AFFIDAVIT OF NATHANIEL E FRANK-WHITE

1. I am a Records Request Processor at the Internet Archive. I make this declaration of my own personal knowledge.

2. The Internet Archive is a website that provides access to a digital library of Internet sites and other cultural artifacts in digital form. Like a paper library, we provide free access to researchers, historians, scholars, and the general public. The Internet Archive has partnered with and receives support from various institutions, including the Library of Congress.

3. The Internet Archive has created a service known as the Wayback Machine. The Wayback Machine makes it possible to browse more than 450 billion pages stored in the Internet Archive's web archive. Visitors to the Wayback Machine can search archives by URL (i.e., a website address). If archived records for a URL are available, the visitor will be presented with a display of available dates. The visitor may select one of those dates, and begin browsing an archived version of the Web. Links on archived files in the Wayback Machine point to other archived files (whether HTML pages or other file types), if any are found for the URL indicated by a given link. For instance, the Wayback Machine is designed such that when a visitor clicks on a hyperlink on an archived page that points to another URL, the visitor will be served the archived file found for the hyperlink's URL with the closest available date to the initial file containing the hyperlink.

4. The archived data made viewable and browsable by the Wayback Machine is obtained by use of web archiving software that automatically stores copies of files available via the Internet, each file preserved as it existed at a particular point in time.

5. The Internet Archive assigns a URL on its site to the archived files in the format http://web.archive.org/web/[Year in yyyy][Month in mm][Day in dd][Time code in hh:mm:ss]/[Archived URL] aka an "extended URL". Thus, the extended URL http://web.archive.org/web/19970126045828/http://www.archive.org/ would be the URL for the record of the Internet Archive home page HTML file (http://www.archive.org/) archived on January 26, 1997 at 4:58 a.m. and 28 seconds (1997/01/26 at 04:58:28). The date indicated by an extended URL applies to a preserved instance of a file for a given URL, but not necessarily to any other files linked therein. Thus, in the case of a page constituted by a primary HTML file and other separate files (e.g., files with images, audio, multimedia, design elements, or other embedded content) linked within that primary HTML file, the primary HTML file and the other files will each have their own respective extended URLs and may not have been archived on the same dates.

6. Attached hereto as Exhibit A are true and accurate copies of screenshots of the Internet Archive's records of the archived files for the URLs and the dates specified in the attached coversheet of each printout.

7. Attached hereto as Exhibit B are true and accurate copies of the Internet Archive's records of the archived files for the URLs and the dates specified in the attached coversheet of each file.

8. Attached hereto as Exhibit C are true and accurate copies of the Internet Archive's records of the archived files for the URLs and the dates specified in the following table.

Folder	URL
001	https://web.archive.org/web/20081031061655/http:/www.wireless4bmw.com:80/pdf/Apple-iPhone3G-ATT.pdf

9. I declare under penalty of perjury that the foregoing is true and correct.

DATE: 01/26/2023

Nathaniel Frank-White

Nathaniel E Frank-White

Please see attached
All Purpose
Jurat form
for additional
Notary Events

JURAT ATTACHMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF Texas }

COUNTY OF Harris }

The foregoing instrument was subscribed and sworn before me this date of 01/26/2023, by Nathaniel Frank-White

This notarial act was an online notarization.

ANA LAURA SALAZAR URIBE
ELECTRONIC NOTARY PUBLIC
STATE OF TEXAS
NOTARY ID: 131757026
COMISSION EXP: OCT 11, 2026

(Notary Seal)

Notary's Signature Ana Laura Salazar Uribe

Registration No.: 131757026

Commission Expiration Date: October 11, 2026

EXHIBIT A

http://web.archive.org/web/20090729034721/http:/www.apple.com/iphone/specs-3g.html

INTERNET ARCHIVE WayBackMachine
http://www.apple.com/iphone/specs-3g.html Go
82 captures
12 Jun 2009 - 9 Jun 2022
JUN JUL SEP
29
2008 2009 2010
About this capture

Technical Specifications

Size and weight[1]

Height: **4.5** inches (115.5 mm)
Width: **2.4** inches (62.1 mm)
Depth: **0.48** inch (12.3 mm)
Weight: **4.7** ounces (133 grams)

Cellular and wireless

- UMTS/HSDPA (850, 1900, 2100 MHz)
- GSM/EDGE (850, 900, 1800, 1900 MHz)
- Wi-Fi (802.11b/g)
- Bluetooth 2.0 + EDR

Location

- Assisted GPS
- Wi-Fi
- Cellular

Power and battery[2]

- Built-in rechargeable lithium-ion battery
- Charging via USB to computer system or power adapter
- Talk time:
  Up to 5 hours on 3G
  Up to 10 hours on 2G
- Standby time: Up to 300 hours
- Internet use:
  Up to 5 hours on 3G
  Up to 6 hours on Wi-Fi
- Video playback: Up to 7 hours
- Audio playback: Up to 24 hours

Mac system requirements

- Mac computer with USB 2.0 port
- Mac OS X v10.4.11 or later
- iTunes 8.2 or later (free download from www.itunes.com/download)

Capacity[3]

- 8GB flash drive

8GB

Color

- Black

Display

- 3.5-inch (diagonal) widescreen Multi-Touch display
- 480-by-320-pixel resolution at 163 ppi
- Support for display of multiple languages and characters simultaneously

Audio playback

- Frequency response: 20Hz to 20,000Hz
- Audio formats supported: AAC, Protected AAC, MP3, MP3 VBR, Audible (formats 2, 3, and 4), Apple Lossless, AIFF, and WAV
- User-configurable maximum volume limit

Video playback

Video formats supported: H.264 video, up to 1.5 Mbps, 640 by 480 pixels, 30 frames per second, Low-Complexity version of the H.264 Baseline Profile with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; H.264 video, up to 2.5 Mbps, 640 by 480 pixels, 30 frames per second, Baseline Profile up to Level 3.0 with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; MPEG-4 video, up to 2.5 Mbps, 640 by 480 pixels, 30 frames per second, Simple Profile with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats

Camera and photos

- 2 megapixels
- Photo geotagging
- iPhone and third-party application integration

External buttons and controls

Sensors

- Accelerometer
- Proximity sensor
- Ambient light sensor

Connectors and input/output

Headphones

- Stereo earphones with built-in microphone
- Frequency response: 20Hz to 20,000Hz
- Impedance: 32 ohms

In the box

- iPhone 3G
- Stereo Headset with mic
- Dock Connector to USB Cable
- USB Power Adapter
- Documentation
- SIM eject tool

Environmental

- iTunes Store account
- Internet access

Windows system requirements

- PC with USB 2.0 port
- Windows Vista; or Windows XP Home or Professional with Service Pack 2 or later
- iTunes 8.2 or later (free download from www.itunes.com/download)
- iTunes Store account
- Internet access

Environmental requirements

- Operating temperature: 32° to 95° F (0° to 35° C)
- Nonoperating temperature: -4° to 113° F (-20° to 45° C)
- Relative humidity: 5% to 95% noncondensing
- Maximum operating altitude: 10,000 feet (3000 m)

Languages

- Language support for English (U.S), English (UK), French (France), German, Traditional Chinese, Simplified Chinese, Dutch, Italian, Spanish, Portuguese (Brazil), Portuguese (Portugal), Danish, Swedish, Finnish, Norwegian, Korean, Japanese, Russian, Polish, Turkish, Ukrainian, Arabic, Thai, Czech, Greek, Hebrew, Indonesian, Malay, Romanian, Slovak, and Croatian
- Keyboard support for English (U.S.), English (UK), French (France), French (Canadian), French (Switzerland), German, Traditional Chinese (Handwriting, Pinyin, Zhuyin), Simplified Chinese (Handwriting, Pinyin), Dutch, Italian, Spanish, Portuguese (Brazil), Portuguese (Portugal), Danish, Swedish, Finnish, Norwegian, Korean, Japanese (QWERTY), Japanese (Kana), Russian, Polish, Turkish, Ukrainian, Estonian, Hungarian, Icelandic, Lithuanian, Latvian, Flemish, Arabic, Thai, Czech, Greek, Hebrew, Indonesian, Malay, Romanian, Slovak, and Croatian
- Dictionary support (enables predictive text and autocorrect) for English (U.S.), English (UK), French, German, Traditional Chinese (Handwriting, Pinyin, Zhuyin), Simplified Chinese (Handwriting, Pinyin), Dutch, Italian, Spanish, Portuguese (Brazil), Portuguese (Portugal), Danish, Swedish, Finnish, Norwegian, Korean, Japanese (QWERTY), Japanese (Kana), Russian, Polish, Turkish, Ukrainian, Lithuanian, Arabic, Thai, Czech , Greek, Hebrew, Indonesian, Malay, Romanian, Slovak, and Croatian

Mail attachment support

Viewable document types: .jpg, .tiff, .gif (images); .doc and .docx (Microsoft Word); .htm and .html (web pages); .key (Keynote); .numbers (Numbers); .pages (Pages); .pdf (Preview and Adobe Acrobat); .ppt and .pptx (Microsoft PowerPoint); .txt (text); .rtf (rich text format); .vcf (contact information); .xls and .xlsx (Microsoft Excel)

Environmental Status Report

iPhone 3G embodies Apple's continuing environmental progress. It is designed with the following features to reduce environmental impact:

PVC-free handset

PVC-free headphones

PVC-free USB cable

Bromine-free printed circuit boards

Mercury-free LCD display

Majority of packaging made from post-consumer recycled fiberboard and biobased materials

Power adapter outperforms strictest global energy efficiency standards

Accessories

MobileMe Subscription
With a MobileMe subscription, you have everything you need, anywhere you are. Your email accounts, calendar, and contacts stay up to date on your iPhone and your computer — automatically.

USB Power Adapter
Use this ultracompact USB-based adapter to charge your iPhone whenever it's not connected to a computer.

Apple Universal Dock

Apple Dock Connector to USB Cable

iPhone 3G Universal Dock Adapter 3-Pack

iPhone TTY Adapter

Apple Component AV Cable

Apple Composite AV Cable

AirPort Extreme Base Station

See more accessories in the Apple Online Store ▸

1. Actual size and weight vary by configuration and manufacturing process.
2. All battery claims depend on network configuration and many other factors; actual results will vary. Rechargeable batteries have a limited number of charge cycles and may eventually need to be replaced by an Apple service provider. See www.apple.com/batteries for more information. For more details of iPhone performance tests for talk time, standby time, Internet use over 3G, Internet use over Wi-Fi, video playback, and audio playback, see www.apple.com/iphone/battery.html.
3. 1GB = 1 billion bytes; actual formatted capacity less.

iPhone 3GS. A Guided Tour.
Watch the video.

iPhone 3.0 Software Update
Already have an iPhone? Update it with new features, free.

iPhone How-To
Get the most out of every iPhone feature with these helpful how-tos.

Buy iPhone
Apple Online Store
Get free shipping ▸

Apple Retail Store
Get free Personal Setup ▸

Call 1-800-MY-APPLE (800-692-7753).
Find your local authorized reseller.

Some features, applications, and services are not available in all areas. See your carrier for details.
Some applications are not available in all areas. Application availability and pricing are subject to change.

iPhone 3G is configured to work only with the wireless services provided by AT&T.

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Shop the Apple Online Store (1-800-MY-APPLE), visit an Apple Retail Store, or find a reseller.

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https://web.archive.org/web/20081213113537/http:/www.allaboutsymbian.com/features/item/Head_to_head_Nokia_N96__HTC_Touch_HD__Apple_iPhone_3G.php

INTERNET ARCHIVE WaybackMachine
http://www.allaboutsymbian.com/features/item/Head_to_head_Nokia_N96__HTC_Touch_HD__Apple_iPhone_3G.php Go
10 captures
13 Dec 2008 - 24 Nov 2010
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Head to head: Nokia N96 : HTC Touch HD : Apple iPhone 3G

Published by Steve Litchfield at 11:16 UTC, December 10th 2008

Everybody loves a good head-to-head, especially when there's some hands-on insight involved and not just a spec fight....

The battle for top end phone supremacy at Christmas 2009? Here are certainly three of the main contenders:

	HTC Touch HD	Apple iPhone 3G	Nokia N96
Form factor	Glass-topped tablet, 3.8" touchscreen, reasonable outdoor contrast, three physical buttons/switches, plastic back	Glass-topped tablet, 3.5" touchscreen, reasonable outdoor contrast, four physical buttons/switches, plastic back	Fairly robust slider phone, 2.8" screen, reasonable outdoor contrast, 29 buttons, including traditional phone keypad (hidden away when not in use)
Price, ex-contract	£545, network-unlocked, very expensive	£350, locked to O2 but with unlimited data for a year - good value, in my opinion	£480, network-unlocked, currently quite expensive
Runs	Windows Mobile 6.1 plus TouchFLO 3D	Version of Apple's desktop OS X	S60 3rd Edition, Feature Pack 2, on Symbian OS.
Battery life	A 1350mAh battery gives reasonable battery life, allied with an 'auto-brightness' feature on its backlight	Good, but integral, non-removable battery, 1400mAh, replacement is via sending away to Apple	Good-ish, BL-5F battery can be removed and replaced quickly, 950mAh. Onboard video and audio decoding hardware mean that media functions are relatively power-efficient

			power-efficient
Connectivity	3.5G. Plus Wi-Fi where available. Automatic joinig of known networks.	3.5G. Plus Wi-Fi, also where available, seamless changeover (in theory)	3.5G, plus Wi-Fi where available, semi-automatic access point selection
Performance and RAM	Full multitasking, 200MB free RAM, though somewhat confused by the appallingly intrusive TouchFLO interface	Very limited multitasking, but applications start and terminate quite quickly, so you might not notice. Background applications limited to Apple built-in apps.	Reasonable, after v12 firmware upgrade, only 49MB of free RAM after booting, but with full multitasking
Built-in Applications	The usual Windows Mobile app set, including Office Mobile, plus a new set of layered graphical mini-apps under the TouchFLO banner	A slightly restricted application set, but graphical and hyper-intuitive.	The usual S60 set of apps and mini-apps, with something of a media/online bent.
Web browsing	Pocket Internet Explorer and Opera Mobile are both included, bizarrely. The latter is the best, but neither can match the Webkit-based browsers on the iPhone and N96. Browsing helped here somewhat by the huge screen and the oodles of RAM	A good touch-driven experience using Safari. No Flash support whatsoever though.	A similarly good experience, this time limited by screen real estate and not bandwidth, with very similar browser code (both based on the same open source Web modules). Flash support, including full Flash video.
Text entry	A variety of on-screen keyboards are available, including an iPhone-like finger-friendly qwerty one, with word completion. Bluetooth keyboards are available.	Text entry via fingers using an on-screen keyboard. Word prediction software helps to enlarge screen touch-sensitive hotspots for likely followup letters, improving typing accuracy a lot. No option for Bluetooth keyboard, at present, sadly. No way of copying and pasting text between apps or within an app.	With no touchscreen or keyboard, text entry is relatively inconvenient, using predictive text on the keypad, and mostly impossible when the N96 is in 'landscape' mode (although a separate Bluetooth keyboard gets round this fairly easily). Full copy and paste support in all apps.
Imaging/Video	Good 5 megapixel camera, spoilt by the lack of a physical, two-stage shutter button - pictures are taken by touching an on-screen icon. No flash. Very slow focussing in poor light conditions. Video capture at QVGA at 30fps is reasonable.	Acceptable (for casual snaps) 2MP camera, fixed focus, no flash, no video recording (latter partly fixable using a third party application)	Awesome 5MP camera with professional lens, auto-focus, multiple scene modes, effects and settings, bright flash, good, though not yet perfect, quality VGA video recording at up to 30 fps. Plus secondary, front-facing VGA camera for video calling.
Music and expansion	WMA and MP3 are supported, with two music players - Windows Media Player is more flexible, but TouchFLO's trivial player is pushed more. 300MB built-in flash memory, so expansion is all via microSD (an 8GB card is included in the box). Music is mainly loaded via Windows Media Player.	Very slick, as you'd expect, and with browsable cover art, MP3 and AAC formats supported. 8GB flash memory capacity (16GB available at extra cost), non-expandable. Music is loaded via iTunes from CDs or DRM-ed purchased music tracks.	Very slick, with *two sets* of dedicated hardware controls for background playback, although cover art is often hit and miss, depending on your music source. MP3, AAC, eAAC+ and WMA formats supported. 16GB flash memory capacity, expandable using microSD to 32GB. A2DP also supported, for wireless listening. Loading is via PC and an iTunes-like client or via DRM-ed purchases over the air from Nokia's Music Store.
Durability	Pouched/cased by necessity, to protect the touch-screen from damage.	Pouched/cased by necessity, to protect the touch-screen from damage.	Pretty durable, with a hard plastic covering over the screen. The camera is not mechanically protected (as on the original N95) and picks up small day-to-day scratches which slightly impact photo quality.
Real world experience	In use, requires two hands to use most of the time, proving a little restrictive	In use, requires two hands to use most of the time, proving a little restrictive	Almost all operations are easy to accomplish one-handed, so other activities (shopping bags, driving(!), child's hand, tube strap) can be undertaken during use.
Messaging	More duplicity, with TouchFLO's Message viewer and Windows Inbox uneasy bedfellows. No functional issues though.	Slick email and SMS clients, but no MMS support. Emailed photos are all downsampled to VGA.	Functional plain text email, SMS and MMS client. Attachments possible for any file with no transcoding or reduction.
Office work	Office Mobile is good and now includes OneNote, full document editing throughout	Word/Excel/Powerpoint/iWork/PDF viewers built into the email client. No editing options, although workarounds using Ajax applications on web sites are possible	Quickoffice 4.1 viewers (upgradable to v5.0 round-trip-perfect editing, including Office 2007 formats), plus Adobe Reader LE 1.5
Navigation	Native version of Google Maps, with cell tower and GPS location support.	Native version of Google Maps, with cell tower and GPS location support.	Native Nokia Maps 2.0, with ad-hoc upgrades for voice guided navigation, with all maps pre-loadable via a PC to enable operation in areas of low data signal. Google Maps is free and a native S60 application, as an over-the-air alternative. Both use both GPS and cell tower data.
Video consumption	Poor experience in both TouchFLO's video player and Windows Media Player. MP4 and WMV support is patchy. A YouTube client is built-in and works well, if rather slow to load and work	Super for Youtube videos (a client is built-in), for BBC iPlayer streaming or for video podcasts from iTunes	DVB-H receiver built-in, for mobile TV in compatible countries. BBC iPlayer also works very well and includes downloading programmes for watching later. YouTube watching is possible through Web in-page or via a Java-based mobile client
Extra applications	Most apps in the Windows Mobile world will load and work, although there are some screen compatibility and TouchFLO issues. Still a good choice.	Extensible using Widgets and Web applications in the Safari web browser, plus third party apps via a slick built-in AppStore/portal, with 10,000 or so apps already contributed.	Plenty of native S60 applications and games, plus thousands more Java apps/games and Widgets. Python, Ruby and Flash Lite applications are also supported. Download! on the device offers a similar service to AppStore, but with nowhere near the same scope and consistency.
Bluetooth	Full A2DP stereo support, plus object exchange, dial up networking and many other profiles	Just headset/mono-handsfree functions.	Full A2DP stereo support, plus object exchange, dial up networking and many other profiles.

	profiles.		
Extra connectivity	Flush 3.5mm headphone socket.	Flush 3.5mm headphone socket.	Flush 3.5mm headphone socket, also with integrated TV-out facility (sending screen feed or full res photos or videos to any TV or video equipment). There's also UPnP support via WiFi and direct printing support with Pictbridge.
Desktop integration	ActiveSync handles syncing to Microsoft Outlook on the desktop. Mac connectivity via third party solutions	Seamless integration with iTunes on Mac or Windows desktops, for all PIM data, settings, etc.	Full functioned but messy integration with several versions of PC Suite and other tools on PC, Nokia Multimedia Transfer, iCal/iSync on Mac, etc.
Online sync/backup	Windows Live works and is free, but is arguably in the same fledgling state as Nokia's Ovi and nowhere near as comprehensive	$100 a year 'Mobile Me' PIM data, plus email and photos. Slick and full realised, but proprietary to Apple.	Free Ovi Sync, plus sync offerings, both free and commercial, from the likes of GooSync, Zyb, Mobical, etc.
	HTC Touch HD	**Apple iPhone**	**Nokia N96**

Picking an overall winner is pretty pointless, tempted though I am, since each device plays to a different target market. The Touch HD will appeal to anyone already committed to Microsoft solutions or with an existing Windows Mobile application portfolio, e.g. within enterprises. The iPhone 3G will appeal to anyone looking for heavy media consumption and gaming - and it's relatively cheap, SIM-free, especially considering the all-in data bundle. But the Nokia N96, from a 'phone' point of view, is perhaps the best of the three featured, for 'all round' use. Your comments welcome!

Steve Litchfield, 10th Dec 2008

Share This (Digg, del.icio.us, Facebook, etc.)

Categories: Comment, Hardware
Platforms: General, S60 3rd Edition

Feature Discussion

mvn

> Actual phone performance would be a useful comparision but very difficult, as someone who purchased an iphone and was disappointed at its poor receiver performance compared to my existing Nokia phone its an important benchmark.

snoyt

> This years crop of Christmas phones is very disappointing. No reason the trade in my N82, until a N97-ish comes available.

slitchfield

> Agreed. If offered any of these three, for free, or having to pay £50 extra to get an N82, I'd go with the N82. Sorry if you guys are getting bored with me going on about the N95/N82-era phones, but the lens protection, the graphics acceleration, the much clearer close-up video capture and, in the N82's case, the Xenon flash - it all adds up.

lookatbowen

> It is a pity you didn't add the N95 (Original) to that comparison. It beats the iPhone and the HTC with features and beats the N96 on the lense protection.
>
> I can't wait for the same comparison with the N97, iPhone and HTC Touch HD.

neilhoskins

> Although these three are all 'flagships', surely it's the 5800 that's aimed at this market sector, rather than the N96? That would be a more relevant head-to-head, surely?

