



# The United States Army Field Band

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

# Euphonium Topics

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## 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, designed to improve flexibility.

*Scale Patterns*

Four staves of musical notation showing scale patterns in 4/4 time. Each staff contains a sequence of eighth-note runs with accents, covering both ascending and descending directions.

*Play both slurred and detached in all keys.*



*Flexibility*

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

6 6 6

# Euphonium Topics

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*(Flexibility, cont.)*

Three staves of musical notation in bass clef. The first staff features a long, sweeping slur over a series of eighth notes, starting on a B-flat and moving up to a G. The second and third staves contain eighth-note patterns with various rests and accidentals, including a B-flat and a G-flat.

## Scale Patterns

Four staves of musical notation in bass clef, each showing a scale pattern. The first staff shows a scale starting on a B-flat with a slur and an accent mark. The second and third staves show similar scale patterns with slurs and accents. The fourth staff shows a more complex scale pattern with slurs and accents, ending with a whole note on a G.

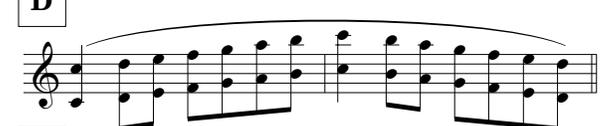
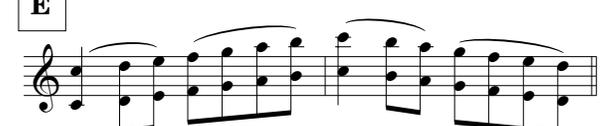
*Play both slurred and detached in all keys.*

# 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!

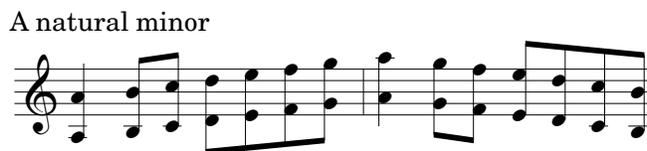
Each scale below should be played slowly at first, ensuring that each note is played correctly. Gradually work for speed, but do not rush. Use a metronome whenever possible to guarantee evenness and a steady tempo. The player should practice difficult scales twice as often as easy ones to develop competence 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:*

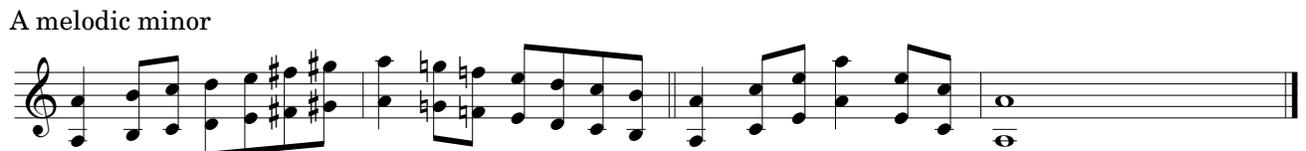
<p><b>A</b></p> 	<p><b>D</b></p> 
<p><b>B</b></p> 	<p><b>E</b></p> 
<p><b>C</b></p> 	<p><b>F</b></p> 

