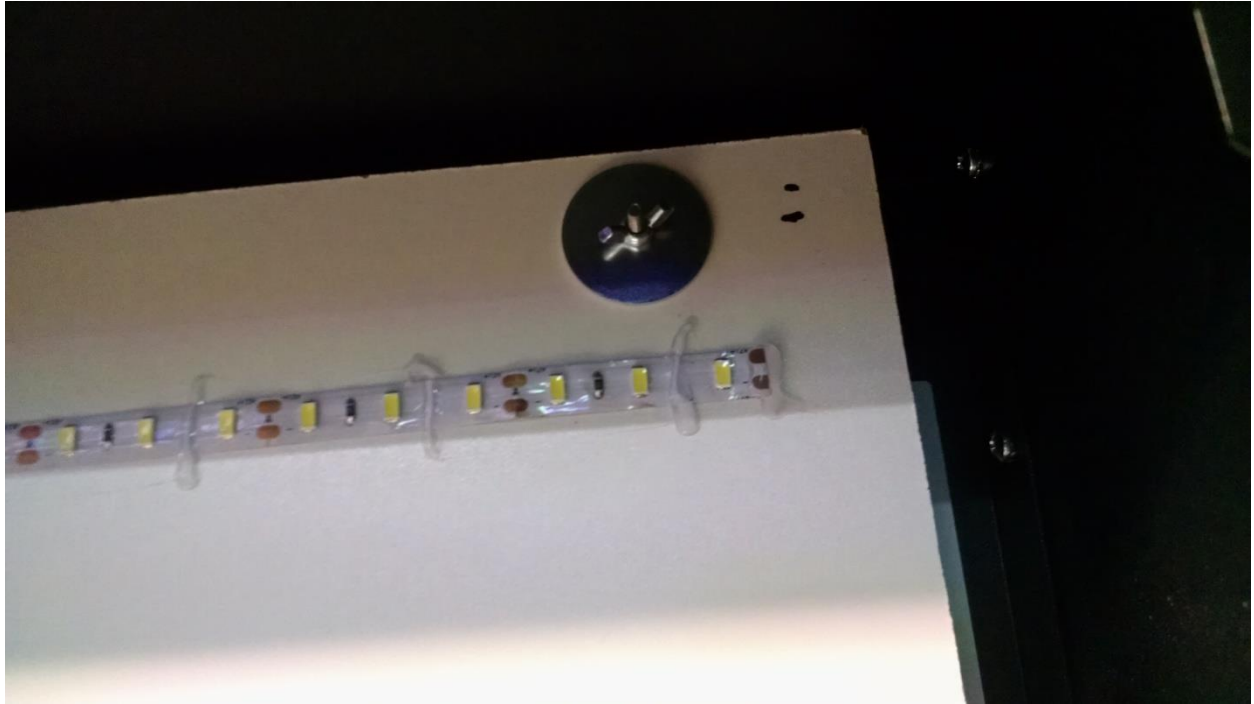


Next screw the lock nut down onto the threaded rod, about a third of the way onto the rod. This should be quite secure in the head with a washer and wing nut on the back of the head, another washer and regular nut inside the head all tightened down.

