



Charging Station

PROJECT PLANS

Finished Dimensions: 18"W x 2-5/8"H x 7-1/4"D

Skill Level: Beginner



Materials

Item	Qty
1" x 8" x 4' Board*	1
1-1/4" x 18-Gauge Collated Nails	1 Box
Mandara 1-1/4" Cabinet Knob	4
Sandpaper** : 150g, 220g & 320g	
Drill Bits: 7/64" & 3/8", Forstner Bits: 3/8" & 3/4"	
Wood Glue	

* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

** Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper. Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

Tools Used

	or					
7-1/4" Sliding Compound Miter Saw		Circular Saw	Jig Saw	Drill/Driver	18-GA. Brad Nailer	5" Random Orbit Sander
						
Rotary Tool	Tape Measure	Drill Bits	Countersink Set	3/4" Spade Bit	5" Orbit Sandpaper	
						
Driver Kit						

Also Needed: Safety Glasses and Clamps



Battery Tip: A 4.0 Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

Lumber Cut List

Board *	Description	Cut to	Qty
1" x 8"	Charging Station Boards	18-1/2"	2

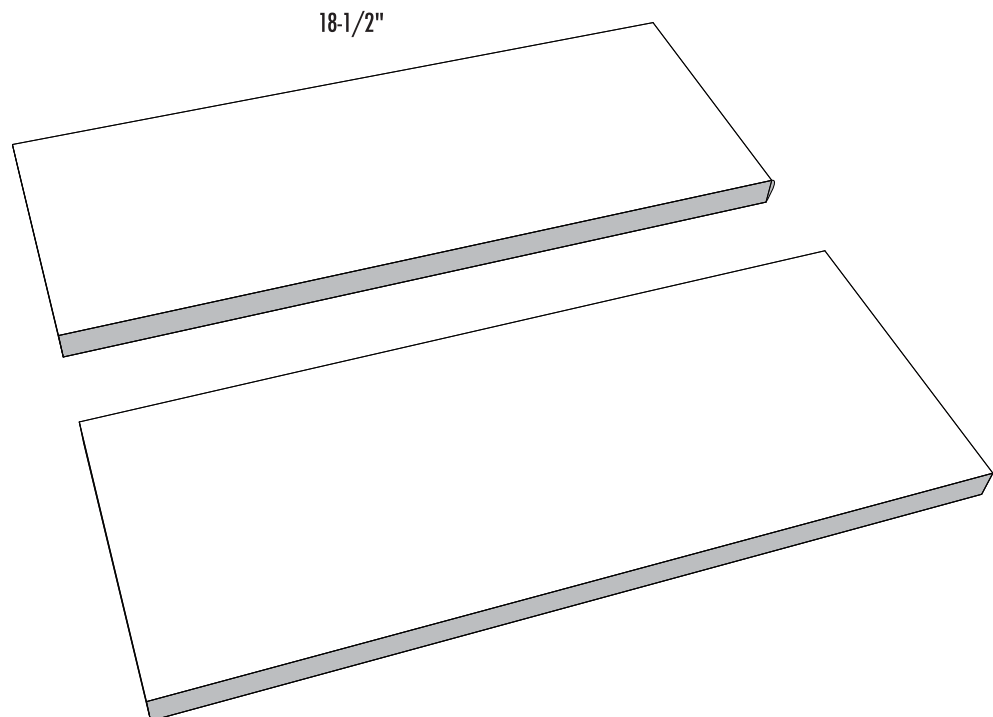
*Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

