

GRAMOPHONE DREAMS

BY HERBERT REICHERT

THIS ISSUE: Herb celebrates the 50th anniversary of a turntable so iconic, it has its own Wikipedia page. *Really.*

An Anniversary to Remember

Which record player has achieved international acclaim as a musical instrument in its own right?

Which turntable is revered for its near-indestructible build quality?

Which disc spinner has played more records—and made more people drink, drug, dance, and make out—than any other?

Which turntable has sold over three million units?

Hint: It is not made in the US, the UK, China, or Switzerland.

Few *Stereophile*-reading audiophiles wept when, in 2010, the Technics SL-1200 Mk.5 direct-drive turntable was discontinued. Those who *did* shed tears blamed it on the rise of the MP3 and the demise of the LP. Outside the audiophile world, people cried, barricaded streets, and demanded an explanation from Technics and its parent company, Panasonic. Corporate suits said the tooling had worn out. Record people everywhere, including yours truly, mourned in silence at the end of the SL-1200's prodigious run.

Well, folks, Technics turntables are back. Completely from scratch, using all-new tooling, Technics has designed and built a brand-new, jet-fighter-strength, direct-drive turntable with a slick, sophisticated look—one that flies rings around the old gray propeller model.

Panasonic is celebrating a half-century of the legendary Technics SL-1200 by releasing two new Technics Grand Class models aimed primarily at audiophiles: the SL-1200GAE 50th Anniversary Limited Edition (1200 numbered units) and the regular-production SL-1200G. The two SL-1200s are *almost* identical: in the SL-1200G, the finish of the magnesium tonearm will be different, as will be the silicone damping inside the new footers. Both models will cost \$4000, and will be sold only through brick-and-mortar audio salons.

Nor is that all: Panasonic has decided to reestablish the Technics brand in perfectionist audio with a full line of high-fidelity audio components, beginning at the top with the new Reference Class, followed by the more affordable Premium Class (of which I recently reviewed the Premium SB-C700 loudspeaker¹), and this new Grand Class, which includes the ST-G30 music server, the SU-G30 network audio amplifier, and the SL-1200GAE 50th Anniversary Limited Edition turntable.

DESCRIPTION: The instant I first saw and touched the Grand Class SL-1200GAE 50th Anniversary Limited Edition, I realized that it is not just a tarding-up of the old workhorse SL-1200. New from the ground up, it has almost nothing in common with the used SL-1200 Mk.2 I bought at a stoop sale for \$70.²



This is not just a tarding-up of the old workhorse SL-1200.

Every time I'm near the shiny new 'GAE, I run my fingers sensually over the word **TECHNICS** deeply engraved on the hairline-processed, 0.375"-thick aluminum top plate

of its plinth. This new fourth layer is added to the already substantial three-layer sandwich of die-cast aluminum, bulk molding compound, and heavy rubber of the SL-1200 Mk.5's plinth. No MDF anywhere! The new 'table weighs 39.6 lbs (18kg). The discontinued SP-1200 Mk.5 weighed 26.4 lbs (12kg).

After I run my finger over the logo, I usually lift off the thick rubber mat and gaze in awe at the brass top of the dynamically balanced platter, which is made of layers of die-cast brass, aluminum, and heavy rubber. The machined brass, resplendent to behold, reminds me of the copper-sandwich platter of Technics' most venerated turntable, the SP-10 Mk.3. The SL-1200GAE's designer, Tetsuya Itani, told me that he owns a Technics SP-10 Mk.3; that was his inspiration and reference for the new model. According to Technics, the SL-1200GAE's much heavier platter "delivers smooth rotational stability and inertial mass surpassing the SP-10 Mk.2."

Removing the platter reveals other new and important features. There is a Mode switch that, in its Manual setting, enables the use of two adjacent trimpots for adjusting Torque (Low to High) and Brake onset (Slow to Fast). With the Mode switch set to Auto, the SL-1200GAE exhibits Torque and Brake performance equivalent to that of the

¹ See the January 2016 issue: www.stereophile.com/content/technics-premium-class-sb-c700-loudspeaker.

