HERB REICHERT

Klipsch Reference Premiere RP-600M

LOUDSPEAKER

If you've ever dipped your toe into some form of high-performance motor sport, you know: The best race-car engines spin torque and exhale horsepower—with intoxicating ease. They're engineered to be responsive. Depress the clutch, toe the throttle, and watch the tachometer instantly pin itself. Engage the clutch—your chest contracts and your head gets light. Then later . . .

Back in your Ford Fiesta, its revving engine sounds distant, muffled. Your body can't feel the powerplant's power. In gear, the Ford feels soft and hesitant, not responsive.

That's how Klipsch's highly responsive Reference Premiere RP-600M loudspeaker with its horn tweeter ($549/pair) compares to conventional box speakers with direct-radiating dome tweeters

I first encountered this affordable stand-mount at my friend Sphere's house. When he played Miles Davis's *In a Silent Way* (LP, Columbia CS 9875), I noticed all these formerly obscure musical happenings that made me love Herbie Hancock more than I used to. With the Klipsch two-ways, Hancock's Fender Rhodes piano emerged from producer Teo Macero's mix in a pronounced, über-electrified way. Every note felt statically charged. At one point I *saw* Miles, who'd introduced Hancock to the Rhodes, motioning to him, drawing him out, begging for *more keyboard*. Hancock's notes revved and floated effortlessly, like orbs of light. My eyes followed his hands—they seemed lifelike, and at their proper height above the floor.

Sphere's room is big—at least 35' by 25', with 10' ceilings. He'd set up the RP-600Ms about 8' apart and 10' from the wall behind them. The next day, I contacted Klipsch.

Horns: A Brief Primer

1925: Chester Rice and E.W. Kellogg develop the first direct-radiating dynamic loudspeakers, based on principles that are standard-issue in most speakers made for domestic use today.[1]

1926: First, Victrolas and radios, then motion pictures that talk. To service the emerging business of talkies, two Bell Labs engineers, Edward C. Wente and Albert L. Thuras, develop the Western Electric 555 compression driver: an extremely light, 0.002"-thin, aluminum diaphragm with a corrugated surround and a light, rigid voice-coil. This piston-coil assembly was set within a heavy, high-powered electromagnetic structure and designed to be easily mounted behind a variety of horns. Its bandwidth was about 300Hz–5kHz. Unbelievably, this ancient high-tech driver is still being used in many of the world's finest audiophile playback systems.

Naked, the WE555 diaphragm looks a lot like a metal-dome tweeter, and almost exactly like the drivers in some of today's best and most expensive headphones. I mention this because, without a horn, these aluminum domes become "dome tweeters" that convert less than 1% of the energy supplied them into acoustic output. With a horn attached, the WE555 converts more than 20%.[2]

Horn loading accomplishes two things. First, a horn's restricted throat mechanically loads the dome (or cone). This restrictive loading creates a region of high pressure that a horn whose flare is of a certain length and rate of expansion can effectively convert to a large, pulsing wavefront at normal atmospheric pressure. This elegant form of tuned acoustic impedance matching not only makes a horn speaker more sensitive to voltage, it reduces the amount of diaphragm excursion required to produce a given sound-pressure level (SPL), thereby linearizing the system and reducing distortion. Within their designated passbands, horns can be incredibly linear and low-distortion—especially at very low and very high SPLs, where conventional direct-

1 Mix Staff, "1925: Chester Rice & Edward Kellogg, General Electric Co. Modern Dynamic Loudspeaker." *Mix*, September 1, 2007: https://tinyurl.com/y7qybd9u.

