***2016 Percussive Arts Society International Convention***

**Tuning, Tone and Timing: Timpani FUNdamentals**

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***Tuning***

*Range*: 32” D-A; 29” F-C; 26” Bb-F; 32” D-A; 20” F-C  
A good way to remember the tuning is that it is a second inversion Bb major chord. Newer drums might have a wider tuning range. The goal will be to try and keep your pitches in the mid to upper ranges of the drums when possible.

*Tuning*: Tuning is the aspect of timpani playing that terrifies most players. Few of us have perfect pitch but believe it or not this is not a bad thing. Developing a sense of relative pitch (the ability to find any note off of a given pitch) is a great way to learn to tune. It is important for students who wish to be good at timpani to become active singers, whether at church, in school choirs or sitting down at a piano and practicing to match pitch. Notice I said active…. Not GOOD!!! The goal is to be able to match pitch, not to become Pavarotti!

A) Work on singing specific intervals. The Perfect Fourth and Perfect Fifth are the most commonly used intervals in music because of their relationship to the V and I chord in composition. Become VERY comfortable with these two intervals first! Then proceed to the major and minor second (these put you into new key areas) and the major and minor thirds (allowing you to start to tune chords as well).

B) Carry a tuning fork around with you daily. Periodically throughout the day play the A on the fork and sing to memorize that pitch. From there practice singing your intervals and arpeggios.

C) A note about pitch pipes: They are the single most annoying sound in the world on a stage!!! AND, the little reeds inside of them can actually be knocked out of tune! Use these only in the most desperate of times!

D) Electronic Tuners: These can get a bad rap but can be useful tools for practicing (watching your intonation as you practice to start to hear more accurate pitch relationships) and for helping to clear the timpani heads. They are not overly useful during a performance as they will pick up the sounds of all of the other instruments around you, making its reading of your pitch inconsistent. Also own a *Drum Dial* for aid in clearing heads as well.

E) Tuning Gauges: Tuning gauges are standard on almost all drums now and ARE used by professionals! Think of them this way: they are like the keys of a wind instrument. When the keys are pressed down the player has an idea of what note will come out but they still have to adjust the pitch to fit into the ensemble. The same is true with gauges. They will get you in the ballpark (which sometimes in pieces with a ton of tuning changes is the best thing ever!) but it will still be up to you to listen and be sure the pitch really stays with the group.

F) How to best approach tuning: Get the idea of what the pitch is you need to tune by singing it in your head. Then VERY lightly tap the drum with your mallet (only YOU should hear this) or press into the head with your finger and flick it to activate it. Then slide the pedal up listening to the resonance of the drum until you hear it match the pitch you are singing. DO NOT TAP IT 8000 TIMES!!!! Once should do! If you miss it drop the pedal back down and go again as it is easier to here pitch from coming from underneath it than from dropping down to it. A good rule of thumb is to not spend over 5 seconds tuning a pitch.

G) Practice scale exercises on the timpani. Preset a pitch on another drum if needed to continue through a scale. Practice singing the scales as you work and work to move directly from note to note, minimizing the amount of glissando you hear. When comfortable with that try doing arpeggios!

G) Most importantly: It is better to come in at the right time out of tune than to not come in perfectly in tune!!! You can always adjust pitch. You cannot make up a missed entrance!!

***Tone***

*Set Up*: Setup in the middle of the drums and then rotate the upper body with the hands in their playing position. Move the drums until the mallets sit over the correct playing position for each drum. Most students pull the drums in WAAAAYYYYYYY too far!!!!

*Playing Position*: You want to find the best “fundamental” sound for each drum. The old general rule is approximately 3” in from the edge but this spot will actually be slightly different for each drum and head. Use your ears to find the best spot! DO NOT play in the center unless it is called for by the composer!!!

*Sitting vs. Standing*: I recommend sitting whenever possible as it allows the feet to be on or near the pedals for minute changes of pitch as needed to stay with the ensemble. It also allows for taller players to have to be less of a contortionist to get a proper stroke on the drums. However, some solo literature does work better with the increased freedom of movement allowed by standing.

*Grips*: There are 3 main grips utilized on timpani. These are German (like matched grip snare drum); French (thumbs on top); and American (in between – similar to marching tenors). All can and should be used depending on the sounds needed in a piece.

