

VOXOS Part 1: A Professional Orchestration Review

By [Peter Lawrence Alexander](#) / February 16, 2011

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The VOXOS & Vocal Library Buying Audience

The Cinesamples corporate name says that the libraries the company produces are for film/TV, and by extension, game scoring. This is a very large audience to be sure, but it's not the only target audience. There are literally, in the US alone, over 300,000 churches many with choirs and many with choral writers. There are about 1200 US schools granting degrees in composition and in all of those schools harmony and counterpoint are required. Nor have we begun considering the large number of music publishing companies who have large choral works for either direct sale or for rent.

As such, [VOXOS](#) can be for film/TV and game composers and composers outside film/TV/game, choral directors needing a tool to create teaching tapes or MP3s for choir members who can't read, and students of harmony and counterpoint since part of that study involves looking at the basis of Western Harmony, the Bach Chorales.

Consequently, a well done vocal library has the marketing potential to be the second "cash register ka-ching" following a well done string section.

So, to fairly evaluate VOXOS, and either of the other three libraries (East West, Tonehammer and Vienna) and partially with Spectrasonic's *Omnisphere* (which contains portions of *Symphony of Voices*), we must consider the whole sales picture, not just the narrow strait of film/TV and game, no matter how large it may be.

It's perhaps worth mentioning that every year roughly 10,000 students take harmony and counterpoint which is a good reason for every library to consider having sound sets for both Sibelius and Finale.

Then, as we know by our collective experience, finding a choir to sing your works is about as easy as getting a permit to prospect for gold in the Promenade in Santa Monica. As with the orchestra, a solid choral library is needed, particularly with separate SATB so lines can be edited as with a string section.

So my approach for myself as a writer and also this review is to test VOXOS with real choral music to see what it can really do.

VOXOS Description

VOXOS: Epic Virtual Choirs from Cinesamples is a 35GB SATB vocal library with individual soprano, alto, tenor and bass, along with a boys choir, solo boy vocalist, solo soprano, solo alto, and a phrase builder using syllables culled from Mozart's *Requiem*. But that's just the hors d'oeuvres! You also get Legato Sections and Choir Effects. Rather than list all the features (which would be half the review there are so many). The library was recorded in Seattle in the Bastyr Chapel Recording Studio, home to many film/TV soundtracks. The choir was captured using four mic positions.

The video below, produced by Cinesamples, gives you a deeper overview of the library.

YOUTUBE VIDEO: <https://youtu.be/tNIS3SCC7kY>
(Michael Patti: Cinesamples VOXOS | Phrase Builder)



Here's a screen capture of the VOXOS mixer. With it, you have ample resources to shape your vocal sound.



Vocal Ranges

As with any orchestral library, you must know the ranges of the actual instruments compared to the ranges of the sampled instruments so you know what you have to work with. I checked vocal ranges with VOXOS by comparing the VOXOS SATB ranges to the definition as used by Grove Music Online.

VOICE	LIVE	VOXOS
Soprano	C4 to A5	C4 to D6
Alto	G3 to E5	G3 to E5
Tenor	C3 to A4	Bb2 to B4
Bass	F2 to E4	D2 to C4

By comparing the ranges, we find that Cinesamples gives an extended range on all of the voices. This is especially so with the upper pitches, except for the Basses where it stops at C4 (where Middle C is C4). My experience as a choir director echoes that of Grove Music in that the Basses can go up to the E4. *So on the next VOXOS update, I suggest extending the Bass range up the major third.*

VOXOS and The Bach Chorales

*Testing VOXOS and other vocal libraries with the Bach Chorales? Have I Gone **Batty**?*

Hardly.

The Bach Chorales are four-voice choral arrangements written using what academically is called Species 1 Counterpoint between the Soprano and Bass, and mixed counterpoint in the Alto and Tenor voices. If you want to learn how to write superb vocal arrangements, you start here. The Bach Chorales go beyond the standard hymn book arrangement because of Bach's sheer depth of writing.

To find out what people and vocal sample libraries can really do, the Bach Chorales are the starting point. To be sure, we will be looking at a variety of choral styles to see what's possible. But we start here first with VOXOS.

