

# Getting Started with 4-part Harmony

Some of you have already written chord progressions in a previous theory class. However, it is my experience that few students come to college with the ability to consistently whip off progressions correctly. Thus, I would recommend that you take a careful look at the way I've organized things here. (If you have never done this before, relax! It's virtually painless, I promise.)

You can also compare this packet to Ottman pp. 83-88.

## The basic setup - bass line + upper voices

When we write harmonic progressions in a 4-voice texture, one usually thinks in terms of a *bass line* plus 3 *upper voices*.

C: I IV V I

It turns out that the two parts of the texture behave very differently. The upper voices tend to move from chord to chord in the smoothest way possible. They are also carefully stacked so that they create a homogenous, blended sound. (The way they must be arranged is called “spacing,” and you will need to learn the spacing rules as explained below.) The bass line, on the other hand, will leap around a bit more, and it is exempt from the spacing rules. It will often wander away quite far from the upper voices. (I like to say that it is a “free agent.”)

The bass line is very easy to write, since it is spelled out for you in the requested chord progression. For now, we will write with all chords in *root position* - this means that the bass line will always cover the root of each harmony.

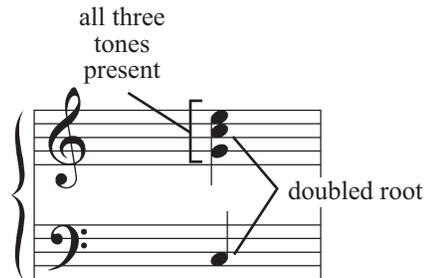
### Three possible bass lines for the same progression

C: I IV V I      I IV V I      I IV V I

## Doubling

The upper voices will cover all three tones of the triad. Thus one of the tones ends up being “doubled,” since it appears in both the upper voices and the bass line. In the beginning, that note should always be the root. There are other possibilities, but we’ll worry about them later. It’s important to start off being 100% consistent, so, once again:

- 1) Always cover all three tones in the upper voices.
- 2) Always double the root.

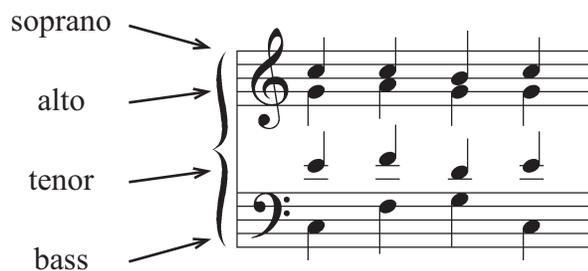


## Keyboard Style vs. SATB

There are actually two different ways you can arrange your 4-voice music on the staff, which are commonly called the “keyboard” and “SATB” styles.

In keyboard style, the bass line is by itself on the bass clef, and the upper three parts are on the treble staff. One usually beams the upper voices together like a single chord. Up to this point all of my examples have been drawn in keyboard style.

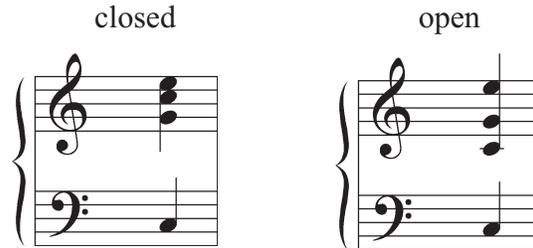
SATB style helps you think of the progression as though it was choral music. SATB stands, of course, for the standard division of choral parts - soprano, alto, tenor, and bass. In this style you put the soprano and alto parts on the top staff and the tenor and bass on the bottom. You will usually stem each part separately, so that soprano stems always point up, alto stems down, and so on. (See my example.)



Many of you have already been taught to write in SATB style all of the time. I would strongly recommend giving keyboard style a try -- it is much easier to conceive, to read, and to play than SATB. It will help you to learn faster and make fewer mistakes.

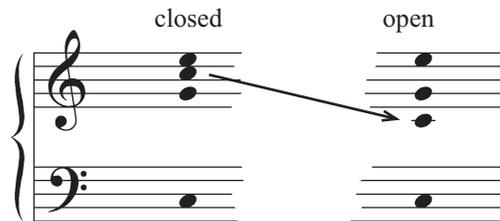
## Open vs. Closed Voicings

So far in this packet I've written everything in "closed" voicings. (Also called "close" voicings.) The triads in the upper voices are stacked as tightly as possible. The opposite of this would be "open" voicings, in which one leaves extra space in between the upper voices.

