

Lindell Audio

LiN76 Limiting Amplifier

I've been looking for a hardware compressor for tracking purposes, so when I saw the attractive price of Lindell Audio's *LiN76*, I decided to grab one. I've owned a few 1176-style hardware clones, other similar hardware compressors, and (of course) the plug-ins, but I'm not going to do a side-by-side comparison here. I mainly mix in the box, but I wanted to gauge whether a hardware compressor could be useful in my workflow.

The *LiN76* is a two rack space unit compressor, and the controls on the front panel will look familiar to anyone who has used a Universal Audio 1176. On the back are 1/4-inch TRS jacks for input and output (but no XLR) and a trimmer potentiometer (pot) for meter calibration. There is also a power connector for the external AC transformer (DC conversion is done in the chassis). The front panel reminds me of a black and white photo negative of the famous "blue-stripe" (revision A and B) era Universal Audio 1176, but the *LiN76* is not a copy of any specific revision. Lindell selected their favorite characteristics from three to four different 1176 revisions: An input section similar to a revision G and an output section based upon revision A, with some of the input circuitry inspired by a revision D. Lindell told us that the *LiN76's* FET was selected specifically for its vintage-style compression "action" that offers a deeper character instead of the cleaner, modern FET vibe found in many other readily available clones.

As with nearly all of my gear, I opened up the *LiN76* to take a peek inside and saw a clean looking build, with good-quality, discrete components. There are a couple of balanced line receiver ICs (integrated circuits), but none are surface mounted, and the output stage has a Cinemag transformer. If you are unfamiliar with the specific revisions of an original 1176, a quick internet search ("1176 revision history") should turn up an informative blog on Universal Audio's website.

I set the *LiN76* up as soon as I received it and was confronted with a few challenges. I prefer an IEC power cord with an internal power supply, or even a "line-lump" power supply versus the *LiN76's* wall-wart plug. Unfortunately, it would not fit into my rack-mount power conditioner, so I had to locate a short extension cord before I could plug it in. After a bit of time warming up, I noticed the meter (an old school VU / not a strip of LEDs!) was slightly off the zero mark, so I grabbed a flat blade screwdriver – okay, not true, I used a guitar pick. Since the pot is on the back of the unit, adjusting the VU meter is already a bit awkward. However, the control was extremely sensitive and would peg the meter left, or right at the slightest touch! It took me several attempts (holding my breath) to adjust it correctly.

Unexpectedly, the pots on the front panel are detented (or stepped), which is a nice touch and makes recall much more effortless! After studying the included quick start guide, some online specs, and briefly fiddling with the dials, I realized the Attack and Release controls work opposite of most 1176-style compressors. I emailed Lindell support, and they confirmed this (and this is now noted on their website). When the knobs are rotated clockwise, the timing gets slower (versus faster on a typical 1176-style compressor). I had to think carefully before making changes at first, but I eventually got used to it. If you are a long-time 1176 user, and comfortable with electronic work, you could change the direction of the controls by swapping the wires going to the outside legs of the potentiometer. However, Lindell suggests leaving it as is – you can always just label the settings as a reminder.

When put to use in a singer/songwriter tracking session, I found it easy to dial in some light gain reduction at 4:1 to shape the vocal, but without inhibiting the intimate sounds we

were getting. On a louder vocal, I could push the *LiN76* into interesting harmonics without going into the red on my converter. In a mix session, I auditioned it on kick and snare and quickly dialed up some nice punch. Using the "all buttons in" trick took a little extra effort to get all of the controls to stick at once, but once engaged, it was pretty easy to get that familiar crushed and blown-out drum or vocal sound. I was also able to tighten up a bass track and reign in a strummed acoustic guitar with minimal effort. All in all, it was doing everything I would expect from this style of compressor.

I was happy to learn that the Lindell *LiN76* can do some of the same tricks I'd expect from a classic 1176. I use more plug-ins at mix time out of convenience (and maybe laziness); thus, I will use this primarily for vocal tracking sessions, where I found the *LiN76* did exactly what I needed. Although the Attack and Release knobs might be confusing for some users, it's a solid piece of gear with a real output transformer at a fantastic price! (\$399 MSRP; lindellaudio.com)

-Mike Kosacek <doubledogrecording.com>

API

SV 14 EQ

As an owner of an API 1608 console [*Tape Op* #81] loaded with a bunch of API 550As, 550Bs, and 560s [#26], I'm pretty familiar with API's EQs in general, and I think they sound great. My one slight gripe has been that I often want to cut or boost a frequency between the stepped frequencies on the 550A and 550B. I really like sweepable EQs, especially on drums, toms, and acoustic guitars. So, when API offered to send a pair of their new four-band sweepable *SV14 Select 500 Series* EQs, I jumped at the chance to try them out.