C Major



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



# Scale Supplement

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G Major



E natural minor

E harmonic minor



E melodic minor



F Major

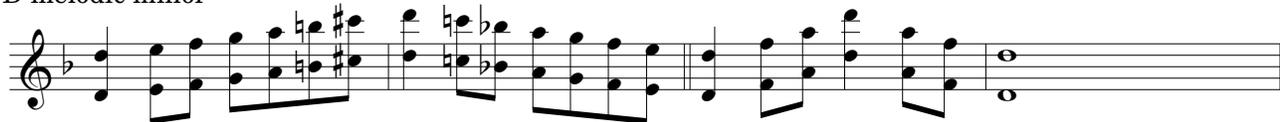


D natural minor

D harmonic minor



D melodic minor



D Major

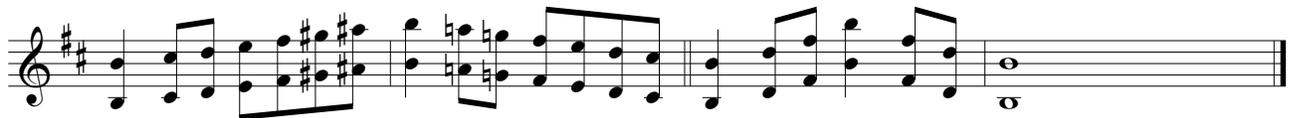


B natural minor

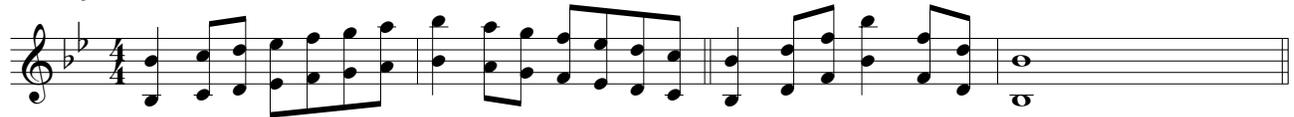
B harmonic minor



B melodic minor



Bb Major



G natural minor

G harmonic minor



G melodic minor



# Scale Supplement

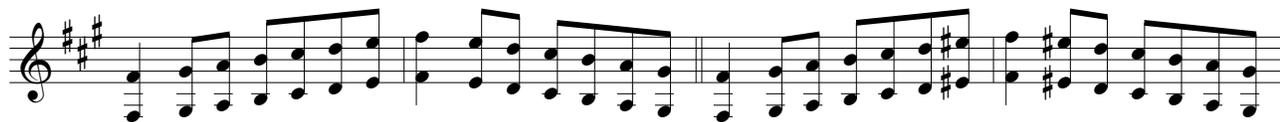
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A Major

