



The United States Army Field Band

The Musical Ambassadors of the Army
Washington, DC

Euphonium Topics

by

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WHAT'S IN A NAME?

What is the difference between a euphonium and a baritone horn? While some people think that the difference is the number of valves or the number of bells, the real difference is in the diameter of the tubing, or bore size. A European baritone horn has a considerably smaller bore size than a euphonium does, similar to the difference between a cornet and a flugelhorn. The American-made baritone horn has a bore size in between a European baritone horn and a euphonium, but closer in size to a euphonium. The larger bore of the euphonium gives it a darker, fuller sound preferred by most professionals and advanced students.

BASS AND TREBLE CLEF

Unlike the music for other instruments in the band, music for the euphonium is printed in two different forms: a non-transposing bass clef part like the trombone, and a Bb transposing treble clef part sounding an octave below the trumpet, like the tenor saxophone. This can make it easy for either a trombone player or a trumpet player to learn to play euphonium.

In virtually all American band music, similar sounding bass and treble clef parts are available, so it is not essential for a beginning player to learn both. Many European band arrangements, however, have bass and treble clef parts that are different—in fact, they are often written for different instruments, with the euphonium part in bass clef and the baritone part in treble clef. Some solo music and much small ensemble and chamber music is only available in one clef, usually bass. Also, a euphonium player who reads both clefs can borrow solo and ensemble music and etudes from many other instruments including trombone, trumpet, clarinet, and cello. To learn a diverse repertoire, euphonium players need to know both bass and treble clefs.

BREATHING AND SUPPORT

In order to take a full, quick breath, the throat has to be relaxed and open. The lungs must expand and fill first from the bottom. To do this,

the diaphragm, a large muscle that separates the chest cavity from the abdominal cavity, must push forward and down, causing the stomach to protrude slightly as the muscles around the waist relax. When this is done, the lungs can expand to their maximum extent, filling sideways as well as downwards. The diaphragm should move first to let the lower lungs fill. The upper lungs fill last, although the whole process must happen quickly and smoothly so that it feels nearly simultaneous.

When exhaling in order to produce a note, the breath must be supported. During normal, quiet breathing, the diaphragm relaxes passively as the air gently escapes the lungs; however, while playing a wind instrument the waist muscles should be contracted. This forces the internal organs of the upper abdomen up against the diaphragm, increasing the pressure to push the air out of the lungs. This provides the breath support necessary to project the tone.

ARTICULATION

For a normal attack, not accented and not legato, the tip of the tongue should be pulled downward from a point near the gumline of the upper front teeth. Depending on the shape of the mouth, the actual point of contact might be the back of the teeth or a little farther back on the roof of the mouth.

Sometimes tonguing problems are actually lip problems. Harsh, clumsy, or indistinct articulation is frequently attributed to the lips. If they are not set properly to vibrate at the correct pitch, the note either refuses to speak or sounds muddy. Tonguing harder or playing louder will not solve the problem. Instead, the lips must accurately predetermine the desired pitch before the tongue initiates the attack. The more precisely the player thinks about the exact pitch, the better the lips will be prepared to play, and the better the note will speak.

RECOMMENDED RESOURCES

Method Books

- Arban's Complete Conservatory Method* (Treble Clef) Jean Baptiste Arban, ed. Goldman and Smith (Carl Fischer)
- Famous Method for Trombone and Baritone* (Bass Clef) Jean Baptiste Arban, ed. Mantia & Randall (Carl Fischer)
- Melodious Etudes for Trombone*, Volumes I, II, and III G. M. Bordogni, ed. Joannes Rochut (Carl Fischer)
- Technical Studies* (Bass Clef) Herbert L. Clarke, ed. Claude Gordon (Carl Fischer)
- Lip Flexibility on the Trumpet* Walter M. Smith (Carl Fischer)
- Method for Baritone* Walter Beeler (Warner Brothers)
- 70 Beginning and Early Studies* David Uber (PP Music)

Solo Literature

- Tom Binkley's Tune* H. Cowell (Presser)
- Aria and Allegro* Franz Joseph Haydn (Rubank)
- Song to the Evening Star* Richard Wagner (Kendor)
- Andante and Allegro* J. Edouard Barat, arr. Forrest Buchtel (Southern Music)
- Morceau Symphonique, op. 88* Alexandre Guilmant (Warner Brothers)
- Andante et Allegro* J. Guy Ropartz (Carl Fischer)

Euphonium Warm-ups

Treble Clef

Long Tones

The image displays eight staves of musical notation for euphonium warm-ups. Each staff begins with a treble clef and a common time signature (C). The exercises are as follows:

- Staff 1: A single long note (half note) with a slur, spanning the first five measures.
- Staff 2: A single long note (half note) with a slur, spanning the first five measures.
- Staff 3: A sequence of six notes, each with a slur: G4, A4, B4, C5, B4, A4.
- Staff 4: A sequence of six notes, each with a slur: F4, E4, D4, C4, B3, A3.
- Staff 5: A sequence of three notes, each with a slur: G4, F4, E4.
- Staff 6: A sequence of three notes, each with a slur: D4, C4, B3.
- Staff 7: A sequence of three notes, each with a slur: G4, F4, E4.
- Staff 8: A sequence of three notes, each with a slur: D4, C4, B3.

