

# *Musical MIDI Accompaniment*

*MMA*

## Chord Reference Manual

*This document was prepared from version 19.08 of MMA.*

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# Chapter 1

## Chord Reference

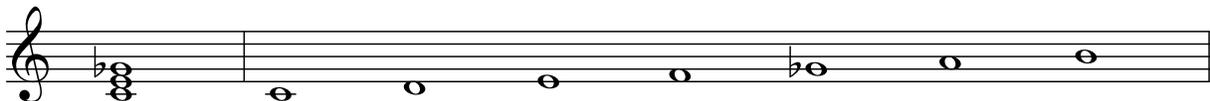
This document is a reference to the chords and scales use in *MtA*. It has been generated directly from the module `chordtable.py` in the *MtA* sources. Each section shows the chord name, a brief description, the chord notes for a “C” chord, and the associated scale tones. These chords and scales are used in *MtA* to generate chords, bass, arpeggios, arias, harmonies and scales.

In all cases you will need to preface the name with a chord pitch. For example, the reference for an 11th chord is listed simply as “11”; you would use a “C11” or “Eb11”, etc. in your *MtA* source file. Read the *MtA* Reference Guide if you don’t understand this.

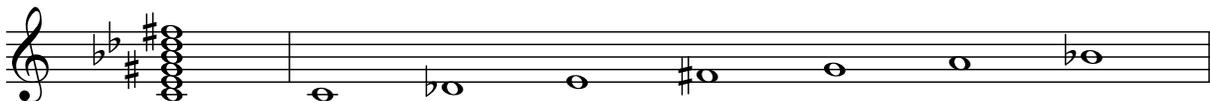
This document was prepared as a reference to verify the correctness of the chords and scales used in *MtA*. If you find an error, please let the author know.

*MtA* defines 98 unique chords plus 62 aliases. Chords used in *MtA* via aliased names are listed after the main name.

(b5) — Major triad with flat 5th. MMA notation requires the () around the name.



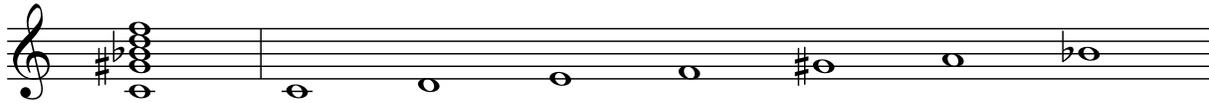
+7b9#11 — Augmented 7th with flat 9th and sharp 11th.



11 — 9th chord plus 11th (3rd not voiced).



**11+**, **11#5** — Augmented 11th (sharp 5).



**11b9** — 7th chord plus flat 9th and 11th.



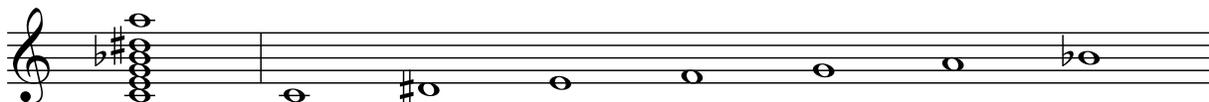
**13** — 7th (including 5th) plus 13th (the 9th and 11th are not voiced).



**13#11** — 7th plus sharp 11th and 13th (9th not voiced).



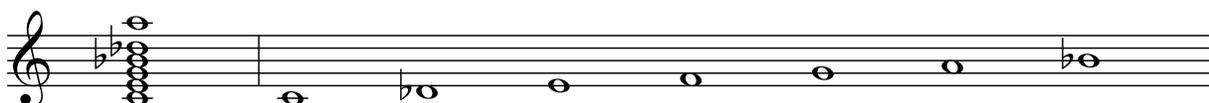
**13#9** — 7th (including 5th) plus 13th and sharp 9th (11th not voiced).



**13b5** — 7th with flat 5th, plus 13th (the 9th and 11th are not voiced).



**13b9**, **M7(add13)** — 7th (including 5th) plus 13th and flat 9th (11th not voiced).



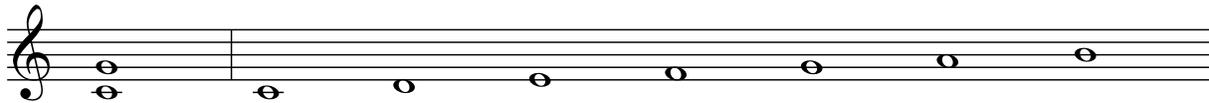
**13sus, 13sus4** — 7sus, plus 9th and 13th



