

**Stern - 2016
Ghostbusters (GB)**

Library Mod v1

The “Library Mod” is hand crafted in Australia by a GB owner for GB owners around the world who love their game and want to transform their plastic to a Library model with lighting for Pro owners or upgrade to a lit library for Premium / LE owners - to add a bit more atmosphere. This mod is a relatively simple one to fit - no soldering, no complex tools and no removal of plastics (for Pro owners) - just follow the detailed instructions to install.



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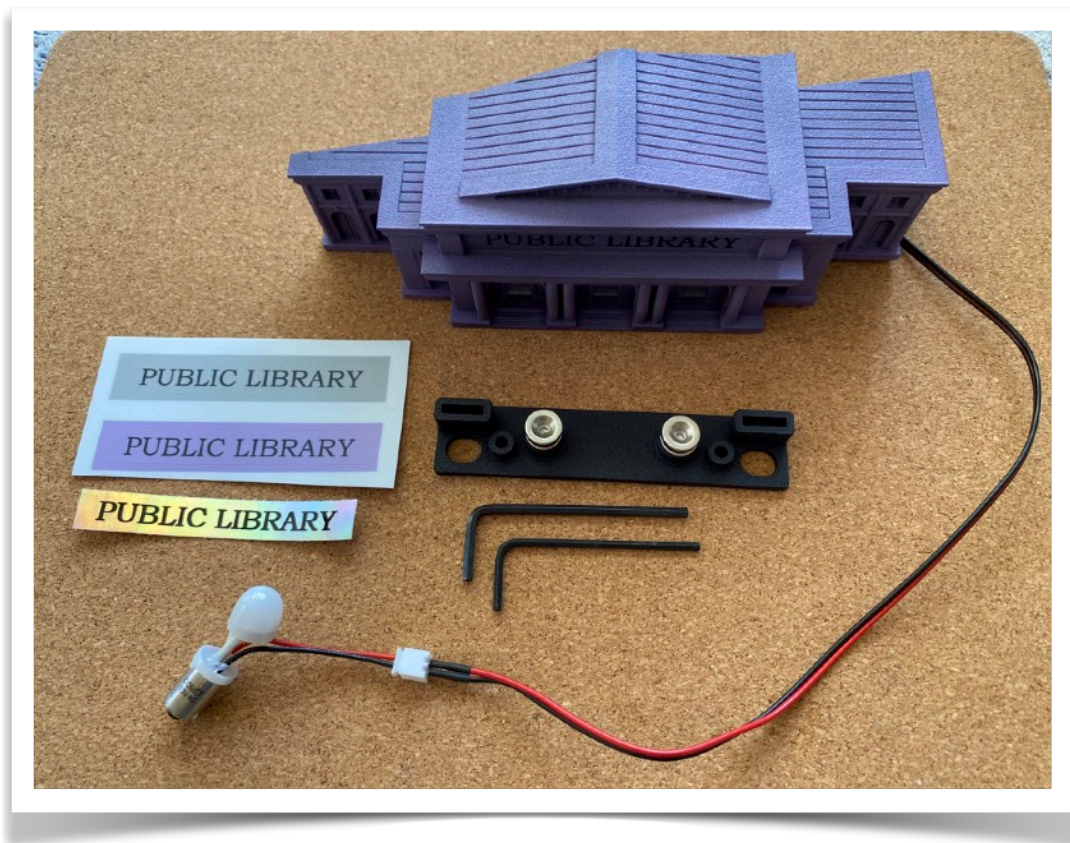
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1 - Mod Parts

When you unpack your mod, you will find the following components with the mod already pre-assembled (see photo below):

- 1 x **Library Mod Kit**
- 3 x Spare “Public Library” Decals
- 1 x **2mm Allen / Hex Key**
- 1 x **2.5mm Allen / Hex Key**



2 - Tools and Safety Notes

Tools necessary to install the mod

- 1 x Phillips screwdriver (is not provided)
- 1 x 2mm metric Allen / Hex key (provided in the kit)
- 1 x 2.5mm metric Allen / Hex Key (provided in the kit)



SAFETY NOTES:

Make sure that your machine is powered off and the power cord running from your machine to the wall outlet has been turned off / disconnected to remove all risk of electrocution.

Read through all these instructions carefully & completely before attempting the installation of this enhancement. Although you may know your machine inside and out, there are a few things to consider before proceeding.

I did have the power on purely to add for better photos but it is a risk - I advise to turn the machine off and only on when you need to test the mod's lighting.

