

# The Sound of Silence

## Sussing out the ear-plug market.

By Ulrich Boser

Posted Tuesday, May 17, 2005, at 4:24 AM PT

The first time I used ear plugs, I thought I'd reached nirvana. I was trying to study in my college dorm room while my roommate blasted the Grateful Dead so loudly it would have made Jerry Garcia's ears ring. So I rolled a set of foam plugs between my fingers, pushed them deep into my ears, and—silence. How sweet! How golden!

It was the start of a long and quiet affair. I now regularly wear foam ear plugs when I'm reading, working, and sleeping. In fact, I recently realized that some days I wear my plugs for 16 hours or more, longer than I use any other personal item, including my computer, glasses, and clothes. That insight made me sigh loudly—and so I quickly pushed the stopples back into my ears.

My passion for plugs is twofold. One, I have the attention span of a small terrier, and the silence helps me concentrate. I also live and work in a 90-year-old, urban apartment building in which aural interruptions are constant. Noisy garbage trucks. Shrill car alarms. Indeed, as I write this, my upstairs neighbor seems to be dancing an Irish jig.

Ear plugs have undergone a quiet revolution over the last two decades. For many years, manufacturers produced only wax-cotton plugs; pharmacies today are filled with silicone, PVC, and polyurethane stopples. Web sites also sell plugs specifically designed for hunting, loud concerts, and motorcycling. Now there are even hearing aid-like plugs that drown out external sounds by playing white noise.

Given the myriad plugs on the market, I wanted to find the stopple that silences the most sound yet is comfortable and affordable enough for everyday use. But before I release my results, there is something every silence shopper should know: No plug can create artificial deafness. Even if the auditory canal is sealed shut, loud noise, especially lower-pitched sounds, can vibrate through the body and be "heard" by the eardrum.

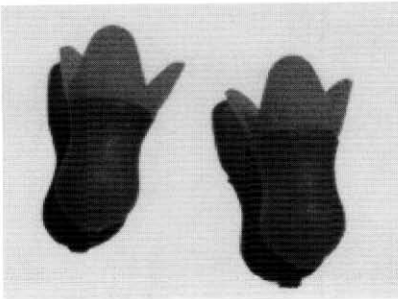
### **Methodology:**

**Effectiveness.** (10 possible points) Almost all ear plugs come with a Noise Reduction Rating, or NRR, that indicates how much sound the plugs muffle. Many experts argue that the NRR does not accurately represent how well the devices work in someone's ear because the ratings are based on lab experiments rather than human experience, and so I listed the NRRs below but did not include them in the final evaluation. (Click [here](#) to read about how NRR is calculated.) Instead, I tested the plugs in a number of different real-world environments. I listened to my stereo blast Bach's *Goldberg Variations* by Daniel Barenboim to see how the plugs worked against loud, high-pitched notes. To test the plugs' efficacy against heavy bass, I visited a construction site and listened to jackhammers, drilling, and catcalls. And I wore the plugs as I spoke with my wife, as well as when I vacuumed the house, to see how well the products muted general background noise.

**Comfort/Ease of Use.** (10 possible points) Since many people use ear plugs to help them sleep, I had a one-night stand with each pair. Key questions: Were the plugs comfortable? Did my ears get itchy or irritated after eight hours of tossing and turning? To test whether the plugs would fall out easily, I sported the plugs while running up and down the five floors of my apartment building.

**Durability.** (10 possible points) After seeing a pair of my ear plugs stained with dirt, an ex-supervisor said, "That is the most disgusting thing I've ever seen!" (The grime had rubbed off my hands, not my ears, thank you.) Cleanliness being of utmost concern to most users, I tested whether the plugs could withstand a good cleaning as well as maintain their shape after repeated use.

**Value.** (10 possible points) Some of the ear plugs cost less than a dollar, others cost more than \$100. Therefore, I used a formula to assess value: I added up each of the scores and divided by the price for a single pair. (Prices were based on the smallest unit available and came from discounted retailers such as the Ear Plug Super Store.)

