



CONSUMER AFFAIRS

B E R M U D A

Promoting Confident Consumers and Responsible Traders

# Audio & Visual Guidance Mobile Device Accessibility Handbook

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# 1. VoiceOver on iPhone

With VoiceOver — a gesture-based screen reader — you can use iPhone even if you can't see the screen. VoiceOver gives audible descriptions of what's on your screen—from battery level, to who's calling, to which app your finger is on. You can also adjust the speaking rate and pitch to suit your needs.


When you touch the screen or drag your finger over it, VoiceOver speaks the name of the item your finger is on, including icons and text. To interact with the item, such as a button or link, or to navigate to another item, [use VoiceOver gestures](#).

When you go to a new screen, VoiceOver plays a sound, then selects and speaks the name of the first item on the screen (typically in the top-left corner). VoiceOver tells you when the display changes to landscape or portrait orientation, when the screen becomes dimmed or locked, and what's active on the Lock Screen when you wake iPhone.

## 1.1 Turn VoiceOver On or Off

Important: VoiceOver changes the gestures you use to control iPhone. When VoiceOver is on, you must use VoiceOver gestures to operate iPhone.


To turn VoiceOver on or off, use any of the following methods:

- [Activate Siri](#) and say “Turn on VoiceOver” or “Turn off VoiceOver.”
- [Triple-click the side button](#) (on an iPhone with Face ID).
- [Triple-click the Home button](#) (on an iPhone with a Home button).
- [Use Control Center](#).
- Go to Settings  > Accessibility > VoiceOver, then turn the setting on or off.

## 1.2 Learn and Practice VoiceOver Gestures

You can practice VoiceOver gestures in a special area without affecting iPhone or its settings. When you practice a gesture, VoiceOver describes the gesture and the resulting action.

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. For best results using multi-finger gestures, touch the screen with some space between your fingers.

1. Go to Settings  > Accessibility > VoiceOver.
2. Turn on VoiceOver, tap VoiceOver Practice, then double-tap to start.
3. Practice the following gestures with one, two, three, and four fingers:
  - Tap
  - Double-tap
  - Triple tap
  - Swipe left, right, up, or down
4. When you finish practicing, tap Done, then double-tap to exit.

## 2. VoiceOver on iPad

With VoiceOver — a gesture-based screen reader — you can use iPad even if you can't see the screen. VoiceOver gives audible descriptions of what's on your screen—from battery level, to who's calling, to which app your finger is on. You can also adjust the speaking rate and pitch to suit your needs.


When you touch the screen or drag your finger over it, VoiceOver speaks the name of the item your finger is on, including icons and text. To interact with the item, such as a button or link, or to navigate to another item, [use VoiceOver gestures](#).

When you go to a new screen, VoiceOver plays a sound, then selects and speaks the name of the first item on the screen (typically in the top-left corner). VoiceOver tells you when the display changes to landscape or portrait orientation, when the screen becomes dimmed or locked, and what's active on the Lock Screen when you wake iPad.

### 2.1 Turn VoiceOver On or Off

**Important:** VoiceOver changes the gestures you use to control iPad. When VoiceOver is on, you must use VoiceOver gestures to operate iPad.


To turn VoiceOver on or off, use any of the following methods:

- [Activate Siri](#) and say “Turn on VoiceOver” or “Turn off VoiceOver.”
- [Triple-click the Home button](#) (on an iPad with a Home button).
- [Triple-click the top button](#) (on other iPad models).
- [Use Control Center](#).
- Go to Settings  > Accessibility > VoiceOver, then turn the setting on or off.

## 2.2 Learn and Practice Voiceover Gestures

You can practice VoiceOver gestures in a special area without affecting iPad or its settings. When you practice a gesture, VoiceOver describes the gesture and the resulting action.


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. For best results using multi-finger gestures, touch the screen with some space between your fingers.

1. Go to Settings  > Accessibility > VoiceOver.
2. Turn on VoiceOver, tap VoiceOver Practice, then double-tap to start.
3. Practice the following gestures with one, two, three, and four fingers:
  - Tap
  - Double-tap
  - Triple-tap
  - Swipe left, right, up, or down
4. When you finish practicing, tap Done, then double-tap to exit.

