Wood Induction Charger

Table of Contents

Intro: Wood Induction Charger

Powermat has come up with a great induction charging solution, but I wanted something that fit into my homes design. What I did was remove the guts from the Powermat office charging solution, route out some hardwood, and then glued the guts back inside of the newly routed out wood. The hardest part to this concept was getting the wood thin enough to get a positive lock on the charging coils below the surface without going through the wood.

All-in-all, I am pretty happy the way it turned out. I also added a piece of industrial felt to the bottom of the wood with some space to the left for my keys, wallet, etc. This keeps the wood from scratching any furniture surface it may come in contact with.

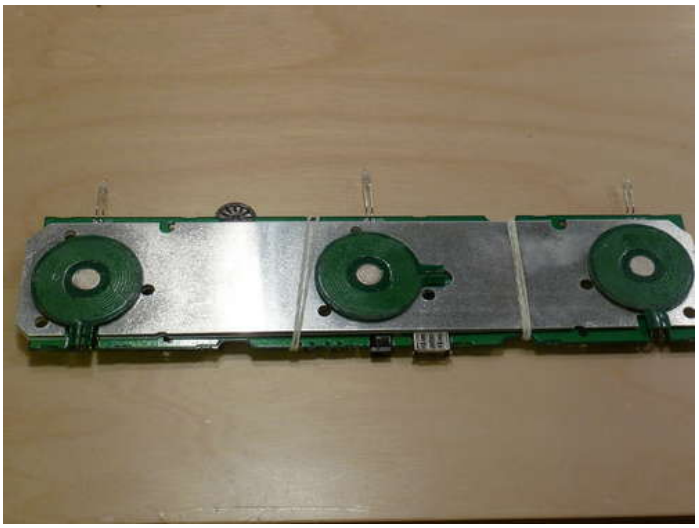
Step 1: Wood Induction Charging Mat

Buy Powermat charging mat.

Step 2: Disassemble

Take apart the Powermat induction charging mat. There are screws underneath the rubber feet. Remove the screws and pry apart the mat.

Remove the PCB. This should all be one piece.



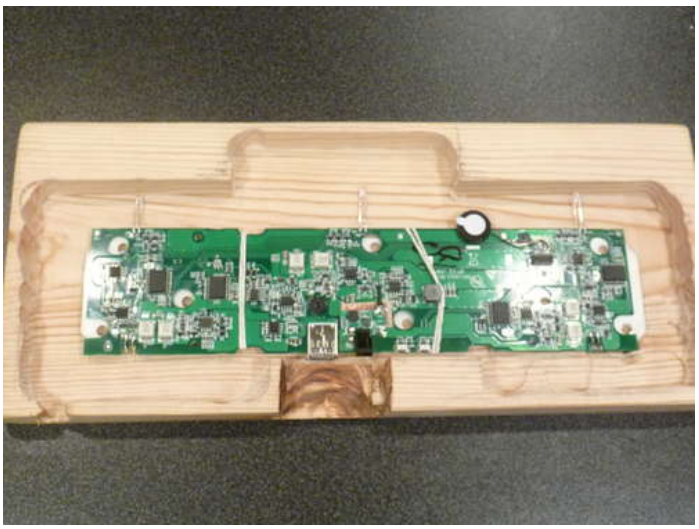
Step 3: Get wood

Go to your local wood store and pick a piece of wood out that you'd like to use. I used some pine at first because I knew it would be soft and easier to use the router on.

Route out a shape that will fit the charging guts. Don't forget to make a cut in the back for the power adapter and USB. The hard part here is making sure the wood is thin enough to get a charge from the coil, but also not burn through it. Thin enough being about 1-2mm. This will be wood dependent because of density.

Step 4: Mount PCB

I sprayed the inside of the wood with some spray adhesive and glued the mat, coils against the wood.



Step 5: Finish

After that dries I attached a piece of felt to the bottom of the wood so it didn't scratch any surface and plugged in..