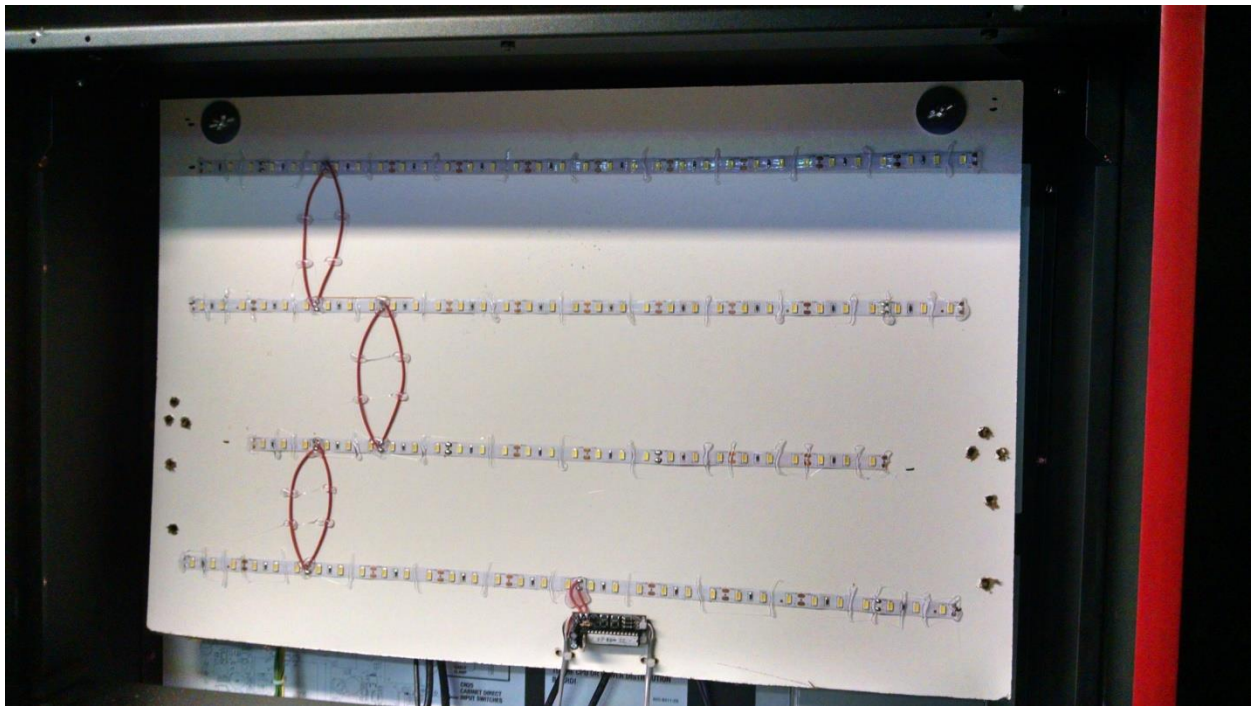
Repeat the whole process for the other side!

Then place a washer onto the rod and fit the panel in place hanging the panel on the rods with the two holes at the top of the panel.

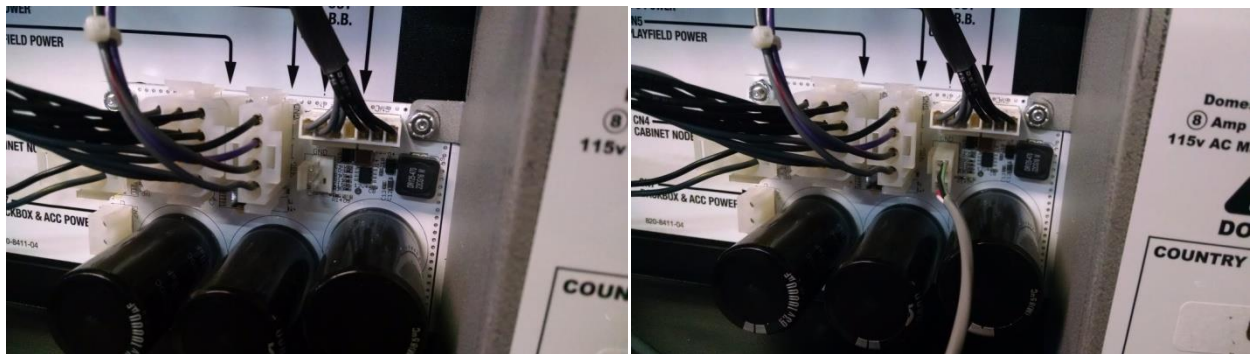
Place another washer on the front of the panel and tighten this down with another wing nut, again repeat with the other side. It should now look like the pic below and the panel should be quite secure in the head.



That's pretty much it for the hardware!



