

WITH MAJOR CHORDS

See before EX. 48

EX. 1

The first exercise is a harmonized major scale in triads using six different fingerings. The first form is on the second and first sets of three strings. (See notations below the staff.) The second form of Ex. 1 is played entirely on the second set of three strings. The third form is played on the second and first sets of three strings but varies from the first form because the cross-over is on a different note of the scale. The fourth form is on the third, second and first sets of three strings. The notation in all the forms of the first exercise is the same but the fingerings are different in each one, and should be practiced as separate exercises. You will notice that the first four forms of Ex. 1 are long forms which cover quite a bit of the fingerboard. The fifth form is more condensed and the sixth form is the most condensed form of this harmonized scale. This first exercise is written in whole notes with no division of bars because the notes are of equal value and should be practiced very slowly. Ex. 1 and all its forms should be played in all the keys, made possible by the six different fingerings, as follows:

- 1st form—from C up to F
- 2nd form—from C up to C sharp (D if possible)
- 3rd form—from C up to F
- 4th form—from A flat up to D flat (D if possible).
- 5th form—from A flat up to E
- 6th form—from F sharp up to C sharp

It is necessary to become familiar with all these forms as they will be referred to often.

FORM 1

FORM 2

FORM 3

MAJOR

Scale in first inversion triads taken thru the descending cycle of fifths - 12 keys - full range - triads named for one octave - then they repeat - Upper voice is the tonic of each triad - Numbers above notation denote steps of scale

C

F

Bb

Ab

G

D

D Em F#m G 4/3 A Bm C#dim 3/3 D 2/3 1/3

G

D Em F#dim G 4/3 Am Bm 3/3 C D 2/3 1/3

These Examples explain the reason for using 3 fingers on triads (open or closed voicing) that can be played with 1 or 2 fingers - this type mechanism is a very necessary part of good harmonic technique - A moving voice can not go below barred sustained notes

4/3 A B 3/3

The voice can move lower when the barre is not employed - as in bars = A-B-

1/3 C D E etc.

The moving voice in bar "C" cant go below "G" because the 1st finger is barring it - in "D" and "E" the voices can continue down because of not using the small barre - (double stop)

HARMONIC MINOR

Scale in first inversion triads taken thru the descending cycle of fifths-12 keys - full range - only the ascension is shown;descend using same notation

Am
All G's #

Dm E F G#dim or E7 4/3 Am 3/3 Bdim Caug Dm etc. 2/3 1/3

Dm
All C's #

Dm Edim Faug Gm A Bb C#dim Dm etc. 2/3 1/3

Gm
All F's #

D Eb F#dim Gm 4/3 Adim Bbaug Cm D etc. 2/3 1/3

Cm
All B's ♭

E♭aug Fm G 4/3 A♭ Bdim Cm 3/3 2/3 Ddim E♭aug etc.

Fm
All E's ♭

Edim Fm Gdim 4/3 A♭aug B♭m C D♭ Edim etc.

B♭m
All A's ♭

E♭m F G♭ 4/3 Adim B♭m Cdim D♭aug E♭m etc. 2/3

E♭m
All D's ♭

E♭m Fdim G♭aug 3/3 A♭m B♭ C♭ Ddim 2/3 E♭m etc. 1/3

G♯m
All F's
Double #
=x

D♯ E Fdim 4/3 G♯m A♯dim B aug C♯m D♯ etc. 2/3 1/3

C♯m
All B's #

D♯dim E aug F♯m 4/3 G♯ A B♯dim 3/3 C♯m D♯dim etc. 2/3 1/3

F♯m
All E's #

D E♯dim F♯m 4/3 G♯dim A aug Bm 3/3 C♯ D etc. 2/3 1/3

Bm
All A's #

D aug Em F♯ G 4/3 A♯dim Bm C♯dim 3/3 D aug etc. 2/3 1/3

Em
All D's #

D♯dim Em F♯dim 4/3 G aug Am B C D♯dim etc. 2/3 1/3

MELODIC MINOR

Sequences of chords are taken thru the descending cycle of fifths-12 keys-full range-descensions are in relative major keys-employ major scale fingering.

