

Nine Charts of Music Basics

The Circle of Fifths

12 Major Keys

12 Major Scales

Scales by Number

Modal Scales in C

Modal Scales by Numbers

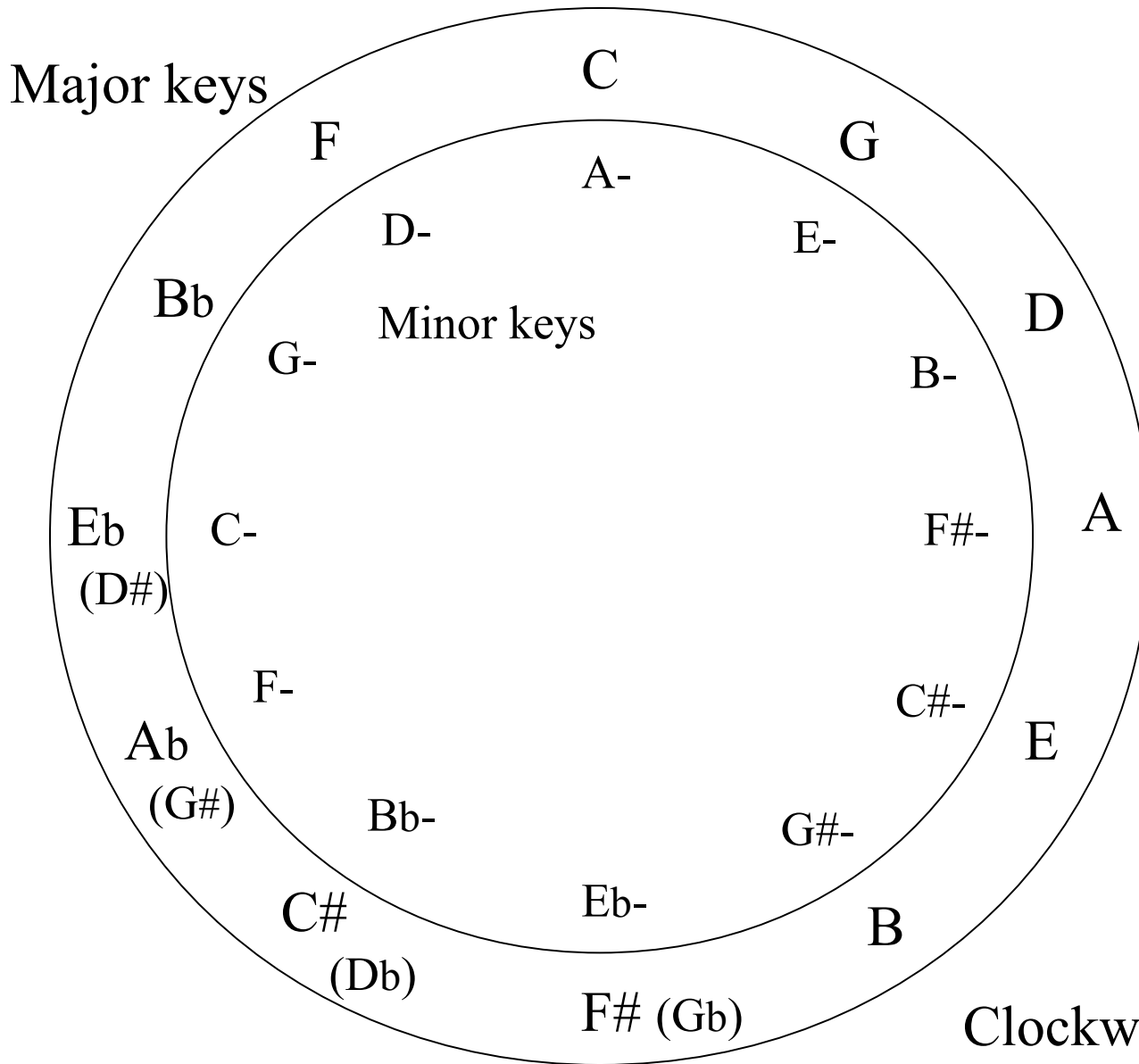
7 Modes in 1 Scale

Chord Groups

Chord Progressions

designed by Thomas O'Hare

The Circle of Fifths



Clockwise: 5ths
Counterclockwise: 4ths

The 12 Major Keys with their Flats or Sharps

Order of Flats: B E A D G C

Order of Sharps: F C G D A E

^F Key	Number of Flats: Notes Flatted
C	none
F	one: B \flat
B \flat	two: B \flat , E \flat
E \flat	three: B \flat , E \flat , A \flat
A \flat	four: B \flat , E \flat , A \flat , D \flat
D \flat	five: B \flat , E \flat , A \flat , D \flat , G \flat
G \flat	six: B \flat , E \flat , A \flat , D \flat , G \flat , C \flat

What about C \flat , F \flat , D \sharp , and G \sharp ?
They are more simply called
B, E, E \flat , and A \flat , respectively.

^B Key	Number of Sharps: Notes Sharped
C	none
G	one: F \sharp
D	two: F \sharp , C \sharp
A	three: F \sharp , C \sharp , G \sharp
E	four: F \sharp , C \sharp , G \sharp , D \sharp
B	five: F \sharp , C \sharp , G \sharp , D \sharp , A \sharp
F \sharp	six: F \sharp , C \sharp , G \sharp , D \sharp , A \sharp , E \sharp
C \sharp	seven: F \sharp , C \sharp , G \sharp , D \sharp , A \sharp , E \sharp , B \sharp

Why are there 14 here?

