

PERSONAL TECH

GADGETWISE

The Difference Between Listening Up and Tuning Out

By KATE MURPHY

RIDE the subway, sit in a coffee shop or just walk down the street and you'll see people wearing earphones. They are everywhere. In some settings, you're the odd man out if you don't have wires dangling from your ears.

Putting aside what this means for sociability, let's instead consider why so many of the earphones people are wearing are so junky. Why would you pay hundreds, if not thousands, of dollars for a phone, tablet or laptop only to plug in a pair of cheap earbuds?

Your earphones may be even more important than your device in delivering the nuances and resolution of streaming or stored audio, so it's worth investing in a decent pair. It's possible to capture the opening and closing of a butterfly's wings with recording technology, but you will miss out if your earphones are only slightly more sophisticated than cans on the end of a string.

Moreover, poor quality earphones can cause hearing loss. "People tend to turn up the volume too high when they are wearing low-grade earphones because the sound is less clear and distorted," said Chris Connaker, founder of Computeraudiophile.com, a website dedicated to information about digital audio. "A better quality earphone can save your hearing."

There are three kinds of earphones: over- or around-ear, which are the earmuff type, often called headphones; on-ear, which rest on the ear but don't cup it; and in-ear, which go in the ear's concha (the hollow part) as earbuds do, or actually go into the ear canal, as do so-called in-ear monitors.

Which one you choose depends on what's comfortable, where you plan to listen, what you plan to listen to and, of course, your budget. Higher prices tend to indicate better quality sound and materials, or possibly customization, such as earpieces by JH Audio and Noble Audio, which can cost \$400 to more than \$1,000 and are molded to precisely fit your ear — like those you see musicians wearing on stage.

But you don't have to spend a fortune to step up your aural experience. Something like the Sennheiser CX 300-II (\$60) universal fit in-ear monitor delivers respectable clarity and enjoyable sound. And unlike the devices you plug them into, which will most likely be obsolete or wear out in three years or so, good earphones endure.



PARROT ZIK 2.0, \$400 These headphones have an app to adjust the music with a five-band equalizer, much as an audio engineer would.

The right earphones may be costly, but they're worth it for significantly better audio quality.

If you're going to be listening in noisy environments like a subway or crowded office, you most likely want in-ear monitors or over-ear earphones. Popular manufacturers include Sennheiser, Shure, Master & Dynamic and OPPO. Look for "closed-back" models, which don't have any vents or openings in them so they keep out competing environmental noise while sparing others from hearing the mosquito-like version of whatever you're listening to.

Closed-back earphones with active noise canceling by manufacturers like Bose and Phiaton produce a nullifying frequency to block intrusive sounds. But be aware that what you gain in canceling environmental racket, you lose in the crispness of the audio you're playing. Earphones such as the Parrot Zik 2.0 (\$400) come with an app that allows you to adjust various aspects of what you're hearing using a five-band equalizer, much like an audio engineer.

For listening in quiet, isolated environments like your home, "open-back" earphones, usually over- or on-ear, are your best bet. They allow sound to pass through them rather than be contained within them, and thus don't have the slight distorting reverberation that can occur in closed-back models. As a result, they are audiophiles' top choice because they sound truer to life. Sennheiser, AKG, Fostex, Grado and Audio-Technica make versions that reviewers consistently praise.

Exercisers are likely to want fitness earphones such as the Jaybird BlueBuds (\$170) and Bose SoundSport (\$150). They are sturdier, sweat- and water-resistant and tend to stay put. Some models, like the Sennheiser PMX 686 SPORTS series (\$110 to \$130), allow just enough outside noise so that you can hear a car or person around you. Some fitness earphones have wireless versions, although they never sound quite as good as their wired counterparts because of the degradation in the signal from source to earpiece.



SENNHEISER PMX 686G SPORTS, \$110 TO \$130 The Sennheiser earphones allow just enough outside noise so the user can hear a car or nearby person.

It also makes a difference what you are listening to. If you're listening to lower-quality MP3s or a low-resolution free music streaming service, it's going to sound pretty lousy no matter how good your earphones are. Conversely, if you're paying for premium MP3s or higher-resolution streams from services like Spotify, Pandora, Tidal or Rdio, you're not going to hear the improvement wearing \$10 earbuds you picked up at a mall kiosk.

Another thing to consider is whether you want your earphones to come with a microphone so that you can use them to talk on the phone, record your voice or use video-calling services like Skype. Many earphones on the market do, but be sure to check the specifications since some do not or may need an adapter or special cable to work with some de-

vices. Because everyone has a different idea of what sounds good, reading earphone reviews on websites like Headphone.com, Head-Fi.org, Computeraudiophile.com, Audiophilereview.com and Headphone.guru is a good way to figure out the sound profile of various models. Reviewers not only discuss clarity and balance but also talk about fit, comfort and compatibility.

"Audiophiles talk about sound as descriptively as wine enthusiasts talk about wine," said Jude Mansilla, founder of Head-Fi.org, which has an extensive review database. "Reading reviews will definitely help you find something that suits your taste," he said, whether you're into bold sounds with velvet delivery, or bright ones with effervescent top notes.



