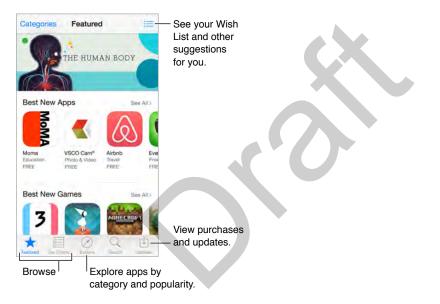
# **App Store**

# 23



### App Store at a glance

Use the App Store to browse, purchase, and download apps to iPhone. Your apps update automatically over Wi-Fi (unless you turn off this feature), so you can keep up with the latest improvements and features.



*Note:* You need an Internet connection and an Apple ID to use the App Store. The App Store is not available in all areas.

## Find apps

If you know what you're looking for, tap Search. Or tap Categories to browse by type of app.

Ask Siri to find it. Siri can search for items and make purchases in the App Store. For example, tell Siri to "Find apps by Apple" or "Purchase *app name*."

Access family members' apps. With Family Sharing turned on, you can view and download apps purchased by other family members. Tap Purchased, tap your name or My Purchases, then select a family member from the menu. For more information, see Family Sharing on page 39.

**Tell a friend about an app.** Find the app, tap  $\hat{\Box}$ , then choose the method. See Share from apps on page 38.

Use Wish List. To track an app you might want to purchase later, tap  $\hat{\Box}$  on the app page, then tap Add to Wish List.

Search apps by category. Tap Explore, scroll to Categories, then tap a category to focus on the apps you want, for example, Education, Medical, or Sports.

What apps are being used nearby? Tap Explore to find out the most popular apps others around you are using (Location Services must be on in Settings > Privacy > Location Services). Try this at a museum, sporting event, or when you're traveling.

**Delete an app.** Touch and hold the app icon on the Home screen until the icon jiggles, then tap Sou can't delete built-in apps. When you finish, press the Home button. Deleting an app also deletes its data. You can download any app you've purchased from the App Store again, free of charge.

For information about erasing all of your apps, data, and settings, see Restart or reset iPhone on page 196.

#### Purchase, redeem, and download

Tap the app's price, then tap Buy to purchase it. If it's free, tap Free, then tap Install.

If you see  $\bigcirc$  instead of a price, you've already purchased the app and you can download it again, free of charge. While the app is downloading or updating, its icon appears on the Home screen with a progress indicator.

**Approve purchases with Family Sharing.** With Family Sharing set up, the family organizer can review and approve purchases made by other family members under a certain age. For more information see Family Sharing on page 39.

Hide individual purchases. Using iTunes on a computer, family members can hide any of their purchases so other family members can't view or download them. For more information, see Family Sharing on page 39.

Use a gift card or code. Tap Featured, scroll to the bottom, then tap Redeem. Or tell Siri "Redeem an iTunes Store gift card."

Send a gift. View the item you want to give, tap  $\square$ , then tap Gift. Or tap Featured, scroll to the bottom, then tap Send Gift to send an iTunes gift certificate to someone.

**Restrict in-app purchases.** Many apps provide extra content or enhancements for a fee. To limit purchases that can be made from within an app, go to Settings > General > Restrictions (make sure Restrictions is enabled), then set options (for example, restrict by age rating or require a password immediately or every 15 minutes). You can turn off In-App Purchases to prevent all purchases. See <u>Restrictions</u> on page 44.

**Use iTunes Pass.** You can add an iTunes Pass to Passbook, which makes it easy to add money to your Apple ID so you can make purchases from the iTunes Store, App Store, and iBooks Store without using a credit or debit card. To add your iTunes Pass in App Store, tap Featured, scroll to the bottom, tap Redeem, then tap Get Started under iTunes Pass. You can add money to your iTunes Pass at Apple Retail Stores in most countries.

#### **App Store settings**

To set options for the App Store, go to Settings > iTunes & App Store.

**View or edit your account.** Tap your Apple ID, then tap View Apple ID. To change your password, tap the Apple ID field, then tap Password.

Sign in using a different Apple ID. Tap your account name, then tap Sign Out. Then enter the other Apple ID.

Turn off automatic downloads. Apps, books, and music you purchase on other devices are automatically downloaded. Also, apps update automatically over Wi-Fi, unless you turn off the option.

**Download using the cellular network.** Turn on Use Cellular Data. Downloading apps, listening to Apple Music, and using iTunes Match over the cellular network may incur carrier charges.

**Suggested Apps**Turn on Suggested Apps to show suggestions relevent to your current location on the lock screen and in the app switcher. Turn on My Apps to show apps that are already installed.

## iBooks

# 74



### Get books

Get books from the iBooks Store. In iBooks, use the buttons at the bottom of the screen to access the iBooks Store. Tap Featured to browse the latest releases, or Top Charts to view the most popular. To find a specific book, tap Search.

Use Siri. Say, for example, "Find books by author name."

## Read a book

Read a book	
Contents, bookmarks, and notes	
Library A Q D Bookmark this page.	
then said, "No, no, they no kill me, they willing love learn." He meant by this, they would be willing to learn. He added, they learned much of the bearded mans that came in the boar. Then I asked him if he would go back to them. He smiled at that, and told me that he could not swim so far. I told him I would make a cance for him. He told me he would go if I would go with him. "I gol" says I; "why, they will eat me if I come there." "No, no," says he, "me make they no eat you; me make they much love you." He meant, he would tell them how I had killed his enemies, and saved his life, and so he would make them love me. Then he told me, as well as he could, how kind they were to	
Back to D.1 689 of 936 3 pages left Go to a page.	

Open a book. Tap the book you want to read. If you don't see it on the bookshelf, swipe left or right to see other collections.

Show the controls. Tap near the center of a page. Not all books have the same controls, but some of the things you can do include searching, viewing the table of contents, and sharing what you're reading.

**Close a book.** Tap Library, or pinch the page.

Enlarge an image. Double-tap the image. In some books, touch and hold to display a magnifying glass you can use to view an image.

Read by columns. In books that support it, double-tap a column of text to zoom in, then swipe up or to the left to move to the next column.

**Go to a specific page.** Use the page navigation controls at the bottom of the screen. Or tap  $\bigcirc$  and enter a page number, then tap the page number in the search results.

Get a definition. Double-tap a word, then tap Define in the menu that appears. Definitions aren't available for all languages.

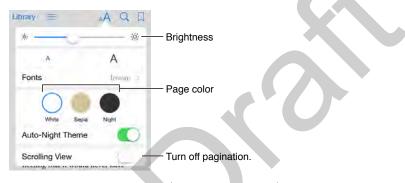
**Remember your place.** Tap  $\sqcup$  to add a bookmark, or tap again to remove it. You can have multiple bookmarks—to see them all, tap  $\equiv$ , then tap Bookmarks. You don't need to add a bookmark when you close the book because iBooks remembers where you left off.

**Remember the good parts.** Some books let you add highlights and notes. To add a highlight, touch and hold a word, then move your finger to draw the highlight. To add a note, double-tap a word to select it, move the grab points to adjust the selection, then tap Note in the menu that appears. To see all the highlights and notes you've made, tap ≔, then tap Notes.

**Share the good parts.** Tap some highlighted text, then, in the menu that appears, tap  $\square$ . If the book is from the iBooks Store, a link to the book is included automatically. (Sharing may not be available in all regions.)

Share a link to a book. Tap near the center of a page to display the controls, then tap  $\equiv$ . Tap  $\hat{\Box}$ .

**Change the way a book looks.** Some books let you change the font, font size, and color of the page. (Tap AA.) You can also change justification and hyphenation in Settings > iBooks. These settings apply to all books that support them.



Change the brightness. Tap - 次. If you don't see - 次, tap 🗚 first.

Dim the screen when it's dark. Turn on Auto-Night Theme to automatically change the bookshelf, page color, and brightness when using iBooks in low-light conditions. (Not all books support Auto-Night Theme.)

#### Interact with multimedia

Some books have interactive elements, such as movies, diagrams, presentations, galleries, and 3D objects. To interact with a multimedia object, tap, swipe, or pinch it. To view an element full-screen, pinch open with two fingers. When you finish, pinch it closed.

#### Study notes and glossary terms

In books that support it, you can review all of your highlights and notes as study cards.

See all your notes. Tap . You can search your notes, or tap a chapter to see notes you made in that chapter.

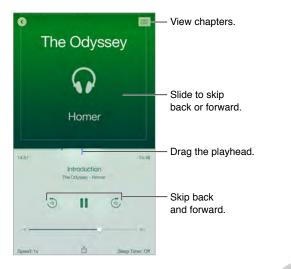
**Delete notes.** Tap Select, select some notes, then tap  $\widehat{III}$ .

**Review your notes as study cards.** Tap Study Cards. Swipe to move between cards. Tap Flip Card to see its back.

Shuffle your study cards. Tap 🔅, then turn on Shuffle.

**Study glossary terms.** If a book includes a glossary, tap <sup>(2)</sup>/<sub>2</sub> to include those words in your study cards.

#### Listen to an audiobook



**Open an audiobook.** Audiobooks are identified by a  $\bigcirc$  on the cover. Tap the book you want to listen to. If you don't see it in the library, swipe left or right to view other collections.

Skip farther forward or back. Touch and hold the arrows, or slide and hold the cover. To change the number of seconds that skipping moves, go to Settings > iBooks.

**Speed it up, or slow it down.** Tap Speed, then choose a playback rate. 1x is normal speed, 0.75x is three-quarters speed, and so on.

Go to a chapter. Tap  $\equiv$ , then tap a chapter. Some books don't define chapter markers.

Go to a specific time. Drag the playhead, located underneath the book cover. Where you started listening during this session is marked on the timeline. Tap the mark to jump to that spot.

**Set a sleep timer.** Before starting playback, tap Sleep Timer, then choose a duration until the audio automatically stops playing.

**Download a previously purchased audiobook.** You can redownload a book from the Purchased list in the iBooks Store.

#### Organize books



View books by title or by cover. Tap  $\blacksquare$  or  $\blacksquare$ .

**View only audiobooks or PDFs.** Tap the name of the current collection (at the top of the screen) then choose PDFs or Audiobooks.

**Organize your books with collections.** Tap Select, then select some books to move them into a collection. To edit or create collections, tap the name of the current collection (at the top of the screen). Some built-in collections, such as PDFs, can't be renamed or deleted.

**Rearrange books.** While viewing books by cover, touch and hold a cover, then drag it to a new location. While viewing books by title, sort the list using the buttons at the top of the screen. The All Books collection is automatically arranged for you; switch to another collection if you want to manually arrange your books.

**Search for a book.** Pull down to reveal the Search field at the top of the screen. Searching looks for the title and the author's name.

Hide purchased books you haven't downloaded. Tap the name of the current collection (at the top of the screen), then turn on Hide iCloud Books.

#### **Read PDFs**

**Sync a PDF.** On a Mac, add the PDF to iBooks for OS X, open iTunes, select the PDF, then sync. In iTunes on your Windows computer, choose File > Add to Library, select the PDF, then sync. See iTunes Help for more info about syncing.

Add a PDF email attachment to iBooks. Open the email message, then touch and hold its PDF attachment. Choose Open in iBooks from the menu that appears.

**Print a PDF.** With the PDF open, tap  $\hat{\Box}$ , then choose Print. You'll need an AirPrint-compatible printer. For more about AirPrint, see AirPrint on page 43.

**Email a PDF.** With the PDF open, tap (1), then choose Email.

#### iBooks settings

**Restrict access to books and audiobooks with explicit content.** Go to Settings > General > Restrictions then select an option for Books.

Go to Settings > iBooks, where you can:

- Sync collections and bookmarks (including notes and current page information) with your other devices.
- Display online content within a book. Some books might access video or audio that's stored on the web.
- Change the direction pages turn when you tap in the left margin.

# Health

# 25



#### Your health at a glance

Use the Health app to keep track of your health and fitness information. Enter data for key parameters, or let the Health app collect data from other apps and devices that monitor your health and activity. You can even share specific data with selected apps, and through apps with some health care providers. And, Health can display important contact and medical information on the iPhone Lock screen for someone attending to you in an emergency.

If you have an Apple Watch, you can send activity, workout, and even heart rate data to your iPhone so you can view it in the Health app.



*WARNING:* iPhone, Apple Watch, and the Health app are not medical devices. See Important safety information on page 193.

## Collect health and fitness data

**Enter your own data.** If the parameter is in your Dashboard, just tap it there, then tap Add Data Point. Otherwise, tap Health Data at the bottom of the screen, tap the parameter you want to update, then tap Add Data Point.