3 - Mod Pre-assembly

Your mod is supplied pre-assembled to save you time making the install very simple.

Fun Fact - this library is approximately 8% smaller than the Stern Issue library for a better fit and look in the game.

Pro Library



Premium / LE Library



4 - Game Preparation

So remove the following:

- lockdown bar
- playfield glass
- playfield out on to it's pegs or playfield brackets
- remove all the balls in the game as you will need to lift the playfield up to connect the mod lead to a GI socket later in the assembly.



PRO Owners

-You can proceed to Step 5

Premium / LE Owners - you will need take the following steps

My apologies as I do not have access to a Premium / LE to capture plenty of photos of this step, but a generous Pinsider offering a few steps and photos:

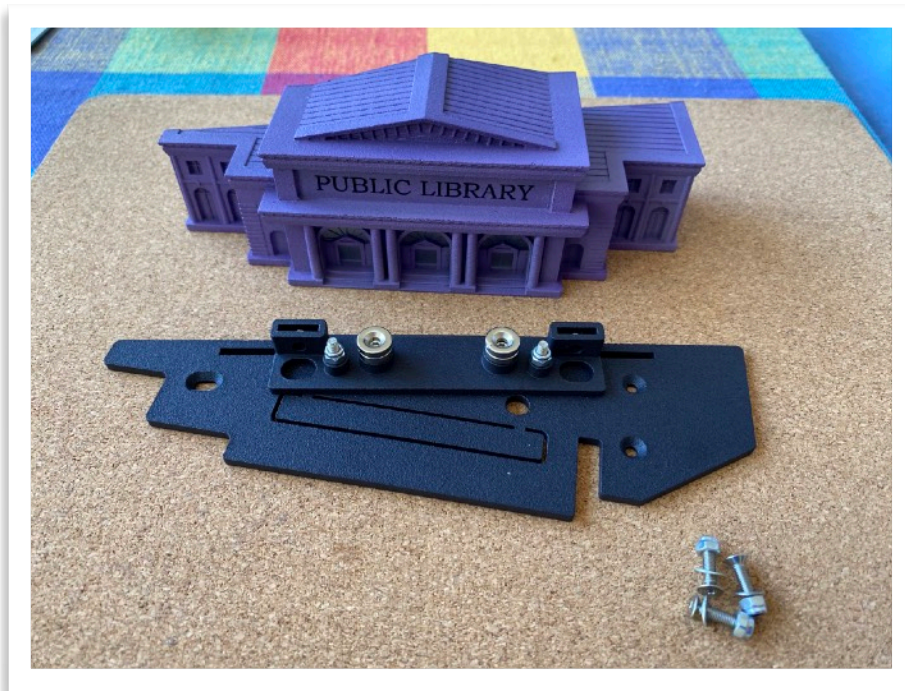
- Remove your whole plastic on the left side over the captive ball area that the library mounts to.
 - Unscrew the 2 screws that attach the plastic to the wooden rail on either side of the library
 - Unscrew the nut to the right of the clear flasher dome using an 5/16 socket
 - Unscrew the hex post directly in front of the firehouse
 - Remove the spot light hex post in front of the library



- Then remove the 3 screws that hold the Stern Library to the plastic.



- Then take the supplied black adaptor plate and secure with the 3 supplied screws, washers & nuts to the Stern plastic with the graphics.



- The black plastic is designed to allow a standard Library to be used across all model games but also to cover the clear blank area of the plastic that will be present when you remove the Stern Library. The extra bracket that has the magnets is the standard issue bracket for the Pro Owners - this is already fitted to the adaptor plate for the Premium / LE customers.



- Once your graphic plastic with adaptor plate is fitted, re-install the graphic plastic back into your game.
- You can now proceed to Step 7 of this manual.

Note: you will notice the production version of the Adaptor Plate comes with a boxed in rectangle with a clearance slot around the perimeter. If you want the games GI light to pass through the games plastic into the mod instead of the mod's light, bend this plate and cut the 2 tabs otherwise leave as the mod has it's own light source. It was original an open space but my tester suggested to create an optional light block.

5 - Remove the Ghost Trap Plastic

Remove the Library Plastic via the 2 silver screws. Set these screws aside as you will be using these to fasten the Library Mod Mount to the games graphic plastic.