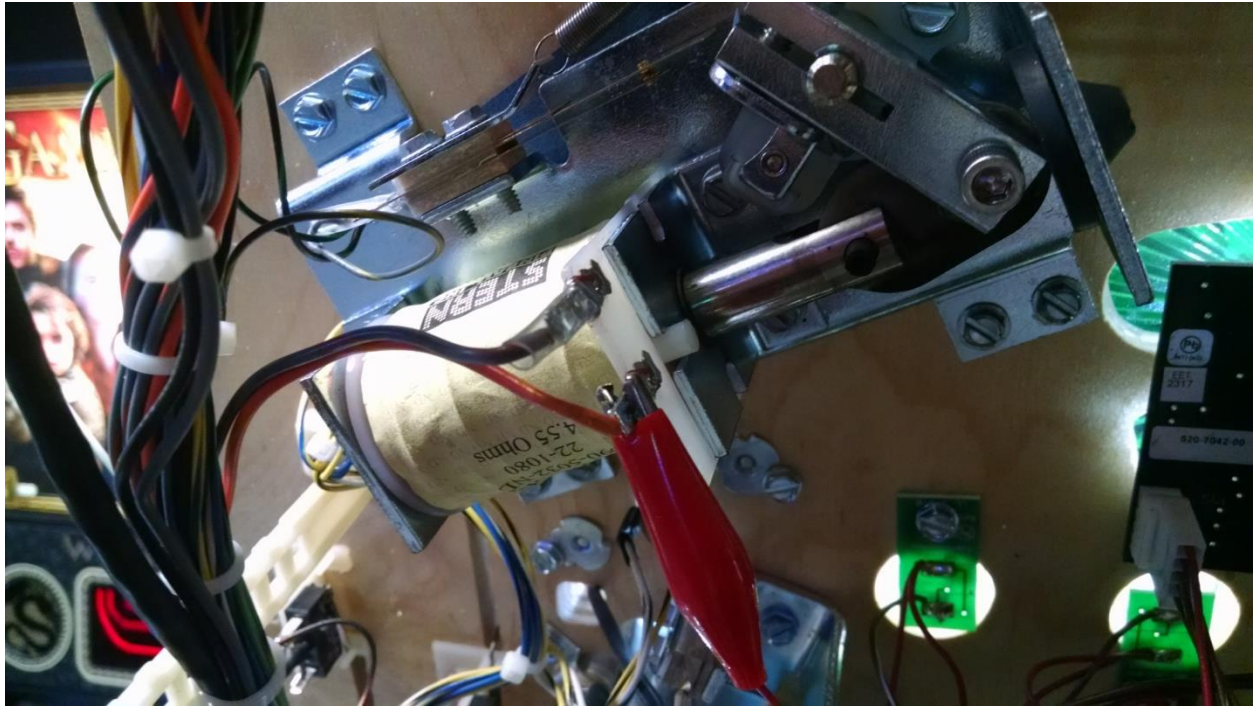
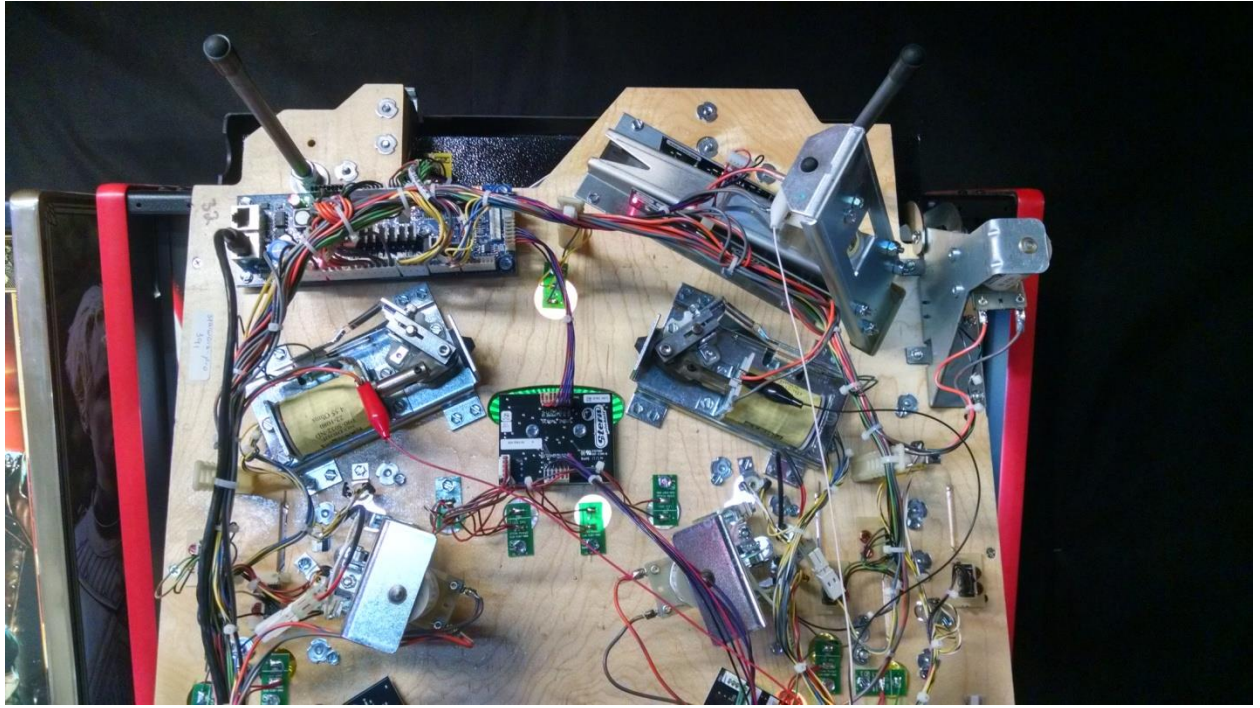
Step 4: Now we'll start the wiring. If you look at the little power distribution board in the lower right side of the head of the machine you should see a little 3 pin connector that is empty, I believe if it's labeled it will be CN6, it should be near the center of the board. It may actually say "for B.B. use" in some machines. This is where we are going to plug the female 3 pin connector from the kit onto. Go ahead and do that now. It should look like the pics below.