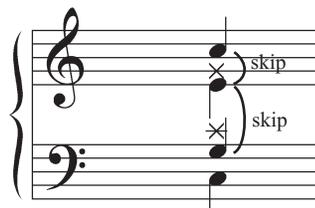


It turns out that open voicings are easy to screw up -- if you are not careful you will violate the spacing and doubling rules. However, I've got a little trick that will help you make proper open voicings every time, by thinking of open voicings as a transformation of closed voicings.

Start by thinking of your progression in closed voicings. Then, take the alto part and send it down an octave, into the tenor part. Voila, instant open voicings! (Eventually you will forego the step of actually composing the closed voicing first -- but you should continue to mentally doublecheck your open voicings in this way.)



A properly spaced and doubled open voicing will skip over one chord tone from S to A and from A to T. Notice how the result is nice and evenly spaced (just like a closed voicing only more spread out.)



## The Spacing Rule

Not following the “skip” pattern causes spacing and doubling problems.

Your spacing is wrong when there is more than an octave between any adjacent pair of upper voices. (So more than an octave between S & A, or A & T.)

no triad tones are skipped here

The proper spacing pattern is also intimately related to doubling.

too many tones skipped

## The Relationship Between Style and Spacing

It turns out that keyboard style goes well with close voicings, and SATB style goes well with open. Don't confuse the two concepts, though - they are separate! You can write close voicings in SATB, or open in keyboard style if you want to.

close voicing, keyboard style

open voicing, SATB style

close voicing, SATB style

open voicing, keyboard style

## Switching Between the Styles

In general it is not advisable to flip-flop between open and closed voicings, nor is it smart to move frequently between the two styles -- better to pick one and stick to it. If you do have a desire to change from keyboard style to SATB, however, you can do it as long as you draw a little line to show where the tenor part crosses over.

## Practice Exercises (for in-class completion)

### A. Making Close Voicings

For each of these chords I'll provide the roman numeral and a soprano note. Fill in the "alto" & "tenor" voices directly below the soprano (making a close voicing) and provide a bass note in the lower clef.

#### Example

I give

D: I

and you  
make

D: I

1.

A: I

2.

c: V

3.

G: IV

4.

B $\flat$ : I

## B. Converting closed to open AND keyboard to SATB

Take these little progressions which are written in close voicings, keyboard style, and “convert” them to open voicings, SATB. All you really have to do it copy the alto part down an octave.

### Example

The example shows a progression in D major. On the left, the keyboard style has a treble clef with chords D4, E4, F#4, and G4, and a bass clef with notes D3, E3, F#3, and G3. An arrow labeled "converts to" points to the right, where the SATB format has the treble clef with notes D4, E4, F#4, and G4, and the bass clef with notes D3, E3, F#3, and G3. The labels below are b: i V i.

b: i V i

1.

The example shows a progression in F major. On the left, the keyboard style has a treble clef with chords F4, G4, A4, and Bb4, and a bass clef with notes F3, G3, A3, and Bb3. An arrow labeled "converts to" points to the right, where the SATB format has the treble clef with notes F4, G4, A4, and Bb4, and the bass clef with notes F3, G3, A3, and Bb3. The labels below are F: I IV I.

F: I IV I

2.

The example shows a progression in C minor. On the left, the keyboard style has a treble clef with chords C4, D4, Eb4, and F4, and a bass clef with notes C3, D3, Eb3, and F3. An arrow labeled "converts to" points to the right, where the SATB format has the treble clef with notes C4, D4, Eb4, and F4, and the bass clef with notes C3, D3, Eb3, and F3. The labels below are c: i V i.

c: i V i

## C. Error Finding

Assign a letter to each one of these excerpts.

- A. Good closed voicing
- B. Spacing error
- C. Good open voicing
- D. Bad doubling



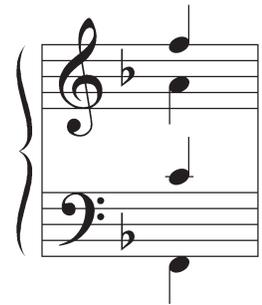
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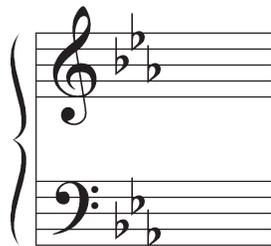
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## D. Making Open Voicings

Make an open voicing for each chord. You can use either SATB or keyboard style.



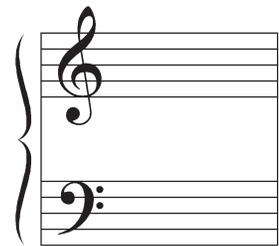
D: I



c: i



G: I



a: i

## I - V - I Progressions

We are going to carefully build up a vocabulary of chord progressions. Each stop on the way will introduce both a new harmonic *function* and new *voice-leading requirements* (i.e. new things you need to remember when you connect the chords).

