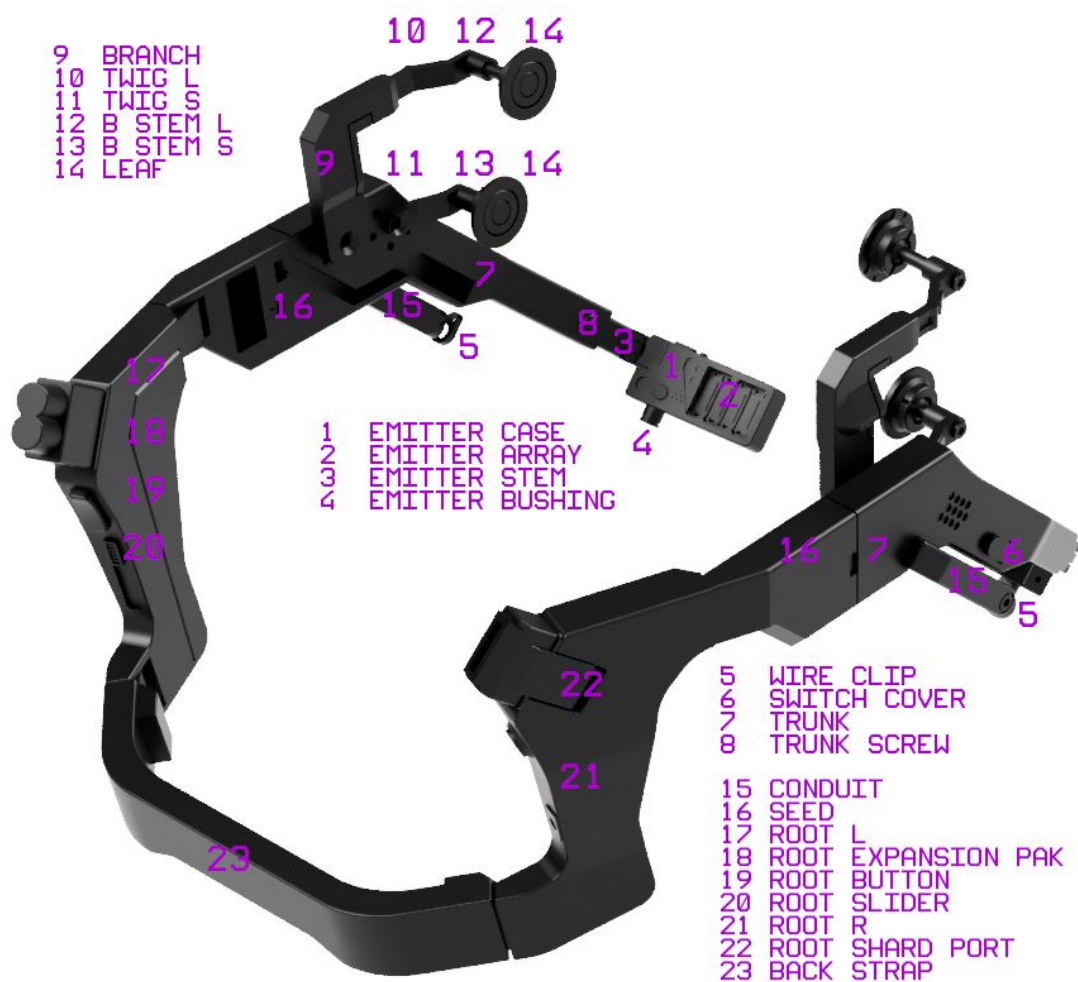


# Cyberpunk 2077 Braindance Wreath STL Pack Instructions

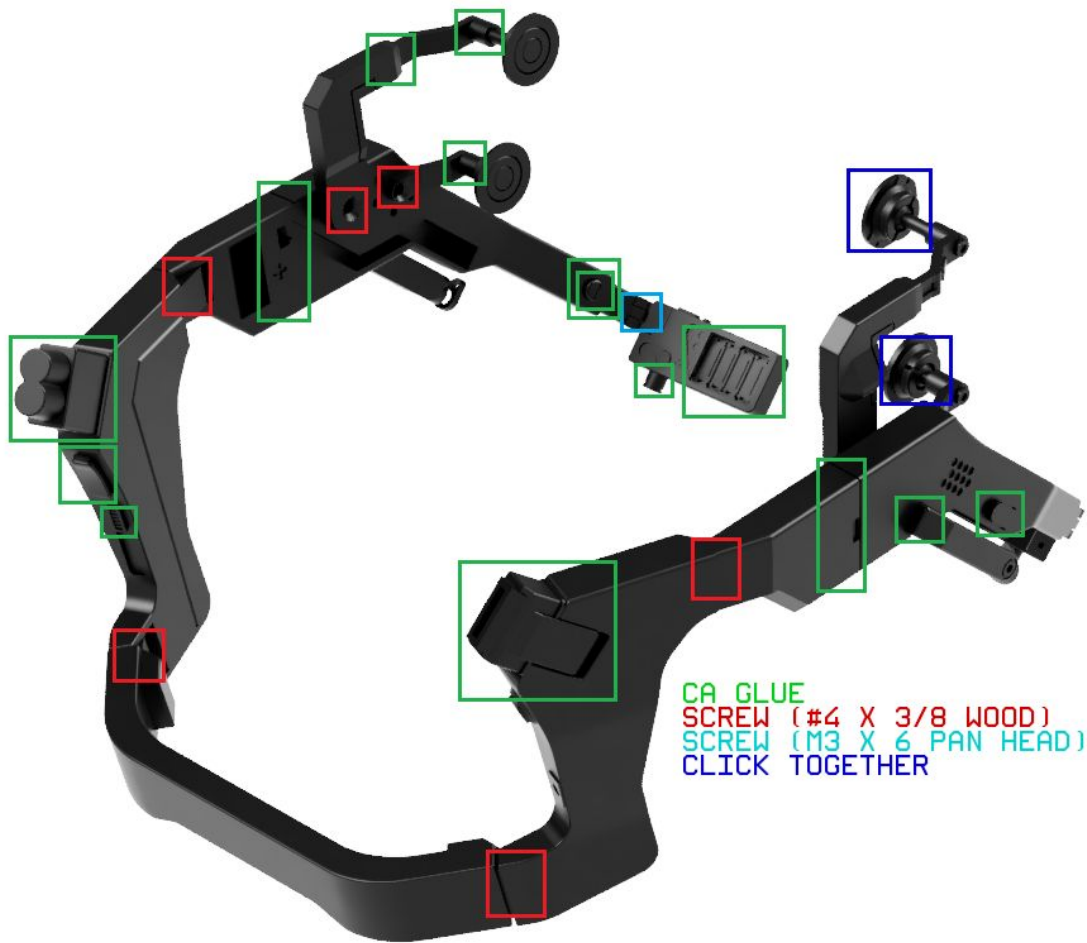
## Starside Armory / Quite a Quarantine 2020

Thank you for checking out this STL pack! I hope you enjoy building CDPR's slick design, painstakingly remodeled and slightly modified for practicality by Starside Armory. Whatever BDs you want to load is your own business, I don't want to know.



### PRINTING

- Parts are already oriented how I found them to print best using FDM+PLA, prioritizing quality of print>strength>eliminating supports. Support special notes:
  - a. Conduit needs no supports.
  - b. Trunks should have supports in the cavity where Seeds insert. No other internal supports needed. External supports help quality but shouldn't be necessary.
- The smallest parts have such tiny details that SLA printing is nice, but not necessary.
- Quantities are listed at the end of each STL. BStems are interchangeable.
- The double LED emitter array alternate is hard to wire and not appreciably brighter.
