

Test Computer Sound Card with Software Audio Frequency Sweep Generator

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William Xu

I. Generate Sweep Audio Signal

Traditionally, people use audio frequency sweep generator to test audio amplifier frequency response. Fig. 1 shows one of the audio signal generators with sweep function.



Fig 1. Audio signal generators with sweep function.

Recently, however, many online software audio signal generators are available with free of charge. **Online Tone Generator** is a commonly used one; you can try it with the following link:

<http://onlinetonegenerator.com/frequency-sweep-generator.html>

At the home page, just click on **Sweep Generator** button to enter this page:

[Home](#)[Pitch Shifter](#)[Time Stretcher](#) NEW[Voice Generator](#)[Sweep Generator](#)[Instrument Tuning](#)[Subwoofer Testing](#)[Hearing Test](#)[Noise Generator](#)

Online Tone Generator

Free online frequency sweep generator.

This frequency sweep tool allows you to enter any two frequencies and a duration into the three boxes below. Once the play button is pressed, the frequency sweeper will then play a tone that begins at the first frequency and sweeps to the second frequency in the duration provided.

The sweep generator tool also enables you to set some more advanced options. You can choose the waveform to be either: sine, square, sawtooth or triangle. There is also an option to determine whether the sweep is done linearly (equal frequency changes over equal time intervals), or exponentially (higher frequencies are swept over more quickly). If you wish the tone to continue playing after the sweep is complete, leave the "continue playing tone" option checked, otherwise click it to turn this feature off. Finally, the sweep generator allows you to set a start volume and end volume. These are numbers between 1 and 100, with 1 being the quietest and 100 being the loudest. (If you do not require this functionality, you can simply leave these boxes at their default setting, which will produce an equal volume sweep.)

Please be very careful using this tool as listening to loud frequencies can cause damage to hearing or equipment. Please only listen at a comfortable volume. Please note, as this is very new technology, the frequency sweep generator is currently only compatible with the latest version of Chrome or Safari and Firefox. Internet Explorer is not currently supported.

Fig 2. Online Tone Generator software

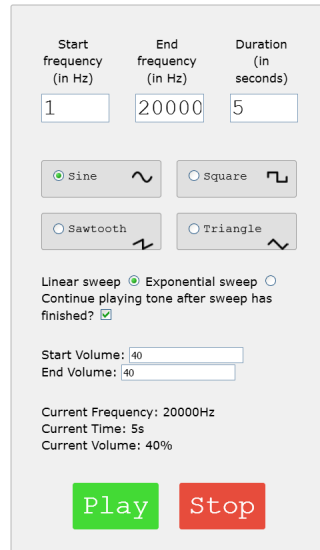


Fig 3. **Sweep Generator** window

If we setup all the parameters as Fig. 3 and click on green button **Play**, a sweep audio signal will be generated from 1 Hz to 20,000 Hz within 5 seconds. If your sound card is ready to use, you will hear the sweep signal from very low (1Hz) to very high (20,000Hz).

II. Test Your Computer Sound Card Frequency Response

1. Hardware Setup.

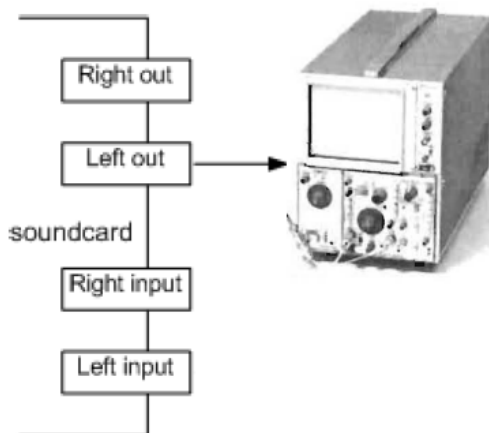


Fig 4. Test Left Channel

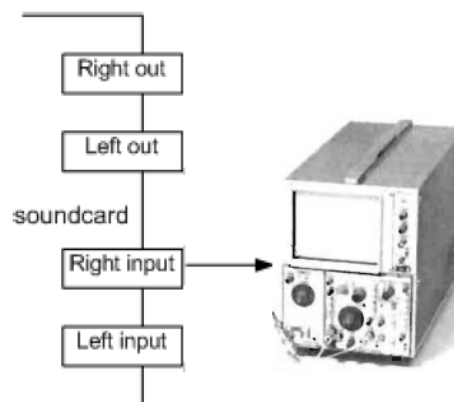


Fig 5. Test Right Channel