*Strokes*: As Sal Rabbio (PAS Hall of Famer and former timpanist of the Detroit Symphony) says, you should be able to make all of the sounds you need by adjusting your hands. The mallet changes just serve to enhance what you can do. I typically teach a French grip first (Praying Hands Technique).

1. Regular/Tenuto: This is your average Joe, everyday stroke. This stroke uses a moderate stick speed (velocity) that creates a natural rebound off of the head. The “lift” is an enhancement of this natural rebound.
2. Legato: This stroke is essentially dropping the mallet onto the head with little thought of velocity etc. This gets a very warm and round tone with as little attack sound as possible.
3. Staccato: This stroke is a very fast stroke with a quick rebound.
4. Soft Strokes: Soft strokes are played from lower to the head but with more up stroke than down stroke (a glancing blow off of the head).

*These strokes allow the performer to influence the tone color and articulation from the drums. The more colors the player can elicit, the less often they have to change mallets but in addition the more MUSICAL options they have available for line and phrasing!*

*Rolls*: Rolls will be single stroke like on mallet instruments except for a few places where an orchestral buzz roll might specifically be called for. The speed of the roll will vary based on the pitch of the drum, the size of the drum and the dynamics of the music. Generally: higher = faster; lower = slower. Spread the mallets a few inches apart on the head to activate more resonance from the drum.

*Grace Notes*: Grace notes on timpani are also played as single strokes. In general they are wider than on a snare drum. Flams are often played placing the grace note on the beat, similar to how wind players interpret them.

*Muffling*: Should be done very lightly with the finger tips (not with the full hand and DEFINATLEY not by throwing the entire body onto the drums…. Come on. You’ve ALL seen it……). Most students muffle the drums too much and too often. LISTEN to who you are playing with. Things are not always what they look like on the page. Many times you will see a quarter note and hear a half note or whole note. Go with what you hear.

*Mallet Selection*: Do not get tricked into thinking of mallets as volumes (softer mallet equals softer sound; harder mallets equal louder sound). While this may be true it is often not the CORRECT sound. Think of your mallets instead as articulations. For a very soft yet rhythmic passage you will often use a much harder mallet. For a louder, more resonant passage, you might actually want a softer mallet.

*Basic Maintenance*: The drums should be round (of course!). Keep them free of dents (these can be hammered out by lightly tapping out the dents with a rubber hammer with a soft cloth placed between the hammer and bowl). Heads should have no rips, tears, dents, crayon markings etc. on them! If these exist on the heads they need to be changed as you will not be able to get a good, true and clear pitch out of them. Heads that are well taken care of can last quite a while. A good rule is to plan to change your timpani heads every 2-3 years in a typical school setting. If the pedal does not work most of the time this is related to the head being dead or the head not being tuned to the correct fundamental pitch. I have MANY times resurrected a “broken” timp by tuning it to the correct pitch. Plan to clear the drums (make sure all lugs are in tune) once a week at a minimum.

*Mallet Care*: DON’T TOUCH THE MALLET HEADS!!!!!!! The felt is very sensitive and the oils in the typical hands can have a negative effect on them (see: timpani mallets in many bands rooms around the world). Keep them in a plastic bag, preferably without the heads touching. A small bag twisted over one head and then the other can be very effective. You should purchase a separate case for just the timpani mallets as well. This keeps them from tumbling around under the bass drum mallets, snare sticks etc. A brief case works well. Frayed mallet heads will lead to an inconsistent sound. Most companies make replacement mallet heads available.

***Timing***

The timpanist is often called the “second conductor”. That is because their rhythmic interpretation of the conductors’ beat is often the sound followed by other members of an ensemble. To that end, it is important for the timpanist to have a strong rhythmic foundation AND a knowledge of how to clearly articulate these rhythms on timpani. Keep in mind mallet placement related to articulation (closer together tends to read as more articulate). Use different parts of the head to get different articulations. Use things like Webrhythms, snare rhythm pieces etc. to work clarity. Try to avoid doubling on the same head, but if you do think of it as a jazz ride cymbal and not use the exact same spot for both notes.

