

Insights: Vienna Dimension Strings – Part 1

By [Peter Lawrence Alexander](#) / March 7, 2013

Recently, the Vienna Symphonic Library released their new Vienna Dimension Strings. In this first Insights, I'm looking at DS from a Professional Orchestration perspective and what it lets the arranger/composer do.

HOW THE DIMENSION STRINGS SOUND IS CREATED

OK. This is a non-technical description. Recording one section at a time, each individual player was recorded. So for the released Dimension Strings Violins, you can have 8 individual violinists up to a section of 8. Sections are built by adding players. As players are added, the section sound is built.

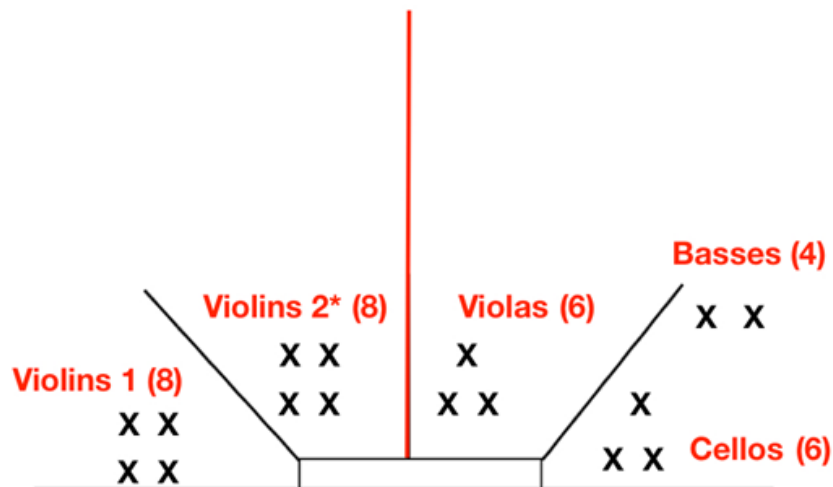
Thus, you can set up for individual violinists, by desks (2 players each), by groups (4 players each), or the full section. When we get to divisi, I'll show you how impressive this is.

As far as the sound quality is concerned, it's slightly darker, natural, and unprocessed sound, sounding like you're standing in front of 8 violinists.

ENSEMBLE SIZE

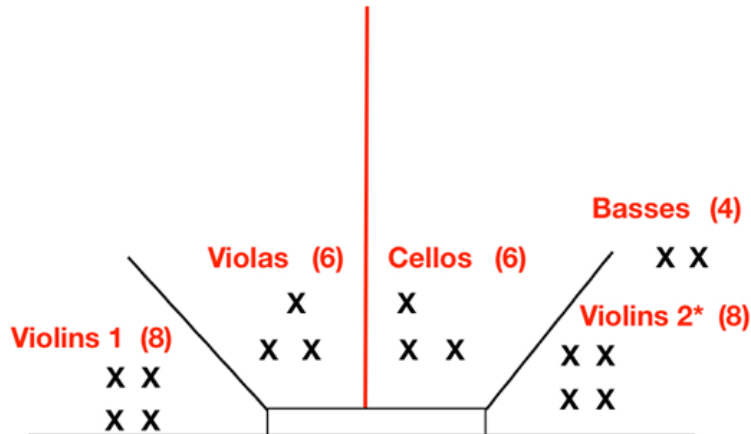
The graphic I created shows the standard orchestral seating with Dimension Strings placed accordingly. The Quartet's size on completion is 8 8* 6 4 2. Two players are assigned a desk (music stand). Hence, the four x's. You'll notice I have 8* for Violins 2. That's because similar to LASS, the transposition trick is needed to create Violins 2 (which takes about 10 seconds in the Vienna Instrument player). The extended center line is for panning. To the left of the line is stage left. To the right of the line is stage right. Using the Vienna PowerPan (found in the Vienna Instrument, Vienna Ensemble, and the Vienna Suite), you can position the strings anywhere you want stage left to stage right.

Dimension Strings - 2 Players Per Desk (music stand)



This next diagram shows something you can do with Vienna that really gives the writer a number of options as you go to produce score, and that's the ability to change seating positions. Here I've "seated" the ensemble similar to that of the Berlin Philharmonic which as a result, allows me a stereo positioning of the violins. Because of Vienna's PowerPan feature, it literally takes only seconds to set up stage positioning, e.g., spatial placement.