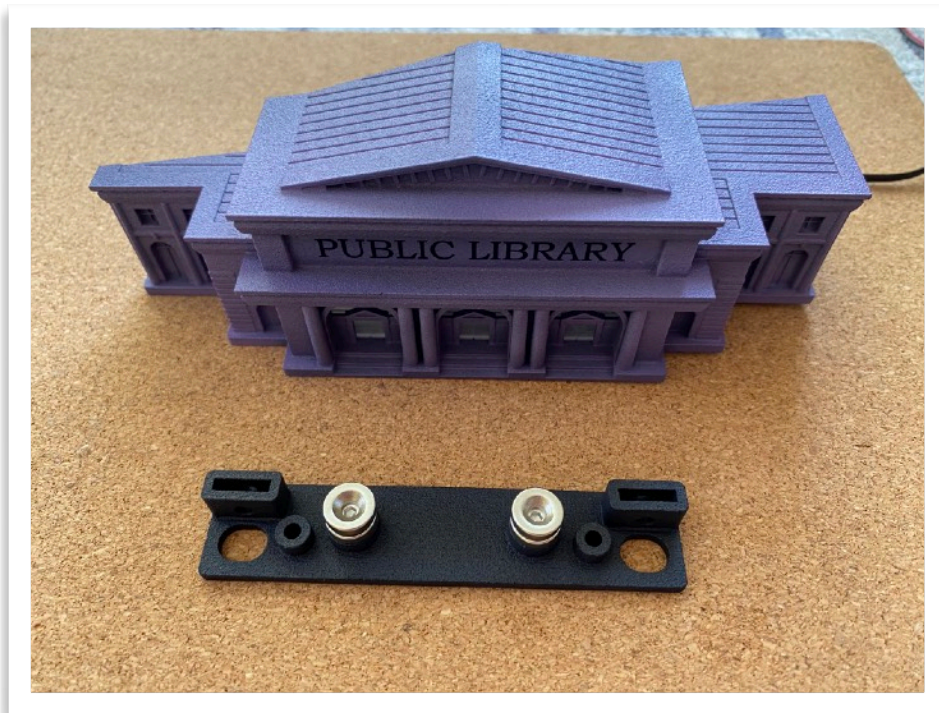


This is how the graphic plastic looks with the Library plastic removed. Simply bag this plastic for safe keeping and store inside your game.



6 - Installing the Library Base Mount to the Plastic

Take the part that has the magnets fitted to it - it will be magnetised to you library so turn the library over to locate it and pull out to remove.



Now place the brackets with magnets and slide over the 2 x 90 degree metal brackets on your plastic that were left behind when you removed the screws that held the plastic in place. Then re-install the 2 screws back through the holes locking the mod's mount to the games plastic.



7 - Installing the Library to the Base Mount

This step is the same for all levels of Game - Pro / Premium / LE.

Take the Library Mod and turn upside down - you will notice there is a star post Comet Board in fitted to a 12" extension lead. Carefully disconnect the extension lead.

You will notice 2 cylinder shafts each with a bolt head installed into it. The library's cylinder shafts are simply installed over the magnets and the bolt heads will magnetise to the magnets.



