

TEST DRIVE



Grid 1 G1

TESTED BY ART THOMPSON

RECHARGEABLE BATTERIES CAN BE

found in everything from flashlights to Ferrari's new 599 hybrid, and while battery-powered guitar amps have been available for many years, only recently has a high-powered model with a tube preamp been an option. The folks at Grid 1 in Vallejo, California, introduced this concept with the G1, a 60-watt 2x12 amp with dual

footswitchable channels, an analog reverb that uses dual bucket-brigade technology, and a rechargeable lithium-polymer battery measuring approximately 7" x 4" x 2" that resides in the bottom of the cabinet. The G1 will operate for over four hours on a single charge and can also run on AC wall voltage for indefinite periods without overcharging the battery.

At the heart of the G1 is its tube preamp, which uses a pair of 7-pin 1U4 tubes—a type used in the 1940s and 1950s for portable radios, as well by the military for battery-powered communications equipment.

Asked why this type of tube was chosen, Grid 1's Kevin Frazier told us, "The 1U4 and 1U5 tubes are rugged and have very low current draw, thus helping us achieve maximum battery life. We had to

tweak the preamp circuit to make them produce the sound we wanted with very low noise, and to accomplish this, we designed a tube buffer stage and an anti-microphonic chamber. For the first part, the tube is driven as hard as possible to make the signal higher in amplitude than the tube's normal background noise, thus masking any microphonics. Then, by adding an attenuator network to the output side of the circuit, we drop the amplitude of the signal to a lower level, thus further reducing the noise and microphonics. This circuit produces a rounded and less brilliant tone, and the net effect is a more natural sound.

"The 1U4s also run very cool, and that enabled us to design an anti-microphonic chamber to house them in," says Frazier.

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Check out these sound clips of the battery-powered G1



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SPECIFICATIONS

CONTACT Grid 1, (800) 928-7144; grid1.com

G1
PRICE \$1,799 direct
CHANNELS Two
CONTROLS (Clean channel) Gain, Bass, Mid, Treble, Reverb, Volume. (Lead channel) Gain, Bass, Mid, Treble, Reverb, Volume. Bright switch, channel-select switch

EXTRAS Effects loop (also a D.I. out using the Send jack), automatic switching between AC and battery power, "universal" voltage operation (90-240 VAC), two-button footswitch included for channel select and reverb on/off.

TUBES Two NOS U.S.-made 1U4 miniature 7-pin preamp tubes

POWER 60 watts

WEIGHT 40 lbs

KUDOS Good range of clean and overdriven tones. Loud and punchy. Battery power allows for use just about anywhere.

CONCERNS Tubes are difficult to access. No extension-speaker jack.



A rechargeable lithium-polymer battery resides at the bottom of the G1's cabinet.

"This soundproof chamber provides mechanical damping by isolating the tubes from higher frequencies that might cause them to start singing. The chamber is shock mounted in its own enclosure *inside* the main chassis, thus isolating it from electrical interference and noise."

Tested with a variety of guitars (including a Gibson Historic '58 Les Paul, a PRS 305, and a reissue Epiphone Wilshire), the G1's Clean channel dished up a warm, clear, sound with plenty of headroom. I had to dime the Gain control to bring on enough tube-flavored distortion for bluesy lead playing with my guitar turned up—a sound that cleaned right up again when I turned down. The tones are on the bright side, even with humbuckers, and with the bright switch on I kept the Treble control at or close to zero with the Bass and Mids set at around two 'o'clock and ten 'o'clock respectively. The reverb sounds shimmering and reasonably spring like at lower settings, but when turned up to surf approved levels its bouncy decay leaves no doubt as to its solid-state origin. Overall though, it's one of the better sounding non-spring 'verbs I've heard on a guitar amp, and having separate level controls for it on both

channels is a welcome feature.

The Overdrive channel is gainy and somewhat leaner sounding than the Clean channel. With the Gain knob venturing toward half way there's plenty of grind for power chording and soloing. The G1's distortion voice isn't particularly reminiscent of, say, Marshall or Mesa/Boogie, although it's a stout enough tone for any style short of metal, and the amp easily kicks out enough volume to hang with a band. The EQ is also well implemented on this channel, and only modest tweaks of the Mid and Bass controls were needed to get good tones from our guitars. The attention put into keeping the G1 quiet was worth the effort too, as this amp has a low hiss level even when turned all the way up with the Overdrive channel engaged.

So why anyone would need a battery-powered amp with the wattage the G1 delivers? Well, the ability to play in places where no AC exists is one reason, although you might be playing by yourself until someone starts making battery-powered bass amps and P.A. systems. Then there's the convenience factor of not needing a wall socket, a byproduct of which means the G1 is immune to any line-noise and/or

"brown" voltage conditions that may exist in the place you're playing. Lastly, the G1 is perfect for off-the-grid types (no pun intended), who would welcome the idea of having a gig amp that could be recharged via power generated from solar panels, wind turbines, or other non-fossil fuel sources. **B**

