



# YAMAHA

## Educator Series

PERCUSSION



*Steve Anzivino*

*Steve Anzivino has been leading bands from behind the drum set for over 20 years, and since 1990 has been an integral part of the percussion department of Yamaha Corporation of America. His experience includes pit percussion and show work in the greater Boston and Grand Rapids areas, as well as performances in venues from small clubs to 10,000 seat arenas. Steve has a bachelor's of music degree in percussion performance/music business from the University of Lowell in Massachusetts. He is currently concert percussion product manager at Yamaha, and enjoys life in Michigan with his wife and three boys.*

## Drum Set Tuning:

### What's the Secret?

*By Steve Anzivino*

Drum Set Tuning – every drummer wants to know the secret. The secret is you. One of the great things about music is that it is a personal expression of the player. In this article I will present some basic tuning concepts for the novice through the professional. Use the following techniques as guidelines to find what sounds best to you.

#### Sound Basics

Creating a good drum sound begins with the equipment. Be sure the shell and hoops are perfectly round and the bearing edge (the highest point of the shell upon which the head stretches) is clean, smooth and even. Next, determine the type of sound you wish to achieve. Do you want a wide open, bright, higher-pitched jazz sound, or do you want a focused, dark, lower pitched rock sound? There are many variations that can be achieved through proper tuning. Read this article all the way through before trying any of the suggested methods.

#### Toms

- With the drum off its mount, hand tighten and seat each head evenly around the shell by keeping the head centered on the shell. Pressing in the center of the head as you hand tighten the tension rods will help seat the head evenly.
- Tighten the bottom head by using a drum key on each tension rod, one turn at a time with a criss-cross tuning method.
- As the head becomes taunt, tap lightly about an inch from the bearing edge in front of each tension rod. It is helpful to muffle the head opposite the lug that you are working, but with practice, this will not be necessary.
- Listen to the tone of the head and try to achieve the same pitch in front of each tension rod. This will ensure that the head is in tune with itself. The actual pitch will vary depending on drum diameter, head type, and desired drum sound.
- Tighten the top head by repeating the process used for the bottom head to get this head in tune with itself.
- If the heads are new, it is best to slightly over-tighten them and let them stretch overnight.

The next important step is determining the relationship between the top and bottom head. Most small and medium size toms produce a full, resonant sound when the bottom head is tuned about a 3rd higher than the top head. Try tuning to an interval of a minor 3rd by singing "Lullaby and good night." The interval from "la" to "by" is a minor 3rd. As toms get larger, the bottom head does not need to be



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much higher than the top head to achieve a full, resonant sound. If you want a shorter sound with a pitch that drops off, leave the bottom head somewhat loose and lower than the pitch of the top head.

Stand in front of your set-up drums and hit the top head of a tom with a drumstick; immediately tap the middle of the bottom head with your finger. You will hear that the sustain tone will match the pitch of the bottom head. This also shows why it is helpful to hear your set from the front for final tuning. Keep in mind that what you hear behind your set is different from what the listener hears from twenty feet away. Consider how your drums will be heard - through a microphone placed very close to the top head, or acoustically to a listener in the back of the room.

Remember there is a certain range in which a drum and a head sound good. If you try to achieve a sound lower than the drum's range, it will sound dead, and the heads may be floppy. In addition, if you try to achieve a sound higher than the drum's range, it will sound choked and the heads may be too tight and will sound "pingy."

A snare drum can provide you with your most personal form of musical expression at the set, so be especially careful how it is tuned. Repeat the tuning process as described for toms and incorporate the following special considerations:

- The tension of both heads should be fairly tight to achieve proper snare response and projection.
- If you are tuning the bottom head with the wire snares on the drum, it is difficult to hear a pitch as you tap in front of each tension rod. Therefore, depress the head with one finger in front of each tension rod and try to achieve an even resistance around the head.
- Tighten the top head so that you can easily depress the center approximately an eighth of an inch with one finger.
- The bottom head should be tightened a 3rd to a 5th higher than the top head. Sing "Here comes the bride. All dressed in white." The interval from "Here" to "comes" is a 4th. The interval from "all" to "dressed" is a 5th. The tension of the wire snares is also important and should be set so as not to choke the drum (too tight) or rattle loosely (too loose). It is sometimes helpful to give an extra turn to the tension rods on the bottom head directly next to the wire snares. This ensures good snare-to-head contact and back beat volume.

## Bass Drum

Bass drum tuning is fairly easy, but by no means unimportant.

- To achieve a relatively short, punchy sound, it is best to use a front display side head with a hole in it. The larger and more centered the hole, the shorter the duration of sound.
- To produce a fuller, livelier sound with more tone, use a front display head with a small, off-center hole, or no hole at all.
- Repeat the tuning process as described for large toms. Because it is more difficult to hear a pure pitch due to the size of a bass drum head, you can use the resistance method as described for a bottom snare drum head. This is essential if muffling material is touching the head. Most bass drum head combinations require some internal muffling, which can be done using a pillow, a blanket, or a commercially available muffling device. I suggest using a minimal amount of muffling so that the true sound of the bass drum can be heard.

## Stay Tuned

All of your tuning should reflect a surface that not only sounds good when played, but feels good as well. Use drums and heads that are in tune with your playing style and good luck in finding the secret of your sound.

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