

Drums, Cymbals, and Gongs

Now that we've discussed keyboards and timpani, it is time to move on to the non-pitched "essentials" of the pit: drums, cymbals, and gongs. These instruments can enhance melodic passages, supply accompaniment, provide an infinite amount of color and rhythmic drive, and most of all, serve up powerful impacts.

CONCERT BASS DRUM

The concert bass drum is an absolutely essential piece of equipment for a pit. Not only will it deliver powerful impacts, but with some creativity, it can provide your pit with a wide array of color. For example, experiment with brush effects, try different keyboard mallets for "brittle" sounds, invest in a nice pair of rolling mallets to achieve thunderous rolls or quiet rumbles. Some groups have experimented, with great success, using 3 or 4 bass drums in the pit. This can produce overwhelming sounds!



Concert bass drums come in several different **sizes**. A good general size is 36" in diameter. There are several types of **stands** on the market as well. Make sure whatever stand you choose has large casters and allows the drum to vibrate freely. "Suspended" style stands often work the best. Replacement bands and bungees can be found in most hardware stores.



Here the drum is suspended in a hoop with large rubber bands or bungee cords.

To purchase "Up Front" please visit www.tapspace.com



Technique considerations

A well-tuned bass drum will have a long sustained sound. To control the sustain, use your free hand to **dampen** the batter head *after* striking the drum. The audience will seldom hear the sustain on the back head. If your fingers make a vibrating sound when you dampen the head, try holding a lamb's wool car washing mitt in your dampening hand. By leaving the mitt on the head when you strike the drum, you can produce dry, staccato notes.



For fast articulated passages (especially when they require two hands), try hanging a towel on the batter head. Make sure you don't over-dampen!



As for **playing zones**, a good general purpose playing zone is about 4 to 6 inches away from center. This will provide a nice balance of articulation and tone. For punchy impacts, play closer to center.



For rolls, each hand should be approximately half way between the center and the edge. You don't need to roll very fast on a concert bass drum. Let your ears be your guide!

Snare Drums



Clockwise from upper right: Piccolo snare drum, field drum, snare drum with multiple strainers, small diameter (10") snare drum.

FIELD DRUM (a.k.a. Military Drum)

This generally refers to a deep, wood-shell snare drum with gut or cable snares. It should be tuned much lower than a contemporary marching snare drum, and sounds best using plastic or synthetic skin heads. Its sound should be deep, and the snare tension rather loose, depending on the desired effect. Heavy, concert snare sticks with a large bead tend to work well on these types of drums.



Sometimes called "Scottys," the pipe drum is one of the main "voices" of the Pipe Bands in Scotland. It has a very distinctive sound due to its high tension (using woven kevlar heads), and **dual snares**. One snare mechanism is under the snare side head, and the other is underneath the batter head. Both snare sets are usually wire, unlike the gut snares on conventional marching snare drums. This gives this drum a very unique, high-pitched, ultra-crisp sound. Players who specialize in Scottish pipe drumming are generally rudimental

wizards! The performance style is very different than American drum corps. The notes are written differently, rolls, flams, and drags are interpreted differently, even the sticks are different. To be a true "pipe drummer" requires quite a bit of training. For our purposes, these unique drums can be used in the pit to obtain different *colors*. Check out Ralph Hardimon's percussion feature, "Musica Bohema" for the 1984 Santa Clara Vanguard. The pipe drum is the leading voice, and is to this day, one of the most innovative pieces written for drum corps.



Scottish pipe drums have wire snares under both the batter and snare side heads

CONCERT SNARE DRUM

A standard concert snare drum is 5" to 6½" deep with a 14" diameter. A piccolo snare is 3½" deep with a 12" or 13" diameter. These drums have an aluminum, wood, steel, brass, or copper **shell**. All of these size configurations and shell materials work well outside. It simply depends on your taste.

A single-ply, coated drum **head** will do the job. If the top head is too thick, the tone of the drum will be muffled. Remember, tone equals projection. A well tuned concert snare drum should have a bit of "ring." Remember to use **sticks** that are designed for concert snare drums; do not use marching snare sticks as they are far too heavy and will distort the sound of the drum. A good starting point for concert snare sticks is a 2B with a wood tip.