BOSE SOUNDSPORT, \$150 Fitness earphones of this type are sturdier than rival earbuds, they resist water and sweat, and they tend to stay put.



SENNHEISER CX 300-II, \$60 The CX 300-II in-ear monitor delivers respectable clarity and enjoyable sound, and they are cheaper than custom monitors.

APP SMART

One Last Ingredient for a Well-Stocked Bar

By KIT EATON

ANEGRONI, anyone? Or maybe a Jack Rose? Knowing how to make good cocktails is a great party trick and almost always more interesting than serving wine or beer to guests. And even if you are a complete cocktail novice, you can deliver delicious drinks, as long as you have the right app.

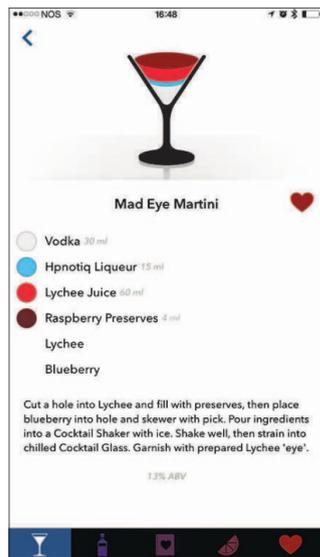
MIXOLOGY is one of the very best cocktail-making apps out there. It has a database of around 8,000 cocktail recipes, using over 1,000 ingredients, so whatever your taste, the odds are that Mixology can help.

To find out how to make a particular cocktail, you can either search for it by name or find it in a category-based search. (You can find James Bond's classic drink, vodka martini, under the martinis category, for example.) The app also has a "new and featured" page, and it has a "random drinks" function if you are feeling lucky.

Any recipe you like can be added to a favorites list for easy access later. Tapping on a listed cocktail takes you to a page showing the necessary ingredients and detailed but clear instructions on how to put the drink together.

The best bit of Mixology, though, is the "drinks cabinet" section, especially if you have a liquor cabinet full of odd half-empty bottles. In this section, you can enter details of the different spirits you have available and see which cocktails you can fashion out of them.

Mixology has well-written text and interesting images and is easy to navigate. The app can show its measurements in American or metric style and also includes recipes for punches and shots as well as classic cocktails. Best of all, the app is free for iOS and Android. If you pay \$2 to upgrade to the Mixologist version you can add your own cocktail recipes to the app.



The Cocktail Flow app, left, has a clear and easy-to-use interface. Mixology, center, has a database of about 8,000 cocktail recipes. Lush features illustrations instead of photos, and it has search and discovery functions.

For a different cocktail-making experience, **COCKTAIL FLOW** — free on iOS and Android — is worth trying. Cocktail Flow is more visually appealing than some rivals and has a clear and easy-to-use interface. For example, each drink in its database is illustrated with artwork rather than a stock photo, and each section of the app, such as "search," has its own color.

The app also lists the ingredients needed for each cocktail in a clear way, with colors for different ingredients. It also groups similar drinks in an interesting fashion in its "discover" section, listing "Prohibition era" cocktails all to-

Mix drinks like a professional, with help from your smartphone.

gether. Cocktail Flow also gives an indication of how strong each drink is and lets you share information about it over social media or by messaging or email — great if a party guest likes your creation and wants to know how to make it.

Like Mixology, Cocktail Flow also has a section where you can discover what recipe you can make from liquors you

already have on your shelf. The app's main downfall is that its drinks database is only about 600 drinks, and to buy more you have to pay about \$1 each for a category of drinks, like Valentine's Day or Christmas. But Cocktail Flow is definitely the most stylish cocktail recipe app around.

On iOS, **LUSH: COCKTAIL AND MIXED DRINK RECIPES** is also stylish, with an Apple-like minimalist design. The app has hundreds of drinks in its database and each drink has an illustration instead of boring photos. You can find a cocktail by searching a name or an ingredient.

The most interesting feature of Lush

is its flavor profile database. You want something citrusy? If you look under lemon in Lush's list you will find drinks that match this flavor, like the Aviation or the Air Force One. It's clever, and also a really interesting way to discover new cocktails. Lush is \$2, and is iOS-only.

ONTHEBAR, which is free on iOS and Android, is a different sort of cocktail app. It's actually a sort of social network meant to connect bartenders and patrons. But as part of this social experience, the app also has a large section dedicated to cocktail recipes that its bartender users have uploaded themselves.

This database of drinks is a little simpler than many other drink apps, because you can only search for drinks by name or see them filtered by those that are new, "en fuego" or have been uploaded by nearby users. In addition, the quality of the recipes varies because they are filled in by users. Some drinks lack detailed instructions. Still, it's definitely a good app for finding new cocktail recipes and for finding nearby places where you can test out the drinks before you try to make them.

QUICK CALL Microsoft has just released variations of its well-known business apps Word, Excel and PowerPoint for Android phones — previously they had been available only for Android tablets. This means you should be able to edit all those important work files while you are mobile, without your PC. **OFFICE** is free.

ONLINE: HOW TO MIX DRINKS
 In a video, Kit Eaton shakes and stirs with Mixology, Cocktail Flow and Onthebar.
nytimes.com/personaltech