

This (below) is a copy of just the text pages printed on the Timpani part of “**Key Sequences**.” Even without the printed music, however, this extra material will still provide a more complete education to the Timpani Student. If you’d like to know more about **Key Sequences**, just contact me on this website, or email r200lina@gmail.com (you can also contact me to report errors or omissions).

I sincerely hope this helps you and your students!

Robin

Here are some extra details to make your Timpani experience easier, more complete, and more enjoyable. However, this is a greatly *shortened* collection of information. It’s easy to find a wealth of helpful suggestions:

- **Listen** to your Teacher’s advice
- **Study** from experts (whether in person, from a book, or in videos)
- **Practice** these specialized techniques
- **Learn** Solos, and ...
- **Enjoy!**

TUNING

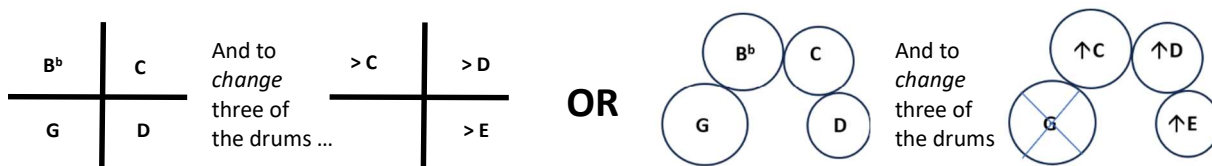
General thoughts about the Tuning process:

Timpani are *pitched* Percussion instruments. They provide an important function of the ensemble’s harmony, and sometimes they even play *melodies*. Therefore, each player must learn how to read pitched music in Bass Clef, and must be able to tune the drums specifically for each composition. The heads often require retuning to new notes *during* the performance. The best Timpanist knows how to tune using gauges (if there are any) as well as *by ear*, and can smoothly tune on-the-fly. These are skills that will require practice. Here is a very short collection of helpful information about your role as a Timpanist:

1. **Gauges vs. no gauges.** Many models come with tuning gauges; however, the gauges are adjustable, and must be *calibrated* to be reliable (the heads change over time). Without calibration, gauges are not as helpful and, in fact, they could lead you to *poor tuning*. Your Teacher probably takes care of the calibration, but it must eventually become part of your skill-set, so plan to learn how to adjust the gauges. If your Timpani have no gauges, then of course you’ll need another method (see “Ear Training, below). **Note:** It is important to *not* rely on gauges. Gauges are a good *visual* aid, but they do not guarantee accurate tuning. Ultimately your *musical ear* is the important factor.
2. **Memorizing Fundamental notes and the range of available notes for each drum.** A drum’s *fundamental* note is the lowest pitch when the tuning pedal is at its bottom setting. *Generally*, the fundamental of the 32” drum = D; 29” = F; 26” = B^b; and 23” = D (see the cover page of this packet). Your models may be different, and your Teacher may have a different preferences. By knowing each drum’s *available notes*, it is easier to choose *which drums* should be tuned to the required pitches. Note: Even though it’s possible to play notes higher than a 5th or 6th above the fundamental, the Timpani often can’t produce a beautiful sound on the highest notes; tune drums within their recommended ranges.
3. **The sound-source: where do I get my pitches?** Even with gauges that have been carefully calibrated, players should learn to tune pitches from a sounding note. Some ensembles use a Principal Clarinet, whereas others use a Tuba, an Oboe, or something else. Timpani players might also ask for a starting pitch from someone *near* them in the ensemble (e.g. Glockenspiel, Marimba,

DoubleBass, Piano). Players should know how to use a **pitch pipe** (and/or a *Tuning Fork*) and should practice tuning pitches independently. Ask your Teacher for additional information.

4. **Finding the right pitch.** Timpani players often use one (or both) of the following methods to set a timpano's tuning: 1. **Strike** (softly) the head in its low range, and listen to the *glissando* as you move the pedal to raise the pitch, stopping when the sound matches the desired sound. Note: strike the head *once* ... avoid a repeated "*tap-tap-tap-tapping*" while moving your foot! 2. **Hum** (or sing "ooo") the correct pitch with your voice close to the head's best striking area. Without striking the head, gradually pedal upward, raising the pitch until the instrument 'rings' a vibration matching your voice. This effect is known as "resonance" or "sympathetic vibration." The goal of your practicing should be to **tune the drums quickly, quietly, and accurately**, without causing excessive noise. **NOTE:** It can be helpful to memorize the feel of the pedal's range-of-motion. [How far must you move your foot for a *narrow* interval or a *wide* interval? Or, specifically, for a "*minor 2nd*"? ... for a "*Major 3rd*"? ... for a "*Perfect 5th*"?]
5. **Marking the Music.** For *retuning* during a performance, it will be important for the player to write instructions into the music. For example, we might write "**A^b → B^b**" just above the staff at an appropriate time within the music. When *more than one drum* needs to be retuned, write the instructions in a logical order, and then *practice the tuning* so it can be done in the allotted time. Ask your Teacher for guidance. Two suggestions about marking the tuning of *four* Timpani:



6. **Tuning at the correct time.** The timpanist is frequently required to complete several complex tunings during rests. This is another very important long-term skill, because players must never get lost from the music while tuning! First, try to memorize the *sound* of the musical passage during rests to help ensure that you're ready to re-enter at the right time. Write your instructions into the music carefully, and *coordinate* your tuning with the beats/rhythm of the piece. For example, to complete four pitch-changes during an 8-measure rest without getting lost, you might tune *one* drum in each two-measures of time, aligned to the pulse of the music. Ask your Teacher for additional suggestions, then write them in and *practice* the timing of your tuning.

