

**The modern notations and how to employ them in the
educational music improvisation material, to benefit music
college students in the job market**

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Abstract

The current research aims to assist third-year students in the Improvisation course at the Faculty of Music Education - Helwan University in understanding modern notations and performing simple exercises, as well as creating some locks using modern notations and diversifying by creating some rhythmic diversity. This research aims to develop the student's innovative ability and to introduce modern notations used in the job market. The research emphasizes that innovative thinking by the teacher can facilitate the transmission of information in his subject, and the student should present the problems he faces during his study and research for useful musical notes to the teacher to find appropriate solutions.

Keywords : notations, educational music, improvisation material

Introduction:

Musical improvisation is considered one of the most important musical subjects that contribute to the development of artistic vision for music students. It also stimulates their imagination. The improvisation subject aims to help students learn how to play creatively and innovatively based on their own vision and interpretation of musical improvisation. The educational musical improvisation which is based on the rules of Emil Dacruz is considered a certain gateway for beginners to learn piano and composition. This is because it enhances their thinking speed, observation skills, concentration, and imagination. Musical improvisation is called educational because its aim is to teach how to improvise and use it to become a good teacher who can enrich their performance in the job market, whether in the teaching field in different educational stages, cultural palaces, centers for children with disabilities, or centers for talented individuals.

Many studies have addressed the topic of improvisational music education, including those that focus on the goal of improving students' improvisational skills, such as Rania Mustafa Abdel Qader's study (1996), Dawood Mohamed

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Samir's study (1998), Adila Youssef Abu Rahab's study (2000), Enas Adel Mustafa El-Sakka's study (2008), and Basant Farouk Ibrahim Al-Othmani's study (2009). However, to the best of the researcher's knowledge, no studies have examined the use of modern notations in this context. This was confirmed through a survey of some graduates of the College of Music Education and some graduates of specialized colleges, who reported difficulties in translating modern notations that differ from what they studied in college. This led to the idea of conducting an exploratory study on some second-year students of the College of Music Education, where music improvisation is taught.

The problem of research

Through teaching the educational musical improvisation subject to second-year students at the College of Music Education, Helwan University, the researcher noticed that some of them have shortcomings in understanding modern notations. The researcher observed that most students cannot read in the traditional way and are not enthusiastic about achieving what is required of them, despite studying it. However, after clarifying this idea, the researcher thought of putting modern notations used in musical notes to guide students, help them develop their innovative and listening abilities, and encourage them to innovate with each other, as this represents an attractive and enticing element for students.

Research objectives

This research aims to:

- Introduce modern notations as illustrative models prepared by the researcher to help students create diverse music accompaniments.
- Develop the innovative and creative abilities of students in the educational music improvisation subject.

The importance of the research:

The importance of this research lies in attempting to keep up with the job market in improvisational music education and the use of musical improvisations in a different way, which leads to increasing self-confidence and innovative performance for students.

Research Questions:

What are the musical improvisations and guidance models to help students innovate musical ideas for diverse musical accompaniment through guidance models prepared by the researcher?

Research Assignments:

Research procedures:

Research Methodology: The research follows the descriptive methodology, which describes the phenomenon subject of the research, analyzes its basic structure, and explains the relationship between its components with a survey experiment.

Research Limits:

- Spatial limits: Music Education College - Helwan University.
- Temporal limits: Academic year 2021-2022.
- Research sample: A group of musical improvisations and some innovative exercises inspired by them.
- Student of the second year of the Music Education College.

Search tools:

A survey form to poll experts on the suitability of the researcher's innovative models for the research topic.

Search terms:

Modern numbering:

Musical improvisation: is a performance art that combines improvisation with musical performance in one, instantly and based on personal imagination and visualization.

The research is divided into two parts:

First: The theoretical framework

1. Previous studies related to the research topic.
2. Musical improvisation.
3. Modern numbering.
4. A student of the College of Music Education.

Second: The applied artistic framework includes research procedures:

- Presentation of guidance models using modern numbering.
- The research concludes with results, recommendations, and references, followed by the research annex.

First The theoretical framework:

1. Previous studies related to the research topic.

a) A study by **Hoda Khalil** ⁽¹⁾ (1995) entitled: *"Visual music in cartoon films as an aid in serving improvisational learning."*

The aim of this study was to develop the ability to create music for use in improvisational learning and to develop the student's ability to analyze and appreciate visual music through cartoon films. The study followed a descriptive-analytical approach on a sample of some scenes from different cartoon films with dramatic situations and analyzed them. The results showed the possibility of developing the student's ability to innovate and imagine through listening, appreciation, and analysis of cartoon films.

B) The study of **Dawood Mohammed Samir** ⁽²⁾ (1998) titled "The Effect of Dalacroze's Piano Compositions Style on the Development of Educational Musical Improvisation" aimed to enrich educational musical improvisation with harmonic elements and locks derived from Dalacroze's compositions. The experimental method was followed, and the results showed the extent of the impact of the proposed experimental program on improving student performance in the research field.

C) The study of **Rania Mustafa** ⁽³⁾ (1998) titled *"Benefiting from Bela Bartok's Compositions (The Little World) in Educational Improvisation"* aimed to benefit from Bela Bartok's compositions, especially in creating melodies suitable for different musical situations. The descriptive method was followed, and the results clarified how to benefit from Bartok's technical methods and how to employ them in different musical improvisation situations.

D) The study of **Ayman Youssef Al-Shami** ⁽⁴⁾ (2020) titled *"Some Innovative Musical Compositions Using Jazz Music Harmonies"* aimed to benefit from the harmonies of jazz music compositions. The descriptive method was followed, and the results clarified how to benefit from the technical methods of jazz music and how to employ them in different musical improvisation situations.

¹) Hawaida Khalil Ahmed: Published research, Cairo, Helwan University, Faculty of Music Education, Journal of Music Science and Arts, Volume 2, Issue 1, 1995.

²) - Dawood Mohamed Samir, unpublished master's thesis, Cairo, Helwan University, Faculty of Music Education, Journal of Music Science and Arts, 1998.

³) Rania Mostafa, unpublished master's thesis, Cairo, Helwan University, Faculty of Music Education, Journal of Music Science and Arts, 1999.

⁴) Ayman Youssef El-Shamy: Published research, Cairo, Helwan University, Faculty of Music Education, Journal of Music Science and Arts, Volume 28, April 2014.

