

A close-up photograph of a wooden mallet percussion instrument. The image shows several dark-stained wooden mallet heads of varying sizes, arranged in a row. They are attached to a larger wooden frame. In the background, a series of vertical brass tubes are visible, likely part of a mallet percussion instrument like a timpani or a set of mallet percussion instruments. The lighting is warm, highlighting the textures of the wood and the metallic sheen of the brass.

COE
PERCUSSION

Mallet percussion in the 21st century

*Custom-Built Professional and Student
Mallet Percussion Instruments*



About the Company

Coe Percussion offers complete custom-built marimbas and concert xylophones designed to meet each individual's needs. We offer both "Concert Series" and "Practice Series" marimbas, as well as Concert xylophones.

Founded in January 1998, Coe Percussion is operated with one principle in mind; to provide the highest quality mallet percussion instruments in the world, using only the finest available materials, and offering these instruments at competitive prices. Coe Percussion focuses exclusively on mallet percussion. With this focus, you can be assured that each instrument is meticulously hand-crafted, passing several quality control measures along the way towards completion. Coe Percussion strives for creativity in instrument design, and we offer a variety of choices and alternate materials in each of our custom-built instruments.

Founder and CEO Matthew Coe's educational and practical experiences, coupled with his creativity and craftsmanship, provide a unique personality in the field of mallet percussion manufacturing. A graduate of Florida State University, Mr. Coe holds a Bachelor of Music Education Degree and has been providing musical instrument services for over ten years as a member of The National Association of Professional Band Instrument Repair Technicians (NAPBIRT). Coe Percussion is a sustaining member of The Percussive Arts Society.



Our Mission

Coe Percussion is dedicated to providing the highest quality mallet percussion instruments at competitive prices. Coe Percussion is able to accomplish this through creativity in instrument design, using alternate materials when appropriate, and a variety of choices in each of our custom instruments.

WARRANTY: Every new instrument that leaves our facility is guaranteed against defects in materials and workmanship for a period of one year. In addition, the warranty covers free bar replacement for any reason during the first year of ownership, and free re-tuning of the bars during the first two years of ownership.

Tuning-Our Philosophy



Marimba bars consist of several tuned pitches, not just the “fundamental”, or the most prevalent pitch you hear when striking a bar. Marimba and xylophone bars also vibrate from side to side and along the diagonal surface area of the bar, and these pitches must also be controlled during the tuning process. All of our tuning is done in a temperature and humidity controlled environment. Each completed instrument is tested in this same environment of about 74 degrees and 50% relative humidity or less. Each individual bar is evaluated not only for correct intonation but also for ring-time and overall tone.

In any musical tone there exists a series of pitches, or overtones, often referred to as the “harmonic series”. Each of the pitches affects the other in certain ways. In the case of the marimba, the lowest notes are where the overtones are most noticeable. However, the importance of tuning this series of notes correctly in each bar affects the entire range and overall sound of the instrument. Tuning the overtone series is part of what gives the marimba and every musical instrument its characteristic sound. Why does a trumpet sound different than a horn? While the answer to that question is quite complex, the harmonic series is partially responsible.

Manipulation of each of these pitches in relation to the other can change a musical instrument’s characteristic tone. In the case of a marimba keyboard, manipulation of these pitches help to make it sound warm, full, dull, pronounced, or even piercing, among other effects. Bar dimensions and thickness also play a large role with these effects. Professional musicians and amateurs alike often have exact ideas of the type of sound they want from their marimba keyboard. Thus the term and practice of “bar voicing”.

During the early years of mallet instrument production in the United States, mallet instrument manufacturers only tuned one pitch in each marimba bar. That is, they tuned the “fundamental” pitch only. After years of research, some trial and error, and improvements in methods of manufacture, marimba makers began tuning two pitches in each bar: the fundamental pitch and the third overtone or harmonic. This pitch is located two octaves above the fundamental. This created marimba bars that were much more pleasant to the human ear and also sounded less “tribal” or ancient.

More recently, makers began tuning the ninth harmonic above the fundamental in addition to both the fundamental and third harmonic. This pitch is located at three octaves and a major third above the fundamental pitch. As stated earlier this pitch is most noticeable when playing the lowest notes on the marimba, especially when playing these notes in combination with the highest notes on the keyboard.

The term “triple tuning” refers to the process of tuning all three aforementioned pitches in each single bar. Manipulation of these pitches, as well as several other physical factors, affect the overall sound of a marimba. Experienced tuners and makers know how to manipulate these factors to create an instrument with specific tone colors and an instrument that is custom-built and tuned upon the sonic wishes of their customers.



Concert Marimbas:



Heavy-Duty Construction with Style and Durability.



Height adjustable, or custom built to your height requirement. (no lower than 34" to natural bars due to resonator lengths) Overall Length of Instrument: 102" Bar Sizes: From 3 1/4" (lowest bars) graduated to 1 5/8" (high end bars) Six different resonator diameters for even resonance throughout the entire range of the keyboard. Instrument weight: 425 lbs.

Five-Octave Concert Marimba: Honduras Rosewood Bars, Brass Resonators, and Maple frame. Our wood frames have unlimited options in both stain applied and type of wood. Please inquire about choices and prices. All instruments come standard with highly polished "mirror finish" brass resonators. Hydraulic height-adjustable frames are available on all of our instruments. (lighter weight aluminum resonator model also available)



Four and One-Sixth Octave (Low E) Concert Marimba: Honduras Rosewood Bars, Brass Resonators, and Maple Frame. (aluminum resonator model also available)

Four and One-Third Octave Concert Marimba (Low A): Honduras Rosewood Bars, Brass Resonators, and Maple frame. (aluminum resonator model also available)

We have a new model 5.5-octave (extended upper range) marimba. Please contact us to find out more.