Euphonium Topics

Flexibility

Continue down:
2, 1, 12, 23, 13(4),
123(24)

(Flexibility, cont.)

Three staves of musical notation. The first staff features a long slur over a series of eighth-note patterns. The second and third staves contain eighth-note patterns with accents and slurs, demonstrating flexibility exercises.

Scale Patterns

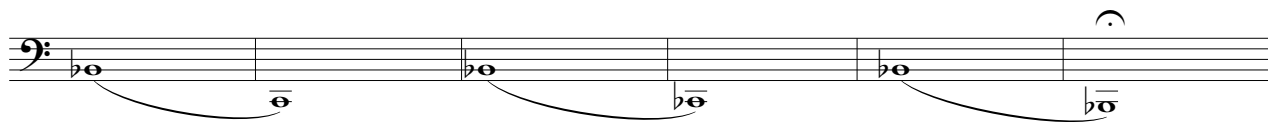
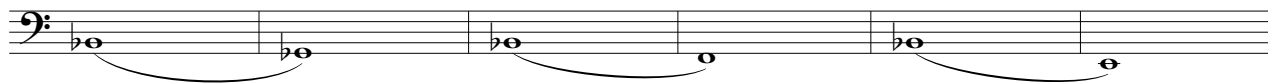
Four staves of musical notation showing scale patterns. Each staff contains a sequence of eighth-note runs with slurs and accents, illustrating various scale patterns for flexibility training.

Play both slurred and detached in all keys.

Euphonium Warm-ups

Bass Clef

Long Tones



Flexibility

Continue down:
2, 1, 12, 23, 13(4),
123(24)

Euphonium Topics

(Flexibility, cont.)

Three staves of musical notation in bass clef. The first staff features a long, sweeping slur over a series of eighth-note patterns. The second and third staves contain eighth-note patterns with various rests and accents, including a fermata on the final note of the second staff.

Scale Patterns

Four staves of musical notation in bass clef, each showing a scale pattern. The first staff is a half-note scale with a fermata on the final note. The second and third staves are eighth-note scales with a fermata on the final note. The fourth staff is a sixteenth-note scale with a fermata on the final note.

Play both slurred and detached in all keys.

Scale Supplement

The fifteen major and minor scales make up our musical “ABCs.” Just as a person wishing to read learns the alphabet first, a musician cannot expect to master an instrument without first learning the basic set of scales. By diligently practicing the major scales and all three forms of the minor scales, they will become automatic, just like reading the alphabet. This will make playing, especially sight reading, much easier so that the musician can concentrate towards the ultimate goal—making music!

Each scale below should be played slowly at first, ensuring that each note is played correctly. Gradually work for speed, but do not rush. Use a metronome whenever possible to guarantee evenness and a steady tempo. The player should practice difficult scales twice as often as easy ones to develop competence in all keys. As skills increase, change rhythmic patterns and increase tempos. Advanced players can still use scales to work on intonation, technique, range, and dynamics.

Use the following patterns one at a time or in combination to get even more benefit from scale practice:

<div data-bbox="183 810 779 966"> <p>A</p> </div> <div data-bbox="183 966 779 1123"> <p>B</p> </div> <div data-bbox="183 1123 779 1276"> <p>C</p> </div>	<div data-bbox="876 810 1481 966"> <p>D</p> </div> <div data-bbox="876 966 1481 1123"> <p>E</p> </div> <div data-bbox="876 1123 1481 1276"> <p>F</p> </div>
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C Major

<p>A natural minor</p>	<p>A harmonic minor</p>
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A melodic minor