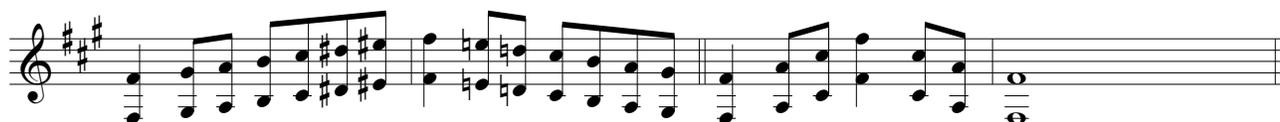


F# natural minor

F# harmonic minor



F# melodic minor

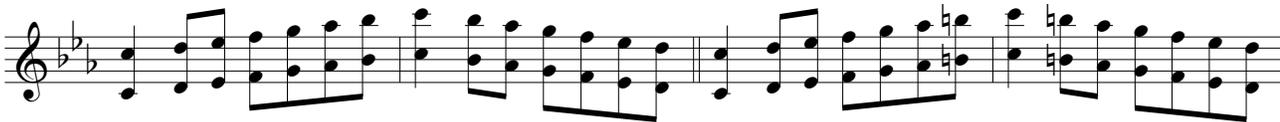


Eb Major

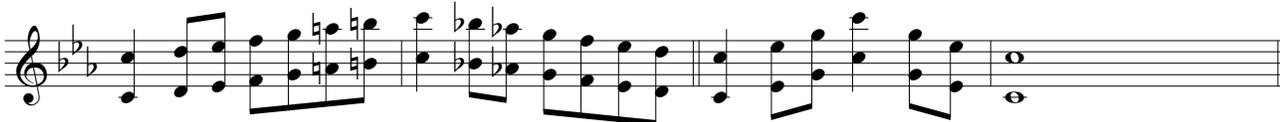


C natural minor

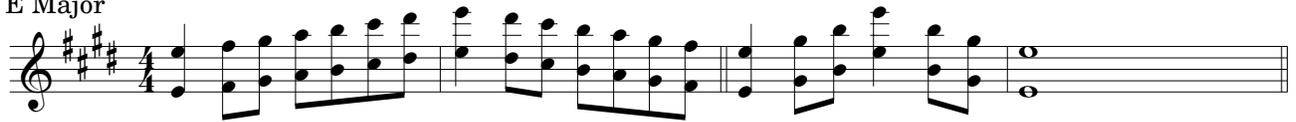
C harmonic minor



C melodic minor

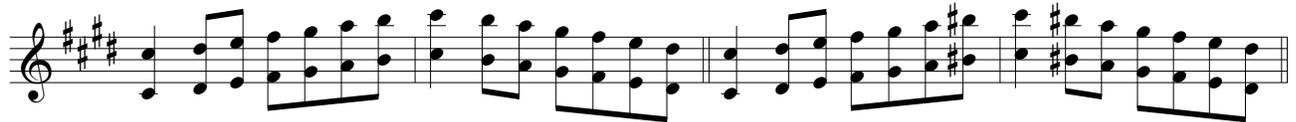


E Major



C# natural minor

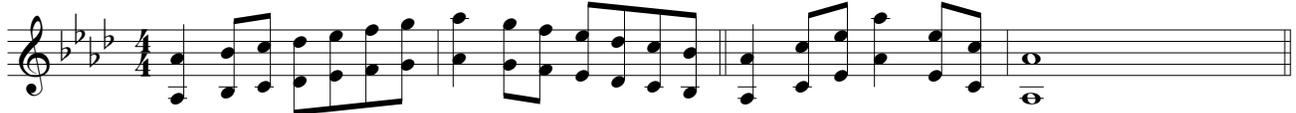
C# harmonic minor



C# melodic minor

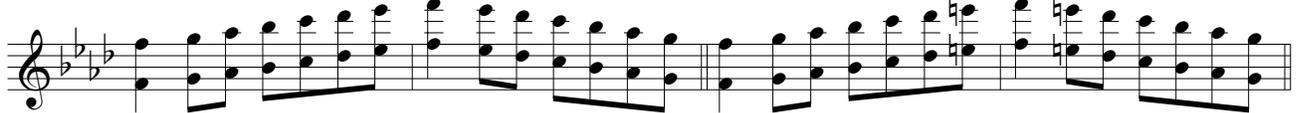


Ab Major

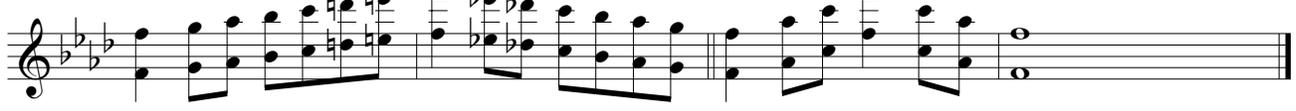


F natural minor

F harmonic minor



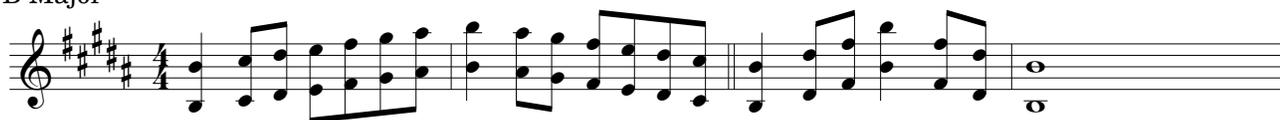
F melodic minor



# Scale Supplement

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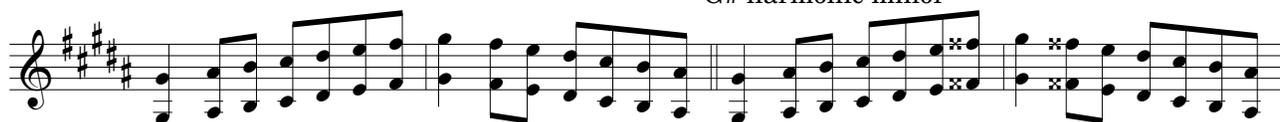
B Major



Musical notation for the B Major scale in 4/4 time. The scale is written on a single staff in treble clef with a key signature of three sharps (F#, C#, G#). The notation shows the ascending and descending scales, with a double bar line in the middle. The piece concludes with a whole note chord on the tonic B.

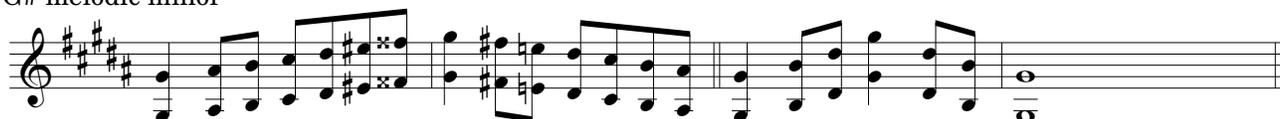
G# natural minor

G# harmonic minor



Musical notation for the G# natural and G# harmonic minor scales in 4/4 time. The scales are written on a single staff in treble clef with a key signature of three sharps (F#, C#, G#). The notation shows the ascending and descending scales, with a double bar line in the middle. The piece concludes with a whole note chord on the tonic G#.

