iPhones have a variety of accessibility features to make it easier to use your device. We've highlighted some of the main features in this guide.¹

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¹ The guidance in this user guide is taken from <u>Apple's accessibility web site</u>.

Vision

VoiceOver

VoiceOver is a screen reader that describes exactly what's happening on your iPhone. It can even tell you what's in a photo. You can also invert colours, reduce white point, enable greyscale or choose from a range of colour filters to support different forms of colour blindness and other vision needs.

To enable VoiceOver:

• Go to Settings > General > Accessibility > VoiceOver > On

Alternatively you can summon Siri and say "Turn on VoiceOver".

Find out more about VoiceOver on the Apple Accessibility site.

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Voiceover + Braille

Without a braille display

VoiceOver includes systemwide support for braille chords in 6 and 8 dot braille, enabling direct braille entry without the need for a physical braille keyboard. The braille keyboard is available in the rotor, so you can use it to type text, unlock your iPhone, launch apps and find content in apps like Music.

Using a braille display

iPhone is fully compatible with more than 70 refreshable braille displays. You can connect a Bluetooth wireless braille display to read VoiceOver output, including contracted and uncontracted braille and equations using Nemeth Code. When you edit text, your display shows the text in context, and your edits are seamlessly converted between braille and printed text. And braille displays with input keys can be used to control your iPhone when VoiceOver is turned on.

Display accomodations

Choose from a range of colour filters to support your colour blindness or turn on Invert Colours to instantly change the values and contrast in iOS, iPadOS and macOS.

Select from common presets like button shapes in iOS, transparency levels in watchOS and more. And when you're all set, enable On/Off labels on your iPhone or Apple Watch so you know what's on and what's not.

With the Smart Invert Colours setting, iOS automatically recognises when a piece of media is using a dark colour style, so you can reverse the colours of the display without affecting the look of images, videos and certain apps. And once you set your filters, the settings apply to everything that appears on your iPhone.

To activate Display Accomodations:

• Go to Settings > General > Accessibility > Display Accomodations



Dictation

Dictation lets you talk where you would type. Tap the microphone button on the keyboard, say what you want to write, and your iPhone converts your words (and numbers and characters) into text. So it's easy to type an email, note or web address — without typing at all.

Zoom

Zoom is a built-in screen magnifier that works wherever you are in iOS. And it works with all apps from the App Store. Turn Zoom on for full-screen or picture-in-picture view, allowing you to see the zoomed area in a separate window while keeping the rest of the screen at its native size. You can adjust the magnification between 100 and 1,500 per cent and access multiple filter options in either view.

To activate Zoom:

• Go to Settings > General > Accessibility > Zoom > On

Magnifier

Magnifier works like a digital magnifying glass. It uses the camera on your iPhone to increase the size of anything you point it at, so you can see the details more clearly. Use the flash to light the object, adjust filters to help you differentiate colours, or snap a photo to get a static close-up.

To access Magnifier:

- On an iPhone X and later, or iPad 12.9-inch (3rd generation) and iPad Pro 11-inch: Triple-click the Side button. Then drag the slider to adjust the magnification level. To close Magnifier, swipe up from the bottom of your screen.
- On an iPhone 8 and earlier, and iPad models with a Home button, triple-click the Home button.
 Then drag the slider to adjust the magnification level. To close Magnifier, press the Home button.

Audio Descriptions

Watch movies with detailed audio descriptions of every scene on your iPhone, iPad, Mac, Apple TV or iPod touch. Just check for the AD icon under the movie title on the Apple TV app or on the iTunes Store.

Hearing

Whether you're deaf or hard of hearing, iPhone makes it easy to stay in the conversation. It supports Textphone calls without the need for Textphone hardware.

If you use sign language, FaceTime is a great way to have conversations in vivid detail. Made for iPhone hearing aids and sound processors provide outstanding sound quality with settings you can personalise to your situation and location.

And Live Listen helps you have better conversations in loud places with AirPods or Made for iPhone hearing aids.