Db = C \sharp G \flat = F \sharp

key
tonic

subdominant

dominant

The 12 Major Scales

C	D	E	F	G	A	B	C	0
G	A	B	C	D	E	F#	G	1 #
D	E	F#	G	A	B	C#	D	2 #'s
A	B	C#	D	E	F#	G#	A	3 #'s
E	F#	G#	A	B	C#	D#	E	4 #'s
B	C#	D#	E	F#	G#	A#	B	5 #'s
F#	G#	A#	B	C#	D#	E#	F#	6 #'s
Gb	Ab	Bb	Cb	Db	Eb	F	Gb	6 b's
Db	Eb	F	Gb	Ab	Bb	C	Db	5 b's
Ab	Bb	C	Db	Eb	F	G	Ab	4 b's
Eb	F	G	Ab	Bb	C	D	Eb	3 b's
Bb	C	D	Eb	F	G	A	Bb	2 b's
F	G	A	Bb	C	D	E	F	1 b

There are 13 scales here. Which two are the same? Which other scale has a twin (which is not shown)?

Scales By Numbers

- Notes and chords are often called by their number.
- Learn to translate numbers to chords in every key.
- Knowing the numbers helps you transpose.
- Chord progressions are described by numbers.

Tonic	dominant						
	subdominant			relative minor			
<u>I</u>	<u>ii</u>	<u>iii</u>	<u>IV</u>	<u>V</u>	<u>vi</u>	<u>Vii</u>	
C	D	E	F	G	A	B	C
D	E	F#	G	A	B	C#	D
E	F	G#	A	B	C#	D#	E
F	G	A	Bb	C	D	E	F
G	A	B	C	D	E	F#	G
A	B	C#	D	E	F	G#	A
Bb	C	D	Eb	F	G	A	Bb
Eb	F	G	Ab	Bb	C	D	Eb

Modal Scales in C

This chart shows the 7 modes in the key of C.

To transpose these modes into any key, learn which notes are altered.
These are shown on the next chart.

<u>I</u>	<u>ii</u>	<u>iii</u>	<u>IV</u>	<u>V</u>	<u>Vi</u>	<u>Vii</u>		<u>Mode</u>
C	D	E	F	G	A	B	C	Ionian
C	D	E \flat	F	G	A	B \flat	C	Dorian
C	D \flat	E \flat	F	G	A \flat	B \flat	C	Phrygian
C	D	E	F \sharp	G	A	B	C	Lydian
C	D	E	F	G	A	B \flat	C	Mixo-Lydian
C	D	E \flat	F	G	A \flat	B \flat	C	Aeolian
C	D \flat	E \flat	F	G \flat	A \flat	B \flat	C	Locrain

Modal Scales By Numbers

This chart shows the 8 modes in terms of numbers and alterations.

							<u>Mode</u>
I	ii	iii	IV	V	Vi	Vii	Ionian
I	ii	iii b	IV	V	Vi b	Vii	Dorian
I	ii b	iii b	IV	V	Vi b	Vii b	Phrygian
I	ii	iii	IV#	V	Vi	Vii	Lydian
I	ii	iii	IV	V	Vi	Vii b	Mixo-Lydian
I	ii	iii b	IV	V	Vi b	Vii b	Aeolian
I	ii b	iii b	IV	V b	Vi b	Vii b	Locrain

7 Modes in 1 Scale

An interesting correlation between the modes:

- Start with any major scale (here the key of C is used).
- Keeping the same notes, start with each note in the scale as the tonic (the first).
- This gives you the 7 classical modes.
- For example, Lydian has the same notes as a C major scale, but it starts on F.

<u>I</u>	<u>II</u>	<u>iii</u>	<u>IV</u>	<u>V</u>	<u>Vi</u>	<u>Vii</u>		<u>Mode</u>
C	D	E	F	G	A	B	C	Ionian
D	E	F	G	A	B	C	D	Dorian
E	F	G	A	B	C	D	E	Phrygian
F	G	A	B	C	D	E	F	Lydian
G	A	B	C	D	E	F	G	Mixo-Lydian
A	B	C	D	E	F	G	A	Aeolian
B	C	D	E	F	G	A	B	Locrain

Chord Groups

In any key, there are 7 basic chords, one built on each note of the scale.

These chords fall into **three groups**:

Subdominant

IV Δ 7

ii -7

unstable

Dominant

V7

vii -7b5

less stable

Tonic

I Δ 7

iii -7

vi -7

stable

Note: "Tonic" usually refers only to the I chord, not the other chords in the group. Likewise, "Dominant" is V7 and the "Subdominant" is IV Δ 7.

Substitute chords within a group.

Chords within a group have most notes in common.

In the key of C:

I	C Δ 7:	C E G B
iii-7	E-7:	E G B D
vi-7	A-7:	A C E G

Progress from one group to another,
usually Subdominant > Dominant > Tonic

Chord

Progressions

Chord progressions generally go towards the tonic.

Subdominant > Dominant > Tonic

jazz: ii-7 > V7 > I

blues: IV > V7 > I

From one chord to the next, the root usually moves down

a perfect 5th V7 > I G7 > CΔ7

or a minor 2nd