2- Musical improvisation

is a science invented by the Swiss educator (Dalcroze) to help in teaching music. It complements his well-known method, the "rhythmic movement," and is interested in preparing a competent teacher who can accompany rhythmic movement lessons in a diverse and interesting style. Musical improvisation is essentially used in accompanying solfeggio exercises and is based on four basic elements: **Rhythm, Melody, Harmony, and Imagination.**

a. Rhythm: It relates to the temporal aspect of musical sound, meaning the relationship between sounds in terms of their length and shortness. It is a primary element in expressing the character and distinctive personality of music through the structure, the type of scale, and rhythmic patterns, and the required speed for the type of music.

b. Melody: It relates to the vocal aspect of music in the relationship between sounds in terms of their pitch and thickness. Musical improvisation relies on performing various melodic models, improvising melodies with flexibility, and diversifying them. Improvising melodies with rhythm is given a specific framework, creating melodic ideas to express a specific situation or a creative kinetic story.

c. Harmony: It is the science of combining musical sounds vertically so that they are heard as one and these combinations are known as compositions whether they are compatible or conflicting. Harmony also includes the progression of compositions with roots and rules that make them artistically connected, known as harmonic sequences.

d. Imagination: It is the invocation of experiences and experiments that an individual writes as a result of continuous interaction between him and the surrounding environment. By recognizing modern notations, various methods can be used in rhythmic, melodic, and harmonic thinking, and these methods can be utilized in educational training for improvisation and reaching an outstanding level of innovative performance for the student (¹)

3. Modern Notations (Modern Harmonies)

are a new concept that deserves to be known and used in the job market, and it is often utilized in Western music instead of traditional harmony. Traditional harmony relies on the existence of a basic melody, which is then combined

¹) Einstein the Unique: Music in the Roman Era - Translation by Ahmed Hamdi Mahmoud - Dar El-Taleef and Publishing House - General Egyptian Libraries Authority - Cairo 1982.

with composed notes. On the other hand, modern harmony considers "chords" as the basic building blocks of music. This means that a certain sequence and arrangement of chords, along with rhythm, is the essential component of music. The following example demonstrates this concept: a melodic phrase is followed by a sequence of chords, which are then repeated with new variations. To simplify, traditional harmony is a basic melody with added harmony, while modern harmony is a sequence and arrangement of chords with repeated melodic phrases. Modern harmony emerged in the United States of America in the early 20th century, and its origins were attributed to skilled musicians. Traditional harmony, on the other hand, appeared in Europe from the 17th to the 19th century.

4. A student of the College of Music Education

is considered one of the most important outputs that institutions, schools, and universities seek to attract and support, as they possess qualifications and abilities that enable them to provide solutions to many problems. The university student is the main axis in the educational system at the university. The music education student, in particular, has a prominent role in serving the surrounding community, as his innovative music has an impact on the youth in the music education subject and also has an effect on himself, as music refines the soul and improves problem-solving skills and creative thinking through innovation in the music improvisation subject. Therefore, the student of the College of Music Education has a special character due to the different qualities he possesses in his ability to lead in terms of playing music and leading the choir. The university student is characterized by academic ethics that make dealing with the place and the people present in the learning environment and create a sense, so he must be keen on his scientific qualification in studying, understanding, and respecting experienced professors in the field of study. At this stage, the student should have the ability to self-evaluate, as his behavior at this stage may be the behavior that continues with him for the rest of his life.

"The procedural steps of research

were taught to the researcher through teaching the subject of improvisation at the Faculty of Music Education - Helwan University for second-year students in the first semester of the academic year (2020-2021). The subject of improvisation is considered one of the most important subjects in the college, as most other subjects rely on its study. When asking the students about the most important modern notations extracted from some musical notes, the answer was that they only learned about Roman numerals and not modern

numerals that are in line with the job market (there is no definition of modern numerals). The researcher explained to the students the importance of modern numerals in the job market where they are used in musical notes outside the college. The subject also includes the study of reading and locks using Roman numerals, not modern numerals. The researcher found that it is possible to apply this method with the application of some modern rhythms using modern modifications or numerals, which improves understanding and makes performance exciting and enjoyable. The researcher encouraged each student .

Secondly, the application framework:

It includes sessions to introduce modern variations and how to use them in some jazz rhythms, and simplified use in accompaniment and use.

The first session:

It is a melody in the 4/3 scale (common hearing).

The first idea: It is a simple presentation of the first and second variations, where all participating students perform it collectively by singing the phrase "la".

The session aims to:

- Help students understand the nature of variation by playing the exercise at different speeds.
- Sense both the half and full cadences.



The second session:

It is the students' performance of a modern rhythm by clapping their hands, then one of them uses a tambourine or drum to perform the beat.

The session aims to:

- Perform the modern rhythm.
- Sense the strong and weak beats.
- Sense the audible scale.
- Share percussion instruments.



The third session:

It is playing the main melody with the phrase "la".

The session aims to:

- Get used to collective performance.
- Sense singing with variations.
- Promote confidence among students.



Session four:

It is a performance that involves playing a damaged note, but at the third step up the same scale, using one of the other instruments such as (xylophone, mandolin, guitar, violin, accordion). It can alternate with the piano in its performance.

The session aims to:

- Integrate other instruments with the piano to serve the principle of teamwork.
- Develop a sense of the third distance in both types.
- Develop the ability to visualize the melody.



Session five:

It is a melodic accompaniment on the piano in the bass area with the use of modern techniques.

The session aims to:

- Increase the participation rate to serve the principle of teamwork.
- Achieve the desired damaged note on the piano to increase the sense of it.
- Contribute to adjusting the time and intensity to serve the required harmony of the collective performance.
- Increase the audible melodic area to strengthen the melodic aspect for students.
- Recognize one of the accompanying damaged types (**Broken cord**).