Scale Supplement

G Major



E natural minor

E harmonic minor



E melodic minor



F Major

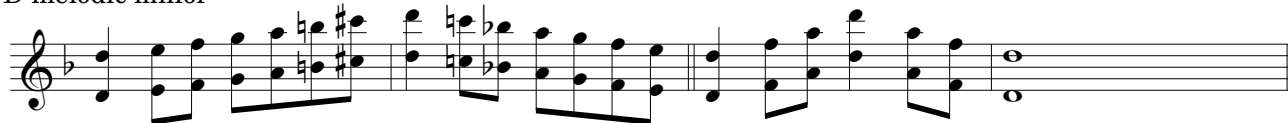


D natural minor

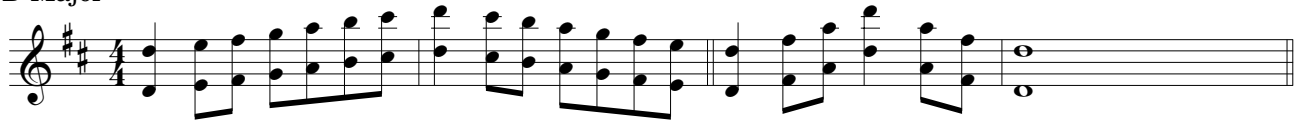
D harmonic minor



D melodic minor



D Major

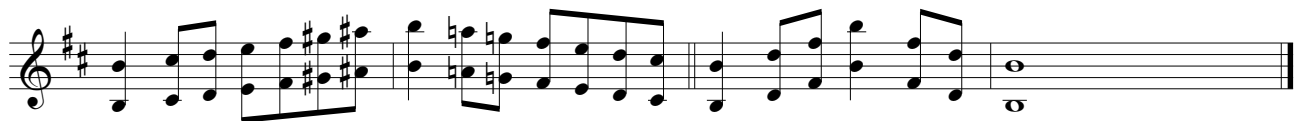


B natural minor

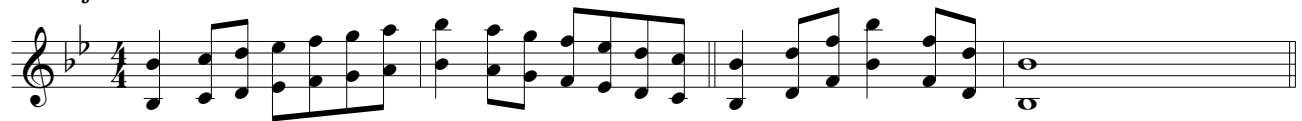
B harmonic minor



B melodic minor



Bb Major



G natural minor

G harmonic minor



G melodic minor



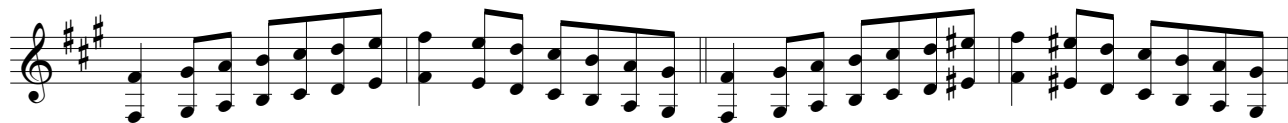
Scale Supplement

A Major



F# natural minor

F# harmonic minor



F# melodic minor

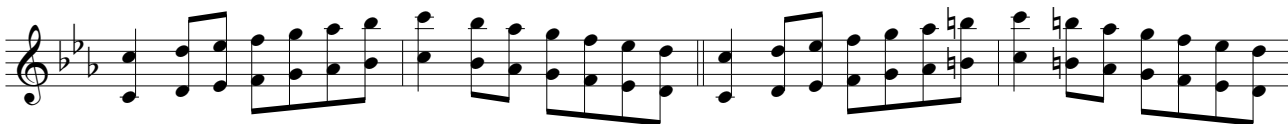


Eb Major

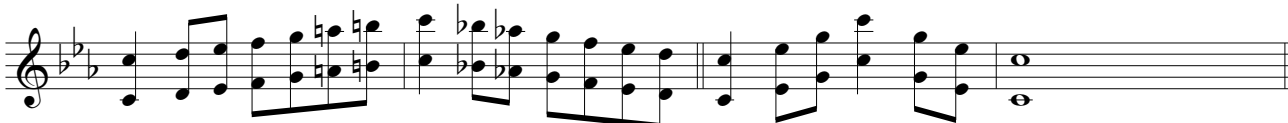


C natural minor

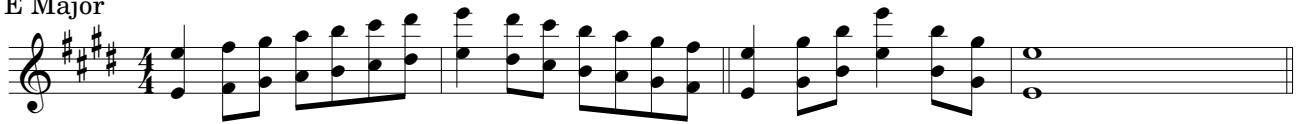
C harmonic minor



C melodic minor

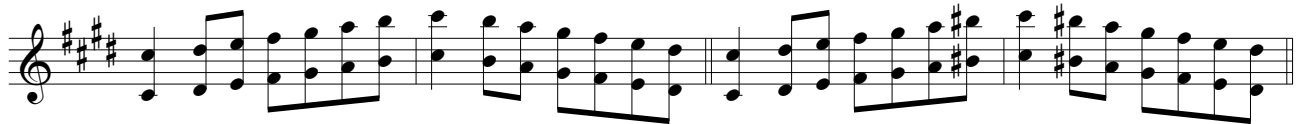


E Major

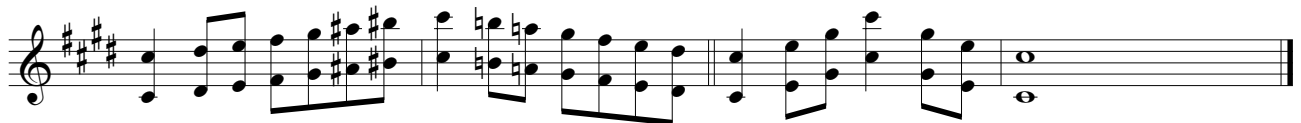


C# natural minor

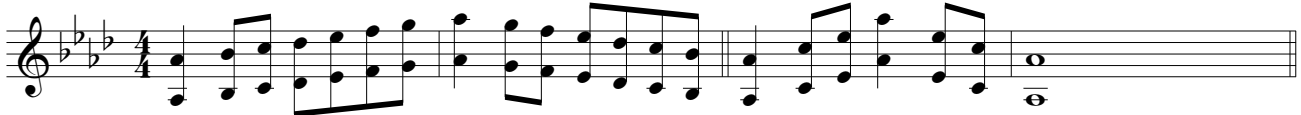
