

STEREO CABINET

BY ROBERT S. YOUNG

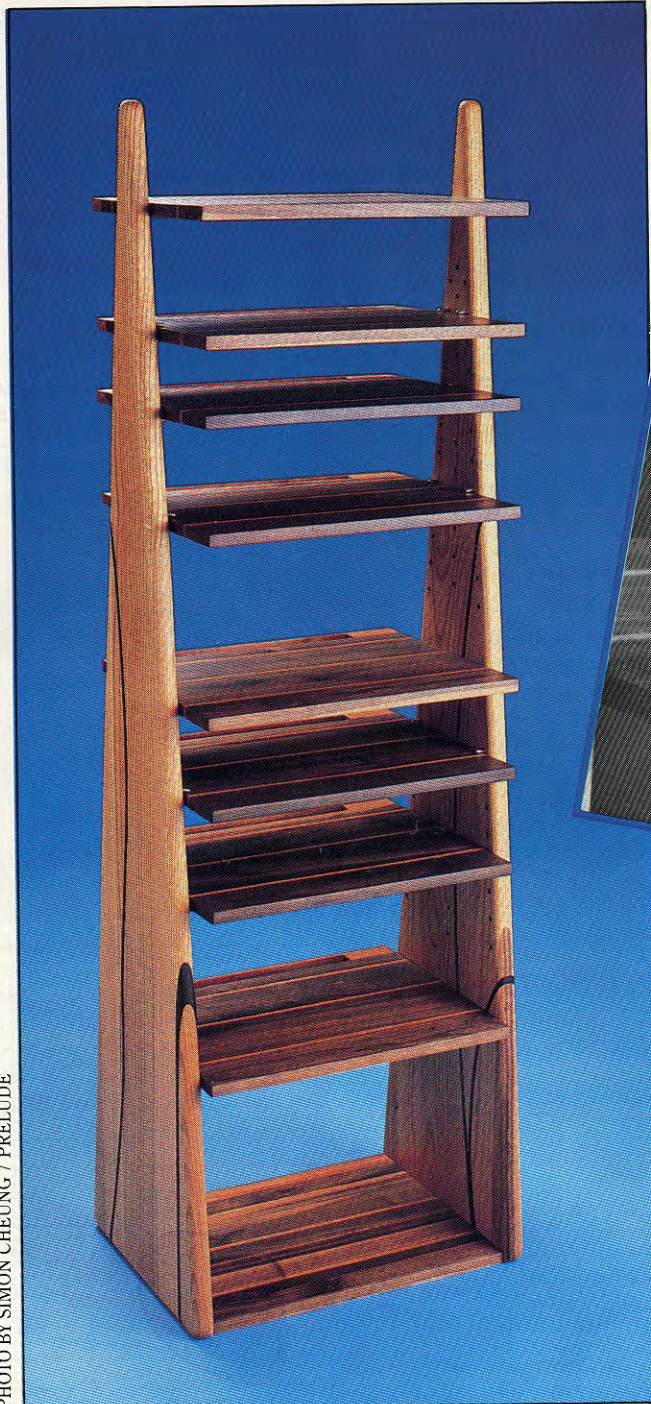
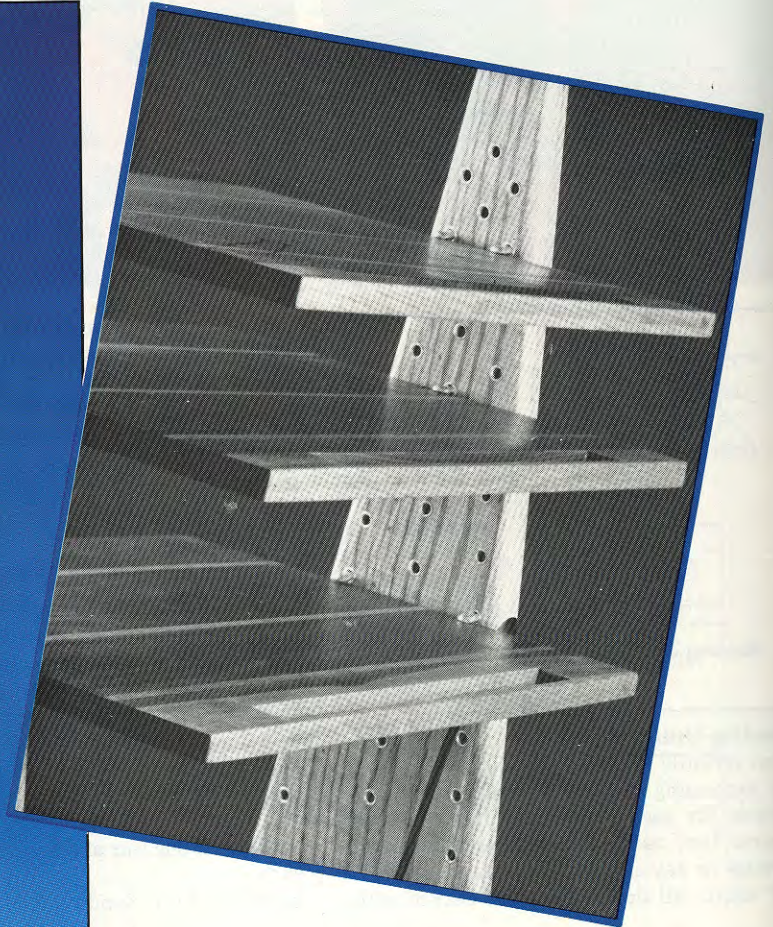