In most cases, playing about a third of the way from the rim will provide the best mix of overtones and articulation.

Tuning is another matter of taste, but the batter head should be tight enough so the parts will "speak." The snare side head should be tuned slightly lower than the batter head, however, you don't want the snare side head so loose that you get a muddy, inarticulate sound.

Concert snare drums may also have several different types of **snare**s. Wire snares are the most common, but tend not to handle high volumes well. Cable snares (thicker wire or plastic coated wire) are very versatile and handle all volume levels. Gut can provide bold, dark sounds but may not handle lower dynamic levels as well as the other types of snares. Several manufactures make concert snare drums with multiple strainers so you can have two or three different types of snares on one drum. This provides the best characteristics of all types of snares!



*It is very important to use a **concert height snare drum stand**. Drum set stands won't do the job, they are too short! When performing on a concert snare drum, the drum should be waist height.*

Suspended Cymbals

Suspended cymbals are probably more abundant in the front ensemble than any other form of percussion ensemble. They come in any number of sizes and weights, and there are a multitude of models and sounds offered by different manufacturers. Choosing cymbals that are right for your group can be a bit overwhelming. The best way to choose cymbals for your ensemble is to sample and compare several different instruments. Since cymbals are expensive, most ensembles will be limited with how many of these instruments they'll be able to purchase, so it's good to have the basic sounds represented. Please note: the below descriptions are VERY general.



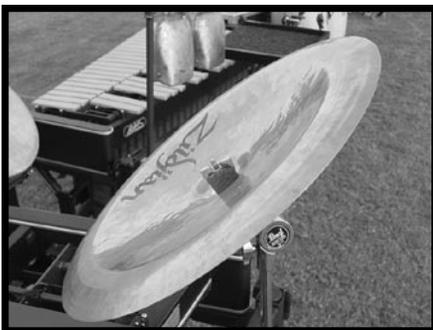
SUSPENDED CYMBALS (18" to 20")

These are most frequently used to supply body, color, and for connecting phrases. These are large cymbals of medium-thin weight that offer the most warmth and range outdoors. Cymbals with more "hand hammering" are usually warmer and darker in sound. Cymbals that are designated as "suspended" cymbals by the manufacturers are not the only cymbals that can serve this function. Many, medium-thin and thin weight **crash** cymbals will do very nicely. Let your ears be your guide, not the label on the cymbal.



SMALLER ACCENT OR CRASH CYMBALS (14" to 18")

These can also be used as suspended cymbals, but are often more effective for "crash" sounds. They typically deliver a quick attack, with a quick decay. Smaller cymbals will generally have a higher pitch, and may not have as "warm" a sound outdoors as the larger cymbals, however, weight factors into this as well. The thicker the cymbal, the brighter its sound. Thinner cymbals usually sound "warmer" but may also distort at higher volumes.



CHINA CYMBALS (12" - 22")

These come in almost any shape and size you can imagine. They have a flanged edge and squared off bell, which gives them a "trashy," gong-like sound. The majority of China cymbals have a quick decay, and sound best when you need to add some trashy accent color. China cymbals with a longer decay can be used as suspended cymbals. This is ideal when you're looking for a small tam tam type sound.

A few suspended cymbal tips...

Don't overplay the instrument! Each cymbal has a "ceiling," or limit, as to how loud it is physically capable of playing. Beyond this ceiling, its tone turns to distortion. While it may seem like playing the instrument "harder, faster, or higher" will make it louder, actually the opposite is true. Since this distorted sound is less pure, it doesn't carry as well, and it's basically just "noisy." There may be a few moments where this could be an "effect," but for general playing, it should be avoided. This is the one rule that is broken most often by inexperienced players.

