# **The City College of New York**



Fig1: Airpods pro(2nd generation) Buy AirPods Pro (2nd generation) - Apple

# **Understanding The Components**

## Abstract:

"introducing Apple AirPods, the wireless earbuds designed for seamless connectivity, clear sound, and Unmatched convenience."

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Apple's earphones have a long history that dates to the company's infancy. Apple's initial release of the iPod in 2001 marked the beginning of personal audio. The first iteration of AirPods was the wired earphones that came with the iPod devices. Purchase the second-generation AirPods Pro-Apple "EarPods." These were the typical earphones that came with the iPod and let consumers listen to their music while they were on the road. Apple made a huge advancement in audio technology in 2007 when it unveiled the first iPhone.

Apple also presented a new model of its headphones, dubbed "Apple Earphones with Remote and Mic," alongside this ground-breaking gadget.

Users of these earbuds were able to make phone calls and control the playback of their music. Over time, Apple has continued to develop and improve its earbuds, adding more iterations and enhancing sound quality, convenience

and comfort. They introduced "EarPods," a revamped version with a more ergonomic shape for improved fit and audio quality, in 2012.

The striking and understated design of Apple AirPods
makes them stand apart from conventional wired
headphones. Each AirPod is designed to fit in the ear
comfortably, and they have a lightweight design that ensures
comfortable, prolonged use.

A totally wireless experience is made possible by the lack of any wires or cables, allowing users to roam around freely



and unrestricted while
listening to their
favorite music or
making phone calls.
According to the
official website of

Fig2. <u>Buy AirPods Pro (2nd generation) - Apple</u>

apple, <a href="https://www.apple.com/airpods/">https://www.apple.com/airpods/</a>.

#### **Exterior Parts:**

The charging case is compact, as we have in the picture of the figure2, it is a high-quality plastic casing with a rectangular shape. It has both a defensive and a charging station and an AirPods case. The case has a magnetically operated hinged cover that opens and closes. At the bottom is a Lightning port for charging the case itself.



Fig3: https://www.stickpng.com/img/download/62fbc05c342f1f906d378079

# AirPods (Left andRight):

The actual AirPods are small, lightweight headphones made to comfortably fit in the ears. It has a downward-facing stem-like protrusion that protrudes from the earbud. Siri activation, touch-sensitive playback controls, call management, and other components are all housed in the stem. There are no wires separating the two earbuds in the AirPods' seamless, sleek design.

#### Interior elements:



fig4: <a href="https://images.idgesg.net/images/article/2019/10/airpods-pro-exnaded-internals-2019-100815762">https://images.idgesg.net/images/article/2019/10/airpods-pro-exnaded-internals-2019-100815762</a>
-orig.ipg)

# Speaker:

Each AirPod has a potent speaker that produces sound of the highest caliber. The speaker is made to deliver a distinct sound.

A fully immersive listening experience is ensured with a sound with deep bass and precise treble.



Fig5: https://tuanphong.vn/tai-nghe/tai-nghe-bluetooth-apple-airpods-pro

The microphones use beamforming technology to focus on the user's voice while eliminating background noise. As stated by What Is

Beamforming Audio, and How Does It Work? (howtogeek.com)

# Battery:

Each AirPod has a battery that lasts for several hours of continuous operation.

# The charging case:

also has a bigger battery that, when placed inside, can recharge the AirPods several times. This makes it possible to listen for longer periods of time without having to find an outlet



Sensors:

For

improved

functionality, AirPods feature a number of sensors. There is an optical sensor built inside them that recognizes when the AirPods are allowing for the automatic pausing and restarting of audio playback when inserted or removed from the ears. The AirPods can recognize taps and motions thanks to the integrated motion accelerometer, offering simple control choices.

# Function and application:

Bluetooth enables wireless AirPod connections to compatible Apple devices. The AirPods immediately pair with the user's device after being removed from the charging case. The AirPods provide a number of capabilities, such as hands-free "Hey Siri" activation, clever audio routing, and

seamless switching between devices.

based on <a href="https://youtu.be/MZLIPvDYxM">https://youtu.be/MZLIPvDYxM</a>.

Innovation in Wireless Audio is RequiredBy providing a smooth and wire-free listening experience, Apple AirPods have completely changed the way we perceive audio.

## Conclusion:

Apple AirPods have changed wireless audio with their slim design, frictionless connectivity, intelligent controls, and incredible sound quality. AirPods are a popular choice for professionals, regular users, and music enthusiasts due to their cutting-edge technology and handy functionality. With the iconic AirPods, Apple retains its dominant position in wireless audio technology with ongoing innovation and advancements, providing an unsurpassed audio experience.

# References:

**Apple website** 

www.apple.com

https://www.apple.com/airpods/

Apple Newsroom (<a href="https://www.apple.com/newsroom/">https://www.apple.com/newsroom/</a>)

CNET (<u>www.cnet.com</u>)

**Engadget** (<u>www.engadget.com</u>)

The Verge (<a href="www.theverge.com">www.theverge.com</a>)

TechRadar (<u>www.techradar.com</u>)

Tom's Guide (<u>www.tomsguide.com</u>)

**Digital Trends (www.digitaltrends.com)** 

**AirPods Pro2 Review:** 

https://youtu.be/f3DfJxvkN-8

**AirPods Pro User Guide and Tutorial:** 

https://youtu.be/MZLIPvDYxM

What Is Beamforming Audio, and How Does It
Work? (howtogeek.com)