

Research Folder

Albini, S. (1993) *The Problem With Music*, Maximum Rock 'n' Roll Issue #133, {Online} Available: <http://www.mercenary.com/probwitmusby.html> {Accessed: 06/05/2010 }

*"The band is now 1/4 of the way through its contract, has made the music industry more than 3 million dollars richer, but is in the hole \$14,000 on royalties. The band members have each earned about 1/3 as much as they would working at a 7-11, but they got to ride in a tour bus for a month. The next album will be about the same, except that the record company will insist they spend more time and money on it. Since the previous one never "recouped," the band will have no leverage, and will oblige. The next tour will be about the same, except the merchandising advance will have already been paid, and the band, strangely enough, won't have earned any royalties from their T-shirts yet. Maybe the T-shirt guys have figured out how to count money like record company guys. Some of your friends are probably already this f***d."*

It's quite clear from this article that there is no advantage in signing to a Major label other than the tour and merchandise support they can provide. However the huge weighting in their contracts can be disastrous for music; this article explains pretty accurately why working independently was chosen rather than trying to "court a deal".

Squeezing the show – Ben Coe

Coe, B. (2010) *Squeezing the Show*, The Artist Farm {electronic resource} Available: <http://theartistfarm.com/Publications/SqueezingTheShow.pdf> {Accessed 16/02/2010}

"use Facebook ads to target people of a specific age range, location (city or state), and interest group. These ads can be a great way to find new fans in an area to help push ticket sales, and can be great marketing for all types of goods. You can either come up with a ticket sale promotion to advertise or you can simply make an ad to reinforce the artist name and have it click through to the event detail page of that particular show. These ads are cheap too – I recommend the pay per click billing option (rather than the pay per impression) for most scenarios. It is also possible to dictate the maximum amount you would like to spend on a daily basis."

This PDF was one of the most helpful in the research for the independent release and covers many diverse topics in a concise manner.

Hammond (2010) *An Introduction to Drawbars*, Hammond.com {Online} Available: http://www.hammond-organ.com/product_support/drawbars.htm {Accessed: 05/01/2010}

"To take the fullest advantage of the harmonic Drawbars of the Hammond Organ, it is necessary to understand what "music" really is. All sounds, musical or otherwise are created by sending impulses or vibrations through the air. These are "felt" in the sensitive mechanism of our ears - a process we call "hearing". While you may think that you hear a single individual sound, actually each sound, or musical note, consists of a "fundamental" or basic tone, and a number of "harmonics" or overtones - the latter being different when the same note is played on different instruments."

For instance, when you play "A" above middle "C" on any instrument - organ, piano, violin, trumpet, or any other - you are creating a vibration at the rate of 440 impulses per second, provided of course that the instrument is in proper tune. This is known as the "fundamental" of this "A". However, the harmonics or overtones which accompany this fundamental of "A" on the piano would be quite different from those you would hear if you played the same note on, say, a violin or a trumpet. This difference in harmonic structure is what distinguishes the sound of a piano from that of a violin or another instrument, and is created by a combination of differences in the materials and shape of the instrument, and the manner of playing."

A very interesting resource on how the drawbars work on Hammond organs work, this proved useful in the research in mixing NFC.

Hongkiat.com (2010) *"Call to Action" Buttons: Guidelines, Best Practices and Examples* {Online} Available: <http://www.hongkiat.com/blog/call-to-action-buttons-guidelines-best-practices-and-examples/> {Accessed 28/03/2010}

"You want visitors on your site to carry out the desired actions with as little thought as possible. While you don't want to deceive your visitors, the more opportunities you give them to stop and consider what they're doing, the more opportunities you're giving them to say "no".

You want your buttons to give them the impression that they need to act right away. You want to encourage them to make their decision immediately, on the spur of the moment. While this won't work for every call to action button (especially those to purchase high-ticket items), for low-cost or free actions, having visitors click with little forethought is desirable."

This article featured a lot of relevant practices in web design and particularly the psychology behind many practices of good design.

