

Ford's Colony Computer & Technology Club

Apple AirTags & FindMy App

January 15, 2023

iOS



TODAY'S AGENDA

- Apple AirTags
 - What are they?
 - How do they work?
 - And should I consider buying them?



AIRTAG VIDEO

iPhone  AirTag

Source: Apple

APPLE AIRTAGS

- Apple **AirTag** is a tiny metal tracker that you can attach to a keychain, drop in a bag, insert into your wallet or snap onto your luggage to keep track of those items.
- **AirTag** works by using a Bluetooth signal to tap into a network of about a billion Apple devices in the world, like iPhones and Macs, that also broadcast a Bluetooth signal.
- Uses a CR2032 coin battery; lasts ~ 1 year+; and notifies you when it needs to be replaced.



AirTag Holders



AirTag Wallet Holder

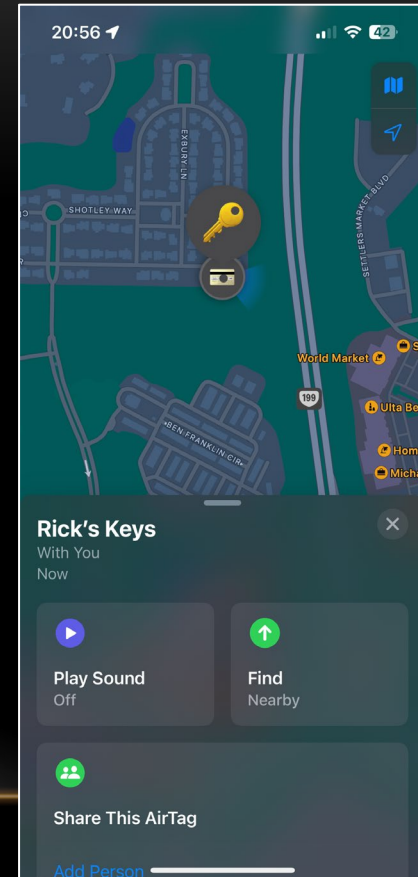
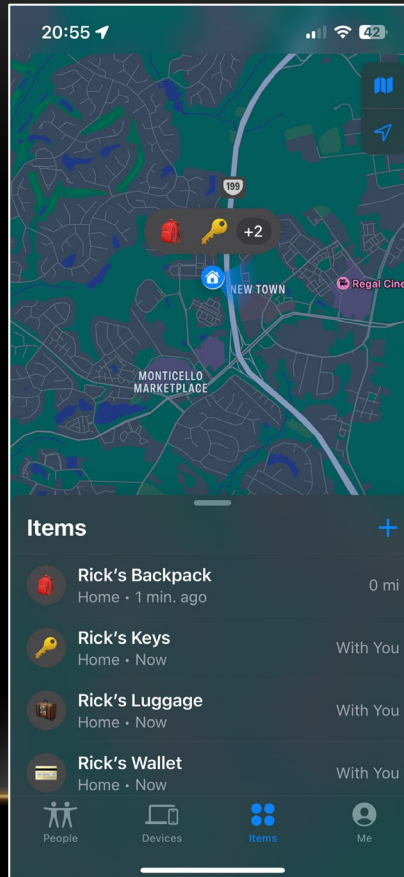
FIND MY APP



- View location of your iPhone, iPad, Apple Watch, Mac, AirPods device in your Family Sharing group, AirTags, or Find My accessories on a map.
- Provides directions to the locations of your devices.
- Nearby misplaced devices can emit a sound to aid in pinpointing their locations.
- If your device is missing, you can put that device in Lost Mode, to lock their screen and display a message or erase them remotely to protect your data.
- Find My App can track:
 - Other People who opt in to share their location
 - Devices - iPhone, iPad, Apple Watch, Mac, AirPods, & Find My network accessories.
 - AirTags
 - Yourself – if you opt in to Share Your Location