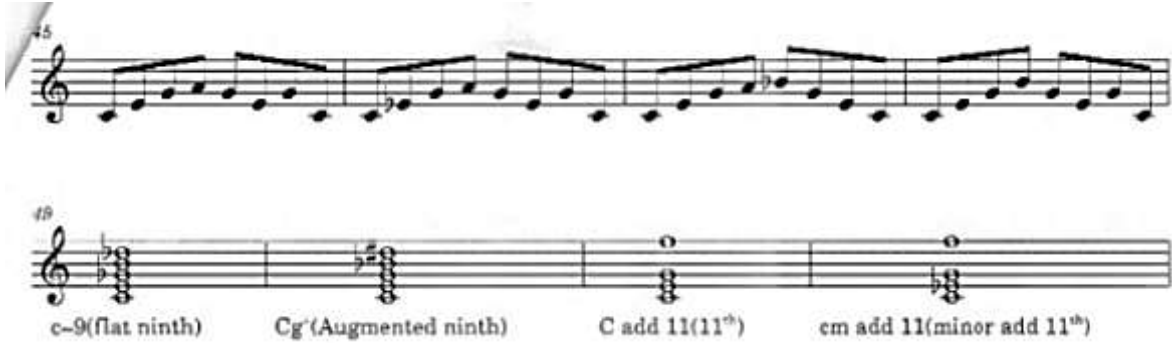


The sixth session:

It is a melody accompaniment in the soprano area using the ostinato style, and each part of the melody can be performed in a higher area of the shoulders.

The session aims to:

- Increase the participation rate in order to strengthen the principle of teamwork and encourage students to learn about the variations.
- Learn the ostinato style to increase the space for innovation.
- Increase the melodic and harmonic area heard to strengthen the melodic and harmonic aspects for students.
- Increase the harmony, unity, and enthusiasm among students to increase the number of participants.



The seventh session:

It is another type of accompaniment on the piano while playing the main melody, and two performers can perform it.

The session aims to:

- Increase the participation rate to serve the principle of teamwork.
- Achieve the rhythm used on the piano to increase the feeling.
- Increase the melodic and harmonic area heard to strengthen the melodic and harmonic aspects for students.
- Learn one of the types of accompanying variations (Block Chord).
- Feel the large and small variations.



الجلسة الثامنة :

وهي العبارة عن استخدام النماذج إقاعية متكررة يمكن ان تقوم بأدائها المثلث او احدى الالات نقر الاخرى مع العزف الطالب لبعض التألفات باستخدام الترقيمات الحديثة .

وتهدف الجلسة الى:

- زيادة نسبة المشاركة بما يخدم مبدأ عمل الجماعي .
- الاحساس بتأخير النبر .
- زيادة رخم المصاحبة بما يساعد على زيادة نسبة التجانس .

■ زيادة التنوع في الشكال والانواع المصاحبات القائمة على الزخرفة .



The Session 9:

It involves using the body in performance by making various sounds such as stomping feet, clapping, and snapping fingers, with the use of modern notations and the ability to play and record exercises at different speeds and pitches.

The session aims to:

- Use motor skills.
- Increase participation to serve the principle of teamwork.
- Increase rhythmic variation in different colors.
- Increase sensitivity to shapes, rhythms, and rhythmic proportions.
- Increase sensitivity to regular timing.
- Increase homogeneity, enthusiasm, and competition among students.
- Review previous studies.



The Session 10:

It is based on diversifying the use of previous ideas by integrating many of them or all of them with variations between notations using modern notations.

The session aims to:

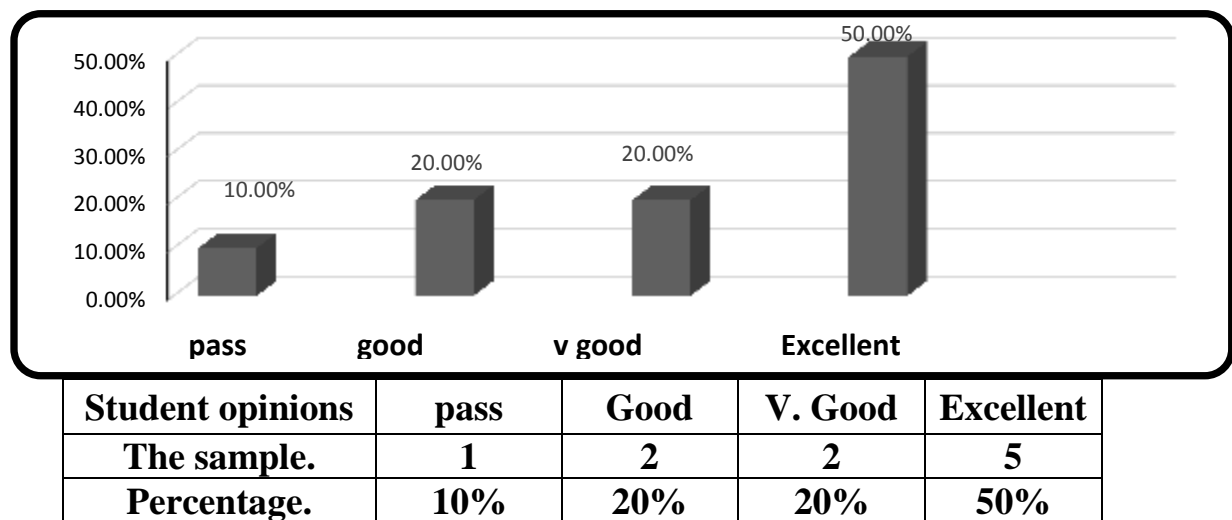
- Increase the smoothness of accompaniment to help increase homogeneity.
- Diversify shapes and types of accompanying decorations.

- Increase homogeneity, enthusiasm, and competition among students.
- Review previous studies.



After the students performed the exercises written with modern numbering, the students created different combinations and used rhythms. Then, the interaction and exchange between the students in innovation between the exercises led to their happiness.

After presenting a group of facts and information obtained from sources for statistical study on questionnaires to students and experts, the statistical results of the opinion

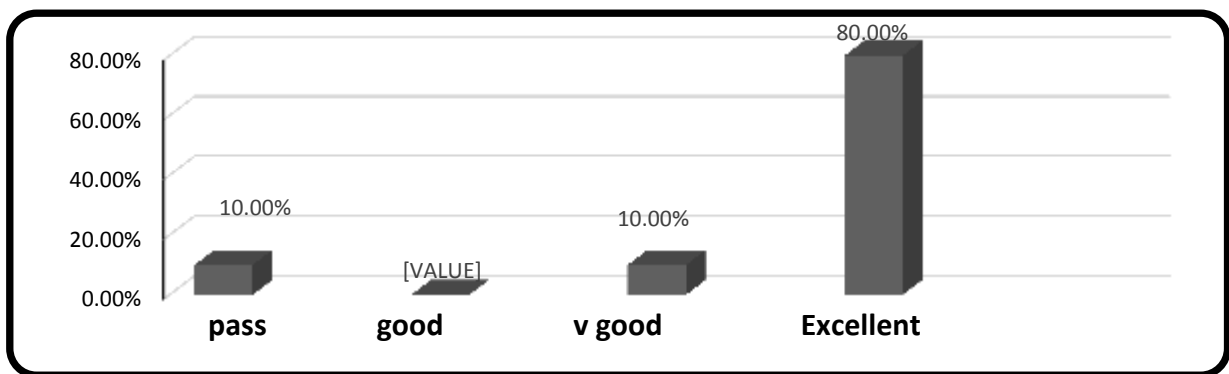


polls are translated into a chart that shows the variation between opinions as follows:

Expert opinions.	pass	Good	V. Good	Excellent
The sample.	1	0	1	8
Percentage.	10%	0%	10%	80%

polls are translated into a chart that shows the variation between opinions as follows:

Statistical functions are calculated, which are the arithmetic mean and



standard deviation.