**Collect data from Apple Watch.** Once you pair Apple Watch with your iPhone, data is automatically sent to the Health app. For example, to see heart rate data recorded by Apple Watch, open the Health app on iPhone, then tap Health Data > Vitals > Heart Rate.

**Collect data from another device.** Follow the instructions that can come with the device to set it up. If it's a Bluetooth device, you need to pair it with iPhone—see Bluetooth devices on page 44.

**Collect data from an app.** Follow the instructions that can come with the app to set it up, then watch for a sharing request where you control whether data is shared with the Health app.

**Stop app data collection.** Tap Sources at the bottom of the Health screen, then select the app in the Apps list. Or tap the associated parameter in your Dashboard or in the Health Data list, tap Share Data, then choose the app under Data Sources.

### Share health and fitness data

Share data. Follow the instructions that can come with the app or the device to set it up, then watch for a sharing request where you control whether data is shared by the Health app. For example, your health care provider might provide an app that sends blood pressure updates to your doctor. You need only install the app, then allow the Health app to share blood pressure data when prompted.

**Stop sharing data.** Tap Sources at the bottom of the Health screen, then select the app in the Apps list. Or tap the associated parameter in your Dashboard or in the Health Data list, tap Share Data, then choose the app under Share Data With.

### Create an emergency medical ID

Your iPhone can display important contact and medical information on the Lock screen, where it's available for someone attending to you in an emergency.

*Note:* Anyone with physical access to your iPhone can read the information you include in your emergency medical ID.

Set up your medical ID. In the Health app, tap Medical ID in the bottom right of the screen.

View your ID. When you wake iPhone, slide to the passcode screen, then tap Emergency.

Prevent viewing. Tap Medical ID, tap Edit, then turn off Show When Locked.

## Wallet

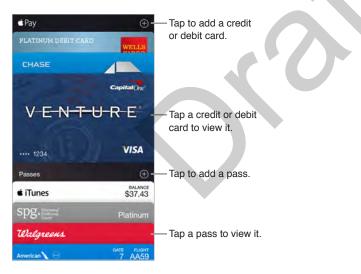
# 26

Image

## Wallet at a glance

Use Wallet to keep your boarding passes, movie tickets, coupons, and more, all in one place. Scan a pass on iPhone to check in for a flight, get in to a movie, or redeem a coupon. Passes can include useful information, such as the balance on your coffee card, a coupon's expiration date, or your seat number for a concert.

With iPhone (some models) you can add credit and debit cards, store credit cards, and loyalty cards to Wallet and use them to make purchases in stores that accept contactless payments, as well as within apps that support Apple Pay (not available in all areas). See Apple Pay on page 139.



## Wallet on the go

**Find apps that support Wallet.** Tap Find Apps for Wallet on the Welcome pass. Or, on your computer, go to www.itunes.com/passbookapps/. You can add a pass from an app, an email or a Messages message, or a website when you make a purchase or receive a coupon or gift. Usually, you tap or click the pass or the link to a pass to add it to Wallet. You can also scan codes, which are then downloaded to Wallet, from merchants' ads or receipts.

#### Apple Confidential

Scan a code. Tap  $\oplus$ , then tap Scan Code. Point your iPhone at the code and frame it to add the pass.



**Use a pass.** If an alert for a pass appears on the Lock screen, slide the alert to display the pass. Or open Wallet, select the pass, then present the barcode on the pass to the scanner.

Share a pass. You can share a pass using Mail, Messages, or AirDrop (iPhone 5 or later). See Share from apps on page 38.

**Display a pass based on location.** A pass can appear on the Lock screen when you wake iPhone at the right time or place—for example, when you reach the airport for a flight you're taking. Location Services must be turned on in Settings > Privacy > Location Services.

**Rearrange passes.** Drag a pass in the stack to move it to a new location. The pass order is updated on all your iOS 7 or later devices.

**Refresh a pass.** Passes are usually updated automatically. To refresh a pass manually, tap the pass, tap (i), then pull the pass downward.

Use iTunes Pass. You can add an iTunes Pass to Wallet, which makes it easy to add money to your Apple ID so you can make purchases from the iTunes Store, App Store, and iBooks Store without using a credit or debit card. To add your iTunes Pass in App Store, tap Featured, scroll to the bottom, tap Redeem, then tap Get Started under iTunes Pass. You can add money to your iTunes Pass at Apple Retail Stores in most countries.

**Done with a pass?** Tap the pass, tap (1), then tap Delete.

#### Apple Pay

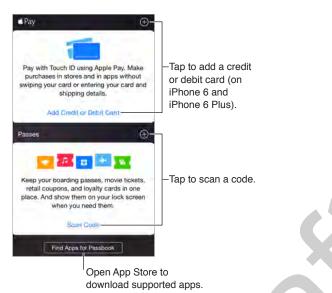
With iPhone 6, iPhone 6 Plus, or later, you can use Apple Pay (not available in all areas). With Apple Pay, you can keep up to eight credit and debit cards available for making contactless payments in stores, and for making payments within apps that support Apple Pay. (Apps supporting Apple Pay sell physical goods and services such as clothing, electronics, health and beauty products, tickets, reservations, and more.)

Credit cards, debit cards, and store loyalty and reward cards appear at the top of your Wallet stack, above your passes. The last four or five digits of your card number appear on both the front and the back of a payment card. The front of a card also shows your most recent activity. The back also shows the last four or five digits of the Device Account Number—the number transmitted to stores and apps for the purchase—and may also display up to 10 recent authorizations and other Apple Pay activity such as payment refunds. (Apple Pay activity is included on your credit and debit card statements.)

**Use your card on file with iTunes.** The first time you add a credit or debit card to Wallet, you may be prompted to use the card you use with iTunes (unless it's the card designated for Family Sharing purchases, and you aren't the primary cardholder—see Family Sharing on page 39). Next to Apple Pay, tap  $\oplus$ , then tap Next on the screen that follows. You are presented with the last four digits of the card on file. Enter the security code for the card, then tap Next to verify your card.

Add a credit, debit, loyalty, or reward card. Next to Apple Pay, tap  $\oplus$ , then tap Next on the screen that follows. Then, position iPhone so that your card appears in the frame. Card details are added automatically, but you may be prompted for additional information.

*Note:* The card issuer determines if your card is eligible to use with Apple Pay, and may ask you to provide additional information to complete the verification process. Many U.S. credit and debit cards can be used with Apple Pay. For information about Apple Pay availability and current card issuers, go to support.apple.com/kb/HT6288.



**Set your default card.** The first card you add to Wallet becomes your default card for payments. To use a different card as your default, make the change in Settings > Wallet & Apple Pay > Default Card.

Pay at a contactless card reader. Contactless card readers, marked with the following symbols, are usually located near cash registers.



To pay with your default card, hold iPhone (some models) with your finger on Touch ID about an inch (or 2.5 cm) away from the symbol on the reader, until iPhone vibrates. You see the card onscreen with a Done checkmark when the card information has been transmitted to the merchant. Or you can start by holding iPhone near a reader until the screen asks you to authenticate with Touch ID or your passcode. After you authenticate, hold iPhone near the reader again until it vibrates and you see the Done checkmark.

*Note:* If you have Location Services turned on, the location of your iPhone at the time you make a purchase may be sent to Apple. See Privacy on page 44.

#### **Apple Confidential**

**Use another card.** Hold iPhone (some models) near the reader until your default card appears. Tap the card to reveal all your cards in Wallet, tap the card you want to use, then place your finger on Touch ID and hold iPhone near the reader until you feel it vibrate and see the Done checkmark, indicating that the card information has been transmitted to the merchant.



**Pay within an app.** Make your selections for goods or services within an app. When checking out, look for the Apple Pay payment option. Tap Apple Pay, then review the information that appears (for example, the card you're using for the payment, your email, and the shipping method). Make any changes before using Touch ID or your passcode to complete the payment.

Activity details appear on the front of the credit card used for the purchase. In addition, you may receive a notification with the merchant name, and the amount authorized for the purchase. Your zip code may be provided to the merchant to calculate tax and shipping costs. Payment information—such as billing and shipping addresses, email address, and phone number—may also be provided to the merchant once you authorize the payment with Touch ID or a passcode.



*Note:* The authorized amount may be different from the amount of the payment charged to your account. For example, a gas station may authorize \$99, even though you only pump \$25 worth of gasoline. Always check your credit or debit card statement for the actual charges.

**View your recent credit card activity.** Tap a credit card. Your most recent activity may appear on the front. Tap (i) to view a list of your recent activity on the back of the card.

**Suspend and remove cards.** You have several options for suspending or removing credit and debit cards. To remove a credit, debit, loyalty, or reward card from Wallet; tap the card; tap (i); then tap Remove Card. To remove an inactive card, tap Remove on the front of the card. If your iPhone is lost or stolen and you have enabled Find My iPhone, you can use it to help you locate and secure your iPhone—including suspending or removing the ability to pay using the cards in Wallet. See Find My iPhone on page 47. You can log in to your account at iCloud.com and remove your cards in Settings > My Devices. You can also call the issuers of your cards.

### Wallet & Apple Pay settings

Add and manage credit and debit cards. (iPhone 6, iPhone 6 Plus, and later) To add credit, debit, loyalty, or reward cards; manage existing cards; change the default payment card; modify the shipping addresses used for Apple Pay purchases; use a different phone number; or change contact information for purchases, go to Settings > Wallet & Apple Pay.

**Change billing information.** Tap a credit or debit card, tap (i), then tap the billing address to make changes. Tap Enter New Billing Address to add a new one.

**Keep passes from appearing on the Lock screen.** Go to Settings > Touch ID & Passcode (iPhone models with Touch ID) or Settings > Passcode (other models), then tap Turn Passcode On. Then, under Allow Access When Locked, turn off Wallet. For passes with notifications, to keep a specific pass from appearing on the Lock screen, tap the pass, tap (i), then turn off Show On Lock Screen.

**Set notification options.** Go to Settings > Notifications > Wallet.

**Include passes on your other iOS devices.** Go to Settings > iCloud, then turn on Wallet.

*Note:* This setting applies only to the passes in Wallet, not to the credit, debit, loyalty, or reward cards.

# FaceTime

# 27



#### FaceTime at a glance

Use FaceTime to make video or audio calls to other iOS devices or computers that support FaceTime. The FaceTime camera lets you talk face-to-face; switch to the rear iSight camera (not available on all models) to share what you see around you.

*Note:* FaceTime may not be available in all areas.



With a Wi-Fi connection and an Apple ID, you can make and receive FaceTime calls (first sign in using your Apple ID, or create a new account). You can also make FaceTime calls over a cellular data connection, which may incur additional charges. To turn off this feature, go to Settings > Cellular. For more information about cellular usage and settings, see Cellular settings on page 199.

## Make and answer calls

**Make a FaceTime call.** Make sure FaceTime is turned on in Settings > FaceTime. Tap FaceTime, then type the name or number you want to call in the entry field at the top. Tap  $\Box \triangleleft$  to make a video call, or tap  $\bigcirc$  to make a FaceTime audio call. Or tap  $\oplus$  to open Contacts and start your call from there.

FaceTime Tap an icon to start a FaceTime call.

#### Apple Confidential

Use your voice to start the call. Press and hold the Home button, then say "FaceTime," followed by the name of the person to call.

Want to call again? Tap FaceTime to see your call history on the screen. Tap Audio or Video to refine your search, then tap a name or number to call again. Tap (i) to open the name or number in Contacts.

**Delete a call from call history.** Tap FaceTime to see your call history on the screen. Swipe to the left, then tap Delete to delete the name or number from your call history.

**Can't take a call right now?** When a FaceTime call comes in, you can answer, decline, or choose another option.

Use Siri. Say, for example, "Make a FaceTime call."



Send the caller a text message.

See the whole gang. Rotate iPhone to use FaceTime in landscape orientation. To avoid unwanted orientation changes, lock iPhone in portrait orientation. See Change the screen orientation on page 27.

#### Manage calls

**Multitask during a call.** Press the Home button, then tap an app icon. You can still talk with your friend, but you can't see each other. To return to the video, tap the green bar at the top of the screen.

**Juggle calls.** FaceTime calls aren't forwarded. If another call comes in while you're on a FaceTime call, you can either end the first call and answer the incoming call, decline the incoming call, or reply with a text message. You can use call waiting with FaceTime audio calls only.

Use call waiting for audio calls. If you're on a FaceTime audio call and another call comes in either a phone call or another FaceTime audio call—you can decline the call, end the first call and accept the new one, or put the first call on hold and respond to the new call.

**Block unwanted callers.** Go to Settings > FaceTime > Blocked > Add New. You won't receive voice calls, FaceTime calls, or text messages from blocked callers. For more information about blocking calls, see support.apple.com/kb/HT5845.