Headphone Accommodations

Headphone Accommodations help you customise your audio experience to make the world sound crisp and clear. Amplify soft sounds and adjust certain sound frequencies based on your individual hearing needs. If you already have your own audiogram, you can add it to your settings. If not, you'll walk through a series of listening tests that allow you to set up as many as nine unique profiles based on your personal sound preferences.

To set up your custom headphone settings:

• Go to Settings > Accessibility > Audio/Visual > Headphone Accommodations

Mono Audio

When you're using headphones, you may miss some audio if you're hard of hearing or deaf in one ear. That's because stereo recordings usually have distinct left- and right-channel audio tracks. iOS can help by playing both audio channels in both ears, and letting you adjust the balance for greater volume in either ear, so you won't miss a single note of a concerto or word of an audiobook.

To enable mono audio:

• Go to Settings > Accessibility > Audio/Visual

FaceTime

Catch every gesture and facial expression — from raised eyebrow to ear-to-ear smile. High-quality video and a fast frame rate make FaceTime ideal for people who communicate using sign language. And because Mac, iPhone, iPad and iPod touch all come equipped with FaceTime, you can talk to iOS and macOS users across the street or across the globe.

Made for iPhone Hearing Aids

Apple has worked with top manufacturers to create hearing aids and sound processors designed specifically for iPhone and iPad. These advanced hearing devices provide outstanding sound quality, offer many helpful features, and are as easy to set up and use as any other Bluetooth device.

You can quickly access the features and settings of your paired hearing device by triple-clicking the Home button. Glance at the battery status or change the left and right volume, together or separately. And quickly apply your audiologist's environmental presets as you go outdoors or enter noisy locations, like restaurants, without having to rely on additional remotes.

Find more information on the Apple support page.

Live Listen

Live Listen is an assistive listening feature that helps you have better conversations in loud places. Just turn on the feature and move your device towards the people you're talking with. Live Listen uses the microphone to pick up what they're saying more clearly.

To enable Live Listening:

• Triple-click the side button (on an iPhone with Face ID) or triple-click the Home button (on other iPhone models), tap Hearing Devices, then tap Live Listen.

Software Textphone

You can use your iPhone to make and receive Textphone calls without the need for Textphone hardware. Transcripts for Textphone calls are saved in the call history of the Phone app. And there's even a special keyboard that includes shortcut keys for common Textphone prompts such as "GA" and "SK".

Sensory Alerts

iPhone lets you know when something's up, in a way you'll notice. It delivers both visual and vibrating alerts for incoming phone and FaceTime calls, new text messages, new and sent mail, and calendar events. You can set an LED light flash for incoming calls and alerts. Or have incoming calls display a photo of the caller. Choose from different vibration patterns or create your own.

Closed Captions

Watch films, TV programmes and podcasts with closed captions. Just look for the CC icon to buy or rent captioned films from the iTunes Store or find captioned podcasts in iTunes U.

Download straight to your iPhone to watch on the go. iOS also supports open captions and subtitles. You can even customise captions with different styles and fonts, including styles that are larger and outlined for better legibility.

For those who are deaf-blind, iPhone lets VoiceOver users access closed caption and subtitle tracks through their braille displays.

Mobility

Voice Control

Navigate your device using just your voice. Commands like click, swipe and tap help you easily interact with your favourite apps. You can precisely select, drag and zoom by showing numbers alongside clickable items or by superimposing a grid on the screen. Voice Control also offers a more efficient way to write and edit. It's a seamless process to make corrections, format changes, and transition between text dictation and commands. For example, in Messages, say "Happy Birthday. Tap send". And it sends "Happy Birthday" — just as you intended.

To enable Voice Control:

- Go to Settings > Accessibility > Set Up Voice Control
- A download will begin in the background and a microphone icon will appear in the status bar of your device to indicate that Voice Control is listening
- When Voice Control is turned on, you can speak commands just like you would perform an action by touch. For example, to access Spotlight Search on the Home screen, say "Swipe down".
- To see a list of available commands for different situations, say "Show me what to say".