- The strap determines the overall fit. Start large and go smaller if it is too loose.



## ASSEMBLY:

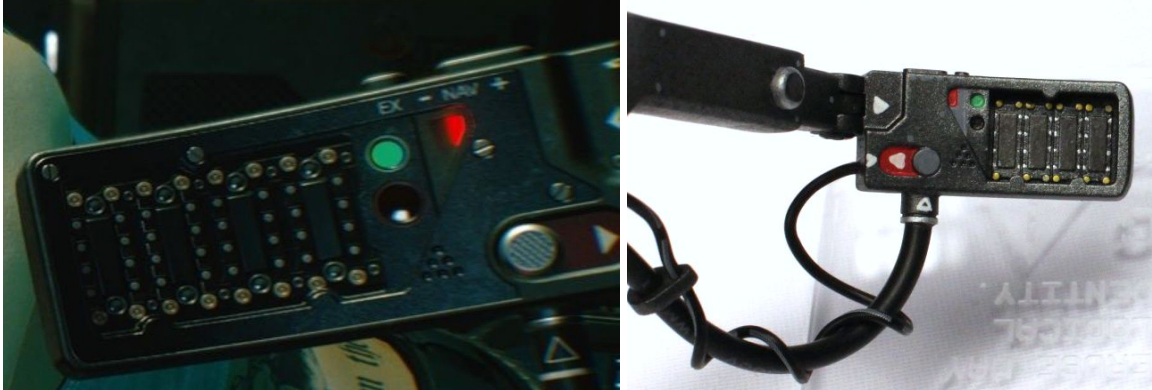
1. Required materials:
  - a. Black CA Glue (clear works but could be ugly in some areas)(accelerant highly recommended as well)
  - b. (2) M3 x 6mm pan head sheet metal screw
  - c. (8) #4 x  $\frac{3}{8}$  wood screw
  - d. Black hot glue (or you can paint clear hot glue once cooled)
  - e. Black primer recommended to hide paint-dodging crevices
  - f. Paint: I use Duplicolor Storm Gray Metallic and Satin Clear
2. Glue bushing to emitter (2) (Avoid getting excessive glue in the wire channels)
3. Glue seed, conduit, & emitter stem to trunk (2) (Avoid glue in the wire channels)
4. Assemble branch leaf & leaf stem (4) - Push balls into sockets
5. Insert short branch stem into short twig (2) - Wait to test fit before gluing
6. Insert long branch stem into long twig (2) - Wait to test fit before gluing
7. Glue long twig to branch (2)
8. Screw branch assemblies to trunk with #4 x  $\frac{3}{8}$  wood screws.
9. Test fit and revise strap and/or branches if needed.

