

Find out your resonance frequencies

Have Voce Vista active. Click on the Gear icon to adjust the settings. On the pop-up window, click on the left side menu on “Analyzer Settings.” Set “Average Duration for Spectrum and Pitch” to the maximum value, 2000 ms. Make sure the frequency display is linear, not log. Start by singing a vowel in a comfortable range. **Continue the same vocal tract shape/space**, but drop into fry. It is best if you do this while continuing to phonate – sing, then just drop into fry on the same breath. *If you take a breath, your larynx height might change, shifting all resonance frequencies.* You want a very slack, loose fry. Hit Stop to freeze after the spectrum stabilizes (at least two seconds). The resonance peaks should be visible in the power spectrum. Remember frequency runs low to high as you go left to right in the power spectrum. The first resonance peak will be the lowest in frequency and closest to the left. The frequency of each in Hertz can be found by moving your cursor around with your mouse until the cursor is lined up with the peak.

You can also determine the bandwidth of each resonance by noting the dB value at the peak, then going to the right and left of the peak until you see where the dB value decreases by 3 dB from the peak’s value. Note what the frequency is below and above the central peak where the dB value drops like this. Subtract the lower frequency from the higher frequency, and that is the resonance’s bandwidth in Hertz.

Now do the above procedure with the following vowels. It is best to start with more open vowels like /ae/ and /a/ and work outward towards the more close vowels. **Sing the same comfortable pitch for each singing portion.** Fill in the chart below with the resonance frequencies and bandwidth values you come up with. These will come in handy when we synthesize your voice!

Vowel	First resonance peak	Bandwidth	Second resonance peak	Bandwidth	Third resonance peak	Bandwidth
i						
I						
e						
E						
ae						
a						
o						
U						
u						