The first unit focuses on the V chord, though it turns out the voice-leading procedures apply to any chords related by a fourth or fifth.

The V chord is the most important harmony in the tonal universe besides I. In the near future we will look at how the V-I progression punctuates most phrases in Classical music.

To get started writing V-I progressions in 4 voices, there are 2 “procedures” you need to learn.

If you follow these formulas you will automatically avoid making the common errors of four-voice writing (like parallel 5ths, etc.) Thus, we can start writing without worrying too much about rules (which will come soon enough.)

### The Common-Tone Procedure (= Ottman’s “First Procedure” p. 92)

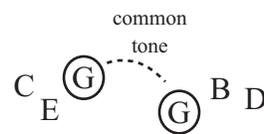
The absolute smoothest and simplest way to connect chords related by fourth or fifth is to take a common tone. It’s easy. Let’s start by making a I-V-I progression in C major.

a) Build your first chord with good spacing and doublings. (Here we will build a I in close position).



I V

b) Figure out which note belongs to both the I and the V chord. (This is the common tone.) If you are not yet confident with your diatonic triads you should spell out both triads above the staff.



I V

c) Hold the common tone over in whatever voice it happens to be in.



I V

d) Connect the other 2 upper voices to tones in the V chord. Both will slide either up or down by step. Make the bass cover V and you are done.



I V

## The “Next-Closest” V-Chord (= Ottman’s “Second Procedure” p. 92)

So you’ve probably figured out by now that when you write out the upper three voices of the triad there are a few different “positions” (or “rotations”) of the chord that you can choose from.

I chord in three “positions”

I    I    I

So when you connect your I to a V, you’ve got to choose a good position for that five chord. Let’s say the the position of the V that would hold over the common tone is the “closest,” since it requires the least amount of movement to get there.

There are occasions, though, that you might not want to go to that particular version of the V chord. (Perhaps it does not make the soprano line you are looking for.) Among the possible connections to the V chord there is a second viable option - the “next-closest.”

*possible  
V chords*

I    V    V    V

The “closest”  
option makes a  
common-tone  
connection

The next-closest  
option

I    V

How do you know you've found the "next-closest" V chord? All the voices will move by a third or less.

I V

So ultimately I think this "procedure" involves putting down a V voicing and inspecting it carefully to see that it meets this requirement.

*The next-next closest = wrong.*

If you choose a connection in which one of the voices moves *more than a third* (namely a fourth or fifth), it's going to make a bad parallels with the bass (parallel 5ths or 8ves) or "badness by contrary motion" (5ths by contrary, 8ves by contrary.) We'll talk more about these rules later, but in the meantime you should just avoid letting the upper voices move by 4th or 5th.

bad parallels

I V

badness by contrary

I V

## Other Progressions by 4th or 5th

You can also apply these procedures to I-IV-I progressions, and "circle-of-fifths" progressions.

I-IV-I with common tone

I IV I

circle-of-fifths progression with common tones

iii vi ii V I

## Exercises (for in-class)

## A. Common-Tone Connections

Once again I'll pick the top note -- all you need to do is fill in the alto and tenor to make a proper close voicing. Next, "convert" the close-voiced progression to an open voiced one (in SATB).

1. fill in closed voicings convert to open voicings

D: I V I

D: I V I

2.

F: I V I

F: I V I

3. Finally, make a common-tone progression of your own, first in close voicings and then in open.

G: I V I

G: I V I

## B. Next-closest Connections

Same deal as the previous page.

1.

E: I V I

E: I V I

2. This line requires a mix of common-tone and next-closest connections.

B $\flat$ : I V I

B $\flat$ : I V I

3. Make your own progression that includes at least one next-closest connection.

A: I V I

A: I V I

## The “Third to Third” technique (Ottman p. 95)

Up until now we’ve been making our progressions in all open or all closed voicings. There’s a good reason for this -- carelessly flipping between open and closed will often cause errors. There’s only one way to safely do it, which we’ll call the “third-to-third” method.

1. The third in one chord moves to the third in the other.

V I

2. The common tone stays put.

V I

3. The remaining voice moves by step. (It moves in the opposite direction of the big third-to-third leap.)

V I

Here’s one that goes from open to closed.

1.

V I

2.

V I

3.

V I

Unfortunately, this method does not always work out well -- it depends on how the first chord is arranged. However, it is important to know, since jumping between open and closed positions using any other method will usually create bad fifths or octaves.

(8ves by contrary)

V I

(8ves by contrary)

V I