

# Insights: Sample Modeling's The Trumpet

By [Peter Lawrence Alexander](#) / April 23, 2013

My focus here is showing ways to get The Trumpet to fit into the mix, which is a common concern expressed on the various forums.

Sample Modeling's *The Trumpet* (in Kontakt format) was one of the instruments I profiled in my course *Visual Orchestration 2: Articulations & Templates*. Because The Trumpet is recorded in an anechoic chamber, adding early reflections, reverb tail and EQ is required to really bring the sound of this instrument. My focus here is showing ways to shape The Trumpet to fit more easily into the mix, which is a common concern made on the various forums.

## FULL ENSEMBLE

The Trumpet isn't "just" a trumpet. It's a trumpet section with three different trumpets, a piccolo trumpet, German trumpet, Flugelhorn and cornet. Five different mutes are also available: straight, cup, harmon, bucket and harmon with stem.



## GETTING SAMPLE MODELING TRUMPET TO SOUND CORRECTLY

To get The Trumpet to sound properly initially, you must have CC11 enabled with an external controller. However, in the beginning I got around this in Logic by recording a line, then going into Logic's Piano Roll Editor, I set CC11 to 90. Once this was engaged, I could then begin my learning.

## GETTING THE TRUMPET TO SIT IN THE MIX WELL

At this point I was able to hear what the manual meant when it said that The Trumpet was recorded in an anechoic chamber. It's a dry lifeless sound. You can hear the potential, but you have to know what to do next, and that's adding Early Reflections.

Once you begin this process, you begin hearing and understanding that the first step in shaping The Trumpet and getting it to sit in the mix well is starting by adding Early Reflections. To get this “right” you need to have several recordings of trumpets available that reflect the sound you’re trying to achieve. Going back and forth between The Trumpet and the recordings will help you get there faster.

So, in this first audio example, you hear The Trumpet as is. This is followed by five examples with Early Reflections starting at .37s working our way up to 1.0s. The ERs are part of the FORTI/SERTI package that’s an add-on to the Vienna Suite. These ERs range from large concert halls down to smaller studios where TV shows and films are recorded. They organized by room size by seconds by long, medium, and short.

As you listen, there’s a subtle change to The Trumpet as the ERs get longer. And you can hear progressively how The Trumpet’s natural beauty is brought out as longer early reflections are added.

**MP3 Example 01** (adjust your volume levels before playing):  
[The TrumpetFS.mp3](#)

My next step was in adding a Reverb Tail. I’m repeating the above example but this time I’m adding in a reverb tail unique for each ER.

1. The Trumpet as is
2. The Trumpet with a .85s RT60 (similar to Smecky Prague, Cello Studio 1)
3. The Trumpet with a .98s RT60
4. The Trumpet with a 1.30s RT60
5. The Trumpet with a 1.80s RT60
6. The Trumpet with a 2.40s RT60 (similar to Abbey Road)

**MP3 Example 02** (adjust your volume levels before playing):  
[The TrumpetFS-wRTs.mp3](#)

Next I added EQ. In FORTI/SERTI, this means I used what’s called a TILT filter. For The Trumpet, to take the edge off, I added a C3 Darker 03. I could have gone to Darker 12, but in the absence of hearing The Trumpet in context with the rest of the ensemble, Darker 03 was the best for this Insights article. Right away you can hear how the brightness is subdued from the previous examples.

1. The Trumpet as is
2. The Trumpet with a .85s RT60 and C3 Darker 03
3. The Trumpet with a .98s RT60 and C3 Darker 03
4. The Trumpet with a 1.30s RT60 and C3 Darker 03
5. The Trumpet with a 1.80s RT60 and C3 Darker 03
6. The Trumpet with a 2.40s RT60 and C3 Darker 03

**MP3 Example 03** (adjust your volume levels before playing):  
[The TrumpetFS-wRTs-EQ.mp3](#)

Now at this point, I’m well on my way to shaping my sound for The Trumpet.

Now, a word about FORTI/SERTI available through Vienna to complement the Vienna Suite. Ever since Visual Orchestration I've been very high on Ernest Cholak's (Numerical Sound) component parts approach to shaping sound and getting everyone into the same room. That's because it's also a composer's approach for doing virtual orchestral mixing since you're working with testable choices from which your ears can say yes, maybe, or no. And once you've narrowed down your sonic choices, it's much easier to make the final choice.