Unregistered

> Probably worth mentioning how poor the 3G implimentation is on the iPhone. If you are heavily dependant on 3G, iPhone will most likely disappoint. Don't know if Apple have secretly fixed it on newer handsets but kept quiet so existing users don't get stressed ?
>
> Been playing with wife's iPhone and love the interface and the simplicity of AppStore. But so many limitations on the basic features. Bluetooth, file transfer to other devices etc. is a joke. I'll just BT you this picture, no you can't. I'll MMS it no you can't. Have to revert to email or PC. Wife's not a techie, that's why she loved the iPhone. What it does is easy to use. She would probably never have tried half of it on an S60 or WinMob unless I set it all up for her (though I did set up the iTunes account for her). But she was able to send MMS and BT pics etc. Asking her to email or use PC instead in not an option.
>
> Also, apart from games, the apps seam a bit basic to me. Not real power apps like you can get on WinMob or even S60. I might be wrong about this, but that's my initial impression. Still no sign of a actually released/available 'Proper' SatNav offerings. Lots of demos on YouTube (assuming they are genuine), so I guess it's just a matter of time/supplier negotiations with Apple (I really hate that Apple control bit).
>
> I've been thinking seriously about getting the HD. Other devices are also tempting me and so I keep swaying in various directions. Just wish HTC sort out drivers for Video etc.
>
> I really love the xda-developers community that is available to HTC users.
>
> If I get a Nokia, I'll get a couple of bug fix releases, but other than that I'm mostly stuck where I am. iPhone may be a bit better, not sure. But with the HD, there is a good chance (no promises) that I'll probably even be able to get some form of WM7 onto it when it eventually comes out. Particularly given the high base specs on the HD.
>
> Just my (fairly unbiased, non fanboy) thoughts.
>
> Zuber

genXhippie

> Quote:
>
> > Originally Posted by **slitchfield** View Post
> > *Agreed. If offered any of these three, for free, or having to pay £50 extra to get an N82, I'd go with the N82. Sorry if you guys are getting bored with me going on about the N95/N82-era phones, but the lens protection, the graphics acceleration, the much clearer close-up video capture and, in the N82's case, the Xenon flash - it all adds up.*
>
> I'm right there w/ you ppl.
>
> I'm happily stuck w/ the N82 heading into 2009. I guess, if I was in the market for one of the current Nokia models, it would surely be the N85(not the extremely overpriced N96 imo). Although, the absence of a xenon kills that option too, but if the N85 "refresh"(w/ xenon) was already upon us, I could easily ditch the N82.

slitchfield

> @neil: Yes, if this head to head had been in late January. The 5800's not out yet, the firmware for it's not even finished yet etc. I wanted to compare three devices that were widely available to the masses.

Unregistered

In this day and age, a crappy built-in browser, or mediocre 3rd party browser, is just unacceptable. Mediocre Youtube experience sucks too. Negates much of the 3.5G and WiFi benefits. Especially for M$. If they can't bother getting this right after 6 years, then it pretty much indicates they are doing at most a mediocre job on the rest of the OS. Even poky S60 has a better browser.

Agree with a previous poster - this season's selection is poor, especially compared to what you can still find online for last year's models. an N95-3 is getting really cheap, and my friend got an N95-4 for free in the US.

PhoneGadgetz

Touch HD > iPhone 3G > N96

I've owned/used all three extensively. The n96 should go bottom of the pack no matter what phone you compare it with. BTW my favourite OS is Symbian... The n96 is the biggest waste of money - slow, bugger, poor battery life, limited potential because of slow cpu.

The n85 is a different story.

Looking forward to the n97.

I wish for more of an objective view instead of Nokia/Symbian always coming on top. I know Nokia do you guys lots of favours but please let's be fair.

neilhoskins

Quote:

Originally Posted by **Unregistered** View Post

If I get a Nokia, I'll get a couple of bug fix releases, but other than that I'm mostly stuck where I am. iPhone may be a bit better, not sure. But with the HD, there is a good chance (no promises) that I'll probably even be able to get some form of WM7 onto it when it eventually comes out. Particularly given the high base specs on the HD.

I have to take issue with that. Free releases from Nokia and regular firmware updates on the N95-1 mean that my device currently bears very little resemblance to the device I bought about 18 months ago. In addition to what I bought I now have:
- a proper streaming media player rather than just a uPNP remote control
- n-gage games
- hugely improved RAM handling
- a whizzy search tool (that I don't use, if the truth be told)
- one-button photo uploads to Flickr and Ovi
- geotagging of photos
- internet radio
- accelerometer-based functions and games
- a Python runtime
- a web runtime

I see this as a reward for being an early adopter, and it gets Nokia a lot of brownie-points in my book.

slitchfield

@phonegadgetz: a) if you read my text, the N96 doesn't come out 'on top', it's merely a better all-rounder. b) I disagree with your assessment of it, given the v12 firmware upgrade, which makes a big difference.

Unregistered

OK,

Just a couple of bug fix releases is a bit unfair.

But alot of it is fixing unfinished/buggy software. Though as you say, there as some nice additions as well.

My point is though, you are stuck at that particular OS level. i.e. S60 3rd addition FPx.

Once they stop making them, you will get a relatively short timeframe of support and then it's onto the next thing.

With the HTC stuff (because of the excellent xda-developers communitiy, not HTC or Microsoft) you continue to get people putting together tweaks and upgrades long after the device is forgotten by the press.

Not sure if I dare say this, but a bit like the linux community I think (or my limited exposure to it).

Zuber

Unregistered

And now, something completely different:

Nokia N96 vs. George W. Bush

1) Popularity:
N96: very unpopular, both in the US and in Europe
GWB: very unpopular, both in the US and in Europe

2) User experience:
N96: very frustrating
GWB: very frustrating

3) Cost:
N96: extremely costly to consumers
GWB: extremely costly to taxpayers

4) Future:
N96: already a lame-duck handset, to be retired (thank God!) in early 2009
GWB: already a lame-duck president, to be retired (thank God!) in early 2009

5) Power:
N96: has too little power
GWB: has too much power

Arthur

N96? LOL... shouldn't even be on this list to be honest.

Hassan

I had N96 myself, really poor battery life, video play back ok but crapy QVGA resolution.
Almost all of the latest videos are 16:9 aspect ratio where N96 still use old 4:3 aspect ratio result a black bar on top and bottom.

Robert dinero videos play fine though. ;)

DVB-H :con?, last time I've heard back in 2005 that the O2 trailing it with Nokia
7710 in Oxford.

Internet browsing again QVGA display, doesn't matter how good web kit you can't see much on screen is. Keep scrolling. No copy past in web browser.

Quick office 5 paid upgrade not something you get out of the box, Documents viewer and even that doesn't support viewing office 2007

documents.

Steve I am sorry but you really are promoting old N96. Why not i8510? what's wrong with that after all it's based on Symbian S60 too. Unless it's All About Nokia. ;)

I had to switch from Nokia after 10 years.

Am happy now with my HD and Storm.

Just to remind you HD plays excelent MP4 files @ 800X480 1.5Mbit/s encoded with H.264 video codes. N96 is no where near that.

Unregistered

I think Steve just hit rock bottom. N96? The most biggest flop in history

abruenin

IMHO, the low screen resolution is the most limiting factor of most actual Symbian phones. The 5800 and N97 won't arrive a day too early. But on the other hand, I had a HTC Touch Pro for some weeks. But I am back on my E71. Though the HTC Touch'es have some eye candy. But I got the things, which I do on a business smartphone, done in a fraction of time on a Symbian device (and only need one hand).
But a very fair comparision for a Symbian fan site!

Unregistered

"But I got the things, which I do on a business smartphone, done in a fraction of time on a Symbian device (and only need one hand)."

Don't suppose you would care to expand on that with specifics ?

Not disputing (or agreeing) but would be interested in specific examples. Might help me which way to go next.

i.e. Go with HD/similar, hang out for N97 or even wait for next gen iPhone/Android.

Thanks,

Zuber

slitchfield

"Steve I am sorry but you really are promoting old N96. Why not i8510? what's wrong with that after all it's based on Symbian S60 too. Unless it's All About Nokia."

The i8510 isn't even finished yet, IMHO. The built-in apps have some issues and third party compatibility is still quite poor. So I refuse to review it yet because I *want* to say nice things about it and I can't *yet*. Give it a couple more months, maybe.

The N96 isn't that bad, you know. It's got less issues than the N95 when it came out and look how rosily we're all regarding THAT now. Give Nokia 2 months to tweak and fine tune the N96 firmware and it'll be a very different story. It'll be up to 60MB free RAM and far less glitches and better video recording etc etc.

Steve

NotMeAgain

Perhaps you haven't setup the HD with the tweaks at XDA-Developers?

Browsing experience:
One of the best because like the Nokia E90 you can view most sites without zooming in/out. And if you tweak with the opera:config in the url you'll be able to make links click-able without zooming. I find this even better than constantly zooming in/out with the iPhone.

Video:
Plays videos better than the other two devices. Install Coreplayer and chuck large 700MB files directly onto your HD and play. I play many flash videos and avi's. No more time wasting and hassles of re-encoding videos.

The resolution and size of the screen makes videos look amazing... Full screen 3.8" WVGA vs n96 2.8" QVGA (about 2.4" with the black borders because of the crappy standard 4:3 resolution). There is no contest.

YouTube client on the HD is the best I've experienced, even better than the iPhone.

Apps:
You'll find far more apps with WM than Symbian. TomTom support for a start. :)

Phone:
This is about the only category I would say the N96 wins because of the keypad. I like real physical buttons however the other two devices can is perfectly adequate handle phone/call functions.

Price:
HD is free from £30 per month contracts. N96 cost about the same if not more... Not everyone is on PAYG or sim free as you keep promoting.

Design/size/weight
Although the HD and iPhone is larger in height x width, it's very slender so can fit in any pocket without adding bulk unlike the n96.

Battery life:
HD >>> iPhone >>> N96

I could go on but I'm bored already. lol

argh

For reference, on my business contract (with Orange), Touch HD was free, N96 was over £60.

Unregistered

One major difference and advantage of iPhone is that it is iconic. Apple has been doing a good job by providing constant update of software to make iPhone (including 1st generation iPhone) up-to-date all the time. Nokia and HTC do not have such "iconic" phones. They just keep introducing new phone models that leave the buyers of "old" phone models in the lurch.

svdwal

"iPhone OS" is the official name for the OS on the iPhone.

Unregistered

Quote:

Originally Posted by **Unregistered** View Post
One major difference and advantage of iPhone is that it is iconic. Apple has been doing a good job by providing constant update of software to make iPhone (including 1st generation iPhone) up-to-date all the time. Nokia and HTC do not have such "iconic" phones. They just keep introducing new phone models that leave the buyers of "old" phone models in the lurch.

Yes, that kind of what I'm saying. Except I was refering to the ability of the user community to provide updates for the HTC devices while the manufacturers move on to the next big thing...

This article got me playing with the Wife's iPhone again yesterday. So much potential, but just missing too many basics. Anyone know when they will be releasing v3. Might be tempted by that. Though Android may have come a long way by then (Apple are just too control freak).

Zuber

35 Comments / Post New Comment

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EXHIBIT B

http://web.archive.org/web/20090206111259/http:/www.marketonline.ro:80/downloads/17725/iPhone_User_Guide.pdf

iPhone
User Guide

For iPhone and iPhone 3G

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Getting Started

1

WARNING: To avoid injury, read all operating instructions in this guide and safety information in the *Important Product Information Guide* at www.apple.com/support/manuals/iphone before using iPhone.

What You Need

To use iPhone, you need:

- A wireless service plan with a carrier that provides iPhone service in your area
- A Mac or a PC with a USB 2.0 port and one of the following operating systems:
  - Mac OS X version 10.4.10 or later
  - Windows XP Home or Professional with Service Pack 2 or later
  - Windows Vista Home Premium, Business, Enterprise, or Ultimate edition
- Display resolution on your computer set to 1024 x 768 or higher
- iTunes 8.0 or later, available at www.itunes.com/download
- An iTunes Store account (for purchases from the iTunes Wi-Fi Music Store or App Store)
- An Internet connection for your computer (broadband recommended)

Activating iPhone

Before you can use any of iPhone's features, you must activate iPhone by signing up for a service plan with an iPhone service carrier in your area and registering iPhone with the network.

Your iPhone may have been activated at the time of purchase. If it isn't activated, contact your iPhone retailer or cellular service provider.

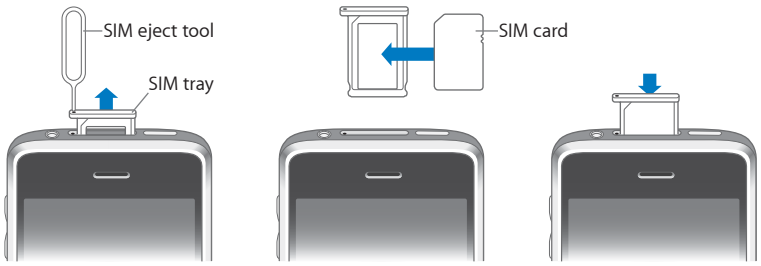
For more information about iPhone, go to www.apple.com/iphone.

Upgrading from an Original iPhone

Contact your cellular service provider for information about upgrading an original iPhone to iPhone 3G. Additional fees may apply.

Installing the SIM Card

If your SIM card was not preinstalled, you must install the SIM card before you can use iPhone.



Install the SIM card:

1 Insert the end of the SIM eject tool into the hole on the SIM tray.

Press firmly and push it straight in until the tray pops out. If you don't have a SIM eject tool, you can use the end of a paper clip.

2 Pull out the SIM tray and place the SIM card in the tray.

The angled corner of the SIM ensures that the card fits only the correct way in the tray.

3 With the tray aligned as shown, carefully replace the SIM tray containing the SIM card in iPhone.

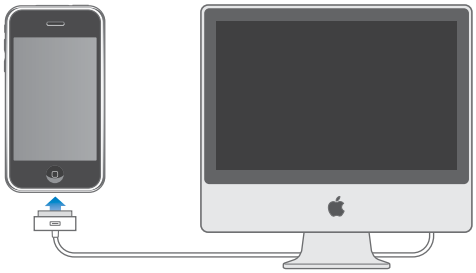
Registering iPhone

Registering iPhone with iTunes enables iTunes to identify your iPhone when it's connected to your computer and help you manage its contents. You can then sync information with your computer and media from iTunes, and create backups of iPhone's contents and settings. You can create an iTunes Store account, or specify an existing account, to enable purchases with iPhone. iTunes also records iPhone's serial number in the event you need it for service or in case of loss.

Register iPhone:

1 Download and install the latest version of iTunes from www.itunes.com/download.

2 Connect iPhone to a USB 2.0 port on your Mac or PC using the cable that came with iPhone.



3 Follow the onscreen instructions in iTunes to register iPhone and sync iPhone with your contacts, calendars, and bookmarks on your computer, and with music, video, and other content from your iTunes library.

In the Set Up Your iPhone screen, select "Automatically sync contacts, calendars and bookmarks" to configure those items to sync automatically when you connect iPhone to your computer. Or, you can customize your sync settings in iTunes. See the following section.

Syncing with iTunes

With iPhone, it's easy to have instant access to your contacts, calendars, and even your browser bookmarks. iTunes can sync all this information to iPhone, and your music, video, and other iTunes library content as well.

Setting Up Syncing

You can set iTunes to sync any or all of the following:

- Contacts—names, phone numbers, addresses, email addresses, and more
- Calendars—appointments and events
- Email account settings
- Webpage bookmarks
- Ringtones
- Music and audiobooks
- Photos
- Podcasts
- Movies and TV shows

- Applications purchased or downloaded from the iTunes Store

You can adjust sync settings whenever iPhone is connected to your computer.

Ringtones, music, audiobooks, podcasts, video content, and purchased applications are synced from your iTunes library. If you don't already have content in iTunes, the iTunes Store (available in some countries) makes it easy to purchase or subscribe to content and download it to iTunes. You can also add music to your iTunes library from your CDs. To learn about iTunes and the iTunes Store, open iTunes and choose Help > iTunes Help.

Contacts, calendars, and webpage bookmarks are synced with applications on your computer, as described in the following section. Contacts and calendars are synced both ways between your computer and iPhone. New entries or changes you make on iPhone are synced to your computer, and vice versa. Webpage bookmarks are also synced both ways. Photos can be synced from an application or from a folder.

Email account settings are only synced from your computer's email application to iPhone. This allows you to customize your email accounts on iPhone without affecting email account settings on your computer.

Note: You can also set up email accounts directly on iPhone. See "Mail, Contacts, and Calendar Accounts" on page 11.

Purchases made on iPhone from the iTunes Wi-Fi Music Store or the App Store are synced back to your iTunes library. You can also purchase or download music and applications directly from the iTunes Store on your computer, then sync them to iPhone.

If you like, you can set iPhone to sync with only a portion of what's on your computer. For example, you might want to sync only a group of contacts from your address book, or only unwatched video podcasts.

Important: You can connect and sync with only one iPhone at a time. Disconnect one before connecting another. You should be logged in to your own computer user account before connecting iPhone. On a PC, if you sync more than one iPhone or iPod to the same computer user account, you must use the same sync settings for each.

Set up iTunes syncing:

1. Connect iPhone to your computer, and open iTunes (if it doesn't open automatically).
2. In iTunes, select iPhone in the sidebar.
3. Configure the sync settings in each of the settings panes.

See the following section for descriptions of the panes.

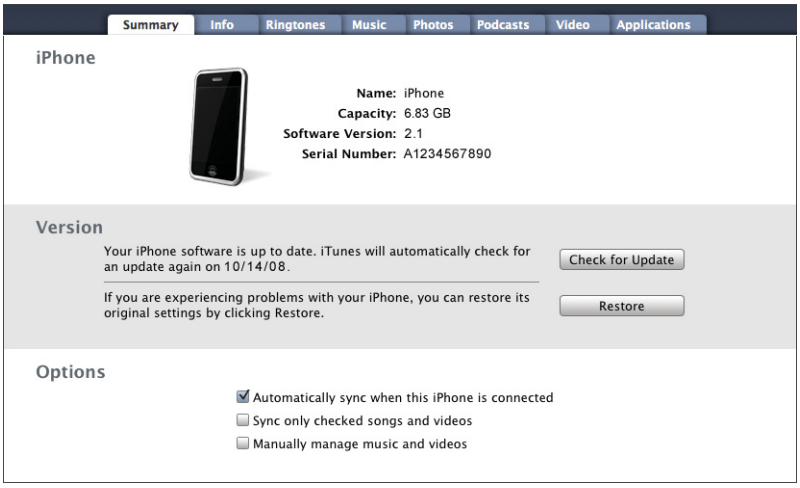
Note: If you set up iPhone to sync contacts, calendars, or bookmarks with MobileMe or Microsoft Exchange, syncing for those items is turned off in iTunes. See "Setting Up Accounts" on page 12.

4 Click Apply in the lower-right corner of the screen.

By default, "Automatically sync when this iPhone is connected" is selected.

iPhone Settings Panes in iTunes

The following sections provide an overview of each of the iPhone settings panes. For more information, open iTunes and choose Help > iTunes Help.



Summary Pane

Select "Automatically sync when this iPhone is connected" to have iTunes sync iPhone automatically whenever you connect it to your computer. Deselect this option if you want to sync only by clicking the Sync button in iTunes. For more information about preventing automatic syncing, see "Preventing Automatic Syncing" on page 11.

Select "Sync only checked songs and videos" if you want to sync only items that are individually checked in your iTunes library.

Select "Manually manage music and videos" to turn off automatic syncing in the Music and Video settings panes. See "Manually Managing Content" on page 59.

Info Pane

The Info pane lets you configure the sync settings for your contacts, calendars, email accounts, and web browser.

- Contacts

You can sync contacts with applications such as Mac OS X Address Book, Microsoft Entourage, Yahoo! Address Book, and Google Address Book on a Mac, or with Yahoo! Address Book, Google Address Book, Windows Address Book (Outlook Express), Vista Contacts, or Microsoft Outlook 2003 or 2007 on a PC. (On a Mac, you can sync contacts with multiple applications. On a PC, you can sync contacts with only one application at a time.)

If you sync with Yahoo! Address Book, you only need to click Configure to enter your new login information when you change your Yahoo! ID or password after you've set up syncing.

- Calendars

  You can sync calendars from applications such as iCal and Microsoft Entourage on a Mac, or from Microsoft Outlook 2003 or 2007 on a PC. (On a Mac, you can sync calendars with multiple applications. On a PC, you can sync calendars with only one application at a time.)

- Mail Accounts

  You can sync email account settings from Mail on a Mac, and from Microsoft Outlook 2003 or 2007 or Outlook Express on a PC. Account settings are only transferred from your computer to iPhone. Changes you make to an email account on iPhone don't affect the account on your computer.

  Note: The password for your Yahoo! email account isn't saved on your computer, so it can't be synced and must be entered on iPhone. In Settings, choose "Mail, Contacts, Calendars," tap your Yahoo! account, and enter the password.

- Web Browser

  You can sync bookmarks on iPhone with Safari on a Mac, or with Safari or Microsoft Internet Explorer on a PC.

- Advanced

  These options let you replace the information on iPhone with the information on your computer during the next sync.

Ringtones Pane

Use the Ringtones pane to select the ringtones you want to sync to iPhone. To learn how to create ringtones in iTunes, see "Creating Ringtones" on page 41.

Music, Podcasts, and Video Panes

Use these panes to specify the media you want to sync. You can sync all music, podcasts, and videos, or select the playlists and specific podcasts and videos you want on iPhone.

If you want to watch rented movies on iPhone, transfer them to iPhone using the Video pane in iTunes.

If there's not enough room on iPhone for all the media you've specified, iTunes asks if you want to create a special playlist. iTunes creates the playlist for you, and sets it to sync with iPhone.

Photos Pane
You can sync photos with iPhoto 4.0.3 or later, or Aperture on a Mac; or with Adobe Photoshop Album 2.0 or later, or Adobe Photoshop Elements 3.0 or later on a PC. You can also sync photos in any folder on your computer that contains images.

Applications Pane
Use the Applications pane to specify which App Store applications you want installed on iPhone. Any applications downloaded directly to iPhone are automatically backed up to your iTunes library when you sync. If you manually delete an application on iPhone, you can reinstall it from this pane as long as it was previously synced.

Preventing Automatic Syncing

You may want to prevent iPhone from syncing automatically when you connect iPhone to a computer other than the one you usually sync with.

Turn off automatic syncing for iPhone: Connect iPhone to your computer. In iTunes, select iPhone in the sidebar, then click the Summary tab. Deselect "Automatically sync when this iPhone is connected." You can always sync by clicking the Sync button.

