The Universal Encyclopedia of Scales
An in-depth account of all 2048 Scales in Music

Symmetrical Augmented
HexaTonic IIIIm:bVI • Messiaen Inv. III Truncated • Augmented
6 Notes • 2 Modes • 4 Transpositions

m3 H m3 H m3 H
1 #2 3 5 b6 7

Bi-Triadic Hexatonic
V+: III+ III: Im bVI: IIIIm l: bV1m

2600 pages showing every scale over the circle of fifths, notated in twelve keys with piano keyboard & guitar fretboard. It includes intervallic formulas, symmetry, source scale and related modes.
The Universal Encyclopedia of Scales

An in-depth account of all 2048 Scales in Music

mDecks Music
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Preface

“There are 2048 scales in music, no more, no less. 12 of them are intervals (scales with only two notes), and 344 of the other 2036 scales are source scales”

A complete encyclopedia of scales has always been on every musician’s wish-list. There are many reasons why having a collection containing all scales in music fascinates us, but the most attractive one is that it is universal.

We all know that our twelve tone system (with only twelve different pitch-classes) must produce an exact amount of scales. A list with all possible scales in music must then be universal and unchanging. In fact, if well-organized, this list should offer much more than just a simple description of each scale. This list could show relationships between scales while cataloguing them based on different properties (symmetry, amount of notes and/or modes, source scales vs. modes of source scales, intervallic formulas, etc.)

With a complete encyclopedia of scales we can finally have the answers to many questions, such as:

- How many scales are there in music and what are they?
- Which scales are the source scales and what are their related modes? (What are the related modes of any scale?)
- Which scales are symmetric?
- How many scales are there with only one (or two, three, etc) mode(s), and which ones are they?
- Which scales are pentatonic or bi-triadic hexatonic or truncated, etc.?
- What is the scale represented by a specific intervallic formula?
- What is the interval content of any scale? How dissonant or consonant a scale is?
- How many modes does any one scale produce?

The creation of this universal encyclopedia of scales was made possible by using the concepts developed for the app Tessitura Pro by mDecks Music.

Tessitura Pro represents scales by graphing them over the circle of fifths. This graphing technique creates very distinct polygons. Moving forward, we will refer to these polygons as graphs. This technique allowed us to find all possible scales in music, studied their properties and classified scales using different criteria.
Master Index of Scales
Select one of the options below

Index of Source Scales by Mode Count

Index of All Scales by Mode Count

Index of Source Scales by Note Count

Index of All Scales by Note Count

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Index of Bi-Triadic Hexatonic Source Scales
Index of Source Scales by Mode Count

Select one of the options below
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Source Scales with 1 Mode
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Source Scales with 3 Modes
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Source Scales with 6 Modes
Source Scales with 7 Modes
Source Scales with 8 Modes
Source Scales with 9 Modes
Source Scales with 10 Modes
Source Scales with 11 Modes
Modes of 1111116

7 Notes • 7 Modes • 12 Transpositions
Source Scale: Ionian
Symmetrical: NO
Bi-Triadic Hexatonic: NO

Click here to go back to Main Index
Click on any scale name (mode) to view it
Ionian

- Ionian
- Major
- Mixolydian n7
- Lydian n4

View related modes

7 Notes • 7 Modes • 12 Transpositions

Intervallic Formula: W W H W W W H

Degrees Formula: 1 2 3 4 5 6 7

Source Scale: Self

Not a Symmetrical Scale

Not a Bi-Triadic Hexatonic

Click here to go back to Main Index
Dorian

- Dorian • Mixolydian b3 • Aeolian n13 • Melodic Minor b7 •

View related modes

7 Notes • 7 Modes • 12 Transpositions

Intervallic Formula: W H W W W H W
Degrees Formula: 1 2 b3 4 5 6 b7

Source Scale: Ionian [2]
Not a Symmetrical Scale
Not a Bi-Triadic Hexatonic

Click here to go back to Main Index
Phrygian
• Phrygian • Aeolian b9 • Locrian n5 •

View related modes

7 Notes • 7 Modes • 12 Transpositions

Intervallic Formula: H W W W H W W

Degrees Formula: 1 b2 b3 4 5 b6 b7

Source Scale: Ionian [3]
Not a Symmetrical Scale
Not a Bi-Triadic Hexatonic

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Lydian

- Lydian • Ionian #4 • Lydian Diminished n3 • Pelog n13 •

View related modes

7 Notes • 7 Modes • 12 Transpositions

Intervallic Formula: W W W H W W H

Degrees Formula: 1 2 3 #4 5 6 7

Source Scale: Ionian [4]

Not a Symmetrical Scale

Not a Bi-Triadic Hexatonic

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Mixolydian
• Mixolydian • Adonai malakh • Ionian b7 • Dorian n3 •
View related modes
7 Notes • 7 Modes • 12 Transpositions
Intervallic Formula: W W H W W H W
Degrees Formula: 1 2 3 4 5 6 b7
Source Scale: Ionian [5]
Not a Symmetrical Scale
Not a Bi-Triadic Hexatonic
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Aeolian

- Aeolian • Natural minor • Dorian b13 • Phrygian n2 •

View related modes

7 Notes • 7 Modes • 12 Transpositions

Intervallic Formula: W H W W H W W

Degrees Formula: 1 2 b3 4 5 b6 b7

Source Scale: Ionian [6]

Not a Symmetrical Scale
Not a Bi-Triadic Hexatonic

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Scale Dissonance (0 to 10): 2.1
Aggregated Dissonance (0 to 10): 3.4

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https://mDecks.com
Locrian
• Locrian • Phrygian b5 • Locrian Dominant b3 • Ritsu add b5

View related modes

7 Notes • 7 Modes • 12 Transpositions

Intervallic Formula: H W W H W W W

Degrees Formula: 1 b2 b3 4 b5 b6 b7

Source Scale: Ionian [7]
Not a Symmetrical Scale
Not a Bi-Triadic Hexatonic

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