

The Coal Mountain Panjo is a three-string instrument inspired by Folk Instruments from the 1800's in the Appalachian Mountains.

The packet includes:

- Assembly instructions with templates
- 1 set of tuning keys with 4 small screws to attach and 3 round white rings to slide over the tuning key post
- 3 strings
- 4 machine screws to fasten the soundboard (top) to the pan
- 2 self drilling screw to fasten the neck to the soundboard (top)
- 1 pick
- 1 set of instructions how to play (with songs)

You will need the following items not included in the packet:

- 9" cake pan for the resonator (sound chamber)
- 10 1/2"x10 1/2" piece of 3/16" plywood for the soundboard (top of panjo)
- 2 pieces of 3/16 plywood (1 3/16" wide and 9" long) for the fret board
- 1 Cedar Board 23" long and 1 3/16" wide and 5/8" thick for the neck
- 2 small pieces of oak or hard wood for the nut and bridge.

On the plywood, trace the pan to cut out top soundboard.

Cut out neck insert in cake pan 1/8" wider and 1/4" deeper than the neck.
The extra space allows for sound to escape the pan.

After the hole has been cut out for the neck attach the top (soundboard) using the 4 machine screws supplied in packet.

To assemble the neck:

Cut out 2 pieces of plywood 9" long and 1 3/16" wide (same width as the cedar board).

Using wood glue attach the plywood on top of each other to the cedar board (neck) 5" down from the end of the neck. This should leave 9" from the bottom of the neck that will insert into the pan.

Using the template provided, mark the fret placements. Then using the wood glue attach the toothpicks, supplied in packet, (frets), to the plywood fret board on neck.

Using 1 of your small pieces of hardwood.

The neck nut will need to be placed and glued against the plywood (fret board) on the 5" side. The neck nut should be 1 3/16" wide, 1/2" in height and 3/16" thick. The top of the nut needs to be sanded at an angle and the string slot should only have about a 1/16" of contact. Cut the slots using the supplied template for the string to pass through. A rubber band will hold the nut in place while the glue sets.

Sand neck to the desired smoothness and round the back of the neck with a belt sander or router with a round over bit.

Before attaching the strings round edges of frets (toothpicks) to allow easier finger movement when playing the instrument.

To attach tuning keys to neck; on the 5-inch side use the templates provided to drill 3 1/4" holes to insert the tuning keys. Insert keys from the back of the headstock and attach using smallest screw in packet. There is a round white cover that will slide over the tuning key post.

To attach the neck: insert through the neck whole and attach with two 1 1/4" self drilling screws found in packet.

Making the Bridge

Using your 2nd small piece of hardwood, cut 2 1/4" long 1/4" wide and 3/8" high. Cut out 3 string slots using the template. Sand the bridge to a wedge shape. Remember the strings should have minimum contact with the wood, only about a 1/16 of an inch. (This will create the best sound)

Adding Strings to the Panjo:

Drill 3 small holes, (smaller than the ball at the end of the string), at the end of the panjo (cake pan) through the lip of the pan, parallel to the neck. The strings will insert through these holes and cross over the bridge up the neck, cross over the nut, and attach to the tuning keys.

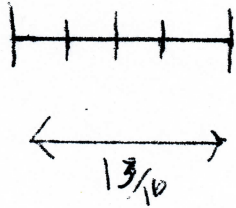
When attaching the strings the smallest string needs to be inserted closest to the floor (when you hold the panjo upright as if playing). The thickest string needs to be at the top of the instrument. Insert strings through keys. The thickest string needs to attach to the key closest to the nut. This string will be wound clockwise. The other strings will attach to the 2nd and 3rd keys in order. Those strings will be wound counter clockwise.

The Bridge should be placed under the strings 13 & 3/4" from the Nut (top of the fret board).

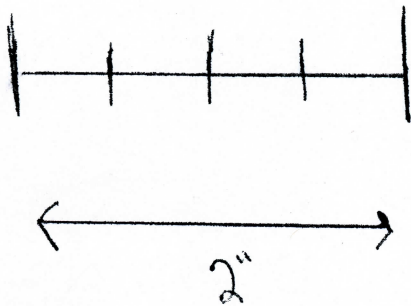
Using an electronic tuner or download a tuner app and tune to D, A, D.

If you have buzzing or muted strings the nut or bridge slots may need to be opened up some or the fret height may need to be filed down some as well.

Nut Template



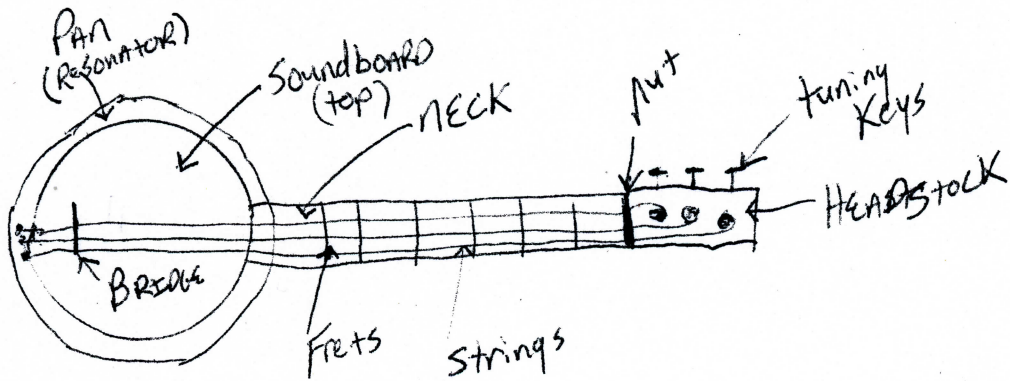
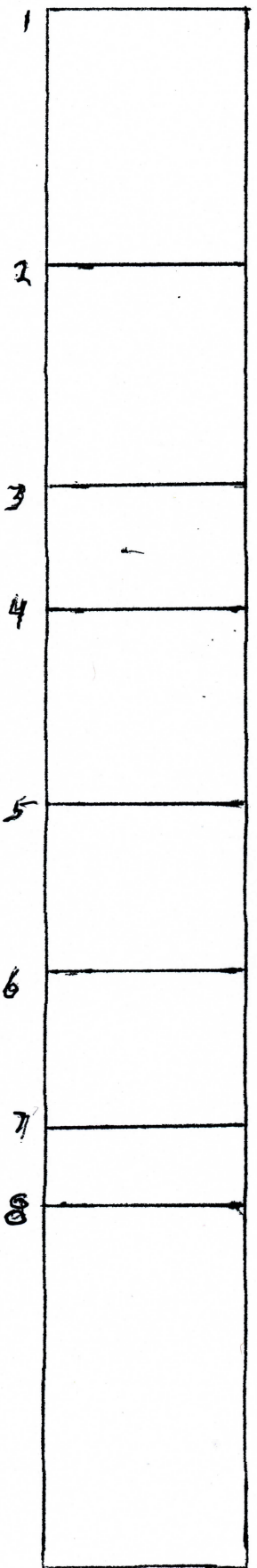
Bridge Template



Head Stock Template



FRET SPACING TEMPLATE



8 toothpicks glued
9" Long x 1 3/16"