Cajón is a Spanish word meaning large box. The origin of the cajón drum can be traced to Peru, most likely during the late 18th or early 19th century. The instrument is associated with the Afro-Peruvian musical genre. It is relatively simple to construct, built with an internal snare drum wire set to produce a clear snare sound and a warm bass sound.

The body of my cajón is made of 1/2” Baltic birch plywood. The front is a 1/8” thick scrap piece of three-layer luan plywood from an old hollow-core door. The snare adjustment rod was made from a shovel handle, and the feet were salvaged from my old compact-disc player. You could use any good-quality plywood for the body, but be sure to use the best 1/8” thick plywood, made of at least three layers, for the front (tapa). Store-bought dowel and rubber bumper feet could be used for the remaining parts.

**The Body**

To build the body, cut two 12” x 18” pieces for the sides and two 12” x 12” pieces for the top and bottom. I used miter joints, but rabbet joints would work as well. Sand any tear-out and glue, nail and clamp the body, ensuring that it is square and all corners are flush. Use a damp sponge to wipe off any glue squeeze-out.

Next rip four square sticks, each about 10” long. Glue and brad one into each inside corner. These will strengthen the body to keep it square and stable, since the musician sits on the cajón while playing it. Remove any squeeze-out.

After the glue has set overnight, use a wood chisel to remove any hardened glue spots and sand all four sides smooth. To make things easier, clamp a board across your work surface and lower the box over it so that it’s at a good working height, as shown.
To make it comfortable for the musician to sit on the cajón, use progressive-grit sanding blocks or pads to round over any sharp corners and to smooth the eight edges, ensuring they are flush to one another. At this point, decide what will be the bottom front of the box and mark it on the inside.

Use a pencil to darken about 3” to 4” along each length of the two upper front corners. In several stages, sand and re-mark until you remove close to 1/16” of material. (Use a straight edge to track your progress.) The clap sound will be produced from these hollowed out areas.

Cut a 1/4” piece of plywood for the back and a 1/8” piece of plywood for the front (tapa), according to the exterior measurements of the box. Sand at least the outer faces. It’s also important to sand all edges and corners of the tapa to prevent slivers while playing. If the tapa is bowed at all, the crown must be inside the box.

A third of the way up from the bottom of the back panel, cut a 4” hole centered horizontally. This will allow the bass sound to escape. It’s also useful for carrying the cajón. I used a drill press circle cutting jig to bore the hole, but a jigsaw or rotary tool could be used. Sand the hole smooth, again to prevent slivers.
The Snare Sound

To produce the snare sound, you will need to purchase a snare drum wire set (shown) from a musical instrument store. They can usually be found for less than $10. The set must be cut in half. To do so, mark a centerline on a piece of masking tape stuck to a wood strip. Center the snare wire set on this and secure it with masking tape at each end. This makes it easier to cut the wires individually using a pair of wire cutters.

Use a 1” or similar-sized dowel to support the snare wire set. The dowel attaches to the sides and is situated toward the front of the box. To cut it to length, measure from the inside edge of one side of the box to the outside edge of the opposite side and add 1/8” for clearance. At the drill press, bore a 1/4” hole at each end, one 1” deep to accept a 1” long dowel and one 2” deep to accept a 2” long 1/4” carriage bolt.

To secure the carriage bolt, drill a 13/32” hole in the side of the dowel (in line with the carriage bolt) to accept the 12mm long x 10mm diameter cross dowel into which the carriage bolt will be threaded. I created a flat spot on the dowel, which is optional. To do so, I milled it at the router table holding the dowel between the jaws of a parallel bar clamp. A rasp could be used instead.

Make a flat spot on another dowel. Cut and glue it onto the wider end of the inside face of the back panel. No nail is necessary, as the clamps will hold it until the glue sets. This dowel, the addition of which is optional, will act as a smooth handle to carry the cajón.
The Assembly and Finish
Slide the dowel through the larger hole, then slide the carriage bolt through the opposite end and thread it into the cross dowel using a screw driver to align it. Pre-drill holes and secure the two halves of the snare wire set with small screws. Another option is to drill a shallow 1/4” hole on each inner side of the box, about 2” away from each corner, to add a 1/4” dowel on which the snare wires will rest. I put vinyl tubing over this dowel to kill the sound from the wires. To turn the snare sound on and off, rotate the fixed knob so that the wires lean (or don’t lean) against the tapa and tighten the opposite knob, which will thread the carriage bolt into the cross dowel to lock the assembly.

The finish is a matter of personal preference. I applied three coats of shellac to the box sides and back panel and two coats of Danish oil to the tapa.
Pre-drill and fix the tapa and back panel using flat-head screws (no glue), leaving about 4” free on each side of the two upper corners of the tapa to get a clap sound. The final detail is to add some rubber bumper feet to each bottom corner.

To play the cajón, sit with one leg on each side of the box. Use your fingers to hit the 2” upper area of the tapa to get a clear snare sound. For the bass sound, hit the tapa about 6” down from the top. For the clap sound, hit high on the upper corner using the outer edge of your thumbs.

Below is my completed cajón, ready for jams, gigs and fun musical sessions with my family. Build one for yourself, your kids or your grandkids. It’s easy to play and it creates an enjoyable sound.

Text and photos by Serge Duclos

Serge Duclos started woodworking 40 years ago after purchasing a house. He soon found it was a way to relax from the stress related to his job as a human resources professional. Since retiring in 2004, Serge continues to enjoy his pastime and to update his bilingual woodworking blog http://atelierdubricoleur.wordpress.com with his projects, as well as his tips and techniques.