SoulTuner for iOS User Guide

This guide explains the features and usage of SoulTuner.

Guide version: 1.1.0



This software is dedicated to my good friends who have been there all along.

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Binaural Audio

Binaural audio uses slightly different tones delivered separately to each ear through stereo headphones, creating the perception of a rhythmic beat based on the difference between their frequencies. Its therapeutic concept is that this gentle auditory stimulation may influence brain activity and encourage relaxation, focused attention, or readiness for sleep, often alongside calming music or ambient sounds. Some studies suggest benefits for anxiety and pain, but findings vary, and claims that specific beat frequencies reliably synchronize brainwaves or produce particular mental states remain unproven. Binaural audio is therefore best understood as a potential complement to relaxation and wellness practices rather than an established medical treatment.

Terminology

Here are some terms used in SoulTuner:

Drone — a sound that plays continuously around a given pitch
Binaural — audio with two distinct sides, one for each ear
Stereo — audio with two sides but shared by both ears
Sofreggio — a set of frequencies that are said to have special properties
Beat — the pulsing that occurs when two close frequencies interact
Hz — Hertz is a term used to mean "cycles per second" or frequency
Octave — When you double or halve a frequency it registers as the same note, just higher or lower, like a repeating pattern on a piano
Pulse — a lower frequency repeating pattern that creates a mental rhythm
Noise — a type of background sound produced from random frequencies

Overview

SoulTuner app for iOS is meant to be a simple audio utility that provides options for controlling various audio drones and pulses.

🎧 For the Binaural Effect, make sure to listen with **headphones** so that each ear gets the exact audio meant for it since playing on speakers both ears can hear both sides. All the other stereo audio features like harmony drones, ambient noise and pulse are fine with speakers.

SoulTuner works on both iPhones and iPads.

You can run SoulTuner in the background and even with your lock screen and if you use the timer option your device will go to sleep after the timer. Be aware of battery usage when running in background and optimally place on a charger if using as a sleep aid.

The bottom of the app shows a set of function selectors and a master **Play/Pause** button.



👁 Visualizer and settings
🎧 Binaural settings
〰 Harmony and Noise settings
⎍ Pulse and Timer settings

ⓘ The **Info Button** up top leads to a brief explanation and simple in-app instructions as well as a master tuning setting.

Uses for SoulTuner

You may find other uses, but here are some starter ideas:

- Relaxation
- Meditation
- Focus
- Sleep aid
- Record harmony drones
- Sound tracks for meditative videos
- Music Theory Education and Learning
- Sound Therapy

Visualizer

The Visualizers pulse in sync to the binaural beats you hear but are deliberately simple. The visualizers will do different things depending on which and how many audio sources you have running at the time. For example, turning on Pulse will cause the Orbit visualizer to gradually spin in 3D based on the speed of the pulse and the flow petals in Mandala to pulse.

Select the **Visualizer Type** you want to try.

Select **Intensity** from Calm to Vivid to bring in more color.

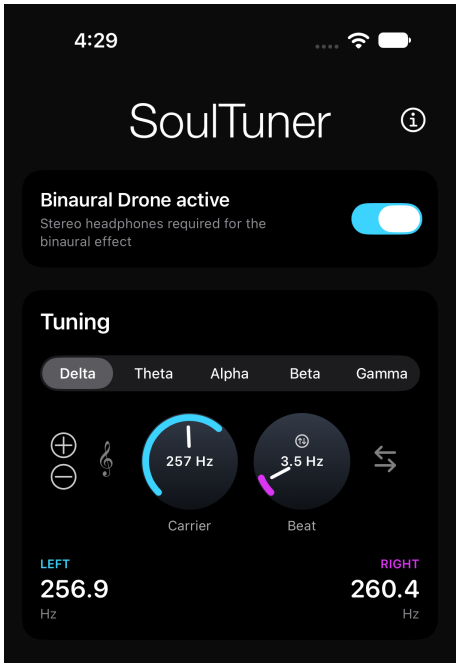
Swipe your finger left or right to change the **Base Color** of the visualizers.

Double tap the screen to **hide the controls** for a more pure experience and repeat to get back to the controls.



Binaural Settings

Use the **Binaural Drone Switch** to activate/deactivate the binaural effect.



Use the **Tuning** section to control the **Carrier** and the **Beat** frequencies. Double tap these knobs for more options.

The **Beat Type Selector** uses common names for beat categories based on the following ranges:

- **Delta**: below 4 Hz
- **Theta**: 4 to <8 Hz
- **Alpha**: 8 to <13 Hz
- **Beta**: 13 to <30 Hz
- **Gamma**: 30 Hz and above

If you adjust the Beat value manually, it will select the appropriate value automatically, otherwise selecting one goes to its default value.