Prevent automatic syncing for all iPhones and iPods: In iTunes choose iTunes > Preferences (on a Mac) or Edit > Preferences (on a PC), click Devices, and select "Disable automatic syncing for all iPhones and iPods."

If this checkbox is selected, iPhone won't sync automatically, even if "Automatically sync when this iPhone is connected" is selected in the Summary pane.

Prevent automatic syncing one time, without changing settings: Open iTunes. Then, as you connect iPhone to your computer, press and hold Command-Option (on a Mac) or Shift-Control (on a PC) until you see iPhone appear in the sidebar.

Sync manually: In iTunes, select iPhone in the sidebar, then click Sync in the lower-right corner of the window. Or, if you've changed any sync settings, click Apply.

Mail, Contacts, and Calendar Accounts

iPhone works with MobileMe, Microsoft Exchange, and many of the most popular email systems.

Setting Up Accounts

MobileMe and Microsoft Exchange provide not only email, but contact and calendar information that can be synced to iPhone automatically, over the air. MobileMe can also sync your bookmarks on iPhone with Safari on a Mac, or with Safari or Microsoft Internet Explorer on a PC. You set up MobileMe, Exchange, and other email accounts directly on iPhone.

iPhone uses the Exchange ActiveSync protocol to sync email, calendars, and contacts with the following versions of Microsoft Exchange:

- Exchange Server 2003 Service Pack 2
- Exchange Server 2007 Service Pack 1

For many of the popular email accounts, iPhone automatically enters most of the settings for you.

If you don't have already have an email account, you can get a free account online at www.yahoo.com, www.google.com, or www.aol.com. You can also try MobileMe, free for 60 days. Go to www.me.com.

Add an account on iPhone:

1. From iPhone's Home screen, tap Settings.
2. Tap "Mail, Contacts, Calendars," then tap Add Account.
3. Tap an account type:
   - Microsoft Exchange
   - MobileMe
   - Google email
   - Yahoo! Mail
   - AOL
   - Other
4. Enter your account information and tap Save.

   Your service provider or system administrator can provide the account settings you need.

   Exchange accounts: Enter your complete email address, domain (optional), user name, password, and a description. The description can be whatever you like.

   iPhone supports Microsoft's Autodiscovery service, which uses your user name and password to determine the address of the Exchange server. If the server's address can't be determined, you're asked to enter it. (Enter the complete address in the Server field.) Once you connect to the Exchange server, you may be prompted to change your passcode to match the policies set on the server.

5 If you're setting up an Exchange or MobileMe account, tap the items you want to sync—mail, contacts, calendars, and bookmarks (MobileMe only). For Exchange accounts, you can also set how many days of email you want to sync to iPhone. Then tap Save.

Important: If you sync contacts or calendars using your Exchange or MobileMe account, syncing for contacts or calendars in iTunes is turned off. Any contact or calendar information on iPhone is replaced by the contacts and calendars from your Exchange or MobileMe account.

Push Accounts

MobileMe, Microsoft Exchange, and Yahoo! Mail are known as "push" accounts. When new information is available, such as the arrival of an email message, the information is automatically delivered (pushed) to iPhone. (In contrast, "fetch" services require your email software to periodically check with your service provider to see if new messages have arrived, and then request them to be delivered.) MobileMe and Exchange also use push to sync your contacts, calendars, and bookmarks (MobileMe only) if you have those items selected in the account settings.

Synced information is transferred automatically over your wireless connection; you don't need to connect iPhone to your computer to sync. If you don't have a cellular connection, iPhone can receive pushed data over a Wi-Fi connection when iPhone is awake (the screen is on, or iPhone is connected to your computer or a power adapter).

Installing Configuration Profiles

If you're in an enterprise environment, you may be able to set up accounts and other items on iPhone by installing a configuration profile. Configuration profiles provide a way for system administrators to quickly set up your iPhone to work with the information systems at your company, school, or organization. For example, a configuration profile might set up your iPhone to access the Microsoft Exchange servers at work, enabling iPhone to access your Exchange email, calendars, and contacts.

Configuration profiles can configure multiple settings on iPhone all at once. For example, a configuration profile can set up your Microsoft Exchange account, VPN account, and certificates for secure access to your company's network and information. A configuration profile may turn on the Passcode Lock, requiring you to create and enter a passcode for using iPhone.

Your system administrator may distribute configuration profiles by email or by putting them on a secure webpage.

Install a configuration profile:

1. Using iPhone, open the email message or download the configuration profile from the website provided by your system administrator.
2. When the configuration profile opens, tap Install.
3. Enter passwords and other information as requested.

Important: You may be asked to verify that the configuration profile is trusted. If in doubt, consult your system administrator before installing a configuration profile.

Settings provided by a configuration profile cannot be altered. If you want to change these settings, you must first remove the configuration profile or install an updated configuration profile.

Remove a profile: In Settings, choose General > Profile, then select the configuration profile and tap Remove.

Removing a configuration profile deletes the settings and all other information installed by the configuration profile from iPhone.

Disconnecting iPhone from Your Computer

Unless iPhone is syncing with your computer, you can disconnect it from your computer at any time.

When iPhone is syncing with your computer, iPhone shows "Sync in progress." If you disconnect iPhone before it finishes syncing, some data may not get transferred. When iPhone finishes syncing, iTunes shows "iPhone sync is complete."

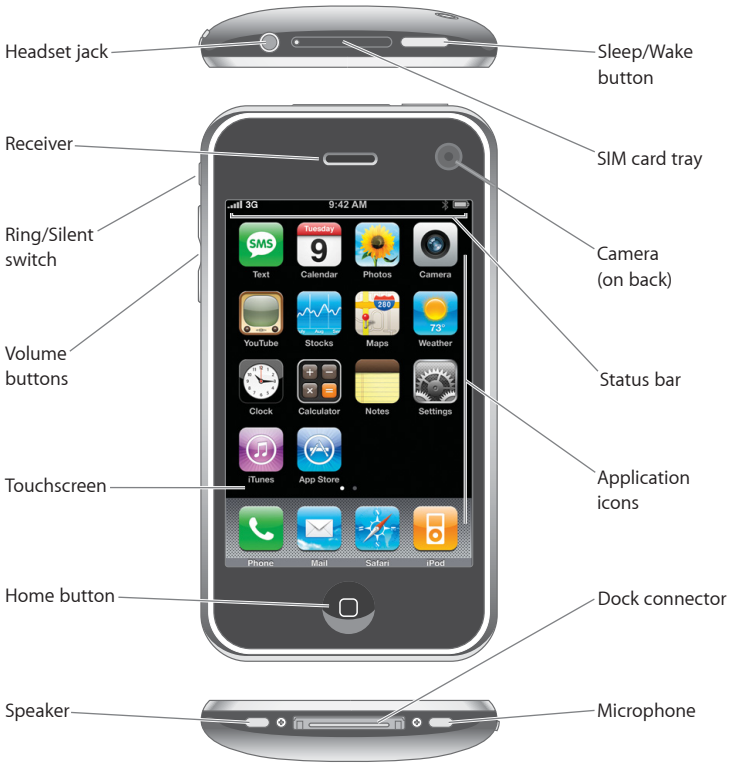
Cancel a sync: Drag the slider on iPhone.

If you get a call during a sync, the sync is canceled automatically and you can unplug iPhone to answer the call. Connect iPhone after the call to finish syncing.

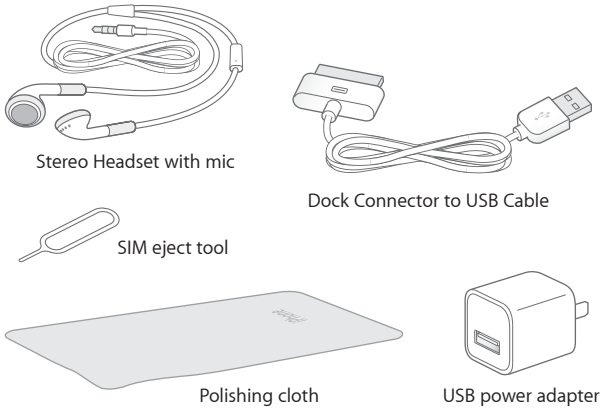
Basics

2

iPhone at a Glance



iPhone Included Accessories



Item	What you can do with it
Stereo Headset with mic	Listen to music, videos, and phone calls. Use the built-in microphone to talk. Press the mic button to answer or end a call. When listening to iPod, press the button once to play or pause a song, or press twice quickly to skip to the next track.
Dock Connector to USB Cable	Use the cable to connect iPhone to your computer to sync and charge. The cable can be used with the optional dock or plugged directly into iPhone.
USB power adapter	Connect the power adapter to iPhone using the included cable, then plug it into a standard power outlet to charge iPhone.
Polishing cloth	Wipe the iPhone screen.
SIM eject tool	Eject the SIM card.

Status Icons

The icons in the status bar at the top of the screen give information about iPhone:

Status icon		What it means
	Cell signal	Shows whether you're in range of the cellular network and can make and receive calls. The more bars, the stronger the signal. If there's no signal, the bars are replaced with "No service."
	Airplane mode	Shows that airplane mode is on—you cannot use the phone, access the Internet, or use Bluetooth® devices. Non-wireless features are available. See page 101.
3G	3G	Shows that your carrier's 3G network is available, and iPhone can connect to the Internet over 3G. Available on iPhone 3G only. See page 30.
E	EDGE	Shows that your carrier's EDGE network is available, and iPhone can connect to the Internet over EDGE. See page 30.
	GPRS	Shows that your carrier's GPRS network is available, and iPhone can connect to the Internet over GPRS. See page 30.
	Wi-Fi	Shows that iPhone is connected to the Internet over a Wi-Fi network. The more bars, the stronger the connection. See page 24.
	Network activity	Indicates over-the-air syncing or other network activity. Some third party applications may also use this icon to indicate an active process.
VPN	VPN	Shows that you are connected to a network using VPN. See "Network" on page 106.
	Lock	Shows that iPhone is locked. See page 20.
	Play	Shows that a song, audiobook, or podcast is playing. See page 60.
	Alarm	Shows that an alarm is set. See page 93.

Status icon		What it means
	Bluetooth	*Blue or white icon:* Bluetooth is on and a device, such as a headset or car kit, is connected. *Gray icon:* Bluetooth is on, but no device is connected. *No icon:* Bluetooth is turned off. See page 42.
	Bluetooth Headset battery	Shows battery level for the iPhone Bluetooth Headset when it's connected. See "iPhone Bluetooth Headset" on page 42.
	Battery	Shows battery level or charging status. See page 31.
	TTY	Shows that iPhone is set to work with a TTY machine. See page 116.

Home Screen

Press the Home button at any time to see your iPhone applications. Tap any application icon to get started.

iPhone Applications

The following applications are included with iPhone:

Phone	Make calls, with quick access to recent callers, favorites, and all your contacts. Or dial manually using the numeric keypad. Visual voicemail presents a list of your voicemail messages. Just tap to listen to any message you want, in any order you want.
Mail	iPhone works with MobileMe, Microsoft Exchange, and many of the most popular email systems—including Yahoo! Mail, Google email, and AOL—as well as most industry-standard POP3 and IMAP email systems. View PDFs and other attachments within Mail. Save attached photos and graphics to your Camera Roll album.
Safari	Browse websites over a cellular data network or over Wi-Fi. Rotate iPhone sideways for widescreen viewing. Double-tap to zoom in or out—Safari automatically fits the webpage column to the iPhone screen for easy reading. Sync bookmarks with Safari or Microsoft Internet Explorer on your computer. Add Safari web clips to the Home screen for fast access to favorite websites. Save images from websites to your Photo Library.

iPod	Listen to your songs, audiobooks, and podcasts. Create on-the-go playlists or use the Genius feature to automatically create a playlist with songs from your library that go great together. Watch movies and video podcasts in widescreen.
Text	Send and receive SMS text messages with anyone who has an SMS-capable phone. Conversations are saved in an iChat-like presentation, so you can see a history of messages you've sent and received.
Calendar	View your MobileMe, iCal, Microsoft Entourage, Microsoft Outlook, or Microsoft Exchange calendars. Enter events on iPhone and they get synced back to the calendar on your computer. Set alerts to remind you of events, appointments, and deadlines.
Photos	View photos and images transferred from your computer or saved on iPhone. View them in portrait or landscape mode. Zoom in on any photo for a closer look. Watch a slideshow. Email photos, add them to a MobileMe gallery, assign them to contacts, and use them as wallpaper.
Camera	Take two-megapixel photos and view them on iPhone, email them, or upload them to your computer. Take a friend's picture and set iPhone to display it when that person calls you.
YouTube	Play videos from YouTube's online collection.[1] Search for any video, or browse featured, most viewed, most recently updated, and top-rated videos.
Stocks	Watch your favorite stocks, updated automatically from the Internet.
Maps	See a street map, satellite view, or hybrid view of locations around the world. Zoom in for a closer look. Find and track your current (approximate) location. Get detailed driving directions and see current highway traffic conditions. Find businesses in the area and call with a single tap.[2]

Weather	Get current weather conditions and a six-day forecast. Add your favorite cities for a quick weather report anytime.
Clock	View the time in cities around the world—create clocks for your favorites. Set one or more alarms. Use the stopwatch, or set a countdown timer.
Calculator	Add, subtract, multiply, and divide. Rotate iPhone sideways to use expanded scientific functions.
Notes	Jot notes on the go—reminders, grocery lists, brilliant ideas. Send them in email.
Settings	Set up accounts and adjust all iPhone settings in one convenient place. Set your own volume limit for listening comfort. Set your ringtone, wallpaper, screen brightness, and settings for network, phone, mail, web, music, video, photos, and more. Set auto-lock and a passcode for security. Restrict access to explicit iTunes content and certain applications. Reset iPhone.
iTunes	Search the iTunes Wi-Fi Music Store music catalog, or browse, preview, and purchase new releases, top-ten songs and albums, and more.[1] In select Starbucks locations,[3] find out what song is playing in the café, then buy it instantly. Browse, preview, and purchase other songs from featured Starbucks Collections.
App Store	Search the App Store for iPhone applications you can purchase or download using your Wi-Fi or cellular data network connection. Read or write your own reviews for your favorite apps. Download and install the application on your Home screen.[1]
Contacts	Get contact information synced from MobileMe, Mac OS X Address Book, Yahoo! Address Book, Google Address Book, Windows Address Book (Outlook Express), Microsoft Outlook, or Microsoft Exchange. Search, add, change, or delete contacts, which get synced back to your computer.

[1] Not available in all areas.
[2] Not all Maps features and services available in all areas.
[3] In the U.S. only.

Customizing the Home Screen

You can customize the layout of icons on the Home screen—including the Dock icons along the bottom of the screen. If you want, arrange them over multiple Home screens.

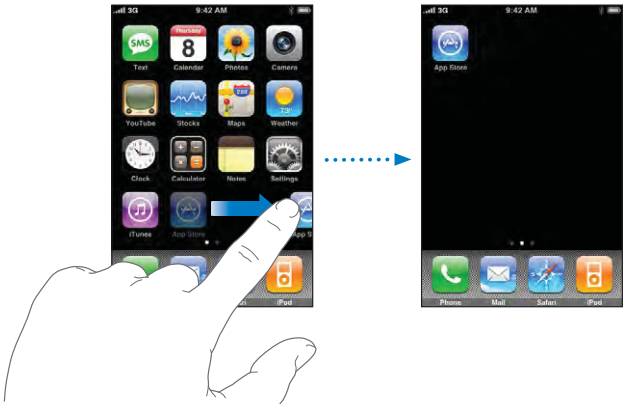
Rearrange icons:

1. Touch and hold any Home screen icon until the icons begin to wiggle.
2. Arrange the icons by dragging them.

3 Press the Home ▢ button to save your arrangement.

You can also add links to your favorite webpages on the Home screen. See "Web Clips" on page 57.

Create additional Home screens: While arranging icons, drag an icon to the right edge of the screen until a new screen appears. You can flick to return to the original screen and drag more icons to the new screen.



You can create up to nine screens. The number of dots above the Dock shows the number of screens you have, and indicates which screen you are viewing.

Switch to another Home screen: Flick left or right, or tap to the left or right of the row of dots.

Reset your Home screen to the default layout: Choose Settings > General > Reset and tap Reset Home Screen Layout.

Buttons

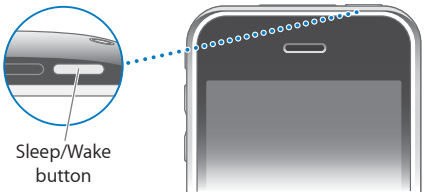
A few simple buttons make it easy to turn iPhone on and off, adjust the volume, and switch between ring and silent modes.

Sleep/Wake Button

When you're not using iPhone but you still want to receive calls and text messages, you can lock it.

When iPhone is locked, nothing happens if you touch the screen. You can still listen to music and adjust the volume, and use the button on the included stereo headset to play or pause a song, or answer or end a call.

By default, if you don't touch the screen for a minute, iPhone locks automatically.



Lock iPhone	Press the Sleep/Wake button.
Unlock iPhone	Press the Home button or the Sleep/Wake button, then drag the slider.
Turn iPhone completely off	Press and hold the Sleep/Wake button for a few seconds until the red slider appears, then drag the slider. When iPhone is off, incoming calls go straight to voicemail.
Turn iPhone on	Press and hold the Sleep/Wake button until the Apple logo appears.

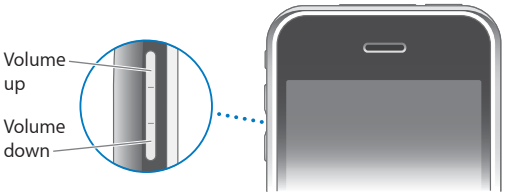
For information about changing how long before iPhone locks, see "Auto-Lock" on page 108. For information about setting iPhone to require a passcode to unlock it, see "Passcode Lock" on page 108.

Volume Buttons

When you're on the phone or listening to songs, movies, or other media, the buttons on the side of iPhone adjust the audio volume. Otherwise, the buttons control the volume for the ringer, alerts, and other sound effects.

> ***WARNING:*** For important information about avoiding hearing loss, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

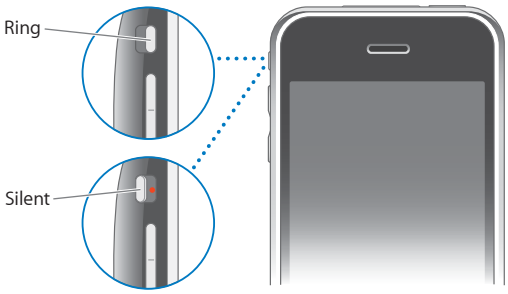
To adjust the volume, use the buttons on the side of iPhone.



To set a volume limit for music and videos on iPhone, see "Music" on page 118.

Ring/Silent Switch

Flip the Ring/Silent switch to change between ring 🔔 and silent 🔕 modes.



When set to ring mode, iPhone plays all sounds. When set to silent mode, iPhone doesn't ring or sound any alerts or sound effects. Alarms set using Clock do sound, however. By default, when you get a call, iPhone vibrates whether it's set to ring or in silent mode. If iPhone is set to ring mode, you can silence a call by pressing the Sleep/Wake button or one of the volume buttons once. Press a second time to send the call to voicemail.

For information about changing sound and vibrate settings, see "Sounds and the Ring/Silent Switch" on page 104.

Touchscreen

The controls on the iPhone touchscreen change dynamically depending on the task you are performing.

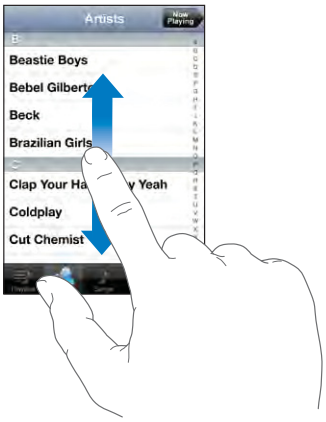
Opening Applications

Open an application: Tap an icon.

Return to the Home screen: Press the Home ▢ button below the display.

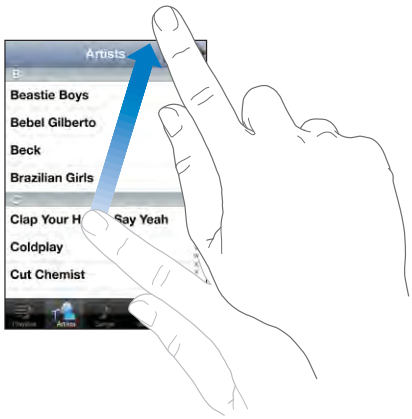
Scrolling

Drag up or down to scroll. On some screens such as webpages, you can also scroll side to side.



Dragging your finger to scroll won't choose or activate anything on the screen.

Flick to scroll quickly.



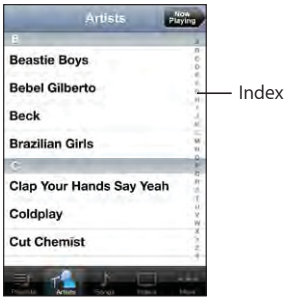
You can wait for the scrolling to come to a stop, or tap or touch anywhere on the screen to stop it immediately. Tapping or touching to stop scrolling won't choose or activate anything on the screen.

To quickly scroll to the top of a list, webpage, or email, just tap the status bar.

Lists

Some lists have an index along the right side.

Find items in an indexed list: Tap a letter to jump to items starting with that letter. Drag your finger along the index to scroll quickly through the list.



Choose an item: Tap an item in the list.

Depending on the list, tapping an item can do different things—for example, it may open a new list, play a song, open an email, or show someone's contact information so you can call that person.

Return to a previous list: Tap the back button in the upper-left corner.

Zooming In or Out

When viewing photos, webpages, email, or maps, you can zoom in and out. Pinch your fingers together or apart. For photos and webpages, you can double-tap (tap twice quickly) to zoom in, then double-tap again to zoom out. For maps, double-tap to zoom in and tap once with two fingers to zoom out.

Onscreen Keyboard

Use the onscreen keyboard to enter text, such as contact information, text messages, or web addresses.

Typing

Depending on the application you're using, the intelligent keyboard may automatically suggest corrections as you type to help prevent mistyped words.

Enter text:

1 Tap a text field, such as in a note or new contact, to bring up the keyboard.

2 Tap keys on the keyboard.

Start by typing with just your index finger. As you get more proficient, you can type more quickly using two thumbs.