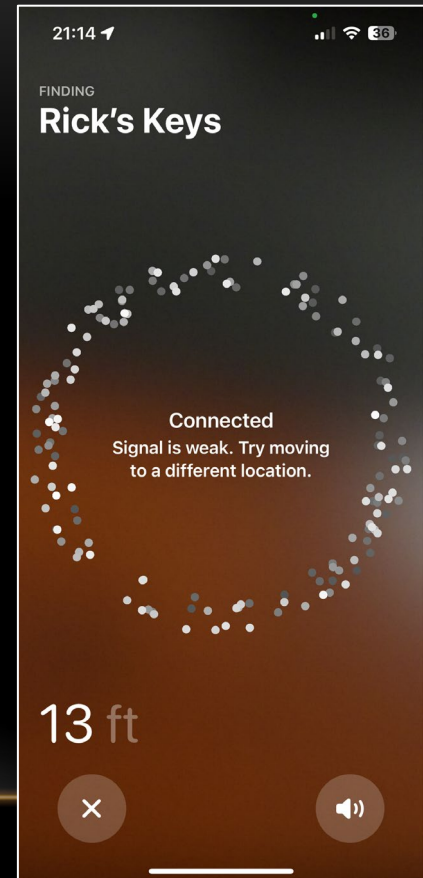
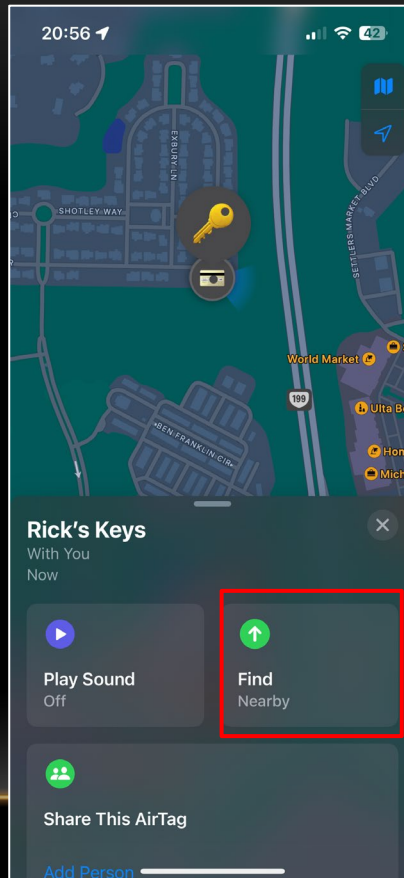
APPLE AIRTAGS & FIND MY APP

- You can view the locations of items with **AirTags** using the **Find My** App on your iPhone, iPad or computer. The App will display the last known location(s) of your item(s).
- If you lose something with an **AirTag** attached to it, you'll get a Notification on your iPhone, iPad or computer with the location when someone with an iPhone or Mac comes within Bluetooth range (~30 feet) of it.
- It'll also show anyone who finds the item a custom message and phone number, which you enter when you report it lost.



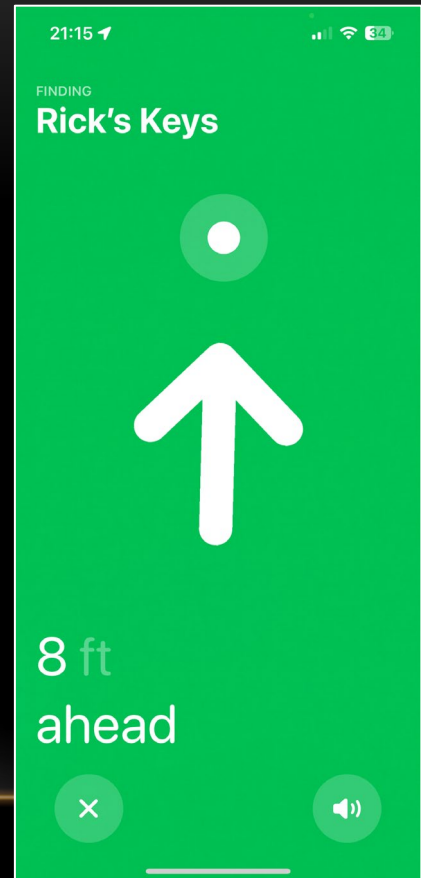
FIND MY APP – PRECISION MODE

- If you misplace something with an **AirTag** attached to it, you can use **Find My** to assist you in locating it.
- Go to the item's last known location, and Tap **Find**.
- Follow the on-screen directions to find your item.