Octave buttons + - double or halve the current frequency or note maintaining its musical identity.

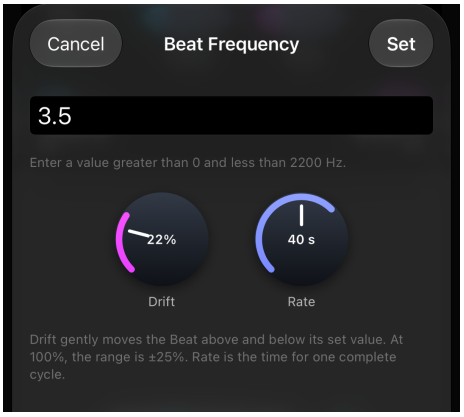


Treble clef button switches to Musical Note Mode where frequencies are replaced with musical notes so you can match other instruments. The **tuning** system is controlled in the Info Panel.

The **Left/Right** arrow button swaps the content between left ear and right ear and you can also see the Left/Right labels swap values.

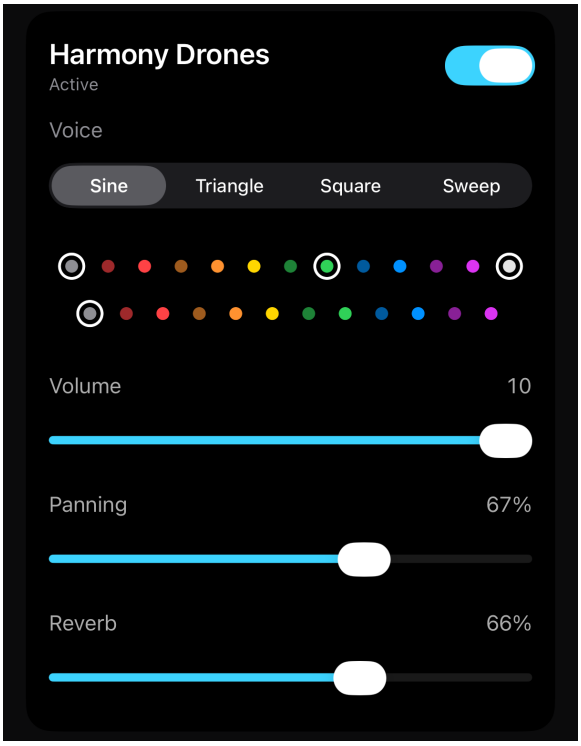
The **Carrier Knob** is used to tune in frequencies and notes. Slide your finger on knob to turn it. You can double-tap on a knob to either enter a value or select from common choices presented.

The **Beat Knob** is used to adjust the interference difference between the two waves and double-tap allows manual entry. If beat says 4, you will hear 4 pulses per second. Double tap the Beat knob to edit the beat manually or add drift.



You can use **Drift Controls** to make the beat frequency gradually swing above and below the selected value over time which keeps the mind engaged. When Drift is active, you will see ⇅ appear on the Beat knob. Set Drift to zero to disable it.

Harmony Drones



Harmony drones operate in conjunction with the Carrier Frequency so when you change that, the harmony voices follow.

Set **Drone Voice** to whatever suits you and likely we will add more options later.

Use the Harmony Selector to choose related notes where slightly darker means minor interval:

Root	white/gray
2nds	reds
3rds	oranges
4th	yellow
5ths	greens
6ths	blues
7ths	violets

The most harmonious intervals with the binaural frequency are the octaves and perfect fifths (bright green). Keep in mind the pure white is unison with your binaural carrier so it can effect the binaural strength balance.