#### Settings

Go to Settings > FaceTime, where you can:

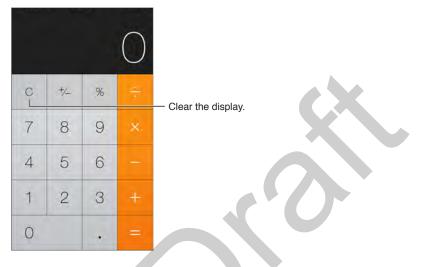
- Turn FaceTime on or off
- Specify a phone number, Apple ID, or email address to use with FaceTime
- Set your caller ID

# Calculator

# 28



Tap numbers and functions in Calculator, just as you would with a standard calculator. **Get to Calculator quickly!** Swipe up from the bottom edge of the screen to open Control Center.



To use the scientific calculator, rotate iPhone to landscape orientation.

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2 <sup>nd</sup>	x <sup>2</sup>	x3	xy	e <sup>x</sup>	10 <sup>x</sup>	7	8	9	
$\frac{1}{x}$	∜×	ŝ√×	<b>%</b> ∑	În	log <sub>te</sub>	4	5	6	-
x	sin	cos	tan	.0	EE.	1	2	3	
Rad	sinh	cosh	tanh	п	Rand	0		4	

# Podcasts

# 29



#### Podcasts at a glance

Open the Podcasts app, then browse, subscribe to, and play your favorite audio or video podcasts on iPhone.



## Get podcasts and episodes

Discover more podcasts. Tap Featured or Top Charts at the bottom of the screen.

Search for new podcasts. Tap Search at the bottom of the screen.

**Search your library.** Tap My Podcasts, then drag down the center of the screen to reveal the Search field.

#### **Apple Confidential**

Preview or stream an episode. Tap the podcast, then tap an episode.



**Get more info.** Tap **•••**, then tap View Full Description to get episode details. Tap any link in podcast or episode descriptions to open them in Safari.

Find new episodes. Tap Unplayed to find episodes you haven't yet heard.

Browse episodes. Tap Feed to see episodes available to download or stream.

Download an episode to iPhone. Tap •••, then tap Download.

**Get new episodes as they're released.** Subscribe to the podcast. If you're browsing Featured podcasts or Top Charts, tap the podcast, then tap Subscribe. If you've already downloaded episodes, tap My Podcasts, tap a podcast that appears under Not Subscribed, tap 🄅, then turn on Subscribed.

Save or delete unplayed episodes. Tap Unplayed, tap Edit, select individual episodes, then tap Save or Delete.

### **Control** playback

Use the playback controls to go forward and back in a podcast, set the speed, skip episodes, and more.



See podcast info while you listen. Tap the podcast image on the Now Playing screen.

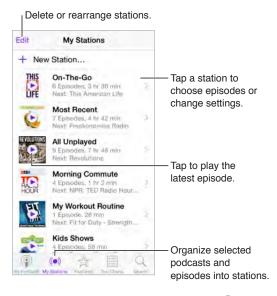
Skip forward or back with greater accuracy. Move your finger toward the top of the screen as you drag the playhead left or right. When you're close to the playback controls, you can scan quickly through the entire episode. When you're close to the top of the screen, you can scan one second at a time.

Use Siri. Say something like:

- "Play podcasts"
- "Play it twice as fast"
- "Skip ahead 15 seconds"

#### Organize your favorites into stations

Organize your favorite podcasts into custom stations, and update episodes automatically across all your devices.



**Create a station.** Tap My Podcasts, tap ⊕, then tap Add Station. Name your station, tap Save, then tap podcasts to add them. To play the podcasts in your station, tap My Podcasts, then tap next to the station.

**Change the order of the station list or the podcasts in a station.** Tap My Stations, tap Edit above the station list, then drag == up or down.

Change the playback order for episodes in a station. Tap the station, then tap <sup>(2)</sup>.

**Rearrange your podcast library.** Tap My Podcasts, tap Edit in the upper right, then drag = up or down.

List oldest episodes first. Tap My Podcasts, tap a podcast, then tap 🏵.

**Play podcasts from the station list.** Tap **>** next to the station name.

#### **Podcasts settings**

Go to Settings > Podcasts, where you can:

- · Choose to keep your podcast subscriptions up to date on all your devices
- · Choose how frequently Podcasts checks your subscriptions for new episodes
- · Have episodes downloaded automatically
- Limit the number of podcasts that are downloaded
- Choose whether to keep episodes after you finish them

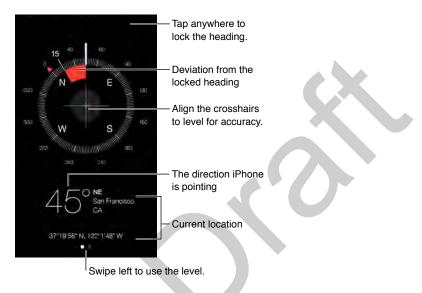
# Compass

# 30



#### Compass at a glance

Find a direction, see your latitude and longitude, find level, or match a slope.



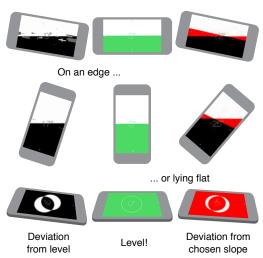
**See your location.** To see your current location, go to Settings > Privacy > Location Services, then turn on Location Services and Compass. For more about Location Services, see Privacy on page 44.

**Stay on course.** Tap the screen to lock in the current heading, then watch for a red band to see if you're off course.

*Important:* The accuracy of the compass can be affected by magnetic or environmental interference; even the magnets in the iPhone earbuds can cause a deviation. Use the digital compass only for basic navigation assistance. Don't rely on it to determine precise location, proximity, distance, or direction.

#### **Apple Confidential**

#### On the level



Show the level. Swipe left on the Compass screen.

Hang it straight. Hold iPhone against a picture frame or other object, then rotate them until you see green. For true level, the deviation is displayed on a black background. If the background is red (indicating relative slope), tap the screen to change it to black.

Level the table. Lay iPhone flat on the table.

**Match that slope.** Hold iPhone against the surface you want to match, then tap the screen to capture the slope. The slope you seek is shown in black, with deviation shown in red. Tap again to return to standard level.

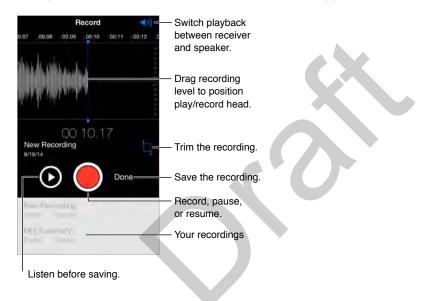
## **Voice Memos**

# 31



#### Voice Memos at a glance

Voice Memos lets you use iPhone as a portable recording device. Use it with the built-in microphone, an iPhone or Bluetooth headset mic, or a supported external microphone.



### Record

**Make a recording.** Tap  $\bigcirc$  or press the center button on your headset. Tap again to pause or resume.

Recordings using the built-in microphone are mono, but you can record stereo using an external stereo microphone that works with the iPhone headset jack, or with the Lightning connector (iPhone 5 or later) or 30-pin dock connector (iPhone 4s). Look for accessories marked with the Apple "Made for iPhone" or "Works with iPhone" logo.

Adjust the recording level. Move the microphone closer to what you're recording. For better recording quality, the loudest level should be between –3 dB and 0 dB.

**Preview before saving.** Tap ► to the left of the Record button. To position the play head, drag the recording level display left or right.

**Record over a section.** Drag the recording level display to position the record/play head, then tap **•**.

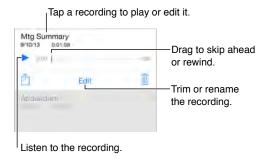
Trim the excess. Tap ☐, then drag the red trim handles. Tap ► to check your edit. Adjust the trim handles if necessary, then tap Trim when you're finished.

Save the recording. Tap Done.

**Mute the start and stop tones.** Use the iPhone volume buttons to turn the volume all the way down.

**Multitask.** To use another app while you're recording, press the Home button, then open the other app. To return to Voice Memos, tap the red bar at the top of the screen.

## Play it back



Rename a recording. Tap the name of the recording.

#### Move recordings to your computer

You can sync voice memos with the iTunes library on your computer, then listen to them on your computer or sync them with another iPhone or iPod touch.

When you delete a synced voice memo from iTunes, it stays on the device where it was recorded, but is deleted from any other iPhone or iPod touch you synced. If you delete a synced voice memo on iPhone, it's copied back to iPhone the next time you sync with iTunes, but you can't sync that copy back to iTunes a second time.

Sync voice memos with iTunes. Connect iPhone to your computer. Open iTunes on your computer, then select iPhone. Select Music at the top of the screen (between Apps and Movies), select Sync Music, select "Include voice memos," then click Apply.

*Note:* If iCloud Music Library is enabled on iPhone, select "Sync voice memos," then click Apply.

Voice memos synced from iPhone to your computer appear in the Music list and in the Voice Memos playlist in iTunes. Voice memos synced from your computer appear in the Voice Memos app on iPhone, but not in the Music app.

## Contacts

# 32



#### Contacts at a glance

iPhone lets you access and edit your contact lists from personal, business, and other accounts.

< All Contacts	Edi	
Sarah Castelbla	nco	
mobile (808) 555-9182	00	— Dial a number.
homa (808) 555-0117	B	Open in Messages.
work (808) 555-9851	B	
FaceTime	D# %	
home scastelblanco@me.com	0 🖾	— Open in Mail.
home 5998 Hoku Street Hilo, HI	96720	

**Set your My Info card for Safari, Siri, and other apps.** Go to Settings > Mail, Contacts, Calendars, tap My Info, then select the contact card with your name and information.

Let Siri know who's who. On your contact card, tap Add Related Name to define relationships you want Siri to know about, so you can say things like "send a message to my sister."

Use Siri. Say, for example, "Sarah Castelblanco is my sister."

**Find a contact.** Tap the search field at the top of the contacts list, then enter your search. You can also search your contacts using Search (see Search on page 35).

Use Siri. Say, for example, "What's my brother's work address?"

Share a contact. Tap a contact, then tap Share Contact. See Share from apps on page 38.

**Change a label.** If a field has the wrong label, such as Home instead of Work, tap Edit. Then tap the label and choose one from the list, or tap Add Custom Label to create one of your own.

Add your friends' social profiles. While viewing a contact, tap Edit, then tap "add social profile." You can add Twitter, Facebook, LinkedIn, Flickr, Myspace, and Sina Weibo accounts, or create a custom entry.

**Create a new contact.** Tap (+). iPhone automatically adds unconfirmed contacts dervied from messages you receive. Turn this on or off at Settings > Mail, Contacts, Calendars > Contacts Found in Mail.

Delete a contact. Go to the contact's card, then tap Edit. Scroll down, then tap Delete Contact.

### Use Contacts with Phone

**Prioritize your contacts.** When you add someone to your Favorites list, their calls bypass Do Not Disturb and are added to your Favorites list in Phone for quick dialing. Choose a contact, then scroll down and tap Add to Favorites.

Save the number you just dialed. In Phone, tap Keypad, enter a number, then tap Add to Contacts. Tap Create New Contact, or tap Add to Existing Contact, then choose a contact.

Add a recent caller to Contacts. In Phone, tap Recents, then tap (i) next to the number. Then tap Create New Contact, or tap Add to Existing Contact and choose a contact.

Automate dialing an extension or passcode. If the number you're calling requires dialing an extension, iPhone can enter it for you. When editing a contact's phone number, tap  $+ \times #$  to enter pauses in the dialing sequence. Tap Pause to enter a two-second pause, which is represented by a comma. Tap Wait to stop dialing until you tap Dial again, which is represented by a semicolon.



### Add contacts

Besides entering contacts, you can:

- Use your iCloud contacts: Go to Settings > iCloud, then turn on Contacts.
- *Import your Facebook Friends:* Go to Settings > Facebook, then turn on Contacts in the "Allow These Apps to Use Your Accounts" list. This creates a Facebook group in Contacts.
- Use your Google contacts: Go to Settings > Mail, Contacts, Calendars, tap your Google account, then turn on Contacts.
- Access a Microsoft Exchange Global Address List: Go to Settings > Mail, Contacts, Calendars, tap your Exchange account, then turn on Contacts.
- Set up an LDAP or CardDAV account to access business or school directories: Go to Settings > Mail, Contacts, Calendars > Add Account > Other. Tap Add LDAP account or Add CardDAV account, then enter the account information.
- *Sync contacts from your computer:* In iTunes on your computer, turn on contact syncing in the device info pane. For information, see iTunes Help.
- Import contacts from a SIM card (GSM): Go to Settings > Mail, Contacts, Calendars > Import SIM Contacts.
- Import contacts from a vCard: Tap a .vcf attachment in an email or message.