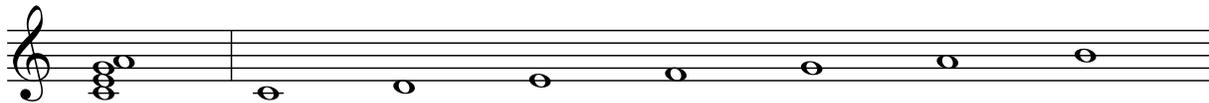
**13sus $\flat$ 9** — 7sus, plus flat 9th and 13th



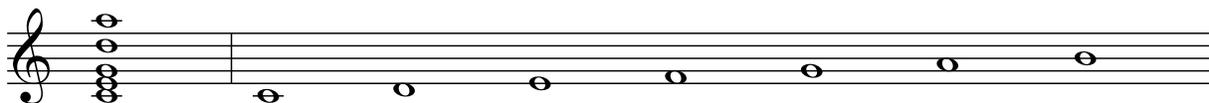
**5** — Altered Fifth or Power Chord; root and 5th only.



**6, M6** — Major triad with added 6th.



**6(add9), 6 $\flat$ 9** — 6th with added 9th. This is sometimes notated as a slash chord in the form “6/9”.



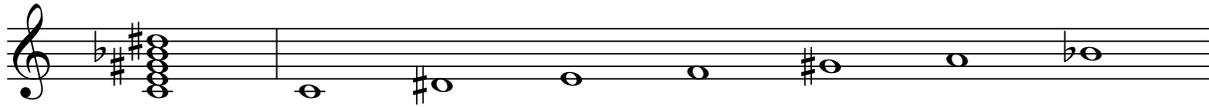
**7** — 7th.



**7 $\sharp$ 11** — 7th plus sharp 11th (9th omitted).



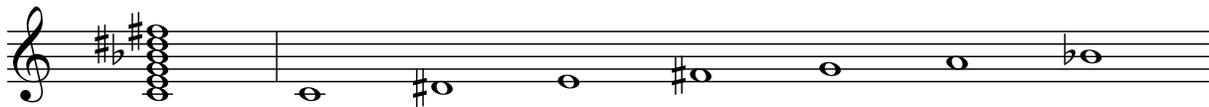
**7 $\sharp$ 5 $\sharp$ 9** — 7th with sharp 5th and sharp 9th.



**7 $\sharp$ 9, 7+9** — 7th with sharp 9th.



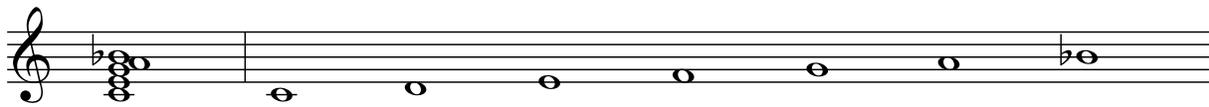
**7 $\sharp$ 9 $\sharp$ 11** — 7th plus sharp 9th and sharp 11th.



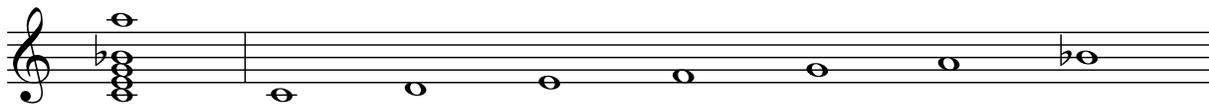
**7 $\sharp$ 9 $\flat$ 13** — 7th with sharp 9th and flat 13th.



**7(6)** — 7th with added 6th.



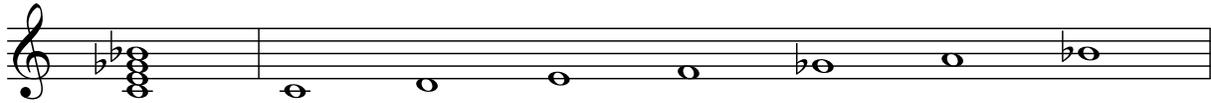
**7(add13)** — 7th with added 13th.



**7 $\flat$ 13** — 7th (including 5th) plus flat 13th (the 9th and 11th are not voiced).



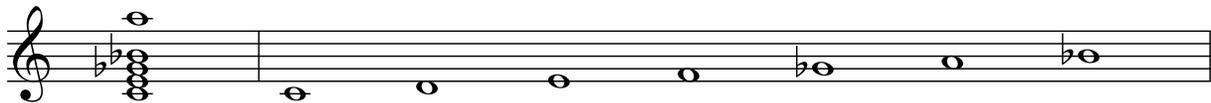
**7<sup>b</sup>5, 7-5** — 7th, flat 5.



