



THE PROS & CONS



Incredible sonic purity from both plugin tools

The DS-1 has excellent transientshaping capabilities and the MM-1has simple, well chosen presets with a few highly effective parameters

The DS-1 has wide-ranging controls capable of increasing dynamics as well as controlling them



The DS-1 is complex to get to grips with

The MM-1 could do with a variable release setting

nvented back in the '90s by Daniel Weiss, the DS-1 was highly lauded by respected mastering engineers for its incredible flexibility and sonic excellence. However, its high price tag has always meant it would only be found in very high-end establishments. Now, Softube (along with Daniel Weiss himself) have ported the code of the original into this plugin to give an exact replica of the original unit's capabilities and have designed two new limiter types to boot. The MM-1 is a maximiser

plugin based on the DS-1 with a simple set of control parameters but retaining the excellent sonic qualities of its elder sibling.

So let's get to what the DS-1 does, as it's a pretty complex beast. Its two main functions are compression and limiting. Compression can be approached either as straight stereo, mid and side or parallel compression. Detection can be summed or split (always split for M/S mode but also useful if you have heavy, loud transients on one side of the mix when in straight stereo

DS-1 MK3 OPTIONS MENU

Pressing the Options button gives access to three other pages of parameters. The first concerns the limiter functions starting with dithering and limiter type. Then comes a variable control to balance some RMS into the detection circuitry, giving you the option of balancing between peak and RMS. Next comes the preview control which allows you to set the preview time when finetuning fast attack envelopes, allowing for far more extreme settings of the compressor without messing up the low end. There are also controls to copy settings from stores A to B and copy channel settings L to R and R to L when in M/S or dual mono modes, plus the option of internal or external side chaining. Imagine this level of control applied to a sedition function in a mix. The mind boggles! Page 2 gives various meter peak level settings for each meter and there's a soft knee range control which can go from 15db to an incredible 70db, allowing incredibly subtle control of how compression can affect the entire dynamic range of a mix. Page 3 is where you set the peak over metering controls and where you select auto gain makeup or manual. Very comprehensive.

or parallel modes) and there is a linear phase filter section with curves for high-pass, low-pass and band-pass. With the filter engaged, the unfiltered signal remains uncompressed; only the filtered signal passes through the compression stage, so you can control the low or high end of the track or just a band of it. This allows the third principal function of the unit and this is de-essing, at which the Weiss is particularly effective.

At the right of the front panel you see two rows of compression controls: attack, release delay (like a 'hold' function for the release section) and the three knobs of the release portion labelled fast, average and slow. This release section requires some explaining. The input is detected simultaneously using two methods. peak and RMS. When a fast attack is detected, fast release is used and when it is slow, slow setting is used. The 'Average' control sets the time over which the RMS component of the side chain is monitored and so short settings provide rapid responses

to level differences and long ones focus more compression to transients; therefore sounding smoother and less processed overall.

Below these, you find four more controls. Threshold is self-explanatory but the others less so. Soft Knee affects the way the compression reacts to threshold level. With full soft knee engaged, compression takes effect well below threshold level with full compression at threshold and above, giving a smoother more rounded effect. The ratio control can be set for compression or expansion, expansion allowing the unit to re-introduce dynamics to a previously over compressed signal.

Finally, there is the Gain Make Up control. All of the other parameters affect the shape of the Transfer Curve (ie. the shape of the compression) but Gain Make Up moves that whole curve up or down, affecting the master level. When the filter is engaged or the unit is in parallel mode, then Gain Make Up simply affects the compressed part of the signal letting you balance with the dry

THE ALTERNATIVES



Brainworx bx_XL V2 \$329

A mid and side master compressor limiter with multiple tricks up its sleeve. Quite different from the DS-1 but just as capable of adding transparent power.

www.plugin-alliance.com



TDR Kotelnikov GE €40

Don't be fooled by the price tag, this is an incredibly sophisticated stereo bus compressor with multiple and highly effective dynamic and harmonic shaping tools. It does lack a final stage limiter, though.

www.tokyodawn.net



Slate Digital FG-X Mastering Processor \$129

With its smooth and transparent compressor and highly individual approach to loudness and master limiting, the FG-X is capable of delivery thundering level with great subtlety.

www.slatedigital.com



POSITIVE FEEDBACK: The display gives great visual feedback over all processes. See exactly what you are doing across the mix

THREE OF A KIND: The three final limiter types allow for very different control of master level over every different type of program material

SHAPING UP: The sophisticated envelope shaping tools, along with read-ahead and dual detection types allow clear and precise compression without unwanted artefacts

signal, a bit like the blend control that can be commonly seen on some other compressors.

To the lower left side of the unit are the buttons for such parameters as parallel or standard compression, M/S mode, whether controls are ganged or not (on for stereo mode and off in M/S or dual mono mode) and there are also controls to switch between an A and a B setting and to monitor the filter setting.

Finally comes the limiter section, which, as previously mentioned, has three different Limiter types (accessed from the options page), the original DS-1 limiter, Type 1 for RMS style limiting and Type 2 for true peak limiting. The buttons to the side of the metering give you control of input level, limiter level and output level. Finally there is a very comprehensive metering section which gives you plenty of visual feedback over all of

the processing you may be doing.

So what does it sound like? Hard to say. This is the most transparent limiter/compressor I've ever used! It's incredibly sophisticated and to realise its full potential I have many more hours of experimentation to do. Despite that I found it easy to find settings that satisfied me on various types of program material. It imparts a very visceral presence to everything it touches. That said, using a low-pass filter in parallel mode is a great way to thicken up a weaker low end, especially if you want to pull a bass instrument up a bit in the mix. It's particularly powerful when using read-ahead as you can get very fast attack times without low end distortion. It also happens to be the best de-esser in my computer - and there are quite a few. Looking for a master bus compressor capable of imparting great energy into a track while retaining impeccable sonic purity? Look no further. And don't just retain it for the master bus. This works on everything from vocals, where it really shines, through to acoustic instruments and drums. Not cheap but worth every penny. FM

THE MM-1

While the DS-1 is a big, complex tool, the MM-1 is a model of simplicity that also achieves excellent results. Amount is like threshold, the parallel mix control is self-explanatory and limiter gain simply pushes more level into the very transparent master limiter. The five 'style' buttons do exactly what they say on the tin and so it's really in the results that you can truly understand just how good this is. Whatever you throw at it, the MM-1 seems capable of dealing with it in an elegant, powerful manner. While it does exactly what you'd expect of a



high quality maximiser on the master bus, it's of great use on individual instruments as well, providing solid level control alongside excellent de-essing and the same ability to put energy into anything you throw at it. Amazing and easy to use. It's not just a quick fix — you'll be coming back to it again and again.

FM VERDICT

9.6

Two of the finest dynamics processors around. The DS-1 is sophisticated, the MM-1 simple; both impart sublime purity and energy