The component parts, as demoed here, are Early Reflections matched to room size, Reverb tails by room type and RT60s, pre-delay setting which is done within the Vienna Convolution Reverb, and finally EQ application which is handled with TILT filters. Then using the Power Pan feature in either the Vienna Suite or Vienna Ensemble, you then spatially place Sample Modeling Trumpet as desired stage left to stage right. For distance you can either use reverb for close/distance, EQ (TILT filters within FORTI/SERTI can also be used for front/back placement), or a distance positioning program like Flux/Ircam Tools SPAT or Parallax Audio's Virtual Sound Stage.

So, you have many options to shape and position The Trumpet's sound, and as a result, have it fit comfortably into the mix.

### **PROFESSIONAL ORCHESTRATION CONSIDERATION #1: UNISON LINES**

As mentioned, The Trumpet isn't just a single instrument. It's a 3-person Bb trumpet section. Thus, using the technique similar to Berlin Woodwinds, LASS Full, Vienna Dimension Brass and Strings, and Wallander Instruments, you can record three individual parts to create a unison line. The build-up that comes with putting the three different sounding instruments on the same line can be very convincing depending upon how it's edited, spatially positioned, and reverbed.

### **PROFESSIONAL ORCHESTRATION CONSIDERATION #2: 2-4 PART HARMONY**

First, you're dealing with a 3-person section. With the exception of large scale trumpet works, this is the size of the standard symphonic organization, and smaller big bands. If you need a fourth trumpet, use #1, or try out the German Trumpet on the fourth part. But the good news is that you can pull off very convincing vertical harmonies that don't sound like a Pontiac car horn. For an example, this link takes you to a quick demo I prepared of Sample Modeling Trumpets only playing triads C to F. I applied the following to all 3 parts.

1. The ERs are from FORTI/SERTI: 22\_ER\_Orch\_36\_99\_Short with an RT60 of 0.54s.
2. The Reverb Tail is from FORTI/SERTI Recital Hall 4 with a 1.14s RT60. The pre-delay, based on the ER, is 99ms.
3. The EQ is from FORTI/SERTI, a TILT Filter, C3, Darker 01

**MP3 Example 04** (adjust your volume levels before playing):

[SMT-Triads-02.mp3](#)

### **PROFESSIONAL ORCHESTRATION CONSIDERATION #3: MUTES**

Mutes give brass versatility to the nth degree. So, if you have our 70th Anniversary Edition of the *Spectrotone Instrumental Tone-Color Chart* and Henry Brant's *Textures and Timbres* you'll be able to create lots of combinations with the virtual orchestra that you never knew were possible. Using our "favorite" leit motif, here's what the Sample Modeling Trumpet mutes sound like using the Vienna Suites Hybrid Reverb 1.9s Large Chamber. You'll hear these in the following order:

1. Straight
2. Cup
3. Bucket
4. Harmon
5. Harmon with Stem

**MP3 Example 05** (adjust your volume levels before playing):

[The Trumpet-Mutes.mp3](#)

### **PROFESSIONAL ORCHESTRATION CONSIDERATION #4: DYNAMIC EQUIVALENTS**

I'm leaping ahead to bring out a benefit that requires getting the Sample Modeling Brass Collection (which are only sold direct by Sample Modeling). For those of us who arrange for various sized ensembles (including jazz and pop) and score for orchestra, we know by experience the relationship of 2 Horns at  $f = 1$  Tpt at  $f = 12$  Violins at  $f$ .

Now you can approach writing virtually with these live performance observations using Sample Modeling Brass and other combinations of orchestral sections.

### **PROFESSIONAL ORCHESTRATION CONSIDERATION #5: SPATIAL PLACEMENT**

Similar to Vienna, The Trumpet and the rest of the instruments in the series must be spatially placed. I realize that many prefer libraries where the instruments are pre-seated for you, and to be sure, that is a great benefit. That said, you can really customize your brass section because you do have to spatially place them. This means you can set up your own pop horn ensemble with rhythm section and stage position how you want them. You can do some awesome stuff with The Trumpet, the Trombone, and The Sax Brothers.

And as I've shown you here, using the Vienna Suite and FORTI/SERTI you can really shape your sound *without* having to get a degree in recording engineering!

### **THE ALL IMPORTANT MANUAL**

My goal in this Insights article has been to examine the orchestration and mixing issues with The Trumpet. However, there are performance issues that must also be addressed. Sample Modeling Trumpet is a deep instrument. And that's what it really is, an instrument. Consequently, I think it's fair to say that you have to practice with it.

Ahh. But *oh* the results.

Visit Sample Modeling's website for more information and their PDF manual on *The Trumpet*.

*This article was previously published at the SonicControl website.*