C# harmonic minor



C# melodic minor

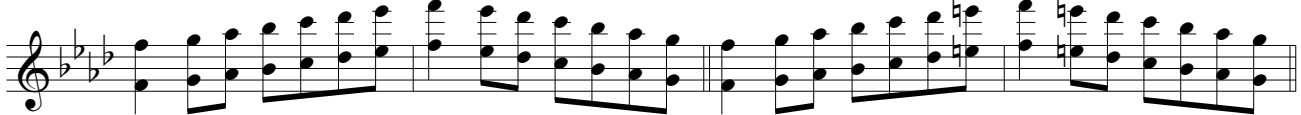


Ab Major



F natural minor

F harmonic minor

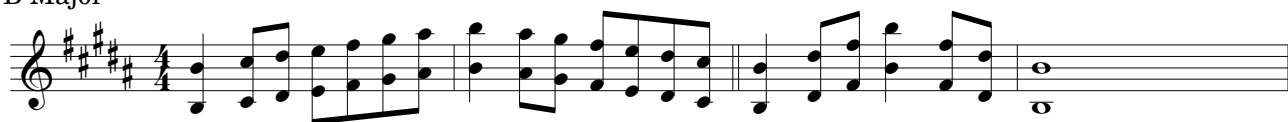


F melodic minor



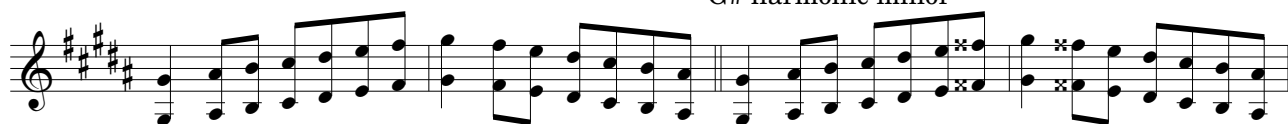
Scale Supplement

B Major



G# natural minor

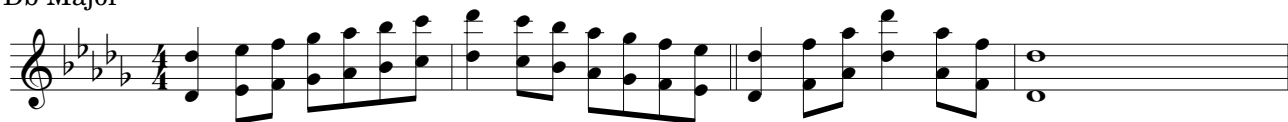
G# harmonic minor



G# melodic minor

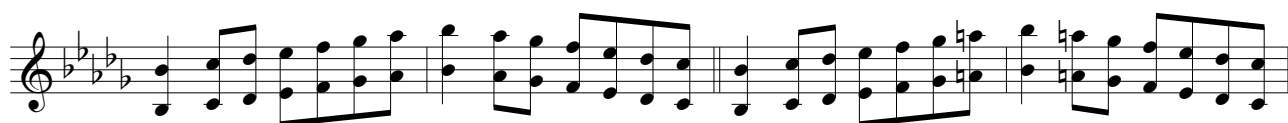


Db Major

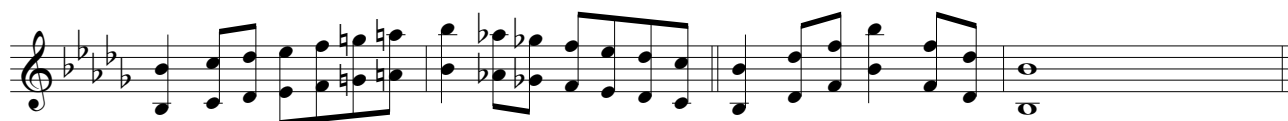


Bb natural minor

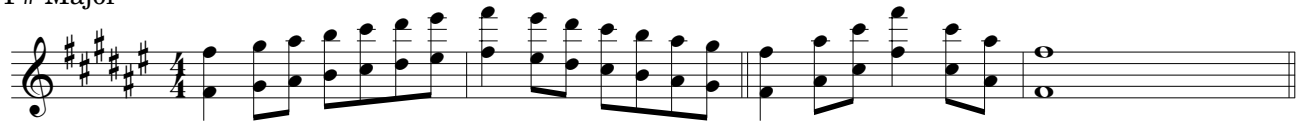
Bb harmonic minor



Bb melodic minor

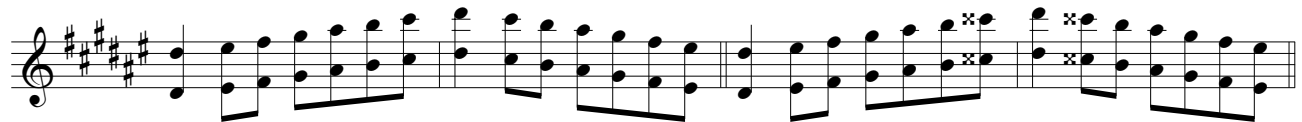


F# Major

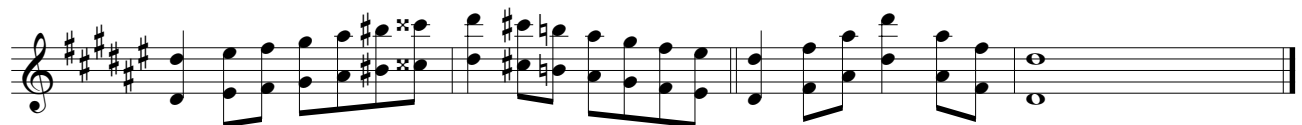


D# natural minor

D# harmonic minor



D# melodic minor

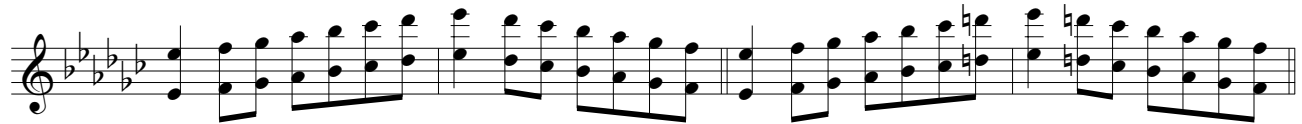


Gb Major



Eb natural minor

Eb harmonic minor

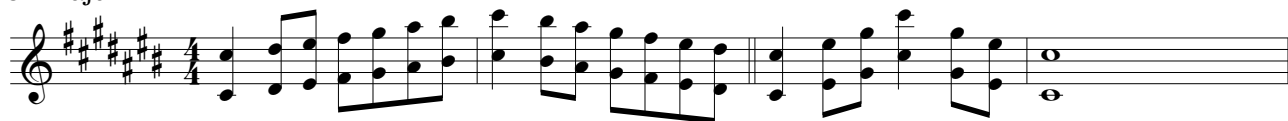


Eb melodic minor



Scale Supplement

C# Major

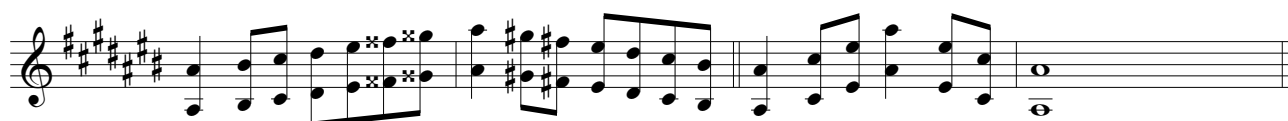


A# natural minor