2 Eberhard Sengpiel, "Loudspeaker Efficiency versus Sensitivity": www.sengpielaudio.com/calculator-efficiency.htm.

SPECIFICATIONS

Description Two-way, rear-ported, stand-mounted loudspeaker. Drive-units: 1" (25mm) titanium-dome tweeter with hybrid cross-section Tractrix horn; 6.5" (165mm) Cerametallic-cone woofer. Crossover frequency: 1.8kHz. Frequency response: 45Hz-25kHz, ±3dB. Sensitivity: 96dB/W/m. Impedance: 8 ohms. Power handling: 100W continuous, 400W peak. **Dimensions** 15.7" (400mm) H by 8" (200mm) W by 11.9" (300mm) D. Weight: 16 lb (7.3kg). **Finishes** Black Ash (vinyl), Walnut, Piano Black Gloss. **Serial numbers of units reviewed** 106580418290330A & B. **Price** $549/pair Ebony and Walnut (vinyl), $649/pair for Piano Black Gloss finishes. Approximate number of dealers: Not disclosed. Warranty: 5 years. **Manufacturer** Klipsch Group, 3502 Woodview Trace, Suite 200, Indianapolis, IN 46268. Tel: (800) 544-1482, (317) 860-8100. Fax: (317) 860-9170. Web: www.klipsch.com.

radiating speakers compress and distort.

1946: Paul W. Klipsch founds Klipsch and Associates, and patents his design for the famous Klipschorn corner loudspeaker. This original design, along with Peter Walker's original Quad electrostatic loudspeaker (1957), marked the beginnings of high-fidelity home audio as we know it today. The illustrious Quad ESL was discontinued in 1985. At the Klipsch factory in Hope, Arkansas, the legendary Klipschorn is still being manufactured, 73 years after its launch.

Description

The Reference Premiere RP-600M is Klipsch's flagship stand-mounted speaker model. It's small, at 15.7" high by 8" wide by 11.9" deep, and the pair of them fit my Sound Anchor Custom Signature stands (24" H by 8" W by 12" D) as if speakers and stands had been designed for each other. The RP-600M's "Linear Travel Suspension" vented tweeter is built around a 1" titanium diaphragm, loaded by a hybrid Tractrix horn whose mouth measures 5.75" by 5.75". The tweeter horn's first expansion is circular and seems made of hard plastic; its second expansion is made of a soft, rubber-like material. The tweeter is crossed over at 1.5kHz to a direct-radiating, 6.5" Spun Copper Cerametallic woofer with a rear-firing port with a flared, Tractrix profile. When I tapped the RP-600M's enclosure with a knuckle, it sounded like a thinnish (15mm) particleboard drum with minimum internal bracing. My review samples were covered in a black ash vinyl that felt extremely durable and solidly applied.

The RP-600M's sensitivity is specified as an extraordinarily high 96dB/W/m, its frequency response as 45Hz–25kHz, ±3dB.

Setup

Getting the RP-600Ms to serve up their full menu of pleasures required positioning them with care. The speakers' off-axis response delivered a sweet spot at least two people wide, and generated satisfying instrumental tone everywhere in my room. At 10' from the front wall in Sphere's room, the RP-600Ms' tonal character leaned toward lean, but so what? They made a mile-deep soundstage. In my room, moving them 3' from the front wall reduced soundstage depth by at least 50%, but the bass and lower midrange were fuller—more to my liking. I also discovered that each inch I moved them farther from or closer to the front wall changed their tonal balance. With the Klipsches only 66" apart and 75" from my ears, their front baffles precisely 29" from the wall behind them, and no toe-in, the weight and timbre of Alexander Melnikov's piano as he performed Book 2 of Debussy's *Préludes* (24-bit/96kHz FLAC, Harmonia Mundi/Qobuz) was just right for me.

I also noticed that when properly Blu-Tacked in place, the Klipsch boxes seemed to *merge* with my heavy, 24"-high, four-poster Sound Anchor Custom Signature stands. I have zero doubt that these heavy stands positively contributed to the quality of sound I achieved.

I had a slight preference for the sound of the RP-600Ms with their magnetically attached grilles in place, but my review observations were made without grilles.

Listening

Listening to soprano Elly Ameling sing J.S. Bach's Cantatas 51 and 199, with the German Bach Soloists under the direction of Helmut Winschermann (LP, Philips LP 6500 014), I noticed how visceral and dynamic a human voice can be. With my First Watt SIT-3 power amplifier (18Wpc) driving the Klipsch RP-600Ms, the sound of Ameling's voice was vibrantly present in the room—I repeat, vibrantly present, physically clear, and beautiful to behold. The only indication that I was listening to her through budget speakers was a moderate lack of soundstage width, and some decreasing imaging focus, as my attention wavered from the left to right of the stage.

