

TAPE OP

The Creative Music Recording Magazine

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Vintagedesign

CL1mk2 2-channel compressor-limiter

Over the years, there have been a variety of tried-and-true compressor/limiter circuit types. For example, VCA was used in the classic dbx 160, FET in the UREI 1176, electro-optical in the Teletronix LA-2A, and, less common these days, diode-based, which had been employed in the 1970's by manufacturers such as Neve, Calrec, EMI, and Siemens. I've been fortunate enough to have had a pair of diode-type Neve 2254/As at my disposal since the mid-'90s and have found them just about unbeatable at most applications, particularly strapped across a 2-channel stem or the stereo bus of a full mix. Their musical gain reduction behavior and tendency to distort in extremely subtle and almost-always-pleasing ways keeps them very busy during nearly every tracking and mixing session I'm involved in.

With its elegant yet workman-like CL1mk2, Sweden's Vintagedesign has filled a need for more variety in the contemporary diode-based comp/limiter world. And this is a good thing indeed. The CL1mk2, for all intents and purposes, is a cross between a Neve 2254 and 2264, with additional features not found in either of the Neve classics. The trademark separate circuitry and controls of compression and limiting of the earlier 2254 are combined with the innovative side-chain circuitry of some versions of the later 2264s, making this a "best of both worlds" vintage-style device. Add comprehensive attack controls for both compression and limiting to the proceedings, and you've pretty much got an ideal Neve-style compressor.

On a recent tracking session, I used the CL1mk2 for recording kick drum and snare, hitting the signal ever-so-gently, for a taming effect. The resulting sound was pleasingly thick and full of iron (yes, the CL1mk2 has transformer-balanced I/O). It was nice to be able to dial in both attack and release times — something I'm not able to do with my 2254As. The detector's high-pass filter — switchable between 50 and 100 Hz for source material with kick drum or bass guitar and jumping up to 7 kHz for de-essing or for giving mixes more shimmer and presence — proved handy and struck me as the perfect add-on to an already nearly-perfect comp/limiter design. Really, just about every signal I fed the CL1mk2 — especially full mixes — sounded noticeably better coming out of it. Very similar in character to my trusty 2254/A pair. The only sound source I wasn't sold on was vocals. Being more of an opto guy when it comes to vocals, I found myself thinking the CL1mk2 would not necessarily be my first choice for compressing a singer since it lacks the gluey adaptable release time that opto circuits offer.

Aesthetically, the 2RU-height CL1mk2 has a nice future-proof look, with red and blue knobs that tip their collective hat to the Neve 80-series modules of old, as well as a pleasantly familiar blue/grey faceplate. I like that the VU meters are placed roughly in the middle of the unit, visually and ergonomically dividing the compressor and limiter sections — a very intuitive design idea. It bears mentioning that the components and housing all have an appealingly heavy-duty feel to them. This is a professional piece of gear for sure.

Sadly, the guts and versatility of a vintage Neve 2264 or 2254 do not currently come cheap. And neither does the contemporary version. But even at over \$3000, the CL1mk2 will give the user everything and more that the old Neve units can offer, without the maintenance headaches so familiar in the vintage gear marketplace.

(£2684 mp; www.vintagedesign.se)

—Pete Weiss, www.weissy.com

TASCAM

DR-100 portable solid-state recorder

TASCAM has a new entry into the increasingly crowded handheld recorder market — the DR-100. This new unit has a number of clear advantages over TASCAM's less expensive (and slightly less bulky) DR-07 and DR-1. First impressions? This is a solid, tough-looking field recorder with metal casing which adds to its substantial heft; this immediately sets it apart from the plastic, toy-like feel of some of the competition. The DR-100 is larger than the Zoom H2 (*Tape Op* #63) or the M-Audio MicroTrack II, but it still fits the hand comfortably, and its controls and backlit screen all make perfect ergonomic sense. TASCAM includes a fair amount of quality extras in the box: a rechargeable Li-ion battery (more on that in a bit), a wireless/wired remote, 2 GB SD card, mini-USB to USB cable for PC or Mac drag-and-drop file transfer, windscreens, and a nicely padded neoprene tote.

There's really no setup needed, as the unit is ready to go out of the box. The on-screen UI is super easy to navigate, and I found myself not really needing the manual for basic functionality. I really appreciate dedicated controls in hardware like this, and the DR-100 is in no short supply; almost every function has a corresponding switch or button. This cuts down on menu-scrolling and lets the user jump right into recording. Boot time is approximately 3-4 seconds, so on-the-spot capture is quick.