**Search a directory.** Tap Groups, tap the GAL, CardDAV, or LDAP directory you want to search, then enter your search. To save a person's info to your contacts, tap Add Contact.

Show or hide a group. Tap Groups, then select the groups you want to see. This button appears only if you have more than one source of contacts.

**Update your contacts using Twitter, Facebook, and Sina Weibo.** Go to Settings > Twitter, Settings > Facebook, or Settings > Sina Weibo, then tap Update Contacts. This updates contact photos and social media account names in Contacts.

#### **Unify contacts**

When you have contacts from multiple sources, you might have multiple entries for the same person. To keep redundant contacts from appearing in your All Contacts list, contacts from different sources that have the same name are linked and displayed as a single *unified contact*. When you view a unified contact, the title Unified Info appears.

Link contacts. If two entries for the same person aren't linked automatically, you can unify them manually. Edit one of the contacts, tap Edit, tap Link Contact, then choose the other contact entry to link to.

Linked contacts aren't merged. If you change or add information in a unified contact, the changes are copied to each source account where that information already exists.

If you link contacts with different first or last names, the names on the individual cards won't change, but only one name appears on the unified card. To choose which name appears when you view the unified card, tap Edit, tap the linked card with the name you prefer, then tap Use This Name For Unified Card.

#### **Contacts settings**

Go to Settings > Mail, Contacts, Calendars, where you can:

- Change how contacts are sorted
- Display contacts by first or last name
- Change how long names are shortened in lists
- · Choose to show recent and favorite contacts in the multitasking screen
- Set a default account for new contacts
- Set your My Info card
- Set if new contacts are automatically derived from mail you receive

# Accessibility



### Accessibility features

iPhone offers many accessibility features:

#### Vision

- VoiceOver
- Support for braille displays
- Zoom
- Invert Colors and Grayscale
- Speak Selection
- Speak Screen
- Speak Auto-text
- Large, bold, and high-contrast text

- Button Shapes
- Reduce screen motion
- On/off switch labels
- Assignable ringtones and vibrations
- Audio Descriptions

#### Hearing

- Hearing aids
- Call audio routing
- Phone noise cancelation
- LED Flash for Alerts
- Subtitles and closed captions
- Mono audio and balance

#### Interaction

- Siri
- Widescreen keyboards
- Guided Access
- •
- AssistiveTouch
- Touch Accommodations
- Software and hardware keyboards

**Turn on accessibility features.** With your voice, you can turn on many accessibility features just by asking Siri ("turn on VoiceOver," for example). See Siri on page 175 and Make requests on page 50. Or go to Settings > General > Accessibility, or use the Accessibility Shortcut. See Accessibility Shortcut on page 158 below.

**Use iTunes on your computer to configure accessibility on iPhone.** In iTunes you can choose to enable a limited number of accessibility features, including VoiceOver, Zoom, invert colors, speak auto-text, mono audio, and show closed captions where available. Click Summary, then click Configure Accessibility at the bottom of the Summary screen.

For more information about iPhone accessibility features, see www.apple.com/accessibility/.

#### **Accessibility Shortcut**

**Use the Accessibility Shortcut.** After setting up an accessibility shortcut, press the Home button quickly three times to engage the associated feature. Features include:

- Touch Accommodations
- VoiceOver
- Invert Colors
- Grayscale
- Zoom
- Switch Control
- AssistiveTouch
- Guided Access (The shortcut starts Guided Access if it's already turned on. See Guided Access on page 175.)
- Hearing Aid Control (if you have paired Made for iPhone hearing aids)

**Choose the features you want to control.** Go to Settings > General > Accessibility > Accessibility Shortcut, then select the accessibility features you use.

**Not so fast.** To slow down the triple-click speed, go to Settings > General > Accessibility > Home Button. (This also slows down double-clicks.)

#### VoiceOver

VoiceOver describes aloud what appears onscreen, so you can use iPhone without seeing it.

VoiceOver tells you about each item on the screen as you select it. The VoiceOver cursor (a rectangle) encloses the item and VoiceOver speaks its name or describes it.

Touch the screen or drag your finger over it to hear the items on the screen. When you select text, VoiceOver reads the text. If you turn on Speak Hints, VoiceOver may tell you the name of the item and provide instructions—for example, "double-tap to open." To interact with items, such as buttons and links, use the gestures described in Learn VoiceOver gestures on page 161.

When you go to a new screen, VoiceOver plays a sound, then selects and speaks the first item on the screen (typically in the upper-left corner). VoiceOver also lets you know when the display changes to landscape or portrait orientation, and when the screen becomes dimmed or locked.

*Note:* VoiceOver speaks in the language specified in Settings > General > Language & Region. VoiceOver is available in many languages, but not all.

#### Use iPhone with VoiceOver

Unlock iPhone. If you've set up Touch ID, place your finger on the Home button. Otherwise, press either the Home button or the Sleep/Wake button, swipe to select the Unlock button, then double-tap the screen.

Enter your passcode silently. To avoid having your passcode spoken as you enter it, use handwriting; see Write with your finger on page 164.

Open an app, toggle a switch, or tap an item. Select the item, then double-tap the screen.

**Double-tap the selected item.** To invoke a command normally executed by tapping twice on the screen, tap three times.

Adjust a slider. Select the slider, then swipe up or down with one finger.

Use a standard gesture. Double-tap and hold your finger on the screen until you hear three rising tones, then make the gesture. When you lift your finger, VoiceOver gestures resume. For example, to drag a volume slider with your finger instead of swiping up and down, select the slider, double-tap and hold, wait for the three tones, then slide left or right.

Scroll a list or area of the screen. Swipe up or down with three fingers.

- *Scroll continuously through a list:* Double-tap and hold until you hear three rising tones, then drag up or down.
- Use the list index: Some lists have an alphabetical table index along the right side. Select the index, then swipe up or down to move through the index. You can also double-tap, hold, then slide your finger up or down.
- Reorder a list: You can change the order of items in some lists, such as the Rotor items in Accessibility settings. Select == to the right of an item, double-tap and hold until you hear three rising tones, then drag up or down.

**Open Notification Center.** Select any item in the status bar, then swipe down with three fingers. To dismiss Notification Center, do a two-finger scrub (move two fingers back and forth three times quickly, making a "z").

**Open Control Center.** Select any item in the status bar, then swipe up with three fingers. To dismiss Control Center, do a two-finger scrub.

Switch apps. Double-click the Home button to display open apps, swipe left or right with one finger to select an app, then double-tap to switch to it. Or, set the rotor to Actions while viewing open apps, then swipe up or down.

**Rearrange your Home screen.** Select an icon on the Home screen, double-tap and hold, then drag. Lift your finger when the icon is in its new location. Drag an icon to the edge of the screen to move it to another Home screen. You can continue to select and move items until you press the Home button.

**Speak iPhone status information.** Tap the status bar at the top of the screen, then swipe left or right to hear information about the time, battery state, Wi-Fi signal strength, and more.

**Speak notifications.** Go to Settings > General > Accessibility > VoiceOver, then turn on Always Speak Notifications. Notifications, including the text of incoming text messages, are spoken as they occur, even if iPhone is locked. Unacknowledged notifications are repeated when you unlock iPhone.

Turn the screen curtain on or off. Triple-tap with three fingers. When the screen curtain is on, the screen contents are active even though the display is turned off.

#### **VoiceOver basics**

*Important:* VoiceOver changes the gestures you use to control iPhone. When VoiceOver is on, you must use VoiceOver gestures to operate iPhone—even to turn VoiceOver off.

**Turn VoiceOver on or off.** Press and hold the Home button and tell Siri "turn VoiceOver on." To turn VoiceOver off, tell Siri "turn VoiceOver off." You can also go to Settings > General > Accessibility > VoiceOver, or use the Accessibility Shortcut. See Accessibility Shortcut above.

**Explore.** Drag your finger over the screen. VoiceOver speaks each item you touch. Lift your finger to leave an item selected.

- Select an item: Tap once to select an item, double-tap to invoke it.
- *Select the next or previous item:* Swipe right or left with one finger. Item order is left-to-right, top-to-bottom.
- Select the item above or below: Set the rotor to Vertical Navigation, then swipe up or down with one finger. If you don't find Vertical Navigation in the rotor, you can add it; see Use the VoiceOver rotor on page 162.
- Select the first or last item on the screen: Tap with four fingers at the top or bottom of the screen.
- Select an item by name: Triple-tap with two fingers anywhere on the screen to open the Item Chooser. Then type a name in the search field, or swipe right or left to move through the list alphabetically, or tap the table index to the right of the list and swipe up or down to move quickly through the list of items. You can also use handwriting to select an item by writing its name; see Write with your finger on page 164. To dismiss the Item Chooser without making a selection, double-tap.
- *Change an item's name so it's easier to find:* Select the item, then double-tap and hold with two fingers anywhere on the screen.
- Speak the text of the selected item: Set the rotor to characters or words, then swipe down or up with one finger.
- Turn spoken hints on or off: Go to Settings > General > Accessibility > VoiceOver > Speak Hints.
- Use phonetic spelling: Go to Settings > General > Accessibility > VoiceOver > Phonetic Feedback.
- Speak the entire screen, from the top: Swipe up with two fingers.
- Speak from the current item to the bottom of the screen: Swipe down with two fingers.
- *Pause speaking:* Tap once with two fingers. Tap again with two fingers to resume, or select another item.
- *Mute VoiceOver:* Double-tap with three fingers; repeat to unmute. If you're using an external keyboard, press the Control key.
- *Silence sound effects:* Go to Settings > General > Accessibility > VoiceOver, then turn off Use Sound Effects.

**Use a larger VoiceOver cursor.** Go to Settings > General > Accessibility > VoiceOver, then turn on Large Cursor.

Adjust the speaking voice. You can adjust the VoiceOver speaking voice:

- *Change the volume:* Use the volume buttons on iPhone. You can also add volume to the rotor, then swipe up and down to adjust; see Use the VoiceOver rotor on page 162.
- Change the speech rate: Go to Settings > General > Accessibility > VoiceOver, then drag the Speaking Rate slider. You can also set the rotor to Speech Rate, then swipe up or down to adjust.

#### **Apple Confidential**

- Use pitch change: VoiceOver uses a higher pitch when speaking the first item of a group (such as a list or table) and a lower pitch when speaking the last item of a group. Go to Settings > General > Accessibility > VoiceOver > Use Pitch Change.
- *Speak punctuation:* Set the rotor to Punctuation, then swipe up or down to select how much you want to hear.
- *Control audio ducking:* To choose whether audio that's playing is turned down while VoiceOver speaks, set the rotor to Audio Ducking, then swipe up or down.
- *Change the language for iPhone:* Go to Settings > General > Language & Region. VoiceOver pronunciation of some languages is affected by the Region Format you choose there.
- Change pronunciation: Set the rotor to Language, then swipe up or down. Language is available in the rotor only if you select more than one pronunciation in Settings > General > Accessibility > VoiceOver > Speech > Rotor Languages.
- Choose which dialects are available in the rotor: Go to Settings > General > Accessibility > VoiceOver > Speech > Rotor Languages. To adjust voice quality or speaking rate, tap (i) next to the language. To remove languages from the rotor or change their order, tap Edit, tap the delete button or drag = up or down, then tap Done.
- Set the default dialect for the current iPhone language: Go to Settings > General > Accessibility > VoiceOver > Speech.
- Download an enhanced quality reading voice: Go to Settings > General > Accessibility > VoiceOver > Speech, tap a language, then choose an enhanced voice. By default, VoiceOver uses the Siri voice. If you're using English, you can choose to download Alex (869 MB), the same high-quality U.S. English voice used for VoiceOver on Mac computers.

#### Learn VoiceOver gestures

When VoiceOver is on, standard touchscreen gestures have different effects, and additional gestures let you move around the screen and control individual items. VoiceOver gestures include two-, three-, and four-finger taps and swipes. For best results using multi-finger gestures, relax and let your fingers touch the screen with some space between them.

You can use different techniques to perform VoiceOver gestures. For example, you can perform a two-finger tap using two fingers on one hand, or one finger on each hand. You can even use your thumbs. Some people use a split-tap gesture: instead of selecting an item and doubletapping, touch and hold an item with one finger, then tap the screen with another finger. If your iPhone supports it, you can use Force Touch to perform gestures.

Try different techniques to discover which works best for you. If a gesture doesn't work, try a quicker movement, especially for a double-tap or swipe gesture. To swipe, try brushing the screen quickly with your finger or fingers.

In VoiceOver settings, you can enter a special area where you can practice VoiceOver gestures without affecting iPhone or its settings.