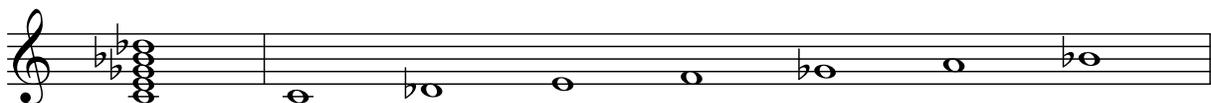
**7<sup>b</sup>5<sup>#</sup>9** — 7th with flat 5th and sharp 9th.



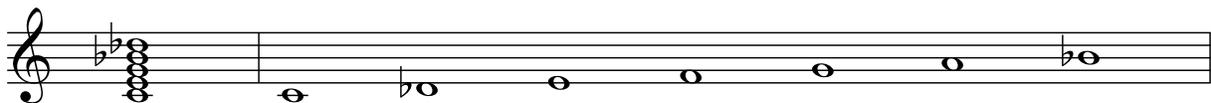
**7<sup>b</sup>5(add13)** — 7th with flat 5 and 13th.



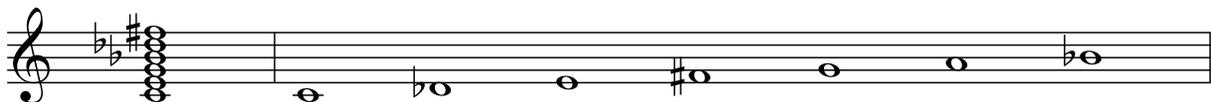
**7<sup>b</sup>5<sup>b</sup>9, 7alt** — 7th with flat 5th and flat 9th.



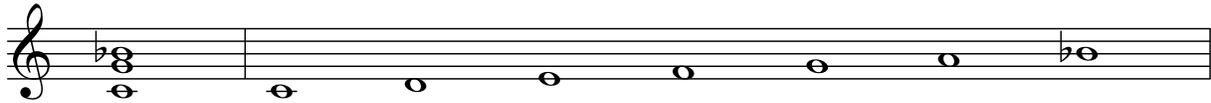
**7<sup>b</sup>9, 7-9** — 7th with flat 9th.



**7<sup>b</sup>9<sup>#</sup>11** — 7th plus flat 9th and sharp 11th.



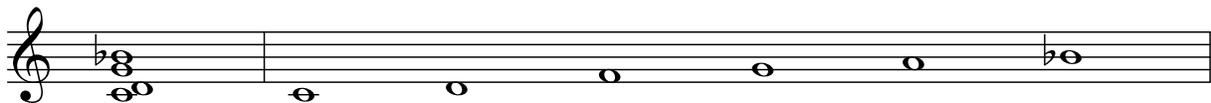
**7omit3, 7(omit3)** — 7th with unvoiced 3rd.



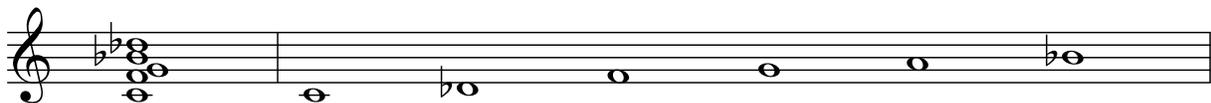
**7sus, 7sus4** — 7th with suspended 4th, dominant 7th with 3rd raised half tone.



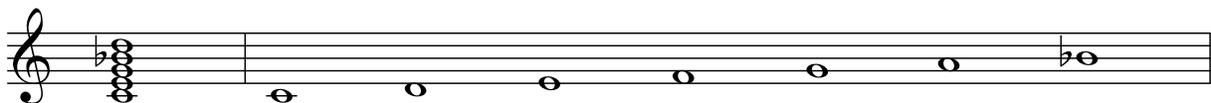
**7sus2** — A sus2 with dominant 7th added.



**7susb9, 7b9sus** — 7th with suspended 4th and flat 9th.



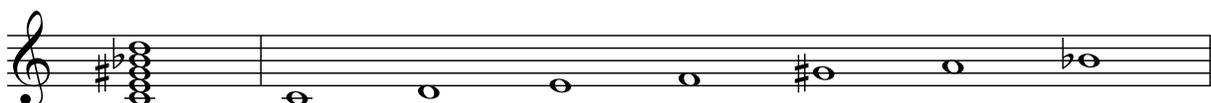
**9** — 7th plus 9th.