Jordain, R. (2002) *Music the Brain and Ecstasy – How music captures our imagination*, Harper Perennial London.

"The rule about using mostly contiguous tones is particularly interesting. Research has found that this principle is observed in all kinds of melodies. Typically, about half of all melody notes are adjacent and another third fall within three of four half-steps (a minor or major third). This demonstrate that successful melodies rely on a sense of line, which is to say that contour always plays an important part in their perception."

This is a truly fascinating book on music and how the brain perceives it on a fundamental level, it has played a very important part in forming the authors current philosophy towards music, recording and mixing.

Kats, B. (2006) *Mastering Audio - The Art and the Science*, Focal Press UK.

"MS EQ. We can accomplish a lot by manipulating the M and S signals with equalisation. Let's take our stereo recording with weak centred vocalist, encode it into MS and apply separate equalisation to the M and S channels. Since M channel has most of the vocal we can raise the vocal slightly by raising (for example) the 250 Hz range, and perhaps also the presence range (5khz, for example) in just the M channel this brings up the centre vocal with little effect on the other instruments and doesn't affect the stereo separation as much as if we had raised the M/S ratio of the entire spectrum".

Although a mastering section was not completed (as discussed with project supervisor) a decent amount of research went into preparing to do so. This book provides a very detailed explanation of the mastering process, its tools and how to use them; this research was not wasted providing useful for the mix stages.

It's Like Cracking a Safe

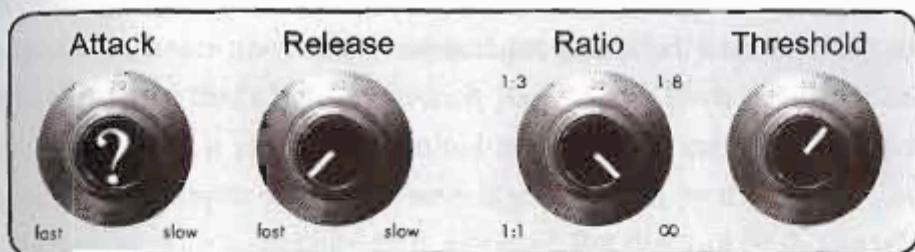
Compressors have four basic knobs (parameters) and the key to classy compression is as simple as the order in which you reach out and focus on adjusting those knobs. When you get the sequence right, you'll hear more clearly the effect of each parameter – thereby arriving at a truer and more musical setting. The compressor's combination lock has four tumblers. Adjusting them in a special order also prevents you from returning to a previously adjusted control. Don't you hate it when you're happy with the Release time until you fiddle with the Attack? They affect each other when adjusted randomly or out-of-sequence. Chasing your tail is about to become a thing of the past. Like cracking any combination lock, once a tumbler falls into place, you need not return to it. Each step represents decisive progress.

Getting Started (*Temporary Settings*)

To crack this combination, you will need to set all the controls to a temporary setting while you focus on one parameter at a time. Once the first one is set, that tumbler falls into place, leaving three more to crack. Focus on the next one – listen – adjust – and tumbler number two falls into place and so forth. Approach this safe-cracking exercise in a different order and you will arrive at a different result.

- Attack to anywhere
- Release to minimum
- Ratio to maximum
- Threshold to sensitive