**Practice VoiceOver gestures.** Go to Settings > General > Accessibility > VoiceOver, then tap VoiceOver Practice. When you finish practicing, tap Done. If you don't see the VoiceOver Practice button, make sure VoiceOver is turned on.

Here are some key VoiceOver gestures:

#### Navigate and read

- Tap: Select and speak the item.
- Swipe right or left: Select the next or previous item.

#### **Apple Confidential**

- Swipe up or down: Depends on the rotor setting. See Use the VoiceOver rotor on page 162.
- Two-finger swipe up: Read all from the top of the screen.
- Two-finger swipe down: Read all from the current position.
- Two-finger tap: Stop or resume speaking.
- *Two-finger scrub:* Move two fingers back and forth three times quickly (making a "z") to dismiss an alert or go back to the previous screen.
- Three-finger swipe up or down: Scroll one page at a time.
- *Three-finger swipe right or left*: Go to the next or previous page (on the Home screen, for example).
- *Three-finger tap:* Speak additional information, such as position within a list or whether text is selected.
- Four-finger tap at top of screen: Select the first item on the page.
- Four-finger tap at bottom of screen: Select the last item on the page.

#### Activate

- Double-tap: Activate the selected item.
- *Triple-tap:* Double-tap an item.
- *Split-tap:* As an alternative to selecting an item and double-tapping to activate it, touch an item with one finger, then tap the screen with another.
- Double-tap and hold (1 second) + standard gesture: Use a standard gesture. The double-tap and hold gesture tells iPhone to interpret the next gesture as standard. For example, you can double-tap and hold, and then without lifting your finger, drag your finger to slide a switch.
- *Two-finger double-tap:* Answer or end a call. Play or pause in Music, Videos, Voice Memos, or Photos. Take a photo in Camera. Start or pause recording in Camera or Voice Memos. Start or stop the stopwatch.
- Two-finger double-tap and hold: Change an item's label to make it easier to find.
- Two-finger triple-tap: Open the Item Chooser.
- Three-finger double-tap: Mute or unmute VoiceOver.
- Three-finger triple-tap: Turn the screen curtain on or off.

#### Use the VoiceOver rotor

Use the rotor to choose what happens when you swipe up or down with VoiceOver turned on, or to select special input methods such as Braille Screen Input or Handwriting.

Operate the rotor. Rotate two fingers on the screen around a point between them.



**Choose your rotor options.** Go to Settings > General > Accessibility > VoiceOver > Rotor, then select the options you want to include in the rotor.

The available rotor options and their effects depend on what you're doing. For example, if you're reading an email, you can use the rotor to switch between hearing text spoken word-by-word or character-by-character when you swipe up or down. If you're browsing a webpage, you can set the rotor to speak all the text (either word-by-word or character-by-character), or to jump from one item to another of a certain type, such as headers or links.

When you use an Apple Wireless Keyboard to control VoiceOver, the rotor lets you adjust settings such as volume, speech rate, use of pitch or phonetics, typing echo, and reading of punctuation. See Use VoiceOver with an Apple Wireless Keyboard on page 165.

#### Use the onscreen keyboard

When you activate an editable text field, the onscreen keyboard appears (unless you have an Apple Wireless Keyboard attached).

Activate a text field. Select the text field, then double-tap. The insertion point and the onscreen keyboard appear.

Enter text. Type characters using the onscreen keyboard:

- *Standard typing:* Select a key on the keyboard by swiping left or right, then double-tap to enter the character. Or move your finger around the keyboard to select a key and, while continuing to touch the key with one finger, tap the screen with another finger. VoiceOver speaks the key when it's selected, and again when the character is entered.
- *Touch typing:* Touch a key on the keyboard to select it, then lift your finger to enter the character. If you touch the wrong key, slide your finger to the key you want. VoiceOver speaks the character for each key as you touch it, but doesn't enter a character until you lift your finger.
- *Direct Touch typing:* VoiceOver is disabled for the keyboard only, so you can type just as you do when VoiceOver is off.
- *Choose typing style:* Go to Settings > General > Accessibility > VoiceOver > Typing Style. Or, set the rotor to Typing Mode, then swipe up or down.

**Move the insertion point.** Swipe up or down to move the insertion point forward or backward in the text. Use the rotor to choose whether you want to move the insertion point by character, by word, or by line. To jump to the beginning or end, double-tap the text.

VoiceOver makes a sound when the insertion point moves, and speaks the character, word, or line that the insertion point moves across. When moving forward by words, the insertion point is placed at the end of each word, before the space or punctuation that follows. When moving backward, the insertion point is placed at the end of the preceding word, before the space or punctuation that follows it.

Move the insertion point past the punctuation at the end of a word or sentence. Use the rotor to switch back to character mode.

When moving the insertion point by line, VoiceOver speaks each line as you move across it. When moving forward, the insertion point is placed at the beginning of the next line (except when you reach the last line of a paragraph, when the insertion point is moved to the end of the line just spoken). When moving backward, the insertion point is placed at the beginning of the line that's spoken.

**Change typing feedback.** Go to Settings > General > Accessibility > VoiceOver > Typing Feedback.

**Use phonetics in typing feedback.** Go to Settings > General > Accessibility > VoiceOver > Phonetic Feedback. Text is read character by character. VoiceOver first speaks the character, then its phonetic equivalent—for example, "f" and then "foxtrot."

**Delete a character.** Use with any of the VoiceOver typing styles. VoiceOver speaks each character as it's deleted. If Use Pitch Change is turned on, VoiceOver speaks deleted characters in a lower pitch.

**Select text.** Set the rotor to Edit, swipe up or down to choose Select or Select All, then doubletap. If you choose Select, the word closest to the insertion point is selected when you doubletap. To increase or decrease the selection, do a two-finger scrub to dismiss the pop-up menu, then pinch.

**Cut, copy, or paste.** Set the rotor to Edit, select the text, swipe up or down to choose Cut, Copy, or Paste, then double-tap.

Undo. Shake iPhone, swipe left or right to choose the action to undo, then double-tap.

**Enter an accented character.** In standard typing style, select the plain character, then double-tap and hold until you hear a sound indicating alternate characters have appeared. Drag left or right to select and hear the choices. Release your finger to enter the current selection. In touch typing style, touch and hold a character until the alternate characters appear.

**Change the keyboard language.** Set the rotor to Language, then swipe up or down. Choose "default language" to use the language specified in Language & Region settings. The Language rotor item appears only if you select more than one language in Settings > General > Accessibility > VoiceOver > Speech.

### Write with your finger

Handwriting mode lets you enter text by writing characters on the screen with your finger. In addition to normal text entry, use handwriting mode to enter your iPhone passcode silently or open apps from the Home screen.

**Enter handwriting mode.** Use the rotor to select Handwriting. If Handwriting isn't in the rotor, go to Settings > General > Accessibility > VoiceOver > Rotor, then add it.

**Choose a character type.** Swipe up or down with three fingers to choose lowercase, numbers, uppercase, or punctuation.

Hear the currently selected character type. Tap with three fingers.

Enter a character. Trace the character on the screen with your finger.

Enter a space. Swipe right with two fingers.

Go to a new line. Swipe right with three fingers.

Delete the character before the insertion point. Swipe left with two fingers.

Select an item on the Home screen. Start writing the name of the item. If there are multiple matches, continue to spell the name until it's unique, or swipe up or down with two fingers to choose from the current matches.

Enter your passcode silently. Set the rotor to Handwriting on the passcode screen, then write the characters of your passcode.

Use a table index to skip through a long list. Select the table index to the right of the table (for example, next to your Contacts list or in the VoiceOver Item Chooser), then write the letter.

Set the rotor to a web browsing element type. Write the first letter of a page element type. For example, write "l" to have up or down swipes skip to links, or "h" to skip to headings.

Exit handwriting mode. Do a two-finger scrub, or turn the rotor to a different selection.

### Type onscreen braille

With Braille Screen Input enabled, you can use your fingers to enter 6-dot or contracted braille codes directly on the iPhone screen. Tap codes with iPhone laying flat in front of you (tabletop mode), or hold iPhone with the screen facing away so your fingers curl back to tap the screen (screen away mode).

**Turn on Braille Screen Input.** Use the rotor to select Braille Screen Input. If you don't find it in the rotor, go to Settings > General > Accessibility > VoiceOver > Rotor, then add it.

**Enter braille codes.** Place iPhone flat in front of you or hold it with the screen facing away, then tap the screen with one or several fingers at the same time.

Adjust entry dot positions. To move the entry dots to match your natural finger positions, tap and lift your right three fingers all at once to position dots 4, 5, and 6, followed immediately by your left three fingers for dots 1, 2, and 3.

**Switch between 6-dot and contracted braille.** Swipe to the right with three fingers. To set the default, go to Settings > General > Accessibility > VoiceOver > Braille > Braille Screen Input.

Enter a space. Swipe right with one finger. (In screen away mode, swipe to your right.)

Delete the previous character. Swipe left with one finger.

Move to a new line (typing). Swipe right with two fingers.

Cycle through spelling suggestions. Swipe up or down with one finger.

Select an item on the Home screen. Start entering the name of the item. If there are multiple matches, continue to spell the name until it is unique, or swipe up or down with one finger to select a partial match.

Open the selected app. Swipe right with two fingers.

Turn braille contractions on or off. Swipe to the right with three fingers.

Translate immediately (when contractions are enabled). Swipe down with two fingers.

Stop entering braille. Do a two-finger scrub, or set the rotor to another setting.

#### Use VoiceOver with an Apple Wireless Keyboard

You can control VoiceOver using an Apple Wireless Keyboard paired with iPhone. See Use an Apple Wireless Keyboard on page 33.

Use VoiceOver keyboard commands to navigate the screen, select items, read screen contents, adjust the rotor, and perform other VoiceOver actions. Commands can use the Control-Option key combination or the Caps Lock key, abbreviated in the list that follows as "VO." (To choose a modifier key go to Settings > General > Accessibility > VoiceOver > Modifier Keys.)

You can use VoiceOver Help to learn the keyboard layout and the actions associated with various key combinations. VoiceOver Help speaks keys and keyboard commands as you type them, without performing the associated action.

#### VoiceOver keyboard commands

VO = Control-Option

- Turn on VoiceOver Help: VO–K
- Turn off VoiceOver Help: Escape
- Select the next or previous item: VO-Right Arrow or VO-Left Arrow

- Double-tap to activate the selected item: VO–Space bar
- Press the Home button: VO-H
- Touch and hold the selected item: VO-Shift-M
- Move to the status bar: VO-M
- Read from the current position: VO-A
- Read from the top: VO-B
- Pause or resume reading: Control
- Copy the last spoken text to the clipboard: VO–Shift–C
- Search for text: VO-F
- Mute or unmute VoiceOver: VO-S
- Open Notification Center: Fn–VO–Up Arrow
- Open Control Center: Fn-VO-Down Arrow
- Open the Item Chooser: VO-I
- Change the label of the selected item: VO-/
- Double-tap with two fingers: VO-"-"
- Adjust the rotor: Use Quick Nav (see below)
- Swipe up or down: VO–Up Arrow or VO–Down Arrow
- Adjust the speech rotor: VO-Command-Left Arrow or VO-Command-Right Arrow
- Adjust the setting specified by the speech rotor: VO-Command-Up Arrow or VO-Command-Down Arrow
- Turn the screen curtain on or off: VO-Shift-S
- Return to the previous screen: Escape
- Switch apps: Command–Tab or Command–Shift–Tab

#### Quick Nav

Turn on Quick Nav to control VoiceOver using the arrow keys.

- Turn Quick Nav on or off: Left Arrow-Right Arrow
- Select the next or previous item: Right Arrow or Left Arrow
- Select the next or previous item specified by the rotor: Up Arrow or Down Arrow
- Select the first or last item: Control–Up Arrow or Control–Down Arrow
- Tap an item: Up Arrow–Down Arrow
- Scroll up, down, left, or right: Option–Up Arrow, Option–Down Arrow, Option–Left Arrow, or Option–Right Arrow
- · Adjust the rotor: Up Arrow-Left Arrow or Up Arrow-Right Arrow

You can also use the number keys on an Apple Wireless Keyboard to dial a phone number in Phone or enter numbers in Calculator.

#### Single-key Quick Nav for web browsing

When you view a webpage with Quick Nav on, you can use the following keys on the keyboard to navigate the page quickly. Typing the key moves to the next item of the indicated type. To move to the previous item, hold the Shift key as you type the letter.

- Turn on Single-key Quick Nav: VO-Q
- Heading: H
- Link: L

- Text field: R
- Button: B
- Form control: C
- Image: I
- Table: T
- Static text: S
- ARIA landmark: W
- List: X
- Item of the same type: M
- Level 1 heading: 1
- Level 2 heading: 2
- Level 3 heading: 3
- Level 4 heading: 4
- Level 5 heading: 5
- Level 6 heading: 6

#### Text editing

Use these commands (with Quick Nav turned off) to work with text. VoiceOver reads the text as you move the insertion point.

