

FretMaestro "How To" text.

The 12 steps to ultra-high precision Fret Leveling:

1. Check for swollen or shrunken fret slots. If the fret slots are not right, this must be repaired before considering any manner of fret leveling.
2. Check for lifted frets, reset them if any.
3. Using a notched straight edge check neck relief with strings on and tuned, (*strings in good condition - tension is not degraded*), place the straight edge with teeth abutting saddle side of frets where there is no wear for best read, ignore wear daylight. If you like the relief there is no need to flatten the neck. NOTE: do not support the guitar near the headstock because the weight of the body flexes the neck. Instead, support the guitar as close to the body as possible.
4. If the relief is not to your liking, loosen strings and tie back off the fretboard using string spreader, blue tape or... use the notched straight edge, adjust truss rod, turn right to tighten to a back bow, left to loosen into relief. If the truss rod does not function this must be corrected before putting more time, effort, and money into the guitar.
5. The ideal practice for leveling frets is to remove the minimal amount of material. Find the shortest fret (or with the deepest string grooves) as the first fret to work on. Use fret height gauge, it's numbered 0-11 matching the 0-11 settings on Maestro. Hold the gauge as close to the bottom as possible, place over fret, change notches until the gauge rocks on the fret, check the low E and high E, and middle to know the score of the fret. For example, the gauge rocks at number 5, for certainty we set the Maestro to setting 4, lower number shallower cut. For string groove, walk it in from there.
6. Position neck support close to target fret. Cut two strips of Glide strip, place one on each side of the fret leaving a 1/16" or less gap (debris gutter) between the edge of the glide strip and the target fret.
7. Mark fret with a sharpie. Use the 150 file to file the fret 4-6 straight even strokes, let the weight of Maestro do the work (*a stroke is one direction, diamond file cut both directions, four strokes are two forward two back*).

8. If none of the sharpie is cleaned, set Maestro to next highest setting, in this example #5, add a strip of office scotch tape under each glide strip to get a .0015" shallower cut Vs .003" without scotch tape. If this works we save fret material up to 50% working time.
9. Now we'll likely see that the sharpie is partially cleaned, typical because the cleaned off area is where the fret is asymmetrically high out of radius. Asymmetry causes buzz, early fret out, poor tone, and inconsistent play.
10. Maestro the fret, often using a tooth brush and a belt sander eraser to keep the fretboard and file clean. *"You can spray the file with Dry Lube, some customers use something like furniture lemon oil."*
11. The sound and coarseness of filing decreases as the radius and height form to fret height. Be sure that your strokes are centered straight along the fret length, careful not to side cut the fret, especially true using the "C/V" crown narrowing file. *(Note: Narrowing file; if filing is not straight, you'll see one side of the fret at one end is getting shaved, and at the opposite end of the fret the opposite side is getting shaved; the filing stroke is not straight. Using only the weight of file makes it a lot easier to keep "C/V" straight).* When the file sounds and feels like it is not doing much, next step...
12. Sharpie mark again, change to the "C/V" crown narrowing file. It does not change the height of the fret. File until the sharpie is narrowed to your preferred fret crown width. Count the strokes to use for all frets. Change to the 300 file and finish the fret, the Maestro will bottom out on the glide strip not allowing further cutting. Maestro should be flush to the glide strip.

A. The first fret is done, we now know the Maestro setting and the stroke count for the final crown narrowing. Use these for the rest of the frets.

B. NOTE: After the 4-6 test strokes, (Step 7) we can save time by first using the "C/V" crown narrowing file to make faster work using the 150 file. After the 150 use the "C/V" file again to narrow the crown to what you like, then finish with the 300. *(Do not use the 300 for leveling, the 300 is made for smoothing – not cutting).*

C. NOTE: If after (Step 8) with the scotch tape layer, you are not able to clean all the sharpie off, making certain this is the case, remove scotch tape, use only the glide strip, this allows Maestro to cut .0015" deeper without changing the setting. If the fret has string wear walk it in to learn the setting, (with and without scotch tape, walk it in).

Cautionary Note: on older guitars the outer edges of the fretboard may be wear rolled. This makes using the Omni not feasible. Use a Radius Maestro, center the strokes to the middle of the fret making sure not to tilt the file to the rolled edge. Using this technique, Maestro ignores the roll and forms the correct radius and height.

If you have any questions, doubts or concerns, know that your success is the only thing that matters, so please don't be shy about asking for help. We will put in whatever time it takes to get you confidently on the right path. [SixStringers.Inc@gmail.com](mailto:SixStringers.Inc@gmail.com) or call (323)428-2479, Steven.

Coming Lessons: (or ask us now)

Heel Ramp: Heel ramps are rare; this is when the end/heel of the neck lifts making a kind of ski jump. Not to be confused with Heel Fall Away, this is usually a deliberate downslope feature of the original build of older guitars. It is the opposite of a Ramp.

Well-worn Fretboards: Finger and string wear are to be expected over time. FretMaestro Radius handles this perfectly.

No Truss Rod, such as pre 1985 Martins: If the non-adjustable neck relief makes for higher string action than is wanted, we can mitigate this with Maestro.

Dreaded "S" Curve: This is bad, but in rare cases we can mitigate by careful Maestro planning and execution. Better solution, try PLEK, sometimes it works, sometimes not, they should know from the scan, and tell you yay or nay. Best solution, replace neck.