iOS 8 Accessibility Quick Start Guide

Overview
This guide explains the new and updated iOS 8 accessibility features and how to use these features on an iPhone, iPad and iPod.

Accessibility Tab
To access the accessibility features within iOS 8. Go to Settings ➔ General ➔ Accessibility.

Vision

VoiceOver
The VoiceOver feature is a screen reader that is built in to iOS devices. To enable VoiceOver go to: Settings ➔ General ➔ Accessibility ➔ VoiceOver and swipe on. When activated, Tap once to select an item, Double-Tap to activate the selected item and Swipe three fingers to scroll.
Language & Dialects

To increase or decrease the speaking rate, slide the cursor from left to right (the turtle or the rabbit) until satisfied. To change the language or dialects of a language go to: Languages & Dialects→Default Dialect and choose a language. You may add a new language by going to: Languages & Dialects→Add New Language as well as download an Enhanced Quality version.

Rotor

The Rotor wheel can be customized by Tapping VoiceOver→Rotor and Tap desired options such as Lines, Words, Headings and Links. A new option of iOS7 is the Handwriting option. This allows an individual to draw the letter or word on the screen and it converts this to text.

To Activate the Rotor, Place two fingers on the device and turn them and you get a dial-like set of options for VoiceOver. This allows users to flick up or down to move through only the text you desire.

Customize the Rotor

By customizing the Rotor, an individual can track through the device quicker. A new feature for the Rotor is the Handwriting feature. The feature allows you to write the letter on the screen with your finger and the device will open a list of applications that start with that letter. Also, when in an application such as Notes the drawings of the letter will convert to text on the screen.

Speak Selection

The Speak Selection feature allows the user to highlight text and then a Button will appear on the screen that will read the highlighted text to the user. To enable this feature go to: Accessibility→Speak Selection→Tap on.
**Speak Screen**

Speak Screen is a new feature of iOS 8 that allows everything on the screen to be read out loud. To enable this feature go to Settings→General→Accessibility→Speech→swipe Speak Screen to the right.

To activate this feature during use, swipe two fingers from top of screen downward. A small horizontal menu, such as pictured below, will appear that allows the user to control the speed, to skip forward or backward on the screen and to exit.

![Speak Screen Menu](Photos)

Speak Screen uses a new high quality voice name Alex.

**Zoom & Display**

**Zoom region**

Zoom Region is a new feature that allows the user to zoom a portion of the screen in a moveable window or zoom the entire screen. The user can customize this window by size as well as choose contrast setting within zoom region. To activate go to Settings→General→Accessibility→Zoom and tap on. To set preferred lens mode go to Zoom→Zoom Region→swipe Window Zoom.

![Zoom Region](Zoom Region)

**Show Controller feature**

Additionally, to increase control within the Zoom Region Window, users can activate the Show Controller feature. This feature creates a ball controller to navigate in the zoom window on the screen with little finger movement. To activate go to Zoom→tap on Show Controller.

When using Zoom controller, the user can initiate Full Zoom, Zoom Out, move the Zoom window around the screen, add filters to the zoom region and resize the zoom region lens.
The filters that can be added to the Zoom Region include inverted (picture below), grayscale, grayscale inverted and low light.

Gray scale

The gray scale feature is a new contrast option so visually, all screens on the phone are in a gray scheme. This features can also be displayed within the Zoom window. To activate Gray Scale go to General→Accessibility→tap on Grayscale.

Bold Text

The Bold Text feature creates all text on the device screen to be bolded for better visibility. To enable this feature go to: Accessibility→Bold Text→Tap on (the device will restart).

Larger Type

The Larger Type feature allows the user to customize the preferred text size for Applications that support Large Dynamic Text. This can be enabled by going to: Accessibility→Larger Type→Tap on the
Larger Dynamic Text. To establish the preferred size of text, drag a finger across the slider from left to right and an example of text will be provided in a window above to assist in choosing a size.