The arithmetic mean (\bar{x}) is calculated for each year of the five years separately, which is the sum of the class centers x frequency \div total frequency, which is the total attendance of the piano in each batch, and the formula is:

$$\bar{x} = \frac{\sum f x}{\sum f} \quad (1)$$

The standard deviation (σ) can be calculated for each year of the five years separately, which is the sum of the squares of the differences of the class centers from their arithmetic mean x frequency \div total frequency, which is the total attendance of the piano in each batch, and the formula is:

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2 f}{\sum f}} \quad \dots(2)$$

After calculating the acceptable arithmetic means with the standard deviation, we conclude that 1.7% is a very weak percentage of sample dispersion. From here, we conclude that the result of the sample for excellent students is 50%,

and the result of the sample for experts is excellent by 80%, which are acceptable results.

Research results:

- 1) Enabling students to perform innovative exercises and locks using modern numerals.
- 2) Employing students in the educational improvisation material in all subjects.
- 3) Students benefiting from the use of modern numerals in the job market.

Research recommendations:

- 1) Using modern numerals in some music subjects such as harmony and solfeggio (Roman numeral lock) and adding a modern numerals lock to them.
- 2) Discussing what students find different outside of the college and what the student would like to add to enrich the college with the latest market developments.
- 3) The researcher recommends using modern numerals in music improvisation, spelling, and harmonious solfeggio.
- 4) Follow the results of current and previous studies to benefit from them in future research, which helps to develop a systematic plan to improve the educational music improvisation curriculum.
- 5)- Expanding the inclusion of the opinions of graduate students in what they find in the job market to serve the curricula of the College of Musical Education.
- 6) Referencing foreign references to integrate them into the curricula of the College of Musical Education.

References:

First: Arabic references

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Third: International Internet References:

- 10) <https://www.ekb.eg/ar/home>

Research Appendices

Appendix (1)

Surveys of the opinions of students and experts on modern notations

Figure number	Notes and instructions	Expert and student opinions			
		pass	Good	V.Good	Excellent
Fig. number (1)					
Fig. number (2)					
Fig. number (3)					
Fig. number (4)					
Fig. number (5)					
Fig. number (6)					
Fig. number (7)					
Fig. number (8)					
Fig. number (9)					
Fig. number (10)					
Fig. number (11)					
Fig. number (12)					

Continue to surveys of the opinions of students and experts on modern notations

Figure number	Notes and instructions	Expert and student opinions			
		pass	Good	V.Good	Excellent
Fig. number (13)					
Fig. number (14)					
Fig. number (14)					
Fig. number (15)					
Fig. number (16)					
Fig. number (17)					
Fig. number (18)					
Fig. number (19)					
Fig. number (20)					
Fig. number (21)					
Fig. number (22)					

Appendix (2)

Octave forms for opinion surveys

Roman Numeral System In Music Theory

Major Scale:	C	D	E	F	G	A	B
Roman Numerals:	I	ii	iii	IV	V	vi	vii°
Chord Sequence:	Maj	Min	Min	Maj	Maj	Min	Dim
Chords:	Cmaj	Dmin	Emin	Fmaj	Gmaj	Amin	Bdim
Minor Scale:	A	B	C	D	E	F	G
Roman Numerals:	i	ii°	III	iv	v	VI	VII
Chord Sequence:	Min	Dim	Maj	Min	Min	Maj	Maj
Chords:	Amin	Bdim	Cmaj	Dmin	Emin	Fmaj	Gmaj

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Fig. number (1)

من الخميس ا بوليو

The musical score consists of eight staves, each representing a different key signature. The chords are written in a simplified notation, likely for a specific guitar style or a simplified version of a more complex piece. The keys are C major, D minor, E minor, F major, G major, A minor, B minor, and C major. The score is written in a simplified notation, likely for a specific guitar style or a simplified version of a more complex piece.

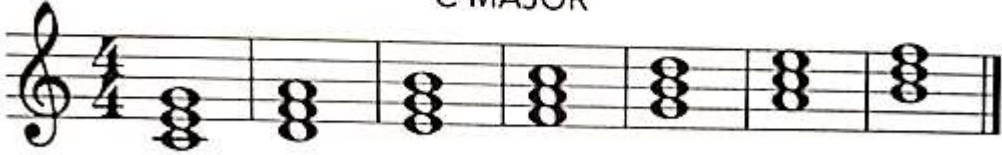
Staff	Key Signature	Chords (Simplified Notation)
1	C Major	C, Dm, Em, F, G, Am, B ^o , C
2	D Minor	D ^r , E ^r m, F ^r m, G ^r , A ^r , E ^r m, C ^o , D ^r
3	E Minor	D, E ^r m, F ^r m, G, A, E ^r m, C ^o , D
4	F Major	E ^r , F ^r m, G ^r m, A ^r , E ^r , C ^r m, D ^o , E ^r
5	G Major	E, F ^r m, G ^r m, A, B, C ^r m, D ^o , E
6	A Minor	F, G ^r m, A ^r m, E ^r , C, D ^r m, E ^o , F
7	B Minor	G ^r , A ^r m, E ^r m, C ^r , D ^r , E ^r m, F ^o , G ^r
8	C Major	G, A ^r m, E ^r m, C, D, E ^r m, F ^o , G

Fig. number (2)

ROMAN NUMERALS IN MUSIC


UPPERCASE = MAJOR CHORD lowercase = minor chord

C MAJOR



Scale Degree:	1	2	3	4	5	6	7
	✓	✓	✓	✓	✓	✓	✓
Chord:	C	dm	em	F	G	am	b dim
	✓	✓	✓	✓	✓	✓	✓
Roman Numeral:	I	ii	iii	IV	V	vi	vii ^o

