Airtags

Convenience or Danger?

Background



Source: Mac Rumors



Source: Apple





\$29

\$99

How it Works

Airtags use Bluetooth to connect to Apple's "Find My" network.

All iPhones are a part this network, unless it's owner has explicitly turned these feature off in their settings.

The Airtags constantly ping nearby apple devices, which is used to report their location to the "Find My" network.

The Airtags use an "Ultra Wide Band" of Bluetooth frequencies, which allow for precision location data.

They work use a CR2032 "Coin Battery" that will last for around 6 months before needing to be replaced.

Similar Devices Exist from other companies



Is this technology a personal convenience or an avenue for abuse?

Pros

Purpose of the Air Tag

Allows you to find lost items

Allows you to keep track of luggage

Allows you to keep track of loved ones

Allows you to keep track of your pet



Benefits of Air Tag Versus TILE



Apple

Uses an anonymous, encrypted method that links to any iPhone in the area to continuously track your belongings.

User interface is much cleaner and easier to use.



Tile

Tracks up to 30 feet

Charges an additional premium fee that allows you to enable tracking history.

A Work in Progress

Apple Website

We're also investigating a series of updates that we plan to introduce later this year, including:

- Precision Finding: This capability allows recipients of an unwanted tracking
 alert to locate an unknown AirTag with precision. iPhone 11, iPhone 12, and
 iPhone 13 users will be able to use Precision Finding to see the distance and
 direction to an unknown AirTag when it is in range. As an iPhone user moves,
 Precision Finding fuses input from the camera, ARKit, accelerometer, and
 gyroscope to guide them to the AirTag through a combination of sound,
 haptics, and visual feedback.
- Display alert with sound: When AirTag automatically emits a sound to alert
 anyone nearby of its presence and is detected moving with your iPhone, iPad,
 or iPod touch, we will also display an alert on your device that you can then
 take action on, like playing a sound or using Precision Finding, if available. This
 will help in cases where the AirTag may be in a location where it is hard to hear,
 or if the AirTag speaker has been tampered with.
- Refining unwanted tracking alert logic: Our unwanted tracking alert system uses sophisticated logic to determine how we alert users. We plan to update our unwanted tracking alert system to notify users earlier that an unknown AirTag or Find My network accessory may be traveling with them.
- Tuning AirTag's sound: Currently, iOS users receiving an unwanted tracking
 alert can play a sound to help them find the unknown AirTag. We will be
 adjusting the tone sequence to use more of the loudest tones to make
 an unknown AirTag more easily findable.

Cons - AirTags make stalking easy.

Airtags were released by apple without adequate forethought about the potential for abuse.

"Stalking and stalkerware existed before AirTags, but Apple made it cheaper and easier than ever for abusers and attackers to track their targets,"

- Albert Fox Cahn, executive director at the Surveillance Technology Oversight Project,

Source: Vice News

Immediately after their release, people immediately raised concerned about how this technology could be for stalking and domestic abuse.

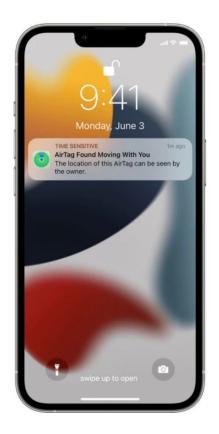
Apple's Effort to Stop Stalking Fall Short

Washington Post Article, May 2021

Shortly after their release, Washington Post Technology reporter Geoffrey A. Fowler asked a colleague to use an AirTag to stalk him.

Despite Apple effort to put in place safeguards, Fowler found that it was "frighteningly easy" to bypass the systems put in place by Apple to stop their use in stalking.