As you type, each letter appears above your thumb or finger. If you touch the wrong key, you can slide your finger to the correct key. The letter isn't entered until you release your finger from the key.

Type uppercase	Tap the Shift ⇧ key before tapping a letter.
Quickly type a period and space	Double-tap the space bar. (You can turn this feature on or off in Settings > General > Keyboard.)
Turn caps lock on	Double-tap the Shift ⇧ key. The Shift key turns blue, and all letters you type are uppercase. Tap the Shift key again to turn caps lock off. (You can turn this feature on or off in Settings > General > Keyboard.)
Show numbers, punctuation, or symbols	Tap the Number .?123 key. Tap the Symbol #+= key to see additional punctuation and symbols.
Type letters or symbols that aren't on the keyboard	Press and hold the related letter or symbol, then slide to choose a variation.

International Keyboards

iPhone provides keyboards that allow you to enter text in many different languages.

For a list of supported keyboards, www.apple.com/iphone/specs.html.

Turn international keyboards on or off:

1. In Settings, choose General > International > Keyboards.
2. Turn on the keyboards you want. Languages with more than one keyboard, such as Japanese and Chinese, indicate the number of keyboards available. Tap to choose a keyboard for that language.

Switch keyboards if more than one keyboard is turned on	Tap 🌐 to switch keyboards. When you tap the symbol, the name of the newly activated keyboard appears briefly.
Enter Japanese Kana	Use the Kana keypad to select syllables. For more syllable options, tap the arrow key and select another syllable or word from the window.
Enter Japanese QWERTY	Use the QWERTY keyboard to input code for Japanese syllables. As you type, suggested syllables appear. Tap the syllable to choose it.
Enter Korean	Use the 2-Set Korean keyboard to type Hangul letters. To type double consonants or compound vowels, press and hold the letter, then slide to choose the double letter.
Enter Simplified Chinese Pinyin	Use the QWERTY keyboard to enter Pinyin for Chinese characters. As you type, suggested Chinese characters appear. Tap a character to choose it, or continue entering Pinyin to see more character options.
Enter handwritten Simplified or Traditional Chinese	Use the touchpad to enter Chinese characters with your finger. As you write character strokes, iPhone recognizes them and shows matching characters in a list, with the closest match at the top. When you choose a character, its related characters appear in the list as additional choices.

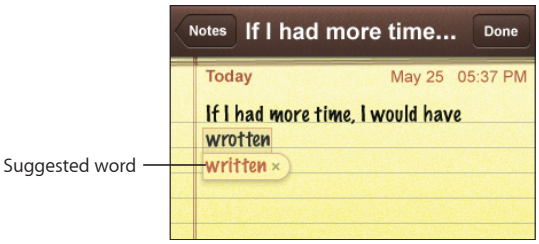
When Simplified or Traditional Chinese handwriting formats are turned on, you can enter Chinese characters with your finger, as shown:

Dictionary

For many languages, iPhone has dictionaries to help you type. The appropriate dictionary is activated automatically when you select a supported keyboard.

For a list of supported languages, see www.apple.com/iphone/specs.html.

iPhone uses the active dictionary to suggest corrections or complete the word you're typing. You don't need to interrupt your typing to accept the suggested word.

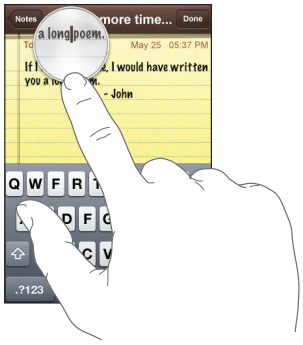


Accept or reject dictionary suggestions:

- *To reject the suggested word,* finish typing the word as you want it, then tap the "x" to dismiss the suggestion before typing anything else. Each time you reject a suggestion for the same word, iPhone becomes more likely to accept your word.
- *To use the suggested word,* type a space, punctuation mark, or return character.

Note: If you are entering Chinese or Japanese, tap one of the suggested alternatives.

Edit text: Touch and hold to see a magnified view, then drag to position the insertion point.



Stereo Headset with mic

The headset included with iPhone features a microphone and an integrated button that allows you to answer and end calls easily, and control audio and video playback.

Plug in the headset to listen to music or a phone call. Callers hear you through the headset microphone. Press the mic button to control music playback and answer or end calls, even when iPhone is locked.

Pause a song or video	Press the mic button once. Press again to resume playback.
Skip to the next song	Press twice quickly.
Answer an incoming call	Press once.
End the current call	Press once.

Decline an incoming call	Press and hold for about two seconds, then let go. When you let go, two low beeps confirm you declined the call.
Switch to an incoming or on-hold call and put the current call on hold	Press once. Press again to switch back to the first call.
Switch to an incoming or on-hold call and end the current call	Press and hold for about two seconds, then let go. When you let go, two low beeps confirm you ended the first call.

If you get a call while the headset is plugged in, you can hear the ringtone through both the iPhone speaker and the headset.

Connecting to the Internet

iPhone connects to the Internet automatically whenever you use Mail, Safari, YouTube, Stocks, Maps, Weather, the App Store or iTunes Wi-Fi Music Store.

How iPhone Connects to the Internet

iPhone connects to the Internet using either a Wi-Fi network or a cellular data network. iPhone does the following, in order, until connected:

- Connects over the last Wi-Fi network you used that's available.
- If no previously used Wi-Fi networks are available, iPhone shows a list of Wi-Fi networks in range. Tap a network and, if necessary, enter the password to join. Networks that require a password show next to them. You can prevent iPhone from automatically showing available networks. See "Wi-Fi" on page 102.
- If no Wi-Fi networks are available or you choose not to join any, iPhone connects to the Internet over a cellular data network (3G, E, or o). You cannot access the iTunes Wi-Fi Music Store over a cellular data network.

If no Wi-Fi networks are available and a cellular data network isn't available, iPhone cannot connect to the Internet.

Note: If you're using an original iPhone, you cannot use the Internet over a cellular data network when you're on a call. You must have a Wi-Fi connection to use Internet applications while also talking on the phone.

Many Wi-Fi networks can be used free of charge including, in some regions, Wi-Fi hotspots provided by your iPhone carrier. Some Wi-Fi networks require a fee. To join a Wi-Fi network at a hotspot where charges apply, you can usually open Safari to see a webpage that allows you to sign up for service.

Joining a Wi-Fi Network

The Wi-Fi settings let you turn on Wi-Fi and join Wi-Fi networks.

Turn on Wi-Fi: Choose Settings > Wi-Fi and turn Wi-Fi on.

Join a Wi-Fi network: Choose Settings > Wi-Fi, wait a moment as iPhone detects networks in range, then select a network (fees may apply to join some Wi-Fi networks). If necessary, enter a password and tap Join (networks that require a password appear with a lock icon).

Once you've joined a Wi-Fi network manually, iPhone automatically connects to it whenever the network is in range. If more than one previously used network is in range, iPhone joins the one last used.

When iPhone is connected to a Wi-Fi network, the Wi-Fi icon in the status bar at the top of the screen shows connection strength. The more bars you see, the stronger the connection.

For information about configuring Wi-Fi settings, see "Wi-Fi" on page 102.

Cellular Data Network Access

3G, EDGE, and GPRS allow Internet connectivity over the cellular network available through your iPhone carrier's wireless service. Check the carrier's network coverage in your area for availability.

You can tell iPhone is connected to the Internet via the cellular data network if you see the 3G (3G), EDGE (E), or GPRS (o) icon in the status bar at the top of the screen.

Note: If you're using an original iPhone, you may not be able to receive calls while iPhone is actively transferring data over a cellular network—downloading a webpage, for example. Incoming calls then go directly to voicemail.

Turn 3G on or off: In Settings, choose General > Network and tap Enable 3G.

If you're outside your carrier's network, you may be able to access the Internet through another carrier. To enable email, web browsing, and other data services whenever possible, turn Data Roaming on.

Turn Data Roaming on: In Settings, choose General > Network and turn Data Roaming on.

Important: Roaming charges may apply. To avoid roaming charges, make sure Data Roaming is turned off.

Internet Access on an Airplane

Airplane mode turns off all the iPhone radio transmitters to avoid interfering with aircraft operation. In some regions, where allowed by the aircraft operator and applicable laws and regulations, you can turn on Wi-Fi while airplane mode is on to:

- Send and receive email
- Browse the Internet
- Sync your contacts and calendars over the air
- Stream YouTube videos
- Get stock quotes
- Get map locations
- Get weather reports
- Purchase music and applications

For more information, see "Airplane Mode" on page 101.

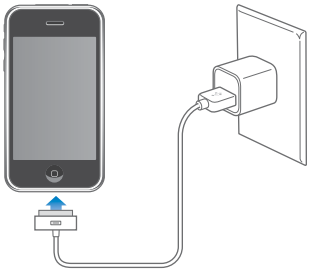
Battery

iPhone has an internal rechargeable battery.

Charging the Battery

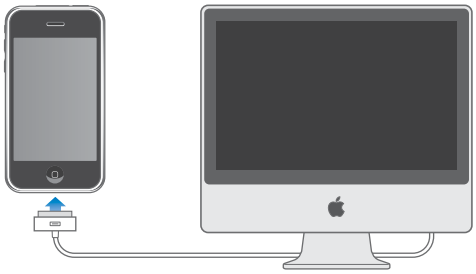
WARNING: For important safety information about charging iPhone, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

Charge the battery: Connect iPhone to a power outlet using the included USB cable and power adapter.



Charge the battery and sync iPhone: Connect iPhone to your computer using the included USB cable. Or, connect iPhone to your computer using the included cable and the Dock, available separately.

Unless your keyboard has a high-powered USB 2.0 port, you must connect iPhone to a USB 2.0 port on your computer.



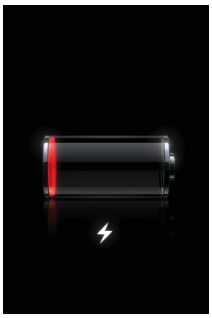
Important: iPhone 3G cannot be charged with a FireWire power adapter or FireWire-based car charger. If iPhone is connected to a computer that's turned off or is in sleep or standby mode, the iPhone battery may drain.

An icon in the upper-right corner of the screen shows battery charging status.

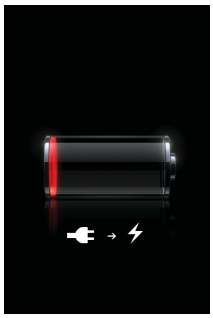
Charging Charged

If you charge the battery while syncing or using iPhone, it may take longer to charge.

Important: If iPhone is very low on power, it may display one of the following images, indicating that iPhone needs to charge for up to ten minutes before you can use it. If iPhone is extremely low on power, the display may be blank for up to two minutes before one of the low-battery images appears.



or



Maximizing Battery Life

iPhone uses lithium-ion batteries. To learn more about how to maximize the lifespan and battery life of your iPhone, go to www.apple.com/batteries.

Replacing the Battery

Rechargeable batteries have a limited number of charge cycles and may eventually need to be replaced. The iPhone battery isn't user replaceable; it can only be replaced by an authorized service provider. For more information, go to www.apple.com/support/iphone/service/battery.

Cleaning iPhone

To clean iPhone, unplug all cables and turn off iPhone (press and hold the Sleep/ Wake button, then slide the onscreen slider). Use a soft, slightly damp, lint-free cloth. Avoid getting moisture in openings. Don't use window cleaners, household cleaners, aerosol sprays, solvents, alcohol, ammonia, or abrasives to clean iPhone.

Restarting and Resetting iPhone

If something is not working right, restarting or resetting iPhone will likely solve the problem.

Restart iPhone: Press and hold the Sleep/Wake button until the red slider appears. Slide your finger across the slider to turn off iPhone. To turn iPhone back on, press and hold the Sleep/Wake until the Apple logo appears.

Reset iPhone: Press and hold the Sleep/Wake button and the Home button at the same time for at least ten seconds, until the Apple logo appears.

For more troubleshooting suggestions, see Appendix A, "Troubleshooting," on page 132.

Phone

3

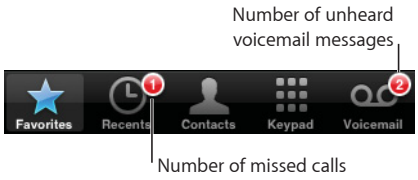
Making a call on iPhone is as simple as tapping a name and number in your contacts, tapping one of your favorites, or tapping a recent call to return it. Visual voicemail displays a list of your messages you can listen to in any order you want. Setting up conference calls is a snap.

WARNING: For important information about driving safely, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

Phone Calls

The cell signal icon at the top of the screen shows whether you're in range of the cellular network and can make and receive calls. The more bars, the stronger the signal.

Making Calls



Buttons at the bottom of the Phone screen give you quick access to your favorites, recent calls, your contacts, and a numeric keypad for dialing manually.

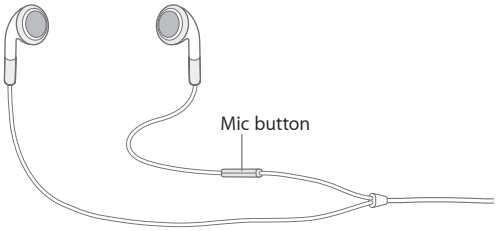
Call someone in your contacts list	Tap Contacts, choose a contact, then tap a phone number.
Call a favorite	Tap Favorites, then choose a contact.
Return a recent call	Tap Recents, then tap a name or number in the list.
Dial a number	Tap Keypad, enter the number, then tap Call.

Jump to favorites from anywhere: Double-click the Home ▢ button.

Bring up the last number you dialed: Tap Keypad, then tap Call. Tap Call again to dial the number.

Receiving Calls

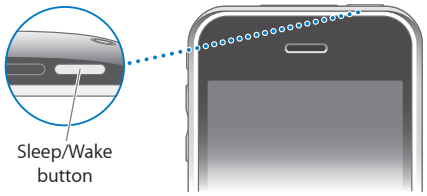
When you receive a call, tap Answer. If iPhone is locked, drag the slider. If you're using the stereo headset, press the mic button to answer a call.



Silence a call: Press the Sleep/Wake or either volume button. You can still answer the call after silencing it, until it goes to voicemail.

Decline a call: Do one of the following to send a call directly to voicemail.

- Press the Sleep/Wake button twice quickly.



- Press and hold the mic button on the headset for about two seconds. Two low beeps confirm that the call was declined.
- Tap Decline (if iPhone is awake when a call comes in).

Block calls and maintain Wi-Fi access to the Internet: In Settings, turn on Airplane Mode, then tap Wi-Fi and turn it on.

While On a Call

When you're on a call, the screen shows call options.

Mute your call: Tap Mute. You can still hear the caller, but the caller can't hear you.

Use the keypad to enter information: Tap Keypad.

Use the speakerphone or a Bluetooth device: Tap Speaker. The Button is labeled "Audio Source" when a Bluetooth device is available, which lets you select the Bluetooth device, iPhone, or Speaker Phone.

See contact information: Tap Contacts.

Put a call on hold: Tap Hold. Neither party can hear the other.

Make another call: Tap Add Call.

Use other applications during a call: Press the Home ▢ button, then tap an application icon.

End a call: Tap End Call. If you're using the stereo headset, you can press the mic button instead.

Second Calls

During a call, you can make or receive another call. If you receive a second call, iPhone beeps and shows the caller's information and a list of options.

Respond to a second call:

- *To ignore the call and send it to voicemail,* tap Ignore.
- *To hold the first call and answer the new one,* tap Hold Call + Answer.
- *To end the first call and answer the new one,* tap End Call + Answer.

Make a second call: Tap Add Call. The first call is put on hold.

Switch between calls: Tap Swap. The active call is put on hold.

Create a conference call: Tap Merge Calls. See "Conference Calls" below.

Conference Calls

You can talk to more than one person at a time, and merge up to five calls, depending on your carrier.

Create a conference call:

1. Make a call.
2. Tap Add Call and make another call. The first call is put on hold.

3 Tap Merge Calls. The calls are merged onto one line and everyone can hear each other.

4 Repeat steps two and three to add up to five calls.

Drop one call	Tap Conference and tap next to a call. Then tap End Call.
Talk privately with a call	Tap Conference, then tap Private next to a call. Tap Merge Calls to resume to conference.
Add an incoming call	Tap Hold Call + Answer, then tap Merge Calls.

iPhone always has a second line available in addition to the conference call.

Emergency Calls

If iPhone is locked with a passcode, you may still be able to make an emergency call.

Make an emergency call when iPhone is locked: Tap Emergency Call, then dial the number using the keypad.

Important: You should not rely on wireless devices for essential communications, such as medical emergencies. Use of any cellular phone to call emergency services may not work in all locations. Emergency numbers and services vary by region, and sometimes an emergency call cannot be placed due to network availability or environmental interference. Some cellular networks may not accept an emergency call from iPhone if it doesn't have a SIM, if you locked your SIM, or if you haven't activated your iPhone.

Visual Voicemail

On iPhone, visual voicemail lets you see a list of your messages and choose which ones to listen to or delete, without having to listen to instructions or prior messages.

Note: Visual voicemail may not be available in all regions. If visual voicemail isn't available, tap Voicemail and follow the voice prompts to retrieve your messages.

Number of missed calls and unheard voicemail messages appears on the Home screen Phone icon.

Setting Up Voicemail

The first time you tap Voicemail, iPhone prompts you to create a voicemail password and record your voicemail greeting.

Change your greeting:

1 Tap Voicemail, tap Greeting, then tap Custom.

2 Tap Record when you're ready to start.

3 When you finish, tap Stop. To review, tap Play.

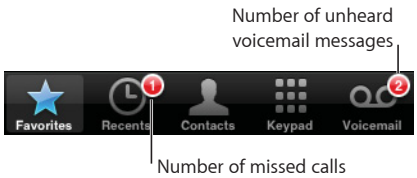
To rerecord, repeat steps 2 and 3.

4 Tap Save.

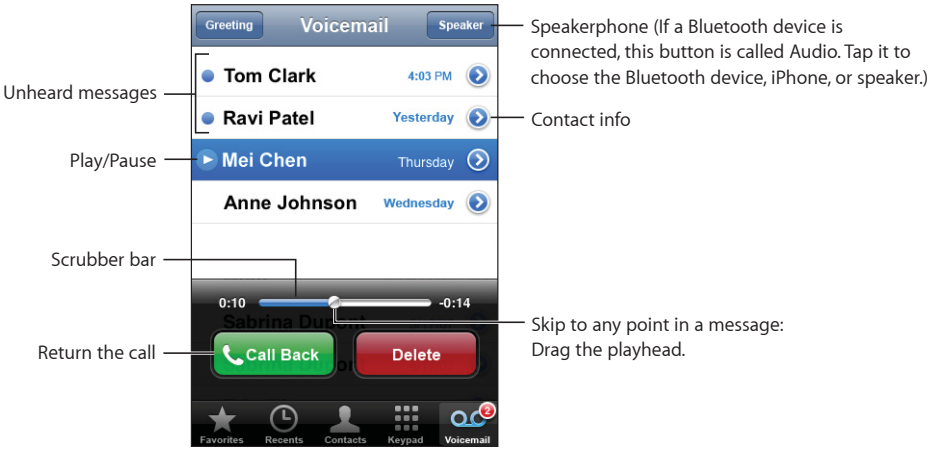
Use your carrier's default greeting	Tap Voicemail, tap Greeting, then tap Default.
Set an alert sound for new voicemail	In Settings, choose Sounds and turn New Voicemail on. The alert sounds once for each new voicemail. If the Ring/Silent switch is off, iPhone won't sound alerts.
Change the voicemail password	In Settings, choose Phone > Change Voicemail Password.

Checking Voicemail

When you tap Phone, iPhone shows the number of missed calls and unheard voicemail messages.



Tap Voicemail to see a list of your messages.



Listen to a message: Tap the message. (If you've already heard the message, tap the message again to replay it.) Use ❚❚ and ▶ to pause and resume playback.

Once you listen to a message, it's saved until your carrier automatically erases it.

Check voicemail from another phone: Dial your own number or your carrier's remote access number.

Deleting Messages

Select a message, then tap Delete. Deleted visual voicemail messages are saved on iPhone until your carrier permanently erases them.

Listen to a deleted message	Tap Deleted Messages (at the end of the list), then tap the message.
Undelete a message	Tap Deleted Messages (at the end of the list), then tap the message and tap Undelete.

Getting Contact Information

Visual voicemail saves the date and time of the call, the length of the message, and any available contact information.

See a caller's contact information: Tap ⓘ next to a message.

You can use the information to email or text the caller, or update contact info.

Contacts

From a contact's Info screen, a quick tap lets you make a phone call, create a new email message, find the location of their address, and more. See "Contacts" on page 98.

Favorites

Favorites gives you quick access to your most-used phone numbers.

Add a contact's number to your favorites list: Tap Contacts and choose a contact. Then tap "Add to Favorites" and choose the number you want to add.

Add a recent caller's number to your favorites list: Tap Recents and tap ⓘ next to a caller, then tap "Add to Favorites."

Go to favorites: Double-click the Home ▢ button. See "Home Button" on page 109.

Call a contact from your favorites	Tap Favorites and choose a contact.
Delete a contact from your favorites	Tap Favorites and tap Edit. Then tap ⊖ next to a contact or number and tap Remove.
Reorder your favorites list	Tap Favorites and tap Edit. Then drag ☰ next to a contact to a new place in the list.

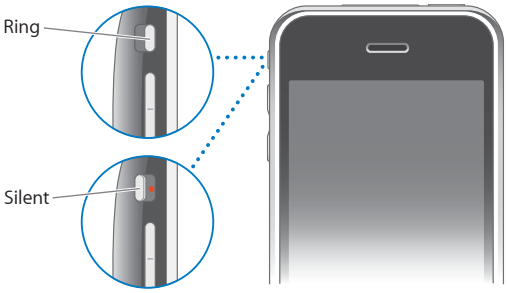
Ringtones and the Ring/Silent Switch

iPhone comes with ringtones you can use for incoming calls, Clock alarms, and the Clock timer. You can also create and purchase ringtones from songs in iTunes.

Ring/Silent Switch and Vibrate Modes

A switch on the side of iPhone makes it easy to turn the ringer on or off.

Turn the ringer on or off: Flip the switch on the side of iPhone.



Note: Clock alarms still sound even if you set the Ring/Silent switch to silent.

Set iPhone to vibrate: In Settings, choose Sounds. Separate controls let you set vibrate for both ring mode and silent mode.