² See my column in the April 2016 issue: www.stereophile.com/content/gramophone-dreams-9.

original SL-1200s. Also under the platter, also new, is a USB port to aid in servicing.

At the center of all this high-Technics newness is a brushless, coreless, twin-rotor, nine-pole DC motor. According to the Technics press release, "One problem that direct-drive systems have always faced was sound quality degradation caused by 'cogging', or tiny vibrations of the motor and rotational speed fluctuations. However, by combining the knowledge and expertise gained as the originator of direct-drive turntable systems with a newly developed coreless direct-drive motor without iron core, this 'cogging' [pole-magnet alignment detent] can be eliminated. Any potential minute motor vibrations are suppressed even further by high-precision rotary positioning sensors guided by a microprocessor controlled system; a feature unique to the new Technics turntable."

If the new platter, motor, and speed control are unquestionably big steps up from the original, so are the new isolation feet, made of heavy die-cast zinc, with a flexible leg of dense silicone separating the zinc feet from their mounting. The new feet allow

the deck to move freely in *three* dimensions. Tetsuya Itani says that his goal was a full-table resonant frequency lower than 10Hz.

My favorite part of the original SL-1200 was its thick rubber platter mat,³ which delivered the full boogie energy of every song. Fortunately, Technics has not changed that. Also unchanged from the SL-1200s of legend are the overall look and layout, the Pitch slider—although pitch control is now fully digital—the Off/On and Start/Stop switches, and the 45rpm adapter. Unlike the old 1200s, the back of the SL-1200GAE has an IEC power-cord socket, and gold-plated RCAs with solid-brass grounding lugs for fitting the tonearm cable of your choice.

My biggest problem with the original SL-1200 was its aluminum tonearm. Compared to audiophile arms, it felt flimsy and imprecise, and favored high-compliance moving-magnet cartridges. (Moving-coil cartridges can overwhelm flimsy tonearms.) The new tonearm has an effective mass of 12gm, low friction, stainless-steel gimbal bearings, and a strong, light, highly damped armtube made of cold-drawn magnesium. It feels very precise, and seems

better suited for the lower-compliance moving-coils favored by audiophiles. To accommodate heavy cartridges, the 'GAE tonearm comes with two extra balance weights, so the user has a choice of small, medium, and large.

Last but emphatically not least: The SL-1200GAE plays 33 1/3, 45, and 78rpm records. This shows you what Panasonic must believe is true of its new customer demographic. While the SL-1200GAE has every feature a dance or radio DJ user might want, the fact that it can also play 78s is, to me, huge—and might actually define this \$4000 turntable's audience for the longer haul.

I believe that the collecting of vintage and new vinyl has only begun to catch on as a normal component of a sophisticated and discriminating lifestyle. Forget DJs with sneakers and headphones! Think foodies in Kenneth Cole suits drinking port wine and playing their latest black-disc acquisitions as a relaxed form of after-dinner parlor entertainment. The 'GAE's new Grand Class style and finish, plus its better-quality magnesium arm with

³ See my column in the March 2015 issue: www.stereophile.com/content/gramophone-dreams-4.

detachable and upgradable headshell, make switching among stereo, mono, and 78rpm cartridges easy. Picture me smiling suavely in my slim-fit black suit, cueing up John Hammond's 1927 recording of "Purty Polly" (78, Sears Silvertone 9249) as my guests sip 1947 Porto rouge Sandeman.

LISTENING: The world's best record-players all exhibit an eerie silence coupled to a precise, palpable, and captivating spatiality—which is what we pay so much extra for. By comparison, my stoop-sale Technics SL-1200 Mk.2 is conspicuously noisy and spatially vague. The *reconceived* 1200, the new Grand Class SL-1200GAE, with its new motor-drive system, went a surprisingly long way toward correcting these problems.

I used four cartridges with the Technics: an Ortofon 2M Black MM, a Hana by Excel EL low-output MC, my Zu Denon DL-103 MC, and a mono-wired Shure M44 MM with 78rpm stylus. My listening notes look like this: "SILENCE, PRECISION, SILENCE, mucho dynamics, easy by nature, expansive, SPATIAL CORRECTNESS, tiny info/detail, jump & jive, quieter and FIRMER than the old 1200! BOOGIE

OOGIE WOOGIE and Smoooooth!"

