

## Deriving the Harmonized Minor Scale

Chromatic Scale (Each note represents 1 fret)

A    A#    B    C    C#    D    D#    E    F    F#    G    G#    (repeats/circular)  
 (Bb)                      (Db)                      (Eb)                      (Gb)

Min Scale

w    h    w    w    h    w    w

w = whole step = 2 frets  
 h = half step = 1 fret

Apply w-h formula to the chromatic scale to generate the Min scale for a specific Minor key  
 This works for each pitch so there are 12 keys/scales total (not including modes)

A Natural Minor scale

A    B    C    D    E    F    G    A

*NOTE: A Min is the relative minor of C Maj (The contain the same 7 notes)  
 The Relative Min scale to any Maj scale beings on the 6th degree of that Maj Scale*

Chords are based off the idea of thirds

	<u>A Mi</u>	<u>B dim</u>	<u>C Ma</u>	<u>D Mi</u>	<u>E Mi</u>	<u>F Ma</u>	<u>G Ma</u>	<u>A Mi</u>
R	A	B	C	D	E	F	G	A
3rd	C	D	E	F	G	A	B	C
5th	E	F	G	A	B	C	D	E

Triad Quality Matrix			
	Ma	Mi	dim
R	R	R	R
3	3	b3	b3
5	5	5	b5

	<u>A Mi7</u>	<u>B Mi7b5</u>	<u>C Ma7</u>	<u>D Mi7</u>	<u>E Mi7</u>	<u>F Ma7</u>	<u>G Dom7</u>	<u>A Mi7</u>
R	A	B	C	D	E	F	G	A
3rd	C	D	E	F	G	A	B	C
5th	E	F	G	A	B	C	D	E
7th	G	A	B	C	D	E	F	G

7th chord Quality Matrix				
	Ma7	Mi7	Dom7	Mi7b5
R	R	R	R	R
3	3	b3	3	b3
5	5	5	5	b5
7	7	b7	b7	b7

**Basic rule: Memorize two things to generate the chords for any MINOR key**

**1. whwwhww**

**2. mi-dim-Ma-mi-mi-Ma-Ma (or mi7-mi7b5-Ma7-mi7-mi7-Ma7-Dom7)**

In thinking of terms of Parallel Major and minor scales

<table border="0"> <tr> <td><b>Maj</b></td> <td><b>C</b></td> <td><b>D</b></td> <td><b>E</b></td> <td><b>F</b></td> <td><b>G</b></td> <td><b>A</b></td> <td><b>B</b></td> <td><b>C</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td><b>1</b></td> <td><b>2</b></td> <td><b>3</b></td> <td><b>4</b></td> <td><b>5</b></td> <td><b>6</b></td> <td><b>7</b></td> <td><b>8</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	<b>Maj</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>A</b>	<b>B</b>	<b>C</b>												<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>											<table border="0"> <tr> <td><b>C Ma</b></td> <td><b>D mi</b></td> <td><b>E mi</b></td> <td><b>F Ma</b></td> <td><b>G Ma</b></td> <td><b>A mi</b></td> <td><b>B dim</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>I Ma</b></td> <td><b>II mi</b></td> <td><b>III mi</b></td> <td><b>IV Ma</b></td> <td><b>V Ma</b></td> <td><b>VI mi</b></td> <td><b>VII dim</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>C Ma7</b></td> <td><b>D mi7</b></td> <td><b>E mi7</b></td> <td><b>F Ma7</b></td> <td><b>G 7</b></td> <td><b>A mi 7</b></td> <td><b>B mi7b5</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>I Ma7</b></td> <td><b>II mi7</b></td> <td><b>III mi7</b></td> <td><b>IV Ma7</b></td> <td><b>V Dom7</b></td> <td><b>VI mi7</b></td> <td><b>VII mi7b5</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	<b>C Ma</b>	<b>D mi</b>	<b>E mi</b>	<b>F Ma</b>	<b>G Ma</b>	<b>A mi</b>	<b>B dim</b>													<b>I Ma</b>	<b>II mi</b>	<b>III mi</b>	<b>IV Ma</b>	<b>V Ma</b>	<b>VI mi</b>	<b>VII dim</b>													<b>C Ma7</b>	<b>D mi7</b>	<b>E mi7</b>	<b>F Ma7</b>	<b>G 7</b>	<b>A mi 7</b>	<b>B mi7b5</b>													<b>I Ma7</b>	<b>II mi7</b>	<b>III mi7</b>	<b>IV Ma7</b>	<b>V Dom7</b>	<b>VI mi7</b>	<b>VII mi7b5</b>												
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| |            |          |          |                      |          |          |                      |                      |          |  |  |  |  |  |  |  |  |  |  | |------------|----------|----------|----------------------|----------|----------|----------------------|----------------------|----------|--|--|--|--|--|--|--|--|--|--| | <b>Min</b> | <b>C</b> | <b>D</b> | <b>E<sup>b</sup></b> | <b>F</b> | <b>G</b> | <b>A<sup>b</sup></b> | <b>B<sup>b</sup></b> | <b>C</b> |  |  |  |  |  |  |  |  |  |  | |            | <b>1</b> | <b>2</b> | <b>b3</b>            | <b>4</b> | <b>5</b> | <b>b6</b>            | <b>b7</b>            | <b>8</b> |  |  |  |  |  |  |  |  |  |  | | |              |                 |                          |               |              |                          |                         |  |  |  |  |  |  |  |  |  |  |  |  | |--------------|-----------------|--------------------------|---------------|--------------|--------------------------|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--| | <b>C mi</b>  | <b>D dim</b>    | <b>E<sup>b</sup> Ma</b>  | <b>F mi</b>   | <b>G mi</b>  | <b>A<sup>b</sup> Ma</b>  | <b>B<sup>b</sup> Ma</b> |  |  |  |  |  |  |  |  |  |  |  |  | | <b>I mi</b>  | <b>II dim</b>   | <b>bIII Ma</b>           | <b>IV mi</b>  | <b>V mi</b>  | <b>bVI Ma</b>            | <b>bVII Ma</b>          |  |  |  |  |  |  |  |  |  |  |  |  | | <b>C mi7</b> | <b>D mi7b5</b>  | <b>E<sup>b</sup> Ma7</b> | <b>F mi7</b>  | <b>G mi7</b> | <b>A<sup>b</sup> Ma7</b> | <b>B<sup>b</sup> 7</b>  |  |  |  |  |  |  |  |  |  |  |  |  | | <b>I mi</b>  | <b>II mi7b5</b> | <b>bIII Ma7</b>          | <b>IV mi7</b> | <b>V mi7</b> | <b>bVI Ma7</b>           | <b>bVII Dom7</b>        |  |  |  |  |  |  |  |  |  |  |  |  | |