1. Attack

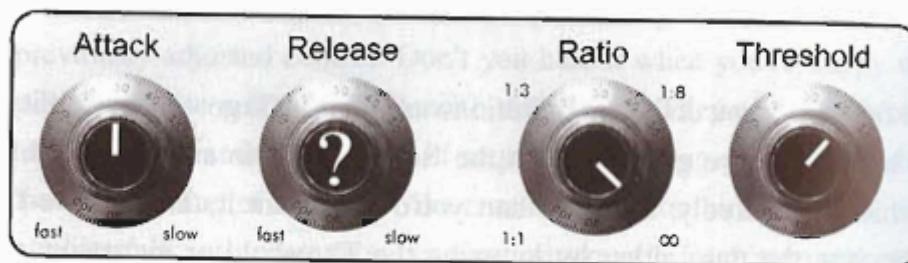


The first thing you do is set the Ratio to as high as it'll go – 20:1, infinity... the highest you've got. Next, set the Release time to as fast as it'll go – which, admittedly, is faster than you'd ever want it. Then, drive the audio into the unit, either by lowering the Threshold or increasing the Input (depends on the unit), and listen while you adjust only the Attack time. Listen to the Attack – the leading edge of the sound – while rolling the Attack knob. Try to ignore the horrible pumping caused by the after effects of the fast Release – just listen to the Attack. (The ultra-fast Release lets you hear far more individual attacks than a slow setting.) Listen to the front edge of the sound. Notice how the Attack knob affects the size of the hit. So, if it's a snare drum that you're compressing, and the Attack is on a fast setting, it's as though the drumstick is really skinny.

Alternatively, if the Attack is on a slow setting, it's as if the stick is much thicker. Likewise, if it's an acoustic guitar and the Attack is on a fast setting, you're just hearing the finger nail come through as it hits the string; while if the Attack is slow, you might get the whole strum through – the entire transient bypasses the compressor. So, forget all the after effects, just listen to the thickness of the Attack until it's 'tasty' – you might want it thin, you might want it thick, just think aesthetics. And

then, because the ratio is so high and the release is so fast, you'll be able to hear the effect of the Attack time much clearer than if they were on any other setting. This technique effectively 'turns your ears up' to heighten your perception of the Attack time control.

2. Release



The second step is to play with the Release time. 'Release' controls the speed at which the sound glides back at you after being punched away. The trick is to get that speed to become a musical component of the sound. You might ask, 'Do you mean in time with the music?' or 'With fast music do I set it faster than I would for a slow ballad?' Perhaps, but certainly don't think, 'I only want it fast because I want to compress the crap out of this' – don't do that. In fact, make it as slow as you can, so that the compression envelope 'bounces back' to reinforce or establish the groove of the music. Remember, any dynamic movement in a song affects the groove, and compressor/limiters are no exception. (Whether the singer is moving back and forth from their mic, or you're madly wiggling a fader, or a compressor is pushing and pulling on a sound, the groove is at risk of being enhanced or destroyed by dynamic movement.) So, don't set your Release to a fast setting just because you want to hear something buried behind the sound. Forget that. There are bigger fish to

fry. You're already compressing a little bit, so these background sounds will come forward anyway. Instead, you want to think, 'How slow can I get it while maintaining some control?', because the power in the groove is really a slower-moving, subliminal yet powerful wave – it's not an ultra-fast thing that's there to crunch your sound. Even in a frantically fast-paced tune, a slower, subliminal undercurrent carries most of the power. For example, you might have it so slow that by the time the next hit comes along it's not quite fully released. But that's okay. A formulaic approach might intellectually tell you that it has to be fully released before the next hit, but that's more math and less groove.

Listen to the Release. Feel the way it glides or bounces back at you and there will be a point where you sense that this bounce-back is kind of like a swing – almost like someone swinging from a rope in a tyre in groove with the tune. It doesn't have to be perfectly in time, because a groove – as anyone who teaches music will tell you – should *keep* time, but should not necessarily *play* the time. Never play the metronome. Never play the conductor's baton. So, don't just make it a quarter of a beat or whatever, just look for that groove, and that's your release time. Make the rush of the Release a musical component that pushes you into the next beat without pre-empting the beat. Let the musician hit you while the pressure is still rising instead of letting the compressor finish its swing – dead air – lifeless moment... no good. Allow the compressor to push the sound towards you until the music makes its next statement.

If, however, all you care about is maximum volume (no matter how detrimental to the groove that might be), then ignore this last paragraph and set the Release to 'maximum irritation'! But I must add that if you aim to make the product likeable (extremely groovy, for example),

This book covers many aspects of recording and mixing and includes many techniques, such as the above method of setting a compressor, that are invaluable.