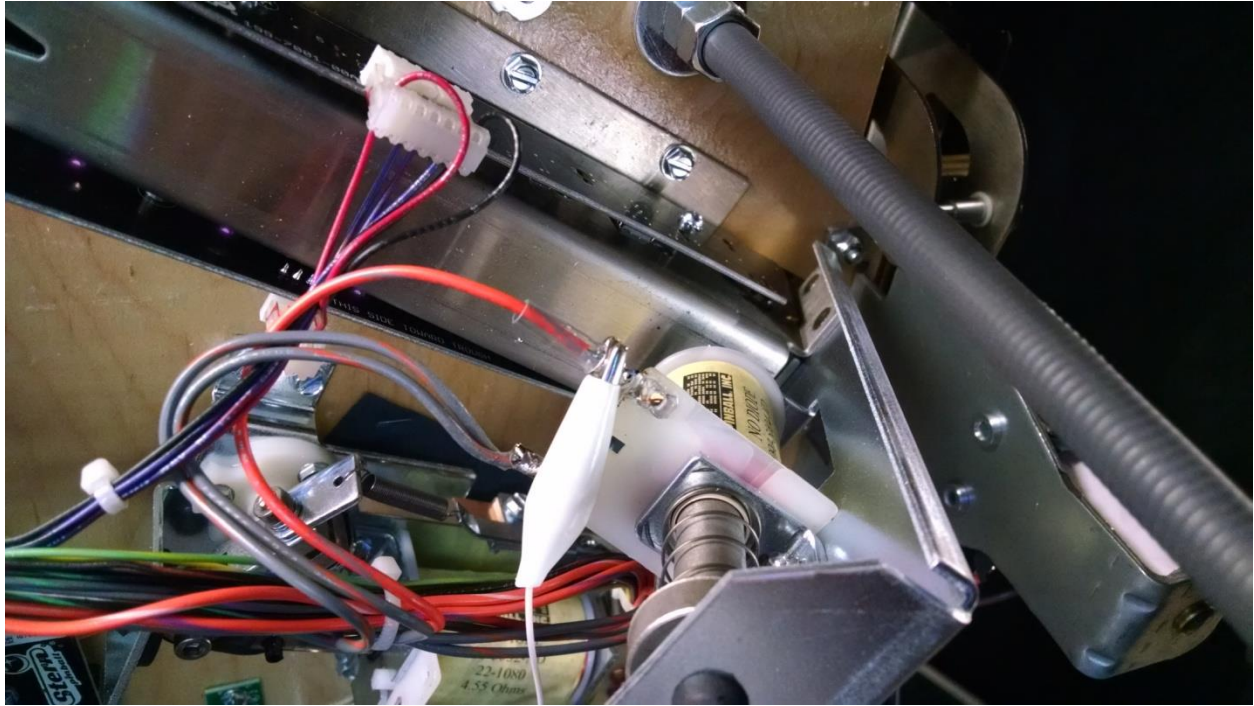


Step 5: At this point all that you should have left is the long cable with 3 alligator clips on the end, go ahead and feed those down into the body of the machine by pushing it down through one of the holes.