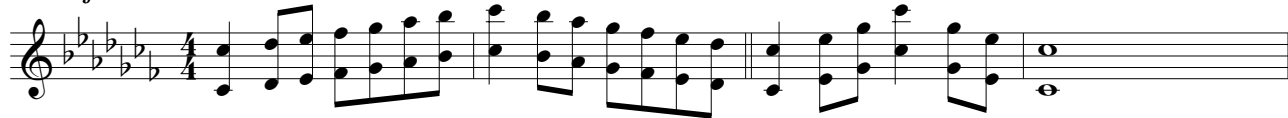
A# harmonic minor



A# melodic minor



Cb Major



Ab natural minor

Ab harmonic minor



Ab melodic minor



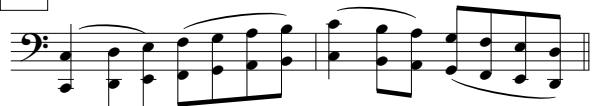

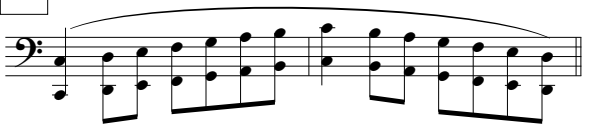



Scale Supplement


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<div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center; margin-bottom: 10px;">A</div> 	<div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center; margin-bottom: 10px;">D</div> 
<div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center; margin-bottom: 10px;">B</div> 	<div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center; margin-bottom: 10px;">E</div> 
<div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center; margin-bottom: 10px;">C</div> 	<div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center; margin-bottom: 10px;">F</div> 

C Major



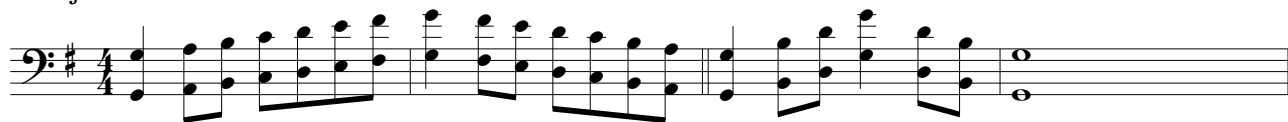