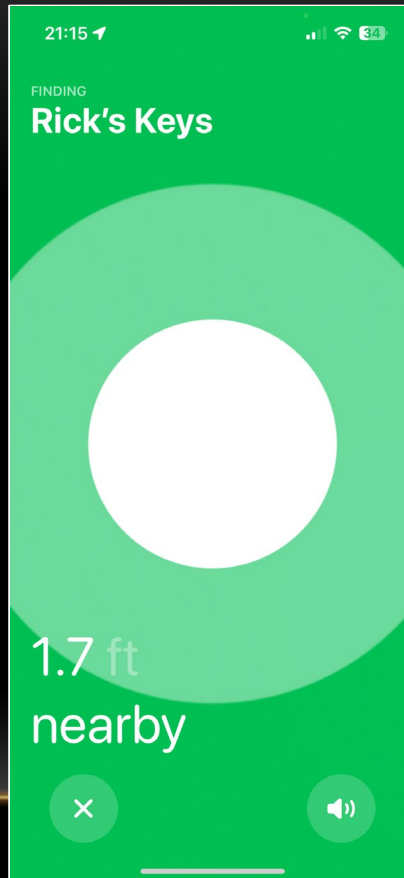
FIND MY APP – PRECISION MODE

- If you misplace something with an *AirTag* attached to it, you can use Find My to assist you in locating it.
- Go to the item's last known location, and Tap Find.
- Follow the on-screen directions to find your item.



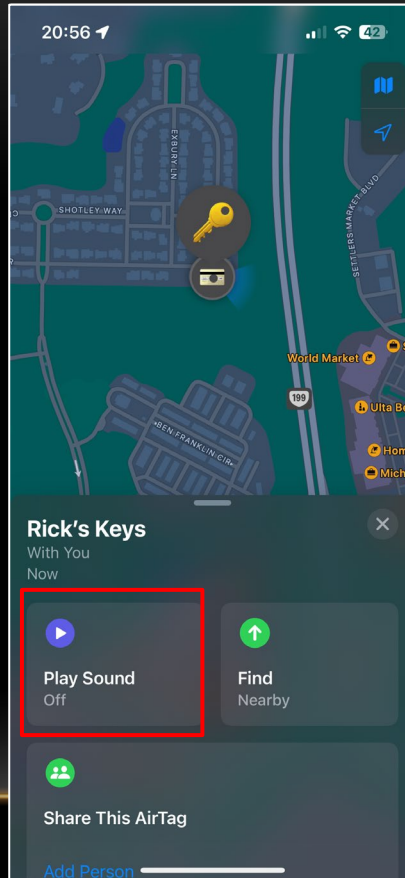
FIND MY APP – PRECISION MODE

- If you misplace something with an *AirTag* attached to it, you can use Find My to assist you in locating it.
- Go to the item's last known location, and Tap Find.
- Follow the on-screen directions to find your item.



FIND MY APP – PRECISION MODE

- If you misplace something with an **AirTag** attached to it, you can use Find My to assist you in locating it.
- Go to the item's last known location, and Tap Find.
- Follow the on-screen directions to find your item.
- If you still can't see your item, try **Play Sound!** The AirTag will emit a chirping sound to assist in finding your item.



MY APPLE AIRTAG STORY

- On Sunday 9/17/2023 I was returning from Indianapolis to Richmond by air; arriving RIC at approximately 7:30pm
- Pre-paid my Airport Parking in the terminal with my credit card while waiting for my checked bag to get to baggage claim
- Got my checked bag and proceeded to my car
- After leaving the airport and getting on I-64, noticed my wallet was missing. Pulled over and checked everywhere – No Wallet!
- Went back to the airport to see if I might have dropped it somewhere in the vicinity of the parking terminal, baggage claim, Lost & Found and the parking lot – Still No Wallet!
- Then I remembered I had an AirTag in a wallet holder in my wallet.
- I pulled up the Find My App on my iPhone
- To my surprise, the AirTag in my wallet indicated it was on the access road ~ ½ mile to I-64E.
- It was dark and raining and after making one search without a flashlight, I gave up the search that Sunday night and headed for home.
- I deduced my wallet had been stolen when I was in a small crowd in baggage claim. I vaguely recalled someone bumping into me when wrangling for our bags
- When I got home I went online and canceled my credit and debit cards.