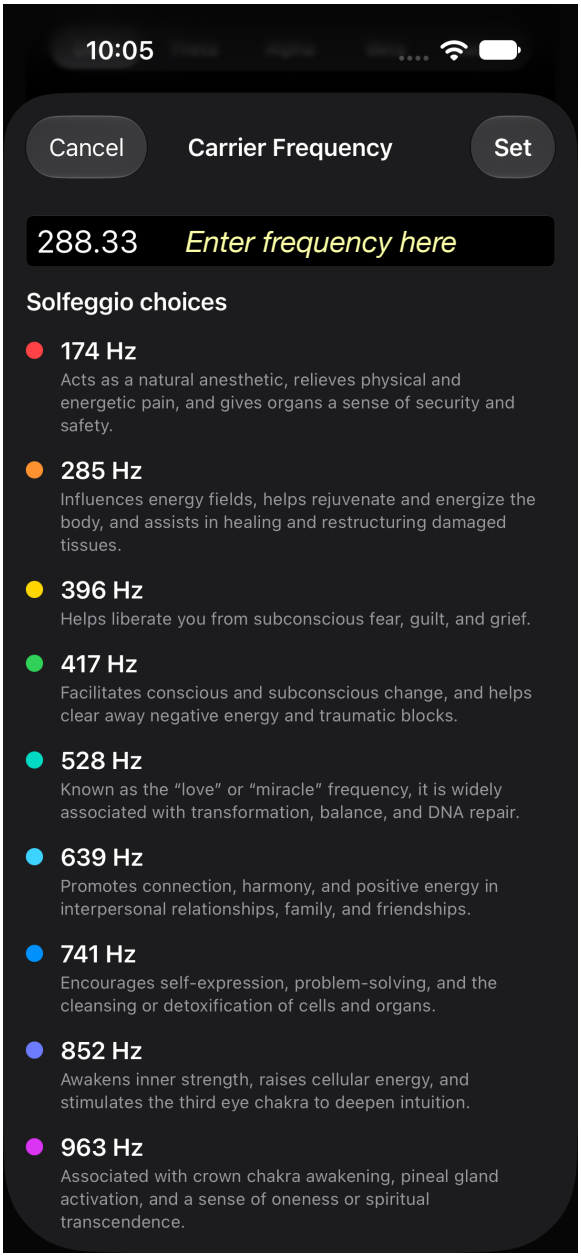
Volume controls the Harmony voices so you can make them more or less prevalent.

Panning controls how much harmony drones drift between left and right ears.

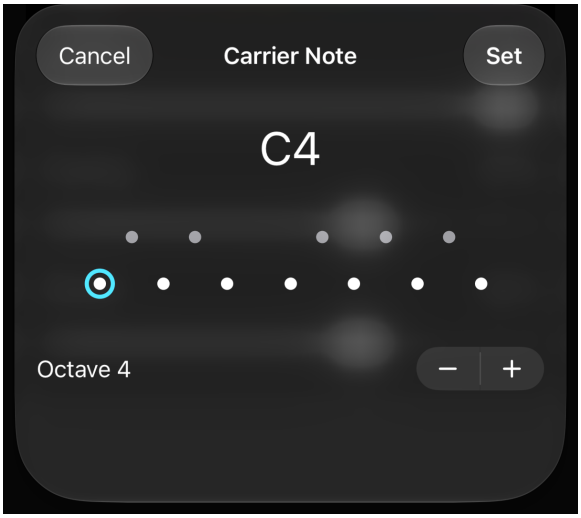
Reverb adds a little bit of space and dimension to harmony voices. It doesn't apply to the Binaural voices because those have to remain pure and unadulterated.

Frequency Helpers

Depending on Music Mode, double-tapping the Carrier Knob brings up these helper dialogs where you can either select a **note** and **octave** from the piano control or **enter a frequency** manually or select one of the **stock frequencies**.

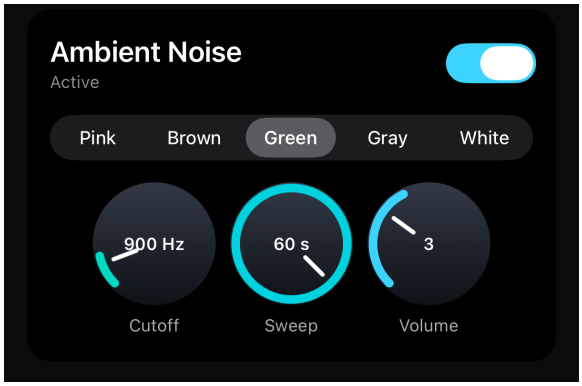


Frequency Selector



Note and Octave Selector

Ambient Noise



Use this section to create a friendly sort of background sound that can both mask out other sounds but relax you. Find the type of noise that works best from these choices:

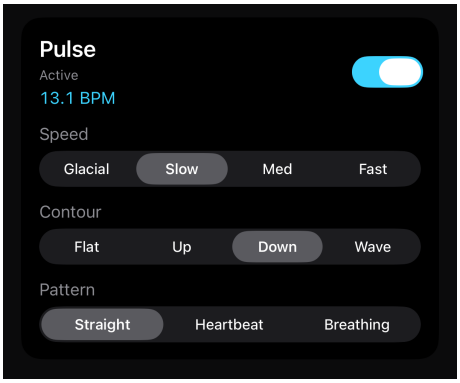
- **Pink** Fuller and less sharp than white noise, somewhat like steady rain
- **Brown** Deep rumble or low rushing sound, like distant surf
- **Green** A rounded wash, often described as waterfall-like
- **Gray** A perceptually balanced wash; depends on the hearing model and playback level
- **White** Bright, steady hiss, like radio static or spraying water

Cutoff lets you set exactly where it cuts off high frequencies

Sweep gives a nice effect of slowly changing the frequency profile to sound almost like waves on a beach.