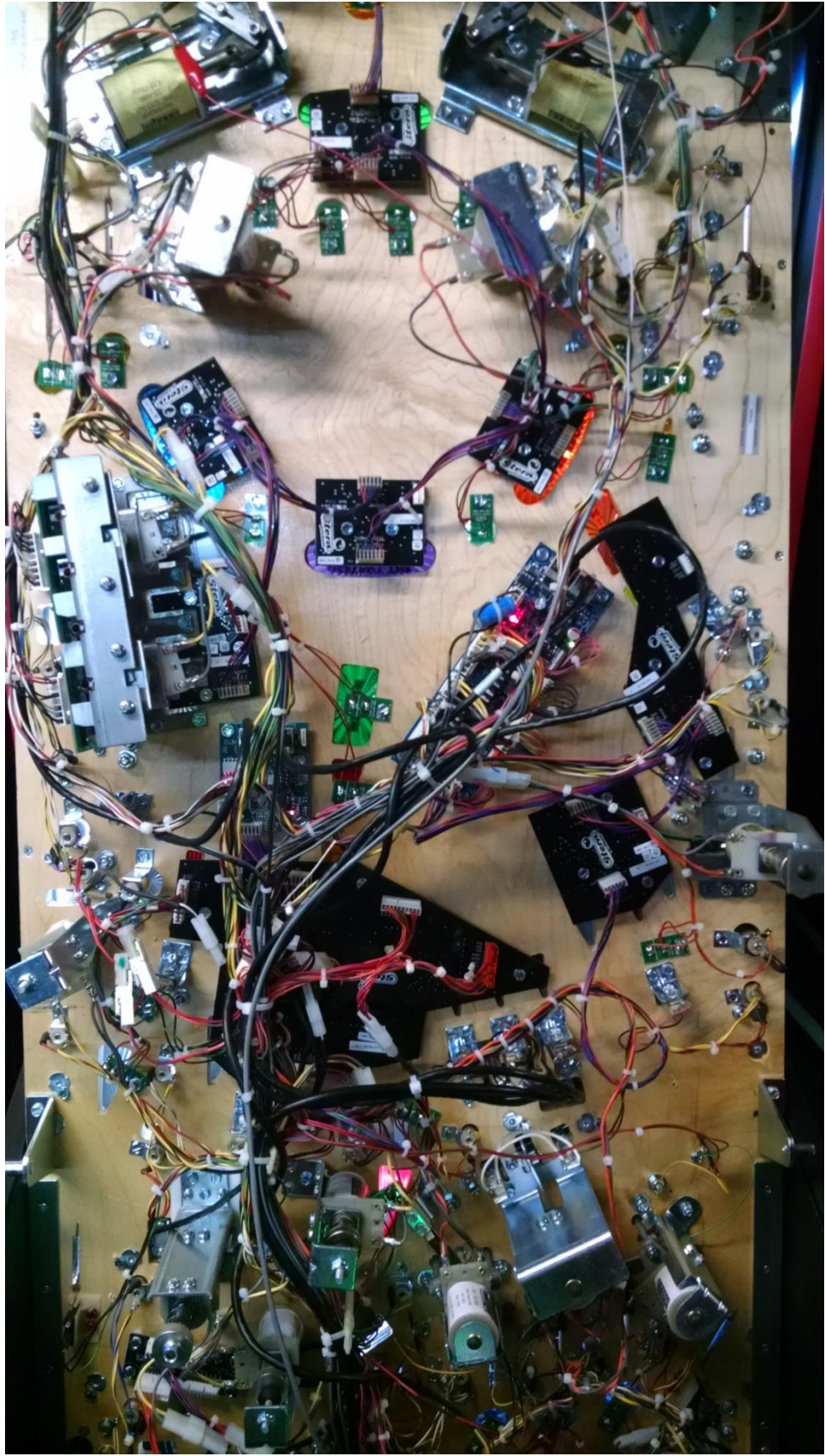
You are now done in the head of the machine (unless you want to make brightness adjustments which I'll describe later.) You can put the display back in place and lock the backglass back now if you'd like as you'll need to get under the playfield next.

