

USING TEST TONES

In your Embervane Test Tones ZIP file, you will find the following files:

1 kHz Test Tone @ -18 dB

200 kHz Test Tone @ -18 dB

Pink Noise @ -18 dB

White Noise @ -18 dB

Sweep 5 seconds @ -18 dB

Sweep 15 seconds @ -18 dB

Using Test Tones PDF (this file)

Using “Flat” Test Tones

A Flat Test Tone is a single frequency sine wave being played where the frequency does not change during the length of the tone file. The frequencies of the test tones included here are 200 Hz and 1,000 Hz. These test tones can be used to test how some plugins or hardware react to pure sine wave tones.

Using Noise Test Tones

A noise test tone is a recording of generated noise. Noise comes in multiple flavors, but the two provided here are the most commonly used. White noise contains all of the frequency spectrum (20 Hz – 20,000 Hz) at equal intensity. Because of psychoacoustics, our brain

will hear some of these frequencies louder than others, so you might hear white noise as higher 'pitched' than pink noise.

Pink noise is different – here the same full frequency spectrum (20 Hz – 20,000 Hz) is not presented at an equal intensity. Instead, lower frequencies are more pronounced and higher frequencies are less intense. This results in a sound that is perceived as more natural to our ears. You might hear pink noise as having more bass than white noise.

These noise files will help you test plugins or hardware to see how they would respond to a more full-spectrum sonic experience, which is closer to regular music.

Sweep Tones

The two sweep files here are exactly the same in frequency range – they are both full spectrum, starting at 20 Hz and ending at 20,000 Hz. The only difference is the amount of time that they take to get there. The 5-second file is slow enough to hear the transitions, but not so slow that you can catch the finer details that the 15-second file provides.

Some people use sweep files to test plugins and hardware, although I have not found that to be as reliable as the other tones provided. Instead, sweep tones work extremely well to give yourself a sense of your listening environment.

If you play a sweep tone and you find that some frequencies are sounding louder or quieter than others, then it means your listening environment is not as flat as it could be. This is a fast and easy test to run by simply playing the sweep file when you sit in your work position and listening for louder or quieter spots. The more dramatic the volume difference you hear, the less neutral your listening environment is.

Test tones are a great tool for getting a sense of your room, headphones, speakers, plugins and hardware. While they do not replace real music, they are more isolated. That isolation removes the distraction of a song away from listening with a diagnostic approach.