![Larger Dynamic Text slider](image)

**Increase Contrast**
The Increase Contrast feature improves contrast on a background in order to increase the legibility for the user. To enable this feature go to: **Accessibility ➔ Increase Contrast ➔ Tap on.**

**Reduce Motion**
Reduce motion is a feature that reduces the parallax effect. When enabled, the motion when opening apps and alerts will gently fade in and out, instead of quickly zoom in and out. To enable this feature go to: **Accessibility ➔ Reduce Motion ➔ Tap on.**

**Keyboards**
A new feature of the iOS 8 is the ability to input Braille through the Braille keyboard. The keyboard can be set as 6-dot Braille, 8-dot Braille or contracted Braille. This feature can be accessed when VoiceOver is activated. To access Braille options go to **Accessibility ➔ VoiceOver ➔ Braille and choose the preferred input and output options.** Additionally, Nemeth is available to input mathematical equations.

The next step is to activate the Braille Screen Input through the Rotor Wheel. Go to **Accessibility ➔ VoiceOver ➔ Rotor ➔ tap on Braille Screen Input.** This will allow the user to access a preferred Braille Keyboard from the Rotor Wheel to input text and access multiple screens. Using 2 fingers, rotate clockwise like turning a knob while the mobile devices is laid on a flat surface in the landscape orientation. The Braille keyboard will appear for the user.
To calibrate the Braille input buttons, each number appearing on the screen must be tapped before inputing text. For a user to explore where the buttons are positioned on the screen, tap with one finger and hold. This will begin “Explore Mode” when the user can drag his or her finger around the screen and the mobile device will verbally state which number the user is on. To end “Explore Mode,” the user picks up their finger.

For Additional motion control tutorial and Braille Keyboard practice, go to Accessibility→VoiceOver→VoiceOver Practice→Choose Braille in the top right corner of the screen.

**Messaging**

**Word Prediction**

New to iOS8, when a text section is selected, not only will the keyboard come up, but it will also try to guess the word you want to type. It starts with the most commonly used words to begin a sentence and continue to guess the word as you type letters. Simply touch the word you want to have it completed for you.

![Word Prediction Keyboard]

**Audio message**

Not only can you send text messages in iOS8, but you can also send audio messages. To create an audio message, select the “Messages” tab from the home page as if you were sending a text message. Instead of typing a message, press and hold the microphone icon to the right of the text box and speak your message.
When you are done recording, release the button. You then have the option to press 🎧 to play the message back, 🗑️ to delete the message, or 📩 to send the message to the recipient.

## Hearing

### Subtitles & Captioning

To enable the Subtitles and Captioning feature go to: Accessibility ➔ Subtitles & Captioning ➔ and Tap option. To choose the text style, Tap Style and then choose desired option or create a new style which allows you to choose fonts, colors, sizes, text background and text highlights.
Hearing Aids, LED Flash & Mono Audio

Hearing Aids
For Mobile devices such as the Iphone5s-Iphone6s, a user can interface their hearing aids wirelessly through Bluetooth. Certain hearing aids are “Made for iPhone” therefore are easier to pair. This allows the user to easily switch back and forth between devices as needed. Additionally, there is a Hearing Aid Mode that improves audio quality with some hearing devices. To enable these features go to: Accessibility→Hearing Aids→Tap feature on

LED Flash
For Mobile devices, the feature allows the user to be notified of alert by an LED light flash versus a vibration. To enable the LED Flash feature go to: Accessibility→LED Flash for Alerts→Tap on.

Mono Audio
Mono Audio is a feature that allows the user to listen through one headphone in the left or right ear. To enable go to: Accessibility→Mono Audio→Tap on. The user can also listen through both headphones and control the balance between the left and right ear by sliding the left-to-right scale beneath the Mono Audio feature.

Learning

Guided Access Improvements
This feature allows the user to lock the ipad home button and specified areas of the ipad in a application. This feature can be activated by going to Settings→Accessibility→Guided Access. A screen will then appear where the user has options to require a passcode to turn the lock off. New to iOS8 is the ability to set a time limit for the amount of time an application is locked. Alarms can also be set to alert user of time remaining and when time is up. Finally, the user can turn on the “Accessibility shortcut” to access guided access by pressing the home button three times.
To activate guided access, it is best to have enabled the “Accessibility Shortcut” in the accessibility menu. Then the user can tap the home button 3 times when in the application opened on the iPad screen. The user can then tap on “Guided Access in the Accessibility options window.

From here, the user has several options regarding features to lock. Also, if not completed previously, the user will also be prompted to create a passcode to turn the lock off.

In the bottom left corner, the user can tap to adjust the availability of hardware options. This includes the sleep/wake button at the top of the iPad, volume buttons on the side of the iPad, motions functions, and use of a keyboard.

