#### **MUSIC THEORY - NOTATIONS**

This is the final lesson in this Music Theory course.

So far the following have been addressed:

- 1. Major scale structure
- 2. Triads of the major scale
- 3. Roman numeral notation
- 4. Natural and Borrowed chords and notational distinction
- 5. Some common progressions
- 6. Added tones
- 7. Other stuff

Additional points have been interjected during coverage of these major points such as the existence of minor keys and their relationship to major keys, "Janus" chords, and a few valid but rarely used terms. [Note: "Janus" is my term and not in common use but many will understand if you use it.]

Emphasis has been placed on the Roman Numeral method of notation. It is an accurate method of abstracting the harmonic structure of a composition. The benefit of this abstraction is that it is static remaining the same regardless of the chosen key. Thus a rendering of a tune with Roman Numerals will allow rapid transposition to any other key simply by using the chords within that key as specified by the Roman numerals.

But there are other types of notation in more common use.

While initially easier to read and implement than the Roman Numeral notation there are drawbacks to every method. Most of the alternative methods make assumptions which are not obvious and, unlike the Roman numeral system, transposition can be quite difficult.

# Chord letters with numbers:

There are many sites which provide lyrics and chords for music. These almost universally use Letters and numbers for chords.

C F6 Em <b>Bbdim</b> Dm7 G7 C Dm7 G	С	F6	Em <b>Bbdim</b> Dm7	G7	С	Dm7 G7
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1. You are the sunshine of my life That's why I'll always be a-round

Generally all capital letters are used and chords are assumed to be Major. Minor or Diminished are specified as "m or min" or "dim". Added tones are usually indicated by the numbers. Superscription is rarely, if ever, used.

Normally this system is sufficient but there are problems as you have to "know" what is meant.

Added tones are assumed to be of a certain type and DO NOT NECESSARILY COME FROM THE KEY SCALE.

The "F6" - F major chord with added MAJOR 6th, i.e. in F-A-C-D (Janus: also Dmin7)

Em - E minor: E-G-B ("E", E Major, would be E-G#-B)

Bbdim - Bb diminished: Bb-Db-Fb. While in a group playing this, a comment was made that this is NOT a diminished seventh (nothing about a seventh shown) but the person who obtained the annotated chart from another organization said that in that group the "dim" *always means dim7*!

So you have to "know"? It does work, but the Bbdim (not 7th) sounds better.

Cmin7 - Does the "min" (minor) apply to the "C" or to the "7"? Unfortunately the answer is not a universal one.

*USUALLY* it means C minor with a 7th but the type of 7th isn't clear; it could be a Major 7th or a minor 7th. You have to know that conventionally it means a minor 7th so the chord would be: C-Eb-G-Bb. To be perfectly clear the notation should be Cminmin7, So it seems that as Cmin7, the "min" does double duty affecting both the Chord and the added interval. But that isn't always true.

Bmadd4 - B minor, add the fourth: B-D-F#, add E (But not a minor 4th, no such thing!)

This is inconsistent notation as other chords with added tones: F6, C7 simply add the number so why not Bm4? No answer for that.

# Quirky notation:

Sometimes notation such as this will be seen: D7/F#

This does not mean play a D7 then and F# major. It almost always means play D7 with F# as the bottom (Bass) tone. Buuttt sometimes is means play the D7 with a quick shift to F#.

"<u>X7</u>"

A prior lesson covered the "Dominant Seventh" structure. This is so commonly used that it is quite universally accepted to simply use any chord letter in place of the "X" and the assumption is that the Dominant Seventh structure applies *REGARDLESS OF THE KEY*. Thus the "7" is *always a minor seventh*.

C7 - C-E-G-Bb even if you are playing in D#, E, or any key, this means a C Dominant Seventh form.

E7 - E-G#-B-D again without consideration of the key.

Ab7 - Ab-C-Eb-G ditto.

G7 - G-B-D-F even in G or D both which use F# and on and on.

# Nashville Notation:

This system uses arabic numerals (1,2,3,4,5,6,7) for the chords but is almost identical to the Roman Numeral system. There are sources available on the internet which explain it. It makes sense when speaking is considered since the pronunciation of a roman numeral is indistinguishable from that of the arabic numeral. Saying "Three" conveys the concept, but the listener doesn't know if the speaker is referencing arabic or roman numerals. It is a bit of a niche system not in widespread use.