<p>A natural minor</p> 	<p>A harmonic minor</p> 
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A melodic minor



Scale Supplement

G Major



E natural minor

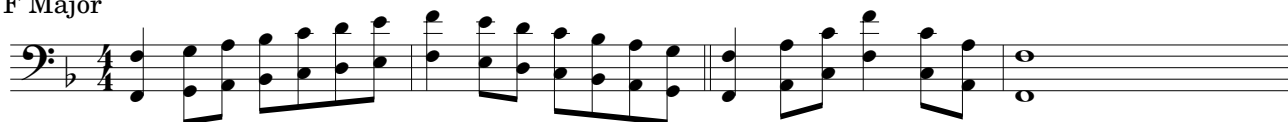
E harmonic minor



E melodic minor



F Major

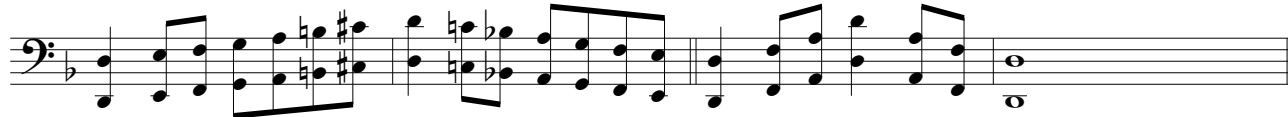


D natural minor

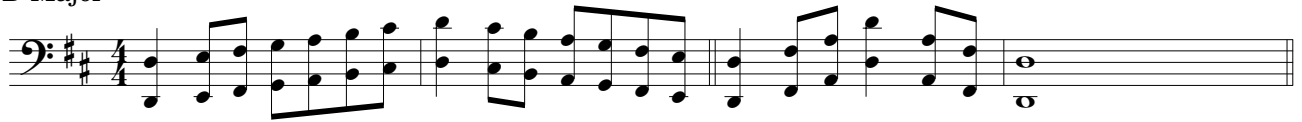
D harmonic minor



D melodic minor



D Major



B natural minor

B harmonic minor



B melodic minor



Bb Major



G natural minor

G harmonic minor



G melodic minor



Scale Supplement

A Major

Musical notation for the A Major scale in bass clef, 4/4 time signature. The scale is written in two parts: an ascending line and a descending line. The key signature has three sharps (F#, C#, G#). The ascending line starts on A2 and goes up to A4. The descending line starts on A4 and goes down to A2. The piece ends with a whole note chord of A2, C#3, and E3.

