

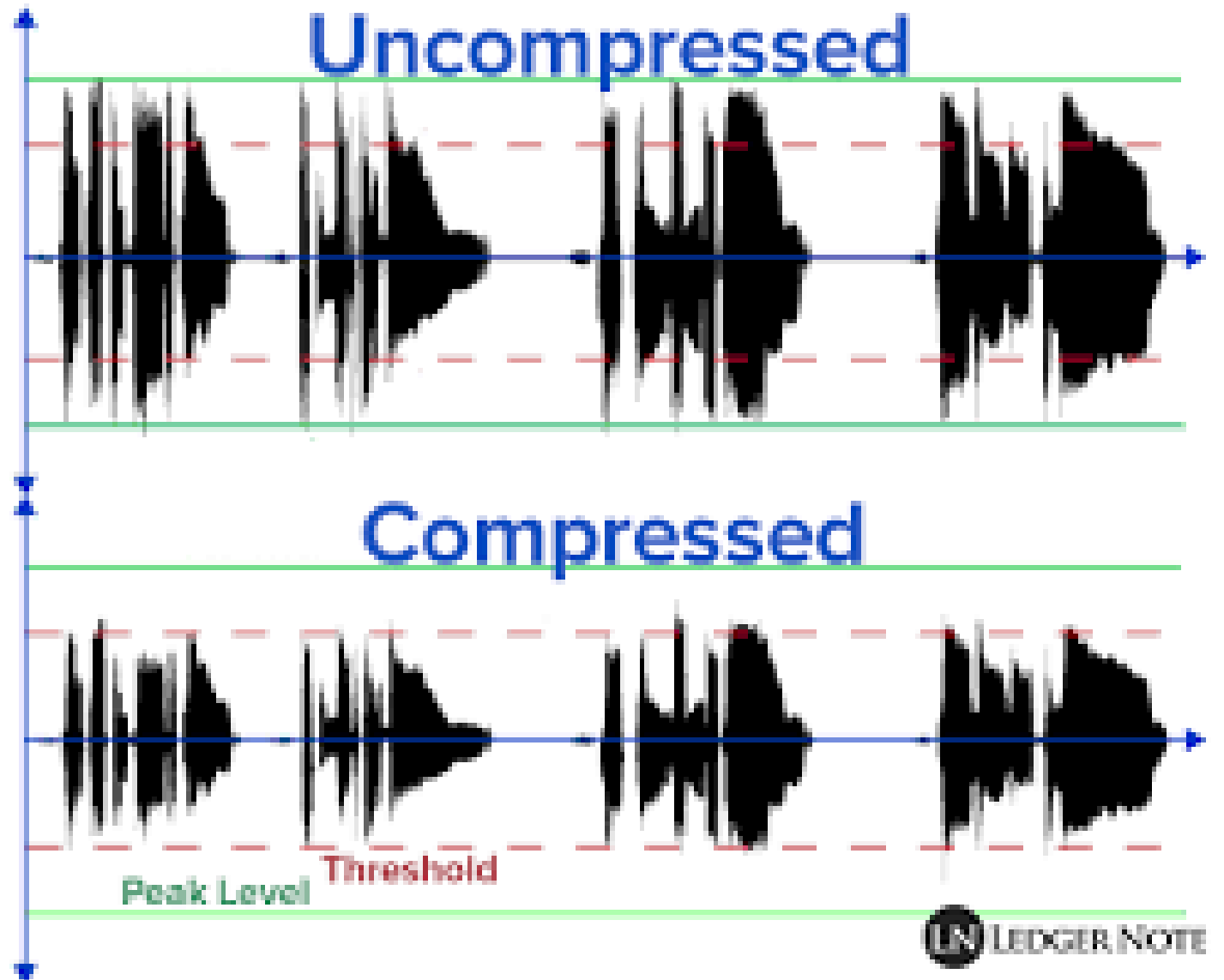
FINE ARTS MUSIC

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CUENCA

HOW TO COMPRESS A DRUMSET

WHAT IS COMPRESSION?