Here are a few of the things I love and which give the unit a future-proof profile. Phantom-powered, stereo XLR mic inputs with 60 dB of gain alongside 3.5 mm line-level inputs. USB charging of the Li-ion battery. Additional AA battery power with intelligent, pause-free switching between the two power sources — over 5 hours of recording time! Direct to MP3 or WAV recording all the way up to 24-bit, 96 kHz. Discrete stereo omni and stereo cardioid microphones — four mics! Very low noise floor and A/D conversion that sounds great. Hardware switches for the filter and limiter/compression options. And a big fat record button with LED feedback!

My gripes? Minor stuff. The remote when used wirelessly has very limited range and is very directional; if it's off-axis with the recorder at all, it's difficult to engage. Fortunately, an adapter to make it wired is included. The Li-ion battery pack seems to be proprietary — again, not a big deal as TASCAM has always been good about parts supply. But spares will run you upwards of \$50, so it's fortunate that the DR-100 will also run on AAs. Also, the headphone preamp seemed a little noisy in my testing at higher volumes. Finally, I'm convinced that a SMPTE timecode option would've been a big plus on such an otherwise versatile recorder. (SMPTE is available on TASCAM's \$999 HD-P2, the lowest cost recorder on the market with timecode.)

All in all, this is a pro handheld field recorder that is built to last, sounds great, and has the benefit of solid ergonomic and industrial design. I'm sold! My other handheld's days might be numbered (*£405 mp; www.tascam.com*)

—Dana Gumbiner, stationtostationrecording.com

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Vertigo Sound

VSC-2 Quad Discrete Compressor

Germany-based Vertigo Sound's first product to market is the VSC-2 Quad Discrete Compressor. The quad part relates to the four VCAs within the VSC-2 and not the number of channels it can process, as this is a dual-mono unit. Having two fully independent channels obviously makes it a candidate for tracking or mixing mono or stereo sources. A quick perusal of the Vertigo website gives you the sense that high expectations and serious thought went into this unit, from the handmade, discrete VCAs to the choice of Jensen input transformers and THAT 1646 balancing amps, resulting in a reassuring maximum output of +25 dBu into 600 ohms. A look into the manual gives further evidence into the level of attention to detail, with handwritten test measurements and specific advice on getting the absolute most from the VSC-2. The overall construction is extremely solid, and the pots give a wonderful feel of being precise yet tactile. Along with the stunning blue color of the unit, the meters are worthy of a mention as they are exceptionally accurate, informative, and gloriously impressive to observe, and very nicely backlit too. The layout and parameter choice will be instantly familiar to engineers/producers, and there is a unique addition in the ratio selection of Soft and Brick.

Jumping straight into the main intended use of this little blue baby — in a word, the VSC-2 does a glorious job of processing stereo mixes. It adds a sense of dimension, coherence, and overall weight or power, making the uncompressed mix seem limp and more than a little lacking in comparison. What's more, it does this whilst preserving the overall tone, stereo image, and size of the mix, and if anything, it further enhances the mix with very little of the adverse effects of lesser units that tend to diminish the lows and highs. Even when using dual-mono mode for mixing, the image is preserved remarkably well, and this occasionally works better than stereo mode. (Caution needs to be exercised here as to not let things get sketchy.) Mix-bus compression probably being the most demanding of a compressor's uses — this unit, when sitting side-by-side with SSL and Focusrite RED bus compressors, trumps them all. I don't bandy about my opinion here lightly, and I was surprised to discover shortcomings in units which I have relied upon for many years, but the VSC-2 really does operate superbly and eloquently with the ability to maintain the integrity of the mix. There seems to be a little adding to or accenting of lower-mid frequencies, which adds a fuller tone to a mix (but this could also be a step too far if the mix is already weighty in that area). I also found the VSC-2 contributes a very nice sheen or enhancement of overtones, especially at higher settings of output gain, which adds that finished/polished dimension to a mix that rapidly becomes very addictive.

I'd say that with some of the faster attack times, this unit is particularly good on transient-rich audio where drums would be at the forefront — not to say that music without drums or percussion would not benefit from some of the VSC-2's dynamic processing. In stereo mode, all controls for channel B become disengaged, and channel A becomes the master. The useful high-pass filters in the side-chain are selectable for 60 and 90 Hz operation and function as expected in preventing unwanted pumping triggered by bass instruments. At first guess, you might think that Vertigo's Soft ratio selection is similar to the dbx 160's OverEasy design, but it's actually more like an exaggeration of the Fairchild 670's curve, where the ratio always stays "inside the curve", even at 8:1 maximum, I found this particularly useful

GEAR GEEKING W/ ANDY...

