

Expressive Backbox Lights

Installation Guide

First, thank you for buying our mod. It is cool to know that we can help people keep their machines in great condition and looking their best! *Please read these instructions fully before installing the kit.* Reach out to us *before you start* if you have any questions.

Information:

This kit is designed to take the signal that drives the expression lights in your Stern game and replicate it behind the backbox, so they light up in the same colors and patterns as the expression lights, in perfect sync! We did our best to make this kit easy to install, and easy to remove, should you ever need to. As of this writing, this kit will work with both Led Zeppelin and Rush games with expression lighting installed, though it should also work with any future games that use expression lighting. All kits are fully bench tested right before they go into the box.

Tools you'll need include: 1/4" nut driver or slotted screwdriver.

Installation:

Step 1:

TURN OFF THE POWER to the game and unplug it. This is crucial to avoid damaging the game. The node boards, expression lights, and our expressive speaker lights are all VERY sensitive to power surges. Wipe away any dust on the back of the backbox with a tack cloth or lightly dampened rag.

Step 2:

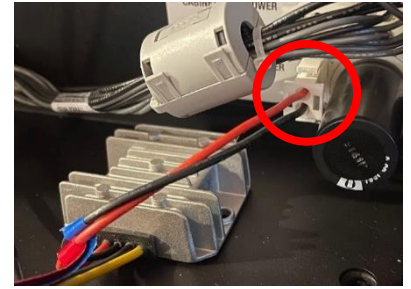
Remove the backglass and set it aside. On the top panel of the backbox, to the rear of the backbox, you will find a circular plug sealing a 1" hole. Remove that plug by squeezing the two retaining tabs and pushing it upward. Replace it with the included rubber grommet, positioning it so that the side with the tabs/flaps is facing up.

Step 3:

Using the magnetic mounting blocks, attach the light strips to the back of the backbox. The strip with two orange wires running down its length will go on the left (when facing the back of the backbox), and the strip with one orange wire will go on the right. For now, just roughly position them, you'll adjust them later. Push the plug through the grommet, into the backbox.

Step 4:

Now we'll install the power supply. Open the speaker panel. Once again, ensure that the power is turned off before proceeding. Plug the power supply connector into CN7 (48V)* on the power supply board, as shown circled in red. If you already have an accessory on CN7, you'll need a splitter, also available in our Pinside shop. Find a place where the power supply sits comfortably and secure it to the bottom of the backbox by removing the cover on the sticky pad and pressing it down firmly against the backbox.



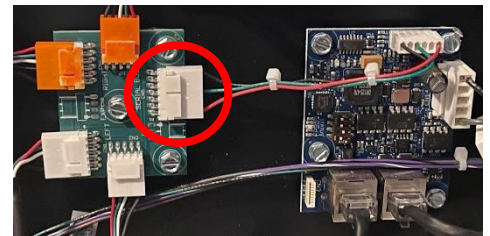
* The CN7 connector won't have any problems powering all three of our kits together, but if you also have a topper or other accessories plugged into CN7, you may want to install a dedicated 48v power supply to run all of your accessories.

Step 5:

From the power supply block, route the wires towards the top of the backbox, using the clips in the backbox to secure them. You'll first route the bundle of red and black power wires up the right side of the mainboard (when looking at it from the front of the game), then to the top center clip. Connect the 6-pin plugs together at the top. Next, route the orange wire (with the ferrite core on it) down the left side of the mainboard, and drop it down the bottom left opening of the backbox and into the cabinet. Now, remove the pinballs from the machine and fully lift the playfield. Continue to route the orange wire down the left side of the cabinet.

Step 6:

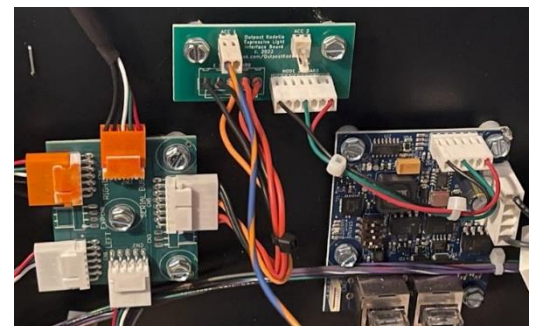
You're done with the backbox, so close it up. If you haven't yet installed the interface board with a previous kit, you'll need to install it now, otherwise you can skip to step 8. However, if you already have a full interface board, you may be installing a second one as part of this kit, in which case continue with the next steps (you'll just daisy-chain the two interface boards together).



You need to disconnect the Node 2 board from the expression light distribution board by removing the plug, as indicated by the red circle. These boards can be found on the left inside wall of the cabinet, approximately 1/3 of the way back. Be careful not to directly touch any boards through this process, as all are sensitive to static shocks.

Step 7:

Now, take that same plug you just removed and plug it into the "NODE 2 BOARD" plug on the little green interface board included with our kit. Take the "E LIGHT BOARD" wire coming out of our interface board and plug it into the expression light distribution board where the Node 2 board was originally connected. Using two hex head 3/4" screws included with the kit, find a place where the interface board sits, such that none of the wires are strained, and secure it to the cabinet with the 1/4" nut driver or slotted screwdriver.



Step 8:

Plug the orange wire into either “ACC 1” or “ACC 2” on the interface board (either one will work the same way). Pull any remaining slack in the orange wire towards the back of the cabinet; this will put the slack where it needs to be should you ever need to lower the backbox for transportation.

Step 9:

Return to the back of the backbox. Now you can adjust the light strips into their final positions. We recommend about 2-3 inches in from each side and roughly centered, top to bottom. Once you have them where you like them, you can tear off the blue backing from the strips and stick them down so they won't slide down over time.

Congratulations! You're all done! Double check your connections, lower the playfield, reinstall the pinballs, and you're ready to turn the game on. The lights will power on with the game and you should see the test cycle run through both the expression lights and your new expressive backbox lights. Now sit back and watch the show when the attract mode starts! ENJOY!!

Contact:

If anything goes wrong or if you have any questions, feel free to reach out to support@ninjacamp.com or @OutpostKodelia on Pinside. I will respond as quickly as possible.