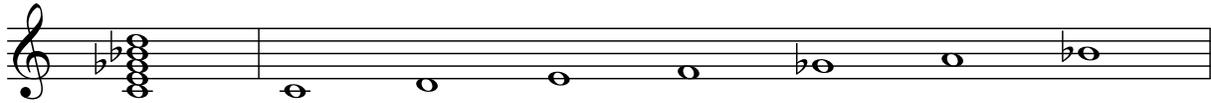
**9#11** — 7th plus 9th and sharp 11th.



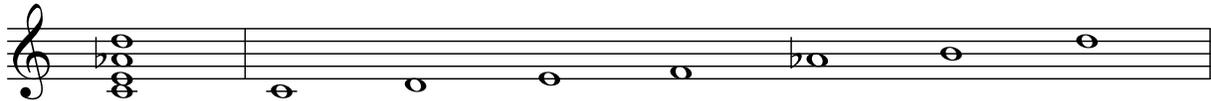
**9#5, aug9, 9+, +9, 9+5** — 7th plus 9th with sharp 5th (same as aug9).



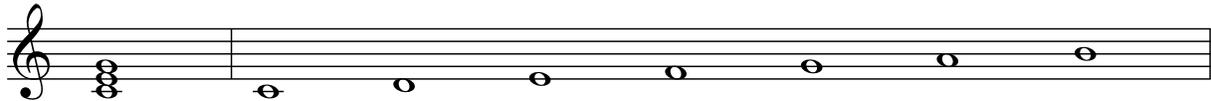
**9<sup>b</sup>5, 9-5** — 7th plus 9th with flat 5th.



**9<sup>b</sup>6** — 9th with flat 6 (no 5th or 7th).



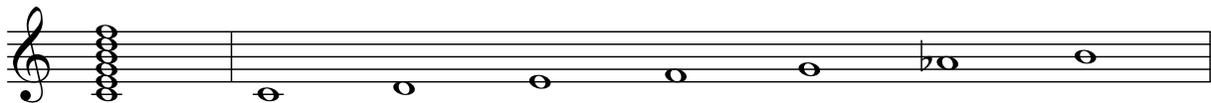
**M** — Major triad. This is the default and is used in the absence of any other chord type specification.



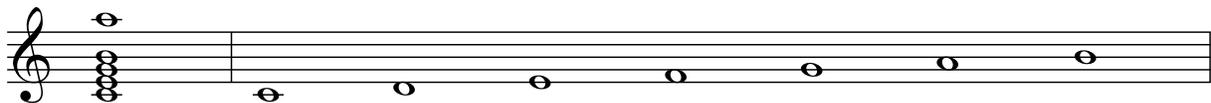
**M<sup>#</sup>11** — Major triad plus sharp 11th.



**M11** — Major 9th plus 11th.



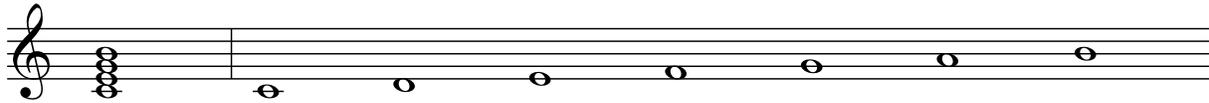
**M13, maj13** — Major 7th (including 5th) plus 13th (9th and 11th not voiced).



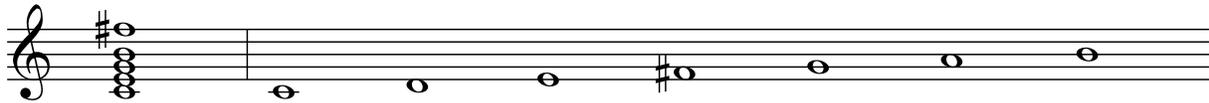
**M13<sup>#</sup>11** — Major 7th plus sharp 11th and 13th (9th not voiced).



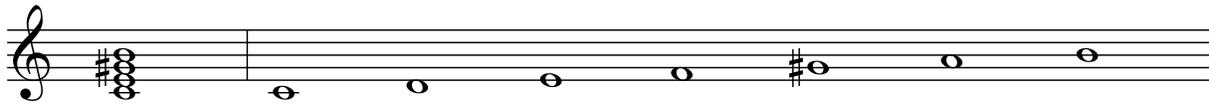
**M7, maj7** — Major 7th.



