

The Keyed Corner Jewelry Box

This is the classiest-looking jewelry box we've seen that can be built in a single weekend!

Whether simple or elaborate in design, jewelry boxes and *keepsake boxes* always make treasured gifts for family and friends. This particular box is made from highly figured woods using some unique construction techniques, including corners with *keyed* accents that give it a one-of-a-kind look.

Getting started

Begin by making your wood selection. You won't need much, so you could actually make this box from scraps you already have laying around the shop. We made ours from quarter-sawn red oak, walnut and spalted beach, but with the wide variety of unique, exotic woods available today through a host of reputable suppliers, your options are virtually limitless.

Sides and Ends

Rough cut some 3/4" stock for the Sides (A) and Ends (B) to approximately 3-1/2" x 29", then plane your stock down to 1/2" using your Thickness Planer. Once you've attained the desired 1/2" thickness, joint one edge, then rip and joint the opposing edge to a finished width of 3-3/16".

Next, tilt your saw table to 45-degrees, then cut and miter the Sides (A) and Ends (B) to length, as per the Bill of Materials.

Using your Dado Set-Up, Shopsmith Router Package or Shopsmith Pro Fence System Router Table with a 1/4" Straight Router Bit, cut 1/4" wide by slightly deeper than 1/4" grooves in these pieces that will accept the box Top and Bottom.

TIP: Have a 1/4" wide test groove cut in a piece of scrap wood for use in checking the fit of the Bottom (C) and assembled Top pieces as you bring them to the required thickness in the following step.

Top and Bottom

Rough cut two pieces of stock for the Bottom (C) and inside Top (D) from 3/4" stock to approximately 5" x 8-1/2". Next, resaw another piece of (approx.) 5" x 8-1/2" stock to a 1/8" thickness, then run it through your Planer to attain a 1/16" thickness for the Outside Top (E).

Tip: If you can't find a large enough piece of "accent" wood for the Outside Top (E), you can always resaw a small piece into a series of 1/8" thick pieces. Then arrange them into an interesting pattern and glue them together with the aid of masking tape and rubber bands. Lay a weight of some sort on top to keep them flat while they dry overnight. Allow to dry for 24 hours.

Thickness plane the Bottom (C) to 1/4" and the Inside Top (D) to slightly over 3/16". Leave both pieces oversized for now.

Using double-stick carpet tape, attach the good face of your Outside Top (E) to a flat piece of plywood, then thin them down to the required 1/16" thickness using your Belt Sander or a hand plane.

IMPORTANT: Do **NOT** use our high adhesion Double-Stick Tape for this task, as it will create too tight of a bond to allow for easy removal of the thin Top piece from the plywood after planing without breakage.

Next, laminate (glue and clamp) the Outside Top (E) to the Inside Top (D). Once the glue has dried completely, cut the assembled Top (D & E) and Bottom (C) to their finished size of 4-1/2" x 7-1/2". Run the Top through your Thickness Planer — with the Inside Top (D) up — and plane it to the required 1/4" thickness.

Assembly of the Basic Box

Finish sand all inside surfaces of the box and dry fit them together. If everything fits properly, apply a small amount of glue to the mitered corners of the sides (A) and ends (B) and clamp them together. Be sure to use only a small amount of glue and wipe away any excess immediately with a cloth. You'll make a series of saw cuts later to separate the Top of the Box from the Bottom.

Allow the completed box assembly to dry thoroughly for 24 hours, then sand it lightly. It's best to hand sand the Box at this stage to avoid removing too much stock.

Forming the *Keyed* joints with a special Jig

Building and using the special *Keyed* Joint Jig shown here will add strength and "class" to your finished Box. When the Jig is used in conjunction with a 1/4" Dado Blade, you'll get the correct width groove with a flat bottom. **NOTE:** You could also use the Shopsmith Router Table Kit with a 1/4" Straight Router Bit to perform this operation.

Be sure to allow an extra 3/16" between the top and middle *Keys*, since this will be removed when you cut the Box assembly apart later to form the Lid.

Thickness plane the dark accent stock (walnut in our case) that you'll use to create the 1/4" *Keys* (J) so they'll fit snugly in the 1/4" grooves you cut for them, above. Cut your *Keys* off of your stock at a 45-degree angle, then use your Drum Sander to form a slight concave "dish" on one edge of each *Key* to provide a little extra glue space.

Glue the *Keys* into their slots. Once they've dried completely (12 hours or so), use your Table Saw or Bandsaw to carefully saw off the excess *Key* stock. Finally, use your Belt Sander to sand the *Keys* flush with the Box surfaces.

Separating the Lid from the Box

Using your Table saw with a blade that takes an approximate 1/8" kerf (Shopsmith's 10" Carbide Tipped Combination Blade or Hollow Ground Blade will work nicely for this job), cut off the Box Lid by guiding the assembled Box against your Rip Fence. Set your blade's depth-of-cut to slightly more than the thickness of your stock. See the drawing for the exact dimensions of where to make these cuts.

Base Assembly

The Base Assembly is made from 3/4" x 3/4" dark accent stock (in our case, Walnut). First, cut your Base Sides (F) and Base Ends (G) to size, per the Bill of Materials. Next, miter their corners to a 45-degree angle, test-fitting as you go to be sure the Base Assembly fits properly around the assembled Box Bottom.

Next, use your Bandsaw or Scroll Saw to cut out the recessed areas between the Feet as shown in the drawings. If necessary, use a small Drum Sander to smooth these recessed areas prior to assembly.

Finally, use a hand plane or a Router Table with a Chamfering Bit to chamfer the outside top edges of the Base Sides and Ends.

Tray and Supports

Cut the Tray (H) and Tray Supports (I) to size per the Bill of Materials. Glue the Tray Supports in position and secure them with spring clamps or small Handscrews until they dry thoroughly.

Use the Shopsmith Router Package with a 1/4" Router Chuck and a "3-in-1 Router Bit" to form the recess in the bottom of the Tray, as shown in the drawing.

Final steps and finishing

Hand sand all completed pieces of the box to a smooth finish, then use a sharp chisel to hand cut the mortises for the hinges.

Carefully glue the Base Assembly together around the Box Bottom. A band-type Framing Clamp will make easy work of this job.

Once everything has dried thoroughly, apply the finish of your choice.

Bill of Materials

(finished dimensions in inches)

A	Sides (2)	1/2 x 3-3/16 x 8 (oak)
B	Ends (2)	1/2 x 3-3/16 x 5 (oak)
C	Bottom	1/4 x 4-1/2 x 7-1/2 (oak)
D	Inside Top	3/16 x 4-1/2 x 7-1/2 (oak)
E	Outside Top	1/16 x 4-1/2 x 7-1/2 (spalted beech)
F	Base Sides (2)	3/4 x 3/4 x 8-1/2 (walnut)
G	Base Ends (2)	3/4 x 3/4 x 5-1/2 (walnut)
H	Tray	1/2 x 3 x 4 (walnut)
I	Tray Supports (2)	1/8 x 1 x 7 (oak)
J	Keys (12)	1/4 x 3/4 x 1 (walnut)

Hardware

(2) 1" x 3/4" Solid Brass Hinges