



FREE · FREQUENCY ENGINEERING

The Test Almost Everything Fails

A 10-minute check for any "binaural" track you own. Free tools. No trust required.

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EDUCATIONAL AUDIO-ENGINEERING ANALYSIS — NOT MEDICAL OR THERAPEUTIC ADVICE

You're ten minutes away from knowing more about the tracks you own than the people who sold them to you.

No gear to buy. No theory to learn first. No trust required — least of all in me. Just one test you run yourself, on your own files, and it has one unsettling habit: **most of the "binaural" audio on the market fails it.** Not "underperforms." Fails — as in, the thing they advertised physically isn't in the file.

Go grab a track. Ideally one you paid for.

Here's the only bit of theory you need, and it's the exact thing most creators of this stuff clearly don't know.

A binaural beat is built *inside your head*, out of the difference between two slightly different tones — one in your left ear, one in your right. 200 in the left, 210 in the right, and your brain makes a slow 10-cycle pulse that isn't in either tone. That difference *is* the product. (Chapter 4 walks the whole mechanism; you don't need it yet.)

Which means a real binaural track has to contain **two genuinely different signals** — left and right have to actually differ. So think about what happens if you squash the two channels down into one — sum left and right together into mono:

- If it's **really binaural**, that changes the sound. The two tones are now in one signal, bumping into each other; the smooth in-head pulse turns into a rough acoustic wobble. You can hear that something just happened.
- If it's **fake** — one signal copied onto both sides, a mono file wearing a stereo costume — then folding it to mono changes *nothing at all*, because there was never a difference to lose. Mono minus mono is the same mono.

That's the whole test. **If it sounds the same in mono, there is no binaural beat.** Not a weak one. None.

(Step-by-step with screenshots lives in Appendix B; the sequence below is complete on its own.)

1. **Get the file** — a download or an export, not a stream if you can help it.
2. **Install Audacity** — free, no account, Windows/Mac/Linux.
3. **Open your track.** You'll see two stacked waveforms: left and right.
4. **Put on headphones and listen for a minute, in stereo.** Note the character — a real beat is a gentle, regular swell under the tones. That's your "before."
5. **Sum to mono:** select everything, then *Tracks* → *Mix* → *Mix Stereo Down to Mono*.
6. **Listen to the same spot again.**

Now read your result:

- **The pulse changed, or a rough beating showed up** where the smooth swell used to be → real two-tone build. It passes *this* test. (Not every test — keep reading.)
- **Nothing changed** → there's no binaural construction in there. Whatever the label said — "528Hz binaural theta," "8D binaural money frequency" — the mechanism they charged you for isn't present. You didn't buy a weak product. You bought a **label**.

Want to *see* the fake instead of hear it? Before mixing down, split the channels, invert one, and mix them. Two identical channels cancel to dead **silence** — the visual proof that left and right were the same signal the whole time.

Less precise, still brutal: play the track through a **single phone speaker**. One speaker is one sound source, so both channels are forced to mix in the air — that's a physical mono sum. Now compare it to headphones. If it's basically the same either way — same texture, same pulse, nothing lost — the "binaural" was never there. (A *real* binaural track through one speaker loses its whole character, which, as Chapter 4 explains, is also why speakers can't deliver binaural even when it's real.)

This test is step one of the forensic audits I run on people's catalogs. One example from the sample audit in this book: a channel's flagship track, sold as "*528Hz binaural, theta entrainment*." Measured? **The file was mono**. Left and right, bit-for-bit identical. No two tones, no difference, no beat. Verdict, in the report's own words: *not binaural* — the headline claim simply absent from the product.

And that wasn't the runt of the litter. That was the *flagship*. Across the catalog, half the binaural claims died at this first gate — before we ever got to wrong frequencies, missing ramps, or fake subliminals. Every one of them had the same thing in common with yours, if yours just failed: the seller was betting nobody would ever check.

You just checked. Welcome to the smallest, best-armed group of customers in this whole market.

This book holds itself to the same standard it holds the gurus to, so let me be exact.

If your track failed: the verdict is airtight. No difference between the channels means no binaural beat — that's physics, not opinion. The headline claim is false at the level of the file.

If your track passed: you've proven there's a real two-tone build in there. You have *not* yet proven the beat matches the band on the label (people sell "6Hz theta" tracks that measure at 11.2 — a different band entirely; Chapter 5 shows you that), that it ramps properly (Chapter 8), that any "subliminal" actually exists at a level you could perceive (Chapter 9), or that the frequency *claims* mean anything at all (Chapter 7). A pass here is a pulse, not a clean bill of health. The full self-audit — five checks, all free — is Chapter 11.

One more honest note: a track can flunk this test and still be a perfectly nice piece of ambient music. Nothing here says your relaxing sounds aren't relaxing. What failed is the *claim* — the specific mechanism you paid extra for. Whether that distinction matters is Chapter 3's question, and I think the answer is more serious than "no harm done."

This is Chapter 2 of 14.

The rest of **Headphones Required: The Honest Guide to Frequency Audio** teaches you the whole craft — how a correct session is really built, how to spot every myth, and how to audit any track on all five dimensions. → **[book link]**

Rather have your whole library done forensically, in a documented report? That's **The Frequency Audit**. Same checklist, applied without mercy. → **[audit link]**