Dimension Strings - Berlin Philharmonic



So, whether I use DS on its own or with another library, spatial placement is a snap. For finessing two or more libs together, Virtual Sound Stage is a very handy and necessary tool when using two or more libs.

Existing Ensemble Size Applications

For those who only want to write for the dramatic size Hollywood film orchestra (even if it's recorded in Prague!), use the transposition trick and you'll have it: 16.16.12.12.8. However, as bizarre a statement as this may seem to be, sometimes the dramatic size can be too big. For example, many TV shows and vocal sessions use much smaller string ensembles. Here's where Vienna's Dimension Strings are a real problem solver.

This chart lists by instrumentation some typical ensemble sizes that can be created once all of DS is released (violins are now shipping, cellos expected sometime late spring/early summer).

Section	Small Symphony	Small Studio	Smaller Studio	Henry Brant	Very Small Studio	Copland
Violins 1	8	6	5	4	3	2
Violins 2	6	6	5	2	3	2
Violas	4	4	3	2	2	2
Cellos	3	4	3	2	2	2
Basses	3	2	1-2	1	1-2	1
Total	24	22	17-18	11	11-12	9

In his book *The Score, The Orchestra and The Conductor*, conductor Gustav Meier recommends for a Baroque work a string section of 64321 and for Haydn/Mozart, 86542. Hot damn! I can do that with DS. And this is important since many a TV show or made-for-TV pic uses this size string section. Factor in woodwinds in 2s, some brass and percussion, and you have a balanced ensemble ready to go.

The Small Symphony – This is the smallest size string ensemble that Rimsky-Korsakov said should play a full symphonic work. Allows for divisi. Doable with DS.

The Small Studio – Many a small budget film or TV presentation has used this size string section. Also the same sized as used for Mozart and other Baroque works, too. Allows for divisi. Doable with DS.

The Smaller Studio – Again, many a small budget film or TV presentation has used this size string section. Also used by Nelson Riddle for many recording dates. Doable with DS.

Henry Brant – Brant orchestrated for film composer Alex North then left Filmland where he pursued a successful second career as a composer and teacher at the academic level. In his experience, Brant said this was the smallest group of Violins 1 he'd write divisi. Doable with DS.

Very Small Studio – Again, a very small size used for TV and artist recording dates. Doable with DS.

Copland – This is *Appalachian Spring* with the original 13 musician setup which included a double string quartet and a bassist (22221).

Then there's Copland's *Nonet For Strings* written for 3 violins, 3 violas, and 3 cellos.

Going smaller, you can create multiple custom string quartets and string quintets.

DIVISI

There are two ways divisi can be performed.

Method One is that the player to the outside takes the top harmony line while the player on the inside (closest to center stage) takes the lower part. Well, using VSS, or SPAT, or Vienna MIR, you can actually do that with Dimension Strings.

