

# Mute Use and the Intonation Tendencies

By Paul Baron

The use of mutes in brass instruments gives us a large variety of tonal variation. The “**Big Band**” and “**Swing**” era bands used a lot of different mutes and mute combinations for wonderful sonic effects and they are still commonly used today. The most common mutes are **Straight, Cup, Harmon, Plunger, and Solo Tone or Clear Tone** mutes. Each has a distinct sound and often comes with its own set of intonation tendencies or problems. I’ll talk about these most common mutes, their uses, tendencies first and then talk about some of the more unique and obscure mutes later. The mutes mentioned above should be part of every trumpet players arsenal since they are the most commonly written and called for. Depending on what job I’m playing, especially if it’s the first time playing with the group or a recording session where you have to be prepared for whatever the producer, arranger, or orchestrator wants, I might bring two different straight mutes, two cups, two harmons, and one each of the solo tone and plunger mutes. Since there are different manufacturers and differing sounds within the same mute type, I want to be prepared to be able to blend with the other players in the section.

The **Straight Mute** is often used for a military or March type sound. It can also be used to sound like a distant trumpet. Its sound is characteristically brighter and with a sharper attack than the cup mute and carries fairly well. The straight mute, depending on which manufactures mute you have, will tend to play a little sharp, sometimes as much as 15-20 cents sharp. Knowing that, if you have the time to pull out the tuning slide and get it back in for the next open horn section, it’ll make it easier to play in tune and you won’t have to “lip down” to play in tune. There are different materials used for straight mutes. The “stone-lined” mutes are sort of a hard condensed cardboard. It’s good to have one of these to sound like an old time swing era player. Most people use metal straight mutes in classical, jazz, and commercial settings. The three materials usually found for the mute bottoms are aluminum, brass, and copper. They are brightest sounding when made with all aluminum and darkest with copper bottoms, with the brass being in the middle.

The **Cup Mute** is a much mellower sounding mute and used more in jazz settings, although its use in classical solo literature is more common in newer pieces. The tradition “stone-lined” cup is the most common and one that everyone should carry with them. There are adjustable cup mutes that many people use, so I always bring one of them as well. Those mutes have the ability to change the sound more depending on how close in or far out you adjust the cup from the bell. The closer you get to touching the bell with the cup, the mellower and softer the sound gets. It also tends to go flatter as well.

The further out you adjust the cup, the louder and brighter, and closer to a straight mute sound you get. In general, the cup mute tends to play flatter and as you ascend it goes even flatter, as much as 25 cents. With the traditional “stone-lined” mute you want to evenly file down each of the corks so that there is about an 1/8<sup>th</sup> inch of space between the points of the cup and the bell. This way there is enough cork to grip the bell but when you gently twist it in the points should be nearly touching the bell. This gets the most traditional cup mute sound.

**Harmon Mutes** are still widely used in solo recordings. **Miles Davis** played the harmon and really made the trumpet sound like a vocalist. **Dizzy Gillespie** used the harmon a lot in solos, and **Chris Botti** also plays it in a smooth jazz setting. The harmon is a very expressive mute. It’s sound is very metallic and buzzy sounding. Today the harmon mute is usually played with stem out, in fact, some mutes are sold without stems at all. Years ago the stem was used more and when played like a plunger mute with the hand opening and closing over the bell of the stem, a vocal “wah-wah” sound would happen. Even though the stem isn’t as called for it’s still important to have a stem with you since you never know when the music will call for it. I often bring two harmon mutes, and sometimes even a third depending on who I’m playing with and the mutes they’re likely to bring along. The pitch tendencies of the harmon mute are similar to the straight, in that they tend to play sharp, and in many cases even more sharp as much as 25 cents. Again, if you have the time to pull out the tuning slide and get it back in after the muted section, this is the way to go.

The **Plunger Mute** is exactly what you might expect. It’s just simply a plunger you would buy at any hardware store. There are different sizes and the one I prefer is smaller. You might find it in the section where they sell parts for RV plumbing. The more you close the plunger over the bell the more muffled and flat it goes. Many people cut a hole in the center of the plunger where the handle would normally screw in to keep from going too flat. Since the plunger is used in a closed and open position, the music often dictates which way, open or closed, for specific notes. For a closed sound the parts will have a plus sign ( + ) and for open a minus ( - ) sign. This creates a sort of “ooh” and “ahh” sound. At first the coordination can be difficult but when you have a very specific notation for open and closed notes, practice very slowly to get the coordination down. You’ll find it really helpful to first pronounce the vowels “ooh” and “ahh” by following along with the music without the horn. When this gets to be second nature and you’re really hearing the vowels in the right place, then use the plunger in the right hand to make the movements, still without the horn, and say the vowels again. Once this movement feels natural try it slowly on the horn. When you really have the coordination down between the hand opening and closing and tonguing the notes, speed it up to performance tempo.

It's a very expressive sound when done well. There are some great recorded examples of plunger playing and my two favorites are **Clark Terry** and **Snooky Young**.

There are some other specialty mutes out there that were used very occasionally but are not necessary to have as part of your regular arsenal. Chances are, if you're like me, they'll sit on a shelf or in a box somewhere as a novelty item. An example of a mute I've never used is the **Buzz-Wow** mute. It's sort of like a cup mute with two holes in the end with a kazoo type membrane that buzzes more or less depending on how much you loosen or clamp down on the membrane. The **Mica Mute** is similar to the cup mute only a little more mellow sounding.

I think what is really important in the use of mutes is to listen to recordings where the mutes are being used. It's not enough to simply own them but important to know how to use them musically and traditionally appropriate to the style of music. Another important part about playing mutes is to learn the intonation and tendencies of each mute so that you know which direction they play, sharp or flat, and by how much. There are some mutes available that need minimal or no adjustment to play in tune and I have been fortunate to have found a company that makes straight mutes and harmon mutes that require no slide adjustment at all. Please look at my website for a link to the company and the mutes they make.

The use of mutes opens up a whole other set of possibilities for expression and sound. Listen to recordings and emulate until you really feel at home on the mutes, then experiment on your own. There's no telling what other cool sounds and effects you might come up with.