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# Summary:

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The Roman numeral notation system provides the greatest degree of accuracy to abstract the harmony of a composition. Letter and number systems are easier to read but more challenging to transcribe to another key. Nashville notation is similar to Roman numerals but is not in widespread use. In the letter notation provided in the examples of this course, Major and minor have been indicated by Capital and lower case letters but even that approach is weak when used for diminished chords. So each system has weaknesses.

#### Suspended chord: sus

The original concept of "suspension" has changed. In early compositions the melody was rather rigorously supported by the underlying harmony that is to say one did not sing a note not in the chord. Of course, that didn't last.

As an example, suppose the composer had the melody on F in one measure and held that F over into the following measure BUT the harmony changes from D minor, which has F in it, to C which does not have F in it. To avoid the obvious and unharmonious clash of the E-F-G notes sounded together (E and G from C), the composer would omit or "suspend" the Third: the E, allowing the F to take it's place thus the suspended effect.

Fast forward a few hundred years. The dissonance of such a suspension is effective. It is used extensively in the Beatles "Ticket to Ride" as shown:

С d  $G^7$ А  $E^7$ h I <sup>sus4</sup> I<sup>sus4</sup> I<sup>sus4</sup> sus4 sus4 Т T Т T II V'1. I think I'm gonna be sad, I think it's to-day, yeah! The girl that's driving me mad is going a-way.

The letter chords aren't all shown. Assuming the time signature is 4/4, the suspended chord occurs on beats 3-4 of every measure. Baritone fingering C- Csus4: 2-0-1-0, 3-0-1-1

As shown in the above example, the abbreviation is "sus" plus the tone to be added. These are limited to either 2 or 4. Consider that the 3 is suspended; 1 and 5 are already there, so only 2 and 4 are left. Adding any number over 5 is already a convention and there is no need to suspend the third for those. Sometime only "sus" is used and that almost always means sus**4**. But do ask.

So the present convention differs from the original definition that the "four" or "two" is suspended or carried over from a prior measure to now mean that the "three" is omitted (suspended) and the "four" or "two" played in place of the "three". Quite a change!

The notation is X sus y where X is the Chord letter and y is the interval to be added. The third is *ALWAYS OMITTED*!

Examples: C<sup>sus4</sup> - C-F-G,C<sup>sus2</sup> - C-D-G [*NO THIRD, NO "E"*] A<sup>sus4</sup> - A-D-E, A<sup>sus2</sup> - A-B-E

Remember, the THIRD IS ALWAYS OMITTED! and Csus assumes (usually) Csus**4** Remember the "Janus" chords discussion?

Write the notes for Esus4 and Asus2.

(waiting)

OK, here is what you should have:

E = E-G#-B, Esus4 = E-A-B

and

A = A-C#-E, Asus2 = A-B-E

Any difference?

Janus!

# Augmented and diminished fourth/fifth

Recall that the intervals of the fourth and fifth are not defined as either Major or minor because of their particularly clear tonality rather they are considered "Perfect". Since Major/minor are comparative terms, the one implying the existence of the other, they aren't used with these perfect intervals. But since they can be changed by using a sharp or flat, there must be some terms which apply and those are "Augmented" and "Diminished".

Common notations, with bold indicating the most common, are:

Augmented (fifth as example)

X5# Xaug5X5+ or X+5 XA5 X<sup>0</sup>

Diminished:

X5b **Xdim5** X5- or X-5 XD5  $X^{\circ}$  (that's an "O") or  $X^{\circ}$  (a "Q")

Where would you use this?

The augmented fifth is a great transition chord, one which exists only for a moment sometimes called a "passing" chord or harmony and is frequently not annotated; you just have to hear it.

"Go where you wanna go" Mamas and Papas in the Bridge (some show as last part of the chorus):

G Em You don't un-der-stand C Am D | D7 (note: the "|" is a measure mark) That a girl like me can love just one man.

Listen to this and there is a very strong bass line over the last part of "un-der" as the chords change from the G to e. This bass line moves from D (on the G chord) then D# (augmented 5th for G) to E (for the e minor).

To play on the Baritone: 0-0-0-3, 1-0-0-3, 2-0-0-0 where the 1-0-0-3 is Gaug5: D#-G-B-G

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fine (Not "fine" as in great, but "fee-nay" Italian for "finished", "done" or "You can stop now".)

You're done. Congratulations!

I hope you've not only enjoyed the course but have learned something. Please keep in mind that this course is designed to give you a working knowledge of Music Theory most likely to be applicable in every day usage thus it isn't comprehensive enough to move onto a Master's Thesis or Doctoral Dissertation. But it's a good start!