

General Tips

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Reference Guide: Bow Measurements

Violin

4/4 Size Bow = 29 1/8"

3/4 Size Bow = 27 1/8"

1/2 Size Bow = 24 3/4"

1/4 Size Bow = 22 1/4"

1/8 Size Bow = 20 1/16"

1/10 Size Bow = 18 1/8"

1/16 Size Bow = 17 1/4"

Viola

16" Size Bow = 29 1/2"

Cello

4/4 Size Bow = 28 1/8"

3/4 Size Bow = 26 1/4"

1/2 Size Bow = 24 3/4"

1/4 Size Bow = 22 3/4"

1/8 Size Bow = 21 1/8"

1/10 Size Bow = 19 1/8"

Bass

French Style Bow = 28 1/2"

German Style Bow = 29 1/2"

Reference Guide: Sizing of Instruments for Students

Violin - With arm extended, measure the length from the left side of the middle of the neck (where you would take a pulse) to the middle of the palm on the left hand.

14 1/8 - 16 7/8 1/16 Size Violin

16 7/8- 18 1/2 1/8 Size Violin

18 1/2 - 20 3/8 1/4 Size Violin

20 3/8 - 22 1/4 1/2 Size Violin

22 1/4 - 23 3/4 3/4 Size Violin

23 3/4 & Up Full Size Violin

Viola - The hand should be able to cup the scroll while the instrument is in playing position.

Cello - While sitting straight in a chair, feet on the floor, with the endpin partially extended, rest the cello against the chest at a slight angle. The C-string should be near the left ear, and the top of the cello body should be in contact with the breastbone. The left hand should be able to run the length of the fingerboard. The knees should comfortably hug either side of the instrument.

Bass - Stand in playing position with the instrument. The nut should be near eye level. The right hand should be able to run the length of the bow across the strings comfortably. The left hand should be able to finger all the strings.

Reference Guide: Ebony, Ebonized and Ebonite

Ebony: Is one of the densest woods available. It is a preferred wood for violin fittings.

Ebonized: Most commonly used to describe a hard wood that is dyed or stained dark black to give it the look of ebony. It is sometimes mistakenly used for woods that are painted black, an inferior way of treating the wood.

Ebonite: A hard rubber or plastic that resembles ebony.

Violin Tuning

A violin is tuned in perfect 5ths to GDAE. The fourth string (the thickest) being tuned to the "G" that is a 4th below middle "C" on a piano. We've found the best way for students to tune is using a violin pitch pipe because it helps build ear training, or of course a chromatic tuner.

Maintenance & Cleaning

The life span of a violin family instrument directly correlates to how well it is taken care of. The daily ritual of cleaning and the proper storage of an instrument are crucial to its longevity and playability. Always wipe down an instrument's strings with a

soft, dry cloth after it is played. There will be rosin from the bow left on the strings and rosin dust underneath the strings on the body. This will build up and degrade the integrity and resonance of the strings if not wiped down, as well as leave a nasty build up on the body. Also, always loosen the tension on the bow after use. Not doing this could cause the bow to warp or break over time.

Violin Storage

Excessive humidity and dryness are arch enemies of violins. A good balance between the two is important for good violin health. Dry weather might cause cracking in the wood and finish whereas extreme humidity and heat could cause the varnish to bubble. It is best to keep the instrument indoors in an air-conditioned room. If you don't have the luxury of AC, an interesting trick is to keep a wet paper towel in a punctured plastic bag in the violin case. This will act as a humidifier and keep the violin safe. Never leave a violin in a car, as the heat will be devastating to it. Because it is easy to damage a violin, keep the instrument in a closed case after it has been played. A violin that's rarely used also needs its case opened frequently to prevent the appearance of carpet beetles, which destroy bow hair. Violins are delicate instruments that can be greatly injured by the slightest mishap. Following these simple rules can keep a violin around for a lifetime or longer.