## 3. Using VoiceOver on iPhone and iPad


### 3.1 How to Change Speaking Rate in VoiceOver

You can change how quickly the VoiceOver speaks to you, and for tons of fun, slow it right down and it sounds drunk! This is easiest to adjust when VoiceOver is turned off.

1. Go to Settings  > Accessibility > VoiceOver.
2. Tap and drag the **slider** under “**Speaking Rate**” to change the rate of speech. The further right you go, the faster it speaks (I have no idea who would be able to use it on 100%, but there you go).

### 3.2 How to Manage Verbosity in VoiceOver


Verbosity is how much information is read to you and for some folks, the chatter can be too much. Under the Verbosity heading, you can control whether or not VoiceOver reads you hints (double-tap this or three-finger-swipe that) or tells you that there are emojis in text.

1. Go to Settings  > Accessibility > VoiceOver.
2. Select “**Verbosity**”
3. Select the “**Speak Hints On/Off switch**” to disable it.
4. Select “**Punctuation**” to switch between speaking *all*, *some*, or *none*.
5. Select the “**switch**” next to “**Speak Detected Text**” to disable it.

6. Select “**Capital Letters**” to customize what happens when capital letters appear. You can choose between *Speak Cap*, *Play Sound*, *Change Pitch* and *Do Nothing*.
7. Select “**Embedded Links**” to customize what happens when embedded links appear. You can choose between *Speak*, *Play Sound*, *Change Pitch*, and *Do Nothing*.
8. Select the **switch** next to “**Table Headers**” to disable it.
9. Select the **switch** next to “**Row & Column Numbers**” to disable it.
10. Select the **switch** next to “**Speak Confirmation**” to disable it.
11. Select the **switch** next to “**Emoji Suffix**” to have VoiceOver speak the word "emoji" when emojis are read in text.
12. Select “**Media Descriptions**” to customize what happens when closed captions and SDH are output during media playback. You can choose between *Off*, *Speech*, *Braille*, and *Speech and Braille*.


### 3.3 How to Change the VoiceOver Voice

If you don't like the VoiceOver voice, you can change it to a male, change to different accents, and download a bunch more by following the below steps:

1. Go to Settings  > Accessibility > VoiceOver.
2. Select “**Speech**”
3. Select “**Voice**”
4. Select a “**Voice**”
5. Tap the “**Play**” button next to a voice to preview it or tap the download button (cloud with an arrow) to download it.
6. Select the name to enable the voice.

### 3.4 How to Change the VoiceOver Pronunciations

VoiceOver isn't perfect and it sometimes reads words out phonetically when that doesn't make sense. Or, you might have a sibling with a name that's hard to pronounce and VoiceOver just can't get it. You can change how VoiceOver pronounces certain words or phrases by following the below steps:

1. Go to Settings  > Accessibility > VoiceOver.
2. Select “**Speech**”
3. Select “**Pronunciations**”
4. Select the “**add**” button in the top right corner of your screen (i.e. the plus + sign).
5. Type the word or phrase in the “**Phrase**” field
6. Select the “**Substitution**” field or tap the dictation button (i.e. the microphone), to type or dictate the pronunciation. It's easier to say it out loud.
7. Select “**Play**” in the top right corner to preview the pronunciation.
8. Tap the “**back button**” in the top left corner to add the pronunciation.

### 3.5 How to Use the VoiceOver Rotor

The rotor is a quick menu of VoiceOver options that you can access from any screen at any time. To use the rotor:

1. **Twist two fingers on the screen** like you're turning a dial. VoiceOver will read out each option as you twist around the circle.
2. Short swipe up or down when you're on the **option you want**. Depending on the option, the swipe up or down will increase volume, speaking rate, or whatever else you choose to [add to the rotor](#).


### 3.6 How to Add New Languages to the VoiceOver Rotor

When using the rotor in VoiceOver (twisting two fingers on the screen like turning a dial) you have quick access to VoiceOver options. To quickly change the language, you just twist to Language and swipe up or down.