Am F# G#

D E F#dim G#dim 4/3 Am Bm Caug D 2/3 1/3 2 3 4 5

Returns in C major

Dm Bb C

Dm Em F aug G 4/3 A Bdim C#dim 3/3 Dm 2/3 1/3 1 2 3 4 5 6 7

Returns in F major

Gm F# Eb

D Edim F#dim Gm 4/3 Am Bb aug C 3/3 D 2/3 1/3 2 3 4 5 6 7

Returns in Bb major

Cm Ab Bb

Dm Eb dim F G 4/3 Adim Bdim 3/3 Cm Dm 2/3 1/3 1 2 3 4 5 6 7

Returns in Eb major

Fm Eb Db

Edim Fm Gm 4/3 Ab aug Bb 3/3 C Ddim Edim 2/3 1/3 2/3 1/3 2 3 4 5 6 7

Returns in Ab major

MELODIC MINOR

Scale in first inversion triads - cycle of fifths

Chords: D aug, E, F#, G#dim 4/3, A#dim 3/3, Bm, C#m, D aug, 2/3, 1/3

Returns in D major

Chords: D#dim, Em, F#m, G aug 4/3, A 3/3, B, C#dim, D#dim, 2/3, 1/3

Returns in G major

To descend in the relative major key merely cancel the accidentals but not the key signature

NOTE

Every 7th step is a diminished chord - they are also dominant 7ths of the keys

VARIATION

A very interesting "Mixed" minor scale is: ascend using the melodic notation - descend using the harmonic notation - example below

Chords: Cm, Dm, Eaug, F, G, Adim, Bdim, Cm, Bdim, Ab, G, Fm, Eaug, Ddim, Cm

Melodic minor | Harmonic minor

Also, ascend using harmonic notation - descend using ascending melodic minor notation - just reverse the above

The examples below show various plucking orders for all 3 note chords - employ each one separately full range - apply them to the 2nd inversion and root position triads also - apply to open voicings also 1st inversion - 1st station

Plucking order: (v) n v v n

MAJOR

Scale in Second Inversion Triads - Cycle of fifths key by key -- 12 keys - full range-middle voice is tonic of each triad

C

Bdim C Dm Em 4/3 F G Am 3/3 Bdim 2/3 1/3

F

Bb C Dm Edim 4/3 F Gm 3/3 Am Bb 2/3 1/3

Bb

Bb Cm Dm Eb 4/3 F 3/3 Gm Adim Bb 2/3 1/3

Eb

Bb Cm Ddim Eb Fm 4/3 Gm Ab 3/3 Bb 2/3 1/3

Ab

Cm Db Eb 4/3 Fm Gdim Ab Bbm 3/3 Cm 2/3 1/3

Db

Cdim Db Ebm Fm 4/3 Gb Ab Bbm 3/3 Cdim 2/3 1/3

Gb

Not using 4th Finger

Cb Db Ebm Fdim 4/3 Gb Abm Bbm 3/3 Cb 2/3 1/3

B

Not using 1st Finger

B C#m D#m E 4/3 F# G#m A#dim 3/3 B 2/3 1/3

MAJOR

Scale in Second Inversion Triads

E

B C#m D#dim E 4/3 F#m G#m A 3/3 B 2/3 1/3

A

Bm C#m D E 4/3 F#m G#dim A 3/3 Bm 2/3 1/3

D

Bm C#dim D Em 3/3 F#m 2/3 A Bm 1/3

G

Bm C D Em 4/3 F#dim G Am 3/3 Bm 2/3 1/3

HARMONIC MINOR

Scale in Second Inversion Triads - Cycle of fifths - 12 keys - full range-middle voice is tonic

