

Headphone Upgrades

BY BILL MACHRONE

This sampling of earphones could hardly be more varied, but it shows the range of choices available if you want something other than the standard white earbuds. We subjected this group to rigorous lab and listening tests, and here's what we found.

AKG K 28 NC

We were eager to try AKG's latest noise cancelers—they're compact, light, and cool-looking, and they fold up small. The noise reduction is built into a belt clip, and the supraural pads are comfortable for the long haul. The K28NCs are very sensitive and can play loudly even from weak sources. We measured an ear-busting 111 dB on our standard rock track. The noise-reduction circuitry reduces external sound effectively. Bass response is very strong—maybe too strong for purists. A sharp peak at 2.5 kHz emphasizes the high midrange more than we'd like, and there's a slightly muffled quality to the sound, but overall, these are listenable phones.

\$120 street. AKG Acoustics, www.akg.com. ●●●●○

Audio-Technica ATH-CM7Ti

The only earbuds in this roundup, these have all the right buzzwords, plus a few new ones: titanium, neodymium, functional swing housing, and high-performance elastomer. Apart from a little weakness in the bass, they sound fine—if you keep them pressed into your ears with your fingers. But they lose too much when they're just resting in your ears, pulled out by the weight of the titanium bodies. We had better luck wearing them upside down, with the wires over the tops of our ears. The diaphragm assembly swivels eccentrically, ostensibly to improve the fit in your ear, but we didn't find any actual benefit. A strong peak at 1.25 to 2 kHz makes vocals very intelligible, but we'd like these phones more if they fit better.

\$150 street. Audio-Technica U.S. Inc., www.audio-technica.com. ●●●●○

Etymotic ER4

Etymotic's high-end canalphones have clear, incisive highs; a smooth midrange; and honest, accurate bass that thins out in the lowest half-octave. These are

musical purist phones, not rock 'n' roll brain squeezers. The in-ear design blocks at least 15 dB of noise in most of the spectrum and up to 30 dB in higher frequencies. The accessories are plentiful, with three sizes each of foam and flanged eartips, a quarter-inch adapter, a tool to replace the filters that keep ear wax out of the drivers, and some spare filters. We measured 103-dB continuous volume and 107-dB peaks on our loudness tests.

The ER4s have the flattest frequency response of any of the phones in this roundup and are among the best of any phones you can buy. They are a pleasure, as long as you don't expect thumping bass.

\$240 street. Etymotic Research Inc., www.etymotic.com. ●●●●○

JVC HA-NC100

These noise cancelers aren't as compact as the AKGs, but they provide excellent noise reduction, with 20- to 30-dB reductions throughout most of the range. Passive noise reduction is effective in the higher end, and the active circuit does a good job down low. The frequency response leaves something to be desired; it's weak in both the bass and the high end. But the design is innovative: As with the category-leading Bose Quiet Comfort 2, the electronics and single triple-A battery are in one earpiece, and the other holds the retractable cord (up to 5 feet). The NC100s fold compactly and come with a travel bag and a two-prong airline adapter. They're plenty loud, with 105-dB peaks.

\$50 street. JVC Americas Corp., www.jvc.com. ●●●●○

Etymotic ER4 ▶



◀ Sennheiser PX 100

Sennheiser PX 100



The PX 100s are the most unassuming-looking and least expensive headphones in this roundup: just a simple stainless-steel headband and open-backed earpieces with foam cushions. They're light and comfortable on the ears; they fold into a small, hinged plastic case; and they sound terrific. The frequency response is almost as flat as that of the Etymotic ER4s, but the bass extends deeper, with a rich, honest, fundamental tone that is equaled in this roundup only by the AKGs. Open-backed phones have a kind of naturalness that closed-back phones and canalphones can't match; they blend external ambience with your music so you don't get that "underwater" effect. The PX 100s cranked out 100 dB on our loudness test, with 106-dB peaks.

\$40 street. Sennheiser electronic GmbH & Co. KG, www.sennheiser.com. ●●●●○

Turtle Beach Ear Force X51

The Ear Force X51s are real surround-sound headphones, with front, rear, and low-frequency drivers in each earpiece. They also have a removable microphone for interactive gaming and Internet telephony. The surround sound actually works with a 5.1 sound card, and it's sufficiently accurate to locate things behind you when you're gaming. The fidelity, however, is all midrange, which makes explosions disappointing. These aren't music lovers' phones by any stretch. They're loud, though, managing 107-dB peaks.

\$50 street. Voyetra Turtle Beach, www.turtlebeach.com. ●●●●○