G# melodic minor



Musical notation for the G# melodic minor scale in 4/4 time. The scale is written on a single staff in treble clef with a key signature of three sharps (F#, C#, G#). The notation shows the ascending and descending scales, with a double bar line in the middle. The piece concludes with a whole note chord on the tonic G#.

Db Major



Musical notation for the Db Major scale in 4/4 time. The scale is written on a single staff in treble clef with a key signature of five flats (Bb, Eb, Ab, Db, Gb). The notation shows the ascending and descending scales, with a double bar line in the middle. The piece concludes with a whole note chord on the tonic Db.

Bb natural minor

Bb harmonic minor



Musical notation for the Bb natural and Bb harmonic minor scales in 4/4 time. The scales are written on a single staff in treble clef with a key signature of five flats (Bb, Eb, Ab, Db, Gb). The notation shows the ascending and descending scales, with a double bar line in the middle. The piece concludes with a whole note chord on the tonic Bb.

Bb melodic minor



Musical notation for the Bb melodic minor scale in 4/4 time. The scale is written on a single staff in treble clef with a key signature of five flats (Bb, Eb, Ab, Db, Gb). The notation shows the ascending and descending scales, with a double bar line in the middle. The piece concludes with a whole note chord on the tonic Bb.

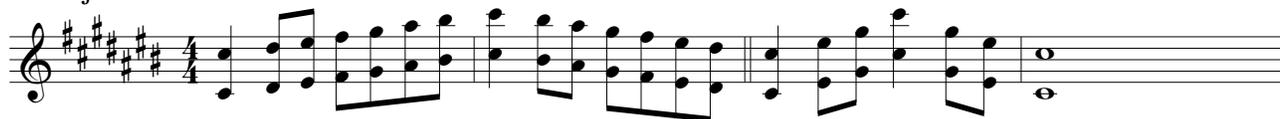
F# Major



# Scale Supplement

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C# Major



A# natural minor