***Resources***

*Books*Goodman - Modern Method for Timpani  
[Carroll-Exercises, Etudes and Solos for the Timpani](http://www.steveweissmusic.com/product/carroll-exercises-etudes-solos-timpani/timpani-books)  
[Hochrainer-Etuden for Timpani (Vol. 1)](http://www.steveweissmusic.com/product/etuden-for-timpani-1/timpani-books)  
[Peters-Fundamental Method for Timpani](http://www.steveweissmusic.com/product/mitchell-peters-fundamental-method-for-timpani/timpani-books)  
[Friese-Timpani Method (Friese/Lepak)](http://www.steveweissmusic.com/product/timpani-method-alfred-friese-alexander-lepak/timpani-books)  
Delecluse – Several Volumes to Choose From  
[Beck-Concepts for Timpani](http://www.steveweissmusic.com/product/concepts-for-timpani-john-beck/timpani-books)  
[Tafoya-Working Timpanist's Survival Guide](http://www.steveweissmusic.com/product/tafoya-working-timpanists-survival-guide/timpani-books)  
[Hinger-Technique for the Virtuoso Timpanist](http://www.steveweissmusic.com/product/technique-for-the-virtuoso-timpanist-fred-hinger/timpani-books)  
[Woud-Symphonic Studies for Timpani](http://www.steveweissmusic.com/product/symphonic-studies-for-timpani-nick-woud/timpani-books)  
[Gay-Pedal to the Kettle](http://www.steveweissmusic.com/product/pedal-to-the-kettle-kirk-gay/timpani-books)  
[Whaley-Musical Studies for the Intermediate Timpanist](http://www.steveweissmusic.com/product/whaley-musical-studies-intermediate-timpanist/timpani-books)  
[Lepak-32 Solos for Timpani](http://www.steveweissmusic.com/product/32-solos-for-timpani-alexander-lepak/timpani-books)  
[Horner-Tuneful Timpanist](http://www.steveweissmusic.com/product/horner-tuneful-timpanist/timpani-books)  
[Peyton-Musical Timpanist, The](http://www.steveweissmusic.com/product/the-musical-timpanist-jeffrey-peyton/timpani-books)  
[Firth-Solo Timpanist](http://www.steveweissmusic.com/product/firth-solo-timpanist/timpani-books)  
[Max-Orchestral Excerpts for Timpani (CD)](http://www.steveweissmusic.com/product/1129328/timpani-books-cd)  
Arand Weitzl – Timpani Kata  
Timp-Tastic – Lalo Davila (CD)

## In addition, there are numerous books by people like David Herbert, Roland Kohloff, Gerald Karlyss and more dealing with specific works in the orchestral timpani repertoire.

*Solos* (I = Intermediate; A = Advanced)  
Elliott Carter: Eight Pieces for Four Timpani - A  
Graham Whettam: Suite for Timpani - A  
[Beck-Sonata for Timpani-4T](http://www.steveweissmusic.com/product/sonata-for-timpani-john-beck/timpani-solo) - I  
[Willmarth-Bushido: The Way of the Warrior-T](http://www.steveweissmusic.com/product/bushido-the-way-of-the-warrior-john-willmarth/timpani-solo) - A  
[Bergamo-Four Pieces for Timpani-4T](http://www.steveweissmusic.com/product/john-bergamo-four-pieces-for-timpani/timpani-solo) - A  
[Cahn-Six Concert Pieces for Solo Timpani-3-6T](http://www.steveweissmusic.com/product/bill-cahn-six-concert-pieces-for-solo-timpani/timpani-solo) – I to A  
Cahn – Raga Number 1 - I  
[Goodman-Ballad for the Dance-4T](http://www.steveweissmusic.com/product/ballad-for-the-dance-saul-goodman/timpani-solo) - I  
[Zivkovic-Cadenza-5T](http://www.steveweissmusic.com/product/4992/timpani-solo) – A