In the middle bottom, the user can adjust what will be available to touch on the screen. By touching the switch, nothing on the screen will be able to be tapped. With the switch for touch still green, the user can circle parts of the depicted screen to indicate portions of the screen to be inaccessible.

Finally, in the lower right of the screen, the user can tap the “Time Limit” option to adjust the time limit for the locked screen. If this feature is to be used, the user must also touch the switch to green below the time set. Once options are arranged, the user then can press “Start” in the top right corner to begin the guided touch activity.
Accessibility Shortcut

The accessibility shortcut allows you to turn accessibility features such as VoiceOver on or off without going into the menu every time.

1. Customize the accessibility shortcut by going to:
   Settings → General → Accessibility → Accessibility shortcut.
2. Triple-click the home button on the device to enable and disable features quickly.

Assistive Touch

Assistive touch can be enabled by going to: Accessibility → Assistive Touch → Tap on. This will create a small gray square to appear on the user’s screen. This square with remain faded on the screen in all applications. Tap the faded square and a menu pop appears on the screen with options such as favorites, Siri, Home button and Device. By tapping Device, another menu appears with Gestures, Shake, Screen shot and Multitasking. New to iOS8 is access to the Notification Center and Control Center using this feature.
Physical and Motor

Switch Control

Switch Control enables users with fine motor impairments to access the device though one or more switches. To Enable Switch Control go to: Accessibility ⇒ Switch Control ⇒ Tap on.

Switch Control highlights items and item groups one by one on the device screen. To make a selection, the user activates a switch when the desired item or item group is highlighted. When an individual item
is selected scanning stops and a new control menu appears. This menu allows the user to choose a physical action to perform, including tap, scroll, press the Home button, perform a gesture (flick, drag, etc.), select a device operation (rotate screen, triple-click Home, etc.) and the option to access Switch Control settings.

As with iOS8, the user can customize switches. To do this, select the “Switches” option.

On the screen that appears, the user can change the function of already established switches or add a new switch.

To edit an existing one, select that switch. You are then given a selection of functions to choose from.
To add a new switch, touch “Add New Switch” at the bottom of the list of already established switches. The user is then given a choice of “External” switches which are other devices paired with the iOS device, “Screen” which includes touching the screen to enact the chosen function, or “Camera” which includes using the camera on the iOS device to detect head movements to the left or right to enact the switch’s function.

Once you choose a switch to add, you are then given options to choose its function. Once a function is chosen, the new switch should appear on the list of switches. At least one switch should have the function of “Select Item.”

Scanning Pop-up Menu
After setting up your switches and their function, you can turn Switch Control on by either going to the Accessibility options in General Settings, or pressing the home button 3 times and selecting “Switch Control.” When an item is selected using a switch, a popup menu appears. In iOS8, there are fewer options presented to the user than in iOS7. However, the number of options has not decreased, just the way they are arranged. Typically, 1-2 scroll options are initially presented with additional options available with the selection of a new popup (the dots on the bottom of the initial window).
Gliding Cursor Speed
In iOS8, the speed to the gliding cursor utilized for switch control can be reduced. Under “Switch Control” in the Accessibility setting, the user can adjust how long it takes the cursor to move across the screen by selecting “Gliding Cursor Speed.” The lower the number, the slower the cursor will move, the level “1” will take about 15 seconds to move across the screen.

Home-Click Speed
The Home-Click Speed feature allows the user to choose between the default, slow and slowest speed required when Double or Triple-clicking the Home button. To enable a preferred speed go to:
Accessibility→Home-click Speed→choose desired speed.

Miscellaneous

“Hey Siri”
Under the Siri Settings, the user can switch on “Allow ‘Hey Siri.” This enables Siri to always be listening to respond to the command “Hey Siri” to ask what you need.
Health Data and Automation Capabilities
It is now easier for 3rd party application and hardware developers to both integrate home automation programs (Home Kit) and track health and fitness data (HealthKit) on an iOS device

Program Manufacturer Contact Info
For more information about Apple accessibility on mobile devices, see the Apple Accessibility Website (http://www.apple.com/accessibility/ios/).

To learn more about a specific Apple Device with iOS7 go to one of these websites.

Information for iPad (http://www.apple.com/ipad/)
Information for iPhone (http://www.apple.com/iphone/)
Information on iPod (http://www.apple.com/ipod/)