I first noticed this contracted soundstage with Georg Solti and the Vienna Philharmonic playing the prelude to Act 1 of Wagner's *Die Walküre* (5 LPs, London OSA 1509). I noticed this effect only when I listened for it, and it was more than

MEASUREMENTS

I used DRA Labs' MLSSA system and a calibrated DPA 4006 microphone to measure the Klipsch Reference Premiere RP-600M's frequency response in the farfield, and an Earthworks QTC-40 mike for the nearfield responses. I left the grille off for the measurements,

The Klipsch's specified sensitivity is an extraordinarily high 96dB/2.83V/m. My estimate was much lower, at 89.6dB(B)/2.83V/m, though this is still higher than is typical for a small two-way speaker. Fig.1 shows that the RP-600M's impedance magnitude (solid trace) remains above 10 ohms for the entire treble, which means that in this region at least, the Klipsch is very efficient, the speaker drawing significantly less current from the partnering amplifier than would a nominal 8 ohm design. The impedance is lower in the midrange and bass, with a minimum value of 3.5 ohms between 180 and 220Hz. There is also a current-hungry combination of 5.3 ohms magnitude and –42° electrical phase angle (dotted trace) at 128Hz, which suggests that the RP-600M will work best with tube amplifiers when driven from their 4 ohm output-transformer taps.

A small discontinuity just above 300Hz in the impedance-magnitude trace suggests some sort of resonance in that region. When I investigated

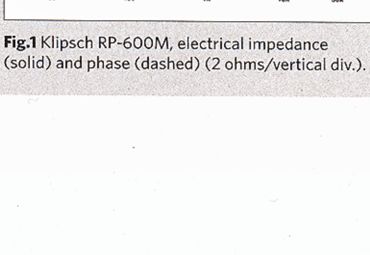

Fig.1 Klipsch RP-600M, electrical impedance (solid) and phase (dashed) (2 ohms/vertical div.).

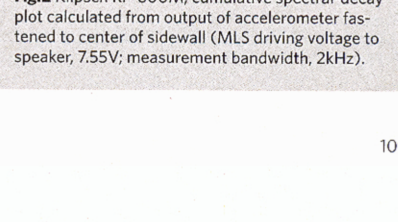

Fig.2 Klipsch RP-600M, cumulative spectral-decay plot calculated from output of accelerometer fastened to center of sidewall (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kHz).

offset by the RP-600Ms' grand ability to direct my attention toward rhythm and melody. The RP-600Ms slightly emphasized the leading edges of notes, which in turn allowed those notes to do an extraordinary job of emphasizing the beat, diagramming the melody, and propelling Wagner's drama. Think ultimate PRaT.

Compared to the Harbeth P3ESR

Besides the British speaker's higher price and quality of finish, there were three important differences between the Harbeth P3ESR ($2190/pair)[3] and the Klipsch RP-600M ($549/pair). The most obvious had to do with the fact that the Harbeth is decidedly lacking in voltage sensitivity (83dB/2.83V/m), while the Klipsch is unusually sensitive (JA measured 89.6dB/2.83V/m). This difference affects every aspect of music playback.

As noted above, more sensitive loudspeakers will play more succinctly at low and high SPLs. They can sound pure and operatic in a way that makes insensitive speakers seem as if they're compressing the signal. For me, though,

the chief virtue of sensitive speakers is that they allow their users to experiment with high-quality, low-power amplification.

In my experience, the Harbeth P3ESR needs at least 25W to get going—and to take off and fly, it needs something like the 100Wpc of Rogue Audio's Stereo 100. In contrast, the Klipsch RP-600Ms roared like jet engines with just the 18Wpc of the First Watt SIT-3. And, as you'll soon see, the Klipsches could play *really* loud with even a simple 8Wpc single-ended-triode amplifier. The little Harbeth can't play loud with any amp.