Dynamic range compression (DRC) or simply compression is an audio signal processing operation that reduces the volume of loud sounds or amplifies quiet sounds, thus reducing or compressing an audio signal's dynamic range. This strategy is commonly used in sound recording, broadcasting, reproduction and live sound reinforcement.



Audio compression basics

Compressors and limiters are used to reduce dynamic range (the difference between the quietest and loudest volume of an instrument, part or piece of music) Compression can be used to subtly massage a track to make it more natural sounding and intelligible without adding distortion, resulting in a song that's more “comfortable” to listen to. But over-compressing your music can really squeeze the life out of it. So you will have to really know and have experience when compressing.



HOW TO COMPRESS A DRUMSET

Tip #1: Slow Down The Attack Time: The attack control will determine how much punch the compressor will add or remove on your drums.

Tip #2: Set The Release Correctly: This approach will add volume and density to your drums by bringing up low-level details, like the decay of the drum hits and the room ambience.

Tip #3: Compress In Stages: For the best results, apply several “coats,” or stages, of compression.

Tip #4: Use Parallel Compression: Parallel compression can add energy and intensity to your drum tracks.

Tip #5: Get Rid Of The Bleed: If you apply compression to the drums, you often bring out the bleed too — which can easily make your drums sound messy and amateur.

Tip #6: Use Your Compressor’s High-Pass Filter: When you’re compressing the drums as a group, sometimes the kick can trigger the compressor more than the rest of the drums do. When the kick drum hits, the compressor will often kick in (no pun intended) aggressively and the entire drum group will dip noticeably in volume.

LIMITERS AND GATES

WHAT ARE LIMITERS USED FOR?

