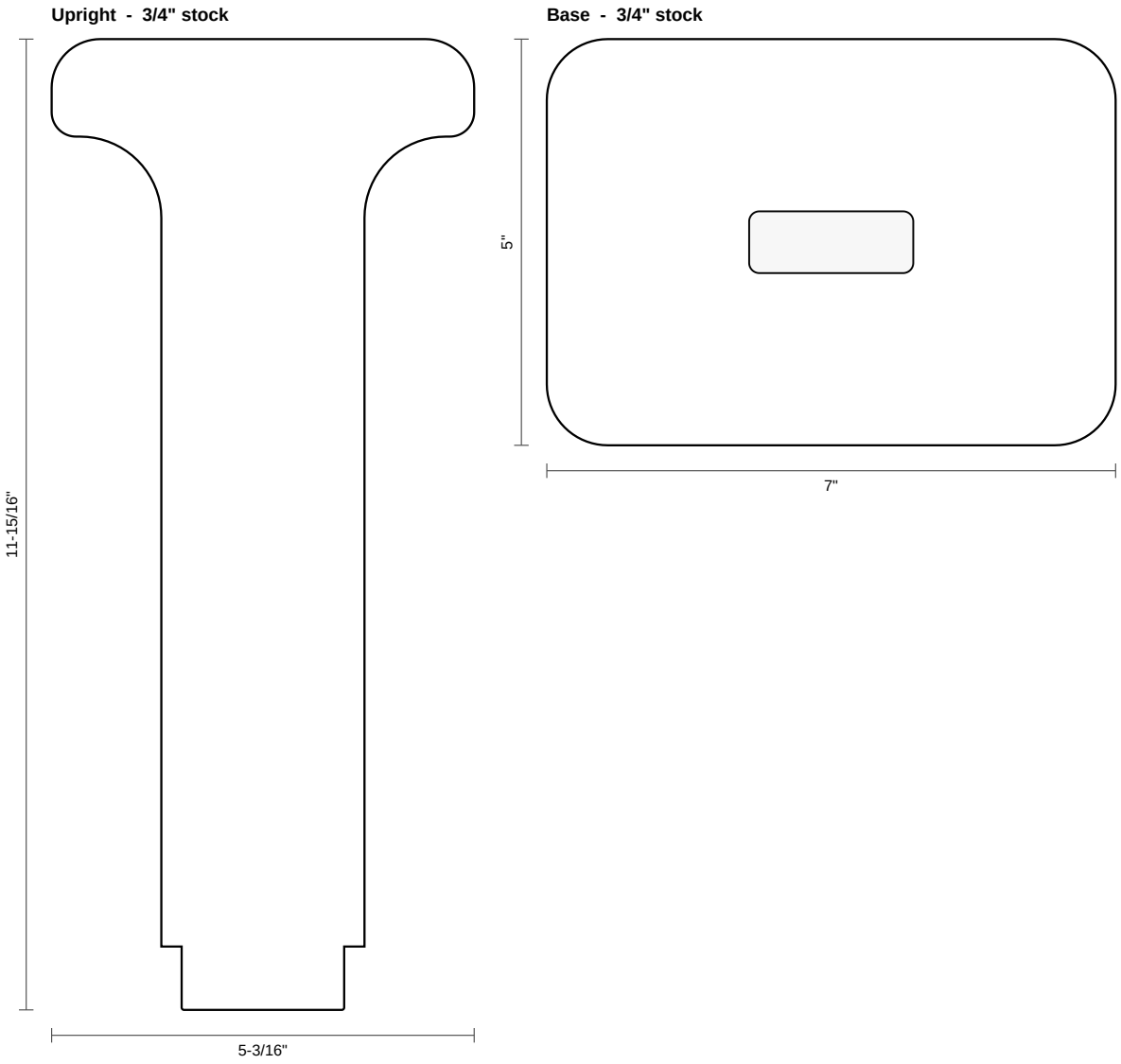
Headphone Stand

11-1/4" tall. The T-shaped saddle spreads the headband load; a through-tenon locks it into the base.



Machine & stock

CNC router, 1/4" end mill. Drawn for 3/4" stock with 0.01" mortise clearance.

The tenon is 1/32" longer than the base is thick so it can be sanded flush.

Hardware

Four small felt or cork pads for the base.

Steps

1. Profile both parts, cutting the mortise in the base as an inside profile.

2. Round the tenon's four corners to match the 1/8" radius left in the mortise ends.

3. Glue the tenon into the base, check the upright is square, and sand the tenon flush underneath.

4. Round over every edge of the saddle generously so it won't dent the headband padding.

5. Finish, then add the felt pads.

VCarve toolpaths (in this order)

Profile, Inside, layer PROFILE_INSIDE_0.750: cut depth 0.750" (through), 1/4" end mill.

Profile, Outside, layer PROFILE_OUTSIDE_0.750: cut depth 0.750" (through), 1/4" end mill, with tabs.

Files

dxf/headphone-stand.dxf

Plan view, drawn at about 1:2.2. Grey = pocket (depth noted), dashed = underside pocket, light fill = through cut. Cut files are full size.