Lumber & Sheet Layout Guide

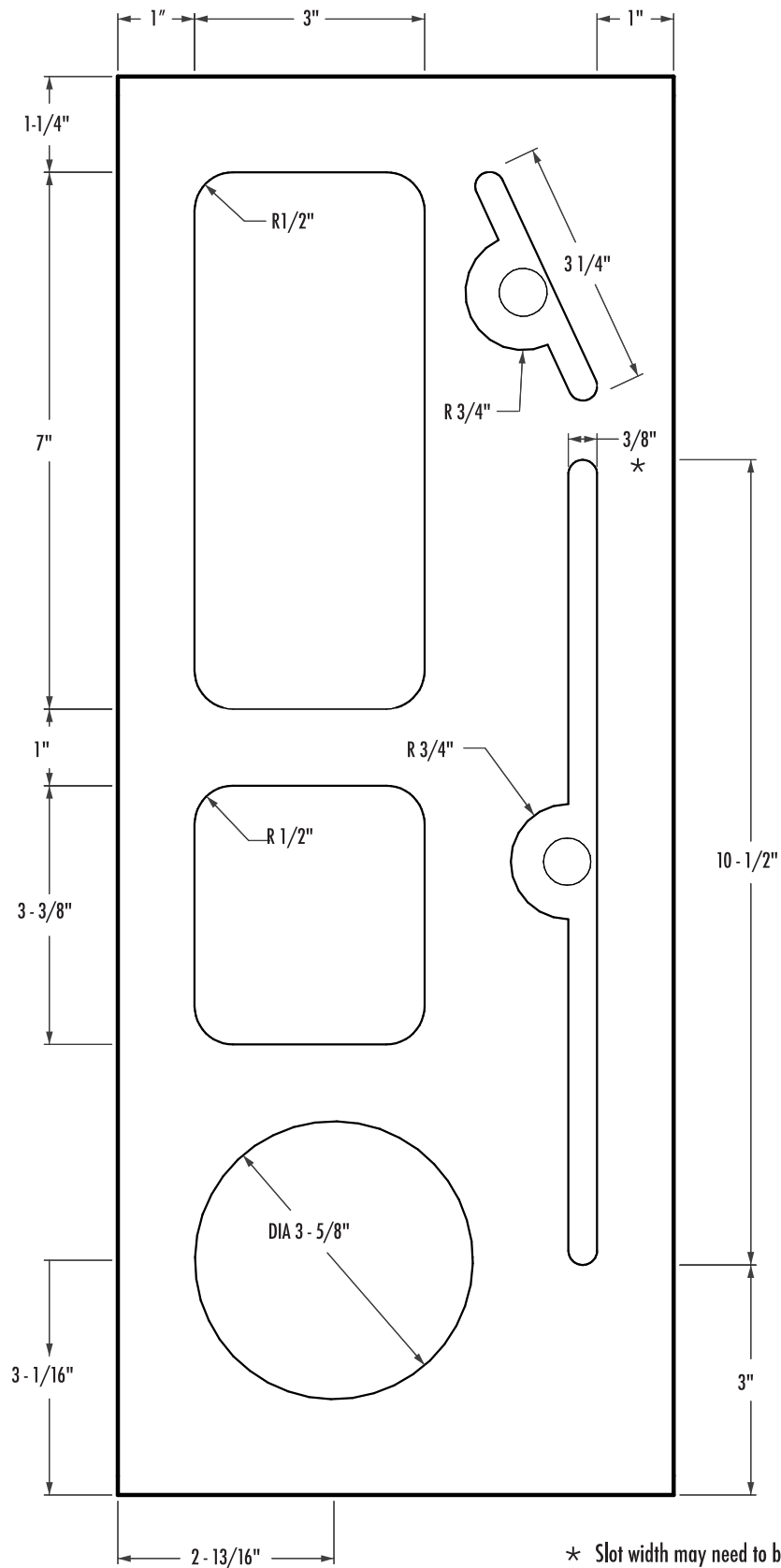


Lumber & Sheet Cut Layout Guide

Boards



Pattern Layout Guide



Assembly Instructions

Step 1



Cut out all material using the Lumber & Sheet Cut Layout Guide.

Step 2



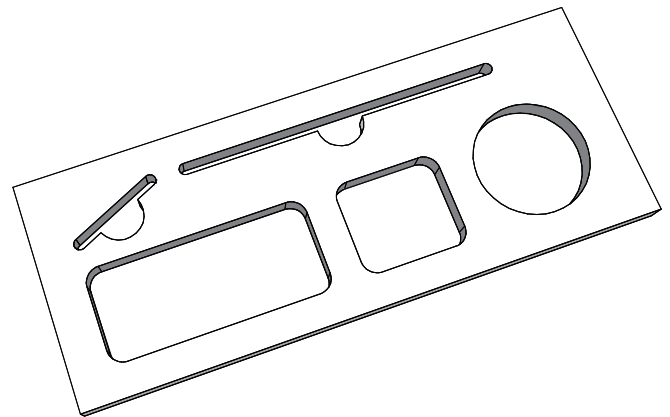
Draw the pattern onto (1) of the boards.

(Slot sizes may need to be adjusted to fit your electronic device. Measure device thickness and add about $1/16$ " for total slot width.)

Drill a $3/8$ " hole into each of the pockets so the Jig Saw blade can pass through.

Use a Jig Saw to cut out each pocket.

Sand and clean up the cut marks with a Rotary Tool.