A NATURAL MINOR



Scale Degree:	1	2	3	4	5	6	7
	✓	✓	✓	✓	✓	✓	✓
Chord:	am	b dim.	C	dm	em	FM	G
	✓	✓	✓	✓	✓	✓	✓
Roman Numeral:	i	ii ^o	III	iv	v	VI	VII ^o

** Minor V chords are rarely*

Fig. number (3)

KEY CARD - CHART OF CHORD PROGRESSIONS

MAJOR KEY	I	II	III	IV	V	VI	VII
A	A	Bm	C#m	D	E	F#m	G#dim
B	B	C#m	D#m	E	F#	G#m	A#dim
C	C	Dm	Em	F	G	Am	Bdim
D	D	Em	F#m	G	A	Bm	C#dim
E	E	F#m	G#m	A	B	C#m	D#dim
F	F	Gm	Am	A#	C	Dm	Edim
G	G	Am	Bm	C	D	Em	F#dim
MINOR KEY	I	II	III	IV	V	VI	VII
Am	Am	Bdim	C	Dm	Em	F	G
Bm	Bm	C#dim	D	Em	F#m	G	A
Cm	Cm	Ddim	D#	Fm	Gm	G#	A#
Dm	Dm	Edim	F	Gm	Am	A#	C
Em	Em	F#dim	G	Am	Bm	C	D
Fm	Fm	Gdim	G#	A#m	Cm	C#	D#
Gm	Gm	Adim	A#	Cm	Dm	D#	F

Fig. number (4)

Chord Type	Formula	Notes	Chord Name/ Suffix
Major	1-3-5	C-E-G	C
fifth (power chord)	1-5	C-G	C5
suspended fourth	1-4-5	C-F-G	Csus4
suspended second	1-2-5	C-D-G	Csus2
added ninth	1-3-5-9	C-E-G-D	C(add9)
sixth	1-3-5-6	C-E-G-A	C6
sixth, added ninth	1-3-5-6-9	C-E-G-A-D	C6/9
Major seventh	1-3-5-7	C-E-G-B	Cmaj7
Major ninth	1-3-5-7-9	C-E-G-B-D	Cmaj9
Major seventh, sharp eleventh	1-3-5-7- #11	C-E-G-B-F#	Cmaj7#11
Major thirteenth	1-3-5-7-9-13	C-E-G-B-D-A	Cmaj13
minor	1-b3-5	C-Eb-G	Cm
minor, added ninth	1-b3-5-9	C-Eb-G-D	Cm(add9)
minor sixth	1-b3-5-6	C-Eb-G-A	Cm6
minor, flat sixth	1-b3-5-b6	C-Eb-G-Ab	Cmb6
minor sixth, added ninth	1-b3-5-6-9	C-Eb-G-A-D	Cm6/9
minor seventh	1-b3-5-b7	C-Eb-G-Bb	Cm7
minor seventh, flat fifth	1-b3-b5-b7	C-Eb-Gb-Bb	Cm7b5
minor ninth	1-b3-5-b7-9	C-Eb-G-Bb-D	Cm9
minor eleventh	1-b3-5-b7-9-11	C-Eb-G-Bb-D-F	Cm11
minor thirteenth	1-b3-5-b7-9-11-13	C-Eb-G-Bb-D-F-A	Cm13
dominant seventh	1-3-5-b7	C-E-G-Bb	C7
seventh, suspended fourth	1-4-5-b7	C-F-G-Bb	C7sus4
ninth	1-3-5-b7-9	C-E-G-Bb-D	C9
ninth, suspended fourth	1-4-5-b7-9	C-F-G-Bb-D	C9sus4
eleventh	1-5-b7-9-11	C-G-Bb-D-F	C11
thirteenth	1-3-5-b7-9-13	C-E-G-Bb-D-A	C13
thirteenth, suspended fourth	1-4-5-b7-9-13	C-F-G-Bb-D-A	C13sus4
diminished	1-b3-b5	C-Eb-Gb	C°

Fig. number (5)

	Common Progressions				Circle Progressions	
Key	I IV V (Primary Chords)	I V VI IV	I IV I V I	III VI II V	I IV VII III VI II V I	I IV V I
A minor	Am Dm E	Am E F Dm	Am Dm Am E Am	C F <u>Bdim</u> E	Am Dm G C F <u>Bdim</u> E Am	Am Dm E Am
E minor	Em Am B	Em B C Am	Em Am Em B Em	G C F# <u>dim</u> B	Em Am D G C F# <u>dim</u> B Em	Em Am B Em
B minor	Bm Em F#	Bm F# G Em	Bm Em Bm F# Bm	D G C# <u>dim</u> F#	Bm Em A D G C# <u>dim</u> F# Bm	Bm Em F# Bm
F# minor	F#m Bm C#	F#m C# D Bm	F#m Bm F#m C# F#m	A D G# <u>dim</u> C#	F#m Bm E A D G# <u>dim</u> C# F#m	F#m Bm C# F#m
C# minor	C#m F#m G#	C#m G# A# F#m	C#m F#m C#m G# C#m	E A D# <u>dim</u> G#	C#m F#m B E A D# <u>dim</u> G# C#m	C#m F#m G# C#m
D minor	Dm Gm A	Dm A Bb Gm	Dm Gm Dm A Dm	F Bb <u>Edim</u> A	Dm Gm C F Bb <u>Edim</u> A Dm	Dm Gm A Dm
G minor	Gm Cm D	Gm D Eb Cm	Gm Cm Gm D Gm	Bb Eb <u>Adim</u> D	Gm Cm F Bb Eb <u>Adim</u> D Gm	Gm Cm D Gm
C minor	Cm Fm G	Cm F Ab Fm	Cm Fm Cm G Cm	Eb Ab <u>Ddim</u> G	Cm Fm Bb Eb Ab <u>Ddim</u> G Cm	Cm Fm G Cm
F minor	Fm <u>Bbm</u> C	Fm C Db <u>Bbm</u>	Fm <u>Bbm</u> Fm C Fm	Ab Db <u>Gdim</u> C	Fm <u>Bbm</u> Eb Ab Db <u>Gdim</u> C Fm	Fm <u>Bbm</u> C Fm
Bb minor	<u>Bbm</u> <u>Ebm</u> F	<u>Bbm</u> F Gb <u>Ebm</u>	<u>Bbm</u> <u>Ebm</u> <u>Bbm</u> F <u>Bbm</u>	Db Gb Cdim F	<u>Bbm</u> <u>Ebm</u> Ab Db Gb Cdim F <u>Bbm</u>	<u>Bbm</u> <u>Ebm</u> F <u>Bbm</u>
Eb minor	<u>Ebm</u> Abm Bb	<u>Ebm</u> Bb Cb <u>Abm</u>	<u>Ebm</u> Abm <u>Ebm</u> Bb <u>Ebm</u>	Gb Cb <u>Fdim</u> Bb	<u>Ebm</u> Abm Db Gb Cb <u>Fdim</u> Bb <u>Ebm</u>	<u>Ebm</u> Abm Bb <u>Ebm</u>
Ab minor	Abm Dbm Eb	Abm Eb Fb <u>Dbm</u>	Abm Dbm Abm Eb <u>Abm</u>	Cb Fb <u>Bbdim</u> Eb	Abm Dbm Gb Cb Fb <u>Bbdim</u> Eb <u>Abm</u>	Abm Dbm Eb <u>Abm</u>

