

IGOR SARDI

**A DEFINITIVE STUDY OF
ARPEGGIOS AND SCALES ON
BASS**



- TIPS AND EXERCISES TO PERFECTLY KNOW ANY SCALE
AND ARPEGGIOS ON THE ENTIRE BASS FRETBOARD, IN ALL KEYS**
- TRIADS**
 - QUADRIADS**
 - ARPEGGIOS IN 5, 6 AND 7 VOICES**
 - ALL SCALES YOU NEED TO KNOW**
 - APPLICATION EXAMPLES**
 - AND MUCH MORE**

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Preface:

Over the years I have noticed that almost all of my new students have huge gaps in the concepts (in my view) fundamental to any musician, and, in our case, any bass player. There are many reasons for this: more and more are self-taught, convinced that since there is an endless amount of teaching material online, they can make a path of study on their own. Unfortunately, it almost always happens that we then find ourselves having followed so many different teachers, so many different teaching methods without anyone to give us proper advice, and to avoid mistakes, which then become very difficult to fix. Another thing I notice, many bass players have technically arrived at an almost crazy level, they play incredible slap passages, solos at enormous speeds, etc. But then I ask them to accompany a simple song in eighths (example), giving the right intention to each note, and I hear the gaps I mentioned earlier. Who goes out of time, who plays them superficially, who doesn't take care of the sound, etc. Or (this occurs in almost all of my students), I ask them to play me a major scale of (example) B, over two octaves, and they get stuck. What's my point? In my opinion, a good bass player, before "venturing" into very very complex techniques and studies, absolutely must have a solid foundation regarding:

- Timing
- Posture and basic techniques (pizzicato, left hand, etc.)
- Care of one's own sound
- Repertoire
- Knowledge and listening to as many genres of music as possible
- Groove and portment
- Knowledge of basic theory and harmony
- TOTAL knowledge of the bass fretboard

It is precisely on this last point that I have dedicated this course. Whether you play 4-, 5-, 6-, or multi-string basses, knowledge of the entire bass fretboard is vital to your course of study. Knowing how to play an arpeggio, a scale, only in the "vertical sense," for example, or with only one fingering, or only in one range of the instrument, will result in an almost complete inability to improvise, but also to play simple fills or to compose simple bass lines. In this project, I have gone through all my studies about it, trying to summarize the most important points, which have led me (with sacrifice and dedication) to know my instrument (quite) well. FUNDAMENTAL will be to follow the proposed exercises, to take cues from them and then use them intelligently. Change key, change rhythm, try to understand every single topic, spend time on every arpeggio, every scale. One day you will understand how much this kind of work, will twist in a positive sense, the way you play the bass and "see" music.

In this book you will find several terms and letters with precise meanings, which may vary depending on the context. Below is a small legend that will be useful to you:

Minor - m

Major - maj

Augmented - Aug

Diminished - Dim or °

Half-diminished - ϕ or m7(\flat 5)

Root - R

Minor second - 2m

Major second - 2M

Minor third - 3m

Major third - 3M

Augmented fourths - #4, 4aug, #11 (fourths to the octave above)

Diminished fifth - \flat 5, 5dim

Augmented fifth - #5, 5 aug

Minor sixth - 6m, \flat 6, 13m, \flat 13

Major sixth - 6M, 13M

Diminished seventh - $\flat\flat$ 7, 7dim

Minor seventh - \flat 7, 7m

Major seventh - 7maj

To receive all attached audio materials (backing tracks, samples, etc.) please send an email to igorsardi@gmail.com

For in-depth study of all topics, check out my other educational books, and the more than 200 free lessons on my YouTube channel (Igor Sardi Bass)

CHORDS VOCABULARY

LEGEND:

R = Root

m = minor

M = Major

O = diminished

ϕ = Half diminished

P = Perfect

Dim = diminished

Aug = Augmented

The ninth is equivalent to the second one octave above

The eleventh is equivalent to the fourths an octave above

The thirteenth is equivalent to the sixth one octave above

Example in F

Chord	Root	3rd	5th	7th	9th	11th	13th
F	F	A 3M	C 5P				
Fm	F	A \flat 3m	C 5P				
Faug or F+	F	A 3M	C \sharp 5aug				
Fdim or F $^{\circ}$	F	A \flat 3m	C \flat 5dim				
Fmaj7	F	A 3M	C 5P	E 7M			
Fm7	F	A \flat 3m	C 5P	E \flat 7m			
F7	F	A 3M	C 5P	E \flat 7m			
F ϕ or Fm7(\flat 5)	F	A \flat 3m	C \flat 5dim	E \flat 7m			
F $^{\circ}$ 7 or Fdim7	F	A \flat 3m	C \flat 5dim	E $\flat\flat$ 7dim			
F6	F	A 3M	C 5P				D 13M
F6/9	F	A 3M	C 5P		G 9M		D 13M
Fadd9	F	A 3M	C 5P		G 9M		
Fmaj9	F	A 3M	C 5P	E 7M	G 9M		
Fmaj11	F	A 3M	C 5P	E 7M	G 9M	B \flat 11P	
Fmaj13	F	A 3M	C 5P	E 7M	G 9M	B \flat 11P	D 13M
Fmaj7(\sharp 11)	F	A 3M	C 5P	E 7M		B 11aug	
Fm6	F	A \flat 3m	C 5P				D 13M

Module II - Quadriads and chords in 5, 6 and 7 voices

Maj7 chords (R - 3M - 5 - 7M)

Example in Bbmaj7
Index finger position

Middle finger position

Little finger position

Bass

Example in Abmaj7
Index finger position

Middle finger position

Little finger position

On two octaves with various possibilities
Example in Amaj7

On one string to the last available note
Example in Fmaj7

On two strings, changing strings on the first available note
Example in Emaj7

On three strings, changing strings on the first available note
Example in Emaj7

Etc.

The musical scales:

A scale is a succession of sounds within an octave, the last of which is a repetition of the first exactly an octave above. An ascending scale is called a scale in which the pitch of the notes is increasing, and a descending scale one in which the order is decreasing. I will also limit myself in this chapter to giving you a small summary of the most widely used and "famous" scales. Examples in C.

- **Ionian scale (or major scale)**

C - D - E - F - G - A - B

- **Dorian scale**

C - D - E \flat - F - G - A - B \flat (Second mode of B \flat major scale)

- **Phrygian scale**

C - D \flat - E \flat - F - G - A \flat - B \flat (Third mode of A \flat major scale)

- **Lydian scale**

C - D - E - F \sharp - G - A - B (Fourth mode of G major scale)

- **Mixolydian scale**

C - D - E - F - G - A - B \flat (Fifth mode of the F major scale)

- **Aeolian scale (or natural minor scale)**

C - D - E \flat - F - G - A \flat - B \flat (Sixth mode of E \flat major scale)

- **Locrian scale**

C - D \flat - E \flat - F - G \flat - A \flat - B \flat (Seventh mode of D \flat major scale)

- **Harmonic minor scale**

C - D - E \flat - F - G - A \flat - B

- **Locrian major sixth scale**

C - D \flat - E \flat - F - G \flat - A - B \flat (Second mode of the B \flat harmonic minor scale)

- **Ionian (#5) scale**

C - D - E - F - G \sharp - A - B (Third mode of the A harmonic minor scale)

- **Dorian (#4) scale**

C - D - E \flat - F \sharp - G - A - B \flat (Fourth mode of the G harmonic minor scale)

- **Phrygian dominant scale**

C - D \flat - E - F - G - A \flat - B \flat (Fifth mode of the F harmonic minor scale)

- **Lydian (#9) scale**

C - D \sharp - E - F \sharp - G - A - B (Sixth mode of the E harmonic minor scale)

- **Diminished scale (or Superlocrian diminished scale)**

C - D \flat - E \flat - F \flat - G \flat - A \flat - B $\flat\flat$ (Seventh mode of the D \flat harmonic minor scale.)

- **Melodic minor scale**

C - D - E \flat - F - G - A \flat - B

- **Dorian (\flat 9) scale**

C - D \flat - E \flat - F - G - A - B \flat (Second mode of the B \flat melodic minor scale.)