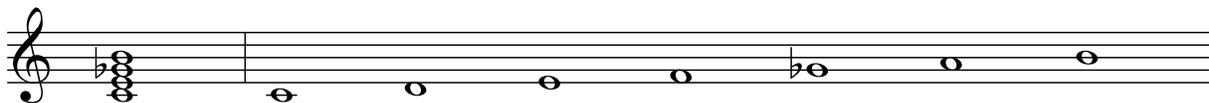
**M7#11** — Major 7th plus sharp 11th (9th omitted).



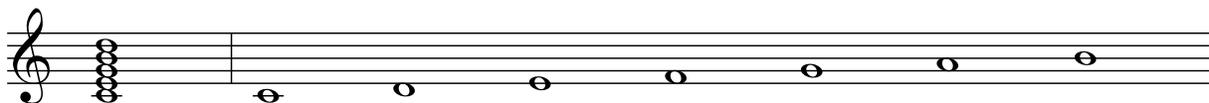
**M7#5, +M7, M7+5** — Major 7th with sharp 5th.



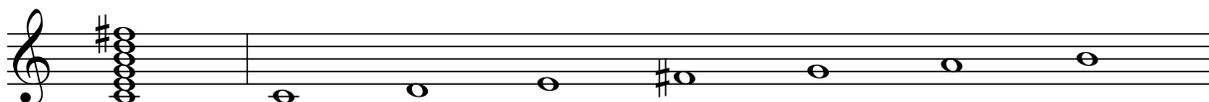
**M7b5, M7-5** — Major 7th with a flat 5th.



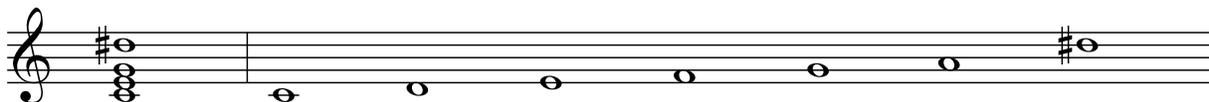
**M9, maj9** — Major 7th plus 9th.



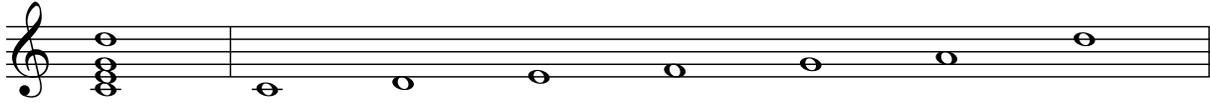
**M9#11** — Major 9th plus sharp 11th.



**add#9, (add#9)** — Major chord plus sharp 9th (no 7th.)



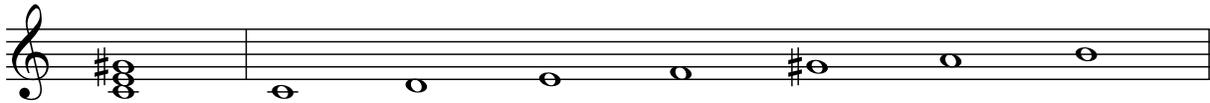
**add9, (add9)** — Major chord plus 9th (no 7th.)



**add $\flat$ 9, (add $\flat$ 9)** — Major chord plus flat 9th (no 7th.)



**aug, +, ( $\sharp$ 5)** — Augmented triad.



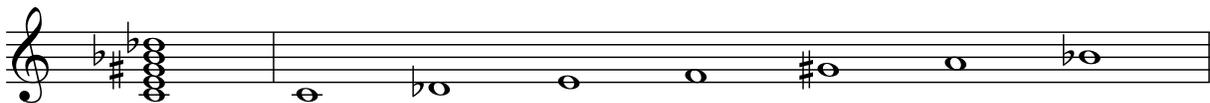
**aug7, +7, 7+, 7 $\sharp$ 5, 7+5** — An augmented chord (raised 5th) with a dominant 7th.



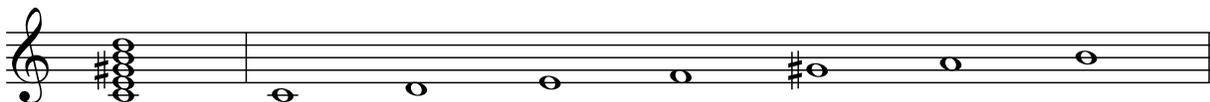
**aug7 $\sharp$ 9, +7 $\sharp$ 9** — An augmented chord (raised 5th) with a dominant 7th and sharp 9th.



**aug7 $\flat$ 9, +7 $\flat$ 9, 7 $\sharp$ 5 $\flat$ 9** — An augmented chord (raised 5th) with a dominant 7th and flat 9th.