All tone bars on the concert instruments are hand-selected Honduras Rosewood. Marimba bars are "triple tuned" and are of the finest quality. (Xylophone bars are "Quint Tuned"). Each bar is painstakingly hand crafted for an extremely smooth surface with rounded edges. Rounded edges and a smooth playing surface prolong the life of the yarn mallets used in playing the instrument. Each bar is carefully selected based upon grain structure of the wood, color, and most importantly ring-time and tone. Bars are finished in multiple coats of a special tung oil that does not hinder the resonance of the bar, while at the same time protecting the bar from all of the elements.



Our Exclusive

Hydraulic Adjustable Frames

Our height system is unlike anything else currently available. It involves the use of a hydraulic system that enables one person to easily adjust the height of the keyboard throughout a range of seven inches. Simply turn a single crank located on the bass end of the instrument for a nearly effortless height adjustment. The hand crank folds away under the bar rail when not in use. The system is totally integrated into the frame and hidden from view. This enables us to use our current all-wooden frame design without many modifications. Most other height adjustable instruments have metal frames, which sacrifice the beauty of all wooden construction.



Our AWESOME one crank height adjustment system. A twin crank system is also available, which offers greater flexibility for those who travel with the instrument often.



Height system all the way down.

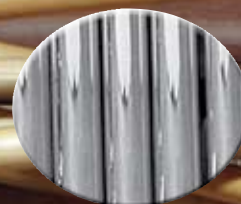
Height system all the way up.



Built-in height measurement guide.

Resonator materials

Resonator materials can include Brass highly polished to a "mirror" finish or left plain, Aluminum powder-coated in your choice of color, and Synthetic Tubing in your choice of color. Materials will be suited to meet your likes/dislikes, needs, and budget.



Practice Marimbas



Height adjustable, or custom built to your height requirement. (no lower than 34" to tops of natural bars due to resonator lengths) Overall length of instrument: 102" Bar sizes: from 3 1/4" wide (lowest bars) graduated to 1 5/8" wide (high end bars) Six different resonator diameters for even resonance throughout the entire range of the keyboard. Instrument weight: 125lbs no resonators, 295lbs with aluminum resonators.

The Practice Series Marimba uses Honduras Rosewood tone bars. We offer both a 5.0-octave and a 4.3-octave version. The bars are identical in size and shape to our Concert Series and are full-sized. The only differences between Concert and Practice Series bars are cosmetic.

The lowest bar is 3 1/4" in width and graduates in size up to 1 5/8" in the top octave. The height-adjustable frame consists of white oak, which is stained dark, and a stainless steel tube metal frame base. The entire instrument breaks down, and the bar rails fold in the center. The tube frame comes completely apart, and everything is very easy to transport.

For the 5.0-octave version, the entire instrument will fit into 4 duffle bags, which are available for an additional cost.

You can add aluminum resonators to this instrument at any time to upgrade it to a concert-ready marimba.



Concert Xylophones



Our height adjustable and fixed-height metal frames are light-weight, absolutely rugged and silent. They are made from ultra-strong and light-weight aircraft aluminum with nylon bushings on all connecting points and joints; there is no metal-to-metal contact!



Our concert xylophones have Honduras Rosewood bars that are 2" in width low C4-D#4, and are 1 5/8" in width E4-C8. The resonators are solid brass or aluminum, with tunable caps on every note. All of our xylophones are based on the classic "ragtime" instruments of the early 20th century, most of which are no longer available, and no other company currently produces an instrument of this same design. The bar dimensions are a replica of a certain model of these type xylophones that we feel was one of the best xylophones ever made. The bars are longer throughout the entire keyboard than most other current production xylophones and are all 15/16" thick, which is thicker than most other xylophones produced today. The bars are "Quint Tuned" in the same manner as was done long ago. These factors give our xylophone a unique sound, all of which words cannot describe. Please inquire about pricing, availability, and any other questions you may have. Hydraulic height adjustable frames are available on our xylophones too!

Marimba sizes range from Four and One Third (low A) to full Five octave instruments. We offer a 3.5 and a 4.0 octave Xylophone. Bars on marimbas are Honduras Rosewood. All Xylophones are Honduras Rosewood; however, other woods are available upon request. (such as Cocobolo used on the old Deagan Klyposerus instruments) We are always experimenting with unique and new wood types, so don't hesitate to inquire.

Custom Cases and Covers

Introducing A Full Range of Travel Cases and Protective Covers

We offer custom made marimba and xylophone covers designed and built by hand in our U.S. workshop. Our covers and cases offer the durability of military-spec heavy duty Cordura, ripstop, and 1/2-inch protective foam, while maintaining the style and value you've come to expect from Coe Percussion.



We offer full-drop covers that cover and completely pad the entire instrument and shallow-drop covers that cover bars and six inches down the sides of the instrument.



Repairs and Re-Tuning

Coe Percussion can re-tune or overhaul any manufacturer's bars, resonators, and instruments. With the large number of different types and makes of mallet instruments, this service will be offered on an individual case-by-case basis. If you have other needs, please ask. We can custom build just about anything.

Custom Resonators with Adjustable Caps



If you are missing resonators or have a desire to upgrade your instrument with resonators that have individually tunable caps, we can build them for your marimba or xylophone.

To inquire for prices or more information please contact Coe Percussion toll free at 1-866-365-7791 (U.S.A. and Canada) or (850)228-6960. Or send an e-mail to info@coepercussion.com

www.coepercussion.com





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