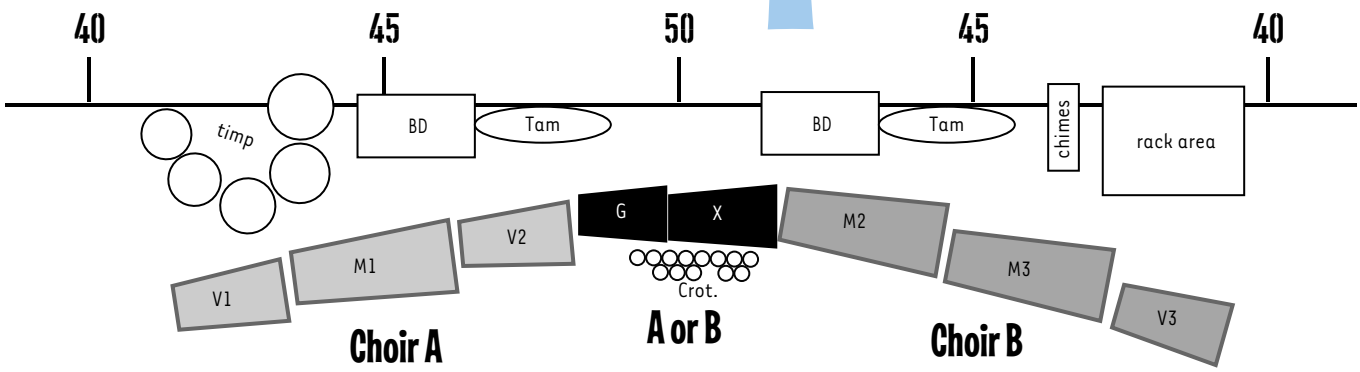
The pit setup

Now that you have purchased two of each of the instruments mentioned above, it's time to develop a setup. There are two basic thought processes involved with the placement of the instruments on the performing field. One thought is that the musical score and the percussionists' needs will dictate where the equipment is set. This can be a very useful setup process for smaller groups with only a few instruments. A second thought process involves developing the setup first, then writing a score that will take advantage of the placement of the instruments. This takes a bit more planning and thought, but the end results can be very effective. This second process works well for larger groups with several instruments. Below are a few popular setup plans.

THE KEYBOARD "CHOIR" SETUP

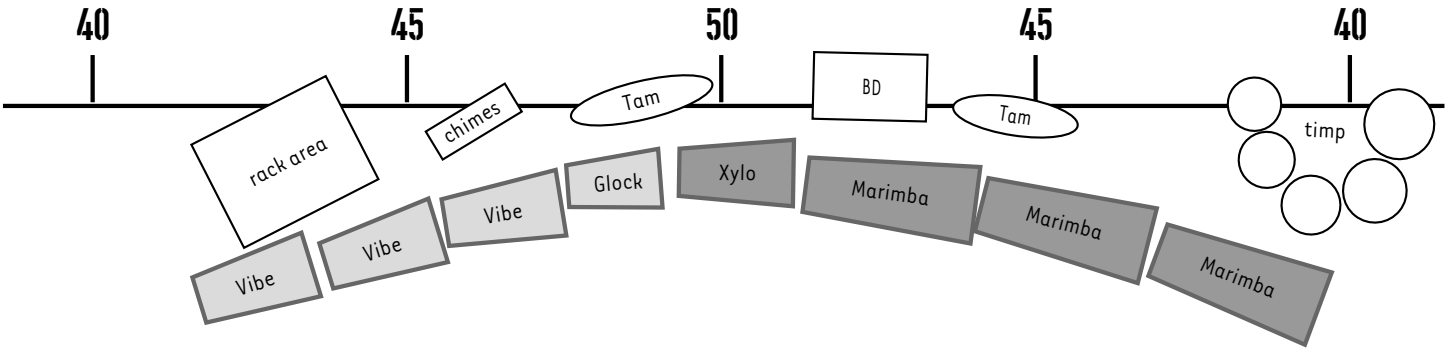
This setup involves grouping one or two of each of the main keyboard instruments into a choir. A large pit could have several choirs within the ensemble. For example, you could have one choir consist of a marimba, a vibraphone, and orchestra bells. The second choir, staged apart from the first choir, could consist of another marimba and vibraphone, and perhaps a xylophone. These two choirs can perform independently, or perhaps "converse" with each other, and since they are close to each other, they can play in unison for tutti sections. This is an extremely versatile setup.



