



SNS COLLEGE OF ENGINEERING

(Autonomous)

DEPARTMENT OF MECHANICAL ENGINEERING



CONSUMER ELECTRONICS



Guess Today's Topic????





HEADPHONES AND HEADSETS



Headphones are a term used for a device that features two drivers connected by a headband and worn over the head. It's also used as an umbrella term that encompasses all the other terms.

Headsets are headphones with microphones.





HEADPHONES AND HEADSETS



Earbuds are small devices that fit directly into the ear canal.
Earphones can be anything and everything depending on who you ask, so we avoid using the term.





HEADPHONES AND HEADSETS



If you're in need of a new pair of cans to take your music-listening experience to the next level, chances are you already have a basic idea of what you need.

This may not include a specific model (that's where our product reviews come in quite handy), but you likely know the shape of the device you want. It might be a pair of headphones or earbuds or perhaps even a headset. Or it could be earphones, in-ear headphones, over-ear headphones, or something else entirely.





HEADPHONES AND HEADSETS



a pair of earcups attached to a headband, a pair of earcups attached to a headband with a microphone sticking out of one earcup, or a pair of those tiny earpieces that you stick inside your ear canal.





HEADPHONES AND HEADSETS



Things would be much simpler that way. These descriptions may sound stupid, but ironically enough, using them is at times less likely to result in misunderstandings than using official terminology like headphones and earphones and so on.

The reason for this is simple: there is no universally agreed-upon paradigm cataloging these audio devices to which everyone must adhere.





HEADPHONES AND HEADSETS



two different listeners could quite conceivably imagine two different devices: on-ear headphones and in-ear headphones. It wouldn't surprise us if there was even a third option we forgot to consider. Therefore, we're here to set the record straight by establishing the terminology we use and why. This is the most popular use of these terms, so it should set you up for most situations, but just know that again, this is not an exact science, so some people may use other definitions





HEADPHONES AND HEADSETS



The most basic term that all the others stem from is [headphones](#). This term is almost universally used to denote a device that features a pair of drivers connected by a headband and is used to listen to music when placed on top of one's head. It's also used as an **umbrella term** that encompasses everything we'll mention in this guide.





HEADPHONES AND HEADSETS



In terms of how the earcups rest on the ears, we can distinguish between two types of headphones:

- **On-ear headphones**
- **Over-ear headphones**

With on-ear headphones, the ear cushions sit directly on your ears. This allows the earcups to be much smaller, which can help reduce the weight of the device and make it **more suitable for outdoor use.**





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However, this also means that on-ear headphones have to clamp your head with more force to stay in place, which isn't really a positive trait as far as comfort is concerned.

Since they funnel the sound directly into your ear canal, their sound stage can come across as **constrained**.

Conversely, **over-ear headphones** feature larger earcups with larger ear cushions, so they generally only sit on the outer ear.





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This, in turn, makes them **more comfortable** to wear for **long stretches of time**, as they don't have to clamp your head with as tight a grip. They also have a **more expansive sound stage**, courtesy of the larger space the drivers are given to work with. Since they win out in both **comfort** and **sound**, **over-ear headphones are often regarded as superior to on-ear headphones.**

They are, however, generally **avoided for outdoor use** due to their cartoonishly big frame.





HEADPHONES AND HEADSETS



This microphone can be detachable or non-detachable, fixed, movable, bendable... it doesn't matter. If it's got a microphone, it's a headset. (Except if we're talking about earbuds with a microphone – earbuds are pretty much their own thing, as you'll see.)

Since the addition of the microphone makes the headset even more **unwieldy for public use** than most regular headphones, it usually employs an over-ear build, but those determined enough to get an on-ear headset can still find some.

Headsets offer the benefit that all other two-in-one solutions offer – **convenience** – but they come with the standard detriment as well – **less focus**. In this case, the jack-of-two-trades-master-of-neither approach leaves headsets with **lower audio quality**, or lower audio quality per dollar, to be more precise.





*Thank
you*