The second difference I heard was one of tonal character and saturation. The little Harbeth reproduces recordings with a sound that reminds me of Kodachrome photographs shot through a polarizing filter, which limits the angles of light entering the camera, thereby reducing glare and increasing contrast and color saturation. The result

3 John Atkinson reviewed the Harbeth P3ESR in August 2010: www.stereophile.com/standloudspeakers/harbeth_p3esr_loudspeaker/index.html.

measurements, continued

the enclosure's vibrational behavior with a plastic-tape accelerometer, I found on all panels a strong, high-Q mode at 316Hz and a lower-level one at 422Hz (fig.2). These are low enough in frequency and high enough in level that I would have thought they would lead to some midrange congestion. It's fair to note, however, that HR didn't comment on any problems in this region, perhaps because of his use of Blu-Tack to resistively couple the speakers to the stands.[1]

The impedance-magnitude plot has a saddle centered on 48Hz, which implies that this is the tuning frequency of the flared port on the RP-600's rear panel. The blue trace in fig.3 shows the woofer's nearfield response, including a minimum-motion notch at this frequency (*ie*, when the back pressure from the port resonance holds the cone stationary). The port's nearfield response (red trace) peaks slightly lower in frequency, and its upper-frequency rolloff is disturbed by a peak at 700Hz. As this resonance is low in level and the port fires to the rear, it will probably be inaudible. The woofer is crossed over to the tweeter (green trace) close to the specified 1.8kHz with what appear to be symmetrical, fourth-order acoustic slopes. Both drive-units are relatively flat in their passbands, but this graph suggests that the tweeter is a couple of dB higher in level than the woofer.

The trace above 300Hz in fig.4 shows the Klipsch's farfield response averaged across a 30° horizontal window centered on the tweeter axis, while below 300Hz it shows the sum of the nearfield woofer and port outputs, taking into account acoustic phase and the different distance of each radiator from a nominal farfield microphone position. The rise in response in the up-

1 See my article on the loudspeaker/stand interface, "The Sound of Surprise": www.stereophile.com/features/806/index.html.

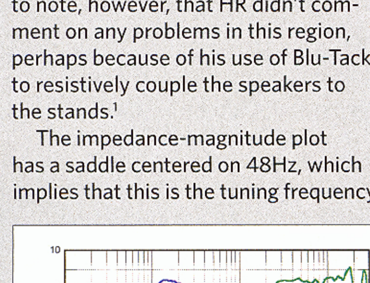

Fig.3 Klipsch RP-600M, acoustic crossover on tweeter axis at 50", corrected for microphone response, with nearfield woofer (blue) and port (red) responses respectively plotted below 350Hz and 750Hz.

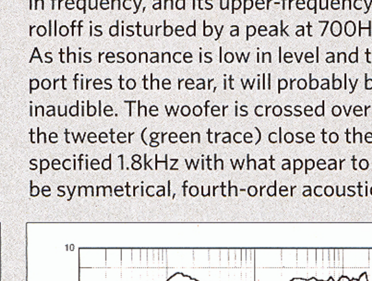

Fig.4 Klipsch RP-600M, anechoic response on tweeter axis at 50", averaged across 30° horizontal window and corrected for microphone response, with complex sum of nearfield woofer and port responses plotted below 300Hz.

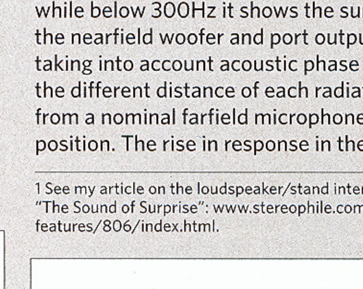

Fig.5 Klipsch RP-600M, lateral response family at 50", normalized to response on tweeter axis, from back to front: differences in response 90–5° off axis, reference response, differences in response 5–90° off axis.

is supersaturated color with no-glare highlights. In contrast, the little Klipsches generated images that were sharp and well focused but that seemed naked in comparison to the P3ESRs' images—as if shot through a lens without filters or coatings. With the Klipsch, light occasionally glared off a trumpet bell, or from the polish on the body of a violin.