Fig. number (6)

	Common Progressions				Circle Progressions	
Key	I IV V (Primary Chords)	I V VI IV	I IV I V I	III VI II V	I IV VII III VI II V I	I IV V I
C major	C F G	C G Am F	C F C G C	Em Am Dm G	C F B ^{dim} Em Am Dm G C	C F G C
G major	G C D	G D Em C	G C G D G	Bm Em Am D	G C F ^{dim} Bm Em Am D G	G C D G
D major	D G A	D A Bm G	D G D A D	F ^m Bm Em A	D G C ^{dim} F ^m Bm Em A D	D G A D
A major	A D E	A E F ^m D	A D A E A	C ^m F ^m Bm E	A D G ^{dim} C ^m F ^m Bm E A	A D E A
E major	E A B	E B C ^m A	E A E B E	G ^m C ^m F ^m B	E A D ^{dim} G ^m C ^m F ^m B E	E A B E
B major	B E F [#]	B F [#] G ^m E	B E B F [#] B	D ^m G ^m C ^m F [#]	B E A ^{dim} D ^m G ^m C ^m F [#] B	B E F [#] B
F [#] major	F [#] B C [#]	F [#] C [#] D ^m B	F [#] B F [#] C [#] F [#]	A ^m D ^m G ^m C [#]	F [#] B E ^{dim} A ^m D ^m G ^m C [#] F [#]	F [#] B C [#] F [#]
F major	F B ^b C	F C Dm B ^b	F B ^b F C F	Am Dm Gm C	F B ^b E ^{dim} Am Dm Gm C F	F B ^b C F
B ^b major	B ^b E ^b F	B ^b F Gm E ^b	B ^b E ^b B ^b F B ^b	Dm Gm Cm F	B ^b E ^b A ^{dim} Dm Gm Cm F B ^b	B ^b E ^b F B ^b
E ^b major	E ^b A ^b B ^b	E ^b B ^b Cm A ^b	E ^b A ^b E ^b B ^b E ^b	Gm Cm Fm B ^b	E ^b A ^b D ^{dim} Gm Cm Fm B ^b E ^b	E ^b A ^b B ^b E ^b
A ^b major	A ^b D ^b E ^b	A ^b E ^b Fm D ^b	A ^b D ^b A ^b E ^b A ^b	Cm Fm B ^{bm} E ^b	A ^b D ^b G ^{dim} Cm Fm B ^{bm} E ^b A ^b	A ^b D ^b E ^b A ^b
D ^b major	D ^b G ^b A ^b	D ^b A ^b B ^{bm} G ^b	D ^b G ^b D ^b A ^b D ^b	Fm B ^{bm} E ^{bm} A ^b	D ^b G ^b C ^{dim} Fm B ^{bm} E ^{bm} A ^b D ^b	D ^b G ^b A ^b D ^b

Fig. number (7)

Common Keys and Chord Progressions

I IV V I

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

I ii V I

G Am D G
A Bm E A
C Dm G C
D Em A D
E F#m B E

I vi IV V

G Em C G
A F#m D E
C Am F G
D Bm G A
E C#m A B

I vi ii V

G Em Am D
A F#m Bm E
C Am Dm G
D Bm Em A
E C#m F#m B

I IV vi V

G C Em D
A D F#m E
C F Am G
D G Bm A
E A C#m B

I V vi IV

G D Em C
A E F#m D
C G Am F
D A Bm G
E B C#m A

Fig. number (8)

Common Chord Progressions

Minor Keys: Am, Bm, Dm, Em F#m

i VI VII	i iv VII	i iv v
Am F G	Am Dm G	Am Dm Em
Bm G A	Bm Em A	Bm Em F#m
Dm Bb C	Dm Gm C	Dm Gm Am
Em C D	Em Am D	Em Am Bm
F#m D E	F#m Bm E	F#m Bm C#m

i VI III VII	ii v i	i iv v i
Am F C G	Bm7b5 Em Am	Am Dm Em Am
Bm G D A	C#m7b5 F#m Bm	Bm Em F#m Bm
Dm Bb F C	Em7b5 Am Dm	Dm Gm Am Dm
Em C G D	F#m7b5 Bm Em	Em Am Bm Em
F#m D A E	G#m7b5 C#m F#m	F#m Bm C#m F#m

VI VII i i	i VII VI VII	i iv i
F G Am Am	Am G F G	Am Dm Am
G A Bm Bm	Bm A G A	Bm Em Bm
Bb C Dm Dm	Dm C Bb C	Dm Gm Dm
C D Em Em	Em D C D	Em Am Em
D E F#m F#m	F#m E D E	F#m Bm F#m

Fig. number (9)