10. The leaf stems have a long and a short style which are interchangeable. If you need longer or shorter leaf stems, consider changing these out and/or trimming to size.

FOAM PADDING: The in-game model has pads on the interior of the Trunk, Seed, Roots, and Backstrap. You can build these with  $\frac{1}{4}$ " EVA or craft foam and affix them with CA glue or velcro. The pads may be useful if the fit is too loose, and velcro will be handy if they get really nasty after too many sessions.



## PAINT:



- Most of the wreath can be painted in an assembled state. This keeps the joints moving freely and is just easier. I paint the tiny trunk parts individually, and the emitter and branches as separate assemblies.

### Recommended Steps:

1. Black primer
2. Duplicolor Storm Gray Metallic
3. Emitter details (per side)(I use an acrylic pen set that had all these colors):
  - a. Bright Red (corner light, round sliding switch surround)
  - b. Light Grey (corner light surround, screw head x4)
  - c. Bright green (status light, on)
  - d. Black (status light, off)
  - e. White (arrows x3, "EX - NAV +" text, bushing triangle)
  - f. Silver (array dots x32, bushing rim, round sliding switch)
  - g. Gold (array corner dots x16)
  - h. Black Metallic (array bars x4)
4. Other part details (per side)
  - a. Silver (leaf details, trunk screw rim)
  - b. Light Grey (trunk screw head x5)
  - c. Black Metallic (conduit screw head, twig screw head x2, touch ups)
5. Glue trunk screw to trunk (2). Scratch paint off the trunk first.
6. Clear Satin

## ELECTRICAL:

These instructions assume you are experienced with basic soldering of tiny leads. It was designed to use a few specific components linked below, but there is room for improvisation. In order to fit in the component, the battery clip is scratch built from a large paperclip. There is a video showing the electronics install [here](#). ( <https://youtu.be/xExoMEJhl-k> )

