

Audio Research's Best Phonostage Yet

ARC PH7

Jonathan Valin



The venerable Audio Research Corporation has been on quite a roll of late. Its newest-generation amps (the Reference 210 and Reference 610T) and preamp (the Reference 3), designed as always by the legendary William Zane Johnson, are across-the-board lower in distortion and coloration, higher in bandwidth, energy, and resolution, fuller in duration, and more neutral in balance than Johnson's previous designs (many of which are undisputed classics).

The PH7 phonostage under review is certainly no exception. My current reference, it is the finest phono preamp Johnson has yet devised or I have heard, though coming to it from previous ARC phonostages (or other high-quality tube units) requires a bit of an adjustment in aural expectations. It simply doesn't sound as markedly "tubey" as the great ARC phono preamps that have preceded it.

Oh, the PH7 still has ARC's characteristic upper-octave air and light, its lifelike image size and soundstage breadth, its incomparable bloom, but so many other ingredients have been added to the sonic recipe that is harder, at first, to recognize the classic ARC profile. For one thing, bandwidth, transient speed, and dynamic impact have greatly increased. Where previous ARC phonostages have been just a bit rolled and polite in the

treble (compensating for this by being just a bit aggressive in the upper midrange), the PH7 isn't—or is far less so. Hard cymbal strikes, such as the ones in the "Libra" section of Roberto Gerhard's *Astrological Series* [Decca Head], no longer sound as if they are being played with a soft mallet or damped by hand; they now have the stinging attack—and the shimmering decay—of the real thing. Ditto for deep bass notes, like the room-shaking bottom-octave *sforzandos* of John Constable's Steinway on

Specs & Pricing

Frequency response: 10Hz–60kHz, ± 0.25dB of RIAA
Distortion: Less than 0.005% at .50V
Gain: 57.5dB at 1kHz
Input impedance: 47k, 1k, 500, 200, 100 ohms
Output impedance: 200 ohms
Tube complement: (4) 6922, (3) 6H30
Dimensions: 19" x 5.22" x 12"
Price: \$5995

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Phonostages • ARC PH7

the same Gerhard piece or the tremendous bass drum thwack toward the close of *The Firebird* [Mercury]. Instruments that play in the bottom octaves—which used to sound a bit soft, plump, and muddled with ARC phonostages (and tube phonostages, in general)—are now very nearly as well defined, fast, powerful, and deep-going as they are with a great transistor phonostage, without any losses in lifelike density of tone color or bloom. Even in the midband, the PH7's speed and impact are plainly audible. With “fast” cartridges like the Air Tight PC1 or the London Reference (and “fast” speakers like the MAGICO Minis), pizzicatos sound fool-you realistic.

But bandwidth and transients aren't the only things that have improved in the PH7. Alongside its remarkable gains in speed and reach are significant gains in low-level resolution and timing. By this last I mean the realistic reproduction of the entire duration of a note—of its attack, timbre, and decay. Tubes have always been good at reproducing timbre and decay (less good at attacks), but the PH7 brings a new level of realism to all three. All you have to do is listen to a recording with acoustic guitar, like Joan Baez's eponymous first album on black-label Vanguard, to hear what I'm talking about. Typically, even with a very good tube preamp, you will hear the way Baez is playing her guitar—strumming or fingerpicking it—and enough of the fundamental and first few harmonics (which repeat the fundamental) of each note to hear its pitch and get an inkling of its tone color. But the upper partials and decay of the notes are typically inaudible, swallowed up by the sounds of subsequent notes. For years, I thought this was simply the way Baez's guitar (in fact, most guitars that are being played as accompaniment to a vocal) sounded on LP—close-in miking just gives you a little more guitar string than guitar body. Then I heard the record through the PH7.

Now I can't say that the ARC unit reproduces each guitar note in its entirety, but I can say that it seems to realistically “prolong” the duration of notes so that tone colors and decays are *much* more fully audible (and it does this without softening attacks). The sonic result is like the difference between seeing a peacock with its

Not Just Great-Sounding But Convenient

All recent-generation ARC electronics come with remote controls (batteries supplied). With the PH7, this means that you can adjust virtually every meaningful parameter of operation—including on/off, mute, mc/mm cartridge-loading (47k, 1k, 500, 200, and 100 ohms), mono/stereo reproduction, and the level of illumination of the vacuum-fluorescent display—from the comfort of your listening chair. The cartridge-loading feature is, by itself, a boon. With the press of a button you can change the load that the cartridge sees—no more getting up to turn knobs or change DIP switches—making A/B comparisons of how your pickup sounds with different loading virtually instantaneous. (Note: As has been the case with every other remote-controlled ARC component, I prefer the sound of the PH7 with the display turned fully off. It will turn itself back on for a few seconds every time you change a parameter via the remote or the unit's own push-button controls, which duplicate those on the remote, so you can confirm the change you've made.) **JV**

New Circuitry in the PH7

ARC claims that much of the PH7's circuitry—and its superior performance—derives from technology that was developed for its Reference 3 preamp (my current reference). The all-tube output stage consists of four 6922 twin-triodes; power-supply regulation is done via three 6H30 triodes. As has been the case with ARC's previous phonostages, the input section is solid-state (J-FET). Gain in the PH7 has been boosted to 57.5dB, which has allowed ARC to eliminate the moving-coil step-up transformer it used in previous phono preamps (and which, frankly, wasn't the most transparent device of its kind). Now, the output of moving-coil cartridges is amplified directly by the PH7, which is one major reason, I think, that its sound is so improved over previous Audio Research units.

