

Quick Start

Timpani Method

Selected Review Pages

First, following is a comment from the author.

There have been two rather recent developments in requirements for timpani performance at the elementary/intermediate level. Those developments are:

1. Not that many years ago, most, but not all, senior high schools were equipped with 4 timpani, and almost all junior high schools had 2 timpani. Now, virtually every senior high school has 4 timpani, as well as do many junior high schools. This means that many student timpanists encounter performance on 4 drums when they are at the elementary/intermediate level.
2. As to timpani tuning, there is a recent advent of the widespread use of the iphone, with its free electronic tuner, coupled with most school timpani now being equipped with good quality mechanical tuning gauges. This means that with the use of that duo, timpanists can now join guitarists, harpists, piano tuners, etc. in easily and accurately tuning their instruments electronically. Indeed, many seasoned professional timpanists at the highest levels of performance no longer tune by ear. This is partly because of tuning demands from contemporary composers. For example, 50 or more tuning changes might be required during the course of a 15 minute modern work.

This book addresses both the above issues, as you will see in the following review pages.

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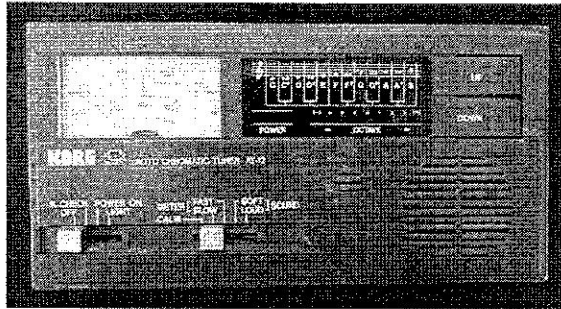
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Tuning the Drums to Specific Pitches in the Digital Age

The second aspect of learning to tune timpani is the actual accurate tuning of the drums to notes on the scale. The use of two devices will make learning that task very quick and easy. Following is an explanation of each:

1. Electronic Tuner

This device measures actual pitch, and is extremely accurate and reliable. It is available from different manufacturers, as well as being available as a free application for smart phones.

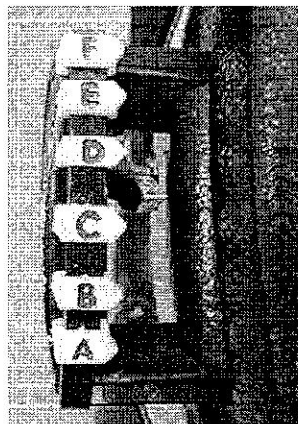


The main drawback of the electronic tuner regarding timpani tuning is that during performance the internal microphone cannot distinguish between the sound of the drum and that of the ensemble, so the analyzer becomes overloaded or “confused,” and the display either gives a false reading or none at all. Thus, the electronic tuner can rarely be used during performance.

This would not be a problem if we played only music where pitch changes were limited to between works or between movements of works. But composers write timpani parts that might require as many as 50 or more pitch changes *during the course of a composition*, and some of the changes must be accomplished very quickly.

2. Mechanical Gauges

These devices, mounted on each drum, give a visual reading of the distance of travel of the foot pedal.



The movable note tabs can be positioned with the aid of an electronic tuner. The duration of the accuracy of the read-out of mechanical gauges can be quite short on drums with calfskin heads. This is because animal skin is very elastic, and the degree of elasticity is extremely sensitive to temperature and humidity. Thus, for drums with skin heads, the tabs of mechanical gauges must be monitored very frequently.

Plastic heads, compared to skin heads, are very inelastic, and much less affected by (but not impervious to) changes in temperature and humidity. As a result, the read-out of the tabs on mechanical gauges on drums with plastic heads is quite reliable if they are monitored occasionally during the course of a rehearsal or concert.

The primary advantages of mechanical gauges are that they: 1) operate in complete silence, and 2) allow for very fast pitch changes – as fast as one can move the pedal – which is a necessity for some passages.

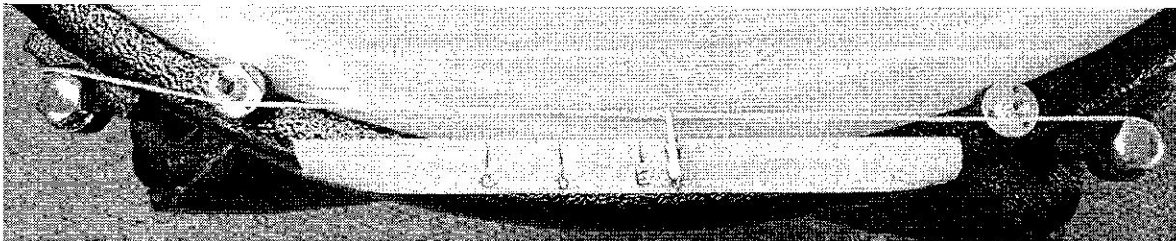
Using the Electronic Tuner and Mechanical Gauges in Combination, on Timpani with Plastic Heads

Please note that the advantage(s) and disadvantage(s) of each of the above two types of timpani tuners off-set each other. Here is how they are commonly used together:

- Immediately before the rehearsal or performance, use the electronic tuner to set the tabs of the mechanical gauge on each drum.
- Use the gauges to change pitches as might be required during performance.
- Monitor the tabs of the gauges in between each composition and/or movement with the electronic tuner.