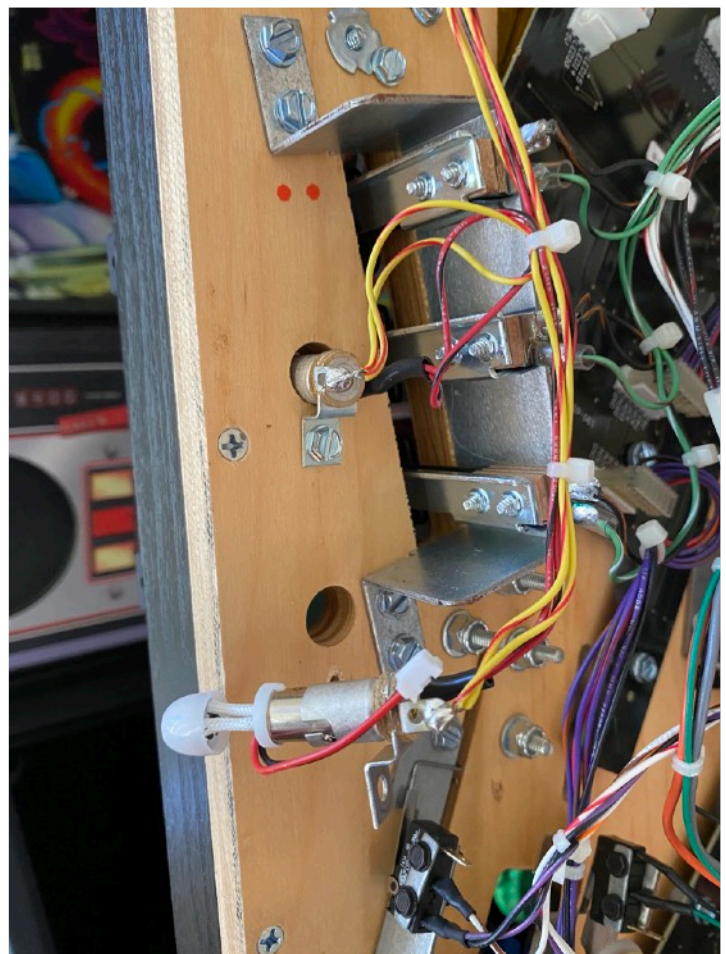
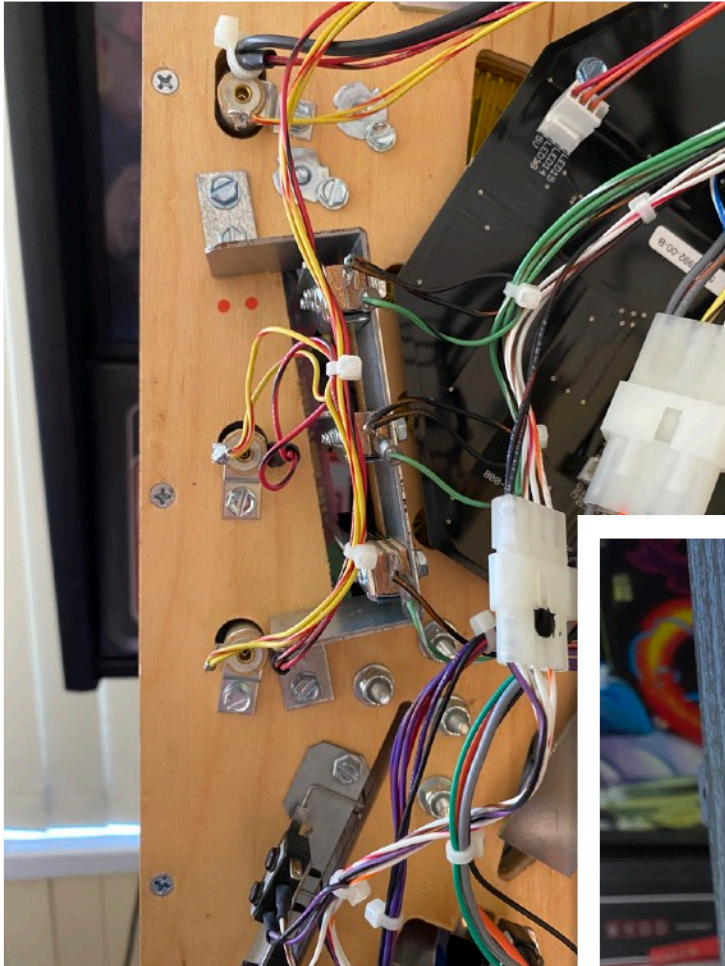
Once installed it will look like this. The Pro (below) is located more central in relation to the targets where as the Premium / LE the library location is governed by the upgraded base plate that needs to cover the large clear space of the graphic plastic so will place a little higher up like the original library but a fraction smaller which I believe is needed as the original was a little over sized.