Clarify the concept "mode" and "modal":

Now we are going to talk about a topic that is often discussed, misunderstood, and poorly explained! What are modal scales for! Here we enter a very wide "world" for which a whole book dedicated to it would probably not be enough. Precisely for this reason I will not go into too much detail, but I will give you just a hint of what modes are. Let us first try to understand the difference between mode and modal scale. In tonal compositions of different genres of music, jazz, pop, classical music and so on, we find recurring harmonic progressions, the chords are articulated with each other according to the rules of tonal harmony. Each chord has a specific function and is part of a sequence and succession that only when taken as a whole has meaning. In modal harmony the mode, with the melodic line that is created with it and its chords, can have an "autonomous life." In modal harmony we express ourselves with Mode, and Mode should be conceived as an autonomous and complete harmonic environment where there are no preparatory chords to other chords, no cadences, as they are conceived in tonal harmony. Let's take an example: let's analyze the cadence (or sequence) II - V - I of C (Dm7 - G7 - C), G7 for example is incorrectly called G Mixolydian. Actually it is only so in terms of the scale name, so it is accurate to speak of a Mixolydian scale and not a Mixolydian mode. Its function then is the fifth degree in the harmonic tonal round II - V - I.

The Mixolydian Mode, just like all other modes, is not only a scale, but is a harmonic system of its own. Modal scales must be considered for all intents and purposes as, for example, the alphabet. It is not enough to know the vowels and consonants to express ourselves, but we need to know a language, the modal language uses modal scales to create the Mode, but we need to know modal thinking to appropriately employ the Mode with the purpose of being able to express ourselves. In tonal harmony we can at the limit introduce the use of some concept having to do with Modes, such as modal interchange, but more than anything else such practice is related to the substitution of one modal scale for another. Awareness of this concept is crucial, as it completely changes the approach to modes. If we decide to create a composition with a particularly sad character, we will probably use the Dorian mode, while if we want to compose something very joyful, surprising, and expansive, we will probably use the Lydian mode.

Now I will just tell you what my approach is in this regard, and how I "use" the various scales myself. For example, in order to understand the subject better, I have always preferred to practice playing on one chord first. Let me explain further, to "feel" the difference in sonority and colors for example between an Ionian scale and a Lydian scale, we can use a base with a Gmaj (or any other key) and play a few phrases, a few melodic lines, first using the G major scale, then the G Lydian scale. Try to "feel" the colors and

Module VI - Lydian scale

Example in B

Index finger position Middle finger position Little finger position

Bass

Example in C

Index finger position Middle finger position Little finger position

On two octaves with various possibilities (Example in G)

On one string to the last available note (Example in E) Etc.

On two strings to the last available note (Example in E) Etc.

On three strings to the last available note (Example in E) Etc.

On four strings to the last available note (Example in E) Etc.

The harmonic minor scale:

To really understand what the harmonic minor scale is, we need to stop for a moment (or even two!) and do a couple of reflections and preliminaries. This step is crucial, so take your time and read slowly, trying to "digest" it all to avoid confusion, and especially to get off on the right foot with the study of minor scales. If you have doubts, perplexities and confusion, re-read, or better yet, write to me.

We have seen that the natural minor scale ("Aeolian") is basically a "close relative" of the major scale, i.e., taking the C major scale (C - D - E - F - G - A - B), if I start from the sixth degree, A, and play the same notes, I will get the A (natural minor) A (A - B - C - D - E - F - G) Aeolian scale. On the other hand, if we take the A major scale (A - B - C# - D - E - F# - G#) and start from the sixth degree (F#) and play the same notes, I will get the Aeolian scale (natural minor) of F# (F# - G# - A - B - C# - D - E). So every major scale has a relative minor starting from its own sixth degree. At this point I one day asked myself, "But then what is the difference between writing a piece in C major and a piece in A minor?" There is an abysmal difference, because the "roles" of each note, and the relationships between them, totally change. The harmonic progression, cadences, and above all, the "color" and "atmosphere" of the piece changes, precisely because of this relationship between the notes, and between the various degrees of the scale. A will no longer be a sixth degree, but will become the fundamental note, the root note, just as E will no longer be a third degree, but will be a fifth, and so on. Above all, between the seventh degree and the eighth there will no longer be a semitone distance as in the major (B - C), but there will be a tone (G - A). So we will no longer have the so-called sensible, that is, that note that has an incredible attraction (in much the same way that I am attracted to my Fenders!!!) to its neighboring note (B and C precisely). In fact, if you play on a backing track of Cmaj, the major scale of C, having arrived on the seventh note (B), you will feel a need to resolve on C. None of this happens in the minor key. In fact, if you play on a backing track of Am, the natural minor scale of A, when you get to the seventh (G) you will not feel that need to resolve that we said for the major scale. The note of G is no longer a sensible, (it is an insensitive!!!). The two notes (G and A) do not love each other as madly as B and C, because there is a greater distance between them (two semitones versus one). All clear? Well, now suppose we want to compose a piece in the key of A natural minor. By harmonizing the natural A minor scale in quadriads, we will have the following chords, (to harmonize any scale start from the root, and write in succession every second note, that is, a succession of thirds).