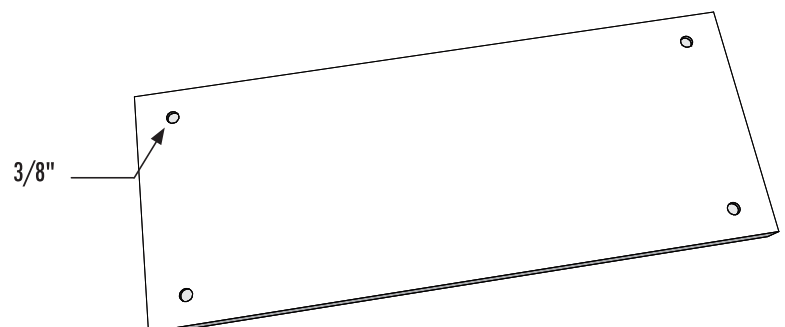
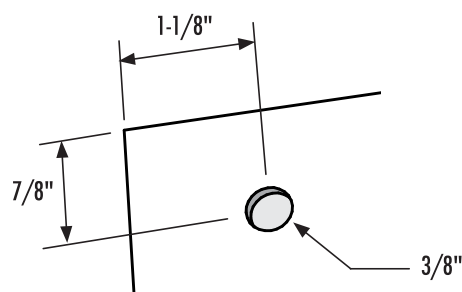


Step 3



Mark a drill point in each corner of the 2nd board using measurements from the diagram.

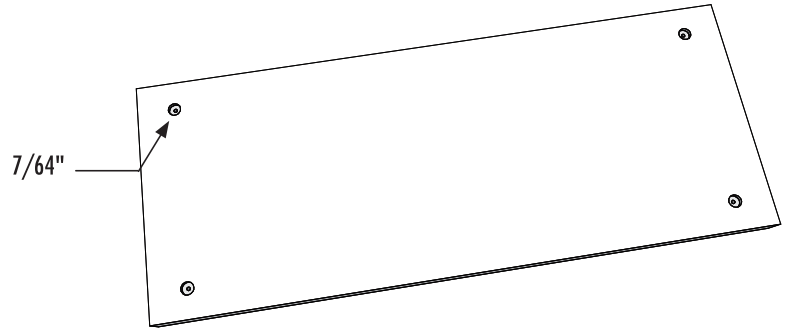
Using a Countersink Bit, drill a shallow hole about $1/8$ " deep. The hole depth needs to only be deep enough for the recess knob screw head.



Step 4



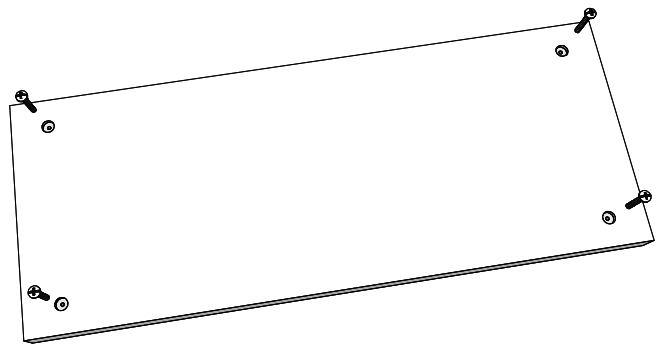
In the center of each hole, drill a 7/64" hole through the board.



Step 5



Install the screws for each of the knobs. Recess each of the screw heads into the boards.

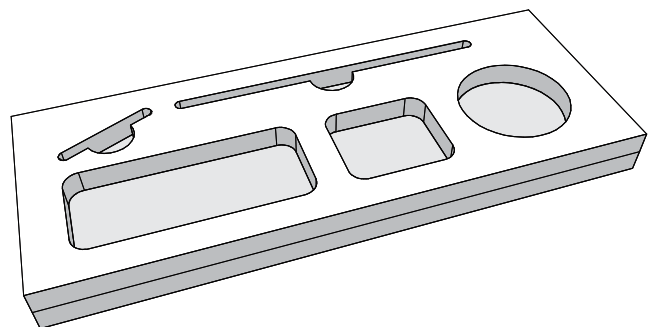


Step 6



Align the top board over the bottom board.

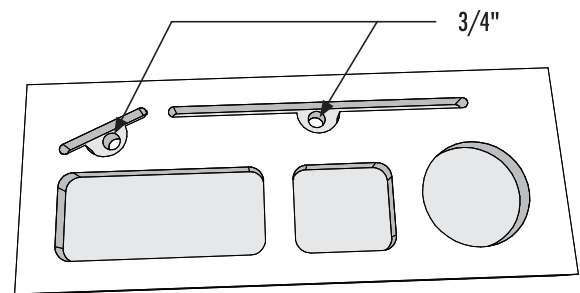
Apply glue in between each board and nail from the bottom side.



Step 7



Using a 3/4" Spade Bit drill through bottom board. Hole should be centered and at the back edge of slot.