Cascade Microphones (cascademicrophones.com) sent *Tape Op* a number of ribbon mics to evaluate, so when JB and his crew at The Hangar were asked to set up a remote studio for Devendra Banhart's new album, he figured it would be a good chance to evaluate the mics during the three months of location recording. Here's what JB wrote: "The **X-15** stereo ribbon (\$399), **Gomez** Michael Joly Edition (\$499, *Tape Op* #66), and **Vin-Jet** long ribbon (\$349) mics all got lots of use on Dev's record and made the cut on keeper tracks. Engineer Bryce Gonzales and producer Paul Butler of The Bees were very impressed — so much so that when Bryce brought the mics back to The Hangar, he kept using them, sometimes favoring them over our more expensive ribbons from Coles, Beyerdynamic, Royer, RCA, and Shure. Since then, I've had a chance to try them out as well, along with engineers Thom Monahan and Robert Cheek, and we're all believers. While voiced differently than some of the better-known ribbons — the X-15 has more midrange (in a nice way) but less detail in the highs than the Royer SF-12, the Vin-Jet is in the ballpark of the RCA Type 77-DX, and the Gomez is similar to the Coles 4038 — the Cascades can hold up against mics at twice the price. The one downside is that less than a year along, the Cascades are showing their age (in physical wear) much more than some of the classic mics that are four to forty years older." ●●● As Gear Reviews Editor, one of my core responsibilities is to make sure the reviews you read in each issue are relevant, informative, and educational. Granted, not all of the products mentioned in these pages will engage all (or even a majority) of our readers. Budget, production style, gear/software requirements, and even exclusivity — all of these factor into whether a product will hold interest to some group of our readership. We receive countless requests from manufacturers to cover their gear — many times the allotment of available review slots — but we (including LC, JB, SM, AL, and GH) strive to include an effective sampling of what's available. Moreover, all of our contributing writers endeavor to deliver a story that will be meaningful to as many readers as possible — even readers that might not find the product immediately compelling — by offering history, technique, or even descriptions of specific use cases that might be out of the reader's norm. I think that's what makes our reviews interesting. Sure we tell you what it is, but we also try to tell you what it can do, whether by design or not — and if we can share a trick or two that you can add to your engineering regimen, regardless of what product is being reviewed, even better! ●●● Our newest reviewer is **Matt Foster** (Vertigo Sound VSC-2 in this issue). Entering the studio ranks as a tape op for EMI Music, he's since graduated to engineering, mixing, or producing the likes of Whitney Houston, Tin Tin Out, The Corrs, Goldie, Grant Nelson, Jungle Brothers, Coldcut, Gorillaz, The Darkness, KRS-One, and Sasha. He works mainly out of the many Milico Studios (www.miloco.co.uk) and teaches at The London School of Sound (londonschoolofsound.co.uk). ●●● Fearless writer **Allen Farnelo**, who reviewed the Neve-inspired BAE 1023 (*Tape Op* #73) and Vintech X73i (#47) preamp/EQs, is working on an extended review of preamps that purportedly offer the Class A, transformer-rich sound of a Neve at a maximum cost of \$1500 per channel. Trouble is, his list of affordable Neve-alikes keeps growing, but hopefully, he'll have something for us to publish soon! -AH

for recording vocals. The Brick setting is an extreme 40:1 ratio that warrants the expressive description where drum mixes get a serious smacking to the point of absolute decadence, although I'm sure this would act as a great limiter for overload protection as well.

As a tracking tool, the VSC-2 is a great unit to have around. Already mentioned is the usefulness for recording vocals, and the same goes for recording bass guitar. It's surprising how much the meters move before you hear the compression overtly. Using the gain makeup at higher settings also adds a range of subtle coloration when tracking instruments.

My aforementioned high expectations for Vertigo Sound are to be found and realized in abundance here, and the VSC-2 warrants its high price tag. For a desert island stereo compressor, this would be very high on my list. It's a superbly-built, no-compromise unit with a variety of uses. My only minor gripes would be that the VSC-2 is not particularly versatile in its sonic character (very few compressors are), and its auto release setting can be a little too sluggish at times, and I would have preferred a faster auto option. The sound is definitely hi-fi and indulgent in a way that is both full of character and enjoyable. It's difficult to get a bad sound from this unit, and I for one rate this in very high regard.