- · Go forward or back one character: Right Arrow or Left Arrow
- · Go forward or back one word: Option-Right Arrow or Option-Left Arrow
- Go up or down one line: Up Arrow or Down Arrow
- Go to the beginning or end of the line: Command-Left Arrow or Command-Down Arrow
- Go to the beginning or end of the paragraph: Option–Up Arrow or Option–Down Arrow
- · Go to the previous or next paragraph: Option-Up Arrow or Option-Down Arrow
- Go to the top or bottom of the text field: Command–Up Arrow or Command–Down Arrow
- Select text as you move: Shift + any of the insertion point movement commands above
- Select all text: Command–A
- Copy, cut, or paste the selected text: Command-C, Command-X, or Command-V
- Undo or redo last change: Command-Z or Shift-Command-Z

### Support for braille displays

You can use a Bluetooth braille display to read VoiceOver output, and you can use a braille display with input keys and other controls to control iPhone when VoiceOver is turned on. For a list of supported braille displays, see www.apple.com/accessibility/ios/braille-display.html.

**Connect a braille display.** Turn on the display, then go to Settings > Bluetooth and turn on Bluetooth. Then, go to Settings > General > Accessibility > VoiceOver > Braille and choose the display.

Adjust Braille settings. Go to Settings > General > Accessibility > VoiceOver > Braille, where you can:

- · Choose contracted, uncontracted 8-dot, or uncontracted 6-dot braille input or output
- · Turn on the status cell and choose its location
- Turn on Nemeth code for equations
- · Display the onscreen keyboard

- Choose to have the page turned automatically when panning
- Change the braille translation from Unified English
- Change the alert display duration

For information about common braille commands for VoiceOver navigation, and for information specific to certain displays, see support.apple.com/kb/HT4400.

**Set the language for VoiceOver.** Go to Settings > General > Language & Region.

If you change the language for iPhone, you may need to reset the language for VoiceOver and your braille display.

You can set the leftmost or rightmost cell of your braille display to provide system status and other information. For example:

- · Announcement History contains an unread message
- The current Announcement History message hasn't been read
- VoiceOver speech is muted
- The iPhone battery is low (less than 20% charge)
- · iPhone is in landscape orientation
- The screen display is turned off
- The current line contains additional text to the left
- The current line contains additional text to the right

**Set the leftmost or rightmost cell to display status information.** Go to Settings > General > Accessibility > VoiceOver > Braille > Status Cell, then tap Left or Right.

See an expanded description of the status cell. On your braille display, press the status cell's router button.

### Make phone calls with VoiceOver

Answer or end a call. Double-tap the screen with two fingers.

When a phone call is established with VoiceOver on, the screen displays the numeric keypad by default, instead of showing call options.

Display call options. Select the Hide Keypad button in the lower-right corner and double-tap.

**Display the numeric keypad again.** Select the Keypad button near the center of the screen and double-tap.

#### **Read math equations**

VoiceOver can read aloud math equations encoded using:

- MathML on the web
- MathML or LaTeX in iBooks Author

Hear an equation. Have VoiceOver read the text as usual. VoiceOver says "math" before it starts reading an equation.

**Explore the equation.** Double-tap the selected equation to display it full screen and move through it one element at a time. Swipe left or right to read elements of the equation. Use the rotor to select Symbols, Small Expressions, Medium Expressions, or Large Expressions, then swipe up or down to hear the next element of that size. You can continue to double-tap the selected element to "drill down" into the equation to focus on the selected element, then swipe left or right, up or down to read one part at a time.

Equations read by VoiceOver can also be output to a braille device using Nemeth code, as well as the codes used by Unified English Braille, British English, French, and Greek. See Support for braille displays on page 167.

### Use VoiceOver with Safari

Search the web. Select the search field, enter your search, then swipe right or left to move down or up the list of suggested search phrases. Then double-tap the screen to search the web using the selected phrase.

**Skip to the next page element of a particular type.** Set the rotor to the element type, then swipe up or down.

Set the rotor options for web browsing. Go to Settings > General > Accessibility > VoiceOver > Rotor. Tap to select or deselect options, or drag  $\implies$  up or down to reposition an item.

**Skip images while navigating.** Go to Settings > General > Accessibility > VoiceOver > Navigate Images. You can choose to skip all images or only those without descriptions.

**Reduce page clutter for easier reading and navigation.** Select the Reader item in the Safari address field (not available for all pages).

If you pair an Apple Wireless Keyboard with iPhone, you can use single-key Quick Nav commands to navigate webpages. See Use VoiceOver with an Apple Wireless Keyboard on page 165.

### Use VoiceOver with Maps

You can use VoiceOver to explore a region, browse points of interest, follow roads, zoom in or out, select a pin, or get information about a location.

**Explore the map.** Drag your finger around the screen, or swipe left or right to move to another item.

Zoom in or out. Select the map, set the rotor to Zoom, then swipe down or up with one finger.

Pan the map. Swipe with three fingers.

Browse visible points of interest. Set the rotor to Points of Interest, then swipe up or down with one finger.

Follow a road. Hold your finger down on the road, wait until you hear "pause to follow," then move your finger along the road while listening to the guide tone. The pitch increases when you stray from the road.

Select a pin. Touch a pin, or swipe left or right to select the pin.

**Get information about a location.** With a pin selected, double-tap to display the information flag. Swipe left or right to select the More Info button, then double-tap to display the information page.

Hear location cues as you move about. Turn on Tracking With Heading in Maps to hear street names and points of interest as you approach them.

### Edit videos and voice memos with VoiceOver

You can use VoiceOver gestures to trim Camera videos and Voice Memo recordings.

Trim a video. While viewing a video in Photos, double-tap the screen to display the video controls, then select the beginning or end of the trim tool. Then swipe up to drag to the right, or swipe down to drag to the left. VoiceOver announces the amount of time the current position will trim from the recording. To complete the trim, select Trim, then double-tap.

Trim a voice memo. Select the memo in Voice Memos, tap Edit, then tap Start Trimming. Select the beginning or end of the selection, double-tap and hold, then drag to adjust. VoiceOver announces the amount of time the current position will trim from the recording. Tap Play to preview the trimmed recording. When you've got it the way you want it, tap Trim.

### Zoom

Many apps let you zoom in or out on specific items. For example, you can double-tap or pinch to look closer in Photos or expand webpage columns in Safari. There's also a general Zoom feature that lets you magnify the screen no matter what you're doing. You can zoom the entire screen (Full Screen Zoom) or zoom part of the screen in a resizable window and leave the rest of the screen unmagnified (Window Zoom). And, you can use Zoom together with VoiceOver.

**Turn Zoom on or off.** Go to Settings > General > Accessibility > Zoom. Or, use the Accessibility Shortcut. See Accessibility Shortcut on page 158.

Zoom in or out. With Zoom turned on, double-tap the screen with three fingers.

Adjust the magnification. Double-tap with three fingers, then drag up or down. The tap-anddrag gesture is similar to a double-tap, except you don't lift your fingers on the second tap instead, drag your fingers on the screen. You can also triple-tap with three fingers, then drag the Zoom Level slider in the controls that appear. To limit the maximum magnification, go to Settings > General > Accessibility > Zoom > Maximum Zoom Level.

**Pan to see more.** Drag the screen with three fingers. Or, hold your finger near the edge of the screen to pan to that side. Move your finger closer to the edge to pan more quickly.

**Switch between Full Screen Zoom and Window Zoom.** Triple-tap with three fingers, then tap Window Zoom or Full Screen Zoom in the zoom controls that appear. To choose the mode that's used when you turn on Zoom, go to Settings > General > Accessibility > Zoom > Zoom Region.

**Resize the zoom window (Window Zoom).** Triple-tap with three fingers, tap Resize Lens, then drag any of the round handles that appear.

Move the zoom window (Window Zoom). Drag the handle at the bottom of the zoom window.

Show the zoom controller. Go to Settings > General > Accessibility > Zoom, then turn on Show Controller, or triple-tap with three fingers, then choose Show Controller. Then you can double-tap the floating Zoom Controls button to zoom in or out, single-tap the button to display the zoom controls, or drag it to pan. To move the Zoom Controls button, touch and hold the button, then drag it to a new location. To adjust the transparency of the zoom controller, go to Settings > General > Accessibility > Zoom > Idle Visibility.

Have Zoom track your selections or the text insertion point. Go to Settings > General > Accessibility > Zoom > Follow Focus. Then, for example, if you use VoiceOver, turning on this option causes the zoom window to magnify each element on the screen as you select it using a swipe in VoiceOver.

**Zoom in on your typing without magnifying the keyboard.** Go to Settings > General > Accessibility > Zoom, then turn on Follow Focus. When you zoom in while typing (in Messages or Notes, for example), the area immediately around the text you type is magnified while all of the keyboard remains visible. Turn on Smart Typing and the entire window (except keyboard) is magnified.

#### Display the magnified part of the screen in grayscale or inverted color. Go to

Settings > General > Accessibility > Zoom, Zoom Filter, then choose an option. Or triple-tap with three fingers, then tap Choose Filter in the zoom controls that appear.

While using Zoom with an Apple Wireless Keyboard, the screen image follows the insertion point, keeping it in the center of the display. See Use an Apple Wireless Keyboard on page 33.

If you have iPhone 6 or iPhone 6 Plus or later, you can turn on Display Zoom to see larger onscreen controls. Go to Settings > Display & Brightness > View.

# Invert Colors and Grayscale

Sometimes, inverting the colors or changing to grayscale on the iPhone screen makes it easier to read.

Invert the screen colors. Go to Settings > General > Accessibility > Invert Colors.

See the screen in grayscale. Go to Settings > General > Accessibility > Grayscale.

Turn on both effects to see inverted grayscale. You can also apply these effects to just the contents of the zoom window—see Zoom on page 170.

# **Speak Selection**

Even with VoiceOver turned off, you can have iPhone read aloud any text you select. iPhone analyzes the text to determine the language, then reads it to you using the appropriate pronunciation.

Turn on Speak Selection. Go to Settings > General > Accessibility > Speech. There you can also:

- Adjust the speaking rate
- · Choose to have individual words highlighted as they're read

Have text read to you. Select the text, then tap Speak.

You can also have iPhone read the entire screen to you. See Speak Screen, next.

# Speak Screen

iPhone can read the contents of the screen to you, even if you don't use VoiceOver.

Turn on Speak Screen. Go to Settings > General > Accessibility > Speech.

Have iPhone speak the screen. Swipe down from the top of the screen with two fingers. Use the controls that appear to pause speaking or adjust the rate.

**Highlight what's being spoken.** Turn on Highlight Content (a command that appears when you turn on Speak Screen) and text highlights as it's spoken.

Ask Siri. Say "speak screen."

You can also have iPhone read just text you select—see Speak Selection, above.

### Speak Auto-text

Speak Auto-text speaks the text corrections and suggestions iPhone makes when you type.

Turn Speak Auto-text on or off. Go to Settings > General > Accessibility > Speech.

Speak Auto-text also works with VoiceOver and Zoom.

# Large, bold, and high-contrast text

**Display larger text in apps such as Settings, Calendar, Contacts, Mail, Messages, and Notes.** Go to Settings > General > Accessibility > Larger Text, then turn on Larger Accessibility Sizes.

**Display bolder text on iPhone.** Go to Settings > General > Accessibility, then turn on Bold Text.

**Increase text contrast where possible.** Go to Settings > General > Accessibility, then turn on Increase Contrast.

# **Button Shapes**

iPhone can add a colored background shape or an underline to buttons so they're easier to see. Emphasize buttons. Go to Settings > General > Accessibility, then turn on Button Shapes.

### **Reduce screen motion**

You can stop the movement of some screen elements, for example, the parallax effect of icons and alerts against the wallpaper, or motion transitions.

**Reduce motion.** Go to Settings > General > Accessibility, then turn on Reduce Motion.

# On/off switch labels

To make it easier to see whether a setting is on or off, you can have iPhone show an additional label on on/off switches.

Add switch-setting labels. Go to Settings > General > Accessibility, then turn on the On/Off Labels switch.

### Assignable ringtones and vibrations

You can assign distinctive ringtones to people in your contacts list for audible caller ID. You can also assign vibration patterns for notifications from specific apps, for phone calls, for FaceTime calls or messages from special contacts, and to alert you of a variety of other events, including new voicemail, new mail, sent mail, Tweet, Facebook Post, and reminders. Choose from existing patterns, or create new ones. See Sounds and silence on page 38.

You can purchase ringtones from the iTunes Store on iPhone. See Chapter 22, iTunes Store, on page 125.