[Kraft-Variations for King George-4T](http://www.steveweissmusic.com/product/william-kraft-variations-for-king-george/timpani-solo) - I  
[Muczynski-Three Designs for Three Timpani-3T](http://www.steveweissmusic.com/product/three-designs-for-three-timpani-robert-muczynski/timpani-solo) - A  
[Cohen-Orange Alert-5T](http://www.steveweissmusic.com/product/1102842/timpani-solo) - A  
[Deane-Prelude I for Four Timpani-4T](http://www.steveweissmusic.com/product/prelude-for-four-timpani-christopher-deane/timpani-solo) - A  
[Williams-Variations for Solo Kettledrums-4T](http://www.steveweissmusic.com/product/variations-for-solo-kettledrums-jan-williams/timpani-solo) - A  
Leonard-Canticle-4T - A  
[Peters-Air and Dance-4T](http://www.steveweissmusic.com/product/9765/timpani-solo) - I  
[Skidmore-An Argument or a Question?-5T](http://www.steveweissmusic.com/product/1128520/timpani-solo) – A  
[Peters-Tribal Serenade-4T](http://www.steveweissmusic.com/product/9147/timpani-solo) - I  
[Ukena-No. II Funk-4T](http://www.steveweissmusic.com/product/9867/timpani-solo) - I  
[Beck-Modulations-4T](http://www.steveweissmusic.com/product/9120/timpani-solo) - I  
[Williams-Four Grotesques for Timpani-4T](http://www.steveweissmusic.com/product/four-grotesques-for-timpani-david-williams/timpani-solo) - A  
[Beall-Seven to Queens-4T](http://www.steveweissmusic.com/product/beall-seven-to-queens/timpani-solo) - A  
[El Dabh-In Search of Three Goddesses-4T](http://www.steveweissmusic.com/product/1129888/timpani-solo) - A  
Ichiyanagi-Rhythm Gradation-4T - A  
[Walker-Tragedy of a Young Soldier-5T/gong](http://www.steveweissmusic.com/product/the-tradegy-of-a-young-soldier-chris-walker/timpani-solo) - A  
[Orfaly-Five Intermediate Pieces-4T](http://www.steveweissmusic.com/product/1109597/timpani-solo) - I  
[Chavez-Partita-6T](http://www.steveweissmusic.com/product/5349/timpani-solo) - A  
[Beck-Alpine Slide-3T](http://www.steveweissmusic.com/product/4290/timpani-solo) - I  
[Willmarth-Capture of the U-505-4T](http://www.steveweissmusic.com/product/capture-of-the-u-505-willmarth/timpani-solo) - A  
[Peyton-The Final Precipice (for timpani and tape)-SP/CD enclosed](http://www.steveweissmusic.com/product/33487/timpani-cd) - A  
[Ridley-Animism (ST)(T)-4T-Tape OS](http://www.steveweissmusic.com/product/4857/timpani-cd) - A  
[Psathas-Planet Damnation-5T/CD](http://www.steveweissmusic.com/product/planet-damnation-psathas/timpani-cd) - A  
[Piche-Steal the Thunder (score w/CD)-4-5T/P/CD](http://www.steveweissmusic.com/product/piche-steal-the-thunder/timpani-cd) - A  
[Rosauro-Concerto for Timpani and Orchestra (Piano Reduction) - 4T/PN SP](http://www.steveweissmusic.com/product/concerto-for-timpani-and-orchestra-piano-reduction-ney-rosauro/timpani-accompaniment) - A  
[Mancini-Suite for Timpani-4T](http://www.steveweissmusic.com/product/suite-for-timpani-david-mancini/timpani-solo) – A  
In addition many of the books above have excellent solos for various levels that are great for solo competitions and recitals!

*Mallet Brands*: **Innovative Percussion Bamboo Series**; *Black Swamp Carbon Fiber*; Malletech Markus Rhoten Series; Amy Putnam; Grover; Clevelander; JG Percussion; Ron Carlisle