Switch Control

Switch Control makes it easy and efficient to control your device with a variety of adaptive switch hardware — or even with a single tap. If you have extensive motor limitations, you can use a system called 'scanning' to navigate sequentially through onscreen keyboards, menus and the Dock. Create your own custom panels and keyboards, systemwide or app by app. Platform Switching allows you to use a single device to navigate any other devices you have synced with your iCloud account. That way, you can control your Mac directly from your iPhone or iPad, without having to set up your switches on each new device.

Switch Control is compatible with a variety of Bluetooth-enabled devices, such as a switch, a joystick, a keyboard space bar and more.

Assistive Touch

Push all the buttons without pressing any.

Adapt your touchscreen to fit your physical needs. If certain gestures, like pinch or tap, don't work for you, swap them with a gesture that does or create a touch that's all your own. You can customise the layout of

the AssistiveTouch menu too, or create an alternative to pressing the Home button — a simple onscreen tap. And you can connect a Bluetooth mouse to control an onscreen pointer for navigation.

Accessibility Keyboard

The customisable, onscreen Accessibility Keyboard allows you to type and navigate macOS in a way that works for you. It includes support for custom toolbars and improved typing with auto-capitalisation and better word suggestions. The Accessibility Keyboard also supports head-tracking hardware, which allows those with limited mobility to move the cursor and select or drag onscreen items. And it has Dwell support, allowing all of macOS to be used without ever needing to click a mouse button.

Neurodiversity

iPhone lets you personalise how you learn. Dictate your next important document, essay or even book. If you prefer to hear what you're reading or writing, Speak Screen adds an auditory component to text. And Safari Reader reduces visual clutter so you can browse with fewer distractions.

Reading Support

If you learn better when you can hear what you're reading or writing, features like Speak Screen, Speak Selection, Typing Feedback and Predictive Text can help by adding an auditory component to text.

Turn on Speak Screen and swipe down from the top of the screen with two fingers, or just tell Siri to Speak Screen, to have all the content on pages read back to you.

Or use Speak Selection to highlight the specific range of text that you want to hear, in colours that you can customise. Then follow along as highlighted words, sentences or words within each sentence are read aloud. And with Typing Feedback activated, each letter you type on the keyboard is spoken aloud as well. You can also use Predictive Text, which suggests word options that you can listen to and choose from to get help with spelling.

Dictionary

Say you're reading an article on astronomy and are stuck on some terminology. Just look it up — dictionary definitions are integrated into iOS. Get quick access to definitions and commonly used phrases to help with spelling, pronunciation and grammar.

Speech

FaceTime lets you communicate visually, whether you use sign language, gestures or facial expressions. iMessage lets you chat with others via text. And Speak Selection helps with speech development by speaking the words you're reading. Or you can compose your own text and have your iPhone speak for you.

Safari Reader

For some students, navigating the web can be a sensory overload. Safari Reader reduces the visual clutter. It strips away ads, buttons and navigation bars, allowing you to focus on just the content you want. And Safari Reader works with Speak Selection and VoiceOver to provide auditory reinforcement for what you're seeing.

Guided Access and Screen Time

Guided Access helps people with autism or other attention and sensory challenges stay focused on the task (or app) at hand. You can even restrict access to the keyboard or touch input on certain areas of the screen. So wandering taps and gestures won't distract from learning. And now with Screen Time, it's even easier for people to manage device usage for themselves and their families.

Activity Reports give a detailed breakdown of where time is spent, and App Limits let you set a specific time to spend in an app. You can also schedule a block of Downtime in which an iOS device can't be used, or choose specific apps like Phone or Books that will always be available.

Apple accessibility support

If you use an accessibility feature or assistive technology, you can get direct access to Apple representatives who are trained in providing support using accessibility services.



Apple Support is available over the phone or chat. You can request a call right away or schedule a time for us to call you when you're ready. Just answer a few questions and we'll select the best options for you. <u>Contact Apple Support to schedule a time to talk.</u>

Call for accessibility support

To contact Apple Accessibility Support over the phone in English: 0800 107 6285

Accessibility support at the University of Aberdeen

For more information or support using any of the software mentioned in this guide, please contact <u>atech@abdn.ac.uk</u>