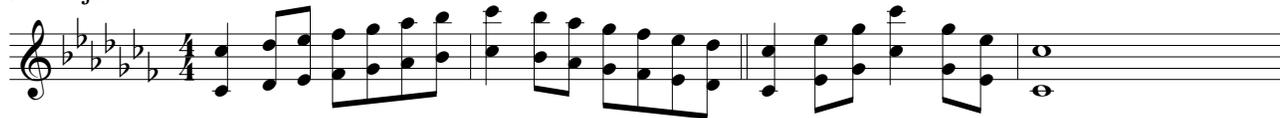
A# harmonic minor



A# melodic minor



Cb Major



Ab natural minor

Ab harmonic minor



Ab melodic minor





# Scale Supplement

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G Major

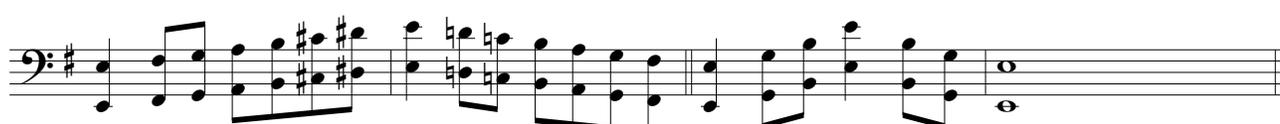


E natural minor

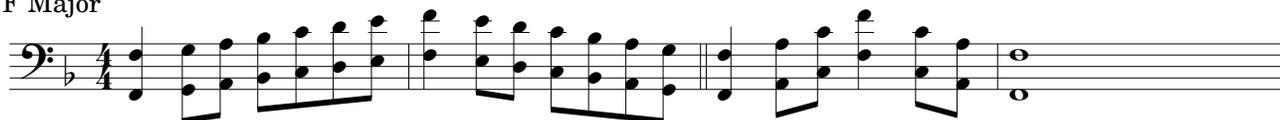
E harmonic minor



E melodic minor



F Major



D natural minor

D harmonic minor



D melodic minor



D Major

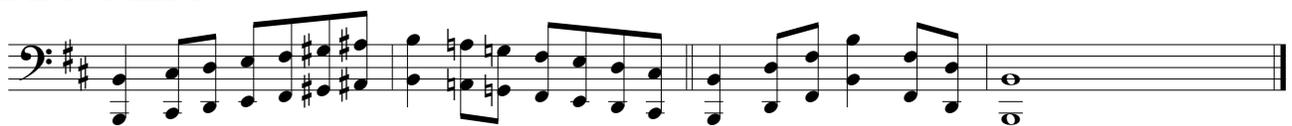


B natural minor

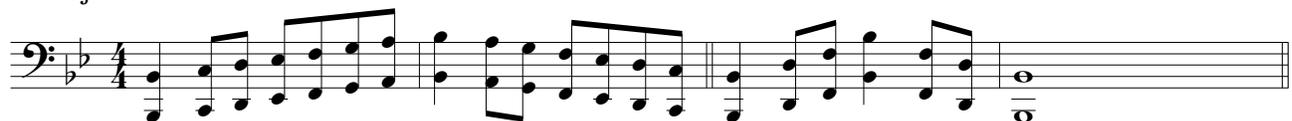
B harmonic minor



B melodic minor



Bb Major

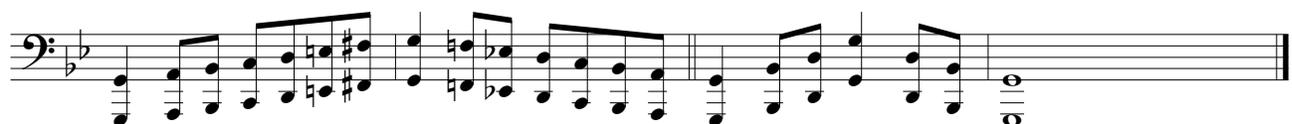


G natural minor

G harmonic minor



G melodic minor



# Scale Supplement

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A Major

F# natural minor

F# harmonic minor

F# melodic minor

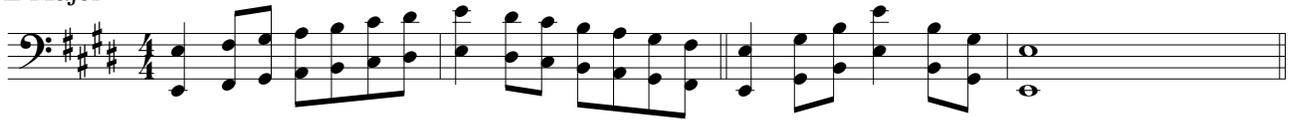
Eb Major

C natural minor

C harmonic minor

C melodic minor

E Major



C# natural minor

C# harmonic minor



C# melodic minor

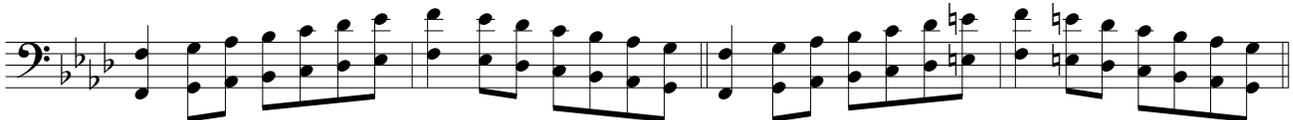


Ab Major

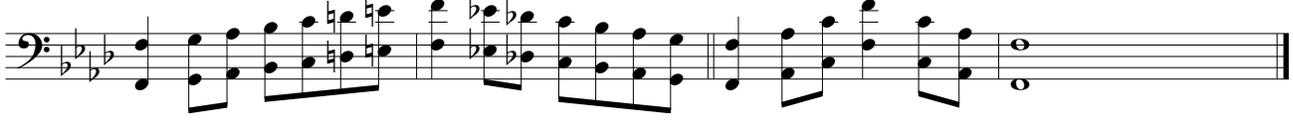


F natural minor

F harmonic minor



F melodic minor



# Scale Supplement

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B Major

Musical notation for the B Major scale in bass clef, 4/4 time signature. The scale is written in two measures: the first measure contains the ascending scale (B2, C#3, D#3, E4, F#4, G#4, A5, B5), and the second measure contains the descending scale (B5, A5, G#4, F#4, E4, D#3, C#3, B2). The piece concludes with a whole note chord of B2, D#3, and F#4.