Am G#

Bdim C aug Dm E 4/3 F G#dim 3/3 Am Bdim 2/3 1/3

Dm C#

Bb C#dim Dm Edim 4/3 F aug Gm A Bb 3/3 2/3 1/3

Gm F#

Baug Cm D Eb 4/3 F#dim 3/3 Adim Bbaug 2/3 1/3

Cm Bb

Bdim Cm Ddim Eb aug 4/3 Fm G 3/3 Ab Bdim 2/3 1/3

MELODIC MINOR

Scale in Second Inversion Triads - cycle of fifths - 12 keys - full range-middle voice is tonic-Descend in relative major keys

The image displays 12 staves of musical notation, each representing a different key signature. Each staff contains a list of triads in second inversion, a melodic line with fingerings (1-4), and a 1/3 time signature. The keys and their corresponding triads are as follows:

- Staff 1 (A minor):** Bm, Caug, D, E (4/3), F#dim, G#dim (3/3), Am, Bm (2/3), 1, 2, 3, 4, 5, 6, 7, 1 (1/3), 2, 3
- Staff 2 (D minor):** Bdim, C#dim, Dm, Em (4/3), F#aug, G (3/3), A, Bdim (2/3), 1, 2, 3, 4, 5, 6, 7, 1 (1/3), 2, 3, 4
- Staff 3 (G minor):** Bbaug, C, D, Edim (4/3), F#dim, Gm (3/3), Am, Bbaug (2/3), 1, 2, 3, 4, 5, 6, 7, 2, 1, 1 (1/3), 2, 3, 4
- Staff 4 (C minor):** Bdim, Cm, Dm, Ebaug (4/3), F, G, Adim (3/3), Bdim (2/3), 1, 2, 3, 4, 5, 6, 7, 4, 1 (1/3), 2, 3, 4, 5, 6, 7, 2, 1
- Staff 5 (F minor):** Bb, C, Ddim (4/3), Edim, Fm (3/3), Gm, Abaug (2/3), Bb, 1, 2, 3, 4, 5, 6, 7, 2, 1, 1 (1/3), 2, 3, 4, 5
- Staff 6 (Bb minor):** Cm, Dbaug (4/3), Eb, F, Gdim, Adim (3/3), Bbm, Cm (2/3), 1, 2, 3, 4, 5, 6, 7, 1 (1/3), 2, 3
- Staff 7 (Eb minor):** Bb, Cdim, Ddim, Ebm, Fm (4/3), Gbaug (3/3), Ab (2/3), Bb (3/3), 1, 2, 3, 4, 5, 6, 7, 1 (1/3), 2, 3, 4, 5, 6
- Staff 8 (G# minor):** Baug, C#, D# (4/3), E#dim, F#dim (3/3), G#m, A#m, Baug (2/3), 1, 2, 3, 4, 5, 6, 7, 1 (1/3), 2, 3, 4

Double Sharp=x

Scale in Root triads

MAJOR

Ab

Ab Bbm Cm Db 4/3 Eb Fm 3/3 Gdim 7 Ab 1 2 2/3 3 4 5 6 1/3 7 1 2

Db

Ab Bbm Cdim D 3/3 Ebm 2/3 Fm 3/3 Gb 4 Ab 5 3/3 2/3 1 2 1/3 3 4 5 6

Gb

Abm Bbm Cb Db 4/3 Ebm 3/3 Fdim 3/3 Gb 2/3 Abm 1 2 3 4 5 6 1/3 7 1 2 3

B

G#m A#dim B C#m 4/3 D#m E F# 3/3 G#m 2/3 1 2 3 4 5 6 2/3 1/3 4 5 6 7

E

G#m A B C#m 4/3 D#dim 7 E 3/3 F#m 2/3 G#m 3/3 2/3 1/3 1 2 3 4 5 6 7 1 2 3 4

A

G#dim A Bm C#m 4/3 D 3/3 E F#m 2/3 G#dim 1 2 3 4 5 6 7 1/3 2 3 4 5 6 7 1

D

G A Bm C#dim 3/3 D Em 3/3 F#m G 2/3 1 2 3 4 5 6 7 1/3 2 3 4 5

G

G Am Bm C 3/3 D 4/3 Em 3/3 F#dim 7 G 1 2 3 4 5 6 7 1/3 1 2 3 4 5