**aug $\sharp$ 9M7, + $\sharp$ 9M7** — An augmented chord (raised 5th) with a major 7th and 9th.



**dim(b13)** — Diminished seventh, added flat 13th.



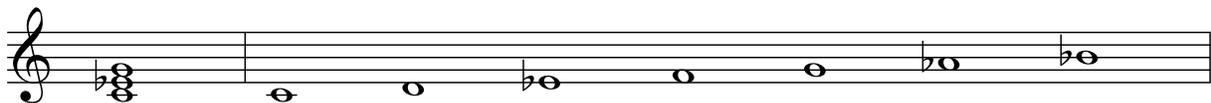
**dim7, dim, °** — Diminished seventh.



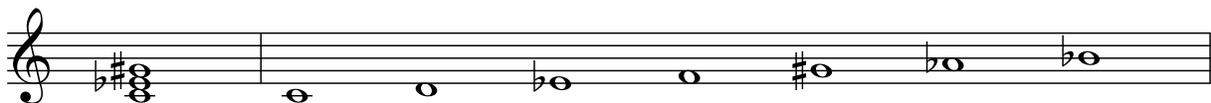
**dim7(addM7), °(addM7)** — Diminished triad with added Major 7th.



**m** — Minor triad.



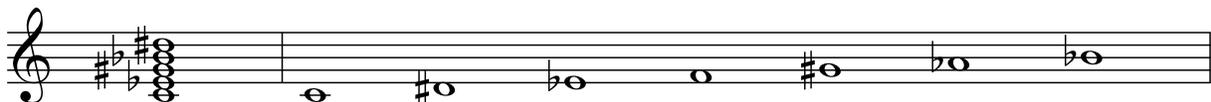
**m#5, m+5, m+** — Minor triad with augmented 5th.



**m(sus9), m(add9)** — Minor triad plus 9th (no 7th).



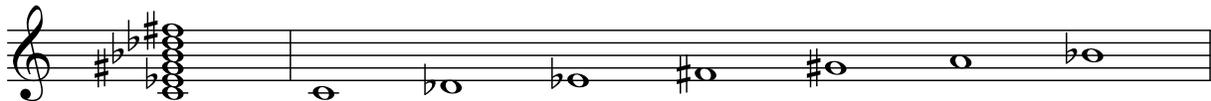
**m+7#9** — Augmented minor 7 plus sharp 9th.



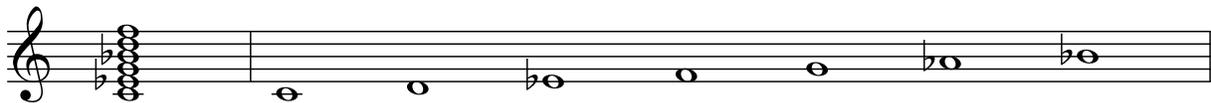
**m+7<sup>b</sup>9** — Augmented minor 7 plus flat 9th.



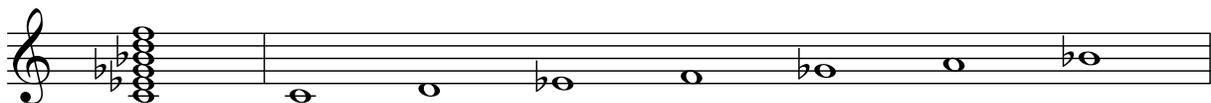
**m+7<sup>b</sup>9#11** — Augmented minor 7th with flat 9th and sharp 11th.



**m11** — 9th with minor 3rd, plus 11th.



**m11<sup>b</sup>5** — Minor 7th with flat 5th plus 11th.



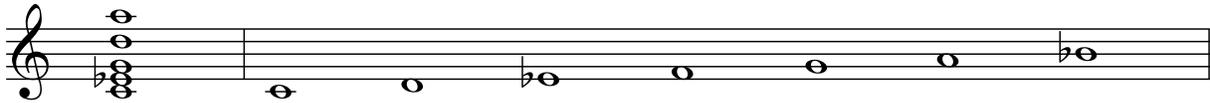
**m13** — Minor 7th (including 5th) plus 13th (9th and 11th not voiced).



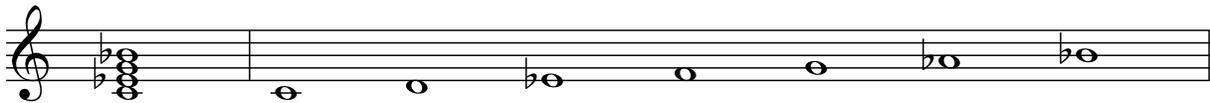
**m6** — Minor 6th (flat 3rd plus a 6th).



