

Diatonic Triads in Major

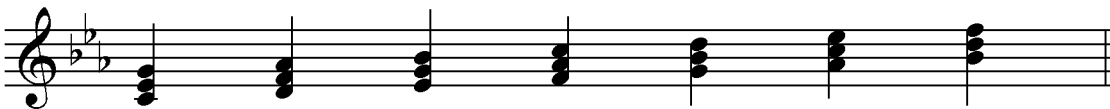


<u>Quality:</u>	M	m	m	M	M	m	d
<u>Function:</u>	I	ii	iii	IV	V	vi	vii ^o
<u>Solfege:</u>	S	L	T	D'	R'	M'	F'
	M	F	S	L	T	D'	R'
	D	R	M	F	S	L	T

Triad Arpeggio Pattern: D-M-S-M-D R-F-L-F-R etc... D'-S-M-S-D (final)

Diatonic Triads in Minor

"Natural" Minor:



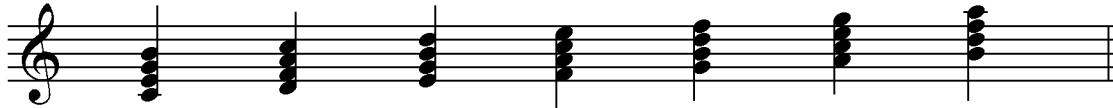
<u>Quality:</u>	m	d	M	m	m	M	M
<u>Function:</u>	i	ii ^o	III	iv	v	VI	VII
<u>Solfege:</u>	S	Le	Te	D'	R'	Me'	F'
	Me	F	S	Le	Te	D'	R'
	D	R	Me	F	S	Le	Te

"Harmonic" and "Melodic" Minor (raised 6th and 7th degrees):



<u>Quality:</u>	m	m	A	M	M	d	d
<u>Function:</u>	i	ii	III+	IV	V	vi ^o	vii ^o
<u>Solfege:</u>	S	L	T	D'	R'	Me'	F'
	Me	F	S	L	T	D'	R'
	D	R	Me	F	S	L	T

Diatonic Seventh Chords in Major

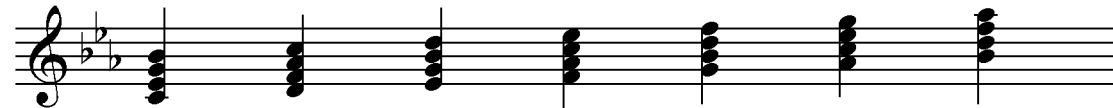


<u>Quality:</u>	MM	mm	mm	MM	Mm	mm	dm
<u>Type:</u>	"Major"	"minor"			"Dominant"		"Half-diminished"
<u>Function:</u>	I ⁷	ii ⁷	iii ⁷	IV ⁷	V ⁷	vi ⁷	vii ^{ø7}
<u>Solfege:</u>	T	D'	R'	M'	F'	S'	L'
	S	L	T	D'	R'	M'	F'
	M	F	S	L	T	D'	R'
	D	R	M	F	S	L	T

Chord Arpeggio Pattern: D-M-S-T-S-M-D R-F-L-D'-L-F-R etc... D'-S-M-S-D (final)

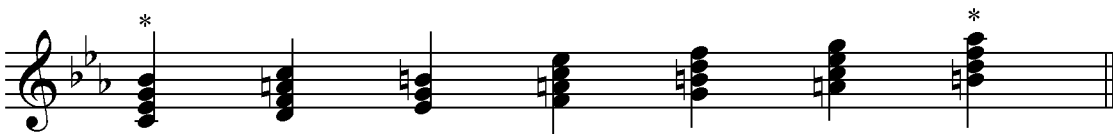
Diatonic Seventh Chords in Minor

"Natural" Minor:



<u>Quality:</u>	mm	dm	MM	mm	mm	MM	Mm
<u>Function:</u>	i ⁷	ii ^{ø7}	III ⁷	iv ⁷	v ⁷	VI ⁷	VII ⁷
<u>Solfege:</u>	Te	D'	R'	Me'	F'	S'	Le'
	S	Le	Te	D'	R'	Me'	F'
	Me	F	S	Le	Te	D'	R'
	D	R	Me	F	S	Le	Te

"Harmonic" and "Melodic" Minor (raised 6th and 7th degrees):



<u>Quality:</u>	mm	mm	(III+ triad only)	Mm	Mm	dm	dd ("Fully-diminished")
<u>Function:</u>	i ⁷	ii ⁷	III+	IV ⁷	V ⁷	vi ^{ø7}	vii ^{ø7}
<u>Solfege:</u>	Te*	D'		Me'	F'	S'	Le'*
	S	L	T	D'	R'	Me'	F'
	Me	F	S	L	T	D'	R'
	D	R	Me	F	S	L	T

* this pitch could also be raised, but usually is not (i7 becomes mM; viio7 becomes dm)

Review of Additional Concepts Related to 7th Chords:

Inversion:

- Because a 7th chord has an additional note (a seventh above the root), an additional chord inversion is possible (the seventh of the chord could be in the bass). We call this “3rd inversion.” Triads cannot be in 3rd inversion, because they don’t have a seventh.
- Inversion symbols for 7th chords also come from figured bass, but are different from triad symbols because the intervals are different after inversion. Here is a chart summarizing the inversion notation for triads and seventh chords:

	Root Pos. (root in bass)	1st Inv. (3 rd in bass)	2nd Inv. (5 th in bass)	3rd Inv. (7 th in bass)
Triad:	no notation	6	6 4	doesn't exist
7th chord:	7	6 5	4 3	4 2

Quality:

- Seventh chord quality has two components – the quality of the triad (root, 3rd and 5th together), and the quality of the 7th (above the chord root). There are five main types of 7th chords that appear in the diatonic Major and minor scale; others are possible but are not commonly used until the 20th century.
 - Here are the five types of 7th chords, using the note A as the root of each:

"Major 7" **"Dominant 7"** **"Minor 7"** **"Half-Diminished 7"** **"Fully-Diminished 7"**

Properties: Major triad, Major 7th Major triad, minor 7th minor triad, minor 7th dim. triad, minor 7th dim. triad, dim. 7th

Root and Quality: AMM AMm Amm Adm Add

- Study page two of this handout to see these different seventh chord qualities in their functional positions within the Major and minor scale (Roman numerals).
- “Half” vs. “Fully” diminished 7th chords:
 - The fully-diminished seventh chord uses the same “degree” symbol as a triad does to indicate that it is diminished, plus the appropriate inversion notation. Example: vii^{o7}
 - The only place a fully-diminished 7th chord appears in diatonic harmony is on the leading-tone seventh chord in a minor key.
 - The half-diminished seventh chord uses the degree symbol, but it is split by a diagonal line to indicate that the chord is not completely diminished. Example: vii^{ø7}
 - The remaining diminished chords in Major and minor keys are all half-diminished when they have a 7th: the leading tone seventh chord in Major keys, and the supertonic and submediant seventh chords in minor keys.
 - **Note:** Triads are neither fully- nor half-diminished, because they don’t have a seventh. Triads are just “diminished”, and use a circle without a line.