CLARINET FUNDAMENTALS

A Workbook for Developing Clarinet Technique

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Clarinet Fundamentals
A Workbook for Developing Clarinet Technique
By Joshua Gardner

The purpose of this workbook is to present the performance fundamentals necessary to develop satisfactory technique on the clarinet. The exercises include long tones, scales, arpeggios, thirds, and various single and multiple articulation exercises. With proper instruction, they will help you develop adequate air control, correct and agile finger motion, proper hand position, flexible intonation, and articulation accuracy and speed. By learning these fundamentals and committing them to muscle memory, you will be able to make music more efficiently and with fewer limitations. All of the exercises are presented in two octaves. You should expand them to three octaves gradually as you become comfortable with the upper register. Fingerings are provided for basic patterns (major/minor scales, arpeggios, and thirds) and the third octaves. Blank fingering diagrams are provided at the end of this workbook for recording custom fingerings.

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Intonation Guide for Long Tones

Being able to play in-tune with a tuner does not necessarily equate to being able to play in-tune within an ensemble. Certain pitch adjustments need to be made when playing in ensembles. Using a tuner provides the opportunity to learn the general tuning tendencies of our instruments and how to adjust to those tendencies. Once we know our instrument’s tendencies, we can better predict how to manipulate a given note to be in-tune within a performance context. Below is a table indicating the pitch changes necessary to play a given interval in-tune (for Just Intonation). In addition to playing Long Tones with a tuner, play them with a drone to practice adjusting to these various intervals. Try to eliminate the “beats” between the two tones. Listen carefully for a third tone – the difference tone (also known as the resultant tone, combination tone, or Tartini tone), which is defined by the frequency difference between you and the drone. For nearly every interval above the drone pitch, some adjustment will be required to be “in tune.”

To lower the pitch, it may be necessary to close tone holes partially or completely, depending on how much adjustment is required. To raise the pitch, try to avoid using excessive embouchure pressure – this will affect the sound detrimentally. A better option is to open tone holes to raise the pitch. Experimentation will yield the best results with your particular setup.

Pitch adjustments required for Just Intonation

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<tr>
<th>Interval</th>
<th>Ratio</th>
<th>Adjustment (cents)</th>
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<tr>
<td>Unison</td>
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<tr>
<td>Minor 2nd</td>
<td>16:15</td>
<td>+11.73</td>
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<tr>
<td>Major 2nd</td>
<td>9:8</td>
<td>+3.91</td>
</tr>
<tr>
<td>Minor 3rd</td>
<td>6:5</td>
<td>+15.64</td>
</tr>
<tr>
<td>Major 3rd</td>
<td>5:4</td>
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<td>Perfect 4th</td>
<td>4:3</td>
<td>-1.96</td>
</tr>
<tr>
<td>Tritone (septimal)</td>
<td>7:5</td>
<td>-17.48</td>
</tr>
<tr>
<td>Perfect 5th</td>
<td>3:2</td>
<td>+1.96</td>
</tr>
<tr>
<td>Minor 6th</td>
<td>8:5</td>
<td>+13.69</td>
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<tr>
<td>Major 6th</td>
<td>5:3</td>
<td>-15.64</td>
</tr>
<tr>
<td>Minor 7th (septimal)</td>
<td>7:4</td>
<td>-31.17</td>
</tr>
<tr>
<td>Major 7th</td>
<td>15:8</td>
<td>-11.73</td>
</tr>
<tr>
<td>Octave</td>
<td>2:1</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Eb major

C natural minor

C harmonic minor

C melodic minor

Ab major

F natural minor

F harmonic minor

F melodic minor

Db major

Bb natural minor

Bb harmonic minor

Bb melodic minor
Major & Minor Scales in Thirds

C major

A minor

F major

D minor

Bb major

G minor

Eb major

C minor

Ab major

F minor

Db major

Bb minor
Additional Scales and Arpeggios

Chromatic Scale

Chromatic Scale in Major Thirds

Chromatic Scale in Minor Thirds
Minor Scale Forms

Natural: follows key signature

Harmonic: raised 7th ascending and descending

Melodic: raised 6th and 7th ascending; natural descending

Whole Tone Scales

Root F

Root E

Octatonic Scales

Root E

Root F

Root F#
Blues Scales
Diminished Seventh Arpeggios
Roots: E, G, Bb, Db

Augmented Arpeggios
Roots: E, G#, C
Roots: F, A, C#
Roots: Gb, Bb, D
Roots: G, B, D#
Major-Minor Seventh Arpeggios
Minor-Minor Seventh Arpeggios
Major-Major Seventh Arpeggios
Half-Diminished Seventh Arpeggios
Third-Octave Guide
Scales
Third-Octave Arpeggios
Third-Octave Thirds
Practice Techniques