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ABOVE: AN AVANT GARDE STEREO CABINET. RIGHT: POSITIONING OF THE FERRULES IS IMPORTANT FOR ADJUSTABLE SHELVES AND APPEARANCE.



Its distinctive avant garde style sets our stereo cabinet in a league by itself. Five adjustable shelves, each with $\frac{3}{4}$ " increment adjustment and a conduit channel for cord routing, ensure versatility when accommodating future generations of machines. Approximately 15 board feet of $\frac{6}{4}$ red oak dressed to a thickness of $1\frac{1}{4}$ " was used and approximately 20 board feet of $\frac{4}{4}$ black walnut dressed to a thickness of $\frac{3}{4}$ " for the five adjustable and four permanent shelves. Within the gable laminations, strips of East Indian rosewood were laid and within each shelf are strips of tropical American mahogany.

Machinery, tools and supplies

Stroke or belt sander, finishing sander
 Tablesaw
 Radial arm saw
 Thickness planer/jointer

Robert S. Young is a professional cabinetmaker and proprietor of Chase of Toronto.

Minimum 5 pipe clamps
 Tack hammer and rubber mallet
 Glue and garnet paper
 (32) $\frac{1}{2}$ " x $2\frac{1}{2}$ " spiral twist dowels
 Finishing materials as needed, we used Watco natural oil finish
 (30) pins and (130) ferrules for adjustable shelving system
 Drill with $\frac{1}{2}$ " bit and dowel centres, $\frac{9}{32}$ " bit
 Router with large corner round bit

Cutting List

The dimensions listed are final size. When laying up a solid wood panel, make it at least $\frac{1}{2}$ " larger on its length and width and trim to final size after initial sanding. The first dimension listed is width, followed by length.

(Number in brackets is number of pieces needed.)

(4) $14\frac{1}{4}$ " x 18" – permanent shelves

(5) $14\frac{1}{4}$ " x $17\frac{7}{8}$ " – adjustable shelves

(2) 15 " x 63 " – gables are triangular in shape and measure $11\frac{1}{4}$ " at top, 15 " at base and 63 " long

INSTRUCTIONS

Begin by making up the panels necessary for the project. The shelves all have a channel at the rear to allow the power cords and speaker connections to pass internally within the unit. This channel is made at the lamination stage by laminating a strip $\frac{3}{8}$ " wide together with two pieces 1 " wide x 3 " long, with the balance required to bring the width to $14\frac{1}{4}$ ". This creates a 1 " x 12 " conduit, large enough to accommodate any configuration of cords. The bottom shelf is a solid $14\frac{1}{4}$ " with no conduit. When trimming the shelves, run the back edge along the fence and cut towards the front to ensure the channels remain identical to one another.

The gables in the unit were laid up and after their initial sanding, cut with the bandsaw to the line design drawn out on the blanks. This must be done very carefully to avoid blade chatter which degrades the intended effect. Once cut, strips of rosewood were sandwiched between the pieces and the assembly was then glued back together. A certain amount of artistic freedom may be expressed when doing such laminating, but an effort must be made to keep grain directions as closely matched as possible to avoid conflicts in the wood's movement.

