

Empirical Labs Lil FrEQ

Dave Derr's company is not exactly prolific, but with his previous two units, the Distressor and the Fatso, he has won many fans, including **GEORGE SHILLING** who bought a Fatso after reviewing it. Our expectations are naturally high for this 1U mono EQ unit.



ONE OF MY FAVOURITE THINGS about the Fatso was its entertaining manual. Yet astonishingly EL has not yet finished one for this unit, although I was allowed a sneak preview and I can confirm that it will be full of useful information when complete. It's good to see the familiar Input and Output gain knobs book-ending the front panel — these are very accurate and easily recallable with great accuracy. These pots were a bit cranky on my review unit but I was looking at a slightly battered example that I gather was the first one acquired by the UK distributor, so it's forgivable.

The Input level is accompanied by an LED marked 'Bad! Clip' to indicate 1dB below where real nasties happen. In between are a number of smaller knobs and pushbuttons for the EQ sections. There are no less than eight EQ functions with seven separately bypassable sections here. Each of these sections features an In button with accompanying LED. At the far right is a Bypass All button, with a red LED that lights when Bypass operates, although slightly confusingly this happens when the button is out rather than in, so really it is another In button. The rear features XLR or jack input, two different output XLRs (more of which below) plus a jack output. On the front is a switchable Instrument input socket.

The first section is the Hi-Pass filter. This is a 'coloured' filter that seems to add a boost just above the corner frequency, from where it rolls off steeply. The frequency is chosen with nudge buttons, with eight settings from 30Hz up to 330Hz. The LEDs glow dimly when the section is bypassed, or brightly if switched in. Even at the 30Hz setting there is some obvious enhancement of the bottom end in the mix when this is switched in (although I had to use just one side of the mix, having just one unit).

The second section features simple High and Low Shelf Cut/Boost knobs, simple hi-fi style tone controls, with a range of +/-10dB. Across a mix or most individual signals, these are sheer temptation as the added top sounds very sweet. They are very broad and the added bottom end is hugely satisfying. They do turn anti-clockwise to cut as well, if you so desire!

The following four sections are parametric. They each feature +/-14dB cut/boost knobs at the top, a bandwidth control labelled 0.1 to 2 octaves, and frequency knobs. At halfway, the bandwidth setting of 0.7 octaves sounds as narrow as many other EQs are when set at their narrowest. There are no centre

détentes for the gain knobs, but with individual In buttons these are not necessary. There is plenty of overlap in the band frequency ranges: the Low band runs from 40Hz to 600Hz, the Low Mid from 100Hz to 2.7kHz, the High Mid from 400Hz to 10kHz and the High from 830Hz to 20kHz. Boost does not diminish as the bandwidth is broadened, so a huge amount of level boost is possible with wider settings but the Clip LED will warn when danger is present even if a section is not switched in. The parametric band characters are juicy, warm, open and musical. The designer describes them as 'surgical', and while this is a good description, they are more fun to tinker with than that word suggests. They claim incredibly low distortion figures, and these are believable, with a sweetness to match the GML 8200 yet an even more straightforward and open character.

The final section is labelled DS, this is a dynamic EQ for de-essing or high frequency softening. A four-LED meter indicates the amount of reduction and two knobs set Threshold and Frequency respectively. A button selects HF or wideband mode. The latter is rather potent, and I sometimes found the release to be audible, but in HF mode things seem gentler with a softer knee. The LED meter remains active even when the section's In button is out, which is either very useful or potentially embarrassing/annoying depending on your preference.

The manual suggests experimenting with this section to soften a track or emulate analogue tape, and it is certainly worth a try if your signal is thin or harsh. Amazingly this section seems to operate independently of the input level, so de-essing remains constant once set. Clever.

While the overall level knobs are easily recallable, the same cannot be said for all of the aluminium knobs, as the black banded ones — such as the Shelf and Bandwidth — do not feature any marking on the barrel.

The Class A transformer output can add some old-style warmth that is especially rich when pushed. This can sound quite different from the DC-coupled 'clean' output so it is worth wiring both up. On the front, an Instrument input turns the unit into an exceptionally good DI box that claims incredible figures for frequency response and noise and sounds wonderfully present.

The still incomplete manual is excellent and full of titbits of wisdom, and even a terrific page-long bulleted list of why EL is such an environmentally friendly company. But like a proper bunch of hippies, after many months they still haven't finished writing it! (*Hey, relax man. Ed.*)

Like the Distressor and the Fatso before it, the Lil FrEQ works hard to be the best at what it does and to add features that are genuinely useful to the hard-working engineer. Again, Derr has designed something rather special, worth every penny of the rather steep asking price (UK £1385 + VAT). The only problem is that, as with the Distressor, you will want two of these. ■

Contact

EMPIRICAL LABS, US:
Website: www.empiricallabs.com
UK, Unity Audio: +44 1440 785843

PROS

Cleanest EQ imaginable; surgical and powerful yet joyous to use; you won't run out of bands or boost; great DI; set-and-forget de-esser.

CONS

Crammed panel makes legending squashed; manual unfinished!

EXTRAS

The EL7 FATSO is a digitally controlled analogue device that offers many of the 'musical non-linearities' exhibited by older valve, class A discrete, and magnetic tape mediums. The two-channel processor will increase the apparent volume without increasing peak levels. Two channels of Empirical Labs compression are provided with several compressor 'types' with fixed attacks and releases.