**m6(add9), m69** — Minor 6th with added 9th. This is sometimes notated as a slash chord in the form “m6/9”.



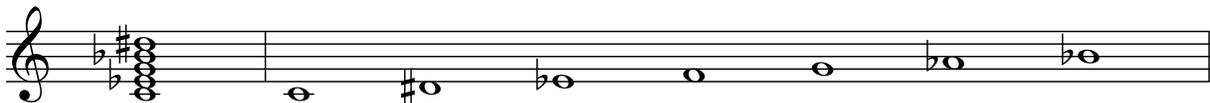
**m7** — Minor 7th (flat 3rd plus dominant 7th).



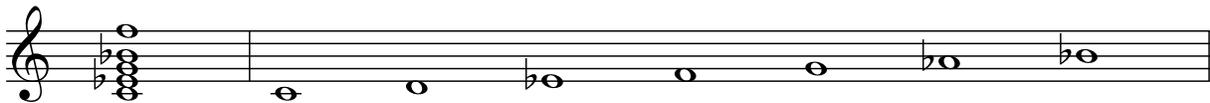
**m7#5** — Minor 7th with sharp 5th.



**m7#9, m7(#9)** — Minor 7th with added sharp 9th.



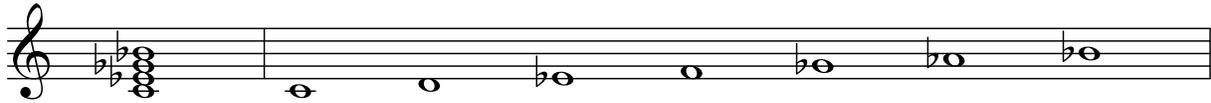
**m7(add11)** — Minor 7th plus 11th.



**m7(add13)** — Minor 7th plus 13th.



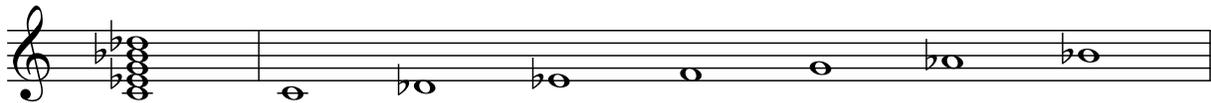
**m7<sup>b</sup>5, m7-5, ø** — Minor 7th, flat 5 (aka 1/2 diminished).



**m7<sup>b</sup>5<sup>b</sup>9** — Minor 7th with flat 5th and flat 9th.



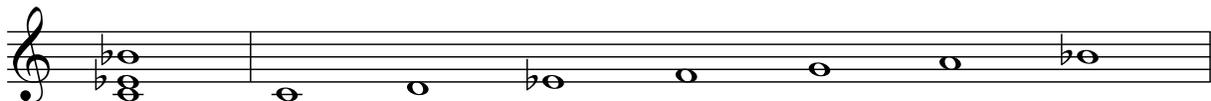
**m7<sup>b</sup>9, m7(b9)** — Minor 7th with added flat 9th.



**m7<sup>b</sup>9<sup>#</sup>11** — Minor 7th plus flat 9th and sharp 11th.



**m7omit5, m7(omit5)** — Minor 7th with unvoiced 5th.



**m7sus4, m7sus** — Minor suspended 4th, minor triad plus 4th and dominant 7th.



**m9** — Minor triad plus 7th and 9th.



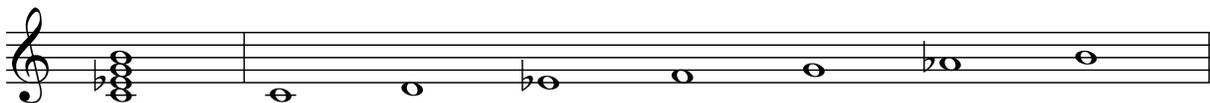
**m9#11** — Minor 7th plus 9th and sharp 11th.



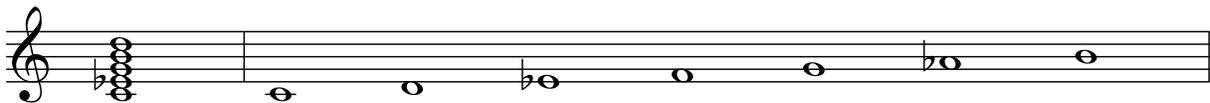
**m9b5** — Minor triad, flat 5, plus 7th and 9th.