Quiet, lively, and precise accurately describe how the Technics SL-1200GAE played records. With every cartridge, the 'GAE's octave-to-octave energy balance felt even and authentic.

Energy-wise, the SL-1200GAE made my newly beloved Linn LP12 with Valhalla power supply feel uneven, a bit out of control (especially in the lower octaves), and possibly a tad vapid. (Linn's Lingo power supply and Cirkus platter-bearing and subchassis upgrades would likely cancel those disparities.) To my surprise, rhythm, melody, and bass lines were more easily noticed and enjoyable to follow with the Technics. As I trolled through my Mango, Island, and Studio One records, I realized that the SL-1200GAE was beating my Linn Sondek LP12 at its own game: It had major force factor and foot-stomping momentum—perhaps the best I've ever experienced. The 'GAE captured the urgency of Miles Davis, the potency of Junior Wells, and the inspired delirium of Roy Acuff singing Hank Williams's "I Saw the Light," from the Nitty Gritty Dirt Band's *Will the Circle Be Unbroken* (3 LPs, United Artists UAS-9801).

Music played on the Technics was better organized, easier to comprehend. The SL-1200GAE did an especially good job of describing full orchestras. Because it reproduced, without blurring, the dynamic spreads of notes and instruments, from silence to full-on drive and swing, it made piano concertos seem less confused and overwrought than they sometimes do.

The one important trait the Technics SL-1200GAE lacked was the Linn Sondek LP12's enjoyable suppleness and sensual elasticity. No matter which cartridge or phono stage I tried, my No.1 complaint about the new Technics was its tendency toward lowered viscosity. I wouldn't quite call it stiff, but no one could characterize the 'GAE as sounding liquid or licentious. Many, however, might call it accurate, because it made LPs sound a lot like good hi-rez digital: crisp, highly controlled, and dynamically uncompressed. (Could I have been hearing the 'GAE's digital speed control?) Meanwhile...

The Technics SL-1200GAE *must* be an audiophile turntable. Why? Because it placed images in space with more certainty and bas-relief than any table

PH34/44 SUT

Step up transformer



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- Jensen Transformer for unmatched performance
- Hand wired for optimal signal flow and low noise
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Al Schmitt
Capital Records - Grammy winning Engineer
Frank Sinatra, Barbra Streisand, Steely Dan, Yo-Yo Mah

"I've been using Hafler for over 25 years and I have never been disappointed. Their performance is outstanding, they are very dependable and their dynamics are just what I look for."

PH50 phono stage

for moving magnet



- Phono stage for moving magnet cartridge
- Ultra low noise transformerless design
- Variable high-pass filter to eliminate rumble
- 91dB dynamic range - 0.002% distortion
- Plug and play easy to set up and use



Andrew Mendelson
Grammy winning Mastering Engineer
The Rolling Stones, The White Stripes, Kings of Leon

"Following a careful review of the Hafler PH50 phono stage, all I can say is it sounds great. The imaging and clarity are remarkable."

PH60 phono stage

for moving coil



- Phono stage for moving coil cartridge
- Ultra low-noise transformerless design with 70dB gain
- Switchable high-pass filter to eliminate rumble
- Internal jumpers to match cartridge impedance
- Plug and play easy to set up and use



Emily Lazar
Chief Mastering Engineer and Founder - The Lodge
Coldplay, Foo Fighters, David Bowie, Beck, The Killers

"The PH 60 translated so incredibly well in conjunction with not just one, but all of our turntables that have moving coil cartridges!"

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Grammy winning Engineer - Producer
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I've used in my home. Soundstages appeared fully developed in a way similar to what the most expensive audiophile turntables can do. Of course, it wasn't as deathly quiet or as low-level informative as a three-motor Dr. Feickert Analogue Firebird (\$12,500) or a Döhmman Helix I (\$40,000), but the musicians reproduced on the SL-1200GAE's soundstages were *present* and *tangible* in ways the old SL-1200 couldn't even hint at. Compared to the best turntables at any price, the 'GAE was weak on sustain, truncated note decays, and lacked psychedelic color—but it made my old SL-1200 Mk.2 and my ancient Thorens TD 124 sound hollow, unspecific, and noisy.