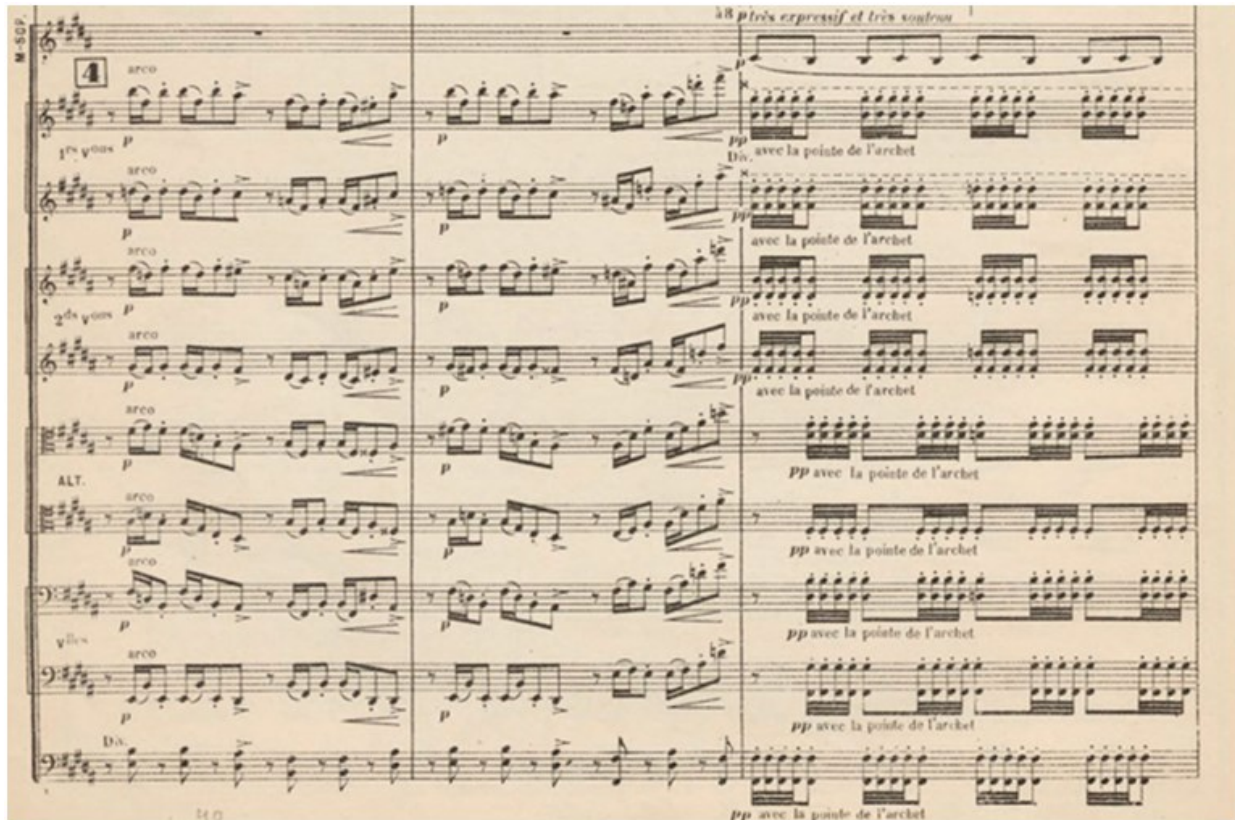
Method Two is where the section is literally divided in half, front to back. The first block of desks takes the high part while the back block of desks takes the lower part. Well, using VSS, or SPAT, or Vienna MIR, you can actually do that, too, with Dimension Strings.

A Useful Footnote – Given what I've just described, there are more options. Ravel, who stacked triads on triads, would write the main theme in octave divisi in Violins 1 then put the two inner harmony parts in Violins 2 and an octave below in the Violas.

In at least one other case, Ravel wrote the theme and first inner harmony part in Violins 1 then the next inner harmony part and the melody 8vb in Violins 2. Again, depending on how the strings are seated, we finally have the unique opportunity to see which writing technique and seating positioning works best for what we're writing.

NB: I don't have MIR but it looks to me like MIR would be the easier way to pull off "live" divisi as I've just described it.

Then we come to Mr. Claude Debussy, the King of Divisi Writing (at least in my mind). From *Three Nocturnes* below is *Sirenes* at Rehearsal 4. With Dimension Strings, for the very first time, we can now approximate this in our virtual orchestrations.



EXPERIMENTAL SPATIAL PLACEMENT

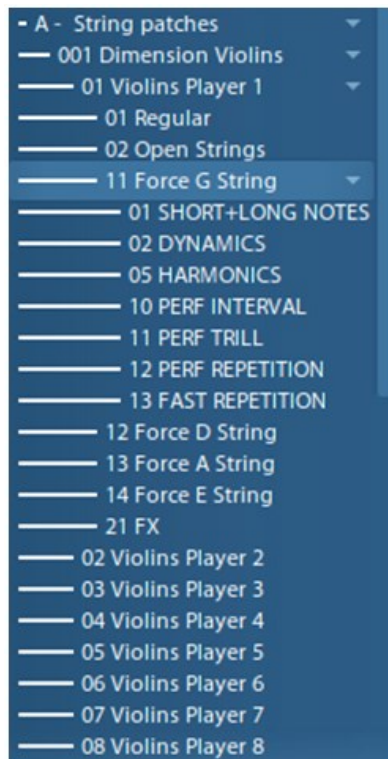
Once he left Filmland, Henry Brant was known for unique spatial placements of his live performances. For example, Brant once had a composition performed at the Guggenheim in NYC with 80 trombonists on the stairwell. It's a little mind boggling to think of the kind of unusual string section setups possible with Dimension Strings. Imagine 8 violinists in a semi-circle with a flautist in the middle. Or a pianist.

Or borrow from the Berlin Philharmonic. When the cellos release, use the transposition trick and have an evening with 12 Cellists of Your Symphony Orchestra!

DS FORCED STRINGS AND THE SPECTROTONE CHART

Dimension Strings has a feature called Forced Strings. At first, this sounds like a wrestling hold! But in orchestration language on the Violins it's Sul G, Sul D, etc. Now, several libraries in the past, including Vienna in the *Orchestral Strings 1*, have recorded sul G. However, Dimension Strings is literally light years beyond this. Not only do you have all the "suls" for each string for each member of the Quartet, you also have a complete set of bowings. See the screen capture on the next page...