Common Chord Progressions

Major Keys: C, D, F, G & A

I	IV	V
C	F	G
D	G	A
F	Bb	C
G	C	D
A	D	E

I	vi	IV	V
C	Am	F	G
D	Bm	G	A
F	Dm	Bb	C
G	Em	C	D
A	F#m	D	E

ii	V	I
Dm7	G7	Cmaj7
Em7	A7	Dmaj7
Gm7	C7	Fmaj7
Am7	D7	Gmaj7
Bm7	E7	Amaj7

I	vi	ii	V
C	Am	Dm	G
D	Bm	Em	A
F	Dm	Gm	C
G	Em	Am	D
A	F#m	Bm	E

I	V	vi	IV
C	G	Am	F
D	A	Bm	G
F	C	Dm	Bb
G	D	Em	C
A	E	F#m	D

I	IV	vi	V
C	F	Am	G
D	G	Bm	A
F	Bb	Dm	C
G	C	Em	D
A	D	F#m	E

I	iii	IV	V
C	Em	F	G
D	F#m	G	A
F	Am	Bb	C
G	Bm	C	D
A	C#m	D	E

I	IV	I	V
C	F	C	G
D	G	D	A
F	Bb	F	C
G	C	G	D
A	D	A	E

I	IV	ii	V
C	F	Dm	G
D	G	Em	A
F	Bb	Gm	C
G	C	Am	D
A	D	Bm	E

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Fig. number (10)

Major	1	3	5	
Minor	1	b3	5	
Augmented	1	3	#5	
Diminished	1	b3	b5	
Major 7	1	3	5	7
Dominant 7	1	3	5	b7
Augmented 7	1	3	#5	b7
Dominant 7 b5	1	3	b5	b7
Minor 7	1	b3	5	b7
Minor (Major 7)	1	b3	5	b7
Half Diminished	1	b3	b5	b7
Diminished 7	1	b3	b5	bb7

Fig. number (11)

2 Chords	
Chord Name	Chord Notes
C2	C-D-G
G2	G-A-D
D2	D-E-A
A2	A-B-E
E2	E-F#-B
B2	B-C#-F#
F#2	F#-G#-C#
C#2	C#-D#-G#
F2	F-G-C
Bb2	Bb-C-F
Eb2	Eb-F-Bb
Ab2	Ab-Bb-Eb
Db2	Db-Eb-Ab
Gb2	Gb-Ab-Db
Cb2	Cb-Db-Gb

Fig. number (12)

Suspended Chords	
Chord Name	Chord Notes
Csus	C-F-G
Gsus	G-C-D
Dsus	D-G-A
Asus	A-D-E
Esus	E-A-B
Bsus	B-E-F#
F#sus	F#-B-C#
C#sus	C#-F#-G#
Fsus	F-Bb-C
Bbsus	Bb-Eb-F
Ebsus	Eb-Ab-Bb
Ab sus	Ab-Db-Eb
Db sus	Db-Gb-Ab
Gbsus	Gb-B-Db
Cbsus	Cb-E-Gb

Fig. number (13)

Minor Chords	
Chord Name	Chord Notes
Cm	C-Eb-G
Gm	G-Bb-D
Dm	D-F-A
Am	A-C-E
Em	E-G-B
Bm	B-D-F#
F#m	F#-A-C#
C#m	C#-E-G#
Fm	F-Ab-C
Bbm	Bb-Db-F
Ebm	Eb-Gb-Bb
Abm	Ab-B-Eb
Dbm	Db-E-Ab
Gbm	Gb-A-Db
Cbm	Cb-D-Gb

Fig. number (14)

Major Chords	
Chord Name	Chord Notes
C	C-E-G
G	G-B-D
D	D-F#-A
A	A-C#-E
E	E-G#-B
B	B-D#-F#
F#	F#-A#-C#
C#	C#-E#-G#
F	F-A-C
Bb	Bb-D-F
Eb	Eb-G-Bb
Ab	Ab-C-Eb
Db	Db-F-Ab
Gb	Gb-Bb-Db
Cb	Cb-Eb-Gb

Fig. number (15)

The chart displays the following chords for each key:

- C:** C, Cm, C⁷, Cm⁷, C[#], C[#]m, C^{#7}, C[#]m⁷
- D:** D, Dm, D⁷, Dm⁷, D^b, D[#]m, D^{b7}, D[#]m⁷
- E:** E, Em, E⁷, Em⁷, E^b, E^bm, E^{b7}, E^bm⁷
- F:** F, Fm, F⁷, Fm⁷, F[#], F[#]m, F^{#7}, F[#]m⁷
- G:** G, Gm, G⁷, Gm⁷, G^b, G[#]m, G^{b7}, G[#]m⁷
- A:** A, Am, A⁷, Am⁷, A^b, A^bm, A^{b7}, A^bm⁷
- B(H):** B(H), Bm(Hm), B⁷(H⁷), Bm⁷(Hm⁷), B^b, B^bm, B^{b7}, B^bm⁷

На этом всё. Теперь вы знаете, как играть

Fig. number (16)

Natural triads and roots (progression materials) — Major and three minor scales

Triads data — short summary parallel scales on C tonic

Major

1	2	3	4	5	6	7	1
I	ii	iii	IV	V	iv	vii*	I
C	D	E	F	G	A	B	C
Maj	min	min	Maj	Maj	min	dim	Maj
0°	2°	4°	5°	7°	9°	11°	12°

Natural minor

1	2	b3	4	5	b6	b7	1
i	ii*	III	iv	v	VI	VII	i
C	D	Eb	F	G	Ab	Bb	C
min	dim	Maj	min	min	Maj	Maj	min
0°	2°	3°	5°	7°	8°	10°	12°

Harmonic minor

1	2	b3	4	5	b6	7	1
i	ii*	III+	iv	V	VI	#vii°	i
C	D	Eb	F	G	Ab	B	C
min	dim	Aug	min	Maj	Maj	dim	min
0°	2°	3°	5°	7°	8°	11°	12°

Melodic minor

1	2	b3	4	5	6	7	1
i	ii	III+	IV	V	#vi*	#vii*	i
C	D	Eb	F	G	A	B	C
min	min	Aug	Maj	Maj	dim	dim	min
0°	2°	3°	5°	7°	9°	11°	12°

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THE minor mode — 13 natural triads and 9 natural roots of three minor scales

I	II	III	IV	V	VI	VII
i	ii, ii°	III, III+	iv, IV	v, V	VI, #vi*	VII, #vii*
0°	2°	3°	5°	7°	8°, 9°	10°, 11°

Fig. number (17)