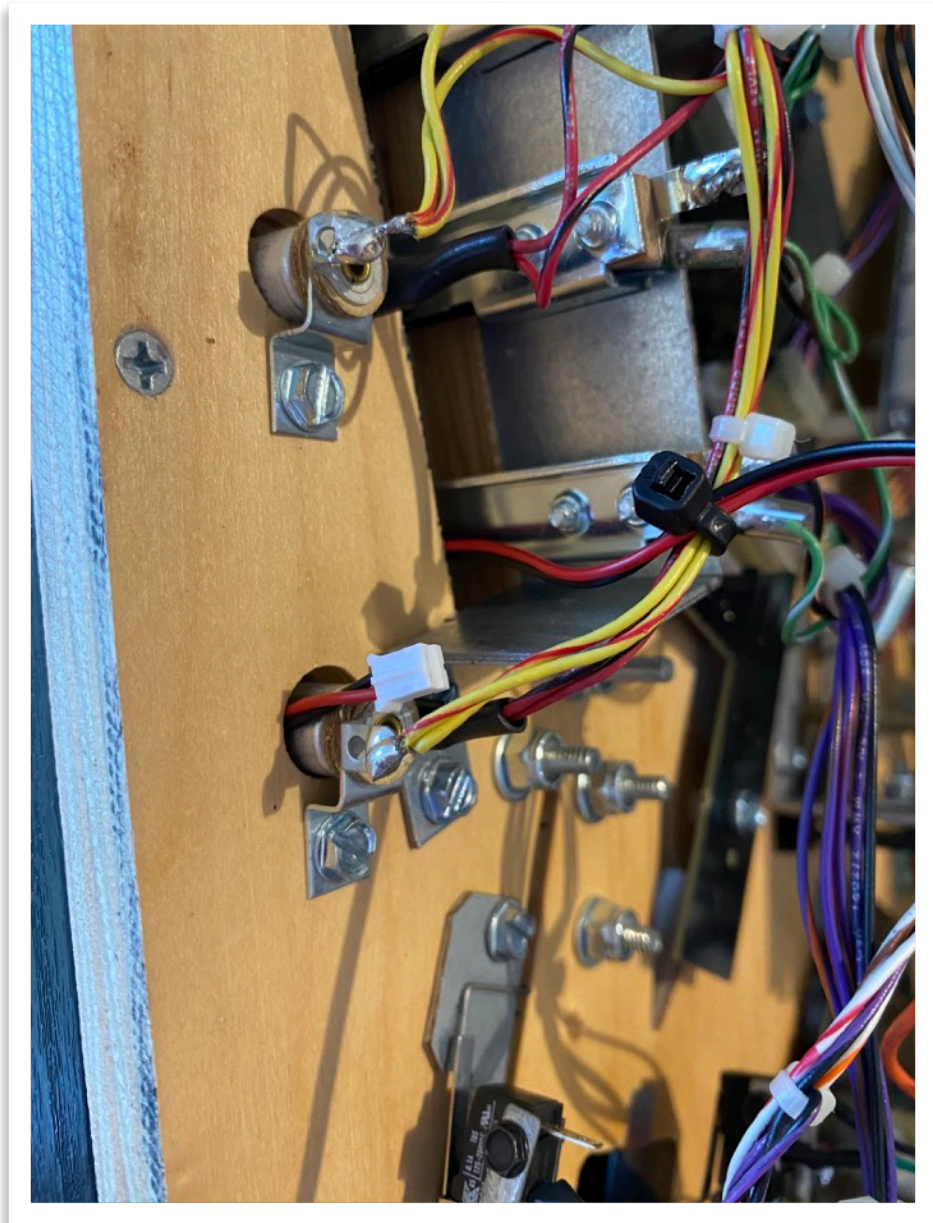
8 - Installing the Wiring to GI

No plastic needs to be removed as the wiring can be connected to a GI socket with the playfield simply lifted up vertically and leaning against the backbox.

Now remove the lower bulb socket (when the playfield is lifted vertical - though technically this is a higher socket when the playfield is down). Then remove the existing Stern led bulb and insert the supplied Comet bulb with the adaptor lead bulb socket.



Then re-install the games GI bulb socket back into the playfield but with the adaptor lead sticking out under the playfield.