The gables were cut starting with a straight cut at the base. This cut becomes the reference point for all other measurements. The centre of the gable is located along this cut and from this point, $7\frac{1}{2}$ " is measured out from each side to give the final 15 " width. Using a large square, draw a perpendicular line starting at the centre point of the base and extend it all the way to the top of the gable. At the 63 " point along this line, intersect it with a right angle and along this line, measure $\frac{5}{8}$ " from centre to get a total width at the top of $1\frac{1}{4}$ ". By connecting the outside points on the base with these two top coordinates, the gable now takes its final shape. Ours was cut on a bandsaw and cleaned up using the jointer and a belt sander. When the gables are final size and edge sanded, draw a set of reference lines running the length of the gable's inside $\frac{3}{4}$ " in from the edge. These lines are used when laying out the adjustable shelf system. The location of the permanent shelves may now be marked. These shelves are dowelled in place, with the holes drilled into the shelves, and with the aid of dowel centres their mates were located in the gables.

Each shelf/gable connection on the bottom and lower middle shelves received five dowels each, the shelf/gable connections on the upper middle shelf have four each and the top permanent shelf has two

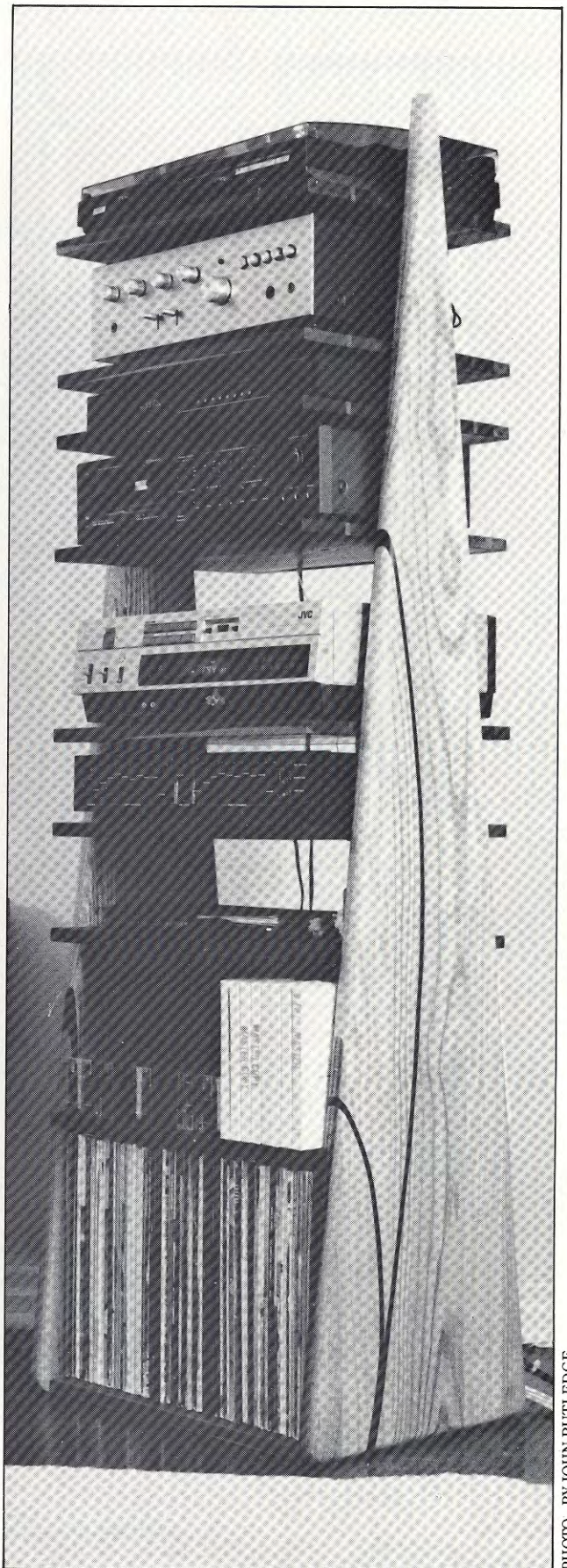


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