

GT134

Session Secret

Compressor

The compressor is a bit of a misunderstood stomp box. It's not like the Turbo-Mega-Distortion that does what it says on the tin; it's a bit more subtle than that. Dario Cortese tries to unravel some of its dark secrets...

Welcome to the new series about session work. Over the next few months we will talk about effects and how, where and when to use them. This month we're gonna talk about one of the most important effects: the compressor.

Put simply, the compressor restricts the overall dynamic range of the guitar; it limits the variation between the loudest and the softest sounds.

There are basically two types of compressor; the stomp box variety or the rack unit (and most modeling units mimic these two broad types of unit). Both work in exactly in the same way but have different characteristics and usages.

The pedal unit usually comes with only two knobs: 'sustain' and 'level', while a few models have an additional 'attack' knob. The sustain knob controls the amount of compression, the attack knob controls how quickly the pedal starts to compress, whereas the level controls the output volume.

You can use this type of compressor in two different places of the effects chain; both produce a different tone characteristic.

The first, and most common placement, is first (or second if you are using a buffer pedal) in the chain. With the compressor in this position you'll see that it doesn't only compress the signal but it also slightly changes the sound of the guitar. Some players also use this position to boost and saturate the first valve of their amp (usually setting the level up to the max). With the compressor in this position you can get loads of different sounds, from the snappy country tone of players such as Brent Mason and Keith Urban, to the squashed funk tones of Eddie Hazel, Nile Rodgers and John Frusciante. With a distorted amp setting it produces a long smooth tone, great for shredding!

The second placement would be in the effects loop of the amp, again at the beginning of the chain. It may not produce the best in terms of signal-to-noise ratio, but it's been used by many guitarists; Andy Summer for one. If what you need is to just keep the volume even, without changing too much of the tone, then this is the right position for you!

The rack unit will usually have more controls: threshold, ratio, attack and output gain. The threshold controls at which level the compressor starts to work; it's expressed in decibels, abbreviated dBs. For instance, if you set your compressor to -30dB, the compressor will start to work when the signal is more the -30dB. If you play quiet, let's say at -40dB, the compressor won't work. The ratio controls the amount of compression once the threshold has been exceeded. For instance: if you set it to 2:1, then for every 2dB in excess of the threshold, there will be a 1dB increase in the output level. The attack knob works in the same way as the floor pedal but in the rack unit will be expressed in milliseconds, abbreviated ms. The output gain controls the final output level.

This is the type of compressor you'll see in any studio. With the newer models, they can be placed anywhere including the effects loop, but most commonly they are used with a mixer and PA system. This kind of compressor has been used by most of the session players (Larry Carlton, Dann Huff, etc) for clean arpeggios or solos, keeping a bit of the dynamic in the sound but avoiding overloads and feedback, etc.

When working with the compressor keep in mind a couple of general rules. Don't use the compressor unless you really need to; avoid over-compressing your guitar tone unless that's the effect that you really want. If you're using the compressor in combination with other effects try to swop them till you find the tone you're looking for. I'll see ya next month with another effect no one should leave home without: the wah pedal!

Ex 1: This is a typical tone used for 'L.A. session' style arpeggios. I used a DBX compressor with the threshold set to -20dB, an analog chorus, digital reverb and delay from the desk. For the backing track I used a Budda wah, an Ebow and my acoustic, again using the same compressor.

♩ = 100 G#m⁹ Esus^{#4}add⁹

The first system shows a musical staff in G#m9 (F# major triad with a suspended 4th and a 9th) and a corresponding guitar TAB. The TAB uses a 4-finger pattern (1, 3, 0, 3, 2, 0, 3) on the first string and a 2-finger pattern (2, 3, 0, 3, 2, 0, 3) on the second string. The second system shows a musical staff with a key signature change to F# major (F#sus4, G#m9) and a corresponding guitar TAB. The TAB uses a 4-finger pattern (4, 3, 0, 3, 2, 0, 3) on the first string and a 2-finger pattern (2, 4, 1, 3, 0, 3, 2, 0, 3) on the second string. The second system includes a first ending (1.) and a second ending (2.).

TAB

1. 2. G#m⁹ G#m⁹

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Ex 2: This is a typical country tone. I've used the Boss CS-2 Made in Japan (set with level at 3 o'clock, Sustain at half way and Attack all the way down) and my Strat. Hybrid picking is needed for this example.

Shuffle ♩ = 160

Ex 3: This is an L.A. 70s' funk style. I've used the Keeley compressor on this one set Sustain at three o'clock and level half way. Use either a Strat or a 335 type of guitar.

♩ = 100 Cmaj7 Bm7

3 Am9 D13(b9) Gmaj7 B7(#5) Em9

Ex 4: Something for the shredders... You can use all three configurations for shredding tones (before the amp, in the fx loop or in a rack). Use 'HALF' of the distortion that you'd normally use and set the compressor so you can hear all the notes perfectly without creating too much noise. Left and right hand tapping techniques required for this one.

♩ = 120

2

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Ex 5: Did I say funk?? This is an example played with a real basic slap technique on the guitar (it's always worth to steal techniques from other instruments!). I've used again the CS-2 with the sustain set around 3 o'clock. This example is mainly played using the slap technique of bass players. For the triplet in bar 1: play an upstroke with the index finger, hit the string using the slap technique (S) producing a dead note, then play a down stroke (T) using again the thumb (not slapping, just a normal downstroke), that should do the trick.

♩ = 100

N.H. N.H.

TAB

s a m i s a m i s i s p i s a m i s a m i s i s p i

3

N.H.

TAB

s a m i s a m i s i s p i

4

N.H.

TAB

s a m i s a m i p i s p i s p i p

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TONE SETTINGS

For those wanting to get a pedal, good choices would be MXR Dynacomp, Boss CS-2 (check for the 'Made In Japan' version as it's the best), Keeley or the Menatone JAC, just to name a few.

For those rack lovers, famous models are DBX 160A and the Teletronix LA-2A if you have the money (and we are talking big bucks). The best way to chose the right compressor is to decide exactly what are you gonna use it for, then go to a shop and try different compressors one after the other.

Really try to hear all of the subtle variations from one to the next.