F# natural minor

F# harmonic minor

Musical notation for the F# natural and harmonic minor scales in bass clef, 4/4 time signature. The key signature has three sharps (F#, C#, G#). The F# natural minor scale is written in two parts: an ascending line and a descending line. The F# harmonic minor scale is written in two parts: an ascending line and a descending line. The piece ends with a whole note chord of F#2, A2, and C#3.

F# melodic minor

Musical notation for the F# melodic minor scale in bass clef, 4/4 time signature. The key signature has three sharps (F#, C#, G#). The scale is written in two parts: an ascending line and a descending line. The piece ends with a whole note chord of F#2, A2, and C#3.

Eb Major

Musical notation for the Eb Major scale in bass clef, 4/4 time signature. The key signature has three flats (Bb, Eb, Ab). The scale is written in two parts: an ascending line and a descending line. The piece ends with a whole note chord of Eb2, Gb2, and Bb2.

C natural minor

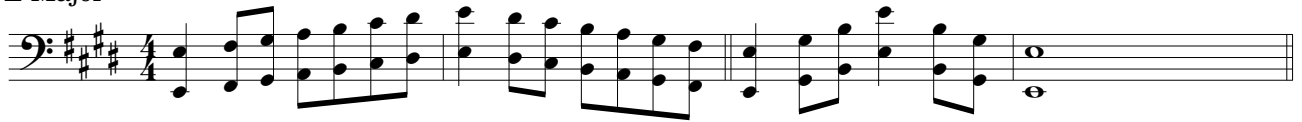
C harmonic minor

Musical notation for the C natural and harmonic minor scales in bass clef, 4/4 time signature. The key signature has two flats (Bb, Eb). The C natural minor scale is written in two parts: an ascending line and a descending line. The C harmonic minor scale is written in two parts: an ascending line and a descending line. The piece ends with a whole note chord of C2, Eb2, and Gb2.

C melodic minor

Musical notation for the C melodic minor scale in bass clef, 4/4 time signature. The key signature has two flats (Bb, Eb). The scale is written in two parts: an ascending line and a descending line. The piece ends with a whole note chord of C2, Eb2, and Gb2.

