

HIGH-PASS FILTER

Removes very low frequencies, which is especially useful if boosting lows elsewhere

LOW BAND

Select the corner frequency for the EQ's low shelving band

HIGH BAND

Select the corner frequency for the EQ's high shelving band

CUT & BOOST

Each EQ band offers 9dB of cut or boost

FAT

Adds a gentle resonance to the HPF cutoff for extra thump

LISTEN

Solo the high band to hear exactly what the compressor is doing

THRESHOLD

Dials in the compressor's threshold level, above which processing is applied

CROSSOVER FREQUENCY

Pick the frequency above which your audio will be compressed

WAVEFORM & GR HISTORY

Shows how the compressor has reacted to the audio over time

GR METER

This part of the visualisation is a conventional gain reduction meter

ECO MODE

Reduce audio processing accuracy to free-up CPU cycles and reduce latency issues

Solid State Logic Fusion Violet EQ and Fusion HF Compressor

£139

PC

MAC

Individually, SSL's Fusion HF Compressor and Fusion Violet EQ can add polish to your mixes, but used in tandem they can make your mixes

> Despite its unassuming looks, Solid State Logic's Fusion processor is a brilliant piece of kit. Designed specifically for digital studios, this box of analogue tricks can sit across your main mix buss, or a stem buss, from where it treats your audio to some extra-special SSL pampering. The results can be spectacular, giving your mix the body, space and sparkle that you'd expect from a high-end analogue console, not a mid-range processor.

The Fusion hardware is reasonably affordable, but this hasn't stopped SSL from converting the analogue processors of the hardware into plugins that are affordable for all. We looked recently at the first two of these, Fusion Vintage Drive and Fusion Stereo Image,

in **cm302**, but now it's the turn of the next two releases in the series: Fusion HF Compressor and Fusion Violet EQ.

"The very intuitive readout makes it really easy to understand how the compressor is responding"

Fusion HF Compressor

Unsurprisingly enough given the name, Fusion HF Compressor is a compressor that works its magic on the higher frequencies in a signal. The processor itself is very straightforward indeed. A crossover splits your audio signal into high- and low-frequency components, with the high frequencies component being fed to a compressor.

The high and low signals are then re-merged and passed to a wet/dry balance mixer before heading to the plugin's output. This makes for a very small number of controls - one to control the compression threshold, one to set the crossover frequency, and one to set the wet/dry balance. Simple!

“Nothing else, other than the actual Fusion hardware, makes it so easy to get your mixes sounding so good”

As well as a conventional gain reduction meter, HF Compressor also has a panel showing the current waveform overlaid with a gain reduction history graph. This very intuitive readout makes it really easy to understand how the compressor is responding, and is something you don't get on the Fusion hardware.

The compressor itself uses very fast attack and release times so that it can catch and control loud peaks in the upper part of the spectrum without creating any noticeable twitching of the overall volume level. Reducing the threshold - and therefore increasing the compression - does reduce the high frequencies, as you would expect, but it does so in a way very different to an EQ, smoothing out the higher registers while retaining top-end presence and airiness. A very slight haze of analogue-like sparkle adds a distinctly musical character to the effect too.

Fusion Violet EQ

Modern EQ plugins routinely offer at least five multi-mode bands, and sometimes as many as 20 or more, so you may be surprised to learn that Fusion Violet EQ boasts just two shelving bands and a single high-pass filter. While this renders the plugin largely useless as a track-level EQ, it makes it very useful as a full mix, stem or mastering equaliser.

The low- and high-shelving EQ bands offer 9dB of cut or boost, and each has a choice of four corner frequencies: 8kHz, 12kHz, 16kHz or 20kHz for the high band, and 30Hz, 50Hz, 70Hz or 90Hz for the low band. Using shelving EQ to boost low frequencies can lead to a lot of very deep rumble (and you may not even be aware of it unless you have a sub in your monitoring rig), which is where the high-pass filter comes in handy with its choice of 30Hz, 40Hz or 50Hz cutoff frequency. As an extra trick, when the high-pass filter is engaged, the plugin's "FAT" button enables a gentle resonance on the filter, adding an extra bit of weight down low.

If you've been paying attention you'll realise that Fusion Violet EQ has been designed to create the perfect "smiley face" EQ curve, with a fat, weighty bottom end and a bright, scintillating top end. And my-oh-my does it do it well! With the added subtlety of the Fusion plugin range's analogue-flavoured colouring and character, Violet EQ buffs your audio to a glittering, professional shine with astonishing ease and speed.

Greater than the sum of its parts

Individually, both of these plugins are very good at what they do, and each can add a distinctly expensive-sounding, analogue-like quality to your audio. But, like Laurel and Hardy, gin and



The full suite of current Fusion plugins

All together now

With the release of Fusion Violet EQ, SSL's digitising of the Fusion hardware is nearly complete - the only thing not yet digitised is the hardware's analogue transformer stage. Yet even without that final link in the chain, the combination of all four Fusion plugins is almost as formidable as the original hardware, especially when chained in the same order.

First in the chain is Fusion Vintage Drive, which adds analogue-like colour and saturation to the signal. From here, it's off to Fusion Violet EQ and Fusion HF Compressor. We've already seen how good these are together, but when you include that initial injection of

analogue character from Vintage Drive, which is then enhanced by the EQ/compressor combo, the results are exceptional... or seem so until you hook-up Fusion Stereo Image at the end of the chain. The sheer airy space this can add demands a whole new definition of the word "exceptional".

When listening to a professional recording produced in a top-flight studio, much of the perception of quality comes from the detail, colour and spaciousness of the higher frequencies. It is these characteristics that Fusion - both hardware and in plugin form - recreates so well, and with such little effort.

tonic, or drums and bass, when teamed up as a double-act, the combination of Fusion Violet EQ and Fusion HF Compressor is far greater than the sum of its parts.

The magic of the combination happens when the plugins are applied across a full mix, with Violet EQ feeding into HF Compressor. Boosting the high frequencies with the EQ pushes them harder into the compressor, which in turn reduces those high frequencies. But, as we mentioned a moment ago, while HF Compressor does reduce high frequencies, it doesn't behave in the same way as an EQ. With a bit of careful tweaking, what we end up with is huge amounts of top-end detail and clarity, but with all of the brittle intensity removed. And not only does this bring out the top end detail of your mix, it also enhances that hard-to-describe analogue-like airiness and spaciousness that runs throughout the Fusion range.

Although fairly priced considering the quality of results, at £139 a pop, the cost of buying standard perpetual licenses for both plugins may seem steep. If so, the \$14.99 per month of SSL's Complete Subscription Bundle may be more attractive, especially when you consider that it includes all of the Fusion plugins. Nothing else that we've seen, other than the actual Fusion hardware, makes it so easy to get your mixes sounding so good. **cm**

Web solidstatellogic.com

Info \$139 per plugin; \$14.99/month as part of SSL Complete Subscription Bundle

Alternatively

Solid State Logic Fusion
around £1,650

Despite the excellent analogue modelling of the plugins, there's nothing quite like the real thing

FabFilter Pro MB
cm200 » 9/10 » £149

Ultra-flexible and can zero in on any range of frequencies to control their dynamics and prominence

Verdict

For Convincing pro analogue sound
Add sparkle and space to your mixes
Individually great; superb double-act
Intuitive gain reduction metering (the HF Compressor)
Perfect "smiley-face" EQ (Violet EQ)

Against Large despite few controls
Quite expensive individually

These plugins are excellent individually, but combined they create mixes that sound like they come from a £1000/day studio

Fusion HF Compressor 8/10

Fusion Violet EQ 8/10

Used in combination 10/10