

HOW TO BUY TIMPANI

By Vic Firth

Timpani, a set of kettledrums, are large barrel-shaped drums that produce notes of definite pitch. Featured in symphony and philharmonic orchestras all over the world, timpani are highlighted in famous literature by Bach, Haydn, Mahler, Batok, Beethoven and Berlioz, among many others

These orchestral percussion instruments date back to the 15th century, when they were used as a cavalry instrument, played on horseback. For several centuries, little changed in the kettledrum's construction, but tuning mechanisms – for faster changes of pitch – were introduced throughout the 18th and 19th centuries.

Selecting Timpani

Selecting a set of timpani for your band or orchestra can be a relatively simple task – especially if costs are not a factor. So, let's take the approach that good musical results are your goal, and then you can evaluate how this fits into your particular financial situation.

Size or Diameter. Starting with the largest timpani, the sizes in inches should be 32, 29, 26, 23. If you can only afford two drums, start with the 26-inch and 29-inch drums. Then add the 32-inch when possible, followed by the 23-inch drum. To play most of today's music, you need four instruments. The concept that two drums can play Haydn or Mozart is incorrect. Depending on the required pitches, you need four drums. Here's why: Say, for example, the first movement is in D-major. The D and A are fine on the 26-inch and 29-inch drums. However, the slow movement (or minuet) is in F and B-flat. Those notes, for proper sound quality and clarity of pitch, have to be played on the 32-inch and 29-inch drums.



Every manufacturer claims that its drums have a range of an octave. This may be true, but all of the notes are not musically acceptable because they are out of the best "playing range" of the diameter of the drum. Below are the proper-sounding ranges for the best musical results:

Under certain circumstances, one may have to compromise these ranges, but that should be the exception rather than the rule. If a fifth drum (piccolo timpani) is to be acquired, it should be a pedal drum (20 inches).

Pedal Mechanism. The pedal mechanism has a comfort factor that varies with different players. The "on the floor" pedal with a pivotal action is most preferred. The ratchet type pedal that extends from the base of the instrument is awkward for some players. (Then there is the clutch ratchet mechanism on the German Dresden type drum, but that is a whole different level.)

Ease of Pedal Action. The pedal mechanism can be either spring-fed or hydraulic. Either way, the pedal action should be tested for smoothness of operation and quietness. A pedal that creaks or grinds while tuning can be unnerving and destructive, musically.

Choice of Head. For your choice of head, I would select a plastic head, as opposed to a calf-skin head. They are much stronger and are impervious to weather and outdoor conditions. I prefer the standard opaque head, which is available in all sizes.

Bowls. The bowls of the timpani should be copper, and they should be freely suspended within their inset rings. Nothing should be bolted or screwed into the bowls.

Accessories

Tuning Gauges. These are extremely helpful, especially to the young student. They do not eliminate the need to listen while tuning. However, when very fast pitch changes occur and accurate listening becomes impossible, the gauge offers a solution.

Mallets. The player should have a minimum of four pairs of mallets, including a general, staccato, ultra-staccato and soft cartwheel type stick. They are necessary for rhythmic clarity, soft playing and big, generous sounds. Remember, the timpani can be the loudest and the softest instrument in the ensemble.

Other Equipment

The drums should be equipped with mufflers. They act as vibration inhibitors when the drums are not being played and also mutes them under certain prescribed conditions.

The drums should also have protective covers, and the covers should be used whenever the drums are not being played, and when they are stored or transported.

Check to see that if the drums have wheels that they also have appropriate brakes to hold them in place while being played.

Maintenance

The student should have an understanding of the maintenance of the drums. For example, when not being played, or when in transit, they should be tuned to G (32 inches), A (29 inches), D (26 inches) and E (23 inches). The heads should be wiped clean after each rehearsal or performance and then covered. Pedals should be locked or secured when being transported so the head does not become loose and move about on the bowl. A loose head will destroy your pitch clarity and ruin the sound.

All of the above suggestions are based on a generous budget. If you can't afford four pedal drums to start, don't compromise by purchasing cheaper drums or two pedal drums and two hand-tuned drums. It's better to make sequential purchases and, over a period of time, end up with four well-constructed pedal instruments.

Ask your local music dealer for assistance when purchasing timpani, but be prepared to order the instruments since they are not commonly in stock at musical instrument stores.

Vic Firth, founder and chairman of drumstick manufacturer Vic Firth Inc., recently celebrated his 50th season as principal timpanist with the Boston Symphony Orchestra. During this time, he has performed under the batons of many famous conductors, including Leonard Bernstein, Serge Koussevitsky, Leopold Stokowski, Jascha Heifitz and Vladimir Horowitz.

Firth, who started his drumstick business out of his basement in 1960, was inducted into the Percussive Arts Society Hall of Fame in 1995. He also served as the head of the percussion department at the New England Conservatory for more than 45 years. Firth has written "The Solo Timpanist" and "The Solo Snare Drummer" for Carl Fischer.