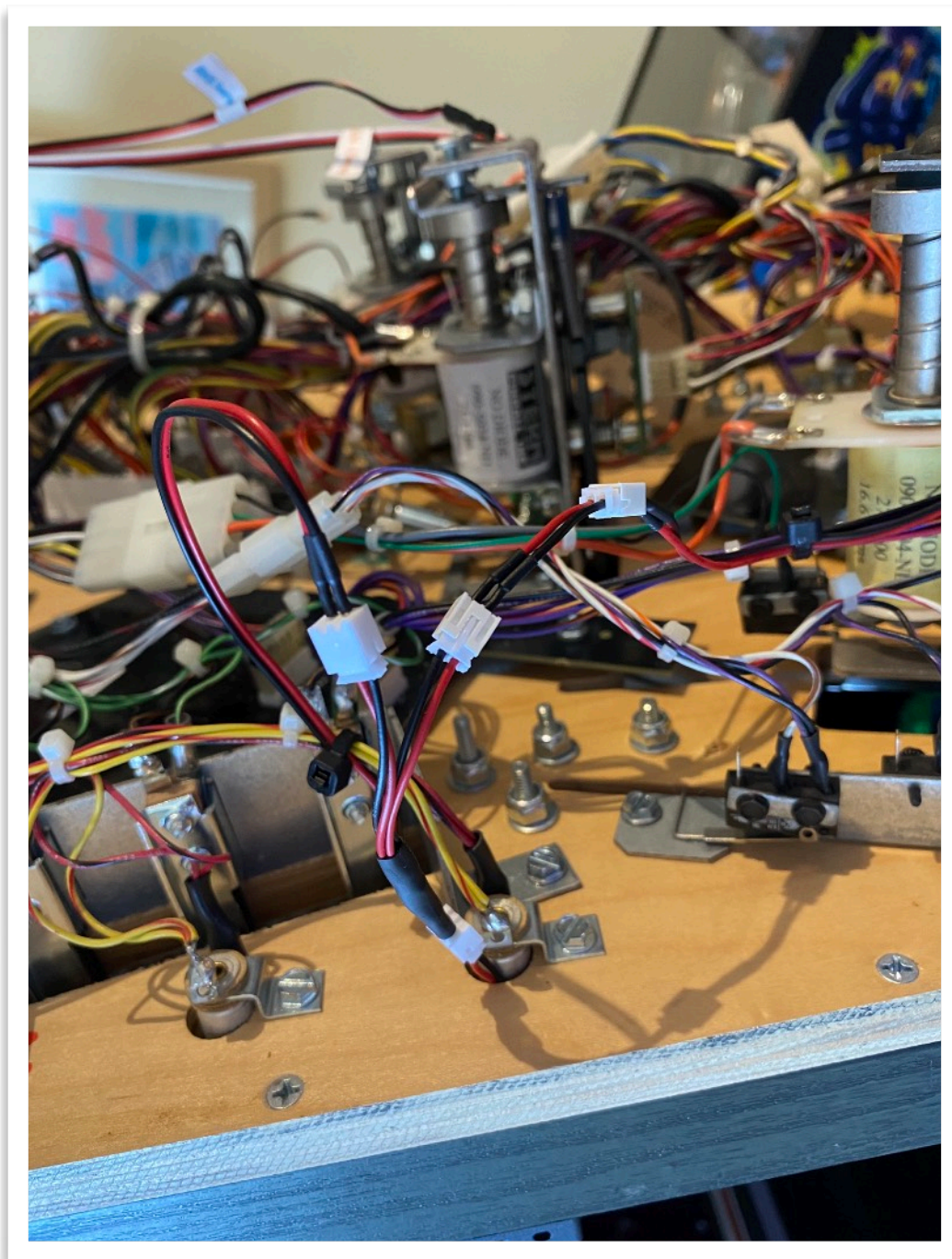


Then connect the 1 foot lead to the bulb adaptor lead and the mod will be ready to test. But in this image you will notice I have an 2 to 1 adapter lead. The second lead will come from the sky mod if you are installing this mod so the GI powers both mods. Routing the sky mod cable will be explained in that mod's manual. If you have an adaptor you can use that otherwise connect to the next bulb along.

Note: in the photo below the lead with the polarity swap lead is the lead going to the Sky Mod. The Polarity Swap wire is not required for this mod.

Now secure the library mod's cable (on the left hand side) to the local wiring so it is restrained and so it can't flop around, with a cable ties and then pass through the back of the target.

Then lower the playfield down back to it's service pegs or service brackets.



