

The Classic Mantel Clock

Here's an easy-to-build, "bracket-style" mantel clock that's sure to fit in with virtually any room decor!



Mantel clocks are fairly simple to make and are universally well received as "heirloom gifts"...which makes them a great choice for Holiday gift-giving. Here's how we made ours:

- 1: Use your table saw, jointer and belt sander to cut, joint and sand all pieces to their final dimensions, as shown in the List of Materials.
- 2: Since all of the pieces of molding used in this project are relatively small in size, we believe the Router Table provides the safest way to handle cutting the required molding profiles. Here are a few important tips to keep in mind when using Router Tables:
 - If you're working with hardwoods, an electronic router motor speed control will help you slow down the bit sufficiently to avoid burning the workpiece. If you don't have such a control, cutting your profiles in multiple passes will also help.
 - Make your end grain cuts first. This way, the subsequent long grain passes will clear up any splintering or tear-outs made by the end grain cuts.
 - Good dust collection is especially important when using Router Tables, as any routing operation will throw dust and debris far and wide if you fail to take measures to collect it at its source. .
 - Always feed your workpiece against the rotation of the router bit...not with it, as making "climb cuts" with a router can result in dangerous kick-backs.
 - Whenever possible, use safety devices such as featherboards and push blocks or push sticks to keep your hands out of harm's way. Don't forget eye protection, as well.
- 3: Start by routing a 5/32" Roman Ogee on all four edges of part (C). Next, move to part (B) and make the indicated cuts with a 1/2" Cove Bit...followed by a 1/4" Straight Bit to make the small step at the top. Finally, use a 1/2" Round-Over bit and a 1/2" Cove Bit to cut the profiles in the top of part (A). **REMINDER:** For the smoothest results, it's usually best to complete routed profiles in multiple passes instead of trying to make your cuts in a single pass.
- 4: The Clock Feet are made using the same basic techniques as the Upper Case Moldings. Use the following Router Bits: 1/2" Round-Over bit, 1/2" Cove Bit and 1/4" Round-Over Bit. This completes the molding operations.
- 5: Cut two oversize pieces of 1/4" plywood or masonite for the front (E) and back (G). Use contact cement to attach walnut veneer (H) to the plywood.
- 6: Use a 1/4" Straight Bit to rout a stopped groove in the front edge of parts (C). Also rout a groove in the front edge of parts (D). These grooves should be about 9/32" wide and 1/4" deep to accept the veneer-covered Clock Face (part E) when the Clock is assembled.
- 7: Next, use your Drill Press mounted Router set-up with a 1/4" Straight Bit to create 1/4" by 1/4" deep mortises in parts (C) — to accept the 1/4" by 1/4" tenons you create on the ends of parts (D). This overhead set-up is preferred for operations such as this since it provides maximum visibility and safety while making your stopped mortise cuts.
- 8: Form the 1/4" by 1/4" tenons on the ends of parts (D) – to fit the mortises in parts (C). Dry assemble parts (C) and (D). When you're satisfied with the fit, put a 1/8" chamfer on the front and back edges of parts (D).

- 9:** Dry assemble parts (C) and (D). Measure and cut the veneered plywood (E,G,H) to fit the assembled case frame (C,D) **NOTE:** The back is different than the front because it must be hinged to provide access to the clock movement.
- 10:** Dry assemble and clamp parts (A, B & C). Drill two 3/8" holes through parts (B & C) and one stopped 3/8" hole into the bottom of part (A). Insert a 3/8" dowel through these holes to help align these three parts during assembly and glue-up.
- 11:** Glue parts (A, B & C) and clamp together until dry. Glue and screw the two feet (F) to the base (C). Once the top assembly has dried, drill two holes for the top handle (bail).
- 12:** The Clock can now be finally assembled. Glue and clamp the top, bottom, sides and front face together, being careful to keep everything square during assembly. Once the assembly has dried thoroughly, drill the appropriate-sized hole in the face panel for your clock movement.
- 13:** Sand the assembled case thoroughly, vacuum the sawdust away, wipe with a tack cloth and apply the finish of your choice.
- 14:** Install the movement, handle, back hinges and any decorative accents.

List of Materials

(finished dimensions in inches)

A	Walnut	3/4 x 4 x 11
B	Walnut	3/4 x 5-1/2 x 12-1/2
C	Walnut (2)	3/4 x 6 x 13
D	Walnut (2)	3/4 x 4-1/2 x 10-1/2
E	Plywood or hardwood	1/4 x 10-1/2 x 10-1/2
F	Walnut (2)	3/4 x 3-1/2 x 7
G	Plywood or hardwood	1/4 x 10 x 10
H	Walnut veneer	12 x 24

Clock parts sources of supply:

Here are a few on-line sources for clock movements and parts.

[Klockit – Lake Geneva, WI – 1-800-556-2548 – www.klockit.com](http://www.klockit.com)

[Clockworks – Westfield, MA – www.clockworks.com](http://www.clockworks.com)

[Cherry Tree – Belmont, OH — 1-800-848-4363 – www.cherrytree-online.com](http://www.cherrytree-online.com)

[Murray Clock Craft – Willowdale, Ontario – 1-800-268-3181 — www.murrayclock.com](http://www.murrayclock.com)

[PM Clocks – Louisville, CO – 303-665-3727 – www.pmclocks.com](http://www.pmclocks.com)