# Audio Descriptions

Audio descriptions provide an audible description of video scenes. If you have a video that includes audio descriptions, iPhone can play them for you.

Turn on Audio Descriptions. Go to Settings > General > Accessibility > Audio Descriptions.

# Hearing aids

#### Made for iPhone hearing aids

If you have Made for iPhone hearing aids, you can use iPhone to adjust their settings, stream audio, or use iPhone as a remote mic.

Pair with iPhone. If your hearing aids aren't listed in Settings > General > Accessibility > Hearing Aids, you need to pair them with iPhone. To start, open the battery door on each hearing aid. Next, on iPhone, go to Settings > Bluetooth, then make sure Bluetooth is turned on. Then go to Settings > General > Accessibility > Hearing Aids. Close the battery doors on your hearing aids and wait until their name appears in the list of devices (this could take a minute). When the name appears, tap it and respond to the pairing request.

When pairing is finished, you hear a series of beeps and a tone, and a checkmark appears next to the hearing aids in the Devices list. Pairing can take as long as 60 seconds—don't try to stream audio or otherwise use the hearing aids until pairing is finished.

You should only need to pair once (and your audiologist might do it for you). After that, each time you turn your hearing aids back on, they reconnect to iPhone.

Adjust hearing aid settings and view status. Go to Settings > General > Accessibility > Hearing Aids, or choose Hearing Aids from the Accessibility Shortcut. See Accessibility Shortcut on page 158. Hearing aid settings appear only after you pair your hearing aids with iPhone.

For shortcut access from the Lock screen, go to Settings > General > Accessibility > Hearing Aids, then turn on Control on Lock Screen. Use the settings to:

- Check hearing aid battery status.
- Adjust ambient microphone volume and equalization.
- Choose which hearing aids (left, right, or both) receive streaming audio.
- Control Live Listen.
- Choose whether call audio and media audio are routed to the hearing aid.
- Choose to play ringtones through the hearing aid. (Not all hearing aids support this feature.)

Stream audio to your hearing aids. Stream audio from Phone, Siri, Music, Videos, and more by choosing your hearing aids from the AirPlay menu .

**Use iPhone as a remote microphone.** You can use Live Listen to stream sound from the microphone in iPhone to your hearing aids. This can help you hear better in some situations by positioning iPhone nearer the sound source. Triple-click the Home button, choose Hearing Aids, then tap Start Live Listen.

Use your hearing aids with more than one iOS device. If you pair your hearing aids with more than one iOS device (both iPhone and iPad, for example), the connection for your hearing aids automatically switches from one to the other when you do something that generates audio on the other device, or when you receive a phone call on iPhone. Changes you make to hearing aid settings on one device are automatically sent to your other iOS devices. To take advantage of this, all of the devices must be on the same Wi-Fi network and signed in to iCloud using the same Apple ID.

#### Hearing Aid Mode

iPhone has a Hearing Aid Mode that, when activated, may reduce interference with some hearing aid models. Hearing Aid Mode reduces the transmission power of the cellular radio in the GSM 1900 MHz band and may result in decreased 2G cellular coverage.

Turn on Hearing Aid Mode. Go to Settings > General > Accessibility > Hearing Aids.

#### Hearing aid compatibility

The FCC has adopted hearing aid compatibility (HAC) rules for digital wireless phones. These rules require certain phones to be tested and rated under the American National Standard Institute (ANSI) C63.19-2007 or C63.19-2011 hearing aid compatibility standards.

The ANSI standard for hearing aid compatibility contains two types of ratings:

- An "M" rating for reduced radio frequency interference to enable acoustic coupling with hearing aids that are not operating in telecoil mode
- A "T" rating for inductive coupling with hearing aids operating in telecoil mode

These ratings are given on a scale from one to four, where four is the most compatible. A phone is considered hearing aid compatible under FCC rules if it is rated M3 or M4 for acoustic coupling and T3 or T4 for inductive coupling.

For iPhone hearing aid compatibility ratings, see www.apple.com/support/hac/.

Hearing aid compatibility ratings don't guarantee that a particular hearing aid works with a particular phone. Some hearing aids may work well with phones that don't meet particular ratings. To ensure interoperability between a hearing aid and a phone, try using them together before purchase.

This phone has been tested and rated for use with hearing aids for some of the wireless technologies it uses. However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids. It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or Apple for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or phone retailer.

### Mono audio and balance

Mono Audio combines the sound from the left and right channels into a mono signal played on both channels. This way you can hear everything with either ear, or through both ears with one channel set louder.

Turn Mono Audio on or off. Go to Settings > General > Accessibility > Mono Audio.

Adjust the balance. Go to Settings > General > Accessibility, then drag the Left Right Stereo Balance slider.

# Subtitles and closed captions

The Videos app includes an Alternate Track button = you can tap to choose subtitles and captions offered by the video you're watching. Standard subtitles and captions are usually listed, but if you prefer special accessible captions, such as subtitles for the deaf and hard of hearing (SDH), you can set iPhone to list them instead, if they're available.

Prefer accessible subtitles and closed captions for the hard of hearing in the list of available subtitles and captions. Go to Settings > General > Accessibility > Subtitles & Captioning, then turn on Closed Captions + SDH. This also turns on subtitles and captions in the Videos app.

Choose from available subtitles and captions. Tap = while watching a video in Videos.

**Customize your subtitles and captions.** Go to Settings > General > Accessibility > Subtitles & Captioning > Style, where you can choose an existing caption style or create a new style based on your choice of:

- Font, size, and color
- Background color and opacity
- Text opacity, edge style, and highlight

Not all videos include closed captions.

# Siri

Siri is often the easiest way to start using accessibility features with iPhone. With Siri, you can open apps, turn many settings on or off (like VoiceOver), or use Siri for what it does best—acting as your assistant. Siri knows when VoiceOver is on, so will often read more information back to you. You can also use VoiceOver to read what Siri shows on the screen. See Make requests on page 50.

# Widescreen keyboards

Many apps, including Mail, Safari, Messages, Notes, and Contacts, let you rotate iPhone when you're typing, so you can use a larger keyboard.

# Large phone keypad

Make phone calls simply by tapping entries in your contacts and favorites lists. When you need to dial a number, the large numeric keypad on iPhone makes it easy. See Make a call.

# LED Flash for Alerts

If you can't hear the sounds that announce incoming calls and other alerts, you can have iPhone flash its LED (next to the camera lens on the back of iPhone). This works only when iPhone is locked or asleep.

*Note:* This is a great feature for all users who, when in a loud environment, may miss the tones associated with calls, texts, and other alerts.

Turn on LED Flash for Alerts. Go to Settings > General > Accessibility > LED Flash for Alerts.

# Call audio routing

You can have the audio of incoming or outgoing calls automatically routed through a headset or speaker phone instead of iPhone.

**Reroute audio for calls.** Go to Settings > General > Accessibility > Call Audio Routing, then choose how you want to hear and speak your calls.

You can also have audio from calls routed to your hearing aids; see Hearing aids on page 172.

# Phone noise cancelation

iPhone uses ambient noise cancelation to reduce background noise.

**Turn noise cancelation on or off.** Go to Settings > General > Accessibility > Phone Noise Cancelation.

### **Guided Access**

Guided Access helps an iPhone user stay focused on a task. Guided Access dedicates iPhone to a single app, and lets you control which app features are available. Use Guided Access to:

• Temporarily restrict iPhone to a particular app

- Disable areas of the screen that aren't relevant to a task, or areas where an accidental gesture might cause a distraction
- Limit how long someone can use an app
- · Disable the iPhone Sleep/Wake or volume buttons

**Use Guided Access.** Tell Siri "turn on Guided Access" or go to Settings > General > Accessibility > Guided Access. Within the Guided Access screen you can:

- Turn Guided Access on or off
- Tap Passcode Settings to set a passcode that controls the use of Guided Access (preventing someone from leaving a session), and turn on Touch ID (as a way to end Guided Access)
- Tap Time Limits to set a sound or have the remaining Guided Access time spoken before time ends
- Set whether other accessibility shortcuts are available during a session

**Start a Guided Access session.** After turning on Guided Access, open the app you want to run, then triple-click the Home button. Adjust settings for the session, then tap Start.

- *Disable app controls and areas of the app screen:* Draw a circle or rectangle around any part of the screen you want to disable. Drag the mask into position or use the handles to adjust its size.
- Enable the Sleep/Wake or volume buttons: Tap Options below Hardware Buttons.
- *Keep iPhone from switching from portrait to landscape or from responding to other motions:* Tap Options, then turn off Motion.
- Prevent typing: Tap Options, then turn off Keyboards.
- Ignore all screen touches: Turn off Touch at the bottom of the screen.
- Set a session time limit: Tap Time Limit Options at the bottom of the screen.

**End the session.** Triple-click the Home button, then enter the Guided Access passcode, or use Touch ID (if enabled).

# Switch Control

Switch Control lets you control iPhone using a single switch or multiple switches. Use any of several methods to perform actions such as selecting, tapping, pressing, dragging, typing, and even free-hand drawing. The basic technique is to use a switch to select an item or location on the screen, and then use the same (or different) switch to choose an action to perform on that item or location. Three basic methods are:

- *Item scanning (default),* which highlights different items on the screen until you select one.
- Point scanning, which lets you use scanning crosshairs to pick a screen location.
- *Manual selection,* which lets you move from item to item on demand (requires multiple switches).

Whichever method you use, when you select an individual item (rather than a group), a menu appears so you can choose how to act on the selected item (tap, press, drag, or pinch, for example).

If you use multiple switches, you can set up each switch to perform a specific action and customize your item selection method. For example, instead of automatically scanning screen items, you can set up switches to move to the next or previous item on demand.

You can adjust the behavior of Switch Control in a variety of ways, to suit your specific needs and style.

### Add a switch and turn on Switch Control

You can use any of these as a switch:

- An external adaptive switch: Choose from a variety of popular USB or Bluetooth switches.
- *The iPhone screen:* Tap the screen to trigger the switch. (Or press the screen with iPhones that support Force Touch.)
- *The iPhone FaceTime camera:* Move your head to trigger the switch. You can use the camera as two switches: one when you move your head to the left, and the other when you move your head to the right.

Add a switch and choose its action. Go to Settings > General > Accessibility > Switch Control > Switches. If you use only one switch, it is your Select Item switch by default.

If you're adding an external switch, you need to connect it to iPhone before it will appear in the list of available switches. Follow the instructions that came with the switch. If it connects using Bluetooth, you need to pair it with iPhone—turn on the switch, go to Settings > Bluetooth, tap the switch, then follow the onscreen instructions. For more information, see Bluetooth devices on page 44.

**Turn on Switch Control.** Go to Settings > General > Accessibility > Switch Control, or use the Accessibility Shortcut. See Accessibility Shortcut on page 158.

**Turn off Switch Control.** Use any scanning method to select, then tap Settings > General > Accessibility > Switch Control. Or triple-click the Home button.

### **Basic techniques**

Whether you use item scanning or point scanning, the Switch Control basics are the same.

Select an item. While the item is highlighted, trigger the switch you've set up as your Select Item switch. If you are using a single switch, it is your Select Item switch by default.

**Perform an action on the selected item.** Choose a command from the control menu that appears when you select the item. The layout of the menu depends on how you configure Tap Behavior. (To choose an option go to Settings > General > Accessibility > Switch Control > Tap Behavior.)

- *With Default on:* The control menu includes only the Tap button and the More button (two dots at the bottom). If you're in a scrollable area of the screen, a Scroll button also appears. To tap the highlighted item, trigger your Select Item button when Tap is highlighted. To see additional action buttons, choose More at the bottom of the menu. If you have multiple switches, you can set one up specifically for tapping.
- With Auto Tap on: To tap the item, do nothing—the item is automatically tapped when the Auto Tap interval expires (0.75 seconds if you haven't changed it). To see the control menu, trigger your Select Item button before the Auto Tap interval expires. The control menu skips the Tap button and goes right to the full set of action buttons.
- *With Always Tap on:* Tap to select the highlighted item rather than display the control menu. Wait until the end of the scan cycle and you can tap a button to display the control menu.

*Note:* Always Tap applies only when you choose item scanning. When point scanning, the Default behavior applies.

**Work with recipes.** A recipe lets you temporarily assign a special action to a switch. For example, you can choose a recipe to turn pages in iBooks or control a game. To use a recipe, go to Settings > General > Accessibility > Switch Control > Recipes, then choose a recipe.

**Dismiss the control menu without choosing an action.** Tap while the original item is highlighted and all the icons in the control menu are dimmed. Or choose Escape from the control menu. The menu goes away after cycling the number of times you specify at Settings > General > Accessibility > Switch Control > Loops.