For more information, see Chapter 8, "Settings," on page 101.

Setting Ringtones

You can set the default ringtone for calls and Clock alarms and timers. You can also assign individual ringtones to contacts so you know who's calling.

Set the default ringtone: In Settings, choose Sounds > Ringtone, then choose a ringtone.

Assign a ringtone to a contact: From Phone, tap Contacts and choose a contact. Then tap Ringtone and choose a ringtone.

Creating Ringtones

You can create ringtones in iTunes using songs purchased from the iTunes Store (not available in all countries). Your iTunes Store account will be charged for each ringtone.

Create a ringtone:

1. In iTunes on your computer, choose iTunes > Preferences and make sure Ringtones is selected (in the General pane).
2. Make sure you are connected to the Internet.
3. To identify the purchases you can use to create ringtones, choose View > View Options and then select Ringtone. (If a message appears, click Check Songs.)

   To identify eligible purchases later, choose iTunes > Check for Updates.
4. Select the song you want to use and then choose Store > Create Ringtone.

5 Adjust the highlighted area at the bottom of the iTunes window to choose up to 30 seconds of the song.

6 To make the ringtone fade in or out, select either or both "fade" checkboxes.

7 To change the delay before the ringtone plays again, choose an interval from the Looping pop-up menu.

8 To listen to the ringtone, click Preview.

9 Click Buy.

Important: After you click Buy, you can change the ringtone's name and other information, but you can't select a different portion of the song.

You can sync ringtones created with iTunes with any iPhone you own, and play them on up to five authorized computers. After you sync your iPhone, you can assign the ringtone to one or more contacts.

You can also create custom ringtones in Garage Band. See Garage Band Help for more information.

Bluetooth Devices

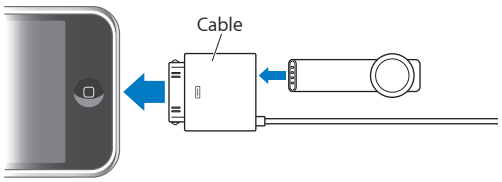
You can talk on iPhone hands-free using the optional iPhone Bluetooth Headset. You can also use iPhone with other Bluetooth headsets and Bluetooth car kits.

WARNING: For important information about avoiding hearing loss and about driving safely, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

iPhone Bluetooth Headset

The iPhone Bluetooth Headset, available separately, features autopairing and simple operation. You must pair the headset with iPhone before you can use it.

Pair the headset with iPhone: Connect the iPhone and the headset to the iPhone Bluetooth Travel Cable, then connect the cable to your computer.



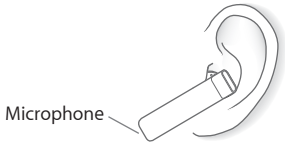
iPhone and the headset pair automatically when they're connected to the travel cable. The first time you connect the headset, let it charge for about an hour until the status light on the headset turns green. When iPhone and the headset are connected to your computer, iPhone displays the headset battery level.

You must connect the headset with iPhone before you can answer or make calls.

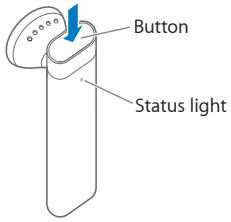
Connect the headset with iPhone: Press the button on the headset.

Make or answer a call:

1 Place the headset in either ear with the microphone pointed towards your mouth.



2 Make a call on iPhone, or press the button on the headset to answer an incoming call.



End a call	Press the headset button.
Adjust the volume	Use the iPhone volume buttons.
Decline an incoming call	Press button for about one second, until you hear a beep.
Switch to an incoming or on-hold call and put the current call on hold	Press button.
Switch to incoming or on-hold call and end current call	Press button for about one second, until you hear a beep.
Check whether the headset is turned on	Press button. If the headset is on, status light blinks green and headset beeps.
Turn the headset on	Press and hold button for about three seconds, until you see the status light blink green or hear four rising tones.
Turn the headset off	Press and hold button for about four seconds, until you see the status light blink amber or hear four falling tones.

For more information, see the *iPhone Bluetooth Headset User Guide.*

Third-Party Headsets and Car Kits

Other Bluetooth headsets and car kits may be used with iPhone. You must first pair a Bluetooth device with iPhone before you can use it for your phone calls.

Pair with iPhone:

1. Follow the instructions that came with the device to make it discoverable or to set it to search for other Bluetooth devices.
2. In Settings, choose General > Bluetooth and turn Bluetooth on.
3. Choose the device on iPhone and enter its passkey or PIN number. See the instructions about the passkey or PIN that came with the device.

After you've paired a Bluetooth device to work with iPhone, you must make a connection to have iPhone use the device for your calls.

Connect with iPhone: See the documentation that came with the headset or car kit.

When iPhone is connected to a Bluetooth device, outgoing calls are routed through the device. Incoming calls are routed through the device if you answer using the device, and through iPhone if you answer using iPhone.

Bluetooth Status

The Bluetooth icon appears in the iPhone status bar at the top of the screen:

- *(blue) or (white):* Bluetooth is on and a device is connected to iPhone. (The color depends on the current color of the status bar.)
- *(gray):* Bluetooth is on but no device is connected. If you've paired a device with iPhone, it may be out of range or turned off.
- *No Bluetooth icon:* Bluetooth is turned off.

An icon showing the headset battery status ( ) also appears in the status bar when iPhone is connected to an iPhone Bluetooth Headset.

Routing Calls Back Through iPhone

When iPhone is connected to a Bluetooth device, you listen to calls through iPhone by doing one of the following:

- Answer a call by tapping the iPhone touchscreen.
- During a call, tap Audio on iPhone. Choose iPhone to hear calls through iPhone or Speaker Phone to use the speakerphone.
- Turn off Bluetooth. In Settings, choose General > Bluetooth and drag the switch to Off.
- Turn off the device, or move out of range. You must be within about 30 feet of a Bluetooth device for it to be connected to iPhone. To turn off the iPhone Bluetooth Headset, press and hold the button until you hear the descending tones.

Unpairing a Device from iPhone

If you've paired iPhone with a device and want to use another device instead, you must unpair the first device.

Unpair a device:

1. In Settings, choose General > Bluetooth and turn Bluetooth on.
2. Choose the device and tap Unpair.

International Calls

iPhone is a UMTS/HSDPA (850, 1900, 2100 MHz) and a GSM (850, 900, 1800, 1900 MHz) phone, ensuring broad international coverage.

Making International Calls from Your Home Area

For information about making international calls from your home area, including rates and other charges that may apply, contact your carrier or go to your carrier's website.

Using iPhone Abroad

You can use iPhone to make calls in many countries around the world. You must first enable your carrier's service plan for international roaming.

Enable international roaming: Contact your carrier.

Set iPhone to add the correct prefix when dialing from another country: In Settings, tap Phone, then turn International Assist on. This lets you make calls to your home country using the numbers in your contacts and favorites, without having to add a prefix or your country code.[1]

Set the carrier to use: In Settings, tap Carrier, then select the carrier you prefer. This option is available only when you're traveling outside your carrier's network. You can make calls only on carriers that have roaming agreements with your iPhone service provider. For more information, see "Carrier" on page 103.

Important: Voice and data roaming charges may apply. To avoid data roaming charges, turn Data Roaming off.

Turn Data Roaming on or off: In Settings, choose General > Network and turn Data Roaming on or off. Data Roaming is turned off by default.

Turning Data Roaming off helps to avoid data roaming charges when traveling outside your carrier's network by disabling data transmission over the cellular network. You can still access the Internet if you have a Wi-Fi connection. If Wi-Fi network access is not available, however, you cannot:

- Get visual voicemail

1 Not available in all areas.

- Send or receive email
- Browse the Internet
- Sync your contacts, calendars, or bookmarks with MobileMe or Exchange
- Send or receive text messages
- Stream YouTube videos
- Get stock quotes
- Get map locations
- Get weather reports
- Purchase music or applications

If Data Roaming is turned off, you can still make and receive phone calls, and send and receive text messages. Voice roaming charges may apply. Visual voicemail is delivered if there is no charge; if your carrier charges for delivery of visual voicemail when roaming, turning Data Roaming off prevents the delivery of visual voicemail until you turn Data Roaming back on or return to an area where your carrier's network is available.

To enable email, web browsing, and other data services, turn Data Roaming on.

Important: If Data Roaming is turned on, you may incur charges when roaming outside your carrier's network for the use of any of the features listed above, as well as for delivery of visual voicemail. Check with your carrier for information about roaming charges.

Get voicemail when visual voicemail isn't available: Dial your own number, or press and hold "1" on the keypad.

Avoid roaming charges by using Airplane Mode: In Settings, tap Airplane Mode to turn it on, then tap Wi-Fi and turn Wi-Fi on. See "Airplane Mode" on page 101.

Mail

4

Mail works with MobileMe, Microsoft Exchange, and many of the most popular email systems—including Yahoo! Mail, Google email, and AOL—as well as other industry-standard POP3 and IMAP email systems. You can send and receive embedded photos and graphics, and view PDFs and other attachments.

Setting Up Email Accounts

You can set up email accounts on iPhone in either of the following ways:

- In iTunes, use the iPhone preference panes to sync email accounts settings from your computer. See "Syncing with iTunes" on page 7.
- Set up an account directly on iPhone. See "Setting Up Accounts" on page 12.

Sending Email

You can send an email message to anyone who has an email address.

Compose and send a message:

1 Tap ✎.

2 Type a name or email address in the To field, or tap ⊕ to add a name from your contacts.

As you type an email address, matching email addresses from your contacts list appear below. Tap an address to add it. To add more names, tap Return or ⊕.

Note: If you're composing a message from your Microsoft Exchange account and have access to your enterprise Global Address List (GAL), matching addresses from the contacts on iPhone will appear first, then matching GAL addresses will appear.

3 Tap Cc/Bcc/From if you want to copy or blind copy the message to others, or change the account you send the message from. If you have more than one email account, you can tap the From field to change the account you're sending from.

4 Enter a subject, then your message.

You can tap Return to move from one field to another.

5 Tap Send.

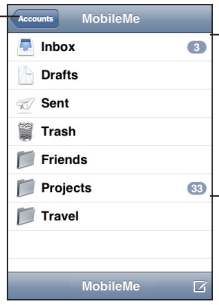
Send a photo in a message	In Photos, choose a photo, tap ⬈, then tap Email Photo. The photo is sent using your default email account (see "Mail" on page 113).
Save a draft of a message to complete later	Tap Cancel, then tap Save. The message is saved in the Drafts mailbox.
Reply to a message	Tap ↩. Tap Reply to reply only to the sender or tap Reply All to reply to the sender and all recipients. Type your return message, then tap Send. Files or images attached to the initial message aren't sent back.
Forward a message	Open a message and tap ↩, then tap Forward. Add one or more email addresses, type your message, then tap Send. When you forward a message, you can include the files or images attached to the original message.
Send a message to someone in an address field	Open the message and tap a name or email address, then tap Email.

Checking and Reading Email

The Mail icon shows the total number of unread messages in all your inboxes. You may have other unread messages in other mailboxes.

Number of unread emails in your inboxes

On each account screen, you can see the number of unread messages in each mailbox.



Tap to see all your email accounts

Number of unread messages

Tap a mailbox to see its messages. Unread messages have a blue dot ● next to them.

When you open a mailbox, Mail loads the number of most recent messages specified in your Mail settings, if the messages haven't already been loaded automatically. (See "Mail" on page 113.)

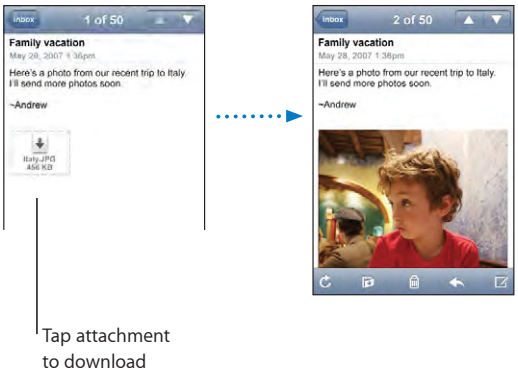
Load additional messages: Scroll to the bottom of the list of messages and tap "Load More Messages."

Read a message: Tap a mailbox, then tap a message. Within a message, tap ▲ or ▼ to see the next or previous message.

Zoom in on part of a message	Double-tap an area of the message to zoom in. Double-tap again to zoom out.
Resize any column of text to fit the screen	Double-tap the text.
Resize a message manually	Pinch to zoom in or out.
Follow a link	Tap the link. Text links are typically underlined and blue. Many images are also links. A link can take you to a webpage, open a map, dial a phone number, or open a new preaddressed email message. Web, phone, and map links open Safari, Phone, or Maps on iPhone. To return to your email, press the Home button and tap Mail.
See a link's destination address	Touch and hold the link. The address pops up next to your finger.

iPhone displays most picture attachments (JPEG, GIF, and TIFF) inline with the text in email messages. iPhone can play many audio attachments (such as MP3, AAC, WAV, and AIFF). You can download and view files (such as PDF, webpage, text, Pages, Keynote, Numbers, and Microsoft Word, Excel, and PowerPoint documents) attached to messages you receive.

Open an attached file: Tap the attachment. It downloads to iPhone and then opens.



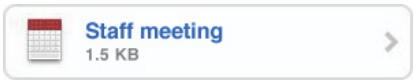
You can view attachments in portrait or landscape orientation. If the format of an attached file isn't supported by iPhone, you can see the name of the file but you can't open it. iPhone supports the following document types:

.doc	Microsoft Word
.docx	Microsoft Word (XML)
.htm	webpage
.html	webpage
.key	Keynote
.numbers	Numbers
.pages	Pages
.pdf	Preview, Adobe Acrobat
.ppt	Microsoft PowerPoint
.pptx	Microsoft PowerPoint (XML)
.txt	text
.vcf	contact information
.xls	Microsoft Excel
.xlsx	Microsoft Excel (XML)

Save a photo attachment to your Camera Roll album: Press and hold the image, then tap "Save Image."

Check for new messages	Choose a mailbox or tap ↻ at any time.
See all the recipients of a message	Tap Details. Tap a name or email address to see the recipient's contact information. Then tap a phone number, email address, or text message to contact the person. Tap Hide to hide the recipients.
Add an email recipient to your contacts list	Tap the message and, if necessary, tap Details to see the recipients. Then tap a name or email address and tap Create New Contact or "Add to Existing Contact."
Mark a message as unread	Open the message and tap "Mark as Unread." A blue dot appears next to the message in the mailbox list until you open it again.

Open a meeting invitation: Tap the invitation.



You can get contact information for the organizer and other attendees, set an alert, add notes to the event, and add comments that are included in your response emailed to the organizer. You can accept, tentatively accept, or decline the invitation. See "Responding to Meeting Invitations" on page 74.

Turn "Push" on or off: In Settings, choose Fetch New Data, then tap Push. See "Fetch New Data" on page 104.

Organizing Email

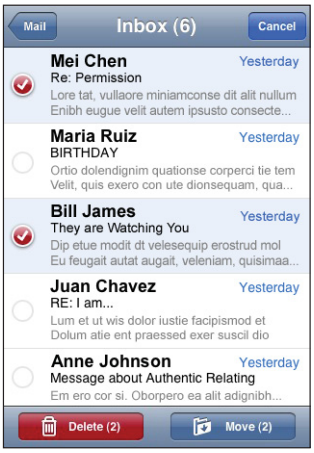
You can delete messages one at a time, or select a group to delete all at once. You can also move messages from one mailbox or folder to another.

Delete a message: Open the message and tap 🗑. Or tap Edit, then tap ⊖ next to the message.

You can also delete a message directly from the mailbox message list by swiping left or right over the message title, then tapping Delete.

To show the Delete button, swipe left or right over the message.

Delete multiple messages: When viewing a list of messages, tap Edit, select the messages you want to delete, then tap Delete.



Move a message to another mailbox or folder: When viewing a message, tap , then choose a mailbox or folder.

Move multiple messages: When viewing a list of messages, tap Edit, select the messages you want to move, then tap Move and select a mailbox or folder.

Safari

5

Safari lets you surf the web and view webpages on iPhone in the same way as if you were on your computer. You can create bookmarks on iPhone and sync bookmarks with your computer. Add web clips for quick access to your favorite sites directly from the Home screen.

Viewing Webpages

You can view webpages in either portrait or landscape orientation. Rotate iPhone and the webpage rotates too, automatically adjusting to fit the page.

Opening Webpages

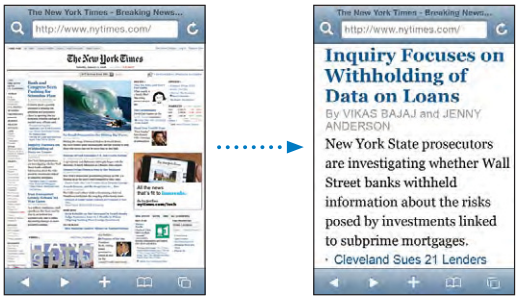
Open a webpage: Tap the address field, then type the web address and tap Go. If the address field is not visible, tap the status bar at the top of the screen to quickly scroll to the address field at the top of the webpage.

As you type, web addresses that start with those letters appear. These are bookmarked or recent pages you've opened. Tap an address to go to that page. Keep typing if you want to enter a web address that's not in the list.

Erase the text in the address field: Tap the address field, then tap ⊗.

Zooming and Scrolling

Zoom in or out: Double-tap a column on a webpage to expand the column. Double-tap again to zoom out.



You can also pinch to zoom in or out manually.

Scroll around a webpage	Drag up, down, or sideways. When scrolling, you can touch and drag anywhere on the page without activating any links.
Scroll within a frame on a webpage	Use two fingers to scroll within a frame on a webpage. Use one finger to scroll the entire webpage.
Scroll quickly to the top of a webpage	Tap the status bar at the top of the iPhone screen.

Navigating Webpages

Links on webpages typically take you to another place on the web.

Follow a link on a webpage: Tap the link.

Links on iPhone can also initiate a phone call, display a location in Maps, or create a preaddressed Mail message. To return to Safari after a link opens another application, press the Home ▢ button and tap Safari.

See a link's destination address	Touch and hold the link. The address pops up next to your finger. You can touch and hold an image to see if it has a link.
Stop a webpage from loading	Tap ✕.
Reload a webpage	Tap ↻.
Return to the previous or next page	Tap ◀ or ▶ at the bottom of the screen.

Return to a recently viewed page	Tap 📖 and tap History. To clear the history list, tap Clear.
Send a webpage address via email	Tap ➕ and tap "Mail Link to this Page."
Save an image or photo to your Camera Roll album	Press and hold the image, then tap Save Image.

Opening Multiple Pages

You can have up to eight pages open at a time. Some links automatically open a new page instead of replacing the current one.

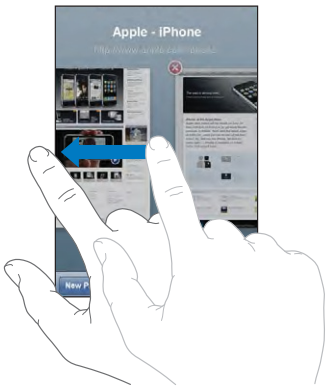
The number inside the pages icon at the bottom of the screen shows how many pages are open. If there's no number inside, just one page is open. For example:

= one page is open

= three pages are open

Open a new page: Tap and tap New Page.

Go to another page: Tap and flick left or right. Tap the page you want to view.



Close a page: Tap and tap . You can't close a page if it's the only one open.

Entering Text and Filling Out Forms

Some webpages have text fields and forms to fill out.

Bring up the keyboard	Tap inside a text field.
Move to another text field	Tap another text field, or tap the Next or Previous button.
Submit a form	Once you finish filling out a form, tap Go or Search. Most pages also have a link you can tap to submit the form.
Close the keyboard without submitting the form	Tap Done.

Searching the Web

By default, Safari searches using Google. You can search using Yahoo!, instead.

Search the web:

1. Tap 🔍 to display the search field.
2. Type a word or phrase that describes what you're looking for, then tap Google.
3. Tap a link in the list of search results to open a webpage.

Set Safari to search using Yahoo!: From the Home screen choose Settings > Safari > Search Engine, then choose Yahoo!.

Bookmarks

You can bookmark webpages you want to return to later.

Bookmark a webpage: Open the page and tap +. Then tap Add Bookmark.

When you save a bookmark you can edit its title. By default, bookmarks are saved at the top level of Bookmarks. Tap Bookmarks to choose another folder.

If you use Safari on a Mac, or Safari or Microsoft Internet Explorer on a PC, you can sync bookmarks with the web browser on your computer.

Sync bookmarks with your computer:

1. Connect iPhone to your computer.
2. In iTunes, select iPhone in the sidebar.
3. Click the Info tab, select "Sync … bookmarks" under Web Browser, then click Apply.

See "Syncing with iTunes" on page 7.

Sync bookmarks with MobileMe: In iPhone's Settings, select Bookmarks in your MobileMe account. See "Setting Up Accounts" on page 12.

Open a bookmarked webpage: Tap 📖, then choose a bookmark or tap a folder to see the bookmarks inside.

Edit a bookmark or bookmark folder: Tap 📖, choose the folder that has the bookmark or folder you want to edit, then tap Edit. Then do one of the following:

- *To make a new folder,* tap New Folder.
- *To delete a bookmark or folder,* tap ⊖, then tap Delete.
- *To reposition a bookmark or folder,* drag ☰.
- *To edit the name or address, or to put it in a different folder,* tap the bookmark or folder.

When you're finished, tap Done.

Web Clips

Add web clips to the Home screen for fast access to your favorite webpages. Web clips appear as icons on the Home screen, and you can arrange your web clips along with the other icons. See "iPhone Applications" on page 18.

Add a web clip: Open the webpage and tap ＋. Then tap "Add to Home Screen."

When you open a web clip, Safari automatically zooms and scrolls to the area of the webpage that was displayed when you saved the web clip. The displayed area is also used to create the icon for the web clip on your Home screen, unless the webpage comes with its own custom icon.

When you add a web clip, you can edit its name. If the name is too long (more than about 10 characters), it may appear abbreviated on the Home screen.

Web clips are not bookmarks, and aren't synced by MobileMe or iTunes.