Example of a keyboard choir style setup

WOOD VS. METAL SETUPS

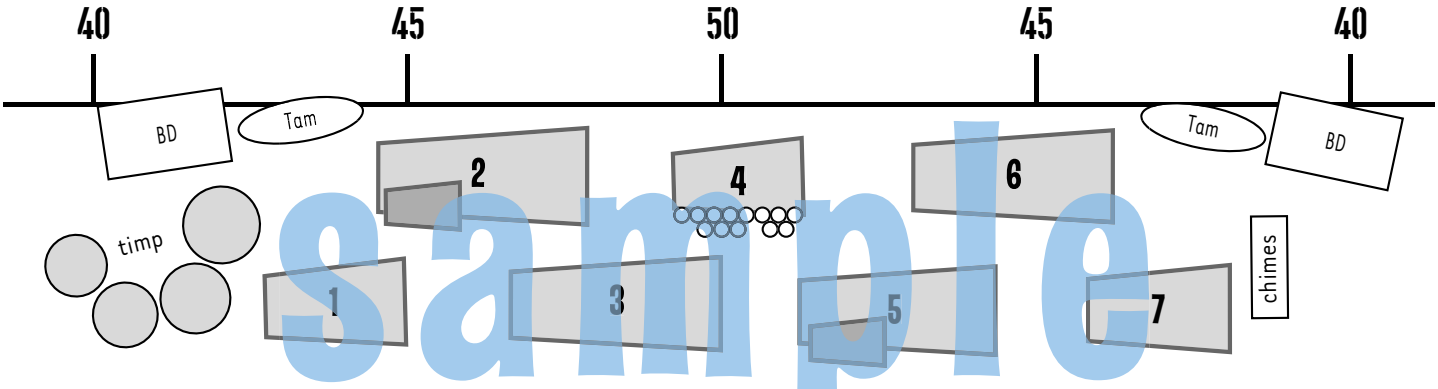
In a wood vs. metal setup, the wood keyboards are grouped as a unit, and the metal keyboards are grouped as a separate unit. Though somewhat more limited in terms of creating composite blends of sound color, you can achieve a good separation in the different sound qualities. Listen to the Crossmen in 1997 or 1998 for some samples of this style of setup.



Example of a wood vs. metal setup.

MULTI-PERCUSSION "POD" STYLE SETUPS

Developed by the Cavaliers in the late 1980's and early 90's, this concept has come a long way, and can be very effective if you have the right equipment. Essentially, each individual performs at his or her own **station** consisting of a multiple-percussion setup. Given the fact that multiple-percussion literature is growing at a fast rate, students are quite adept at dealing with this style of playing. In fact, many players may prefer this style of setup since their own station essentially becomes "their instrument." In order to create these pods, it is important to have the right equipment. Many companies are now offering keyboard frames which will accommodate additional accessory instruments, drums, extra keyboards such as bells or piccolo xylophones, cymbals, and whatever else you can think of. All of this gear can be **clamped onto one rolling frame**. This makes it very convenient to transport the section on and off the field at competitions. The pit crew will love it!



Legend:

Pod 1: Vibes, 16" Sus, 22" China, Triangle, Temp blocks, 20" hand cyms

Pod 2: Mar. (4.6), concert toms (10-14"), 18", 20" sus.

Pod 3: Mar (4.6), concert toms (15-16"), 6", 8" splash

Pod 4: Xylo/Crotales, 14" sus, woodblocks, picc. snare

Pod 5: Mar (4.3), picc xylo, 17" sus, brake drums, opera gong

Pod 6: Mar (4.3), bells, cowbells, 14" hi-hat

Pod 7: Vibes, 18" sus, Almglocken (C-F), 18" hand cyms

Example of multi-percussion "pod" style setup and instrument palette.

Mallet Selection by Jim Casella

Now more than ever, sound quality of the pit ensemble is something that doesn't go unnoticed. **Sound quality** is a result of technique, mallet selection, equipment, and scoring. Let's discuss mallet selection. The fact of the matter is that there's no *one* mallet that will work for every musical application. If you plan on getting the best sound possible throughout your entire show, you must understand that this will entail some mallet changing. This requires an investment in a **variety of mallets**. If you take proper care of your mallets, they will most likely last you a very long time. Today's top mallet manufacturers have created some very durable mallets specifically geared toward the rigorous environment of marching ensembles.

The secrets to a better sound *and* projection are **weight** and **mass**. If you pick up a "field series" mallet you'll be able to tell immediately that it is much heavier than your standard "indoor" mallet. There is a good reason for this…and it's not to build chops. The reason is that by adding more weight and mass to the head of the mallet, the **fundamental tone** is unleashed from the bars to its fullest potential. The fundamental is the purest, most resonant pitch that the bar can produce. This comes from an increased clarity of the lowest series of overtones produced by the bar.

I first started realizing this when **Innovative Percussion** began creating some of the industry's best outdoor keyboard mallets in the early 1990's. They were heavy, but they sounded great and were very durable. At that time, Scotty Sells was arranging for the Santa Clara Vanguard pit, and I spent a good deal of time listening to his arrangements while I was arranging for the Vanguard Cadets (SCV's feeder corps). Scotty's pits were getting some incredible sounds, unlike anything I had ever heard. It was around this time that I noticed that more people were paying attention to achieving a good sound quality in the pit, and this "heavy mallet" idea began to evolve more rapidly. While mallet selection is merely one piece of this evolution, it does make a big difference! Today, more than ever, we have the tools available to achieve a superior sound.

I acknowledge the fact that by using heavier mallets in a marching environment, you could inflict some damage to your bars. Also, some harder mallets have a "bite" to them and with continual playing at high velocities and greater heights, it can cause equipment damage and sound somewhat "tinny." So I frequently like to use mallets that take that "edge" off by having **latex wrapped cores**, or perhaps a wrap that is slightly denser. Basically, taking away that "bite" gives us a **better sound**. For this reason, I'm more prone to choose a "hard" mallet outdoors that is a little *softer* and *heavier* than a "hard" mallet that I'd use in the concert hall. Which bring us to the next topic…