9 - Connect the Power Lead to the Library

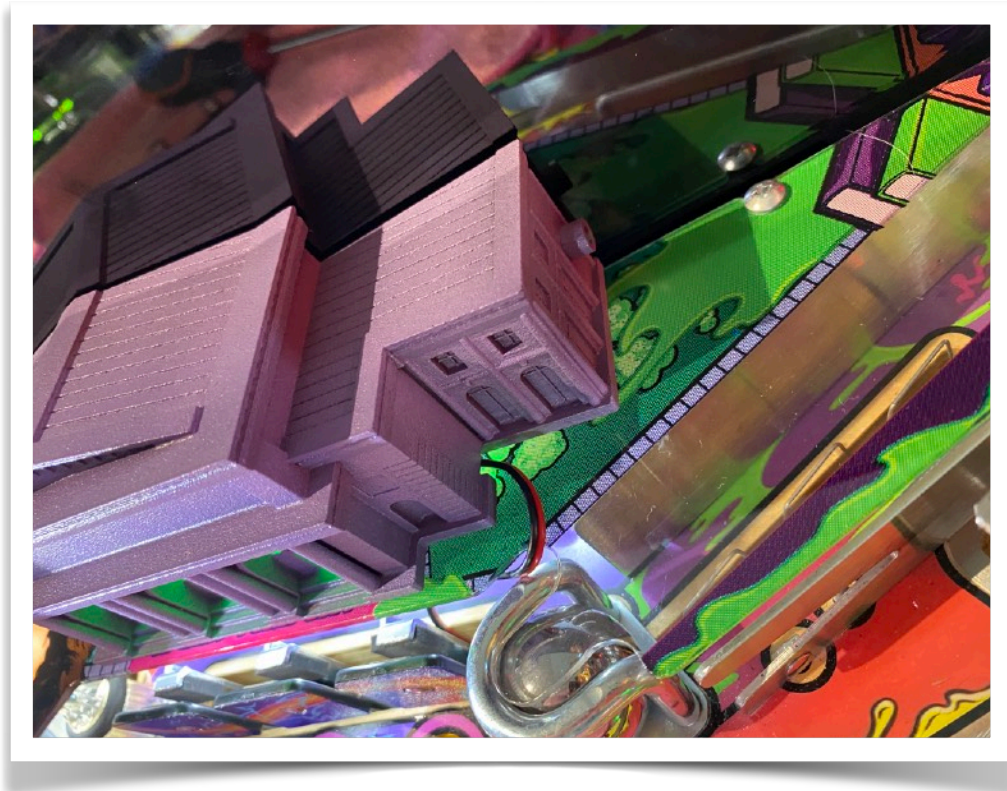
The lead (red and black wire) will pop out near the captive ball as seen below. The production versions of cables has a section painted black so the red cable does not stand out as much.



Then connect the extension lead to the Comet star post led lead inside the library.



There are 2 slots in the bottom of the library - to the left and to the right of the 3 arches. Tuck the lead inside the library and then carefully lower the library over the 2 shafts on to their magnets once again and the library should sit flush. Then feed the rest of the wire into the slot of the games graphic plastic and in behind the target and you may need to pull the playfield out to pull any undesired excess cable to under the playfield and then restrain but leave enough under the library for maintenance.



If the library does not sit flush it is quite possibly sitting on the wire. Now lower the playfield into it's play position and just check the library alignment - the back of the library in relation to the cabinet side should have a consistent gap.

If it isn't aligned correctly it can be 1 of 3 things:

- Wiring is not allowing the mod to sit flush on the graphic plastic
- The base mount could be poorly aligned or
- The bolt head within the library cylinder is not sitting right in the magnet cup. The bolt in the magnet can be wound out 1-2mm to ensure the mod sits flush and square.

10 - Testing the Library Mod

Power up your game and in attract mode the **GI will light up and the Flat Iron Mod should also light up.**

If it works, you are all ok to proceed to enjoying your new mod. If it doesn't check that the bulb works and check the 2 socket ends of the extension lead in case a pin has been pushed out and not making a connection.

If there is any excess cable fed under the playfield, you will need to lift the playfield once again and secure the cable.

11 - Set Up your Game

You are now ready to lower you playfield if it is out back into the cabinet and re-install the games balls and power up.

12 - Enjoy

Now your mod is installed and operational, it will operate when ever the games GI is active.