Delete a web clip:

1. Touch and hold any icon on the Home screen until the icons start to wiggle.
2. Tap the "x" in the corner of the web clip you want to delete.
3. Tap Delete, then press the Home ▢ button to save your arrangement.

iPod

6

iPhone syncs with iTunes on your computer to get songs, videos, and other content you've collected in your iTunes library. For information about adding music and other media to your iTunes library, open iTunes and choose Help > iTunes Help.

Getting Music, Video, and More

To get music, video, and podcasts onto iPhone, you can set up iTunes on your computer to sync content in your library, or you can manually manage the media you put on iPhone.

Syncing Content from iTunes

You can get music, video, and more onto iPhone by syncing content from iTunes. You can sync all of your media, or you can select specific songs, videos, and podcasts.

Set iTunes to sync iPod content:

1. Connect iPhone to your computer.
2. In iTunes, select iPhone in the sidebar.
3. On the Music, Podcasts, and Video tabs, select the content you want to transfer to iPhone. For example, you could set iTunes to sync selected music playlists and the three most recent episodes of your favorite video podcast.
4. Click Apply.

To set iTunes to sync iPod content and other info automatically, click the Summary tab and select "Automatically sync when this iPhone is connected."

Only songs and videos encoded in formats that iPhone supports are transferred to iPhone. For information about which formats iPhone supports, see "Song, Video, or Other Items Won't Play" on page 139.

If there are more songs in your iTunes library than can fit on your iPhone, iTunes offers to create a special playlist to sync with iPhone. iTunes fills the playlist with selections from your library. You can add or delete songs from the playlist and sync again.

If you listen to part of a podcast or audiobook, your place in the story is included if you sync the content with iTunes. If you started listening to the story on iPhone, you can pick up where you left off using iTunes on your computer—or vice versa.

For more information about using iTunes to get music and other media onto your computer, see "What You Need" on page 5.

Manually Managing Content

The manually managing feature lets you choose just the music, video, and podcasts you want to have on iPhone.

Set up iPhone for manually managing content:

1. Connect iPhone to your computer.
2. In iTunes, select iPhone in the sidebar.
3. Click the Summary tab and select "Manually manage music and videos."
4. Click Apply.

Add items to iPhone: Drag a song, video, podcast, or playlist in your iTunes library to iPhone (in the sidebar). Shift-click or Command-click to select multiple items to add at the same time.

iTunes syncs the content immediately. If you deselect "Manually manage music and videos," the content you added manually is removed from iPhone the next time iTunes syncs content.

Remove items from iPhone: With iPhone connected to your computer, select the iPhone icon in the iTunes sidebar. Click the disclosure triangle to the left of the icon to show the contents. Select a content area, such as Music or Movies, then select the items you want to delete and press the Delete key on the keyboard.

Removing an item from iPhone doesn't delete it from your iTunes library.

Important: If you delete an item from iTunes, it will also be deleted from iPhone the next time you sync.

Transferring Purchased Content to Another Computer

You can transfer content on iPhone that was purchased using iTunes on one computer to an iTunes library on another authorized computer. The computer must be authorized to play content from your iTunes account. To authorize the computer, open iTunes on the computer and choose Store > Authorize Computer.

Transfer purchased content: Connect iPhone to the other computer. iTunes asks if you want to transfer purchased content.

Converting Videos for iPhone

You can add videos other than those purchased from the iTunes Store to iPhone, such as videos you create in iMovie on a Mac or videos you download from the Internet and then add to iTunes.

If you try to add a video from iTunes to iPhone and a message says the video can't play on iPhone, you can convert the video.

Convert a video to work with iPhone: Select the video in your iTunes library and choose Advanced > "Create iPod or iPhone Version." Then add the converted video to iPhone.

Music and Other Audio

The high-resolution Multi-Touch display makes listening to songs on iPhone as much a visual experience as a musical one. You can scroll through your playlists, or use Cover Flow to browse through your album art.

WARNING: For important information about avoiding hearing loss, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

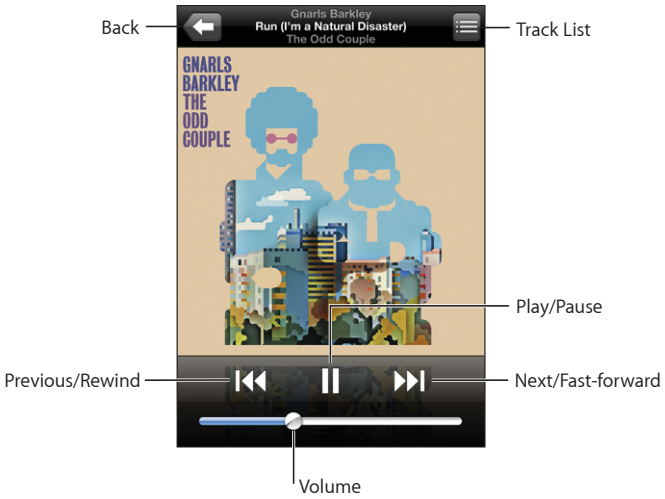
Playing Songs

Browse your collection: Tap Playlists, Artists, or Songs. Tap More to browse Albums, Audiobooks, Compilations, Composers, Genres, or Podcasts.

Play a song: Tap the song.

Controlling Song Playback

When you play a song, the Now Playing screen appears.



Pause a song	Tap ❚❚ or press the mic button on the iPhone headset.
Resume playback	Tap ▶ or press the mic button on the iPhone headset.
Raise or lower the volume	Drag the volume slider or use the buttons on the side of iPhone.
Restart a song or a chapter in an audiobook or podcast	Tap ⏮.
Skip to the next or previous song or chapter in an audiobook or podcast	Tap ⏮ twice to skip to the previous song. Tap ⏭ to skip to the next song, or press the mic button on the iPhone headset twice quickly.
Rewind or fast-forward	Touch and hold ⏮ or ⏭. The longer you hold the control, the faster the song rewinds or fast-forwards.
Return to the iPod browse lists	Tap ⇦. Or swipe to the right over the album cover.
Return to the Now Playing screen	Tap Now Playing.
Display a song's lyrics	Tap the album cover when playing a song. (Lyrics appear only if you've added them to the song using the song's Info window in iTunes.)

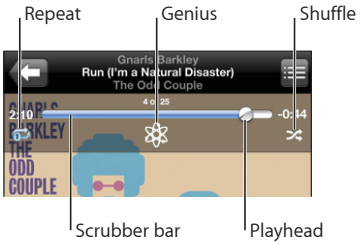
You can display playback controls at any time when you're listening to music and using another application—or even when iPhone is locked—by double-clicking the Home ▢ button. See "Home Button" on page 109.

If you're using an application, the playback controls appear on top of the application. After using the controls, you can close them or tap Music to go to the Now Playing screen. If iPhone is locked, the controls appear onscreen, then disappear automatically after you finish using them.

Additional Controls

From the Now Playing screen, tap the album cover.

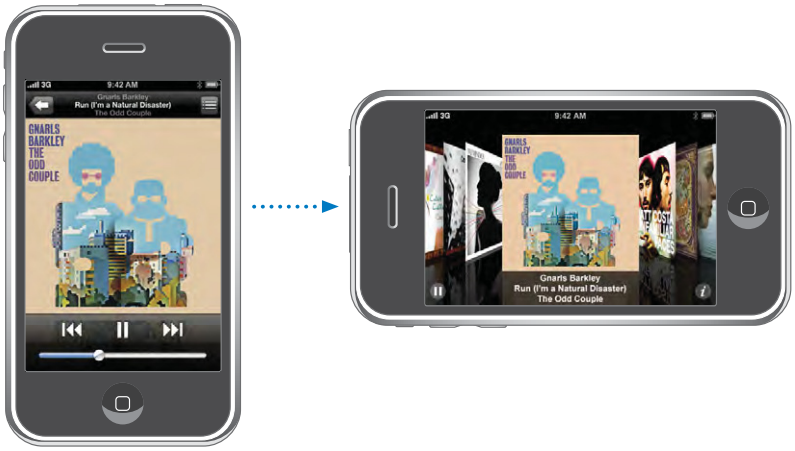
The repeat, Genius, and shuffle controls and the scrubber bar appear. You can see elapsed time, remaining time, and the song number. The song's lyrics also appear, if you've added them to the song in iTunes.



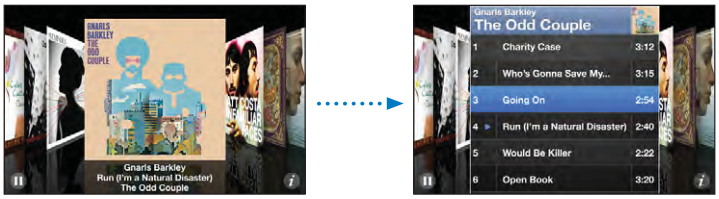
Set iPhone to repeat songs	Tap ⟲. Tap ⟲ again to set iPhone to repeat only the current song. ⟲ = iPhone is set to repeat all songs in the current album or list. ⟲ = iPhone is set to repeat the current song over and over. ⟲ = iPhone isn't set to repeat songs.
Skip to any point in a song	Drag the playhead along the scrubber bar.
Make a Genius playlist	Tap ⚛. The Genius playlist appears. See "Using Genius on iPhone" on page 64.
Set iPhone to shuffle songs	Tap ⤮. Tap ⤮ again to set iPhone to play songs in order. ⤮ = iPhone is set to shuffle songs. ⤮ = iPhone is set to play songs in order.
Shuffle the tracks in any playlist, album, or other list of songs	Tap Shuffle at the top of the list. For example, to shuffle all the songs on iPhone, choose Songs > Shuffle. Whether or not iPhone is set to shuffle, if you tap Shuffle at the top of a list of songs, iPhone plays the songs from that list in random order.

Browsing Album Covers in Cover Flow

When you're browsing music, you can rotate iPhone sideways to see your iTunes content in Cover Flow and browse your music by album artwork.



See content in Cover Flow	Rotate iPhone sideways.
Browse album covers	Drag or flick left or right.
See the tracks on an album	Tap a cover or ⓘ.



Play any track	Tap the track. Drag up or down to scroll through the tracks.
Return to the cover	Tap the title bar. Or tap ⓘ again.
Play or pause the current song	Tap ▶ or ❚❚. Or, if you're using the included stereo headset, press the mic button.

Viewing All Tracks on an Album

See all the tracks on the album that contains the current song: From the Now Playing screen tap ☰. Tap a track to play it. Tap the album cover thumbnail to return to the Now Playing screen.

In track list view, you can assign ratings to songs. You can use ratings to create smart playlists in iTunes that dynamically update to include, for example, your highest rated songs.

Rate a song: Drag your thumb across the ratings bar to give the song zero to five stars.

Using Genius on iPhone

Genius automatically creates a playlist of songs from your library that go great together with the song you're playing. It's like having a built-in DJ who knows your tastes well enough to make the right mix just for you. To use Genius on iPhone, you first need to set up Genius in iTunes, then sync iPhone with iTunes. Genius is a free service, but it requires an iTunes Store Account. You can make Genius playlists in iTunes and sync them to iPhone. You can also make Genius playlists directly on iPhone.

Make a Genius playlist on iPhone:

1. Tap Playlists and tap Genius.
2. Tap a song in the list. Genius creates a playlist with additional songs based on that song.

   You can also make a Genius playlist based on the song you're playing. From the Now Playing screen, tap the album cover to display additional controls, then tap ⚛.

Save a Genius playlist: In the playlist, tap Save. The playlist is saved in Playlists with the title of the song you picked.

You can make and save as many Genius playlists as you want. If you save a Genius playlist created on iPhone, it's synced back to iTunes the next time you connect.

Refresh a Genius playlist: In the playlist, tap Refresh.

Refreshing a playlist creates a playlist of different songs based on the song you picked. You can refresh any Genius playlist, whether it was created in iTunes and synced to iPhone, or created directly on iPhone.

Base the Genius playlist on a new song: In the playlist, tap New, then pick a new song.

Delete a saved Genius playlist: In a playlist that you saved directly on iPhone, tap Edit, then tap Delete Playlist.

Once a Genius playlist is synced back to iTunes, you won't be able to delete it directly from iPhone. You can use iTunes to edit the playlist name, stop syncing, or delete the playlist.

Making On-The-Go Playlists

Make an on-the-go playlist:

1. Tap Playlists and tap On-The-Go.
2. Browse for songs using the buttons at the bottom of the screen. Tap any song or video to add it to the playlist. Tap Add All Songs at the top of any list of songs to add all the songs in the list.
3. When you finish, tap Done.

When you make an on-the-go playlist and then sync iPhone to your computer, the playlist is saved on iPhone and in your iTunes library, then deleted from iPhone. The first is saved as "On-The-Go 1," the second as "On-The-Go 2," and so on. To put a playlist back on iPhone, select iPhone in the iTunes sidebar, click the Music tab, and set the playlist to sync.

Edit an on-the-go playlist: Tap Playlists, tap On-The-Go, tap Edit, then do one of the following:

- *To move a song higher or lower in the list,* drag ☰ next to the song.
- *To delete a song from the playlist,* tap ⊖ next to a song, then tap Delete. Deleting a song from the on-the-go playlist doesn't delete it from iPhone.
- *To clear the entire playlist,* tap Clear Playlist.
- *To add more songs,* tap +.

Videos

With iPhone, you can view video content such as movies, music videos, and video podcasts. If a video contains chapters, you can skip to the next or previous chapter, or bring up a list and start playing at any chapter that you choose. If a video provides alternate language features, you can choose an audio language or display subtitles.

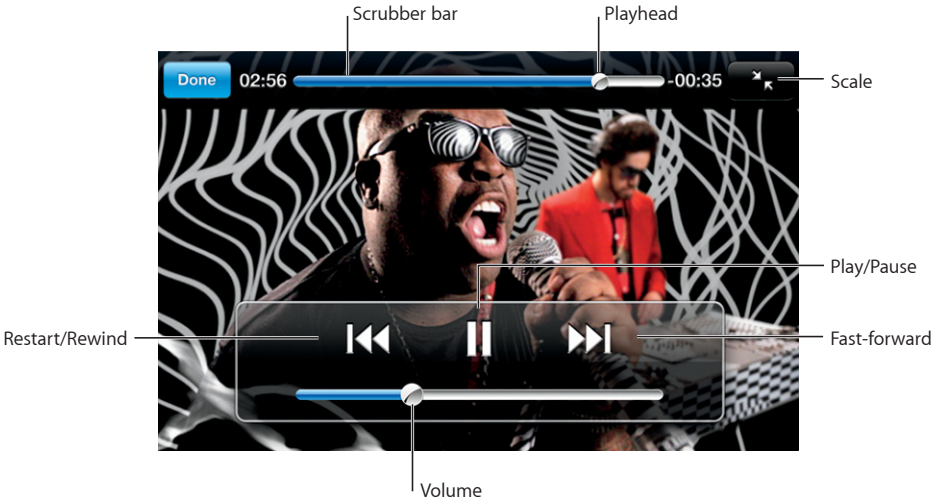
Playing Videos

Play a video: Tap Videos and tap the video.

Display playback controls: Tap the screen to show the controls. Tap again to hide them.

Controlling Video Playback

Videos play in widescreen to take full advantage of the display.



Run by Gnarls Barkley is available on iTunes in select countries

Play or pause a video	Tap ▶ or ❚❚.
Raise or lower the volume	Drag the volume slider.
Start a video over	Drag the playhead on the scrubber bar all the way to the left, or tap ⏮ if the video doesn't contain chapters.
Skip to the previous or next chapter (if available)	Tap ⏮ to skip to the previous chapter. Tap ⏭ to skip to the next chapter.
Start playing at a specific chapter (if available)	Tap ☰, then choose a chapter from the list.
Rewind or fast-forward	Touch and hold ⏮ or ⏭.
Skip to any point in a video	Drag the playhead along the scrubber bar.
Stop watching a video before it finishes playing	Tap Done. Or press the Home ▢ button.

Scale a video to fill the screen or fit to the screen	Tap to make the video fill the screen. Tap to make it fit the screen.You can also double-tap the video to toggle between fitting and filling the screen. When you scale a video to fill the screen, the sides or top may be cropped from view. When you scale it to fit the screen, you may see black bars on the sides or above and below the video.
Select an alternate audio language (if available)	Tap , then choose a language from the Audio list.
Show or hide subtitles (if available)	Tap , then choose a language, or Off, from the Subtitles list.

Watching Rented Movies

You can rent movies from the iTunes Store and watch them on iPhone. You use iTunes to rent the movies and transfer them to iPhone. (Rented movies are not available in all regions.)

Rented movies are playable only for a limited time. The time remaining in which you must finish watching a rented movie appears near its title. Movies are automatically deleted when they expire. Check the iTunes Store for the expiration times before renting a movie.

Transfer rented movies to iPhone: Connect iPhone to your computer. Then select iPhone in the iTunes sidebar, click Video, and select the rented movies you want to transfer. Your computer must be connected to the Internet.

View a rented movie: On iPhone, choose iPod > Videos and select a movie.

Watching Videos on a TV

You can connect iPhone to your TV and watch your videos on the larger screen. Use the Apple Component AV Cable, Apple Composite AV Cable, or other authorized iPhone compatible cable. You can also use these cables with the Apple Universal Dock to connect iPhone to your TV. (The Apple Universal Dock includes a remote, which allows you to control playback from a distance.) Apple cables and docks are available for purchase separately at www.apple.com/ipodstore.

Deleting Videos from iPhone

You can delete videos from iPhone to save space.

Delete a video: In the videos list, swipe left or right over the video, then tap Delete.

When you delete a video (other than rented movies) from iPhone, it isn't deleted from your iTunes library and you can sync the video back to iPhone later. If you don't want to sync the video back to iPhone, set iTunes to not sync the video. See "What You Need" on page 5.

Important: If you delete a rented movie from iPhone, it is deleted permanently and cannot be transferred back to your computer.

Setting a Sleep Timer

You can set iPhone to stop playing music or videos after a period of time.

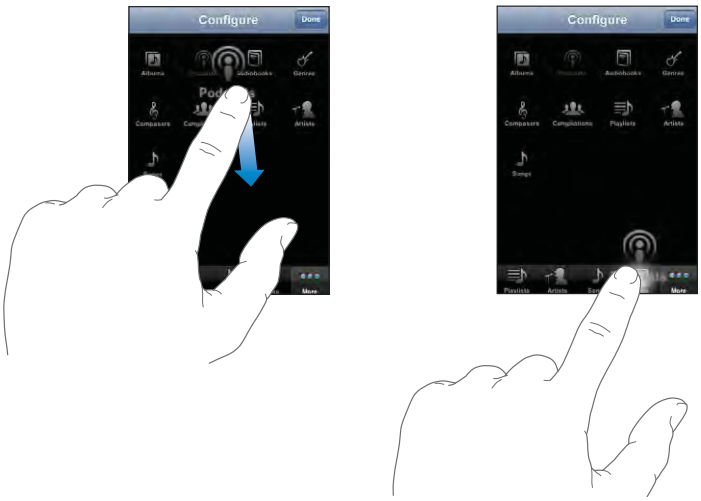
Set a sleep timer: From the Home screen choose Clock > Timer, then flick to set the number of hours and minutes. Tap When Timer Ends and choose Sleep iPod, tap Set, then tap Start to start the timer.

When the timer ends, iPhone stops playing music or video, closes any other open application, and then locks itself.

Changing the Browse Buttons

You can replace the Playlists, Artist, Songs, or Videos browse buttons at the bottom of the screen with ones you use more frequently. For example, if you often listen to podcasts and don't watch many videos, you can replace the Videos button with Podcasts.

Change the browse buttons: Tap More and tap Edit, then drag a button to the bottom of the screen, over the button you want to replace.



You can drag the buttons at the bottom of the screen left or right to rearrange them. Tap Done when you finish. Tap More at any time to access the buttons you replaced.

More Applications

7

Text

You can send text messages to anyone with an SMS-capable phone. The recipient is notified of the message and can read it and reply at any time. You can also send text messages to multiple people at the same time.

WARNING: For important information about driving safely, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

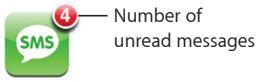
Sending and Receiving Text Messages

You can send and receive text messages whenever you're in range of the cellular network. If you can make a call, you can send a text message.

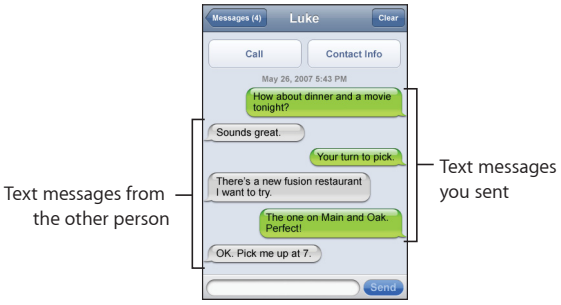
Depending on your phone plan, you may be charged for text messages you send or receive.

Send a new text message: Tap ✎, then enter a phone number or name, or tap ⊕ and choose a contact from your contacts list. Type a message and tap Send.

The Text icon on the Home screen shows the total number of unread text messages you have.



Your text conversations are saved in the Text Messages list. Conversations that contain unread messages have a blue dot next to them. Tap a name in the list to see or add to that conversation.



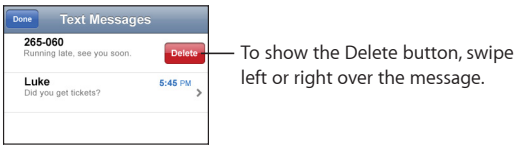
iPhone displays the 50 most recent messages in the conversation. To see earlier messages, scroll to the top and tap "Show Earlier Messages."

Send a text message to multiple people: Tap , then add people one at a time. If you enter a phone number manually (instead of selecting it from Contacts), you must tap Return before entering another entry.

Replies from any of the recipients are sent only to you. The other people you texted won't see anyone else's reply.

Reply to a message or send one to someone (or a group) you've texted before: Tap a name or phone number in the Text Messages list, then type a message and tap Send.

Delete a conversation from the Text Messages list: Tap Edit, then tap next to a conversation and tap Delete. You can also delete a conversation by swiping left or right over a conversation and tapping Delete.



Send a text message to a favorite or to a recent call:

1. From the Home screen tap Phone, then tap Favorites or Recents.
2. Tap next to a name or number and tap Text Message.
3. If multiple phone numbers appear, tap the one you want to text.

Using Contact Information and Links

Call or email someone you've texted: Tap a message in the Text Messages list and scroll to the top of the conversation.

- *To call the person,* tap Call.

- *To email the person,* tap Contact Info, then tap an email address.

