



Keyboard FUNdamentals

James Lambert & Judy Moonert

I. BASIC MUSIC THEORY

• A beginning mallet percussionist must memorize the 12 major scales. These scales relate to other harmonic information that the student will need. With each marimba bar one half step away from the next bar, the major scales are built on a series of half steps and whole steps (w,w,h,w,w,w,h). Below are the note names for the lines of the bass and treble clefs.



Treble Clef Lines E G B D F



Bass Clef Lines G B D F A

• Learning key signatures for these scales is important. The key signature is indicated at the top of the music with sharps and flats (a sharp will raise a pitch one half step, a flat will lower a tone one half step). Below is the order sharps and flats are used in key signatures, i.e. F major has one flat (B-Flat), B-Flat major has two flats (B-Flat and E-Flat, etc.).

Flats: B E A D G C F

Sharps: F C G D A E B

• Each key signature has a major and minor scale. To find the relative minor scale from the major scale, go down three half steps from the tonic or “home base.”

Examples: C major and “a” minor (no sharps or flats)

F major and “d” minor (one flat)

D Major and “b” minor (two sharps)

• To find the chord or triad for a given pitch, use the first, third and fifth scale degrees.

Examples: Major chord - 1, 3, 5 of major scale

Minor chord - 1, flat-3, 5 of major scale

Augmented chord - 1, 3, sharp-5 of major scale

Diminished chord - 1, flat-3, flat-5 of major scale



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II. KEYBOARD PERCUSSION TECHNIQUE

Keyboard Percussion Technique includes grip, arm position, body placement, stroke, roll development, as well as the placement of mallets on the keyboard percussion instrument. A solid foundation in the above basic fundamentals is essential to produce a full sound and develop excellent note accuracy on keyboard percussion instruments.

• The Grip (2-mallet)

The mallet is held between the thumb and the first knuckle of the first finger, the end of the finger wraps underneath the mallet. The other fingers close naturally on the mallet shaft with the fingers laying in a relaxed, flat manner without gripping or wrapping tightly around the mallet shaft. The mallet should be held toward the end of the shaft with about one inch extending out of the back of the hand. Using a wrist stroke, experiment with holding the mallet shaft in different areas, notice how the weight of the mallet head and the sound of the instrument changes as you move closer to the mallet ball versus the back of the mallet shaft. In general, you want to hold the mallet in a place where the mallet head feels heavy but not so heavy that it dampens the sound of the bars of the keyboard.

• Arm Position

The arm position is natural like you are shaking hands in greeting another person. The hands lie close to the keyboard in a flat position that will allow the wrists to have a full up-down motion. Blocks of wood or stacked PVC pipe can be placed underneath the wheels of an instrument to raise the instrument to a comfortable height so that your wrist can have a full motion.

• Body Placement

Stand in the middle of the register you are playing to minimize foot motion. In general, the less body motion used - the better your note accuracy. You will need some foot motion to avoid losing balance for long reaches, try gliding or shuffling your feet as you move, avoid large foot motions or jumps! Stand with your spine (back) and shoulders straight and bend your chin to look down at the instrument.

• Stroke

The stroke used on mallet instruments starts in the up position, strikes the bar and returns to the original up position similar to a “V”. The stroke is called a “piston stroke”. All strokes are produced through a wrist motion. Keep the wrist as low as possible to the instrument. To produce a big sound, minimize mallet height and maximize the weight in the mallet through using a wrist stroke. Remember to bring the mallet back to its original “up” position. Focus more on raising the mallet after the stroke than striking the keyboard. Tone is determined by how long the mallet is in contact with the bar.

• Playing Area

The bars are played slightly off-center and over the resonator to produce a full resonant sound. The upper keyboard may be played on the very end of the bar near the lower keyboard to facilitate smooth movement between the upper and lower keyboard.



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- **Movement Anticipation**

It is important to have the mallet over the bar before you need to play the note so that you can have a straight stroke without slicing from moving to the bar late.

- **Rolling/Sustaining Notes:**

Use alternating single strokes to create a sustained sound.

Roll speed is determined by pitch - the lower the pitch, the slower the roll.

DEVELOPING READING SKILLS

- **Recognizing musical patterns through developing a musical vocabulary (see basic music theory above)**

Scales, chords, and other short melodic motives can be memorized and recognized instantly when reading music.

When you read a book you recognize groups of words because of your knowledge of the English vocabulary - the same reading concept can be applied to music.

Practice scales and chords until they become a part of you.

III. PERCUSSION KEYBOARD READING FOR BEGINNERS

- Select a passage to read from one of the books recommended on page 8 of this handout or one suggested to you by a percussion teacher.

- A. Determine the tonality of the composition.

- B. Review your technique for that key with the suggested exercises.

- Speak the note names of the selection—in correct rhythm.

- Touch the keys with your index fingers (without mallets) and also speak the note names in rhythm (attempt to match pitch and keep eyes on the printed music).

- Play the piece with mallets—slowly—while speaking/singing the note names. Do your best to develop peripheral vision so that you are not looking from the music stand to the keys, but focusing on the printed music with the mallets in your lower peripheral vision.

- Gradually increase the tempo—with the assistance of a metronome—until the optimum speed and style are achieved.

Practice Habits

- Find a regular time—dedicated to yourself—every day to develop your abilities.

- Use a relaxed grip, with your palms facing the floor. The primary fulcrum for two-mallet playing should be



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between the thumb and forefinger. Be certain that you are not gripping the mallet too tightly! Be relaxed, and use your wrist—not elbow or shoulder movement.

• A suggested 25–30 minute practice session could include:

5–10 minutes for techniques (scales, arpeggios, rolling, movement, etc.)

15 minutes preparing assigned material

5–10 minutes for sightreading and improvisation

• Have Fun!

Key Signatures and Exercises

C Major/a minor *F Major/d minor* *B♭ Major/g minor* *E♭ Major/c minor* *A♭ Major/f minor*

D♭ Major/B♭ minor *G♭ Major/e♭ minor* *C♭ Major/a♭ minor* *G Major/e minor* *D Major/b minor*

A Major/♯ minor *E Major/c♯ minor* *B Major/g♯ minor* *F♯ Major/d♯ minor* *C♯ Major/a♯ minor*

Stroke Development

Double Stroke



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Stroke Development

Single Stroke

L R L R etc.

L R L R etc.

Oblique Stroke

R L R L R L R L etc.

L R L R L R L R etc.



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Technical Development

1. Focus on equal mallet height between hands and the use of a full wrist stroke with mallet beginning in the “up” position and returning to the up position after striking the bar.

Unison Exercise



Add accents and vary the rhythm of the above exercise to create your own exercises. Practice in all major and minor keys.

2. The following exercise is used to develop musical vocabulary. Practice in all major and minor keys.

Musical Vocabulary Exercise





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3. The following exercise is used to develop a “feel” for keyboard spacing. Practice in all major keys.

Spider Web Interval Exercise

Repeat each measure until you are playing the notes accurately.

• Recommended Texts

1. *Modern School for the Xylophone, Vibraphone, and Marimba* by Morris Goldenberg (Chappell)
2. *Primary Handbook for Mallets* by Garwood Whaley (Meredith)
3. *Rhythmical Articulation* by Pasquale Bona (Schirmer)
4. *Method of Movement* by Leigh Howard Stevens
5. *Ideo-Kinetics, A Workbook for Marimba Technique* by Gordon Stout
6. *Modern Mallet Method* by Phil Kraus