

## How Your Sound is Affected by Hardware

Musicians always want to know how to change and improve their sound. Drumming discussions always include references like “How did so and so get that sound?”, for example. It’s clear that the many combinations of talent, equipment, and acoustics all make a difference in your sound. Also consider that judging a sound is subjective. If you like it’s good, and if you don’t it’s bad.

I’ve used 5” or 5 1/2” snare drums most of my life, with most of them having wooden shells. While in Atlantic City with a dance/show act, in the early 80’s, I decided to experiment with a “bigger” snare drum sound. I wanted to keep a clean, crisp sound, but simply get a deeper, “fatter” sound. So I bought an (expensive) name-brand 6 1/2”, wood shell drum, and used it that night. It had the same (Remo “Diplomat”) heads I had always used, at about the same tension.

Neither the band or the leader noticed it, much to my dismay. However, after the set, the sound man came up to me, and asked me if I changed something on the snare drum, and commented that it had a really *high-pitched, metallic* sound. (!)

*Simply put, the more metal you have, the more metallic your tone.*

The new drum had 10 lugs, as opposed to my 5 1/2” drum’s 8 lugs. The new drum also had thicker, more rigid hoops, and had a fairly massive snare strainer. Also, it was made out of plywood (translated “super strong 9-ply shell of birch veneer”, in the drum catalog) whereas my other drum was a Slingerland “Radio King”, with a single-piece, 3/4” maple shell.

You probably already know this is true, even if you haven’t given it much thought. Play an old “student model” snare drum with 6 or 8 lugs, and a lightweight snare strainer. Often these drums are the ones with the “meatiest” sound for their size. So, once you understand this, it will also occur to you that the same idea affects *all* of your drums. Snare drums and small toms are obviously more affected than big bass drums, for example, because there is a higher percentage of metal compared to shell material.

*More metal also muffles the drum.*

We’ve been talking about *tone*. What about *resonance*? If you want a big, powerful acoustic drum sound, think about the muffling effect of all the metal. How can the shell vibrate if there are 20 lugs, 2 metal hoops, or a massive snare strainer or tom mount. What will your bass drum sound like if you mount a pedal, 4 toms, and a couple of cymbals on it?

To a lesser degree, the finish also affects your sound. Does the drum have a lightly-laquered “natural” finish, or possibly a plastic or metal outer covering? If you have the chance, try and play some otherwise “identical” drums, and listen for the difference.

So, how do you get the ultimate, fabulous sound? ...

## Simply coordinate these things for the ultimate sound:

- Your ability to alter the sound with your hands (*your ears, connected to your brain*)
- The construction of the drum, and all the hardware items just discussed
- The size and weight of the sticks you use, and your control of them
- The type of heads you use, and how you tension the drum
- The fact that every room sounds completely different
- The difference between an acoustic sound and an amplified one  
(This leads to a long discussion on microphones, amps, mixers, effects, sound men, etc..)
- The sound you're trying to create
- The effect of the band on your sound. (For example, is it very loud?)
- The infinite number of perceptions of your sound that individuals have.  
(Whose judgment of *your* sound do you value and respect, above your own?)

All these things are facts, and you can't change them. If you're a new drummer, it can seem pretty intimidating. But, you'll find that as you become more experienced, you'll evaluate most of these things instantly and automatically. Just pay attention, and it'll eventually soak in.

Listen, experiment, and never stop developing!