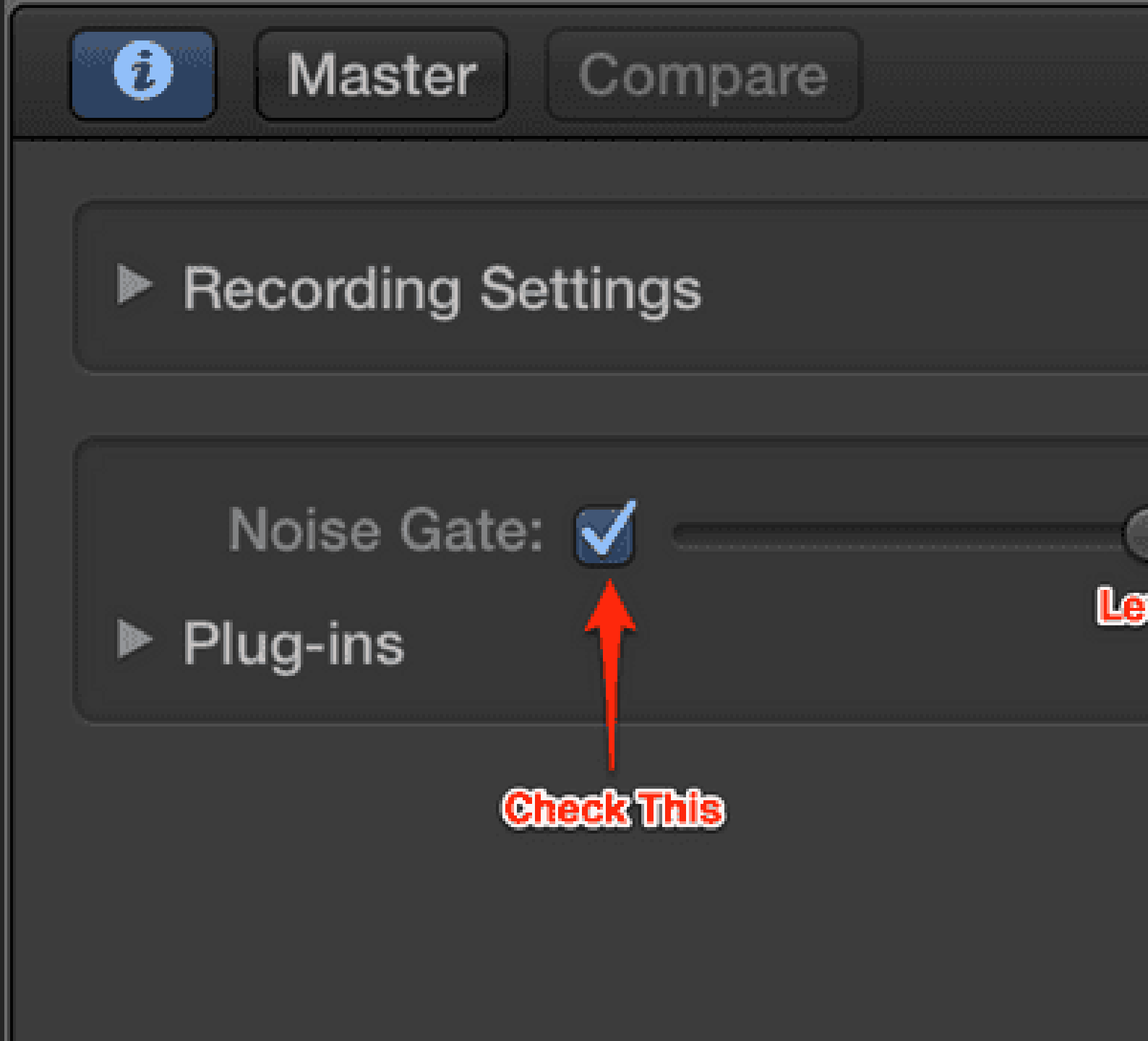
Limiters In Mixing

As a creative tool, a limiter can **boost the perceived volume of a certain sound**. It can also be used to restrain unpredictable effects or automated sounds that have too much dynamic range. You'd simply be using the Limiter as a heavy-duty Compressor (a Compressor with a very high ratio).



GATES

A noise gate or gate is a **type of audio processor that is used to control excess noise in an audio signal**. Simply put, when used correctly a gate will block all unwanted noise. Noise gates come in the form of software or hardware.



Programación de Baterías Logic Pro

What is Logic Pro

Logic Pro is an audio editing software application for audio and MIDI tracks that works only on the macOS platform. Originally created by C-Lab, it became an Apple product when it was purchased in 2002. A shortened version, Logic Express, was also available through version 9.



Programación de Baterías Logic Pro

How to program batteries in logic pro?

<https://www.youtube.com/watch?v=W6Alm9O9dxc>

Manufacturer site. BATTERY 4 is the cutting-edge drum sampler designed for the 21st century. It combines a supercharged library, tailor-made for electronic and hip hop music, with a radically-intuitive workflow that keeps the focus on creativity.

Right click on the parameter you want to automate in battery and choose "Enable Host Automation". Then in Live click "configure" in the Plugin-Device Window and briefly move/change the parameter inside the battery window. Awesome, thanks for the quick response!



WHAT IS EQ

to adjust or correct the frequency characteristics of (an electronic signal) by restoring to their original level high frequencies that have been attenuated

An equalizer is a device that modifies the level of the frequency content of the signal it processes. To do this, it modifies the amplitudes of its Fourier coefficients, which translates into different levels for each frequency.