Exercises for Tuning, Intervals, Music Theory, and Ear-Training:

You'll need to understand intervals (distances between notes), both by sight and by sound. When you see two pitches on the staff, how will you tune the sounds correctly? *Ear Training* is the answer. There are many valid systems for ear-training and for learning basic Music Theory concepts; follow the advice of your Teachers for guidance. These easy suggestions may help while you're developing your own musical ear.

In many compositions, Timpani music involves at least one interval of a *Perfect 4th*, so it's wise to learn that sound right away. If you can already sing a *scale* – and you can 'hear' it in your mind – you'll recognize the interval of a *Perfect 4th* as the distance from *Sol* to *Do* upward ("**Sol-La-Ti-Do**") or *Do* to *Sol* downward ("**Do-Ti-La-Sol**").

Example – Scale method: To easily tune a Perfect 4th, play "Do" but then use your inner hearing to *imagine* (audiate) the sounds of "Re" and "Mi." Your ear will then allow you to correctly tune the "Fa".

With this basic method, tuning a **Perfect 4th sound** (upward) works this way:

- Play **G** – (audiate Re, Mi) – Play **C**
- Play **F** – (audiate Re, Mi) – Play **B^b**
- Play **A** – (audiate Re, Mi) – Play **D**
- Play **B^b** – (audiate Re, Mi) – Play **E^b**

And with the same scale method, a **Perfect 4th** (downward) works this way:

Play **G** – (audiate Ti, La) – Play **D**
Play **F** – (audiate Ti, La) – Play **C**
Play **A** – (audiate Ti, La) – Play **E**
Play **B^b** – (audiate Ti, La) – Play **F**

Example – Song method: Many musicians memorize intervals based on songs they already know. The *Perfect 4th* sound is very common, and easy to memorize. Try these songs first for the “4th”, and then learn the other intervals with songs of your choice. These are common examples, but ultimately it will be *your* personal decision about which songs are the most recognizable for you:

Ascending 4th: *Here Comes the Bride (The Wedding March); Taps; We Wish You A Merry Christmas; Amazing Grace*

Descending 4th: *Hallelujah Chorus (from The Messiah); Shave and A Haircut; O Come All Ye Faithful; Eine Kleine Nachtmusik (Mozart)*

This very clever website offers a song-list for all intervals:

<https://www.earmaster.com/products/free-tools/interval-song-chart-generator.html>

If you're comfortable using the Scale method, then you already know the sounds of Intervals in that scale. Using the *Major Scale*, it's easy to find *any interval* in that scale:

Major 3rd = **Do** (Re) **Mi**

Perfect 5th = **Do** (Re, Mi, Fa) **Sol**

Major 6th = **Do** (Re, Mi, Fa, Sol) **La**

Major 7th = **Do** (Re, Mi, Fa, Sol, La) **Ti**

Eventually, learn the sound of the Minor Scale too. But *until that time*, here's a shortcut to tune minor intervals *by using the Major Scale*:

minor 2nd = (Do, Re) **Mi Fa**

minor 3rd = (Do, Re) **Mi (Fa) Sol**

minor 6th = (Do, Re) **Mi (Fa, Sol, La, Ti) Do**

minor 7th = (Do) **Re (Mi, Fa, Sol, La, Ti) Do**

NOTE: It's important to practice tuning downward (descending) intervals too! Design a strategy that works for you to help with the descending intervals.

TIMPANI TIDBITS – TUNING, TECHNIQUE, AND TYPICAL TOPICS:

- Practice Playing Songs by ear** on one drum, using the pedal (*Do-Re-Mi; Frere Jacques; Three Blind Mice; etc.*)
- Mark Your Sticking** (R-L) in the music, especially for *double-strokes* and **crossovers* (*here's a video lesson for crossing sticks on Timpani: <https://rb.gy/2onur>)
- Muffling** is a big topic, but it's a very important skill. With too much material for a bulleted list, I recommend that you get a demonstration from a professional. Try these links for nice muffling lessons ...
 - from *Alfred Music's "Sound Innovations"*: <https://rb.gy/atnx5>
 - from *Vic Firth's "Percussion 101"*: <https://rb.gy/goi0v>
 - from *Andrew Proctor*: <https://rb.gy/766k2>
- To Stand or To Sit?** You'll develop a preference. Just be sure your feet are ready and *available* for your pedaling, even when it's fast or complicated. If you choose a stool, it must support you at the right *height* for your best mallet technique.
- Managing Mallets:** Unless you have a hanging stick-bag or a dedicated trap table, you might use a music stand, with its desk flattened to a low angle. Cover the desk with a towel or pad; your mallets must be easily reached and exchanged, without noise.

- **Moving the Timpani:** First, ask your Teacher for guidance and approval, because moving/lifting these instruments can cause expensive damage. When you **move** a timpano, keep its head on a higher pitch (stretched more tightly), which will help avoid letting the head slip out of its “seat.” When you **lift** a timpano, never grab it by its rim; lift using the *legs* of the drum. *Protect the gauge, the pedal, and the rim from any impacts.*
- **Changing Heads:** Let a professional do this job (but *observe and learn!*). A new Timpani head is expensive, and changing it is an important but *complicated* task.
- **Have fun!** Your role is *very important* to the quality of your ensemble. Enjoy it!

R. Linaberry, 2018

Tuning Exercises for Timpani

26" > B^b - C - D - E^b - F - E^b - D - C - B^b B^b 26"
B^b - C -- D

29" > F F -- G -- A -- B^b

Show Finale Notation

Three Blind Mice

26" > D - C -- B^b ---- D - C -- B^b ----

Show Finale Notation

Frere Jacques

26" > B^b - C - D - B^b - B^b - C - D - B^b - D - E^b - F ---- D - E^b - F ----

Show Finale Notation