1. Go to Settings  > Accessibility > VoiceOver.
2. Select **“Speech”**
3. Select **“Add New Language”**
4. Select the language you want to add


### 3.7 How to Manage Braille Input/Output Options

If you have a Bluetooth braille display, you can easily pair it with your iPhone or iPad so that you can still read using VoiceOver by conducting the following steps:

1. Go to Settings  > Accessibility > VoiceOver.
2. Select **“Braille”**
3. Select **“Output”** **“Input”** or **“Braille Screen Input”** and then selection one of the following options
  - **Braille Display Output:**
    - Uncontracted Six-dot Braille
    - Uncontracted Eight-dot Braille
    - Contracted Braille
  - **Braille Display Input:**
    - Uncontracted Six-dot Braille
    - Uncontracted Eight-dot Braille
    - Contracted Braille
    - Automatic Braille Translation – tap the switch to turn it on or off
  - **Braille Screen Input:**


- Uncontracted Six-dot Braille
- Uncontracted Eight-dot Braille
- Contracted Braille
- Automatic Braille Translation – tap the switch to turn it on or off

### 3.8 How to Change the Braille Translation Language


1. Go to Settings  > Accessibility > VoiceOver.
2. Select **“Braille”**
3. Select **“Braille Translation”**
4. Select a **dialect**

### 3.9 How to Choose a Braille Display

If you have more than one braille display paired with your iPhone or iPad, you can quickly choose one right from the braille menu.


1. Go to Settings  > Accessibility > VoiceOver.
2. Select **“Braille”**
3. Select the **braille** display you want to use. It will appear at the bottom under **Choose a Braille Display**

### 3.10 How to Change How VoiceOver Navigates Images

1. Go to Settings  > Accessibility > VoiceOver.
2. Select **Navigate Images**
3. Select an option:
  - Always
  - With descriptions
  - Never

### 3.11 How to Change the Double-tap Timeout

When VoiceOver is enabled, you have to double-tap items instead of single-tapping like you normally would. The time between each tap is the double-tap timeout and if you also have troubles with motor skills, you can lengthen the timeout to give you more time to make that second tap by completing the following steps:

1. Go to Settings  > Accessibility > VoiceOver.
2. Select **“Double-tap Timeout”**. It is at the bottom
3. Tap the **plus (+) and minus (-)** buttons to increase or decrease the timeout.



## 4. Talkback on Android Devices

Much like VoiceOver for Mac devices, TalkBack is an accessibility service for Android phones. It helps users who are blind and visually impaired to easily use their phones. It uses spoken words, vibrations, and other audible feedback to guide the user as to what's happening on their screen.

1. Go to Settings
2. Go to Accessibility
  - In some Android phones this can be found in "More Settings"
3. Select TalkBack
4. Select TalkBack toggle to "On".
  - The toggle will turn blue when activated.

## 5. How to Use Talkback on Android Devices

Learning how to use TalkBack can be a bit hard at first. There are lots of gestures to learn with their corresponding actions. It has a bit of a learning curve but once you get the hang of it, it will become muscle memory.

### 5.1 General Gestures

<b>Gesture</b>	<b>Function</b>
Swipe right or left	This is used to move between items or objects. For example, if you're on the homepage, swiping right or left will highlight your apps. TalkBack will read the app that is currently highlighted.
Drag your finger	This will help you navigate your way around compared to swiping right or left. You can drag it around the screen for TalkBack to read what is currently on your screen.
Double-tap the screen	This is used to activate the currently highlighted item. For example, you're on your home screen and an app is currently highlighted. Simply double-tap on your screen to launch the app.

Swipe 2 fingers up and down	To scroll up and down, you'll need 2 fingers. For example, you're browsing a website on Google Chrome. Usually, users scroll up and down with 1 finger. But if TalkBack is activated, scrolling with 1 finger will make TalkBack read what's on the screen. You'll need to use 2 fingers to scroll up and down.
Touch or cover the proximity sensor	This will stop TalkBack from talking. The proximity sensor is usually located at the top of your phone, right next to the front camera.
Swipe down from the top with 2 fingers	This accesses the notifications panel.
Swipe down from the top with 3 fingers	This will open the quick settings.

## 5.2 Advanced Gestures

<b>Gesture</b>	<b>Function</b>
Swipe up then down	This will take you to the first item on the screen. This is usually the item on the top left of the screen.
Swipe down then up	This will take you to the last item on the screen.
Swipe right then left	This will take you to the next page on the home screen. If you're on a list, this will help you scroll down on the menu. This gesture can also help you increase sliders by sliding them to the right.
Swipe left then right	This will take you back to the previous page on the home screen. If you're on a list, this will help you scroll up on the menu.



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