

## Lisson Grove Compressor Review

Mar 1, 2012 9:00 AM, By Barry Rudolph

UNIQUE-SOUNDING GAIN CONTROLLER WITH ALTEC LINEAGE



The [Lisson Grove](#) single-channel, variable- $\mu$  compressor is an homage to the U.S.-made Altec 436B compressor originally released in 1958 for telephone and broadcast use. American recording engineers found them unreliable, lacking good bass response, and mostly ignored them. British engineers recognized the Altec's potential and made extensive circuitry changes, tube substitutions and operational modifications, transforming the unit into a superior-sounding device. The unit was used exclusively at British studios and others throughout the world. It became a big part of the "British Sound," appearing on countless records in the '60s and '70s including numerous 'Beatles' & 'Pink Floyd' records.

The Lisson Grove builds on that unit's legacy with further refinements, enhanced reliability and some modern touches—all without deviating far from the original's core sonics

### BUILT LIKE A BRITISH CHALLENGER II TANK

The U.S.-made, two-rack-space comes in an all-steel cabinet painted with a super-thick and scratch-resistant industrial coating. The "chicken-head" knobs, institutional-green front panel, vintage jewel pilot light and antique-looking Hoyt Electric gain reduction VU meter all combine to give it a militaristic retro look.

Inside, a steel truss panel running the width of the unit supports the main circuit board on one side, and three horizontally mounted tubes on the other.

### TRY THIS

Because there is (essentially) no noise in digital recordings, you can record and then re-record the same track(s) again and again through the Lisson Grove [REDACTED] without a buildup of tape hiss, modulation noise and analog generational loss—as was the norm in olden analog tape times. I had already recorded bass guitar through the [REDACTED] using fast attack and release times, and then re-recorded the same track through the unit again—this time with longer attack and release settings. Compressing each time over 15 dB, the final bass sound was incredible with volume changes of only about 1 or 2 dB no matter what was played. The bass remained dynamically "still"—at a constant level for a consistent and never-wavering position in the mix.

The power supply board is mounted on the inside of the unit's back panel and has a switchable 110/220 VAC mains IEC socket.

Point-to-point hand-wiring is used throughout, with pots made by Pec or Alpha, switches by Carling, and critical audio capacitors from Auricaps and Solen. The three tubes (6ES8, 6CG7 and 6AL5) are in ceramic sockets but without hold-down brackets. Sowter makes the input transformer; the output transformer is a custom-made CineMag.

To counteract changes in sound and operation over time caused by tube aging, component drift and the quirky 1950 circuit design, the Lisson Grove uses a clever tube-balancing method. With the unit connected and patched, pushing a front panel button activates a NE-2 neon bulb relaxation oscillator circuit that sends a 3Hz pulse to both cathodes of the triode halves of the 6ES8 push-pull input stage, causing a low-level "ticking" sound in the unit's output.

The recording engineer would then adjust a lockable front panel trim pot labeled Balance so that this ticking sound is at minimum, indicating that both triode halves are balanced. This 20-second procedure is required one or two times a month and can be done at any time—even during a session.

### **WHAT'S THE DIFFERENCE?**

The comes with a continuously variable attack time control with a range of 15 ms to 125 ms, along with a new O/P Load control feature. O/P's front panel control sets the output impedance anywhere between (CCW) 200 ohms (labeled "Dark") to 600 ohms (CW). Also new is a rear panel, ¼-inch link jack for stereo operation of two units, with the unit that is compressing more acting as the master.

Release operation is also completely "remixed" on th. A faster release time replaces the fastest position—it's now 310 ms , with all other five release times the same as on the modified British unit..

Like the modified British unit, the Lisson Grove's Release rotary switch allows access to the compressor's unique Hold or Infinity mode. As soon as you switch to Hold, the current amount of gain reduction at that moment is "frozen," with no recovery of gain back to unity as is typical of a compressor. To engage Hold, there are six interstitial switch positions between the six release time positions, making the Hold mode always one click away from any selected release time.

For hands-free operation of Hold, there is a ¼-inch rear TS panel jack for connecting a normally open footswitch (not included). Shorting the tip to the sleeve returns the unit to normal operation.

### **IN THE STUDIO**

#### **Proto Loudness Wars?**

I heard a story about a certain Beatle record that was mastered through a "wound up" EMI RS124 and reported to be the loudest record of all time when it first debuted on the radio in 1968! Using two [REDACTED] for stereo mix bus compression or mastering might seem like a wrong choice—we're not talking about transparent and unobtrusive, high fidelity dynamic control here.