Polishing a Violin.

Violins are much more sensitive than other stringed instruments and as such they need a bit more care. We recommend polishing a violin not more than once or twice a year. Polishing the violin will only help it to look better; it will not enhance the playability or sound. Otherwise, just keep the violin dry and dust free with a soft cloth. Use violin polish when ready but be careful NOT to get any polish on the strings or the bow. Getting polish on either of these will damage the items.

Viola Tuning

A viola is tuned in perfect 5th's to CGDA. The fourth string (the thickest) being tuned to the "C" that is one octave below middle "C" on a piano. It is easy for students to tune their viola, and build ear training, by using pitch pipes, or of course a chromatic tuner

Changing a Fine Tuner Tailpiece

Changing a fine tuner tailpiece is an easy job for our violin family instruments. First, remove the strings on the violin and simply remove the existing tailpiece and tailon. Line up the end of your new fine tuner tailpiece to the bottom of the saddle. Thread the ends of the tailon, or tailgut, through the holes at the bottom of the tailpiece. Fasten the screws and collars to the hanger ends and adjust evenly. Then fit the tailon around the endpin groove. The lower saddle bears the weight of the tailpiece so adjust the screws so that the saddle is high enough for the tailpiece to clear the belly of the instrument. Now the violin is ready to be restrung and enjoyed. In just a few simple steps you are on your way to playing again!

Tuning a Cello

The cello is tuned to CGDA, with the "A" being just below middle "C". We offer cello pitch pipes that make it easier for students to tune their instrument, while developing ear training.

Tuning a Bass

The bass is tuned to EADG, like the bottom four strings of a guitar. Using a quartz tuner for bass will help tune the instrument while further developing ear training skills.

Shaping a Violin Bridge.

Just like a guitar, a violin can have its action adjusted to an individual's taste. The shaping of the violin bridge will determine the clearance of the strings from the end of the fingerboard (known as action to a guitar player). Each violin's fingerboard is slightly different, and the bridge can be shaped to match the individual variations in the fingerboard. To do this procedure you will need a flat file, a small V-shaped file, and 180-grit sandpaper. Here is a simple setup procedure that can be done even if you are not a violin expert:

1. At the end of the fingerboard, measure the distance from the fingerboard to the string at the G and E strings.
2. We recommend a clearance of $3/16''$ for the G string and $1/8''$ for the E string. Use the flat file to reduce the unnecessary clearance by shaping the bridge accordingly. Make sure that the new bridge shape is similar to the fingerboard. Be careful not to file the bridge too low.
3. You may need to measure and file the bridge a few times to get the clearance right. Start small.
4. Use the 180-grit sandpaper to smooth the rough edges off the top of the re-shaped bridge.
5. Next you will need to put a slight notch for the strings in the bridge to maintain proper string spacing. Measure $7/32''$ from the centre of the bridge to the left. Using the V-shaped file, put a small notch in the bridge.
6. Measuring $7/16''$ left of the existing notch, put another notch in the bridge.
7. Repeat steps 5 and 6 for the A and E strings to the right of the bridge.

Applying Rosin to a Bow.

Before applying rosin to a violin bow, be sure that the rosin cake has some powder on the surface. If there isn't any powder on the surface, scrape a coin along the surface to give texture to the cake. Making sure that the bow hair is taut, rub the rosin gently along the bow hair from the frog to the top of the bow. Do this 25+ times if the bow is new, 4+ times if it is not. Be careful not to touch the bow hair with your hands when putting rosin on, as the oils in your hand will damage it. Put the bow to the strings and play a few open strings. If there is any slippage with the bow, or if little sound is being produced, it needs more rosin. A properly rosined bow will bring a very clear, expressive tone from the violin

This is one of a series of Instruction sheets prepared by JPB Music to help players gain a better understanding. We write these to assist, but if you are still unsure, please either phone for more advice, or ask your teacher for help.

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