Another reason is the significant lowering of noise, extension of bandwidth, and superior grounding in the PH7. Where, because of RF I could not listen to moving-coil cartridges without using a step-up transformer, with the PH7 I can. Though it isn't dead quiet at very high volumes, it is so far improved over previous ARC phonostages (and other tube phonostages) that RF is, for all intents and purposes, no longer a significant problem. Congratulations, ARC, for successfully addressing this aggravating problem! **JV**

iridescent tail folded up and seeing it with its tail fully displayed. The harmonics of the strummed and plucked guitar strings bloom with fresh color, hanging in the silence between notes before gradually trailing away beneath the attack of freshly sounded notes.

These major gains in dynamic and harmonic resolution are clearly related to the PH7's dramatically lower noise floor, combined with its dramatically beefed-up power supply, which is claimed to provide three times the energy storage of the Audio Research PH5 (see the sidebar on “New Circuitry”). Though the unit isn't as dead quiet as some solid-state preamps I've heard, it comes mighty darn close, and with its improved bandwidth, superior dynamic energy, and higher resolution of tone color and duration takes a second chair to none that I know of.

I come now to a subject that isn't discussed often enough in audio magazines—at least it is isn't discussed when electronics are reviewed—and that is the way the PH7, and ARC's other new-generation electronics, facilitates the “vanishing act” of really neutral loudspeakers. Customarily, we talk about how loudspeakers “disappear” into the soundfield they project as if that were solely a function of the speaker's build-quality. It isn't. It is also, demonstrably, a function of the electronics that are feeding the speaker (and of cabling and source). Anything that reminds us that we are listening to a hi-fi system can flummox even the best loudspeakers—be it gross distortions like RFI or AC hum, subtler deviations from a neutral tonal balance like a persistent darkness or brightness or graininess, the lack of lifelike image size and dimensionality (which tends to peg the sound of voices and instruments to the faces of loudspeakers and individual drivers), a constriction of soundstage width and depth (which persistently reminds us of speaker-cabinet boundaries), or an absence of “action” or bloom (which tends to make the soundfield unnaturally static, as if instruments were pinned to



discrete spots, like dead butterflies to a corkboard—rather than realistically dynamic, with instruments changing in relative size and presence with changes in register and intensity).

ARC gear has always been good at avoiding these pitfalls, and its latest generation products are simply superb at it. Because of its natural image size (focused, but never miniaturized), tonal neutrality (which in the PH7 is better than ever—and more extended top-to-bottom than ever), low levels of distortion, lifelike bloom or action, and simply astounding soundstage (the widest, deepest, tallest, and most densely populated I've yet heard from an ARC phonostage—or any tube phonostage), the PH7 truly does help speakers disappear.

There are other great phonostages out there that do some of the things that the PH7 does—and do them well. The gorgeous-sounding Aesthetix Io is just as big and bloomy and has more output, but, as least in my room, it is way too noisy. The superb Lamm LP2 Deluxe is as quick and detailed and marginally lower in noise, but it is darker in balance and lacks the action and “life” of the ARC unit. Certain solid-state units have equal grip in the very bottom, albeit at the steep price of sacrificing bloom, air, and light in the mids and treble. At this point, only the PH7 provides *all* the virtues of these others with few to none of the drawbacks—and it does all this without reminding you that it and the speakers you're listening to are there. With the right source and the right speakers, you cannot find a more lifelike phono preamp. **TAS**

JV's Associated Equipment

Analog Source: Walker Black Diamond record player

Cartridge: Air Tight PC-1, Clearaudio Goldfinger

Phonostages: ARC PH7, Lamm LP2 Deluxe, Aesthetix Io

Digital Source: MBL 1621A/1611E, ARC Reference CD7

Lineage preamps: ARC Reference 3, MBL 6010D, Lamm L2 Deluxe, Aesthetix Callisto

Amplification: ARC 610 T monoblock, MBL 9008 monoblock, Edge 12.5, Lamm ML2 monoblock

Speakers: MAGICO Minis with (2) Wilson-Benesch Torus subwoofers, MBL 101 E Radialstrahler, Ascendo M-S Mk II, Quad 57

Interconnect: Tara Labs “Zero,” Synergistic Research “Absolute Reference”

Speaker Cable: Tara Labs “Omega,” Synergistic Research “Absolute Reference”

Power Cords: Tara Labs “The One”

Accessories: Shakti Hallographs; Walker Prologue Reference equipment stand; Walker Prologue amp stands; Richard Gray Power Company 6005/Pole Pig line/power conditioner; Cable Elevators Plus; Walker Valid Points and Resonance Control discs; Winds Arm Load meter; Clearaudio Matrix record cleaner; Walker Prelude record-cleaning system; HiFi-Tuning silver/gold fuses

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