Now those with our *Spectrotone Instrumental Tone-Color Chart™* will recall that Arthur Lange defined the tone colors for each individual string on each member of The Quartet.



Using the Spectrotone Chart with the Dimension Strings (starting with the violins), pulls out combinations *per* individual string *per* instrument that *until now* was simply not possible in virtual orchestration, but which *can* be done with Dimension Strings. Talk about a serious compositional/scoring breakthrough! I mean *this*, from an orchestration perspective, is a genuine *next generation* string library.

Now, in the last video lecture in my *Visual Orchestration #1* course, I challenged fellow Learners to create a composition per tone color, and for no particular reason, suggested the color red. If you have the Spectrotone Chart, look at the violin and you'll see a very narrow range of pitches available that can *only* be performed Sul G. So as a demonstration, I wrote a piece called *Opus Red #1* where all the violin parts fell into this narrow range of tones.

Producing it, however, was a different matter. The score calls for a fast rhythmic figure being performed with spiccato and the opening theme performed with a second violin section using *detache* bowing. Thus, stage left is the ostinato figure and stage right is the theme. Previously, I could only ask students to “imagine” what the sound would be like for sul G.

Not now. Now I can produce *Opus Red #1* as I wrote it utilizing all the other instruments, woodwinds and brass, within the red tone color range!

Consequently, down to the individual string level, nearly all the combinations shown possible with the Spectrotone Instrumental Tone-Color Chart can be executed with Dimension Strings and the balance of the Vienna libraries.

In fairness, woods, brass, keyboards, timpani, harp and selected mallets from other libraries can also be matched to the Dimension Strings Forced Strings to recreate these Spectrotone Chart combinations.

Simply put, adding Dimension Strings to your existing palette opens a whole new world of virtual orchestration for you.

DS AND OTHER STRING LIBS

The first lib I tested was L.A. Scoring Strings (LASS) full edition because of its divisi. I took the whole 8 player DS Violin legato ensemble and paired it with LASS's Violin 1 C section (also 8 players) as is, no EQ'ing. I also turned EQ off on LASS.

The sound was very compatible for blending. DS is a bit brighter and closer to the mics than LASS. So in blending the two, you'll need to push DS slightly back to get them into the same space.

Next I built a 16-player First Violins section combining the two (using the transposition trick I could also create a 16-player Second Violins section).

The two paired were a beautiful full sound and for divisi, very easy to execute. Since both sections are 8 players each, the two in unison created Violins 1, then for div a 2, I can select which library would play the top and bottom harmony parts, then back to unison.

When both Dimension Strings and LASS are combined together, you have the unprecedented scoring opportunity of virtually orchestrating div a 4 with a 16-person Violins 1 and equally, with a 16-person Violins 2 section.

I then put them into a “room” using two instances of the Vienna Suite’s Convolution Reverb with FORTI/SERTI. The first instance was an early reflection and the second was a reverb tail based on a 1.65s reverb tail found in Prague’s Smecky Studios.

Once spatially positioned, you’ll have to decide whether to slightly darken DS or slightly brighten LASS to create your desired string sound.

Vienna Appassionata Strings – I next tested DS with Vienna’s own Appassionata Strings. Similar to LASS, there’s good compatibility, but you also need to push Dimension Strings back and to decide which to brighten/darken, as DS is definitely brighter than the Appassionatas.

Vienna Orchestra Strings 1 – Violins – Again, there’s good compatibility, but you also need to push Dimension Strings back. When comparing these two, you can hear the more natural sound of Dimension Strings compared to the more recorded sound of Orchestra Strings 1.

General Observations

When you compare Dimension Strings to all other libraries, they are all radically different sounding string sections. To get them to blend, you do have to push DS back, and depending upon how you spatially place, pull the others forward.

Additionally, the 8 violinists that you build into a single section don’t really sound smaller than the other libs, even within the Vienna family.

But what sets Dimension Strings apart, even and particularly within Vienna’s *own* string family, is the sheer depth of bowings that have been recorded down to Forced Strings (the “suls”), Open Strings, and individual players. In my reviews over the years, I’ve identified four Workhorse String Libraries: the Appassionatas, String Essentials 2, LASS and Hollywood Strings. When the complete Dimension Strings library is finally released, this will be the next workhorse string library.

