

Drawmer 1968 Mercenary Edition Valve Compressor

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This new 1U rack from Drawmer offers their best-sounding compression yet.

Paul White

The compressor section of Drawmer's popular 1960 is held in high regard within the pro audio industry, and the new 1968 appears to be based on a variation of the same JFET gain-reduction circuit combined with a valve gain stage. Housed in a 1U rack, the 1968 is a dual-channel 'buss' compressor, which is to say that it is designed to operate at line level within master, buss, or channel insert points, where it can be used to control both individual sounds and mixes/submixes. It doesn't have the mic amps of the 1960 and, because it is a soft-knee compressor (where the compression ratio rises progressively with level), there's also no ratio control. As on the 1960, the attack and release times are switchable rather than continuously variable, and there's a new switchable function known simply as Big, which reduces the side-chain's sensitivity to low frequencies, with the result that less gain reduction is applied to those frequencies, creating the effect that the bass is louder or 'bigger'.



Photos: Mark Ewing

Connection to the unit is via electronically balanced XLRs, though there's also an unbalanced side-chain send/return TRS jack on each channel allowing an equaliser to be inserted in series with the side-chain input for frequency-conscious compression. XLRs are the accepted pro standard, but in the project studio, where quarter-inch balanced-jack patchbays are the norm, it would have been useful to have these connections doubled up on balanced jacks. Power is via an IEC connector, and the mains switch is on the right-hand side of the front panel. The mains voltage can be changed between 110V and 230V, at 50Hz or 60Hz.

Front Panel Controls

The front panel retains traditional Drawmer styling, and both channels have identical sets of controls, with a Stereo Link switch positioned between them allowing a choice of dual-mono or stereo operation. This switch needs to be turned on when processing stereo signals to ensure that exactly the same gain reduction is applied to both channels regardless of the left/right balance or content, so as to prevent the stereo image from shifting in an unnatural way. When linked, the left-hand set of controls (including the Big switch) adjusts both channels.

Threshold sets the input level above which compression takes place, though with a soft-knee compressor this isn't a hard-and-fast value, as the compression comes in progressively with level. Turning the Threshold control clockwise to lower the threshold value can therefore be thought of as a turning up the amount of compression. Next to this is the Big switch and its status LED.

According to the manual, enabling the Big mode filters out some of the low end entering the side-chain so that low frequencies are compressed less than high frequencies. As well as making the bass end sound more powerful, this simple little feature also reduces the ducking and pumping effects that can occur when high frequencies are pulled down in level because they occur at the same time as a loud bass sound. This feature helps make mix compression sound more benign.

Attack is switchable, providing choices of 2, 8, 15, 25, 30, and 50ms, and sets the time it takes the compressor to apply gain reduction once the input signal level is high enough to trigger the gain-reduction process. By setting a longer attack time, the leading transient of a sound can be allowed through before the gain reduction is applied, which in effect makes that transient seem louder and better defined. This is commonly used to brighten acoustic guitar and bass guitar parts, as well as to add extra definition to drums. Non-transient sounds such as vocals, on the other hand, are usually best treated using a fairly fast attack time.

Programme-dependent Release Time

Release is also switchable, offering manual settings of 100ms, 500ms, and 1s; 200ms-2s and 500ms-5s semi-automatic signal-dependent settings; or a fully automatic 1s-10s programme-dependent mode. The automatic and semi-automatic settings adapt the release time depending on the dynamics of the signal being processed, and are based on prior Drawmer programme-adaptive techniques that have been successfully deployed in some of their earlier compressors.

Because gain reduction, by its very nature, makes things quieter, compressors need a means to add gain after processing in order to restore any lost level, and in this case that is done using a conventional Gain



Drawmer 1968 Mercenary Edition £993

pros

- Traditional Drawmer build quality.
- Classy, vintage sound.
- Very easy to use.

cons

- Having only XLRs makes connection to a patchbay more complicated than it needs to be.

summary

This is a great mix compressor that can also turn its hand to track compression. It offers everything you'd expect from a Drawmer unit, and maybe a little more besides!

information

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control. The circuit path includes a 12AX7 tube gain stage which adds a little tube warmth and flavour to the sound.

That leaves the familiar Drawmer moving coil-meter, which can be switched to read the output level, the output level plus 10dB (useful when feeding hungry A-D converter inputs) or the amount of gain reduction being applied. However, this meter includes a new trick, because the back-light glows red when the signal level at the output approaches clipping — so much more stylish than a simple peak LED! As well as providing a bypass function, the Output switch also has a Side-chain Listen switch position which allows the user to evaluate the effect of any EQ or other processing inserted into the side-chain signal path.

Conceptually, this is a very straightforward compressor to operate, and it's designed to have a clean, transparent sound so that it can be used to treat complete mixes as well as individual sound sources. The technical spec backs this up, with a frequency response that's flat within a decibel from 17Hz to 28kHz and within 3dB from 10Hz to 47kHz. The unity-gain noise figure is a pleasingly low -85dB, and the output can handle up to +21dBu before clipping.

Active Service

Because of the XLR-only I/O connections, I had to resort to my hugely useful box of Planet Waves adaptors, which usually accompanies me on live gigs. There's something in there for pretty much every eventuality, though I still don't have the special 'quarter-inch jack to 13A mains plug' adaptor that music shop assistants hand out to electrocute any guitarists who want to play 'Smoke On the Water' all Saturday morning!

Once up and running, what surprised me most about this compressor was that I was able to apply very aggressive amounts of gain reduction to a complex mix without changing its perceived tonality or in any way diminishing the impact of any transients, even with Big switched off. Even metered gain-reduction levels in excess of 10dB produced no unmusical side-effects.

For most general material, the shortest of the auto release times seemed to work best, but the longer ones proved to be good for more 'covert operations'. If you apply even more gain reduction so that the compression process becomes more audible, it still works in a very musical way, adding energy and density without compromising clarity. Getting vintage rock and pop sounds that sit just on the edge of gain pumping is most definitely not a problem for this unit.



As a tracking compressor, the 1968 also holds its own, and proved itself capable of both subtle levelling and, at higher gain-reduction settings, of adding weight and energy to a sound without any distracting pumping or dulling. Bringing in the Big switch does much as the documentation leads you to expect, increasing the sense of deep bass. With Big switched out, the bass end has a tighter feel.

The 1968 is a classic Drawmer product, both in appearance and performance. It is designed and built in the UK and is constructed in much the same way as most other Drawmer rack processors, which should bode well for reliability. This particular compressor combines vintage charm with a compact format and extreme ease of use — one of my favourite aspects of Drawmer gear is that the operation of the controls always seems to be very predictable.

Many compressors struggle to preserve transients and overall tonality when asked to process a complex mix, but this one works beautifully in that application, even when driven hard. When side effects do become audible, they tend to be flattering rather than destructive, and if you're of the 'there can never be enough bass' persuasion, the Big switch could become your best friend.

The role of the tube circuitry here is subtle, as it should be, and though the overall effect is flattering, it is implemented in such a way that you don't notice that any processing is taking place. Clearly a product of this calibre costs more in the UK than one of the many 'me too' units doing the rounds, but after hearing it I think you'll agree it is worth it. In fact, this is probably the best-sounding Drawmer compressor to date, in my opinion, and it could give a number of the 'silly price' esoteric units a very good run for their money. **SOS**

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