The third difference was spatial. The Harbeth P3ESRs present music with a wide perspective and substantial depth of field—like photos shot with a stopped-down f16 aperture on a 24mm wide-angle lens: Everything is in focus. In terms of force and impact, these speakers play small, but in projecting a soundfield, they're giants—especially when I set the P3ESRs far out from the front and sidewalls and sit in the extreme nearfield.

The Klipsch RP-600Ms projected music with considerably more force and impact, but within a narrower horizon line and a shallower field of focus—as if shot with a 90mm lens.

Compared to the DeVore Fidelity Orangutan O/93

The raison d'être of DeVore Fidelity's Orangutan O/93 loudspeaker ($8400/pair) is to provide a high-quality, musically satisfying transducer for use with low-powered class-A and single-ended-triode amplifiers, and at this it excels. The O/93's sound is less detailed than DeVore's more expensive Orangutan O/96's, but no one could fail to admire the O/93's effortless flow, saturated tones, or waltz-and-polka musicality. The 93dB/W/m-sensitive DeVores revealed the full merits of both the 18Wpc, solid-state First Watt SIT-3 and the 8Wpc, 300B-tubed, single-ended EleKit TU-8600R amplifiers.

Both of the abovementioned amp-speaker combos made me never want to change my system again. Both reproduced Elly Ameling singing Bach cantatas with a quality of tone and an assuredness of tempo that made me forget all audiophile concerns. How could the humble Klipsch RP-600M compete?

The first thing I noticed when I switched from the DeVore O/93s with their 10" woofers to the Klipsch RP-600Ms and their 6.5" woofers was the reduction in energy from 80 to 300Hz. The German Bach Soloists, and especially the cello, harpsichord, and organ, moved back in space and became less fully realized. Bass was strong and detailed down to about 60Hz, but definitely on the lean side. Suddenly, I wanted to add one or two of Klipsch's matching subwoofers.[4]

The Klipsch emphasized odd-order harmonics, which made their sound feel punchy. Rhythms grabbed my attention. The RP-600Ms delivered more microdetail than the DeVores, and with greater dynamic ease. They put a smaller but denser, quicker-revving energy into my room. Compared to the DeVores, the Klipsches delivered less bottom-octave fullness and midrange color, but more tuneful fun and visceral excitement. And, lest you forget, the RP-600M costs less than 7% of the price of the esteemed DeVore.

4 See www.klipsch.com/subwoofers#all-new-reference.

per bass is an artifact of the nearfield measurement technique. However, it does look as if the port doesn't fully extend the SP-600M's low-frequency output. As HR found, the distance of the speaker from the wall behind it needs to be carefully arranged to balance soundstage precision against bass weight.

The Klipsch's farfield response has a slight lack of energy in the crossover region. Despite the spatial averaging, the tweeter is still balanced a little too high in level. I wasn't surprised, therefore, that HR found that the RP-600Ms "slightly emphasized the leading edges of notes." HR also wrote that he had "a slight preference" for the sound of the RP-600Ms with their grilles on. The grille reduces the tweeter's output by 1dB or so between 3 and 8kHz.

The Klipsch's horizontal dispersion (fig.5) is characterized by an even and well-controlled rolloff in the treble to the speaker's sides as the frequency increases. This usually correlates with precise stereo imaging, though HR noted a "moderate lack of soundstage width." Above 13kHz, however, the horn-loaded tweeter becomes very directional, which might make the speaker sound a little lacking in top-octave air in large or overdamped rooms. In the vertical plane (fig.6), a suckout develops in the crossover region 10° above and 20° below the tweeter axis.

In the time domain, the RP-600M's step response (fig.7) indicates that both drive-units are connected in positive acoustic polarity. The tweeter's step has begun to decay before the woofer's step begins, which suggests that the best blend between the units occurs just below the tweeter axis. The Klipsch's cumulative spectral-decay plot (fig.8) is superbly clean.

Overall, and that lively enclosure aside, the Klipsch Reference Premiere RP-600M offers impressive measured performance, especially when its affordable price is taken into account.