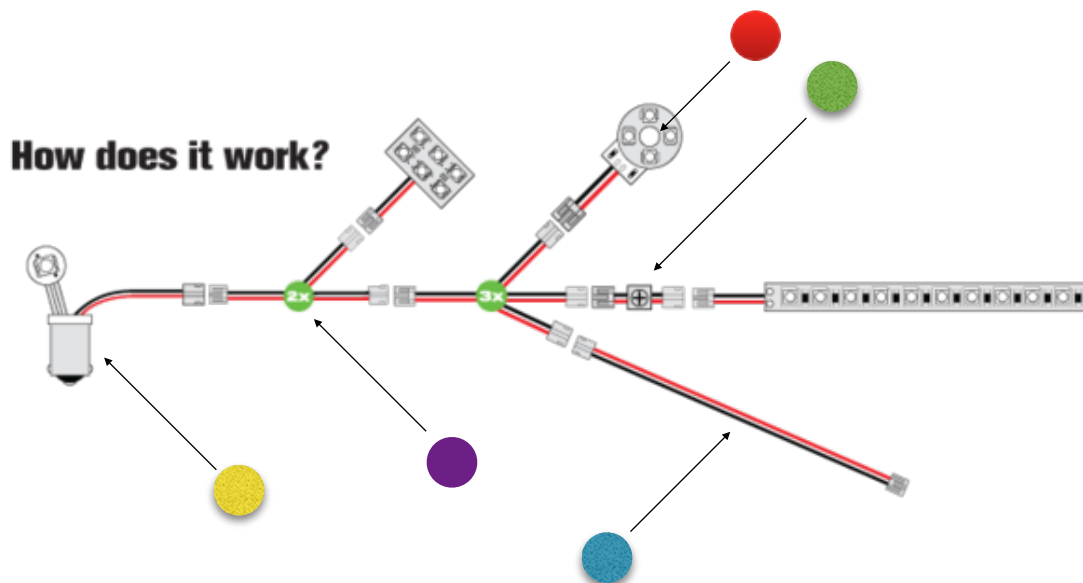
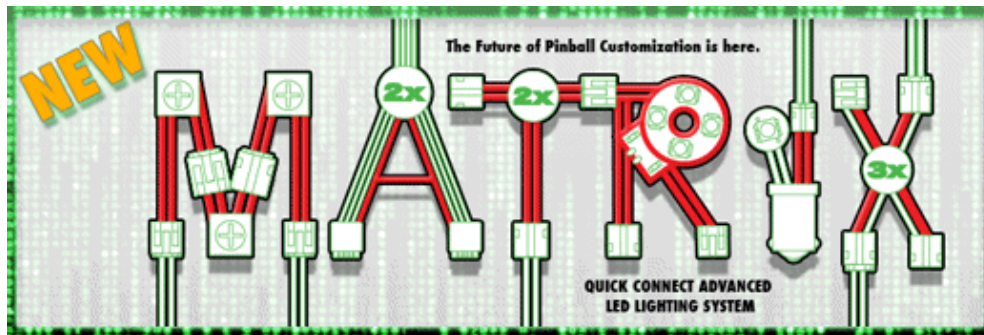
New images will come soon to show the Public Library Decals.

Enjoy.



13 - Spare Lighting Parts

- Lighting is supplied by Comet Pinball based in Colorado in the USA using their cool products from their Matrix range. See a coloured arrows referencing the components.



To find these parts:

-  <https://www.cometpinball.com/products/quick-connects?variant=12387006677036>
-  <https://www.cometpinball.com/products/matrix-spike-conversion-wire?variant=27680693682278>
-  <https://www.cometpinball.com/products/matrix-extension-wires?variant=12493662158892>
-  <https://www.cometpinball.com/products/star-post-lights>
-  <https://www.cometpinball.com/products/matrix-splitter-wires>

15 - Credits

A Big Thanks to Brooke from the USA in aiding me in testing fitting the Premium / LE versions of the Library in their game to ensure fit, as well as issuing us with measurements and photos, and in the end making this version of the Mod possible, thank you very much.

RETURN POLICY:

*Please contact us as we will be proactive to try and quickly resolve any problems from abroad reducing the need to send your purchased parts back for repair. Approval from Swinks Pinball must be received before any items can be returned for repair or replacement. All parts, cables, etc. must be included when the product is returned. We will repair or replace/exchange components based on our analysis of the problem. Swinks Pinball reserves the right to deny any return or exchange. Refunds are not given. Freight will be covered by Swinks Pinball on the return trip back to you **only**.*

In stating that we want everyone to love and enjoy their Library Mod - so if you have any issues at all please, please reach out via the well known Pinside forum or another forum or via email and we will promptly help you out.

Email: swinks.pinball@gmail.com

PRODUCT DISCLAIMER:

Please remember that this is a "MOD." We took great effort in designing and testing our product in order to produce a high quality product, but it is not a Stern factory original nor an approved part for your pinball machine. There is the risk of unwanted side effects with any modification to a factory game and there are many factors that can cause undesirable side effects after installation of such a modification. As such, we cannot assume responsibility for game malfunction, damage to the game or surroundings, unwanted electrical emissions, personal injury, or other adverse effects caused by the installation of our MOD.

PRODUCT QUALITY DISCLAIMER:

All parts are made to the highest quality possible. The Mod's parts are professionally 3D printed by Zelta3D using MJF & SLS nylon & Resin processes which may have some minor print lines, colour variances (which follows through the dye and some paint process) or clouding (on the resin parts) - which are all part of the process and treated to the best of our ability to make the parts look nice and professional. In addition the purple dye process and paint process will be unique to each mod and is meant to be directional to create shadowing to simulate a night atmosphere. Once the mod is installed into the game with game lighting these minor effects will not be clearly visible from the players perspective and the mod will give your machine that cool night time city feeling.