MES TROIS CONCLUSIONS: I'll be writing a Follow-Up about the Technics Grand Class SL-1200GAE 50th Anniversary Limited Edition in which I'll delve more deeply into the musical vicissitudes of this shiny new machine. For now, I'll answer three questions about it:

Is the SL-1200GAE better than its legendary predecessors? The SL-1200GAE was so quiet, precise, and forceful that it made my old SL-1200 Mk.2 feel and sound almost like a toy. It played with substantially more detail, dynamics, and musical authority than either the SL-1200 Mk.2 or Pioneer's PLX-1000 (\$699).³

Is the SL-1200GAE an audiophile-quality turntable that can compete in a high-end audio marketplace filled with scores of quality contenders costing less than \$5000? I believe that it is. It did all the audiophile tricks—especially low noise, precise imaging, midrange clarity, bass punch, and openness of the high frequencies—and it out-boogied them all.

Is the SL-1200GAE worth \$4000? Unquestionably. Its materials and build quality are superb, and, to my taste and experience, it played records as well as or better than any turntable listed in Class B of *Stereophile's* "Recommended Components."

Hana by Excel EL moving-coil cartridge

Your secrets are safe with me: I forget them the moment I hear them. Because of this quasi-willful amnesia, it has been my fate to be admitted to some expensive hotel rooms in which I have witnessed groups of smirking high-end audio gangsters actually making up the prices of their ultra-expensive gear. I can hear you thinking: *Well... don't they just multiply the costs of design, manufacturing, and marketing by a factor of*

six or seven? I'm sure they don't, but I forget why...

Trust me: With *all* commercial goods, the first and most important design consideration is price. This is especially true with high-end phono cartridges, which typically are little more than bunches of tiny OEM parts assembled on a workbench by a third-party manufacturer with a microscope and an exotic-sounding name. Never forget: The value (in dollars and sense) of any person, place, or thing is determined mainly by the mythology surrounding it.

Imagine that you're an OEM manufacturer of styli, cantilevers, magnets, wire, etc., and you're selling thousands upon thousands of tiny bits of wire, stone, and iron that end up in cartridges selling for zillions of dollars. One day, you might wake up and think, *Hmmmm... maybe I'm in the wrong part of the cartridge racket. Maybe I should put some workbenches in the corner of my factory and cut out those gangsters and their overpriced mythologies. I already have all the bits—I could make a genuine high-end cartridge, sell it at a reasonable price, and make a lot of audiophiles on modest budgets very happy.* This type of thinking is probably what inspired Hiroshi Ishihara, of Japan's Sibatech, Inc., to commission from Excel Sound Corporation a new line of moderately priced cartridges called Hana by Excel.

Excel Sound Corporation is a Tokyo company that, since the 1970s, has made high-quality moving-coil cartridges, both OEM and under its own name. Excel is highly regarded for the quality of its engineering and the precision of its manufacturing.

Aside from minor variances in their performance specs, the four Hana by Excel MC cartridges differ only in their stylus profiles and output voltages. The EH and EL models (\$475 each) have elliptical styli, the SH and SL (\$750 each) have Shibata styli. The EH and SH have an output voltage of 2mV, the EL and SL 0.5mV.

All four Hanas have aluminum cantilevers and alnico magnets. I love alnico because I feel that the material yields a uniquely relaxed, colorful, and naturally textured sound. For me, there's something very natural and non-hi-fi about the character of music made with alnico-magnet transducers. Of course, I can't *prove* it's the alnico, but the Hana EL presented music

³ See my column in the March 2015 issue: www.stereophile.com/content/gramophone-dreams-4.

Advancing the Science and Efficacy of Power Conditioning



There are many approaches to reducing the noise associated with AC power—conditioner-filters, regenerators, isolation transformers, battery inverters, and more—and all can yield meaningful results. However, some of these techniques also cause ringing, current compression, and non-linear (obnoxious) distortions. **Some cures are worse than the disease**—some are not as good as plugging straight into the wall.