KEY CARD - CHART OF CHORD PROGRESSIONS

ORIGINALLY FOUND ON UKUTABS.COM

MAJOR KEY	I	II	III	IV	V	VI	VII
A	A	Bm	C#m	D	E	F#m	G#dim
B	B	C#m	D#m	E	F#	G#m	A#dim
C	C	Dm	Em	F	G	Am	Bdim
D	D	Em	F#m	G	A	Bm	C#dim
E	E	F#m	G#m	A	B	C#m	D#dim
F	F	Gm	Am	A#	C	Dm	Edim
G	G	Am	Bm	C	D	Em	F#dim
MINOR KEY	I	II	III	IV	V	VI	VII
Am	Am	Bdim	C	Dm	Em	F	G
Bm	Bm	C#dim	D	Em	F#m	G	A
Cm	Cm	Ddim	D#	Fm	Gm	G#	A#
Dm	Dm	Edim	F	Gm	Am	A#	C
Em	Em	F#dim	G	Am	Bm	C	D
Fm	Fm	Gdim	G#	A#m	Cm	C#	D#
Gm	Gm	Adim	A#	Cm	Dm	D#	F

Fig. number (18)

Chord	Formula
Major Chords	
Major	1 3 5
Major6	1 3 5 6
Major6/9	1 3 5 6 9
Major7	1 3 5 7
Major9	1 3 5 7 9
Major11	1 3 5 7 9 11
Major13	1 3 5 7 9 11 13
Minor Chords	
Minor	1 b3 5
Minor6	1 b3 5 6
Minor7	1 b3 5 b7
Minor7b5	1 b3 b5 b7
Minor9	1 b3 5 b7 9
Minor11	1 b3 5 b7 9 11
Minor13	1 b3 5 b7 13
Dominant Chords	
Dominant7	1 3 5 b7
Dominant9	1 3 5 b7 9
Dominant11	1 3 5 b7 9 11
Dominant13	1 3 5 b7 9 11 13
Add Chords	
Add9	1 3 5 9
Add11	1 3 5 11
Sus Chords	
Sus2	1 2 5
Sus4	1 4 5
Altered Chords	
Dominant7#9	1 3 5 b7 #9
Dominant7b9	1 3 5 b7 b9
Dominant7#5	1 3 5 b7 #5
Dominant7b5	1 3 5 b7 b5
Diminished Chords	
Diminished	1 b3 b5
Diminished7	1 b3 b5 bb7
Augmented Chords	
Augmented	1 3 #5
Augmented7	1 3 #5 b7

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Fig. number (19)

Scale degree names

	1	2	3	4	5	6	7	1
	I	II	III	IV	V	VI	VII	I
	Major						Minor	
1	I = Tonic						1	I = Tonic
2	II = Supertonic						2	II = Supertonic
3	III = Mediant						3	III = Mediant
4	IV = Subdominant						4	IV = Subdominant
5	V = Dominant						5	V = Dominant
6	VI = Submediant						6	VI = Submediant
7	VII = Leading tone						7	VII = Subtonic
1	I = Tonic						1	I = Tonic

Triad Roman numerals key

UPPER case	I, IV, V	= Major
UPPER case w/+	III+	= augmented
lower case	i, ii, vi	= minor
lower case w/*	ii*, vii*	= diminished

Fig. number (20)

Major											
I	2	3	4	5	6	7	I				
I	ii	iii	IV	V	iv	vii*	I				
C	D	E	F	G	A	B	C				
Maj	min	min	Maj	Maj	min	dim	Maj				
0*	2*	4*	5*	7*	9*	11*	12*				

Natural minor											
I	2	b3	4	5	b6	b7	I				
i	ii*	III	iv	v	VI	VII	i				
C	D	E♭	F	G	A♭	B♭	C				
min	dim	Maj	min	min	Maj	Maj	min				
0*	2*	3*	5*	7*	8*	10*	12*				

Harmonic minor											
I	2	b3	4	5	b6	7	I				
i	ii*	III*	iv	V	VI	♯vii*	i				
C	D	E♭	F	G	A♭	B	C				
min	dim	Aug	min	Maj	Maj	dim	min				
0*	2*	3*	5*	7*	8*	11*	12*				

Melodic minor											
I	2	b3	4	5	6	7	I				
i	ii	III*	IV	V	♯vi*	♯vii*	i				
C	D	E♭	F	G	A	B	C				
min	min	Aug	Maj	Maj	dim	dim	min				
0*	2*	3*	5*	7*	9*	11*	12*				

Fig. 21

Fig. number (21)

Chord Type	Formula	Notes	Chord Name Suffix
Major	1-3-5	C-E-G	C
fifth (power chord)	1-5	C-G	C5
suspended fourth	1-4-5	C-F-G	Csus4
suspended second	1-2-5	C-D-G	Csus2
added ninth	1-3-5-9	C-E-G-D	C(add9)
sixth	1-3-5-6	C-E-G-A	C6
sixth, added ninth	1-3-5-6-9	C-E-G-A-D	C6/9
Major seventh	1-3-5-7	C-E-G-B	Cmaj7
Major ninth	1-3-5-7-9	C-E-G-B-D	Cmaj9
Major seventh, sharp eleventh	1-3-5-7-#11	C-E-G-B-F#	Cmaj7#11
Major thirteenth	1-3-5-7-9-13	C-E-G-B-D-A	Cmaj13
minor	1-b3-5	C-Eb-G	Cm
minor, added ninth	1-b3-5-9	C-Eb-G-D	Cm(add9)
minor sixth	1-b3-5-6	C-Eb-G-A	Cm6
minor, flat sixth	1-b3-5-b6	C-Eb-G-Ab	Cmb6
minor sixth, added ninth	1-b3-5-6-9	C-Eb-G-A-D	Cm6/9
minor seventh	1-b3-5-b7	C-Eb-G-Bb	Cm7
minor seventh, flat fifth	1-b3-b5-b7	C-Eb-Gb-Bb	Cm7b5
minor ninth	1-b3-5-b7-9	C-Eb-G-Bb-D	Cm9
minor eleventh	1-b3-5-b7-9-11	C-Eb-G-Bb-D-F	Cm11
minor thirteenth	1-b3-5-b7-9-11-13	C-Eb-G-Bb-D-F-A	Cm13
dominant seventh	1-3-5-b7	C-E-G-Bb	C7
seventh, suspended fourth	1-4-5-b7	C-F-G-Bb	C7sus4
ninth	1-3-5-b7-9	C-E-G-Bb-D	C9
ninth, suspended fourth	1-4-5-b7-9	C-F-G-Bb-D	C9sus4
eleventh	1-5-b7-9-11	C-G-Bb-D-F	C11
thirteenth	1-3-5-b7-9-13	C-E-G-Bb-D-A	C13
thirteenth, suspended fourth	1-4-5-b7-9-13	C-F-G-Bb-D-A	C13sus4
diminished	1-b3-b5	C-Eb-Gb	C°

Fig. number (22)