Module XIII - Harmonic minor scale

Example in Bb
 Index finger position Middle finger position Little finger position

Bass

On two octaves with various possibilities (Example in A)

On one string to the last available note (Example in E) Etc.

On two strings to the last available note (Example in E) Etc.

On three strings to the last available note (Example in E) Etc.

On four strings to the last available note (Example in E) Etc.

♩ = 110

Harmonic minor scales in the first 4 frets, one descending and one ascending, using open strings (EX 101)

18 ^E ^F

The melodic minor scale:

We saw in the previous chapter that in principle the Harmonic minor scale was "invented" because of the need to have the major seventh degree even in the minor key (remember)? The natural minor scale has the seventh that is one tone away from the fundamental, the Harmonic minor has the seventh raised, so it is one semitone away from the root. This solved precisely the problem of the sensible seventh, and also the problem of the chord on the fifth degree (which in the natural minor key is minor, while in the harmonic minor key it is dominant 7th) but created another one. As you have heard, the Harmonic minor scale has a very peculiar sonority because of the distance of a tone and a half between the sixth and seventh degrees (in C, between A \flat and B), and this did not always fit well with the compositional ideas of the musicians and the desired sonorities. This "problem" was then solved as well, simply by raising the sixth by a semitone as well, which from minor became major (in C, A \flat became natural A). Thus was born the Melodic minor scale. In classical music, especially in some eras, both the Harmonic minor scale and the Melodic minor scale were played in the ascending sense with the degrees precisely raised, while in the descending sense (no longer needing the major seventh) the scale became natural minor. Over time, (with Bach!), and, especially definitively by modern music (in Jazz in particular), this was eliminated permanently, playing both scales "altered" in both directions. The Melodic minor scale is composed as follows (example in C)

C - D - E \flat - F - G - A - B

1 - 2M - 3m - 4 - 5 - 6M - 7M

As you can observe, the only note different from the major scale is the third. Now let's harmonize the scale in triads, using the same procedure we saw for the Harmonic minor scale (we remain in C):

I degree - Cm - C - E \flat - G

II - Dm - D - F - A

III - E \flat + - E \flat - G - B

IV - Fmaj - F - A - C

V - Gmaj - G - B - D

VI - A $^\circ$ - A - C - E \flat

VII - B $^\circ$ - B - D - F

To memorize them I suggest you note the "pairwise" (except for the 3rd degree) succession of the quality of the triads (min - min - augmented - maj - maj - dim - dim)

Now we add a third interval to our triads and have quadriad harmonization

I degree - Cm(maj7) - C - E \flat - G - B

II - Dm7 - D - F - A - C

III - E \flat maj7(#5) - E \flat - G - B - D

IV - F7 - F - A - C - E \flat

Module XIV - Melodic minor scale

Example in Bb
Index finger position Middle finger position Little finger position

Bass

On two octaves with various possibilities (Example in A)

On one string to the last available note (Example in E) Etc.

On two strings to the last available note (Example in E) Etc.

On three strings to the last available note (Example in E) Etc.

On four strings to the last available note (Example in E) Etc.

♩ = 110

Melodic minor scales in the first 4 frets, one descending and one ascending, using open strings (EX 108)

18 ^E ^F

Module XVI - Important exercises to study the concepts seen

♩ = 85

Ascending scales on the following harmonic progression (EX 115) *Do not always start from the root

C Major scale C Dorian F Bebop dominant
 Cadd9 Cm7 F7

G major pentatonic G lydian Bb minor pentatonic Eb h/w diminished scale
 Gmaj7 Bbm7 E7

A blues scale D Mixolydian G major pentatonic E Dorian
 Am7 D7 Gmaj7 Em7

A blues scale A Whole tone scale A harmonic minor G mixolydian
 A7 Am7 G7

Descending scales and arpeggios on the same harmonic progression (EX 116)

C major scale Cmaj9 arpeggio C melodic minor F13 arpeggio
 Cadd9 Cm7 F7