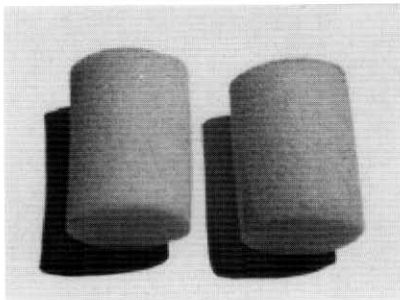


SilentEar

These silicon plugs were the easiest to insert. No noodling, squishing, or rolling. Just pop the little rocket-shaped devices into your ear, and you are ready to rumble. You might be listening to some rumble, too, as they received a middling grade at bass-sound reduction.

(Heartech also offers a "QuietEar" option, which allows the user to hear conversations. While I didn't test the product, I wonder: Who wants to talk to someone wearing fire engine red plugs?)

Effectiveness: 7  
Comfort/Ease of Use: 8.5  
Durability: 9  
Value: 2.7  
Total: 27.3



Flents Quiet! Please

### **Flents Quiet! Please**

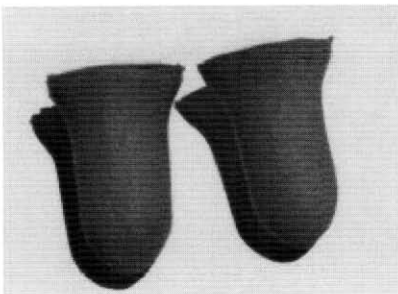
Price: six pair for \$2.95  
NRR: 29

These PVC foam ear plugs are among the most effective if they are installed properly. A quick primer: First roll the plug into a very small cylinder. Then take your right hand and reach over your head and pull back on the lobe of your left ear.

Then, with your left hand, push the plug as deep as possible into your left ear canal. The plug should go down about a half-inch and no further than an inch and a half. Repeat with right ear.

Sound like a pain in the ear? It is. It also earned me some very odd looks from the construction workers. But the foam plugs worked well. The jackhammer was reduced to a dull thumping, and I couldn't hear a word my wife was saying.

Effectiveness: 9  
Comfort/Ease of Use: 4  
Durability: 4  
Value: 34.7  
Total: 51.7



Howard Leight MAX

### **Howard Leight MAX**

Price: one pair \$1  
NRR: 33

These polyurethane stopples must be rolled into a small cylinder before being inserted, but the process is much easier than the PVC foam plugs. Just squish the plugs into a small peg and push. And while the

neon orange might turn off some—I looked ready for a shooting range—the bright color made the plugs hard to misplace.

The plugs did an excellent job of reducing sound. I couldn't hear the vacuum cleaner or my wife's chatter. The *Goldberg Variations* and the jackhammer were audible but muted. Indeed, the plugs might be too good. It's possible that you could sleep through your alarm clock or a fire alarm with these plugs stuck down your auditory canal.

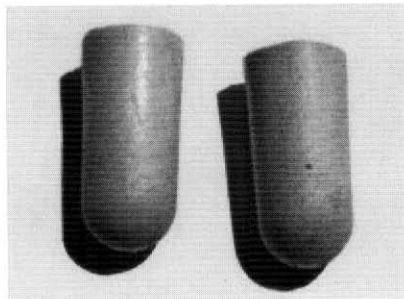
Effectiveness: 9

Comfort/Ease of Use: 8

Durability: 9

Value: 26

Total: 52



Hearos Ultimate Softness

### **Hearos Ultimate Softness Series**

Price: one pair for \$1

NRR: 32

These plugs beat out the Howard Leight stopples for one reason: They are much softer and thus much more comfortable to wear. Like the Leight plugs, they are made of polyurethane and were easy to insert and clean. They could also play the

sounds of silence: The loud, shrill noises were muted, the background noises inaudible. (Like the Leight plugs, heavy sleepers should use these plugs with care.) And while the ear-plug industry seems beset by terrible product names ("Snore Busters" and "Soft Blasts"), these plugs demonstrated, especially because they reduced the pounding sounds of the jackhammer to a pleasant thud, that it's worth holding out for Hearos.

Effectiveness: 9

Comfort/Ease of Use: 9

Durability: 9

Value: 27

Total: 54

*Ulrich Boser is a contributing editor at U.S. News and World Report.*