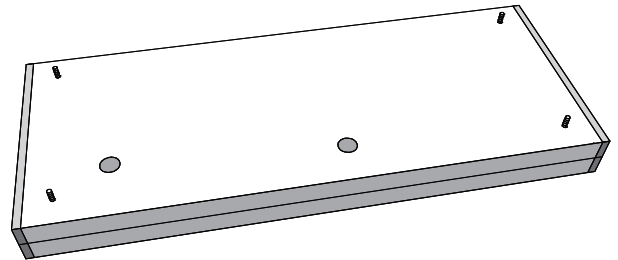


Step 8



Mark a line 1/4" from each end and cut. This will clean up both ends and create a 1" offset around the pockets. Make sure to cut outside of the line.

Place boards on the Miter Saw with the screws facing upward.

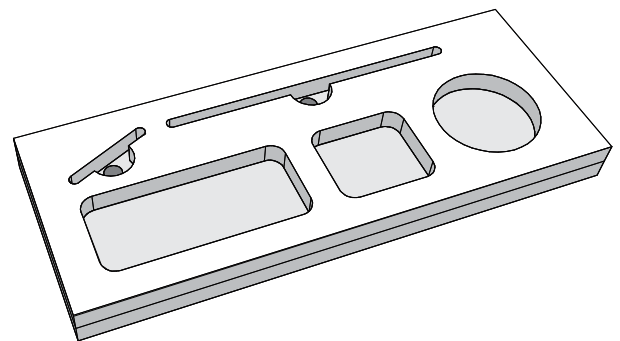


Step 9



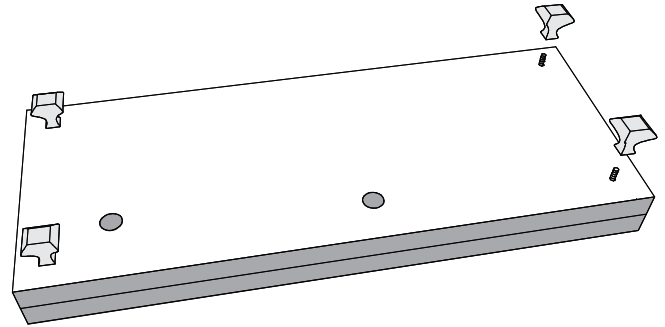
Sand the charging station. Refer to the sanding information on the bottom of Page 8.

Apply the finish coat as desired.



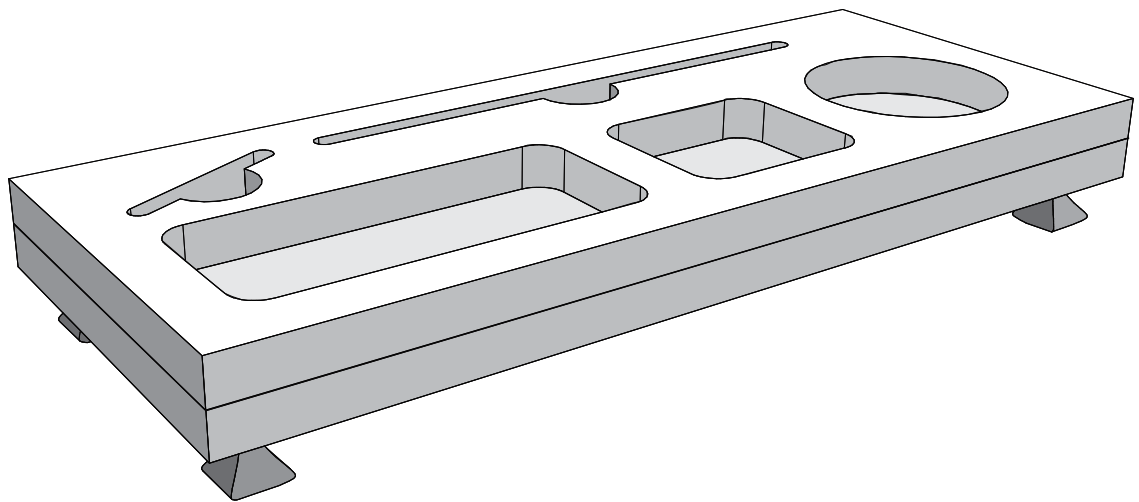
Step 10

Attach knobs to the screws. Align the edge of the knobs to be parallel with the sides of boards.



Step 11

Project complete!



Rougher finish – Use 60-80 grit sandpaper to hand sand with the grain of the wood.

Smoother finish – Use 60-80 grit sandpaper to remove scratches & imperfections.

Followed by using 120-220 grit to smooth.

Finish Sanding – Use 320-400 grit sandpaper

Super fine sanding – Use 600+ grit sandpaper