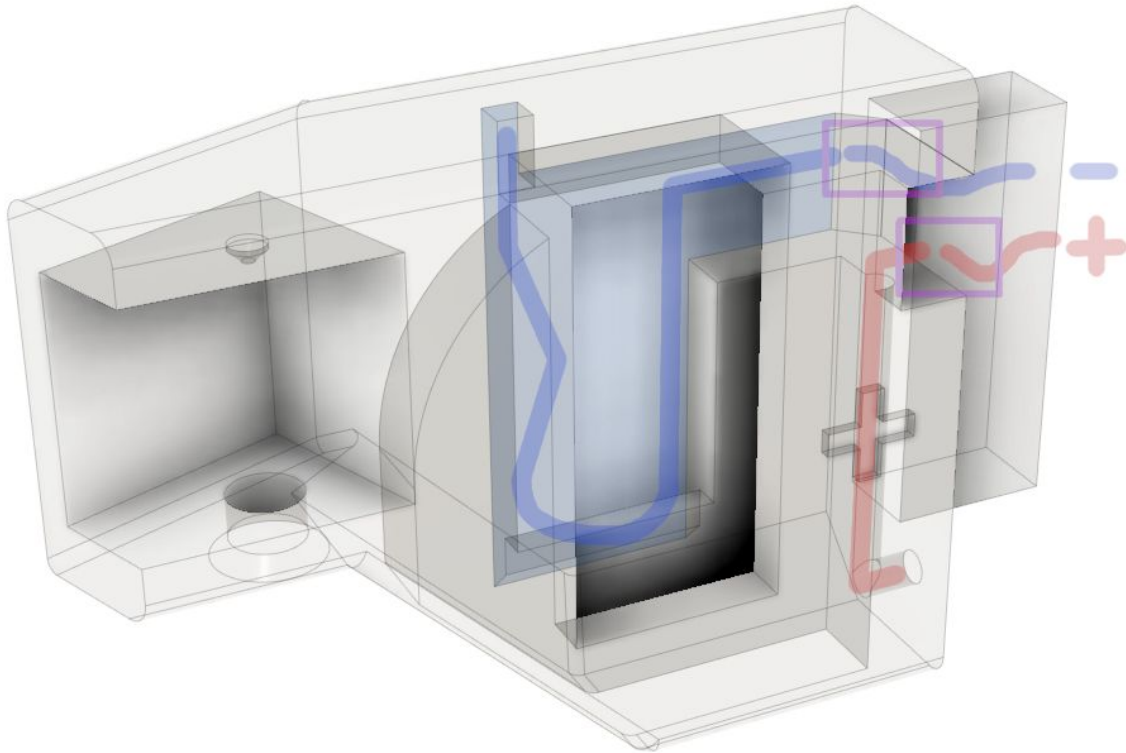


### Specific components:

- a. (2) [Switch](#) - Chosen for size, and I had a bunch. Second throw is unused.
  - b. (2) 3mm LED - I don't know if pre-wired LEDs fit inside the emitter; they might.
  - c. [Main wire](#) jacketed 22/2 3.5mm OD - Parts are sized for this wire.
  - d. Aux wire: 24 gauge 1.5mm OD - Ends which are inserted need to be stripped.
  - e. (2) CR2032 battery
  - f. Paper clips (DIY battery clip, see video)
1. Clip off raised rim of 3mm LED to get it to fit in the emitter case.
  2. Cut main wire: 20cm total, jacket stripped 4cm on emitter end and 7cm on conduit end.
  3. Insert main wire through emitter bushing/case. Solder LED. Install on array insert.
  4. Gently push array into case. Pull the main wire back out to help. End of array will drop down into case, then center the array in the opening. There is a hidden lip that will capture the end of the array insert. Combined with the wires jammed in the case, glue isn't really necessary.
  5. Put a tiny bit of glue on the main wire and push it back into the bushing.
  6. Install wire clip. Strip and insert aux wire into emitter (24awg black, black CA glue).
  7. Screw emitter to stem with M3 x 6mm pan head screw.
  8. Insert main wire through conduit. This part can be annoying. Snag the wire tips with a razor or weeding tool, and tweezers. Over-insert the jacketed wire to give yourself some slack inside for the next steps. Just remember to leave enough slack to pull it back out too. Test and plan this out carefully.



## SOLDER AND HEATSHRINK



Bend, solder, and install battery clips (made from a large paper clip). See video for help with specific shapes. I'll quickly outline it here:

- a. The U shaped piece is the negative contact. The clip nests in a groove in the seed/battery compartment, with the "U" end sliding into a slot at the bottom and the straight end inserting in a tiny hole in the upper corner of the slot. This clip is slightly bent up in the middle to put tension on the battery.
  - b. Solder the bent "L" end of the negative clip and insert through the battery window. Insert the U in the slot, then the straight end into the hole. Verify battery fit.
  - c. The ] shaped piece is the positive contact. There is a groove inside of the seed/battery compartment,
  - d. Solder one end of the positive clip and insert through the battery window. Seat the soldered end, then insert the other end in the hole. Make sure the clip fits snugly along the edge of the battery area, as it is a tight tolerance.
  - e. If the battery fit is too tight, consider filing the PLA edges down a bit.
9. Battery is inserted positive side up, visible in the battery window.

10. Solder negative battery lead to negative wire coming through conduit. Leave slack!
11. Prepare switch (if you're using the one I linked): The switch lever is a little too tall, clip off ~1.5mm and sand flat. One mounting tab must be removed. The terminal closest to the remaining mounting tab must be removed.
12. Solder positive battery lead to one switch terminal.
13. Solder positive conduit lead to other switch terminal.
14. Stuff wires into channel and make sure switch stays completely seated. Test function and connections.
15. Sparingly apply hot glue in channel, mostly aiming to cover the switch and conduit hole.
16. Glue switch cover to switch, first testing to make sure it fits correctly.

That should be it! Let me know if I can help with anything, and thanks again!

-Curtis



Email me if you have any questions:

[curtis@starsidearmory.com](mailto:curtis@starsidearmory.com) | [Check out gear only offered on my site](#) & [Updates on Instagram](#)

Useless trivia:

Since it is called a wreath, at first I tried to name every part after tree and flower parts. With so many small parts to be printed together, during prototyping I found myself with a bird's nest of extremely confusing and vague file names like "twigs leaves branches petalstems leafstems". Plus I ran out of viable plant words, so I changed a bunch of them, changed some again, and some still seemed fitting so they stuck. The resulting file list is perhaps a metaphor for the melding of biological and mechanical, and that was still obtuse and confusing so I just numbered everything. So yeah, sorry about the file names.