MY APPLE AIRTAG STORY

- On Monday, 9/18/2023 I checked the Find My App again and my wallet's AirTag still indicated it was on the access road to I-64E near RIC airport.
- I drove over to the access road location – had Apple CarPlay in my car which connected my Apple Maps to the car display.
- I got out of my vehicle to do a foot search and withing ~ 50' from where I parked – I found my wallet.
- It had been run over a few times but the AirTag did its job.
- My credit and debit cards were missing – confirming that the wallet had been stolen.
- However, all my ID's were still in the beaten-up wallet
 - VA Drivers License
 - PassPort Card
 - Insurance
 - Medicare

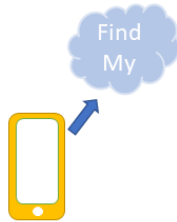
HOW APPLE AIRTAGS WORK



New AirTag uses NFC to communicate with an iPhone. They share a unique cryptographic seed that is known only to this AirTag and this iPhone / iPhone User



AirTag emits a Bluetooth LE advertising beacon message every two seconds to broadcast a time sensitive encrypted message. The AirTag does this forever, until the battery dies.



If the AirTag's BLE message is detected by an iPhone or Mac, the encrypted message, along with the phone's location data (via GPS/Wi-fi), is relayed to the Apple 'Find My' network, in the cloud.



When the AirTag owner requests the location of the AirTag, the iPhone calculates what the latest expected broadcast message should be, encrypts it, and then runs a query against the 'My Find' network to see if there are matches. This iPhone has the private key to decrypt the message and thus know that last place an anonymous iPhone detected the AirTag.



iPhones running 14.5 or later, feature push notifications to alert users an AirTag that does not belong to them is travelling with them.



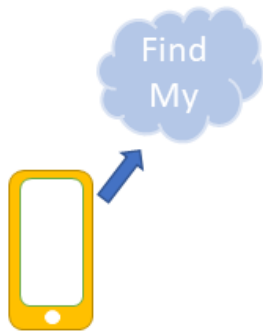
Any iPhone can get limited information from a lost AirTag via NFC.



New AirTag uses NFC to communicate with an iPhone. They share a unique cryptographic seed that is known only to this AirTag and this iPhone / iPhone User



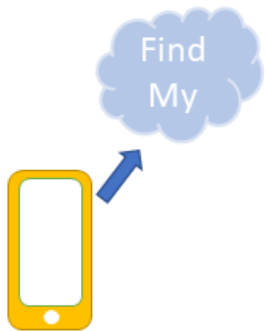
AirTag emits a Bluetooth LE advertising beacon message every two seconds to broadcast a time sensitive encrypted message. The AirTag does this forever, until the battery dies.



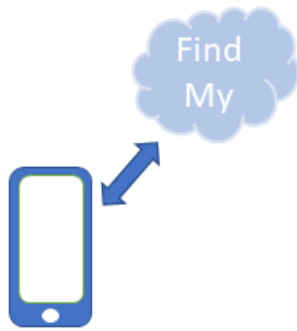
If the AirTag's BLE message is detected by an iPhone or Mac, the encrypted message, along with the phone's location data (via GPS/Wi-fi), is relayed to the Apple 'Find My' network, in the cloud.



When the AirTag owner requests the location of the AirTag, the iPhone calculates what the latest expected broadcast message should be, encrypts it, and then runs a query against the 'My Find' network to see if there are matches. This iPhone has the private key to decrypt the message and thus know that last place an anonymous iPhone detected the AirTag.



If the AirTag's BLE message is detected by an iPhone or Mac, the encrypted message, along with the phone's location data (via GPS/Wi-fi), is relayed to the Apple 'Find My' network, in the cloud.



When the AirTag owner requests the location of the AirTag, the iPhone calculates what the latest expected broadcast message should be, encrypts it, and then runs a query against the 'My Find' network to see if there are matches. This iPhone has the private key to decrypt the message and thus know that last place an anonymous iPhone detected the AirTag.



iPhones running 14.5 or later, feature push notifications to alert users an AirTag that does not belong to them is travelling with them.



Any iPhone can get limited information from a lost AirTag via NFC.