Perform screen gestures. Choose Gestures from the control menu.

Scroll the screen. Select an item in a scrollable part of the screen, then:

- *With Auto Tap off:* Choose the Scroll Down button (next to the Tap button) in the control menu. Or, for more scrolling options, choose More, then choose Scroll.
- *With Auto Tap on:* Choose Scroll from the control menu. If many actions are available, you might have to choose More first.

Tap the Home button. Choose Home from the control menu.

**Perform other hardware actions.** Select any item, then choose Device from the menu that appears. Use the menu to mimic these actions:

- Double-click the Home button for multitasking
- Open Notification Center or Control Center
- Press the Sleep/Wake button to lock iPhone
- Rotate iPhone
- Flip the Ring/Silent switch
- Press the volume buttons
- Hold down the Home button to open Siri
- Triple-click the Home button
- Shake iPhone
- Press the Home and Sleep/Wake buttons simultaneously to take a screenshot
- Swipe down from the top with two fingers to speak the screen (if you have Speak Screen turned on)
- On compatible iPhones press to trigger a Force Touch action

#### Item scanning

Item scanning alternately highlights each item or group of items on the entire screen until you trigger your Select Item switch. If there are many items, Switch Control highlights them in groups. When you select a group, highlighting continues with the items in the group. When you select a unique item, scanning stops and the control menu appears. Item scanning is the default when you first turn on Switch Control.

You can choose from three scanning styles—auto scanning, manual scanning, and single switch step scanning. Auto scanning automatically highlights items, one after the other. With manual scanning you use one switch to highlight an item and another to activate it. Single switch step scanning uses a switch to move the highlight from item to item. If you take no action after a period of time, the highlighted item activates.

Select an item or enter a group. Watch (or listen) as items are highlighted. When the item you want to control (or the group containing the item) is highlighted, trigger your Select Item switch. Work your way down in the hierarchy of items until you select the individual item you want to control.

**Back out of a group.** Trigger your Select Item switch when the dashed highlight around the group or item appears.

**Dismiss the control menu without performing an action.** Trigger your Select Item switch when the item itself is highlighted. Or choose Escape from the control menu.

**Hear the names of items as they are highlighted.** Go to Settings > General > Accessibility > Switch Control, then turn on Speech. Or choose Settings from the control menu, then choose Speech On.

**Slow down the scanning.** Go to Settings > General > Accessibility > Switch Control > Auto Scanning Time.

#### Point scanning

Point scanning lets you select an item on the screen by pinpointing it with scanning crosshairs.

**Switch to point scanning.** Use item scanning to choose Point Mode from the control menu. The vertical crosshair appears when you close the menu.

**Select an item.** Trigger your Select Item switch when the item you want is within the broad, horizontal scanning band, then trigger again when the fine scanning line is on the item. Repeat for vertical scanning.

Refine your selection point. Choose Refine Selection from the control menu.

Return to item scanning. Choose Item Mode from the control menu.

#### Settings and adjustments

Adjust basic settings. Go to Settings > General > Accessibility > Switch Control, where you can:

- Add switches and specify their function
- Choose, create, and edit recipes
- Choose a scanning style
- Adjust how rapidly items are scanned
- · Set scanning to pause on the first item in a group
- Choose how many times to cycle through the screen before hiding Switch Control
- Choose a tap behavior and set the interval for performing a second switch action to show the control menu
- Set whether a movement action is repeated when you hold down a switch, and how long to wait before repeating
- Add another action to a switch by holding down the switch for a long duration
- · Choose which items appear in menus and the order in which they appear
- Set whether and how long you need to hold a switch down before it's accepted as a switch action
- Have Switch Control ignore accidental repeated switch triggers
- Adjust the point scanning speed
- Turn on sound effects or have items read aloud as they are scanned
- Choose what to include in the Switch Control menu

- Set whether items should be grouped while item scanning
- · Make the selection cursor larger or a different color
- Save custom gestures to the control menu (in Gestures > Saved)

Fine-tune Switch Control. Choose Settings from the control menu to:

- Adjust scanning speed
- Change the location of the control menu
- Turn sound or speech accompaniment on or off
- Turn off groups to scan items one at a time

### AssistiveTouch

AssistiveTouch helps you use iPhone if you have difficulty touching the screen or pressing the buttons. You can use AssistiveTouch without any accessory to perform gestures that are difficult for you. You can also use a compatible adaptive accessory (such as a joystick) together with AssistiveTouch to control iPhone. To configure the AssistiveTouch menu, go to Settings > General > Accessibility > AssistiveTouch.

The AssistiveTouch menu lets you perform actions such as these by just tapping (or the equivalent on your accessory):

- Press the Home button
- Summon Siri
- · Perform multi-finger gestures
- · Access Control Center or Notification Center
- Adjust iPhone volume
- Shake iPhone
- Capture a screenshot
- Add more actions (for a total of eight)
- Use Force Touch (with supported iPhone)
- Double-tap

**Turn on AssistiveTouch.** Tell Siri "turn on AssistiveTouch," go to Settings > General > Accessibility > AssistiveTouch, or use the Accessibility Shortcut. See Accessibility Shortcut on page 158. When AssistiveTouch is on, the floating menu button appears on the screen.

Show or hide the menu. Tap the floating menu button, or click the secondary button on your accessory.

Simulate pressing the Home button. Tap the menu button, then tap Home.

Lock or rotate the screen, adjust iPhone volume, or simulate shaking iPhone. Tap the menu button, then tap Device.

**Perform a swipe or drag that uses 2, 3, 4, or 5 fingers.** Tap the menu button, tap Device > More > Gestures, then tap the number of digits needed for the gesture. When the corresponding circles appear on the screen, swipe or drag in the direction required by the gesture. When you finish, tap the menu button.

**Perform a pinch gesture.** Tap the menu button, tap Custom, then tap Pinch. When the pinch circles appear, touch anywhere on the screen to move the pinch circles, then drag the pinch circles in or out to perform a pinch gesture. When you finish, tap the menu button.

**Create your own gesture.** You can add your own favorite gestures to the control menu (for example, touch and hold or two-finger rotation). Tap the menu button, tap Custom, then tap an empty gesture placeholder. Or go to Settings > General > Accessibility > AssistiveTouch > Create New Gesture.

*Example 1:* To create the rotation gesture, go to Settings > General > Accessibility > AssistiveTouch > Create New Gesture. On the gesture recording screen that prompts you to touch to create a gesture, rotate two fingers on the iPhone screen around a point between them. (You can do this with a single finger or stylus—just create each arc separately, one after the other.) If it doesn't turn out quite right, tap Cancel, then try again. When it looks right, tap Save, then give the gesture a name—maybe "Rotate 90." Then, to rotate the view in Maps, for example, open Maps, tap the AssistiveTouch menu button, and choose Rotate 90 from Custom. When the blue circles representing the starting finger positions appear, drag them to the point around which you want to rotate the map, then release. You might want to create several gestures with different degrees of rotation.

*Example 2:* Let's create the touch-and-hold gesture that you use to start rearranging icons on your Home screen. This time, on the gesture recording screen, hold down your finger in one spot until the recording progress bar reaches halfway, then lift your finger. Be careful not to move your finger while recording, or the gesture will be recorded as a drag. Tap Save, then name the gesture. To use the gesture, tap the AssistiveTouch menu button, then choose your gesture from Custom. When the blue circle representing your touch appears, drag it over a Home screen icon and release.

If you record a sequence of taps or drags, they're all played back at the same time. For example, using one finger or a stylus to record four separate, sequential taps at four locations on the screen creates a simultaneous four-finger tap.

**Exit a menu without performing a gesture.** Tap anywhere outside the menu. To return to the previous menu, tap the arrow in the middle of the menu.

Move the menu button. Drag it anywhere along the edge of the screen.

**Adjust your accessory tracking speed.** Go to Settings > General > Accessibility > AssistiveTouch > Touch speed.

**Hide the menu button (with an accessory attached).** Go to Settings > General > Accessibility > AssistiveTouch > Always Show Menu.

### **Touch Accommodations**

If you have trouble using the touch screen use Touch Accommodations to change how the screen responds to touches.

**Choose how long you must touch the screen before a touch is recognized.** Go to Settings > General > Accessibility > Touch Accommodations, turn on Hold Duration, then choose a duration (the default is 0.10 seconds).

**Choose the duration in which multiple touches are treated as a single touch.** Go to Settings > General > Accessibility > Touch Accommodations, turn on Ignore Repeat, then adjust the timing.

**Choose the location where iPhone registers a tap.** Go to Settings > General > Accessibility > Touch Accommodations, then turn on Tap Assistance.

When you choose Use Initial Touch location, iPhone uses the location of your first tap—when you tap an app on the Home screen, for example. Choose Use Final Touch Location and iPhone registers the tap where you lift your finger.

# Software and hardware keyboards

If you have difficulty distinguishing characters on the iPhone keyboard or manipulating a hardware keyboard, find help by going to Settings > General > Accessibility > Keyboard. You can adjust settings to:

- · Show only uppercase keys on iPhone keyboard
- · Adjust the key repeat rate on hardware keyboards
- Use the Sticky Keys feature to hold down modifier keys such as Command and Option as you press another key
- Adjust the time between when a key is pressed and when it's activated

# **TTY support**

You can use the iPhone TTY Adapter cable (sold separately in many areas) to connect iPhone to a TTY machine. Go to www.apple.com/store/ (may not be available in all areas) or check with your local Apple retailer.

**Connect iPhone to a TTY machine.** Go to Settings > Phone, then turn on TTY. Then connect iPhone to your TTY machine using the iPhone TTY Adapter.

When TTY on iPhone is turned on, the TTY icon **m** appears in the status bar at the top of the screen. For information about using a particular TTY machine, see the documentation that came with the machine.

Note: Continuity features are not available for TTY support.

# Visual voicemail

You can hear voicemail by asking Siri to read or play it ("play my voicemail"). You can also ask Siri to call back a number or hear voicemail again.

The play and pause controls in visual voicemail let you control the playback of messages. Drag the playhead on the scrubber bar to repeat a portion of the message that's hard to understand. See Visual voicemail on page 57.

# **Voice Control**

Voice Control lets you make phone calls and control Music playback using voice commands. See Make a call on page 53, and Siri and Voice Control on page 77.

# Accessibility in OS X

Take advantage of the accessibility features in OS X when you use iTunes to sync information and content from your iTunes library to iPhone. In the Finder, choose Help > Help Center (or Help > Mac Help in OS X Yosemite), then search for "accessibility."

For more information about iPhone and OS X accessibility features, go to www.apple.com/accessibility/.

# iPhone in business

With support for secure access to corporate networks, directories, custom apps, and Microsoft Exchange, iPhone is ready to go to work. For detailed information about using iPhone in business, go to www.apple.com/iphone/business/.

# Mail, Contacts, and Calendar

To use iPhone with your work accounts, you need to know the settings your organization requires. If you received your iPhone from your organization, the settings and apps you need might already be installed. If it's your own iPhone, your system administrator may provide you with the settings for you to enter, or have you connect to a *mobile device management* server that installs the settings and apps you should have.

Organizational settings and accounts are typically in *configuration profiles*. You might be asked to install a configuration profile that was sent to you in an email, or one that is downloaded from a webpage. When you open the file, iPhone asks for your permission to install the profile, and displays information about what it contains.

In most cases, when you install a configuration profile that sets up an account for you, some iPhone settings can't be changed. For example, your organization might turn on Auto-Lock and require you to set a passcode in order to protect the information in the accounts you access.

You can see your profiles in Settings > General > Profiles. If you delete a profile, all of the settings and accounts associated with the profile are also removed, including any custom apps your organization provided or had you download. If you need a passcode to delete a profile, contact your system administrator.

### Network access

A VPN (virtual private network) provides secure access over the Internet to private resources, such as your organization's network. You may need to install a VPN app from the App Store that configures your iPhone to access a particular network. Contact your system administrator for information about apps and settings you need.

# Apps

In addition to the built-in apps and the ones you get from the App Store, your organization may want you to have certain other apps. They might provide you with a pre-paid redemption code for the App Store. When you download an app using a redemption code, you own it, even though your organization purchased it for you.

Your organization can also purchase App Store app licenses that are assigned to you for a period of time, but that the organization retains. You'll be invited to participate in your organization's program in order to access these apps. After you enroll with your Apple ID, you're prompted to install these apps as they're assigned to you. You can also find them in your Purchased list in the App Store. An app you receive this way is removed if the organization assigns it to someone else.

Your organization might also develop custom apps that aren't in the App Store. You install them from a webpage or, if your organization uses mobile device management, you receive a notification asking you to install them over the air. These apps belong to your organization, and they may be removed or stop working if you delete a configuration profile or dissociate iPhone from the mobile device management server.