“String” Gauges

These are mechanical gauges that are simple, quick and inexpensive to make. And they can be installed (and uninstalled) in a minute or less. Timpanists keep them in their kit as an emergency back-up in the event a regular mechanical gauge breaks down. Made and installed properly, they are as accurate as the finest commercial mechanical gauges. On page 33 in the Appendix are instructions for making and installing a string gauge.



Tuning Timpani with Calfskin Heads

As mentioned earlier, the procedure for tuning timpani with plastic heads is not reliable enough for general use on timpani with skin heads because of the extreme sensitivity of the heads to even slight changes in temperature and humidity. Dealing with this issue requires the timpanist to tune the drums mainly by “ear.”

Almost anyone can develop aural acumen to a very high degree, but for most the “road to mastery is not short.” Several advanced steps in music theory and ear training must be mastered in order to accurately tune timpani by ear in all performance situations. This includes the ability to sing any interval up or down and tune the timpani while the ensemble is playing, and while at the same time accurately counting measures rest.

Exercises for developing the required level of aural acumen to play timpani with skin heads is beyond the scope of this book. However, at this time it is rare to encounter timpani with calfskin heads, and almost invariably they are on the drums as an option of the performer. That is, the skin heads are usually mounted only at the request of the timpanist.

Shifts

One of the major technical challenges in playing timpani is shifting the mallets from one drum to another. There are two objectives in this maneuver:

1. To move to the precise intended location. As stated earlier, even though the “target” (the drumhead) is huge, the “bull’s-eye” (the striking area) is very small, and success in striking that exact spot has a major effect on tone production. If one strikes too close to the edge of the head, the sound will be thin and shallow. Conversely, if one strikes too far from the edge, the sound will be thumpy; and
2. To make a very smooth move with the least amount of effort and in the shortest time.

Probably the most common methods of shifting are:



1 = downstroke
2 = recovery
3 = shift



1 = downstroke
2 = recovery and shift combined into one motion

Since the second method has only two motions instead of three, it: 1) requires less effort, and 2) saves time. A major (but often overlooked) benefit of saving time is that in making the shift, if one overshoots or undershoots the bull’s-eye, it gives him an extra split second to adjust position. For this reason, even when there is plenty of time to shift, it is usually well to do so sooner rather than later. There’s no reason to linger over the drum just struck, and a very good reason to arrive at the other drum early.

Sticking Policies

It is important to have sticking policies that contribute to smooth shifts. One policy is to lead with the same hand as the direction of the shift, where possible. This is best accomplished by reading groups of notes at a time rather than one note at a time. In the following exercise, most of the shifts are immediately preceded by two notes. Practice reading each 3-note rhythmic figure as a unit, and begin each one with the same hand as the direction of the shift. This will prevent awkward cross-sticking and double-sticking.

Shift Studies

Shifts Preceded by Two Notes
(Begin with the same hand as the direction of the shift)

R L R R R L R

L L L L R R

L L L L R

L R L R L

R L R L R L

R L R R R L L L

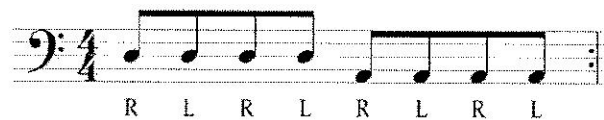
L L R

R R L R

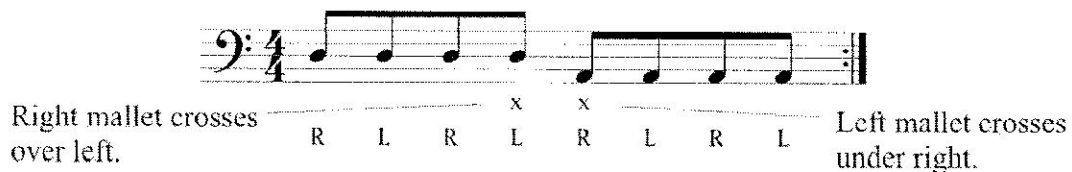
Awkward Shifts

Awkward shifts are those in which one ends up playing the last note before a shift with the same hand as the direction of the shift. The degree of awkwardness depends on the tempo and/or particular rhythmic figure. Following are three traditional ways of dealing with those situations.

1. The most common way of dealing with this issue is to use alternate sticking, and always keep the mallets parallel with each other, moving them to the left and right in tandem. The mallets are never crossed over or under each other. This method of movement is commonly called **parallel sticking** (see following illustration).



2. Another solution is to again use alternate sticking, with an awkward shift to the left (on the third beat in the following illustration) being initiated by crossing the right mallet **over** the left, followed immediately by “uncrossing” the left mallet **under** the right. This method is called **cross sticking**. The same works in reverse in an awkward shift to the right.