AIRTAGS & ACCESSORIES



AirTags

- Amazon - \$23.99/each; \$79.99 for four

[Amazon.com: Apple AirTag 4 Pack : Electronics](#)



AirTag Holders w/clip rings

- Amazon - \$9.99 for four

[Amazon.com: Compatible with AirTag Case Keychain Air Tag Holder Silicone AirTags Key Ring Cases Tags Chain Apple GPS Item Finders Accessories 4 Pack : Electronics](#)



Wallet Holder

- Amazon - \$5.99 for two

[Amazon.com: for Apple Airtag Wallet Holder, 2 Packs Airtag Wallet Men Case, Slim Airtag Holder - \(Type B\) : Electronics](#)

AIRTAGS



VIDEO



Roll over image to zoom in



Apple AirTag 4 Pack

Visit the Apple Store

4.8 ★★★★★ 102,376 ratings | Search this page

#1 Best Seller in Electronics

10K+ bought in past month

-14% **\$84.99**

List Price: \$99.00

Or **\$15.69** /mo (6 mo). Select from 1 plan

✓prime One-Day

FREE Returns

Coupon: Apply \$6 coupon Shop items > | Terms

[Unlock a \\$100 Amazon Gift Card](#) upon approval for Prime Visa.

May be available at a lower price from other sellers, potentially without free Prime shipping.

Brand	Apple
Are Batteries Included	Yes
Number of Batteries	4 CR2032 batteries required. (included)
Compatible Devices	airtag
Item Weight	0.39 Ounces

About this item

- Keep track of and find your items alongside friends and devices in the Find My app
- Simple one-tap setup instantly connects AirTag with your iPhone or iPad
- Play a sound on the built-in speaker to help find your things, or just ask Siri for help
- Precision Finding with Ultra Wideband technology leads you right to your nearby

Delivery

Pickup

\$84.99

✓prime One-Day

FREE Returns

FREE delivery **Tomorrow, January 16.** Order within 6 hrs 36 mins

📍 Deliver to Richard - Williamsburg 23188

In Stock

Quantity: 1

Add to Cart

Buy Now

Ships from	Amazon.com
Sold by	Amazon.com
Returns	Eligible for Return, Refund or Replacement within 15 days of...
Support	Product support included

✓ See more

Add a Protection Plan:

- 2-Year Protection for **\$8.99**
- 3-Year Protection for **\$11.99**
- Asurion Complete Protect: One plan covers all eligible past and

[Amazon.com: Apple AirTag 4 Pack : Electronics](#)

AIRTAG HOLDER

Electronics > GPS, Finders & Accessories > GPS System Accessories > Cases



[Click to see more videos](#)

HATALKIN Compatible with AirTag Case Keychain Air Tag Holder Silicone AirTags Key Ring Cases Tags Chain Apple GPS Item Finders Accessories 4 Pack

Visit the HATALKIN Store

4.7 ★★★★★ | 14,276 ratings

[Search this page](#)

Amazon's Choice in GPS Cases by HATALKIN

10K+ bought in past month

-10% \$8⁹⁹

Typical price: \$9.99

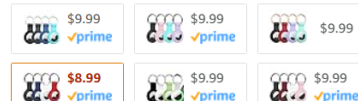
prime One-Day

FREE Returns

Coupon: Apply 10% coupon [Shop items >](#) | [Terms](#)

You could have earned \$446.35 in rewards on your Amazon purchases over the past year with 5% back with an Amazon Prime Store Card. Apply now and get a \$10 Amazon Gift Card upon approval. [Learn more](#)

Color: **Black/White/Blue/Red**



Delivery

Pickup

\$8⁹⁹

prime One-Day

FREE Returns

FREE delivery **Tomorrow, January 16**. Order within 3 hrs 59 mins

Deliver to Richard - Williamsburg 23188

In Stock

Buy 2 or more, save 13% Discount by Amazon [Terms](#)

Quantity: 1

Add to Cart

Buy Now

Ships from Amazon
Sold by Tianyuanxin
Returns Eligible for Return, Refund or Replacement...
Payment Secure transaction