Volume is volume.

Pulse

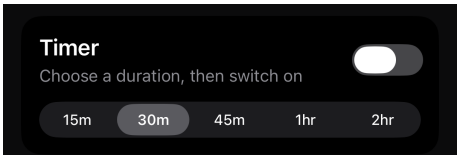


Creates a slow rhythmic low frequency pulse. The tone of the pulse is related to the Carrier frequency and the **Speed** is always relative to the Beat frequency so everything stays in sync.

Contour controls the internal motion of the individual pulses.

Pattern controls how the contours are used and the special pattern for Breathing moves between Up for inhale, Flat for hold and Down for exhale so overrides contour choice.

Timer



Use this to automatically turn off all voices after an elapsed time, even if your phone is locked.

Interesting Frequencies

The following list is what is said by various proponents of Sound Therapy to be beneficial frequencies worth experimenting with. We can't confirm this but research and anecdotal evidence points to something interesting going on.

Solfeggio Frequencies

These come from ancient sources including Tibetan and Gregorian chants.

Frequency	Common Benefit
174 Hz	Grounding, comfort, sense of security
285 Hz	Physical and energetic restoration
396 Hz	Releasing fear, guilt, limiting beliefs
417 Hz	Supporting change and transformation
528 Hz	Healing, positive transformation, "love frequency"
639 Hz	Relationships, connection, communication
741 Hz	Clarity, self-expression, mental cleansing
852 Hz	Intuition, inner wisdom, spiritual awareness
963 Hz	Unity, higher consciousness, divine connection
1074 Hz	Expanded consciousness and spiritual exploration

Angel Frequencies

The concept of Angel Frequencies is associated with spiritual and metaphysical beliefs, particularly in numerology and angelic symbolism.

Frequency	Common Benefit
111 Hz	New beginnings, intuition
222 Hz	Harmony, balance

333 Hz	Guidance, creativity
444 Hz	Protection, stability
555 Hz	Change and transformation
666 Hz	Reflection and realignment
777 Hz	Spiritual growth
888 Hz	Abundance and prosperity
999 Hz	Completion and release
1111 Hz	Spiritual awakening
2222 Hz	Harmony and partnerships
3333 Hz	Expansion and creativity

Planetary Frequencies

The idea of assigning frequencies to planets is rooted in the work of Swiss mathematician Hans Cousto, who calculated planetary tones by converting orbital periods into audible frequencies using the *law of octaves*. These frequencies are widely used in sound therapy and meditation as tools for cosmic attunement, though they are not scientifically validated as having specific healing effects.

Frequency	**Planetary Tone**	**Common Benefit**
126.22 Hz	Sun	Vitality, confidence
136.10 Hz	Earth Year (OM)	Centering, meditation
140.25 Hz	Pluto	Transformation
141.27 Hz	Mercury	Communication
144.72 Hz	Mars	Action, motivation

147.85 Hz	Saturn	Discipline, structure
172.06 Hz	Platonic Year	Deep contemplation
183.58 Hz	Jupiter	Growth, abundance
194.18 Hz	Earth Day	Grounding
207.36 Hz	Uranus	Innovation
210.42 Hz	Moon	Emotional balance
211.44 Hz	Neptune	Intuition, dreams
221.23 Hz	Venus	Love, harmony

Schumann Resonance: 7.83 Hz (Earth's Heartbeat)
The Schumann Resonance is a set of spectrum peaks in the extremely low-frequency (ELF) portion of the Earth's electromagnetic field. The fundamental frequency is around 7.83 Hz, often referred to as the Earth's heartbeat. The Schumann Resonance aligns closely with the frequency range of human brain waves during states of relaxation and meditation. Scientific evidence supporting specific health benefits remains limited, but the concept has gained popularity in holistic health communities.

110 Hz Healing Frequency
The 110 Hz frequency holds a special place in sound healing, blending ancient practices with modern scientific validation. This low frequency aligns with the average pitch of the male voice, fostering a grounding effect in listeners. Ancient sites like Malta's Hypogeum were constructed to resonate with 110 Hz, amplifying its meditative qualities during rituals. Studies suggest that 110 Hz stimulates the prefrontal cortex, supporting emotional regulation and relaxation. This is an A in the A440 tuning system too.

432 Hz Foundation Frequency
This is also said to be a biologically resonant healing frequency which also corresponds to an A note in the alternate 432 tuning system commonly used by orchestras.