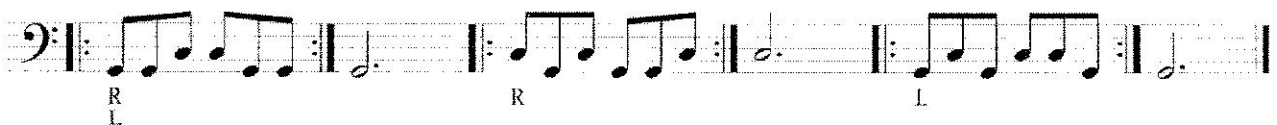
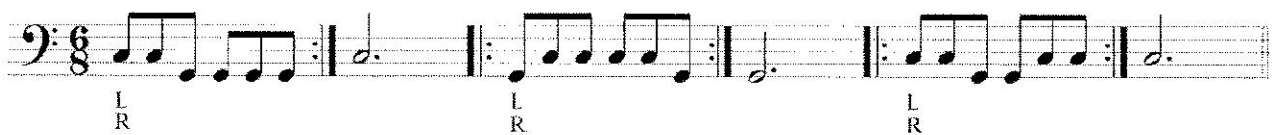
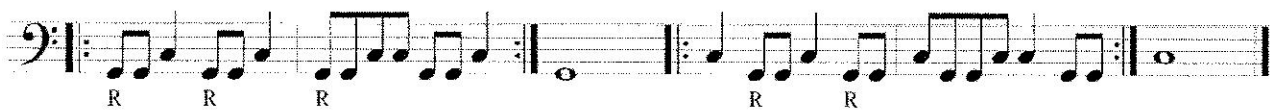
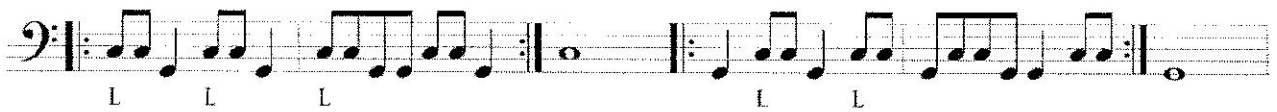
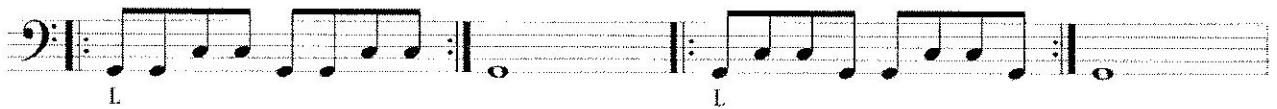
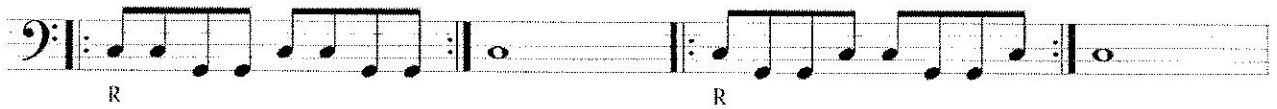
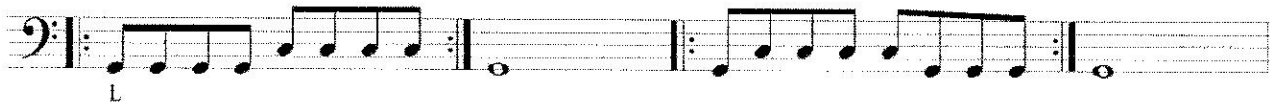
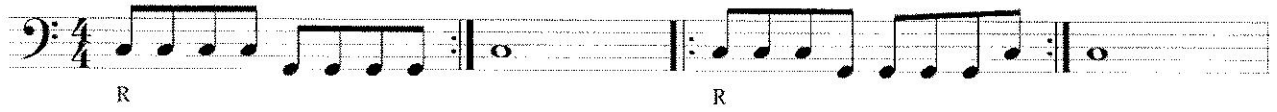
3. Still another solution is to use alternate sticking until one note before an awkward shift, at which point that note is played with the hand that is opposite the direction of the shift (on the 2nd and 4th beat in the following illustration). In other words, the hand opposite the direction of the shift plays two successive notes to give the other hand more time to initiate the shift. This is called **double sticking**.



Each of the above methods has certain advantages over the others, depending on the particular passage or musical situation, so it is well to be accomplished in all of them.

Shift Exercises (For Parallel, Cross, and Double Sticking)

Take each repeat several times. Then, once facility has been fairly well established, play each of the two exercises from beginning to end with no repeats.



Four-Drum Exercises

Take each repeat several times.

L R L R L R L R R L R L R L R L R L

L R L R L R L R R L R L R L R L R L

L R L R etc. R L R L etc.

L R L R etc. R L R L etc.

L R R L R R L R L R R L R R L L R L L R L R L R L

L R R L R R L R L R R L R R L L R L L R L R L R L

L L R R L R L R L R R L L R R R L L R L R L R L L R R L

L L R R etc. R R L L etc.