Rolling: There is usually no need to roll very fast, as the sustain of the cymbal should produce most of your sound. Roll just fast enough to keep an even sustain. At lower volumes, the roll will be slower. At higher volumes, the roll will be faster. As with timpani, bass drum, or keyboard instruments, the roll speed on suspended cymbals should be determined by the needs of the music.



Roll on the cymbal at the edge, with each hand directly across from each other.

Avoid crashing on suspended cymbals with plastic xylophone or bell mallets. This may sound obvious, but again, it's amazing how frequently inexperienced performers do this. Not only does it sound bad, but it's a quick way to crack your cymbals. If the performer doesn't have time to pick up a softer mallet or drumstick, have someone else play the part who has a more appropriate implement available. No cymbal part is so important that you have to clang through the ensemble with lexan mallets on a 17" cymbal.

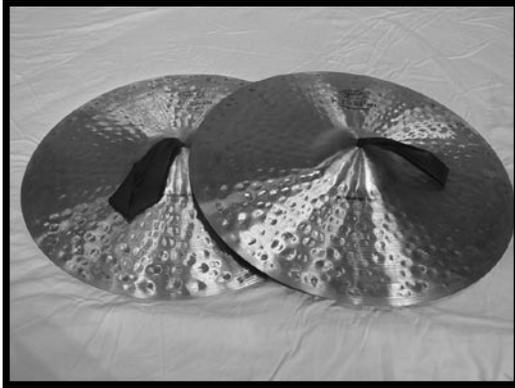


When **crashing** on a suspended cymbal with a stick, play the edge of the cymbal with the shoulder of the stick. This will give you the fullest sound from the cymbal.



For a quicker, brighter sound, crash with the shoulder of the stick on the bow of the cymbal (left). With covered mallets, crash as close to the edge of the cymbal as you can (right). This will produce a clear attack sound and a full spectrum of overtones.

HAND CYMBALS



Hand cymbals are standard in any band, corps, or orchestra setting. Contrary to what some may think (particularly those who have never tried crashing a pair of cymbals), this is a tough instrument to play well. It takes a lot of practice to get a nice full-sounding crash. It's equally difficult to play soft notes with consistency. For these reasons, it is strongly recommended that pit instructors take part of a rehearsal block each year, and have a cymbal "clinic." If

you are dealing with students who have never been in a pit before, there's a good chance that they've never crashed a pair of cymbals. Be sure they understand the basics of hand cymbal technique (see pages 39-41).

A good "general" size for hand cymbals is 18". This is probably the most standard size used in concert settings as well. These are great for general purpose playing. If you have the means for another pair, 20" cymbals would be a good choice. They have more "body" outdoors, and tend to project better. These are great for powerful impacts. It is alright to use smaller sizes as well, such as 16" or 17", but they will have a brighter, smaller sound that won't sustain as well outdoors. Consider these to be effects, rather than general purpose crashes.

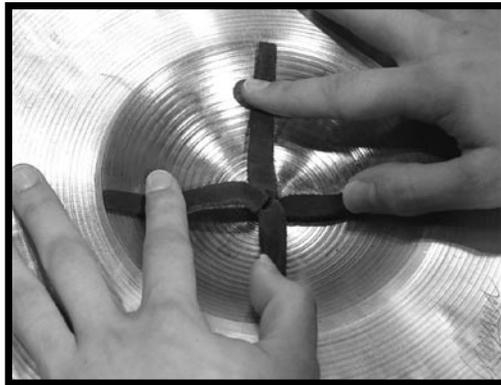
Tying the knot

Your hand cymbals should be equipped with good quality **leather straps**. If you have wood handles on your cymbals, remove them and burn them. These handles will restrict the vibrations of the cymbals which could lead to cracking. **Leather pads** are not necessary in the pit. In fact, they should only be used by hand cymbal players marching on the field.