Follow a link in a message: Tap the link.

A link may open a webpage in Safari, initiate a phone call in Phone, open a preaddressed message in Mail, or display a location in Maps. To return to your text messages, press the Home button and tap Text.

Add information in a link to a contact, or see the contact information of the person associated with the link: Tap next to the message.

Add someone you've texted to your contacts list: Tap a phone number in the Text Messages list, then tap "Add to Contacts."

SMS Preview

By default, iPhone displays a preview of new text messages when iPhone is locked or you are using another application. You can turn this preview on or off in Settings.

Turn SMS Preview on or off: In Settings, choose General > Passcode Lock and tap Show SMS Preview.

Alerts

Set whether an alert sounds when you get a text message: In Settings, choose Sounds, then turn New Text Message on or off.

Important: If the Ring/Silent switch is off, text alerts won't sound.

Display new text messages when iPhone is locked: In Settings, choose General > Passcode Lock and tap to turn "SMS preview" on.

Calendar

Calendar lets you view your events in a continuous list, by day, or by month. Sync iPhone with the calendars on your computer. Make, edit, or cancel appointments on iPhone, and have them synced back to your computer. If you have a Microsoft Exchange account, you can receive and respond to meeting invitations.

Syncing Calendars

You can sync Calendar in either of the following ways:

- In iTunes, use the iPhone preference panes to sync with iCal or Microsoft Entourage on a Mac, or Microsoft Outlook 2003 or 2007 on a PC when you connect iPhone to your computer. See "Syncing with iTunes" on page 7.

- In iPhone's Settings, select Calendar in your MobileMe or Microsoft Exchange accounts to sync your calendar information over the air. See "Setting Up Accounts" on page 12.

Adding Calendar Events to iPhone

You can also enter and edit calendar events directly on iPhone.

Add an event: Tap + and enter event information, then tap Done.

You can enter any of the following:

- Title
- Location
- Starting and ending times (or turn on All-day if it's an all-day event)
- Repeat times—none, or every day, week, two weeks, month, or year
- Alert time—from five minutes to two days before the event

  When you set an alert, the option to set a second alert appears. When an alert goes off, iPhone displays a message. You can also set iPhone to play a sound (see below).

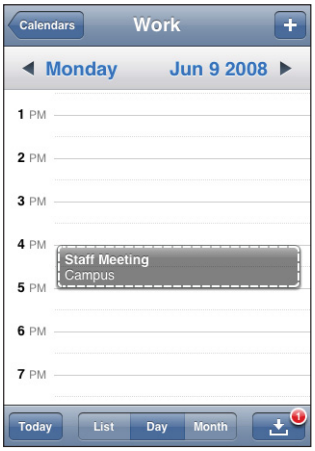
  Important: Some carriers don't support network time in all locations. If you're traveling, iPhone may not alert you at the correct local time. To manually set the correct time, see "Date and Time" on page 110.
- Notes

To select which calendar to add the event to, tap Calendar. Read-only calendars don't appear in the list.

Edit an event	Tap the event, then tap Edit.
Delete an event	Tap the event, tap Edit, then scroll down and tap Delete Event.

Responding to Meeting Invitations

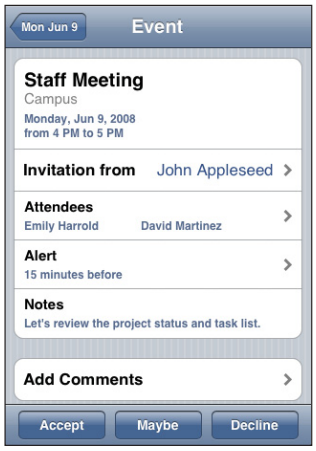
If you have a Microsoft Exchange account set up on iPhone with Calendars enabled, you can receive and respond to meeting invitations from people in your organization. When you receive an invitation, the meeting appears in your calendar with a dotted line around it. The icon in the lower-right corner of the screen indicates the total number of new invitations you have, as does the Calendar icon on the Home screen.



Number of meeting invitations

Respond to an invitation in Calendar:

1 Tap a meeting invitation in the calendar, or tap to display the Event screen and tap an invitation.



- Tap "Invitation from" to get contact information for the meeting organizer. Tap the email address to send a message to the organizer. If the organizer is in your contacts, you can also tap to call or send a text message.
- Tap Attendees to see the other people invited to the meeting. Tap a name to see an attendee's contact information. Tap the email address to send a message to the attendee. If the attendee is in your contacts, you can also tap to call or send a text message.
- Tap Alert to set iPhone to sound an alert before the meeting.
- Tap Add Comments to add comments in the email response to the meeting organizer. You comments will also appear in your Info screen for the meeting.

Notes are made by the meeting organizer.

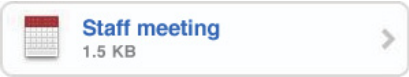
2 Tap Accept, Maybe, or Decline.

When you accept, tentatively accept, or decline the invitation, a response email that includes any comments you added is sent to the organizer.

If you accept or tentatively accept the meeting, you can change your response later. Tap Add Comments if you want to change your comments.

Exchange meeting invitations are also sent in an email message, which lets you open the meeting's Info screen from Mail.

Open a meeting invitation in an email message: Tap the invitation.



Alerts

Set calendar alerts: In Settings, choose Sounds, then turn Calendar Alerts on. If Calendar Alerts is off, iPhone displays a message when an event is about to occur but makes no sound.

Important: If the Ring/Silent switch is off, calendar alerts won't sound.

Sounds alerts for invitations: In Settings, choose "Mail, Contacts, Calendar." Under Calendars, tap New Invitation Alert to turn it on.

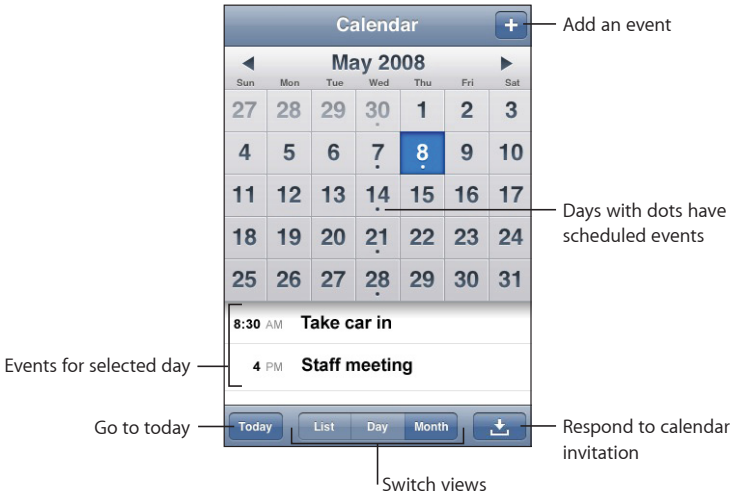
Viewing Your Calendar

You can view your calendar events in a list, by day, or by month. The events for all of your synced calendars appear in the same calendar on iPhone.

Switch views: Tap List, Day, or Month.

- *List view:* All your appointments and events appear in a scrollable list.

- *Day view:* Scroll up or down to see the events in a day. Tap ◀ or ▶ to see the previous or next day's events.
- *Month view:* Tap a day to see its events. Tap ◀ or ▶ to see the previous or next month.



See the details of an event: Tap the event.

Set iPhone to adjust event times for a selected time zone:

1. In Settings, choose General > Date & Time.
2. Turn Time Zone Support on.
3. Tap Time Zone and search for a major city in the time zone you want.

When Time Zone Support is on, Calendar displays event dates and times in the time zone of the city you selected. When Time Zone Support is off, Calendar displays events in the time zone of your current location as determined by the network time.

Photos

iPhone lets you carry your photos with you, so you can share them with your family, friends, and associates. You can sync photos from your computer, and use photos as wallpaper or assign them to identify contacts when they call.

Syncing Photos with Your Computer

iTunes can sync your photos with the following applications:

- *Mac:* iPhoto 4.0.3 or later, or Aperture
- *PC:* Adobe Photoshop Album 2.0 or later, or Adobe Photoshop Elements 3.0 or later

See "What You Need" on page 5.

Viewing Photos

Photos synced from your computer can be viewed in Photos. You can also view the roll of pictures you've taken with the built-in camera.

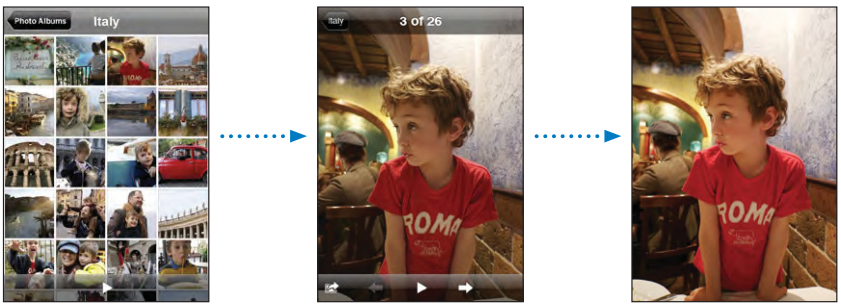
View photos:

1 In Photos:

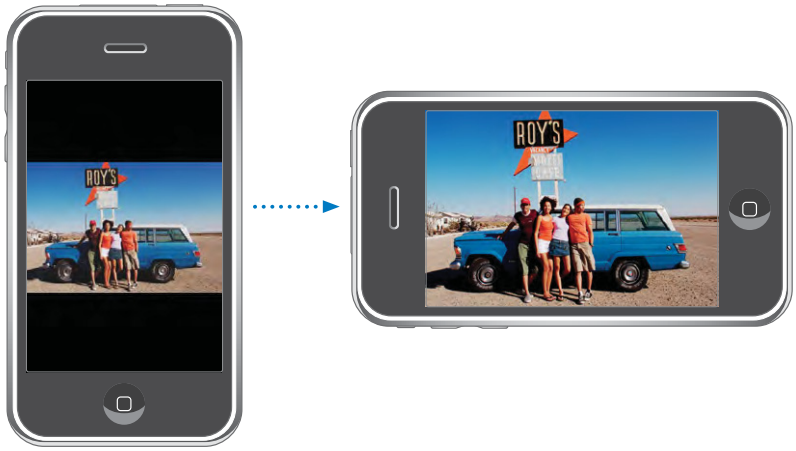
- Tap Photo Library to see all your photos.
- Tap any photo album, or tap Camera Roll to see pictures you've taken with iPhone.

2 Tap a thumbnail to see the photo at full screen.

Show or hide the controls: Tap the full screen photo to show the controls. Tap again to hide them.



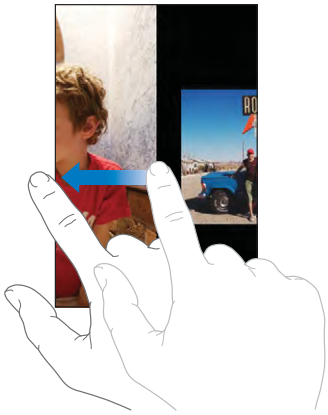
View a photo in landscape orientation: Rotate iPhone sideways. The photo reorients automatically and, if it's in landscape format, expands to fit the screen.



Zoom in on part of a photo: Double-tap where you want to zoom in. Double-tap again to zoom out. You can also pinch to zoom in or out.

Pan around a photo: Drag the photo.

See the next or previous photo: Flick left or right. Or tap the screen to show the controls, then tap ➡ or ⬅.



Slideshows

You can view your photos as a slideshow, complete with background music.

View photos in a slideshow: Choose a photo album, then tap ▶.

You can also tap ▶ to start a slideshow when viewing an individual photo. If you don't see ▶, tap the photo to show the controls.

Stop a slideshow: Tap the screen.

Set slideshow settings: In Settings, choose Photos and set the following options:

- *To set the length of time each slide is shown,* tap Play Each Slide For and choose a time.
- *To set transition effects when moving from photo to photo,* tap Transition and choose a transition type.
- *To set whether slideshows repeat,* turn Repeat on or off.
- *To set whether photos are shown in random order,* turn Shuffle on or off.

Play music during a slideshow: In iPod, play a song, then choose Photos from the Home screen and start a slideshow.

Wallpaper

You see a wallpaper background picture as you unlock iPhone or when you're on a call with someone you don't have a high-resolution photo for.

Set a photo as wallpaper:

1. Choose any photo and tap ⬈, then tap Use As Wallpaper.
2. Drag the photo to pan, or pinch the photo to zoom in or out, until it looks the way you want.

3 Tap Set Wallpaper.

You can also choose from several wallpaper pictures included with iPhone by choosing Settings > Wallpaper > Wallpaper from the Home screen.

Saving Images from an Email Message or Webpage

You can add images attached to an email message or webpage to your Photo Library.

Add a photo to your Photo Library: Press and hold the photo, then tap Save Image.

The image is added to the Camera Roll album. You can upload your Camera Roll pictures to your computer's photo application by connecting iPhone to your computer.

Emailing a Photo

Email a photo: Choose any photo and tap ⇧, then tap Email Photo.

iPhone must be set up for email. See "Organizing Email" on page 51.

Sending a Photo to a MobileMe Gallery

If you have a MobileMe account, you can send photos directly from iPhone to a gallery you've created. You can also send photos to someone else's MobileMe gallery if that person has enabled email contributions.

Before you can send photos to a gallery, you must:

- Set up your MobileMe account on iPhone
- Publish a MobileMe gallery, and allow photo uploading by email
- Join a Wi-Fi network that is connected to the Internet

For more information about creating a gallery, see MobileMe Help.

Send a photo to your gallery: Choose any photo and tap ⇧, then tap Send to Gallery.

Assigning a Photo to a Contact

You can assign a photo to a contact. When that person calls, iPhone displays the photo.

Assign a photo to a contact:

1 Choose Camera from the Home screen and take someone's picture. Or choose any photo alreadyon iPhone and tap ⇧.

2 Tap Assign to Contact and choose a contact.

3 Position and size the photo until it looks the way you want.

Drag the photo to pan, and pinch to zoom in or out.

4 Tap Set Photo.

You can also assign a photo to a contact in Contacts by tapping Edit and then tapping the picture icon.

Camera

iPhone lets you take pictures with the built-in 2-megapixel camera.

Taking Pictures

To take a picture, just point and tap. The camera is on the back of iPhone so you can see the image you want on the display.

Camera photos are tagged with location data if Location Services is turned on. You can use location data with some applications and photo-sharing websites to track and post where you took your pictures. If Location Services is turned off, you'll be prompted to turn it on. If you don't want to include location data with your photos, you don't need to have Location Services turn on to take pictures. See "Location Services" on page 107.

Take a picture: In Camera, aim iPhone and tap .

If you take a picture with iPhone rotated sideways, the pictures is automatically saved in landscape orientation.

Take a screenshot of iPhone's display: Quickly press and release the Sleep/Wake and Home buttons at the same time. A flash of the screen lets you know the screenshot was taken. The screenshot is added to the Camera Roll.

Viewing Pictures

See the pictures you've taken: In Camera, tap . Or in Photos, tap Camera Roll.

Delete a picture: In Camera, tap a picture, then tap . Or in Photos, tap a picture in the Camera Roll album, then tap .

Upload pictures from iPhone to your computer: Connect iPhone to your computer.

- *Mac:* Select the photos you want and click the Import button. In Aperture, you can select the project or folder you want to put the photos in before importing.
- *PC:* Follow the instructions that came with your camera or photo application.

YouTube

YouTube features short videos submitted by people from around the world. (Not available in all languages, and may not be available in all locations.)

Finding and Viewing Videos

You can browse YouTube or search for videos you want to watch.

Browse videos: Tap Featured, Most Viewed, or Bookmarks. Or tap More to browse by Most Recent, Top Rated, or History.

- *Featured:* Videos reviewed and featured by YouTube staff.
- *Most Viewed:* Videos most seen by YouTube viewers. Tap All for all-time most viewed videos, or Today or This Week for most-viewed videos of the day or week.
- *Bookmarks:* Videos you've bookmarked.
- *Most Recent:* Videos most recently submitted to YouTube.
- *Top Rated:* Videos most highly rated by YouTube viewers. To rate videos, go to www.youtube.com.
- *History:* Videos you've viewed most recently.

Search for a video:

1. Tap Search, then tap the YouTube search field.
2. Type a word or phrase that describes what you're looking for, then tap Search. YouTube shows results based on video titles, descriptions, tags, and user names.

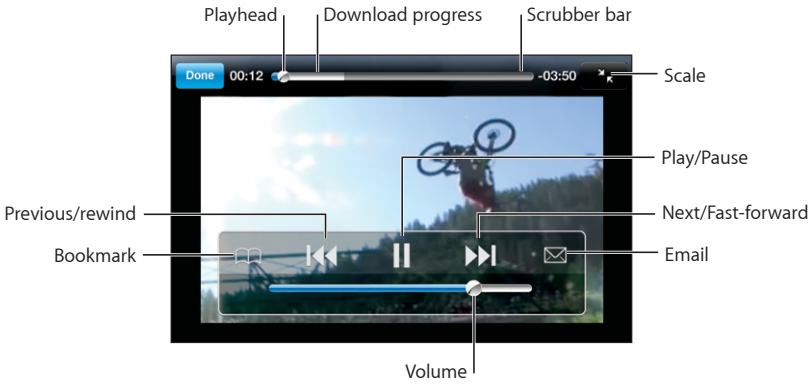
Play a video: Tap the video.

The video begins to download to iPhone and a progress bar appears. When enough of the video has downloaded, it begins to play. You can also tap ▶ to start the video.

Controlling Video Playback

When a video starts playing, the controls disappear so they don't obscure the video.

Show or hide video controls: Tap the screen.

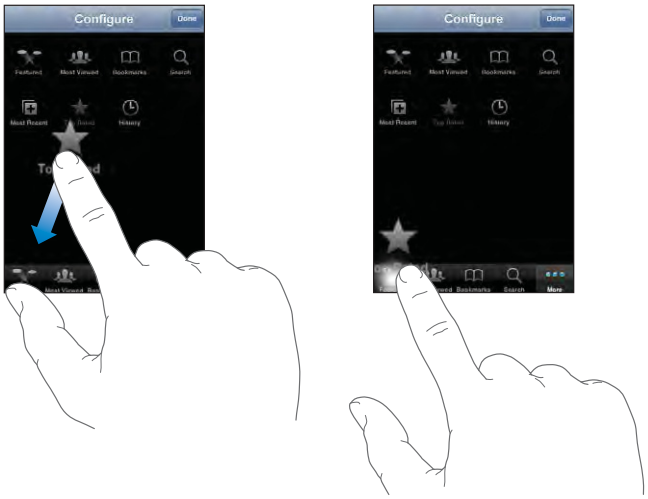


Play or pause a video	Tap ▶ or ❚❚.
Raise or lower the volume	Drag the volume slider. Or use the volume buttons on the side of iPhone.
Start a video over	Tap ⏮.
Skip to the next or previous video	Tap ⏮ twice to skip to the previous video. Tap ⏭ to skip to the next video.
Rewind or fast-forward	Touch and hold ⏮ or ⏭.
Skip to any point in a video	Drag the playhead along the scrubber bar.
Stop watching a video before it finishes playing	Tap Done. Or press the Home button.
Toggle between scaling a video to fill the screen or fit to the screen	Double-tap the video. You can also tap to make the video fill the screen, or tap to make it fit the screen.
Bookmark a video	Tap next to a video and tap Bookmark. Or start playing a video and tap . Tap Bookmarks to see your bookmarked videos.
Email a link to the video	Tap next to a video and tap Share. Or start playing a video and tap .
See details about a video and browse related videos	Play the whole video, tap Done while a video is playing, or tap next to any video in a list. iPhone shows the video's rating, description, date added, and other information. You also see a list of related videos that you can tap to view.

Changing the Browse Buttons

You can replace the Featured, Most Viewed, Bookmarks, and Search buttons at the bottom of the screen with ones you use more frequently. For example, if you watch top rated videos often but don't watch many featured videos, you could replace the Featured button with Top Rated.

Change the browse buttons: Tap More and tap Edit, then drag a button to the bottom of the screen, over the button you want to replace.



You can drag the buttons at the bottom of the screen left or right to rearrange them. When you finish, tap Done.

When you're browsing for videos, tap More to access the browse buttons that aren't visible.

Add Your Own Videos to YouTube

For information about adding your own videos to YouTube, go to www.youtube.com and tap Help.

Stocks

Stocks lets you see the latest available quotes for your selected stocks.

Viewing Stock Quotes

Quotes are updated every time you open Stocks while connected to the Internet. Quotes may be delayed by up to 20 minutes.

Add a stock, index, or fund to the stock reader:

1 Tap ⓘ, then tap +.

2 Enter a symbol, company name, index, or fund name, then tap Search.

3 Choose an item in the search list.

Show a stock's progress over a longer or shorter time period: Tap a stock symbol, then tap 1d, 1w, 1m, 3m, 6m, 1y, or 2y. The chart adjusts to show progress over one day, one week, one, three, or six months, or one or two years.

Delete a stock: Tap ⓘ and tap ⊖ next to a stock, then tap Delete.

Reorder stocks: Tap ⓘ. Then drag ☰ next to a stock to a new place in the list.

Display monetary or percentage change: Tap the number showing the change. Tap it again to switch back. Or tap ⓘ and tap % or Numbers.

Getting More Information

See information about a stock at Yahoo.com: Select the stock and tap Y!.

You can see news, information, websites related to the stock, and more.

Maps

Maps provides street maps, satellite photos, and hybrid views of locations in many of the world's countries. You can get detailed driving directions and, in some areas, traffic information. Also in some areas, you can find and track your current (approximate) location, and use your current location to get driving directions to or from another place.[1]

> ***WARNING:*** For important information about driving and navigating safely, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

Finding and Viewing Locations

Find a location and see a map:

1. Tap the search field to bring up the keyboard.
2. Type an address, intersection, area, landmark, bookmark, contact, or zip code.
3. Tap Search.

   A pin marks the location. Tap the pin to see the name or description of the location.

Tap to get information about the location, get directions, or add the location to your bookmarks or contacts list

Find your current location and turn tracking mode on: Tap .

