

NAME FIELD

Each instance of Neutron can be renamed for ease of reference in the Masking Meter

TRACK ASSISTANT

Press this innocuous looking button to have Neutron create a complete preset customised specifically to the input signal

PRESETS

Open the preset browser and access a ton of excellent categorised patches

PROCESSING MODULES

Neutron's channel strip consists of multiband Compressor (x2), Exciter and Transient Shaper modules, and a 12-band EQ – drag to rearrange the signal flow



UNDO/REDO

Open the Undo history and step backwards and forwards through your edits

LIMITER

Neutron's Limiter has three levels of transparency/latency and three preset response speeds

OPTIONS

Open the Options window to adjust Meter and Spectrum styles, choose Analog or Transparent Crossover Types, and more

MAIN CONTROL AREA

The parameters and metering of the selected module are adjusted and viewed here

NEUTRINO MODE

Enhance the source signal with one of a range of intelligent spectral shaping algorithms



iZotope Neutron

£185/£259



This semi-autonomous channel strip plugin wants to give you a leg up in the mixing department... but are its bold promises too good to be true?

> Teased a few months ago by their free Neutrino spectral shaper, iZotope's mixing plugin Neutron is a smart channel strip built on the foundations of Alloy 2 (9/10, **cm184**), that aims to help you achieve better mixes through intelligent analysis and semi-automatic processing of individual tracks. It comes in two versions: Neutron and Neutron Advanced, the latter including separate plugin versions of its four processing modules and support for surround sound up to 7.1.

Atomic mass

Neutron comprises five main processing modules, arranged in tabs across the top of the GUI, and each with its own wet/dry mix slider and preset library: two identical three-band compressors, an EQ, a three-band Exciter and a three-band Transient Shaper. The signal flow through them is established by dragging the tabs left and right, and all the multiband models

can be switched down to single-band operation, of course.

Each of the Compressor's bands features a Ratio control ranging from -10:1 (expansion) to 30:1, variable knee, Attack from 0.1-500ms, Release from 0.1-5000ms (or Auto), and wet/dry mix. Every band also has its own sidechain, for triggering compression with any of the other bands, or external signals. In its default mode, the Compressor is transparent and precise, but

“Neutron comprises five main processing modules, each with its own wet/dry mix slider”

activating Vintage mode invokes a much more colourful, punchy sound and analogue-style behaviour, complete with per-band VU meters.

The EQ is a 12-band model with eight parametric bands, low and high shelves, and low- and high-pass resonant filters. Each band type offers a range of shaping options: proportional Q or a flat-topped bell for the parametrics, Analog, Baxandall and Pultec styles for the shelves, and roll-off slopes from 6-48dB/octave for the filters. Editing the EQ is done directly in the graphical display or using the controls in the pop-out Details view, and two Dynamic modes (Compress and Expand) enable individual band gains to be modulated by the input level at that or any other band, or the full-frequency signal.

Finally, the Exciter borrows the X/Y distortion 'style' pad from iZotope's Alloy 2 channel strip, allowing a blend to be set between Tube, Warm, Tape and Retro algorithms for each band; while the Transient Shaper supplements the usual

“Crucial to its success is the quality of the processors themselves”

Attack and Sustain sliders with a choice of Sharp, Medium and Smooth Contour modes, governing the per-band response speed. And at the end of the signal flow, a limiter delivers three types of post-processing dynamics control – transparent with high latency (IRC II), less transparent with low latency (IRC LL) and brickwall with zero-latency (Hard) – and three response speeds.

All of Neutron’s processing modules bar the Limiter also include a Learn function. With the EQ, this constantly analyses the signal, shifting active filter nodes to “areas of interest” – sibilance or rumble, for example – while for the other three, it sets the multiband crossovers to their ‘natural’ frequencies, as befit the input signal. While the Learn function is a great feature in itself, it’s really just an hors d’oeuvre for Neutron’s tasty main course: Track Assistant.