*Interval Tunes*Minor Second – Jaws; She Will Be Loved (Maroon 5)  
Major Second - Silent Night; Friday (Rebecca Black)  
Minor Third – So Long, Farewell (Sound of Music); Lullaby (Brahms); Whistle Signal (Hunger Games); Hey Jude; Smoke on the Water; Greensleeves  
Major Third – Kumbaya; Some Nights (Fun); Today Was A Fairytale (Taylor Swift); Marine Hymn; Good Night Ladies  
Perfect Fourth – Here Comes the Bride; Amazing Grace; My Girl  
Tritone – Maria (West Side Story); The Simpsons; YYZ  
Perfect Fifth – Star Wars; Twinkle Twinkle; Blackbird (Beatles); Flintstones  
Minor Sixth – Johanna (Sweeney Todd); Love Story Theme  
Major Sixth – NBC; Man in the Mirror (Michael Jackson); My Bonnie Lives Over the Ocean; Music of the Night (Phantom of the Opera); It Came Upon a Midnight Clear; My Way (And NOW part)  
Minor Seventh – Somewhere (West Side Story); Original Star Trek Theme; Have You Driven a Ford  
Major Seventh – Superman Theme; Take on Me (AHA)  
Perfect Octave – Somewhere Over the Rainbow; The Christmas Song (Chestnuts Roasting)

Dr. Tracy Wiggins is Assistant Director of Bands and coordinator of the percussion program at the University of North Alabama. He holds the Doctor of Musical Arts degree from the HARTT School, University of Hartford, the Master's Degree in Percussion Performance from the University of New Mexico, and the Bachelor of Music in Music Education from Oklahoma State University, as well as post-master's work at The Ohio State University. He also regularly performs as an extra percussionist/timpanist with the Huntsville Symphony.

Dr. Wiggins' varied musical interests are reflected in his performance credits, highlights of which include: orchestral work with the Alabama Symphony Orchestra (extra), The Fayetteville Symphony Orchestra, Florence Symphony Orchestra, Carolina Philharmonic, The New Mexico Symphony Orchestra, the Waterbury (CT) Symphony, the New Britain (CT) Symphony, the Westerville (Ohio) Civic Symphony and as principal percussionist for the Santa Fe Symphony; **solo appearances** at the University of Maryland at College-Park, Tarleton State University, the University of New Mexico's Composers Symposium, Oklahoma State University, Samford University, Henderson State University, The HARTT School, Western Connecticut State University, the University of Alabama-Birmingham, the 2004 and 2009 Percussive Arts Society International Conventions and The Ohio State University; **percussion and drumset work** for "Cathy Rigby is Peter Pan" and the touring Broadway musical "Ragtime" with the Birmingham Broadway Series, The Birmingham Operaworks production of "Trouble in Tahiti," and the Birmingham Theatre production of "Kiss of the Spider Woman"; **concerto appearances** with the HARTT School, University of New Mexico, Oklahoma State University, and The Ohio State University percussion ensembles, the HARTT Contemporary Players, the Oklahoma State University Symphony Orchestra, University of North Carolina at Pembroke Wind Ensemble, and the Samford University Wind Ensemble; **chamber music** performances at the North American Saxophone Alliance Northeastern Conference, with "Performance 20/20," and he has twice performed on the Percussive Arts Society's "New Music" day as a member of the University of New Mexico ensemble; **marching percussion** with the Freelancers and Black Gold Drum and Bugle Corps, as well as instructing the DCI Division III World Championship finalist Delta Brigade and the Northern Aurora Drum and Bugle Corps, and DCA Finalist Carolina Gold; **ethnic percussion** with the HARTT School, Samford University and The Ohio State University steel drum bands, the HARTT Handance Ensemble, and the HARTT and The Ohio State University African Drumming Groups.

Dr. Wiggins' teachers include Johnny Almendra, Tricia Bovenschen, Wayne Bovenschen, Michael Bump, Joe Galeota, Ralph Hardimon, Gregg Koyle, Alexander Lepak, Christopher Shultis, Ben Toth, Glen Velez, and Nancy Zeltsman. He has also performed on masterclasses for Evelyn Glennie, Nebojsa Zivkovic, and Robert Van Sice. Dr. Wiggins has premiered works by composers Sam Merciers, David Macbride, Thomas DeLio, Daniel Davis, and others.

Dr. Wiggins is an artist/endorser for **Yamaha Percussion**, **Black Swamp Percussion**, **Innovative Percussion**, **Remo Drum Heads**, **Beetle Percussion** and **Sabian Cymbals**, and holds current memberships in the Percussive Arts Society, the National Association for Music Education, The College Music Society, Kappa Kappa Psi, and Phi Mu Alpha Sinfonia.