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Sincerely, Bill Low



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with an alnico-like feeling of home-spun organic rightness. The EL's basic sonic character was highly musical and exceptionally nonmechanical.

The Hana EL's compliance of 10×10^{-6} cm/dyne appeared to perfectly match the effective mass of my SME M2-9 tonearm (\$1099), the combination exhibiting a moderate resonance at 9.5Hz. The EL tracked everything on Shure's *Era IV Audio Obstacle Course* test LP and never seemed to overstimulate the arm or bearings.

I listened mostly through the MC phono section of Rogue Audio's new RP-1 preamplifier (\$1695). Using the RP-1's internal jumpers, I loaded the 30-ohm Hana EL at 300 ohms. The combination demonstrated Technicolor mids, liquid (but not overly extended) highs, and a delightful way with plucked double bass. Records were effortlessly engaging. The only things I wished for were a tad more slam and some dewdrop sparkle.

With the Dynavector P75 phono stage (\$895) set to 470 ohms, I experienced sharper transient attacks and a more hypertextured midrange. Bells, gongs, and cymbals sounded enjoyably real. Drums picked up some power. The soundstage became more tightly formed and densely layered. Recording venues increased in air and volume.

I bought a new Moondog album, *Snaketime Series* (LP, Moondog 1), and could not stop playing it. *Snaketime Series* played with Moondog-enhancing

clarity. Car sounds and ambient street noises sounded satisfyingly real. Both the Rogue RP-1 and the Dynavector P75 phono stages made the Hana feel like a more expensive cartridge than it is, but I was curious to see just how much, if anything, I would lose by switching to Schiit Audio's humble but always-overachieving Mani phono stage (\$129).

With the Mani, punch, detail, and drive were all noticeably reduced, but the Hana EL's easygoing musical magic decreased not at all. Midrange colors were still enjoyable. I listened to five Miles Davis records in a row with the Schiit Mani and Hana EL. I found them, in musical terms, a damn-near unbeatable budget combination. With every disc, Miles's trumpet—and the reverberating air around it—sounded inexorably real.

When I mounted the Hana EL in the tonearm of Technics' new Grand Class SL-1200GAE 50th Anniversary Limited Edition turntable, it retained its unpretentious charm but suddenly picked up energy and began dancing like a Gypsy, sounding more dynamic, spontaneous, and tuneful. I played this combo for some old-timer audiophiles. At first they were skeptical, but in short order their heads were bobbing and they were pounding their knees like bongos. All of them said they liked the Hana EL better than the Denon DL-103. So did I.

All through this review period I listened to the Nitty Gritty Dirt Band's 1972 masterpiece, *Will the Circle Be Unbroken* (3 LPs, United Artists UAS 9801), produced by William McEuen (who also plays banjo and mandolin) and featuring Vassar Clements, Earl Scruggs, Roy Acuff, Doc Watson, Mother Maybelle Carter, and a score of other old-school country-music wizards. I played Acuff singing the Hank Williams classic "I Saw the Light" on every possible combination of Hana EL, tonearm, turntable, and phono stage, and—please don't laugh or get angry—I most liked the Hana EL's boogie, excitement, and instrumental tone with the Technics SL-1200GAE turntable and tonearm (\$4000) driving the Dynavector SUP-200 MC step-up transformer (\$2500) driving Dynavector's P75 phono stage (\$895) in MM mode. I know, I know—these are some expensive backing singers—but the exceedingly natural-sounding Hana EL by Excel was totally worthy of such support. I love it. ■

CONTACTS

Technics

Panasonic Consumer Electronics Corporation
Two Riverfront Plaza
Newark, NJ 07102
Web: www.technics.com/us

Hana by Excel

Excel Sound Corporation
Toyo Building 5f-a, No.8-5 1-Chome
Ebisu, Shibuya-ku, Tokyo
Japan
Tel: (81) (03)444-8634
Web: www.excel-sound.co.jp

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