**mM7, m(maj7), m+7, min(maj7), min#7, m#7** — Minor Triad plus Major 7th. You will also see this printed as “m(maj7)”, “m+7”, “min(maj7)” and “min#7” (which *MIA* accepts); as well as the *MIA* invalid forms: “-(Δ7)”, and “min♭7”.



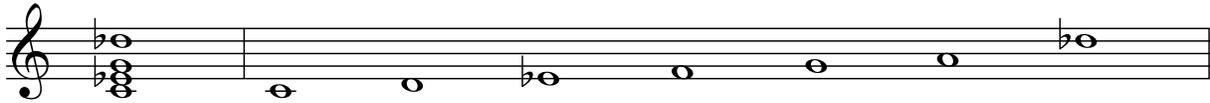
**mM7(add9)** — Minor Triad plus Major 7th and 9th.



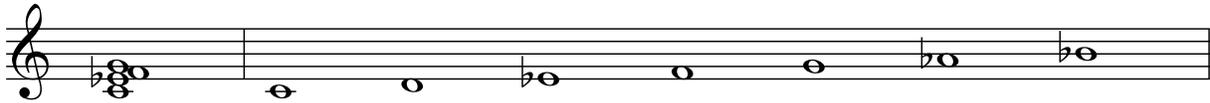
**m<sup>b</sup>5, m(b5), °3, dim3** — Minor triad with flat 5th (aka dim).



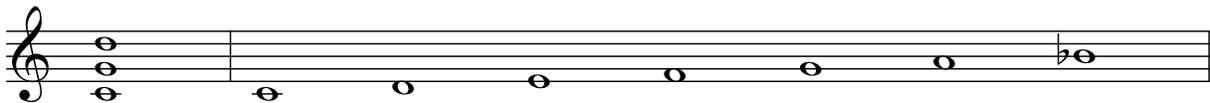
**mb9** — Minor chord plus flat 9th (no 7th.)



**msus4, msus** — Minor suspended 4th, minor triad plus 4th.



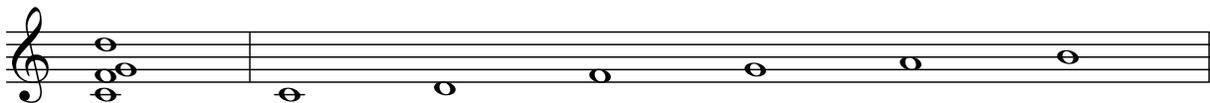
**omit3add9, omit3(add9)** — Triad: root, 5th and 9th.



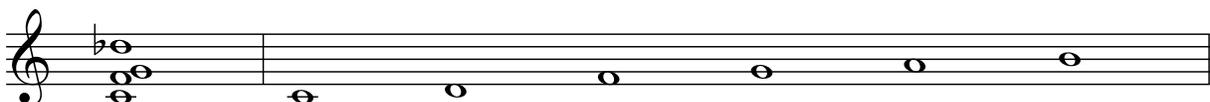
**sus(add#9)** — Suspended 4th, major triad with the 3rd raised half tone plus sharp 9th.



**sus(add9)** — Suspended 4th, major triad with the 3rd raised half tone plus 9th.



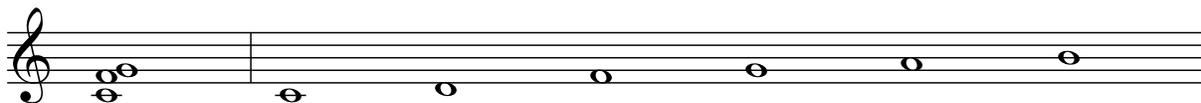
**sus(addb9)** — Suspended 4th, major triad with the 3rd raised half tone plus flat 9th.



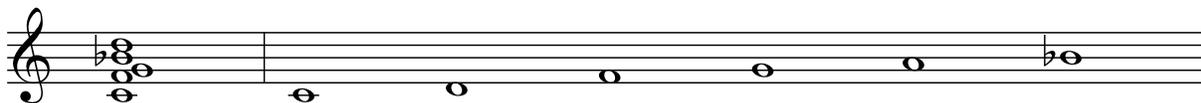
**sus2** — Suspended 2nd, major triad with the major 2nd above the root substituted for 3rd.



**sus4, sus** — Suspended 4th, major triad with the 3rd raised half tone.



**sus9, 9sus, 9sus4** — 7sus plus 9th.



*Appendix A*

*Index of Chords*