Rhythm Patterns

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Other Practice Techniques

Add a note

Displaced Accents
Intermediate Single & Multiple Articulation Exercises

1. Pre-Langenus #1

2. Pre-Langenus #2

3. Endurance with a single note

4. Five-note scales

5. Endurance with scales
Single Articulation
Adapted from Langenus, pg. 22
Single/Multiple Articulation
Adapted from Langenus, pg. 23
CUSTOM FINGERING CHART

Pitch: _______  Pitch: _______  Pitch: _______

Notes:  Notes:  Notes:

Pitch: _______  Pitch: _______  Pitch: _______

Notes:  Notes:  Notes:

Pitch: _______  Pitch: _______  Pitch: _______

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<tr>
<td>Notes:</td>
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<td>Notes:</td>
</tr>
</tbody>
</table>

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The following fingering chart includes fingerings you can use to play the third octave of all major and minor scales, arpeggios, and thirds. The fingerings are ordered chromatically with the pitch and octave indicated in the label. Notes with more than one fingering option have the specific fingering indicated above the note. Notes without a label use the indicated fingering in the chart. When first learning these third-octave exercises, fold out the fingering chart so it is visible next to the page with the exercises. Once you become familiar with the fingerings, try to play the exercises with the chart folded back into the book.

**Fingering Notes**

- **Db/C#6**: Stable fingering; avoid using the RH Eb key
- **D6**: Stable fingering; sometimes the Eb key is unnecessary—check tuning
- **Eb/D#6.1**: Stable fingering, can be flat on some clarinets
- **Eb/D#6.2**: Tends to be flat—check tuning; makes Db/Eb transitions much easier
  - Note: An Eb marked with an * indicates that Eb6.2 is technically easier to execute. However, if the pitch is too low, Eb6.1 should be used.
- **E6**: Requires proper voicing to avoid squeaking to A6; half-holing the first LH tone hole improves stability
- **F6**: Relatively stable fingering; can be flat on some clarinets
- **F#6**: Tends to be flat—the RH sliver key will help raise pitch
- **G6.1**: Requires proper voicing to avoid squeaking to B6 or dropping to C#6
- **G6.2**: Excellent response; may be slightly flat—the RH sliver key will help raise pitch
- **G6.3**: RH sliver key necessary to raise pitch; proper voicing
- **Ab/G#6.1**: Fantastic response and intonation; awkward for technical passages
- **Ab/G#6.2**: Requires accurate voicing for tuning and response; excellent for scalar passages
- **Ab/G#6.3**: Great for leaps/arpeggios; flexible intonation; can be unstable
- **A6.1**: Fantastic response; can be sharp; excellent response
- **A6.2**: Good response, but not as good as A6.1. Slightly lower pitch than A6.1
- **Bb/A#6**: Requires accurate voicing; excellent pitch; easy response
- **Bb/A#6.1**: Stable response, pitch, and sound; requires accurate voicing for leaps and scalar passages
- **Bb/A#6.2**: Slightly flat; excellent response—great for leaps
- **C7**: Stable fingering; excellent, flexible pitch; LH G# key can be added to raise pitch, if necessary
- **Db/C#7**: Full sound; can be unstable; sharp
- **D7**: Excellent sound and pitch; great for scalar passages; requires accurate voicing to avoid G6 or B6
- **Eb/D#7**: Can be sharp or flat, depending on reed—the LH C#/G# key will raise the pitch. Articulation may be necessary when leaping to Eb7 from Bb6 in the Eb major and minor arpeggios.
- **E7**: Can be sharp or flat, depending on reed; requires accurate voicing
- **F7**: Tends to be flat; very dependent on reed