But I did try my single review [REDACTED] on a (summed) mono mix and it was fun but not part of my particular engineering style. I find "coloring" audio most effective on an individual track/source basis and not globally over the entire mix. But I do think the bypass mode coupled with the right O/P setting would make a fine, alternative choice in the mastering studio. But I'll reserve a final opinion about compressing a mix when I have two matched [REDACTED] stereo-coupled and across the mix bus in my studio.

Operating the Lisson Grove's input, output, attack and release controls reminded me of setting up a UA 1176LN peak limiter except without threshold or ratio controls—much easier. Simply turn up the input level control to set the amount of compression and adjust output to makeup gain.

During a mix, a young female singer's overly dynamic vocal tracks were easily managed by the LG. I used the fastest attack time and the number 3 release position. With input at nearly full CW, I saw 20 dB of gain reduction resulting in a solid sound that revealed the singer's every vocal nuance and detail. This worked well for the lead vocal track to keep it "tucked in" and not overpowering the dense rock track I was mixing.

However, with 20 dB of makeup gain in the chain, in between the singer's phrases I could also hear headphone spill, the tube mic/preamp noise floor and the producer talking in the next room! Plus, the song's "call and response" vocal production meant that several seconds of time elapsed between lead vocal sections. Every time the singer started in on the next section, the LG attacked and started gain reduction, but, because the release time had expired, there was a tremendous "pop" at the front of her first note.

Hold allowed me to freeze the release time (and therefore gain reduction) at the last moment of the singer's previous section. When my singer came back in, I immediately clicked out of Hold and avoided an attack "pop." The LG, already in GR, was back to normal operation with the vocal at about the same volume. I found this process easy to do and liked having the option to use it or not.

Processing direct Fender bass is great fun—you can compress to needle-pinning depths off scale—around 25 dB and it sounds fat, rich and super-dense. I was working on a song in drop D tuning and the bass player's performance and sound was good, but it was not "reading" well in the final mix.

I went with the Lisson Grove's input control at 9, output at 8, attack time control straight up and the fastest release. In spite of the fast release time and about 15 dB of squash, the unit did not distort sustained bass notes. The bass track had about a 3dB dynamic range, stayed "in your face" at all times and took on raucous character as if we had used a bass amp that was about to explode.

Here, the O/P Load function became useful because at the 600-ohm position, this bass was too bright, so I went halfway between the darker 200 and full-range 600 ohm. I found O/P's tonal range to be vast for an effect anywhere from subtle to dramatic.

Pulling out the LG's Attack knob switches to a throughput bypass—audio passes through the unit without compression. Because this is not a true bypass, switching to it will necessitate all-new level settings. In a future version, I'd like to see a hardwired bypass switch because doing A/Bs should be easier.

I had a lot of fun overdriving LG by winding up the input control. I liked the many analog colors possible, from subtle warming to brutal distortion. On the Dark side of the O/P control, the sound fuzzes out, low frequencies thin out and the output level decreases. Toward the 600-ohm side, high fidelity is

returned.

Bypass worked well for overly clean electric guitars that I wanted to “throw out into the street” and rough up. Different combinations of O/P and input settings offer many tonal choices, from somber and dire to brighter and full-sounding.

A Martin D18 acoustic sounded better after a pass through the unit. I preferred barely compressing (4dB max) with the slowest attack time setting, release set to 1 or 2, and O/P set at full 600 ohms for an open sound.

Individual drum tracks, loops, a mono drum mix bus and most percussion are also good subjects for the LG's magic. Even under massive compression (greater than 10 dB), the sound does not dull out and lose high frequencies. Set the attack time anywhere from 12 o'clock to faster, release on either 1 or 2, and O/P set to 12 o'clock or higher.

### **OLD IS ALL-NEW**

The Lisson Grove tube compressor is like a glimpse into the toolkit of English recording engineers working circa 1960. It's not perfect, it's not pristine and it's not like any other compressor. It sounds distinctive and is one of my favorite compressors of all time.

Barry Rudolph is an L.A.-based recording engineer. Visit him at [barryrudolph.com](http://barryrudolph.com).

Manufactured under licence in the UK by Unity Audio Ltd  
[www.unityaudioproducts.co.uk](http://www.unityaudioproducts.co.uk)  
[sales@unityaudio.co.uk](mailto:sales@unityaudio.co.uk)  
Tel: UK ( 0044 ) (0) 1799 520786