Another reason for my testing with the Bach Chorales is that unless I've missed something, I haven't seen any vocal library demos done with the Bach chorales. I think it's time.

So, we'll test drive the VOXOS sopranos with Johnny B in the driver's seat.

Bach and Soprano Ranges

For this portion of the review, I analyzed the soprano ranges of every single Bach chorale, all 390 of them, as found in the [Street Smart Guide to the Bach Chorales](#).

My objective was to find the highest pitch Bach wrote the sopranos for and then test VOXOS within that practical range usage. Let's look at the research below:

Bach Chorale Soprano High Pitch Where Middle C is C4

High Pitch	# of Chorales
A4 - Bb4	2
B4	1
C5-C#5	20
D5-D#5	90
E5	108
F5-F#5	112
G5-G#5	49
A5-A#5	8
B5	0
C6	0

Source: *Street Smart Guide™ to the Bach Chorales*

Comparing back to the VOXOS soprano range, Bach wrote 0 chorales where the high pitch was above A. A total of 8 had a high point of A, and of them, none had a high point of Bb. The heaviest concentration of high points was between D and F#. So if you're looking to write a realistic soprano part, VOXOS is right in the pocket.

To test VOXOS Sopranos I've selected one phrase from each group of high points. In looking at these phrases, be aware that the high points rarely come at the end of the song for drama as we would write them today in 21st Century songs. In many cases the high pitch is approached and left in step-wise motion.

Note: All of the examples were "moused" into Logic 9.1.3 with little editing so as to avoid any sense of favoritism. No reverb was added. You're hearing *VOXOS Individual Patch Legato Section-Sopranos* right out of the box. Also, I'm making no effort to present these short phrases as "demos" of VOXOS. As a writer experienced in working with choirs, I want to see how the VOXOS Sopranos sound on these high pitches.

That's because in older libraries, the higher the sopranos were programmed the more synthy they sounded. *So, does VOXOS sound like real Sopranos or high pitched sopranos from Mars?*



I also want to point out one other aspect about “mousing” in the pitches, otherwise known as step time, that has a direct sales application for any vocal library.

Worldwide, there are *several hundred thousand* users of Finale and Sibelius who are potential purchasers of VOXOS and other similar libraries. Of these several hundred thousand users, some will:

- mouse in the rhythmic value and pitches;
- type in the rhythmic value and pitches from the QWERTY keyboard;
- key in the rhythmic value and pitches from a MIDI keyboard.
- Others will record in real time.

Mousing in, then, tests a note entry method used by thousands of composers who don't sequence.

One result of this testing approach is to set forth in the VOXOS training literature alternate editing possibilities if the end user isn't sequencing, and therefore, isn't taking advantage of CC1, the mod wheel or pedaling.

With these points in mind, here are eight short phrases testing the VOXOS Sopranos on high pitches within the Bach chorales.

A4 – Bb4: Bach Chorale #2

Here's one of the two Bach chorales where the high pitch for the sopranos was Bb. This phrase is made up entirely of quarter notes with repeated pitches. The human voice can easily handle repeated pitches. The trick in a MIDI mock-up is to be able to effectively recreate both phrasing and breathing.



B4: Bach Chorale #22

Here the soprano's high pitch is only B4. Even though just moused in, VOXOS easily handles the eighth notes at phrase end. Notice the repeated notes in the melody. To break up the stiffness I used a setting of Swing 8A in quantize.



C5-C#5: Bach Chorale #59

Again, repeated notes. In performance, note length is determined by the length of the syllable.



D5-D#5: Bach Chorale #160

This is a very smooth line with no repeated notes.



E5: Bach Chorale #96

Another smooth line with no repeated notes. The melody moves scale-wise for the sopranos to the high pitch E.



F5-F#5: Bach Chorale #295

Again, scale-wise motion leading to the high pitch F in the key of Bb.



CINESAMPLES RESPONSE

The only trouble with mousing is there's no velocity changing where we have different envelopes in the lower velocity for different attacks. Mike Barry, Developer.

DISCLAIMER

VOXOS was provided for this review as an NFR and is available from [Big Fish Audio](#).

This article was previously published at SonicControl.tv