HOW TO EQ GUITAR AND DRUMS

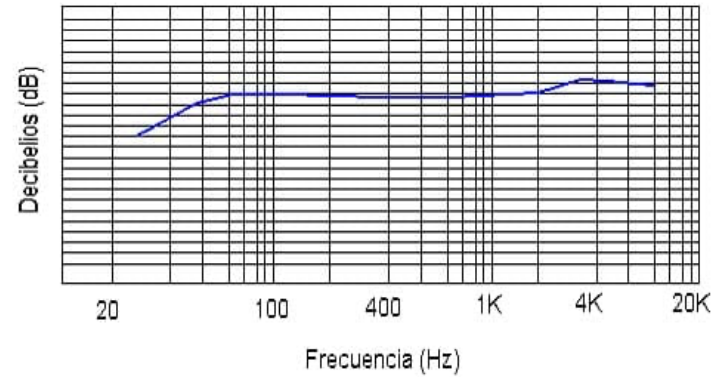
There are equipment such as HIFI sound systems that integrate equalization presets or basic equalizers so that you can adjust the frequencies of your system according to your tastes, but if your sound equipment does not have this function, then you must install an external equalizer, how, for example, in the case of passive car speakers.

Although the correct thing to do should be to equalize the speakers to reproduce a flat sound, we always tend to perform the famous smile equalization.

According to the study of the isophonic curves of Fletcher and Munson, this is because the human ear is capable of hearing low sounds, from 20hz, to high sounds, 20,000hz, but not flat. (Although all sounds have the same intensity in decibels).

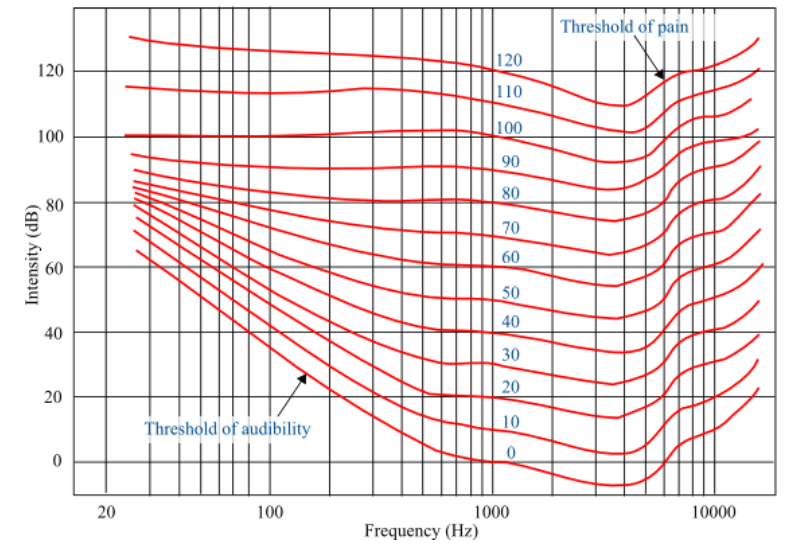
Types of EQ

Flat Sound



Smile Equalization

Fletcher and Munson curve



FILTERS

The equalization filters are essential to make the adjustments in the equalizer and understand how to equalize a sound system correctly, thus achieving a better sound quality in your professional speakers.

Hi Pass Filter

This type of filter allows the passage of high frequencies (Treble), starting from the selected cutoff frequency.

Low Pass Filter

This type of filter allows the low frequencies (Bass) to pass through, starting from the selected cutoff frequency.

Band pass filter

This type of filter is the sum of a high pass filter and a low pass filter, since it only allows a range of "mid or central" frequencies to pass through.

FILTERS

Notch filter

This type of filter allows the increase or decrease of one or more frequencies with a very narrow Q factor.



BIBLIOGRAFIA

<https://behindthespeakers.com/how-to-compress-drums/>

<https://www.soundonsound.com/techniques/compression-fashion-drum-sound-you-want>

https://en.wikipedia.org/wiki/Dynamic_range#:~:text=orders%20of%20magnitude.-,Music,sound%20less%20exciting%20or%20live.

<https://www.armadamusic.com/university/music-production-articles/how-to-use-limiters-limiting-explained>

https://es.wikipedia.org/wiki/Logic_Pro