Next, with the playfield lifted up in the "maintenance" position find the two lower flipper coils and the through upkicker coil. There should be a gray and an orange wire running to both of these. Please clip one of the clips to the orange wire on each of these coils. It doesn't matter which clip goes where, the kit will figure out where you put them for you. See pics below.



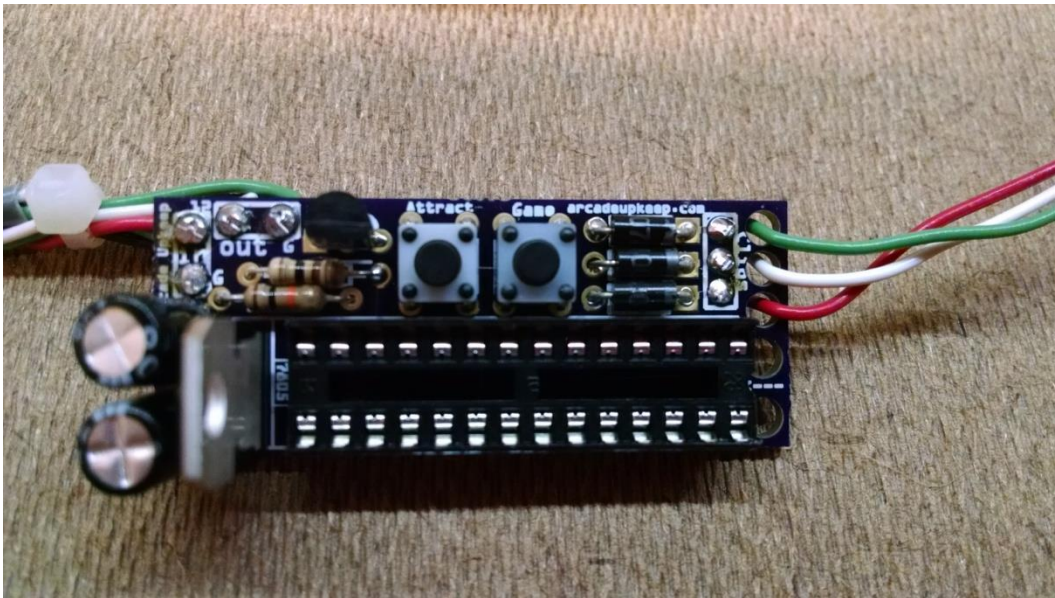


Step 6: We are now done with the installation. The only thing left to do is zip tie the long gray cable to a bundle of wires in the game already to keep it safe as you raise and lower the playfield. See pic below, but any bundle of wires should suffice to hold it in place.



You can put the playfield back in place now as you turn the game on, the backbox panel should fade up to full brightness.

Step 7: The dimmer module ships to you on its default settings, so using it as is will work just fine but you can adjust the brightness levels to your liking. If you look at the board itself you will see two little push buttons, these are the adjustment buttons and they are labeled "attract" and "game".



The "attract" button to the left controls the panels brightness during attract mode and the "game" button to the right controls the brightness it fades down to when the game starts.

Pressing either button will show you that setting and lower it one notch, keep pressing it to keep lowering the setting. When the board gets down to off, it will reset to full brightness. Not pressing a button for a few seconds will return it to where it was in the cycle and save your new settings.

Note: It will take a bright-dim cycle for your new settings to take effect, or you can power the game off and on for them to take effect now.

NOTE: Powering the board up with the coin door open or the power to the coils disabled may cause it to enter "test mode". It will fade on and back off then may flash on and off, this is normal. Powering the kit on with the coil high power enabled and the coin door closed will cause it to power on correctly.

Congratulations, you're done!

Again, if you have any questions on any step of the way, or you have an idea to improve this kit or the instructions, send me an email at Brandon@arcadeupkeep.com

Kit and Instructions by Arcade Upkeep.

www.arcadeupkeep.com