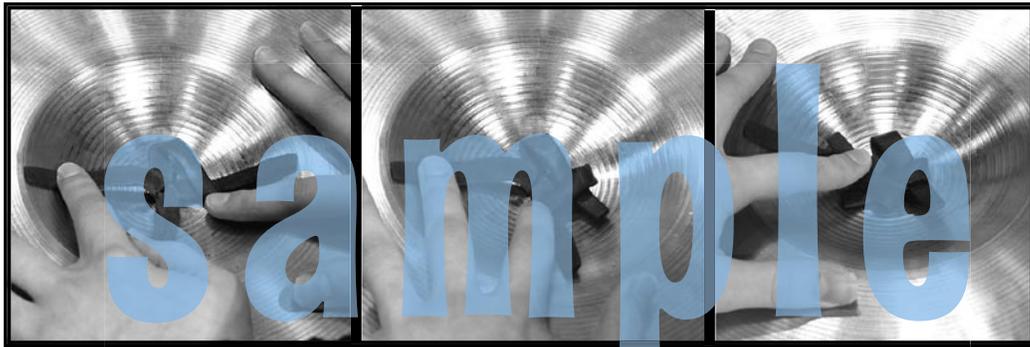


These types of cymbal handles should only be used if you are one of those little wind-up monkey toys!

Here's how to tie your cymbal knot:



Pull the strap through and separate the four strips



Now loop each strip over the one next to it.



Tuck the last strip into the fold created by the first.



If the straps stretch and pull through the cymbal, you can place a penny inside the knot.

The **crash** will be a **grace note** or **flam** style crash. That is to say, as you crash the cymbals together, the edges that are angled in toward each other will strike first (the grace note), then the rest of the cymbal will provide the main body of the crash. Once again it is vital that both cymbals participate in the crash. If the grace note is too wide, “ca-rash,” decrease the angle size. If the angle is too shallow, you will get an “air-pocket” sound.



First contact (grace note)



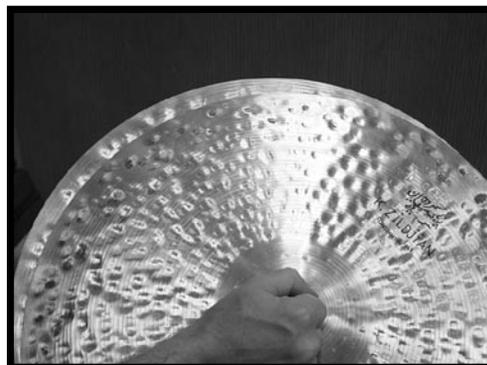
Second contact (main note)

After the crash, simply **follow-through** by pulling both cymbals apart and resuming the starting position. No visuals are necessary in the pit. Most instructors agree that the pit should *not* be a part of the visual focus.



Follow-through

Displacing the cymbals slightly and creating a crescent shape at the edge will help the air escape. This will help to get a full sounding crash. Getting the angles correct takes a bit of practice and each pair of cymbals feels a little different. Be patient and practice with ear plugs!



TAM TAM

The tam tam is often mistakenly called a gong. What's the difference?

Gongs are most often smaller instruments with a specific pitch, whereas the **tam tam** (pictured here) has a complex blend of overtones with no specific pitch. The tam tam is the more commonly used instrument of the pit ensemble.

Lingo aside, these terms are still used interchangeably by composers, teachers, and conductors.



Tam tams sound best when hung from **braided rope**. Due to the weight of the instrument, the rope will eventually need replacing, so keep your eye out for fraying rope. You don't want to hear what it sounds like when the rope breaks! Avoid hanging your tam tam with **wire cable**. While this is great for durability, the metal fibers that make up the cable actually absorb a lot of the vibration from the instrument itself. You will get much more resonance using rope.



Also be careful **how the tam tam is hung**. It should hang directly from the rope that comes out of the **front** of the instrument (outside the curved edge). If you hang it from the other side, the rope will dampen the instrument dramatically!

Tam tams are another pricey investment and must be played properly to avoid cracking. Start with a **mallet** that is designed for tam tams (not a bass drum mallet) and is the appropriate size for your instrument. Next, no matter how soft the part is, always **warm up** the instrument by tapping it lightly with the mallet. This will get the metal moving and prevent it from being "shocked" by a loud strike. Next, **strike** the instrument half way between the center and the edge. This will provide an excellent