(£3400+VAT mp; www.vertigosound.com)

-Matt Foster, www.matt-f.co.uk

Kinman

Single-coil guitar pickups

When people come to me to record, I always have guitars and amps that I know sound great mic'd up and ready to go. Guitars have to have great tone, playability, solid intonation and — if I can achieve it — noiseless operation. Telecasters are one of my favorite guitars, yet can be torturous when it comes to buzz and hum. If the song is loud, it's no big deal and can even offer a little "real life" vibe on the fade out, but if you're recording quieter songs, this buzz can render a guitar useless. This noise problem is as old as the electric guitar and needs no further explanation.

The problem with using humbucking pickups in Teles and Strats is that you just can't get that classic, bell-like single-coil sound with humbuckers. Close, maybe, but not quite there. Rooting around the web in search for new developments in this area, I came across Kinman pickups from Australia, a brand with recent patents on some new design for noiseless Tele and Strat replacement pickups (the inventor's explanation of the technology is intentionally cryptic). I decided to give these pickups a shot, and indeed they are noiseless and sound just like excellent, aged single coils. The first time I swapped out my Kinman-equipped Tele for a client's buzzing, humming guitar (that was forcing him to stand at a weird angle while tracking just to keep the noise controlled), I knew I had scored some real points. The Kinman tone was better, too!

I consider these pickups an essential recording tool and encourage anyone who keeps Teles and Strats on hand in their studio to consider investing in them, even though they aren't cheap. These pickups are available in various configurations and flavors, and prices vary accordingly. (www.kinman.com)

-Allen Farnelo, www.farnelo.com

ART

Pro VLA II

ART's Pro VLA (*Tape Op* #37) is one of the best compressors ever made at its price point. You can pick one up new for under \$400. It's an electro-optical compressor with a 12AX7 tube gain stage. You could call it the poor man's stereo LA-2A, but the funny thing is, lots of engineers who can afford to spend more still use the Pro VLA. Rather than run a review of this new box as a new piece of gear, we thought it would be more interesting to send it around the country via FedEx truck and see what some engineers who were familiar with the original Pro VLA thought about the new upgraded version. First we had Kirt Shearer of Paradise Studios (*Cake; Toni, Tony, Tone; Tesla*) here in Sacramento give it a listen. -JB

Being very familiar with the original VLA, I was glad to see that they didn't screw up this new version. It's hard to get the original to sound bad unless you hit the front end too hard, and the same is true for version II. It can be just as unobtrusive as the original without being boring. The difference is seen when you mess with the variable attack and release controls. Put this on a drum submix and crank the attack and release to full fast. Now set the ratio to infinity, and all of a sudden, this thing gets *nasty* in a way the old one never could. It can get some of that abusive "British" sound. Since I believe that the circuitry is the same, this means that the original wasn't taking full advantage of how fast the opto could operate. Other than the rather silly and sometimes redundant metering (do we really need six meters?), this is an improvement on an already great compressor, adding a degree of versatility that the original was missing.

-Kirt Shearer, www.paradisestudios.net

Next we shipped it down to Los Angeles for Thom Monahan (*Vetiver, Devendra Banhart, Alela Diane*) to try out.

It's hard not to imagine that the new Pro VLA II was designed by people that didn't really understand why the first one was so successful. Gone is the auto attack and release function that made it a great "set and forget" box, and added is yet another set of input/output led meters, making three separate ways to monitor your signal visually — totally unnecessary to the point of ridiculousness. I don't think that the weirdo, paired VU and step LED meters were a real selling point for the original. I think that most people used their ears to evaluate it because it was an ugly device that has now only gotten uglier. But who really cares if it sounds great! The original Pro VLA had incredible bang-for-your-buck, and thankfully, the newest version retains most of the original's sonic character. In use, swapping between version I and II in a mix on a drum subgroup, the Pro VLA II couldn't match the original for transparency on the kit, but it did add a midrange punch that the original lacked. The attack and release controls were useful, but it was difficult to keep the newer version from overcompressing. It was either barely touching the signal or stomping on it. But the sound of the compressor was extremely engaging — just not the same as the original's. It isn't just the Pro VLA with added attack and release controls, it's another beast altogether with more midrange detail and a much more aggressive sound. What you get for the money seems well worth it.

-Thom Monahan <thom.mn@gmail.com>

Then Thom started it on its journey back east to Craig Schumacher (*Calexico, Neko Case, Devotchka*) at Wavelab in Tucson, AZ.