E Major



C# natural minor

C# harmonic minor



C# melodic minor

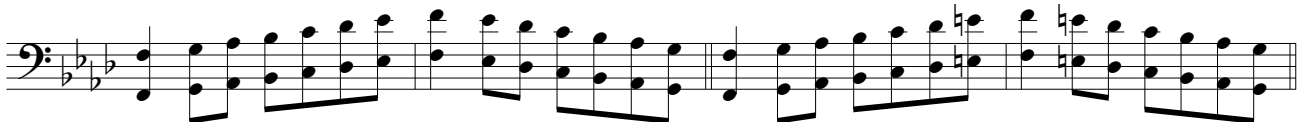


Ab Major

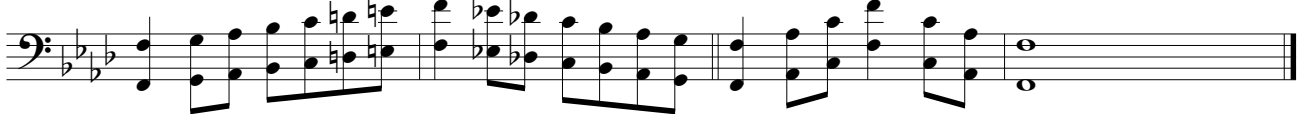


F natural minor

F harmonic minor



F melodic minor



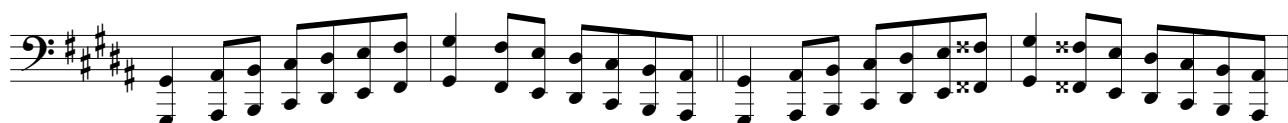
Scale Supplement

B Major



G# natural minor

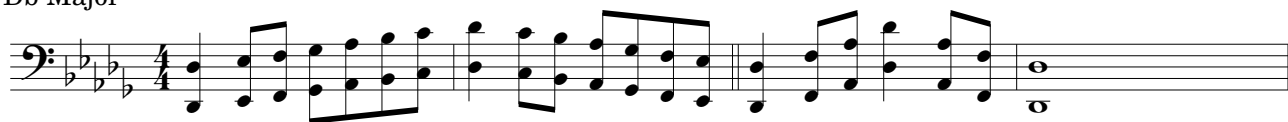
G# harmonic minor



G# melodic minor



Db Major



Bb natural minor

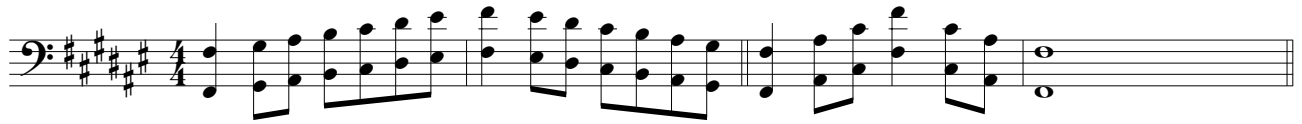
Bb harmonic minor



Bb melodic minor



F# Major

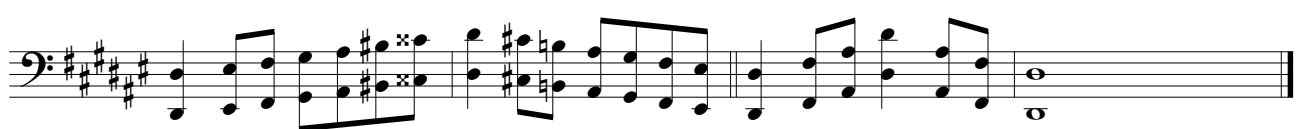


D# natural minor

D# harmonic minor



D# melodic minor

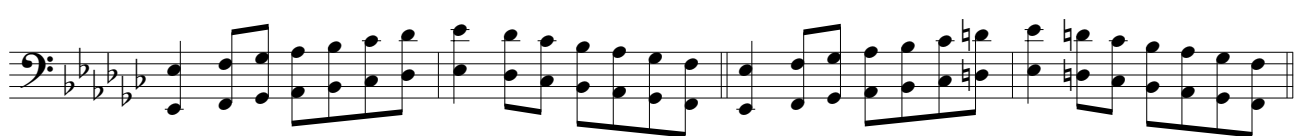


Gb Major



Eb natural minor

Eb harmonic minor



Eb melodic minor



Scale Supplement

C# Major

Musical notation for C# Major scale in bass clef, 4/4 time signature. The scale is written in a single line, starting on C#4 and ending on C#5. The notation includes a key signature of two sharps (F# and C#) and a time signature of 4/4. The scale is presented in a single line, with a repeat sign at the end.

A# natural minor

A# harmonic minor

Musical notation for A# natural and harmonic minor scales in bass clef, 4/4 time signature. The natural minor scale is written in a single line, starting on A#4 and ending on A#5. The harmonic minor scale is written in a single line, starting on A#4 and ending on A#5, with a double sharp (x) above the 7th degree (F##) and a double flat (x) below the 6th degree (E##). The notation includes a key signature of two sharps (F# and C#) and a time signature of 4/4. The scales are presented in a single line, with a repeat sign at the end.

A# melodic minor

Musical notation for A# melodic minor scale in bass clef, 4/4 time signature. The scale is written in a single line, starting on A#4 and ending on A#5. The notation includes a key signature of two sharps (F# and C#) and a time signature of 4/4. The scale is presented in a single line, with a repeat sign at the end.

Cb Major

Musical notation for Cb Major scale in bass clef, 4/4 time signature. The scale is written in a single line, starting on Cb4 and ending on Cb5. The notation includes a key signature of seven flats (Bb, Eb, Ab, Db, Gb, Cb, Fb) and a time signature of 4/4. The scale is presented in a single line, with a repeat sign at the end.

Ab natural minor

Ab harmonic minor

Musical notation for Ab natural and harmonic minor scales in bass clef, 4/4 time signature. The natural minor scale is written in a single line, starting on Ab4 and ending on Ab5. The harmonic minor scale is written in a single line, starting on Ab4 and ending on Ab5, with a double sharp (x) above the 7th degree (G##) and a double flat (x) below the 6th degree (F##). The notation includes a key signature of seven flats (Bb, Eb, Ab, Db, Gb, Cb, Fb) and a time signature of 4/4. The scales are presented in a single line, with a repeat sign at the end.

Ab melodic minor

Musical notation for Ab melodic minor scale in bass clef, 4/4 time signature. The scale is written in a single line, starting on Ab4 and ending on Ab5. The notation includes a key signature of seven flats (Bb, Eb, Ab, Db, Gb, Cb, Fb) and a time signature of 4/4. The scale is presented in a single line, with a repeat sign at the end.