—John Atkinson

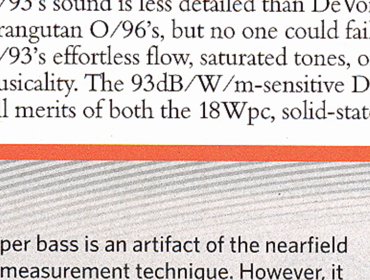

Fig.6 Klipsch RP-600M, vertical response family at 50", normalized to response on tweeter axis, from back to front: differences in response 45–5° above axis, reference response, differences in response 5–45° below axis.

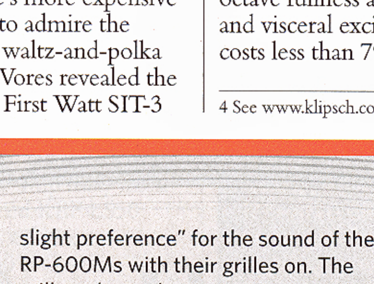

Fig.7 Klipsch RP-600M, step response on tweeter axis at 50" (5ms time window, 30kHz bandwidth).

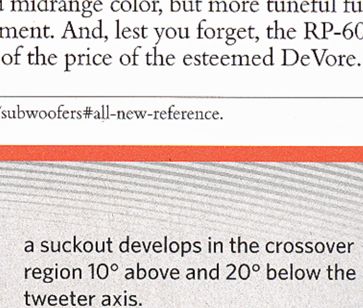

Fig.8 Klipsch RP-600M, cumulative spectral-decay plot on tweeter axis at 50" (0.15ms risetime).

With the Line Magnetic LM-518 IA

On recording after recording, with every amplifier I tried, the one virtue of the RP-600M that kept holding my attention was how piano notes and keyboards were presented. More than any other speakers I use, the RP-600Ms forced to me *watch* how piano notes are played: their sequence, their shifting patterns, their touch and force. This effect was most obvious with a 22Wpc single-ended 845 tube amplifier, the Line Magnetic LM-518 IA integrated amplifier ($4450).[5]

The RP-600M showed me anew the elegant simplicity and intoxicating virtuosity of Skip James's piano, guitar, and singing. I've rarely experienced the full intricacies of his piano playing as I did when listening to "Little Cow, Little Calf Blues," from *Blues from the Delta* (44.1/16 FLAC, Vanguard 79517-2/Qobuz), through these speakers. I've rarely been more attuned to the way James bends a phrase. The counterpoint of his modulating voice, set against his mad little melodies, was never more conspicuous.

Likewise the timbre of Alexander Melnikov's piano in Debussy's *Préludes*, Book 2. I was using the Line Magnetic amp while I fined-tuned the setup of the RP-600Ms, and folks, I swear on Debussy's grave, this $4999 amp-speaker combo reproduced piano recordings with $10,000 worth of élan and realistic presence. If, like me, you're psychically invested in piano recordings, I urge you to give this speaker a whirl—maybe with Line Magnetic's LM-518 IA and a Klipsch subwoofer.

Compared to the KEF LS50

While using the Line Magnetic LM-518 IA amplifier, I switched to a speaker that I know this SET amp *really* likes: the universally admired, super-well-balanced KEF LS50 ($1299/pair). The first thing I noticed was a denser, more palpable energy in the two octaves from 50 to 200Hz. The LS50's midrange (200–1600Hz) was also richer and fuller, more consistent in tone, but with less sparkle and vitality in the octaves above 1.6kHz.

The KEF LS50's sound was more rounded than the RP-600M's—darker, slightly veiled, more compressed. Through the KEFs, Melnikov's piano was smaller and farther from the microphones. Sometimes, it seemed that the LS50s couldn't keep up with Melnikov's fingerings.

Compared to the Zu Audio Soul Supreme

Wagner's *Die Walküre* was more fully and subtly expressed when I switched from the Klipsch stand-mounts to Zu Audio's floorstanding Soul Supremes ($4499/pair). The RP-600Ms' 6.5" woofers felt small compared to the primary 10" full-range drive-units of the crossoverless Soul Supremes. John Culshaw's historic production of this opera got bigger, more immediate, more epic-dramatic; the layout of the recording venue became more comprehensible.

