

## Tuning Tips

By John Riley

Every type of music has its own sound. Stylistic issues, acoustical needs and music history have helped shape our concepts of good sound. Regardless of style concerns, the principals of drum tuning are fairly straightforward; drums sound best when each drum is in tune with itself and when the collection of instruments sound harmonious.

The first step in drum tuning requires that each drumhead be evenly tensioned. Remove your drum from its' stand and put it on a table or the floor. This will allow you to isolate the head to be tuned. Before you put a new head on the drum first wipe any residue off of the shell and off the hoop. Place the head on the shell and the hoop on the drum. Make sure that the head and hoop are centered on the shell. Finger tighten the tuning screws. Now tighten each screw one rotation with your drum key. It's best to tighten across the drum, i.e. go from the screw in the 12:00 position to the one at 6:00, then the one at 3:00 to 9:00 etc. After you have turned each screw one rotation press in the center of the head to help regulate your adjustments. Repeat this procedure until you are approaching your desired pitch. Now the fine-tuning begins. With your finger or a drumstick gently tap the head 1" inside each tuning screw. Listen to the pitch at each point. Make a mental note of the highest and lowest points. Slightly tighten the lowest screw and loosen the highest one. Now press the center of the head. Tap each point again; different screws may need adjustment each time. Adjust the highest and lowest points towards the middle. Continue the adjusting and pressing procedure until the head is evenly tuned. Turn the drum over and repeat the process on the opposite head.

To accommodate the needs of various styles, three types of tuning are most common. All are best achieved using the techniques above but each seeks a different result and that is obtained by adjusting the pitch relationship between to top and bottom heads.

The most open and resonant sound occurs when both the top and bottom heads are in tune with themselves and are tuned in unison with each other. This is a typical jazz type tuning. The selection of the overall pitch of the drum is a very personal choice but jazz drummers have often preferred high pitched ringing drums.

For a more pop or funk tuning, tune the bottom head a minor third lower than the top head. This will give your drum a deeper tone and a slight fall-off or dip in the decay.

The third tuning requires that the bottom head be tuned higher than the top head and again the interval of a minor third consistently yields pleasing results. With this tuning, sustain is reduced and the tone is reflected towards the player, or microphone.

Snare drum tuning is also personal but a good starting place is to get each head in tune with itself and then adjust the heads so that the bottom head is a Perfect fourth lower than the top head. The old-timers and many orchestral musicians tune the snare drum to a B flat.

Perhaps bass drum tuning is the most varied from style to style. Jazz drummers prefer an open, tom-like resonance and, often, a high pitch. Pop and funk drummers often play low pitched, single headed bass drums and want more attack and less resonance. Deadening material is placed on the batter head to reduce resonance and help create more punch.

When I play in a big band I tune my bass drum fairly low and wide open - no muffling. For small group playing I'll bring the pitch up and may tape a 2" x 2" piece of paper towel on the outside of the batter head. I'll also adjust my bass drum tuning to help blend in with the bass player. With an acoustic bass, I find a lower, resonant tone works best. Because the electric bass has a more pointed sound, I am more likely to muffle my bass drum to give it a pointed attack.

One should always be aware of and sensitive to the acoustical properties of the room in which you are playing and adjust touch or tuning to help achieve a pleasing result. I want my instrument to sound great on stage and to sound great from the audience. I have noticed that drums seem to sound deeper from the audience's perspective than they do on stage so I will tune a little higher to get the sound I want "in the house."

Regardless of your choice of heads, coated or clear, single ply or double ply these tuning and acoustical guidelines hold true. Experiment with the different tuning set ups and try different head combinations to create your own sound. For information on my current Remo head set up check my web site at [www.johnriley.org](http://www.johnriley.org).

Tuning can be tedious work but I know that when my instruments are sounding good to me I am more inspired to practice and to play. Take your time tuning and get the most out of your drums. Good luck.