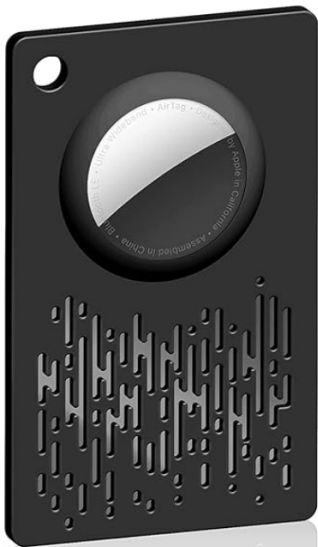
[See more](#)

Add a gift receipt for easy returns

Add to List

[Amazon.com: Compatible with AirTag Case Keychain Air Tag Holder Silicone AirTags Key Ring Cases Tags Chain Apple GPS Item Finders Accessories 4 Pack : Electronics](#)

AIRTAG WALLET HOLDER



Roll over image to zoom in



for Apple Airtag Wallet Holder, 2 Packs Airtag Wallet Men Case, Slim Airtag Holder - (Type B)

Visit the jaminben Store

4.5 ★★★★★ 251 ratings | Search this page

50+ bought in past month

\$5⁹⁹

✓prime Two-Day

FREE Returns

Unlock a \$100 Amazon Gift Card upon approval for Prime Visa.

Size: **Type B**

Type A

\$5.69

✓prime

Type B

\$5.99

✓prime

Brand jaminben

Color TYPE B

Compatible Devices GPS

Form Factor Case

Shell Type Hard

About this item

- **[Compact Design]** The Credit Card-Sized AirTag Wallet Card Holder is as small as a credit card, with a thickness of 0.1 inches, making it perfect for keeping in compact wallets.
- **[Durable and Lightweight Material]** The AirTag

Delivery

Pickup

\$5⁹⁹

✓prime Two-Day

FREE Returns

FREE delivery **Wednesday, January 17.** Order within 7 hrs 46 mins

Deliver to Richard - Williamsburg 23188

In Stock

Quantity: 1

Add to Cart

Buy Now

Ships from Amazon
Sold by jaminben
Returns Eligible for Return, Refund or Replacement...
Payment See more
Secure transaction

Add a gift receipt for easy returns

Add to List

Amazon.com: for Apple Airtag Wallet Holder, 2 Packs Airtag Wallet Men Case, Slim Airtag Holder - (Type B) : Electronics

WALLETS W/BUILT-IN AIRTAG HOLDERS

Results

Check each product page for other buying options. Price and other details may vary based on product size and color.

Electronics

Customer Reviews

< Clear

- ★★★★★ & Up
- ★★★★☆ & Up
- ★★★☆☆ & Up
- ★★☆☆☆ & Up

Amazon Fashion

- Premium Brands
- Top Brands

Brands

- GAOCHALE
- LORZOR
- typecase
- TRAVANDO
- Stealth Mode

Price

\$6 – \$94+



- Up to \$25
- \$25 to \$50
- \$50 to \$100
- \$100 to \$200

Deals & Discounts

All Discounts
Today's Deals

Form Factor

- Bi-Fold



+3 colors/patterns

Sponsored ⓘ

GAOCHALE

AirTag Wallet Genuine Leather Air Tag Wallet RFID Technology...

★★★★★ ~ 2,857

1K+ bought in past month

\$39⁹⁹

Save 10% with coupon

✓prime One-Day

FREE delivery Tomorrow, Jan 16

See options



+4 colors/patterns

Sponsored ⓘ

Artpaxy

Mens Wallet With AirTag Holder, Bifold Leather RFID Blocking 1 I...

★★★★★ ~ 710

900+ bought in past month

\$30⁹⁹

Save 5% with coupon

FREE delivery for Prime members

See options



+1 color/pattern

Sponsored ⓘ

typecase

Mens Wallet Card Holder for AirTag: Secure Holder for Apple...

★★★★★ ~ 564

1K+ bought in past month

\$39⁹⁹

Save 5% with coupon

✓prime One-Day

FREE delivery Tomorrow, Jan 16

See options



+7 colors/patterns

Sponsored ⓘ

Swallowmall

Air Tag Wallet- Bifold Genuine Leather Mens Wallet for AirTag...

★★★★★ ~ 887

\$27⁹⁹

✓prime One-Day
FREE delivery Tomorrow, Jan 16

See options

Overall Pick ⓘ



[Amazon.com : wallet for airtag for men](https://www.amazon.com/wallet-for-airtag-for-men)