Both speakers enjoyed being driven by low-power amps, and both performed gracefully under the direction of the 22Wpc Line Magnetic LM-518 IA, but the Zus' treated-paper cones delivered gentler, more lifelike timbres than the Klipsches' Cerametallic cones. The Soul Supremes showed me the walls of the recording venue. The Klipsches didn't.

My chief criticism of the RP-600M was that it lent an extremely slight, overdamped hardness to everything it reproduced, especially brasses and strings. Similarly, the leanness of its bottom octaves reduced my ability to enter the Solti-Culshaw recording space. Obviously, each speaker's woofer had its own sound; I prefer the relaxed nature of Zu's treated-paper, full-range cone to Klipsch's harder cone.

ASSOCIATED EQUIPMENT

Analog Sources Dr. Feickert Analogue Blackbird turntable with Jelco KT-850L tonearm, AMG Giro G9 turntable & 9W Turbo tonearm; AMG Teatro, EMT TSD 75, Etsuro Urushi Cobalt Blue, Hana SL, Koetsu Rosewood Signature Platinum, My Sonic Lab Ultra Eminent Ex cartridges.
Digital Sources Mac mini computer running Audirvana Plus 3.2; JVC X-Z1010 CD player (transport only); Chord Qutest, HoloAudio Spring "Kitsuné Tuned Edition" Level 3 DACs.
Preamplification Auditorium 23, Bob's Devices CineMag 1131, Dynavector SUP-200, EMIA MC step-up transformers; Lounge Audio LCR Mk.III, Musical Surroundings Phonomena II+ & LCPS power supply, Tavish Design Adagio RIAA phono preamplifiers; PrimaLuna DiaLogue, Rogue Audio RP-7 line preamplifiers.
Power Amplifiers First Watt SIT-3, EleKit TU-8600R, Rogue Audio Stereo 100.
Integrated Amplifier Line Magnetic LM-518 IA.
Loudspeakers DeVore Fidelity Orangutan O/93, Harbeth P3ESR, KEF LS50, Zu Audio Soul Supreme.
Cables Digital: AudioQuest Cinnamon (USB), Kimber Kable D60 Data Flex Studio (coax). Interconnect: Auditorium 23, Triode Wire Labs Spirit, Wireworld Silver Eclipse 7. Speaker: Auditorium 23, Triode Wire Labs American. AC: AudioQuest Tornado, Triode Wire Labs American-Digital & Seven-Plus.
Accessories AudioQuest Niagara 1000 power conditioner; Audiophile Systems, Harmonic Resolution Systems M3X-1719-AMG GR LF, PS Audio PerfectWave PowerBase isolation platforms; Sound Anchor Custom Signature speaker stands; Acoustical-Systems SmarTractor, Dr. Feickert Analogue cartridge-alignment protractors; Musical Surroundings Fozgometer azimuth-range meter. —Herb Reichert

Conclusion

A speaker this inexpensive isn't supposed to be this good. It isn't rational. The Klipsch Reference Premiere RP-600M is not just a great loudspeaker for its price, or for horn-loving Klipsch Kids—it's way better than that.

If you're not already a fan of Klipsch speakers, all I can say is, why not? You don't like speakers that spin torque and exude horsepower? Some tool told you that horns sound like megaphones? And you believed him?

If you're not a fan, I have to ask: What other speaker manufacturer has continuously manufactured the same flagship model for 73 years? What other speaker maker has three anechoic chambers, one engineered specifically for measuring the compression drivers of horns? What other speaker maker would sell a "Reference Premiere" model for only $549/pair?

Most important: What other stand-mounted loudspeaker lets itself be driven by low-powered, single-ended, directly heated triode amps with the air, punch, boogie, and resolution of the Klipsch Reference Premiere RP-600M? None that I know of. In my world, this speaker is a uniquely important discovery. Super-highly recommended. ■

5 I reviewed the Line Magnetic LM-518 IA in October 2015: www.stereophile.com/content/line-magnetic-audio-lm-518ia-integrated-amplifier.