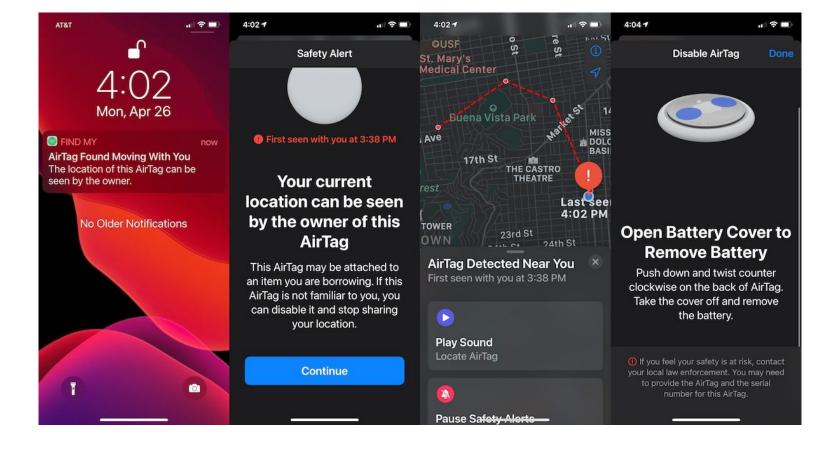




Fowler reported that it took three days to receive an alert that he was travelling with an AirTag that didn't belong to him.



Fowler reports that after three days there was "a light chirping for 15 seconds"



Examples of notifications

ONLY if you have an IPhone, not helpful for the 50% of smartphone owners who have an Android Device.

In February 2022, Apple released a statement to address some of these concerns.

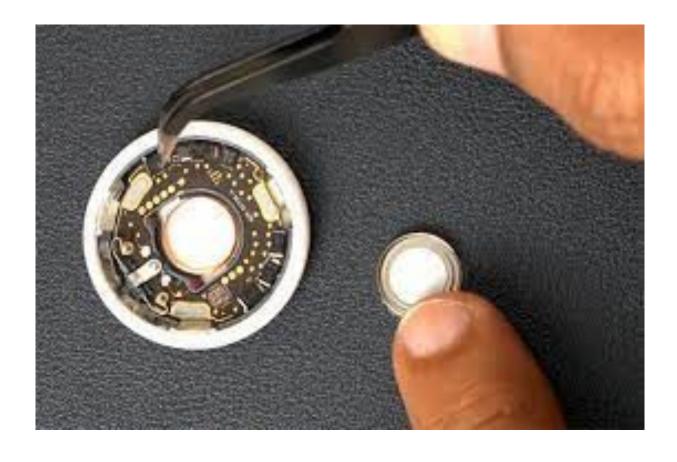
Here is a run down of the changes...

- Alerts now happen within 8 to 24 hours.
- Precision finding to help locate Unknown Airtags.
- Ability to play sound to help locate the Airtag.

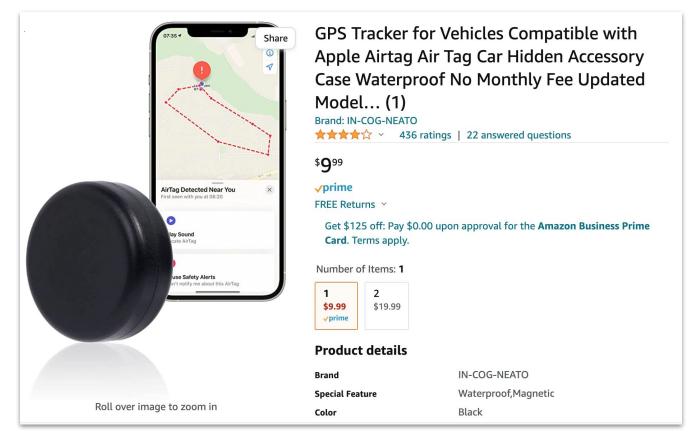
In February 2022, Apple also released an app for Android users to detect Unknown Airtags.

This puts all responsibility on potential victims.

Apparently the app doesn't run in the background, so individuals have to suspect they are being tracked first.



The speaker can be removed! Easy to find guides on YouTube



Source: Amazon

Vice new found that of 150 police reports that mentioned Airtags, only one was made by a man.

Source: Vice News

Apple could work with other companies to make it easier to discover unwanted AirTags.

It's easy for stalkers to use these devices to harass and threaten their victims. It should be easier for victims to find out if this is happening to them so they can protect themselves.

Electronic Frontier Foundation

"There's no technical fix that can prevent AirTags from being abused. As long as Apple continues to sell a cheap, easily-hidden tracking device, stalkers will continue to use it. The only solution is to stop selling and supporting AirTags. This product is far too dangerous to stay on the market." - Albert Fox Cahn

Source: Vice News