G# natural minor

G# harmonic minor

Musical notation for the G# natural and harmonic minor scales in bass clef, 4/4 time signature. The first measure shows the ascending G# natural minor scale (G#2, A2, B2, C#3, D#3, E4, F#4, G#4). The second measure shows the ascending G# harmonic minor scale (G#2, A2, B2, C#3, D#3, E4, F#4, G#4, A5, B5). The third measure shows the descending G# harmonic minor scale (B5, A5, G#4, F#4, E4, D#3, C#3, B2, A2, G#2). The piece concludes with a whole note chord of G#2, B2, and D#3.

G# melodic minor

Musical notation for the G# melodic minor scale in bass clef, 4/4 time signature. The first measure shows the ascending G# melodic minor scale (G#2, A2, B2, C#3, D#3, E4, F#4, G#4). The second measure shows the descending G# melodic minor scale (B5, A5, G#4, F#4, E4, D#3, C#3, B2, A2, G#2). The piece concludes with a whole note chord of G#2, B2, and D#3.

Db Major

Musical notation for the Db Major scale in bass clef, 4/4 time signature. The scale is written in two measures: the first measure contains the ascending scale (Db2, Eb3, Fb3, Gb3, Ab3, Bb3, C4, Db4), and the second measure contains the descending scale (Db4, C4, Bb3, Ab3, Gb3, Fb3, Eb3, Db2). The piece concludes with a whole note chord of Db2, Fb3, and Ab3.

Bb natural minor

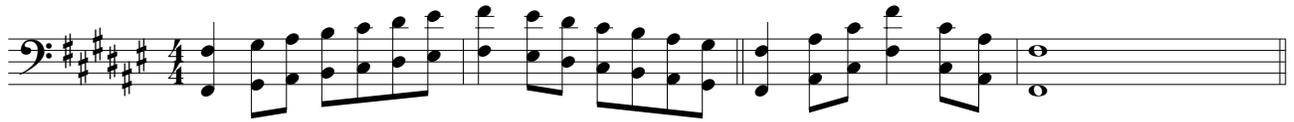
Bb harmonic minor

Musical notation for the Bb natural and harmonic minor scales in bass clef, 4/4 time signature. The first measure shows the ascending Bb natural minor scale (Bb2, Cb3, Db3, Eb3, Fb3, Gb3, Ab3, Bb3). The second measure shows the ascending Bb harmonic minor scale (Bb2, Cb3, Db3, Eb3, Fb3, Gb3, Ab3, Bb3, C4, Db4). The third measure shows the descending Bb harmonic minor scale (Db4, C4, Bb3, Ab3, Gb3, Fb3, Eb3, Db2, Cb3, Bb2). The piece concludes with a whole note chord of Bb2, Db3, and Eb3.

Bb melodic minor

Musical notation for the Bb melodic minor scale in bass clef, 4/4 time signature. The first measure shows the ascending Bb melodic minor scale (Bb2, Cb3, Db3, Eb3, Fb3, Gb3, Ab3, Bb3). The second measure shows the descending Bb melodic minor scale (Db4, C4, Bb3, Ab3, Gb3, Fb3, Eb3, Db2, Cb3, Bb2). The piece concludes with a whole note chord of Bb2, Db3, and Eb3.

F# Major



D# natural minor

D# harmonic minor



D# melodic minor

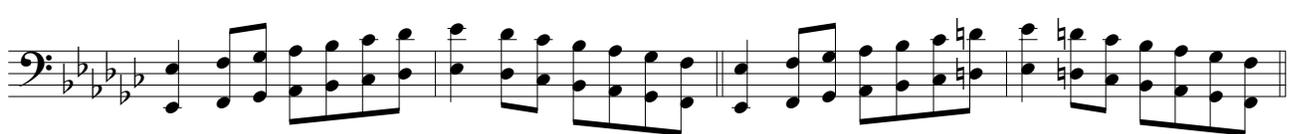


Gb Major



Eb natural minor

Eb harmonic minor



Eb melodic minor



# Scale Supplement

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C# Major

A# natural minor

A# harmonic minor

A# melodic minor

Cb Major

Ab natural minor

Ab harmonic minor

Ab melodic minor