LEARNING CURVE

The learning curve is as fast as you know the Vienna Instrument player. The more you understand about how the player works, the faster you get going with Dimension Strings. I had no “wait time” in opening, loading and working with Dimension Strings.

If you have any Vienna library, the order of articulations is very similar. You’re just using what you already know how to do, which is refreshing because you’re not trying to learn both a new interface and a new library. You’re just focusing on the Dimension Strings library and its sound. For a change, learning Vienna’s new library is enjoyable and fun as you marvel at the detail

HARD DRIVES

Let's look at the graphic first, then I'll explain.



Now. There are libraries on the market that when you load a program, it's near a gig, is a gig, or bigger than a gig in size. Some of these patches that are a gig or better are only for one (1) bowing while others are similar to VSL in that you can load all your core bowings per section in a single instance. These programs are often recommended to be used on an SSD drive. VSL recommends in their specs to run DS on its own drive with 7200RPM speed or better (read SSDs). I think this is a good recommendation.

For now, I have Dimension Strings running on a 7200RPM Caviar Black drive. I've tested them inside Logic and inside VE Pro 4 routed into Logic. This may be my system: on first loading into Logic I hear a few pops initially, but none later. When loaded into VE Pro and routed into Logic, no pops at all.

Keep in mind that because of the Vienna Instruments player, Dimension Strings are radically different to these other libraries, including Vienna's, because of the sheer number of bowings available to you. For example, the screen shot above demonstrates 12 different Violins 1 bowings in one matrix the total of which are 1.3GB. What's obvious and what needs to be stated are that the more bowings you load in a single instance the larger the total patch will be.

Below, I created my first matrix, V1-Basic-DS with four bowings that will easily blend with the other libraries: legato, staccato, spiccato, and pizzicato. All *four* bowings came in combined at 755MB for a single instance using keyswitches to change between bowings.



THE LEGATO CRITIQUE

Some have critiqued the Violas on the legato not feeling it was connected enough. I don't know that I can agree with this. Under the Advanced tab in the Vienna Instruments Pro player, you'll find a setting labeled *Interval Threshold*. As you bring the setting down, the connectivity increases especially for broader legato melodies. Bring the setting up for faster rhythms.

I'm also on the written record for stating that I never met a virtual string detache that I ever liked. With Dimension Strings Violas, that has changed. The Detache shorts are almost staccato like and to me, function a bit like punta d'arco as used by Berlioz in *Symphony Fantastique*. But the Detache longs I like a lot as they sound to me more like a Detache Moyen. With the Detache Longs you have more the normal back and forth bowing you find in a string section, and it's also the second way to create a legato feel in the Quartet vs. the primary method of legato being all the pitches played under a single bow stroke.

Even within the Vienna family, I think the long detaches in the Dimension Strings are the best and the most lively.

CONCLUSION

I've used Vienna libraries for the decade they've been in business. I coordinated two L.A. beta test teams for the First Edition then the Pro Edition. When the Vienna Instruments Cube came out, my Dad had recently passed away, and I took some of my inheritance to get this library to honor my Father by pursuing what I was called to do.

This library and its approach is a bold move on VSL's part. Risk is part of being both a composer and an entrepreneur, and doing this library was an entrepreneurial risk, especially in a very shaky global economy, regardless of how well the Dow is doing today.

What I find exciting about Dimension Strings, especially and particularly because of its divisi capabilities, is that I can do both basic and advanced string writing. I can set up divisi using either of the two methods used in live symphonic performance. I can pick and choose what desks play what part the way Debussy did in *Three Nocturnes* and other pieces. I can literally design my own string orchestral sound.

At the very minimum, I can use Virtual Sound Stage for spatial placement and other reverbs to achieve these realities, or I can go the distance and get MIR.

This divisi/small ensemble design factor of Dimension Strings does set it apart from all the other string libs because it gives you such flexibility. But! A major component of Dimension Strings Violas is learning the inner workings of the Vienna Instrument Pro player, which gives you even more flexibility.

Overall, I have to say I am really impressed with what I've seen and experienced these past few days with Dimension Strings. I never thought a time would come where I could write a passage for just the red tone color section (per the Spectrotone Chart) on the violin's G-string and double it with alto flute, or other "red" instrument! I mean, that's pretty amazing. Add to this spatial placement possibilities, divisi options, small ensemble creation, and so much more.

I think it's fair to say Dimension Strings are, or will be upon completion, the next generation workhorse string library.

This article was previously published at the SonicControl website.