Before installing, I opened up the well-built and sturdy shielded metal enclosure to check out the guts of the *SV14* and found a solid interior design, with socketed TL072 op amps and a beefy output transformer on a clean PCB. I was in the middle of tracking acoustic guitars on a project, so I followed up my API 312 [*Tape Op* #141] mic pres with the *SV14*, and got excellent results. Cutting both some low mids while boosting a little upper mids was easy, fast, and sounded really good, and I was hitting record within minutes. That's what I like – not keeping the artist waiting. A week or so later, I was mixing the same project and used the *SV14s* on the kick and snare, then printed those into my mix and then put them on my stereo overheads. In both cases, I quickly got good results that sounded very musical to my ears (to use an overused term). I don't know how the bandwidth curves work on these EQs and I don't care, because they sound good to me. Even when boosting upper mids or high end, the *SV14s* still sounded excellent. Adding a bit of a boost at 16 kHz (the top band extends all the way to 20 kHz) provided a nice crispness to the ride cymbal on a track, with the pleasant sound of the stick hitting the cymbal accenting in a nice way. Lastly, as I was wrapping up mixing the track, something in the midrange of the lead vocal was starting to annoy me, so I made a stem of the drums and moved the vocal over to the *SV14*. I was already running the vocal through my Retro Instruments Powerstrip [*Tape Op* #82], my go to for vocal compression with a touch of Pultec-style passive EQ. However, something in the mids was not working. Using the three lower bands of the *SV14*, I was quickly able to dial down the midrange and add a slight bump on the bottom end of the vocal, and then it sounded much better. Bottom line: These EQs sound great and are pretty affordable. If you're looking for a quality sweepable EQ, this will be one of the better choices on the market. I will definitely be buying these, and would look to pick up a few more for our 1608 console. (\$565 street; apiaudio.com) -JB

Solid State Logic

4K B channel strip plug-in

Before the widely known SSL 4000 G and E series consoles, Solid State Logic built six 4000 B series consoles. They have modeled the entire signal path of a hardware channel strip from the 4000 B, and made it available as a plug-in. Some of the unique features of this channel strip emulation include a modeled Jensen transformer mic pre, a dynamics section, de-ess functionality, and modeled dbx 202 "black can" VCA fader. The result is a rich and colorful sound, quite different from the more commonly emulated SSL 4000 and 9000 series plug-ins available from other manufacturers.

Typically for me, an SSL channel strip is my go-to for drum tracks and often vocals. After instantiating the *4K B* plug-in across all drum tracks in a working mix, I could immediately hear the difference in fullness and, frankly, quality when compared to a third-party popular SSL channel strip plug-in, one I have used for years. In addition, there is a definition in the low mids that seems to carve out space and separation between the kick and snare – and this is just on the default setting! I'm embarrassed to say that while testing out the *4K B*, I realized just how lackluster the other channel strip emulation I'd been using was – a good reminder that all plug-ins have a characteristic sound, even at their default settings.

With the *4K B* preamp emulation engaged and turned up a couple clicks across all the drum tracks, the sonic outline of each drum became clearer – a similar effect to pulling up faders on a high-quality console. The fundamental frequencies of the toms and snare had more definition, and the transients were tighter. The dynamics section is my favorite part of the *4K B* channel strip. The compressor in this plug-in is designed to be more like the classic SSL bus compressor. Ratios are fixed, with 2:1, 4:1, 10:1, and "ds" as your options. Variable Threshold and Release knobs are provided, but there is no Attack setting. This means we get no fast attack option like other SSL console compressors. The same goes for the Gate/Expander section; there are only controls for Threshold, Range, and fixed Release settings. This compressor has a bit more of an elegant gluey sound than the punchy/grabby sound of the traditional 4000 series compressor, and I dig it. It really excels on drums, piano, and vocals.

The "ds" mode in the compressor section has two parts. When the compressor's ratio is set to "ds" it is a fixed 10:1 ratio that reacts to high frequency information. When the release is set to "ds" it is a variable release time between 30-50 ms, which is a bit faster than a typical SSL compressor release. While it may not be the most tweakable de-esser on the market, it works beautifully without ever getting into lisp territory. In addition to vocal de-essing, this feature is also excellent for taming high hats or super bright cymbals in overhead and snare mics. I love the simplicity here! The result is being able to get better sounds in less time. I was able to get a thicker, and more glued-together drum sound by just using the *4K B* where I'd generally be stacking up inserts with saturation plug-ins, channel strips, and extra tone shapers.

The Gate/Expander section is much more musical and accurate than a competing channel strip I typically use. With the SSL, it's so easy to dial in, and it works so well that it gives me that feeling of "Ahhh! This must be what working with the real console is like!" The *4K B* plug-in made me feel like I was clearly working with a superior tool than I had before. Its blend of simplicity and excellent tone makes for much easier mixing.