Aidez moi

Clicking the Track Assistant button at the top of the interface puts Neutron into ‘listening’ mode. Play the source track and after a few seconds of analysis, Neutron will categorise it as Vocals/ Dialogue, Guitar/Instrument, Bass, Drums/ Percussive or Clean, and configure all five modules – signal flow and bypass status, crossovers, EQ bands, compression ratios, etc – to create a custom preset tailored specifically to the sound being processed. Every category except Clean also applies its own Neutrino spectral shaping algorithm, using adaptive psychoacoustic multiband processing to polish and generally enhance the signal. The Neutrino algorithm can be manually switched, too, for potentially interesting ‘mixed-and-matched’ flavours, and adjusted in terms of Detail (processing density) and Amount. Track Assistant also offers three processing ‘strengths’ – Subtle, Medium and Aggressive – and three stylistic presets – Broadband Clarity, Warm and Open, and Upfront Midrange – so you can give it an idea of the kind of sound you’re after before you hit the button.

What has to be fully understood is that the preset Track Assistant arrives at is only intended as a starting point for further contextually



The Exciter module is pretty much lifted straight from iZotope’s amazing Alloy channel strip – which is a very good thing indeed



Use Masking Meter to reduce the loudness loss from frequency masking

Behind the Mask

Neutron’s Masking Meter lets you visualise how one track might suck the loudness out of another when both are played together. To do this, it analyses the difference in perceived loudness between each of two tracks heard on its own and at the same time as the other, using a model of the human ear.

With multiple Neutrons running in a project, clicking the Masking button in the EQ section of any of them activates a menu listing all the others. Selecting one splits the EQ window in two, with the active Neutron’s EQ controls, response curve and spectrogram at the top, and those of the menu-selected Neutron at the bottom. The frequencies

at which the bottom signal is masking the top signal light up in white in the top half in real time, while the cumulative occurrence of masking over time (the last 400ms, 3s or Infinite) is shown in the histogram above, so you can clearly see where to make cuts or boosts in either EQ.

When the Inverse Link button is active, changes made to any node in either EQ are applied in reverse to the same node in the other. Using this, you can apply, say, 1dB of gain to the masked signal and have 1dB of cut automatically applied at the same frequency in the masking signal. Ingenious!

considered tweaking, rather than a conclusive channel strip. I.e, don’t expect it to actually do your mixing for you; you almost always need to get in there yourself and at least fine-tune the proposed settings, if not fling them around quite radically, depending on the rest of the mix. With all that in mind, though, Track Assistant is very impressive, genuinely improving the sound of whatever’s fed into with regard to clarity, dynamics, harmonic excitement and frequency profile. And, importantly, iZotope’s prime directive of it “doing no harm” has certainly been achieved for the most part.

Neutron star

Although Track Assistant and Masking Meter are obviously Neutron’s loudest selling points, equally (if not more) crucial to its success is the quality of the processors themselves, which, as you’d expect from the developers of Ozone and Alloy, is absolutely superb. Whether you’re after modern transparency or analogue-style character, every one of Neutron’s devices just sound awesome through and through.

Think of it as the engineer’s assistant rather than the engineer, and Neutron is an incredibly useful, time-saving and even educational mixing tool to have in your plugins folder. **cm**

Web www.timespace.com

Alternatively

iZotope Alloy 2
cm184 » 9/10 » £155

If all you really need is a regular channel strip, Alloy is a stunner

MeldaProduction MAutoDynamicEQ
cm206 » 9/10 » €99

Melda’s amazing plugin features seven bands of dynamic EQ

Verdict

For Track Assistant is brilliant – and commendably realistic in its ambition
Masking Meter works well
Neutrino spectral shaping is good for general enhancement
Easy to use and intuitive

Against Could encourage complacency
Track Assistant can give odd results

Use it in the way it’s meant to be used and Neutron could become your best friend. Even without Track Assistant, it’s still one of the most powerful channel strips around

9/10