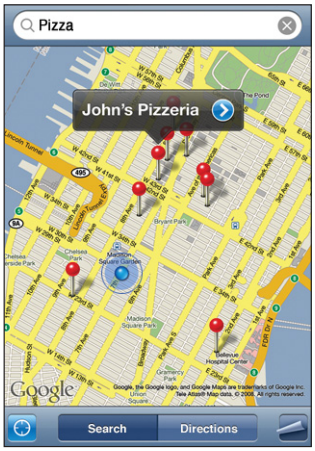
iPhone uses Location Services to determine your current (approximate) location. Location Services uses available information from cellular network data, local Wi-Fi networks (if you have Wi-Fi turned on), and GPS (if you have an iPhone 3G; GPS not available in all locations). The more accurate the information, the more precisely your location is indicated. This feature is not available in all areas.

1 Maps, directions, and location information depend on data collected and services provided by third parties. These data services are subject to change and may not be available in all geographic areas, resulting in maps, directions, or location information that may be unavailable, inaccurate, or incomplete. For more information, see www.apple.com/iphone. In order to provide your location, data is collected in a form that doesn't personally identify you. If you don't want such data collected, don't use the feature. Not using this feature won't impact the functionality of your iPhone.

If Location Services is turned off, you'll be prompted to turn it on. You can't find and track your current location if Location Services is turned off. See "Location Services" on page 107.

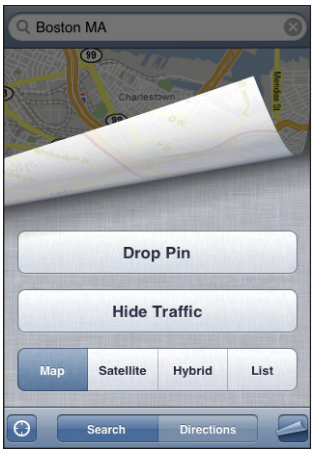
If you have an iPhone 3G, a blue marker indicates your location when GPS is used to find your location. Otherwise, a circle is used to show your approximate location. As you move around, iPhone updates your location, adjusting the map so that the location indicator remains in the center of the screen. If you tap ⊕ again or drag the map, iPhone continues to update your location but stops centering it, so the location information may move off the screen.

Note: To conserve battery life, turn Location Services off when you're not using it. In Settings, choose General > Location Services.



Use the dropped pin: Tap ⊕, then tap Drop Pin.

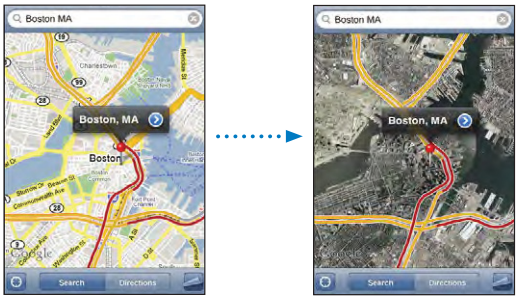
A pin drops down on the map, which you can then drag to any location you choose.



Quickly move the pin to the area currently displayed: Tap , then tap Replace Pin.

Zoom in to a part of a map	Pinch the map with two fingers. Or double-tap the part you want to zoom in on. Double-tap again to zoom in even closer.
Zoom out	Pinch the map. Or tap the map with two fingers. Tap with two fingers again to zoom out further.
Pan or scroll to another part of the map	Drag up, down, left, or right.

See a satellite or hybrid view: Tap , then tap Satellite or Hybrid to see just a satellite view or a combined street map and satellite view.



Tap Map to return to map view.

See the location of someone's address in your contacts list	Tap in the search field, then tap Contacts and choose a contact. To locate an address in this way, the contact must include at least one address. If the contact has more than one address, you must choose the one you want to locate. You can also find the location of an address by tapping the address directly in Contacts.
Add a location to your contacts list	Find a location, tap the pin that points to it, tap next to the name or description, then tap Create New Contact or "Add to Existing Contact."

Bookmarking Locations

You can bookmark locations that you want to find again later.

Bookmark a location: Find a location, tap the pin that points to it, tap next to the name or description, then tap "Add to Bookmarks."

See a bookmarked location or recently viewed location: Tap in the search field, then tap Bookmarks or Recents.

Getting Directions

You can get step-by step driving directions for a destination.

Get directions:

1 Tap Directions.

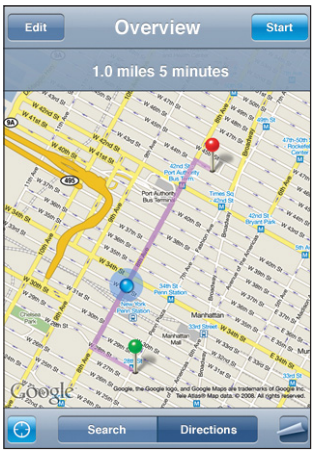
2 Enter starting and ending locations in the Start and End fields. By default, iPhone starts with your current approximate location (when available). Tap in either field and choose a location in Bookmarks (including your current approximate location and the dropped pin, when available), Recents, or Contacts.

For example, if a friend's address is in your contacts list, you can tap Contacts and tap your friend's name instead of having to type the address.

To reverse the directions, tap .

3 Tap Route, then do one of the following:

- *To view directions one step at a time,* tap Start, then tap ➡ to see the next leg of the trip. Tap ⬅ to go back.
- *To view all the directions in a list,* tap , then tap List. Tap any item in the list to see a map showing that leg of the trip.



The approximate driving time appears at the top of the screen. If traffic data is available, the driving time is adjusted accordingly.

You can also get directions by finding a location on the map, tapping the pin that points to it, tapping , then tapping Directions To Here or Directions From Here.

Switch start and end points, for reverse directions: Tap .

If you don't see , tap List, then tap Edit.

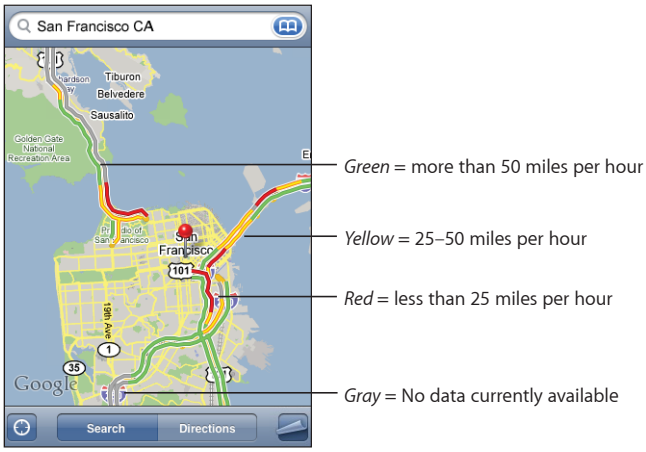
See recently viewed directions: Tap in the search field, then tap Recents.

Showing Traffic Conditions

When available, you can show highway traffic conditions on the map.

Show or hide traffic conditions: Tap , then tap Show Traffic or Hide Traffic.

Highways are color-coded according to the flow of traffic:



If you don't see color-coded highways, you may need to zoom out to a level where you can see major roads, or traffic conditions may not be available for that area.

Finding and Contacting Businesses

Find businesses in an area:

1. Find a location—for example, a city and state or country, or a street address—or scroll to a location on a map.
2. Type the kind of business in the text field and tap Search.

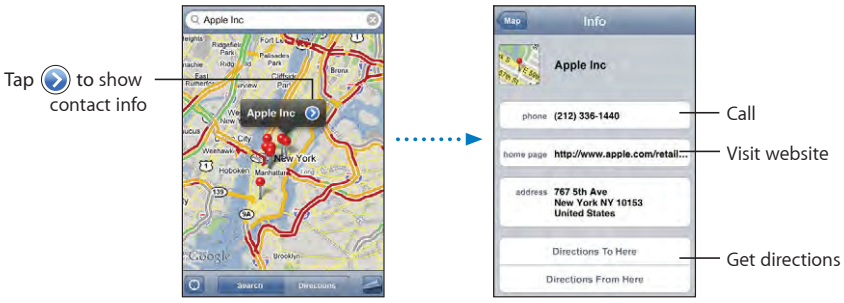
   Pins appear for matching locations. For example, if you locate your city and then type "movies" and tap Search, pins mark movie theatres in your city.

   Tap the pin that marks a business to see its name or description.

Find businesses without finding the location first: Type things like:

- restaurants san francisco ca
- apple inc new york

Contact a business or get directions: Tap the pin that marks a business, then tap ⓘ next to the name.



From there, you can do the following:

- Tap a phone number to call, an email address to send email to, or a web address to visit.
- For directions, tap Directions To Here or Directions From Here.
- To add the business to your contacts list, scroll down and tap Create New Contact or "Add to Existing Contact."

See a list of the businesses found in the search: From the Map screen, tap List.

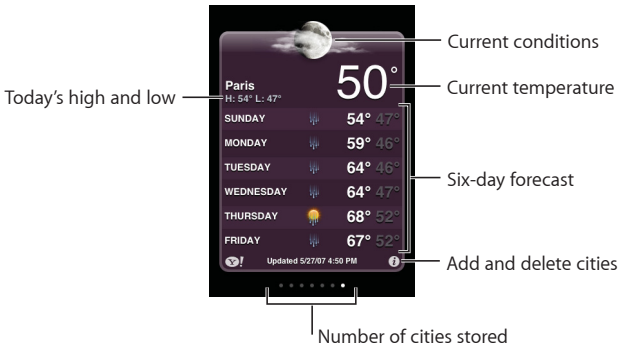
Tap a business to see its location. Or tap ⓘ next to a business to see its information.

Weather

Use Weather to get the current temperature and six-day forecast for one or more cities around the world.

Viewing Weather Summaries

Tap Weather from the Home screen to see the current weather for the selected city.



If the weather board is light blue, it's daytime in that city—between 6:00 a.m. and 6:00 p.m. If the board is dark purple, it's nighttime—between 6:00 p.m. and 6:00 a.m.

Add a city:

1. Tap ⓘ, then tap +.
2. Enter a city name or zip code, then tap Search.
3. Choose a city in the search list.

Switch to another city: Flick left or right, or tap to the left or right of the row of dots. The number of dots below the weather board shows how many cities are stored.

Reorder cities: Tap ⓘ, then drag ≡ next to a city to a new place in the list.

Delete a city: Tap ⓘ and tap ⊖ next to a city, then tap Delete.

Display temperature in Fahrenheit or Celsius: Tap ⓘ, then tap °F or °C.

Getting More Weather Information

You can see a more detailed weather report, news and websites related to the city, and more.

See information about a city at Yahoo.com: Tap Y!.

Clock

Clock lets you see the time in different places, set an alarm, use a stopwatch, and set a timer.

World Clocks

You can add clocks to show the time in other major cities and time zones around the world.

View clocks: Tap World Clock.

If the clock face is white, it's daytime in that city. If the clock face is black, it's nighttime. If you have more than four clocks, flick to scroll through them.

Add a clock:

1 Tap World Clock.

2 Tap +, then type the name of a city.

Cities matching what you've typed appear below.

3 Tap a city to add a clock for that city.

If you don't see the city you're looking for, try a major city in the same time zone.

Delete a clock: Tap World Clock and tap Edit. Then tap ⊖ next to a clock and tap Delete.

Rearrange clocks: Tap World Clock and tap Edit. Then drag ☰ next to a clock to a new place in the list.

Alarms

You can set multiple alarms. Set each alarm to repeat on days you specify, or to sound only once.

Set an alarm:

1 Tap Alarm and tap +.

2 Adjust any of the following settings:

- *To set the alarm to repeat on certain days,* tap Repeat and choose the days.
- *To choose the ringtone that sounds when the alarm goes off,* tap Sound.
- *To set whether the alarm gives you the option to hit snooze,* turn Snooze on or off. If Snooze is on and you tap Snooze when the alarm sounds, the alarm stops and then sounds again in ten minutes.

- *To give the alarm a description,* tap Label. iPhone displays the label when the alarm sounds.

If at least one alarm is set and turned on, appears in the iPhone status bar at the top of the screen.

Note: Some carriers don't support network time in all locations. If you're traveling, iPhone alerts may not sound at the correct local time. See "Date and Time" on page 110.

Turn an alarm on or off: Tap Alarm and turn any alarm on or off. If an alarm is turned off, it won't sound again unless you turn it back on.

If an alarm is set to sound only once, it turns off automatically after it sounds. You can turn it on again to reenable it.

Change settings for an alarm: Tap Alarm and tap Edit, then tap next to the alarm you want to change.

Delete an alarm: Tap Alarm and tap Edit, then tap next to the alarm and tap Delete.

Stopwatch

Use the stopwatch to time an event:

1 Tap Stopwatch.

2 Tap Start to start the stopwatch.

- *To record lap times,* tap Lap after each lap.
- *To pause the stopwatch,* tap Stop. Tap Start to resume.
- *To reset the stopwatch,* tap Reset when the stopwatch is pause.

If you start the stopwatch and go to another iPhone application, the stopwatch continues running in the background.

Timer

Set the timer: Tap Timer, then flick to set the number of hours and minutes. Tap Start to start the timer.

Choose the sound: Tap When Timer Ends.

Set a sleep timer: Set the timer, then tap When Timer Ends and choose Sleep iPod.

When you set a sleep timer, iPhone stops playing music or video when the timer ends.

If you start the timer and go to another iPhone application, the timer continues running in the background.

Calculator

Using the Calculator

Tap numbers and functions in Calculator just as you would with a standard calculator. When you tap the add, subtract, multiply, or divide button, a white ring appears around the button to let you know the operation to be carried out. Rotate iPhone to get an expanded scientific calculator.

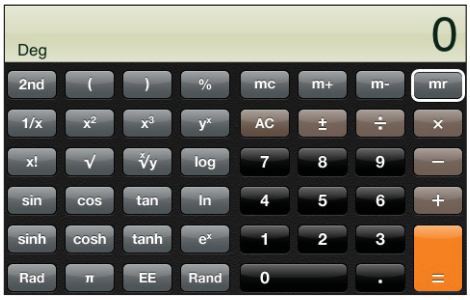
Standard Memory Functions

- *C:* Tap to clear the displayed number.
- *MC:* Tap to clear the memory.
- *M+:* Tap to add the displayed number to the number in memory. If no number is in memory, tap to store the displayed number in memory.
- *M-:* Tap to subtract the displayed number from the number in memory.
- *MR:* Tap to replace the displayed number with the number in memory. If the button has a white ring around it, there is a number stored in memory.

The stored number remains in memory when you switch between the standard and scientific calculators.

Scientific Calculator Keys

Rotate iPhone to landscape orientation to display the scientific calculator.



2nd	Changes the trigonometric buttons (sin, cos, tan, sinh, cosh, and tanh) to their inverse functions ($\sin^{-1}$, $\cos^{-1}$, $\tan^{-1}$, $\sinh^{-1}$, $\cosh^{-1}$, and $\tanh^{-1}$). It also changes ln to log2, and e^x to 2^x. Tap 2nd again to return the buttons to their original functions.
(	Opens a parenthetical expression. Expressions can be nested.
)	Closes a parenthetical expression.

%	Calculates percentages, adds markups, and subtracts discounts. To calculate a percentage, use it with the multiplication (x) key. For example, to calculate 8% of 500, enter 500 x 8 % = which returns 40. To add a markup or subtract a discount, use it with the plus (+) or minus (–) key. For example, to compute the total cost of a $500 item with an 8% sales tax, enter 500 + 8 % = which returns 540.
1/x	Returns the reciprocal of a value in decimal format.
x^2	Squares a value.
x^3	Cubes a value.
y^x	Tap between values to raise the first value to the power of the second value. For example, to compute 3^4, enter 3 y^x 4 = which returns 81.
x!	Calculates the factorial of a value.
√	Calculates the square root of a value.
$^x\sqrt{y}$	Use between values to calculate the x root of y. For example to compute $^4\sqrt{81}$, enter 81 $^x\sqrt{y}$ 4 = which returns 3.
log	Returns the log base 10 of a value.
sin	Calculates the sine of a value.
sin^{-1}	Calculates the arc sine of a value. (Available when the 2nd button is tapped.)
cos	Calculates the cosine of a value.
cos^{-1}	Calculates the arc cosine of a value. (Available when the 2nd button is tapped.)
tan	Calculates the tangent of a value.
tan^{-1}	Calculates the arc tangent of a value. (Available when the 2nd button is tapped.)
ln	Calculates the natural log of a value.
log2	Calculates the log base 2. (Available when the 2nd button is tapped.)
sinh	Calculates the hyperbolic sine of a value.
$sinh^{-1}$	Calculates the inverse hyperbolic sine of a value. (Available when the 2nd button is tapped.)

cosh	Calculates the hyperbolic cosine of a value.
$\cosh^{-1}$	Calculates the inverse hyperbolic cosine of a value. (Available when the 2nd button is tapped.)
tanh	Calculates the hyperbolic tangent of a value.
$\tanh^{-1}$	Calculates the inverse hyperbolic tangent of a value. (Available when the 2nd button is tapped.)
e^x	Tap after entering a value to raise the constant "e" (2.718281828459045...) to the power of that value.
2^x	Calculates 2 to the power of the displayed value. For example, 10 2^x = 1024. (Available when the 2nd button is tapped.)
Rad	Changes mode to express trigonometric functions in radians.
Deg	Changes mode to express trigonometric functions in degrees.
π	Enters the value of π (3.141592653589793...).
EE	An operator that multiplies the currently displayed value by 10 to the power of the next value you enter.
Rand	Returns a random number between 0 and 1.

Notes

Writing and Reading Notes

Notes are listed by date added, with the most recent note at the top. You can see the first few words of each note in the list.

Add a note: Tap +, then type your note and tap Done.

Read a note: Tap the note. Tap ➡ or ⬅ to see the next or previous note.

Edit a note: Tap anywhere on the note to bring up the keyboard.

Delete a note: Tap the note, then tap 🗑.

Emailing Notes

Email a note: Tap the note, then tap ✉.

To email a note, iPhone must be set up for email. See "Organizing Email" on page 51.

Contacts

Importing and Syncing Contacts

You can add contacts to iPhone in the following ways:

- In iTunes, sync contacts with applications on your computer (see "Syncing with iTunes" on page 7)
- Set up MobileMe or Microsoft Exchange accounts on iPhone, with Calendars enabled (see "Setting Up Accounts" on page 12)
- Install a profile that sets up an Exchange account, with Calendars enabled (see "Installing Configuration Profiles" on page 13)
- Enter contacts directly on iPhone
- Import contacts from a SIM

Import contacts from a SIM: In Settings, tap "Mail, Contacts, Calendars," then tap Import SIM Contacts.

The contact information on the SIM is imported to iPhone. If you have Calendars enabled for both MobileMe and Microsoft Exchange, you are prompted to choose which account you want to add the SIM contacts to.

Searching Contacts

You can search the first, last, and company names in your contacts on iPhone. If you have a Microsoft Exchange account set up on iPhone, you may also be able to search your enterprise Global Address List (GAL) for contacts in the organization.

When you enter search information, contacts with matching information appear immediately as you start to type.

Search contacts: In Contacts, tap the search field at the top of any list of contacts and enter a first, last, or company name.

Search a GAL: Tap Groups, tap Directories at the bottom of the list, then enter a first, last, or company name.

You can't edit GAL contacts or save them to iPhone.

Managing Contacts on iPhone

Add a contact on iPhone: Tap Contacts and tap +.

Delete a contact	In Contacts, choose a contact, than tap Edit. Scroll down and tap Delete Contact.
Add a contact from the keypad	Tap Keypad, enter a number, then tap +. Tap Create New Contact and enter the caller's information, or tap "Add to Existing Contact" and choose a contact.
Edit contact information	In Contacts, choose a contact, then tap Edit. To add an item, tap . To delete an item, tap .
Enter a pause in a number	Tap +*#, then tap Pause. One or more pauses may be required by a phone system before dialing an extension, for example. Pauses appear as commas when the number is saved.
Add a recent caller's phone number to your contacts	Tap Recents and tap next to the number. Then tap Create New Contact, or tap "Add to Existing Contact" and choose a contact.

Assign a photo to a contact:

1. Tap Contacts and choose a contact.
2. Tap Edit and tap Add Photo, or tap the existing photo.
3. Tap Take Photo to use the camera. Or tap Choose Existing Photo and choose a photo.
4. Drag and scale the photo as desired.
5. Tap Set Photo.

Use a contact's info screen: Tap Contacts and choose a contact. Then tap an item.

A star next to a phone number means the number is in your favorites list.

See your own phone number: Tap Contacts and scroll to the top of the list. (Not available in all regions.)

Settings

8

Settings allows you to customize iPhone applications, set the date and time, configure your network connection, and enter other preferences for iPhone.

Airplane Mode

Airplane mode disables the wireless features of iPhone to avoid interfering with aircraft operation and other electrical equipment.

Turn on airplane mode: Tap Settings and turn airplane mode on.

When airplane mode is on, ✈ appears in the status bar at the top of the screen. No phone, radio, Wi-Fi, or Bluetooth signals are emitted from iPhone and GPS reception is turned off, disabling many of iPhone's features. You won't be able to:

- Make or receive phone calls
- Get visual voicemail
- Send or receive email
- Browse the Internet
- Sync your contacts, calendars, or bookmarks (MobileMe only) with MobileMe or Microsoft Exchange
- Send or receive text messages
- Stream YouTube videos
- Get stock quotes
- Get map locations
- Get weather reports
- Purchase music or applications

If allowed by the aircraft operator and applicable laws and regulations, you can continue to use iPhone to:

- Listen to music and watch video
- Listen to visual voicemail
- Check your calendar
- Take or view pictures
- Hear alarms
- Use the stopwatch or timer
- Use the calculator
- Take notes
- Read text messages and email messages stored on iPhone

In some regions, where allowed by the aircraft operator and applicable laws and regulations, you can turn Wi-Fi back on, enabling you to:

- Send and receive email
- Browse the Internet
- Sync your contacts, calendars, and bookmarks (MobileMe only) with MobileMe and Microsoft Exchange
- Stream YouTube videos
- Get stock quotes
- Get map locations
- Get weather reports
- Purchase music and applications

Wi-Fi

Wi-Fi settings determine whether iPhone uses local Wi-Fi networks to connect to the Internet. If no Wi-Fi networks are available, or you've turned Wi-Fi off, then iPhone connects to the Internet via your cellular data network, when available. You can use Mail, Safari, YouTube, Stocks, Maps, Weather, and the App Store over a cellular data network connection, but not the iTunes Wi-Fi Music Store.

Turn Wi-Fi on or off: Choose Wi-Fi and turn Wi-Fi on or off.

Join a Wi-Fi network: Choose Wi-Fi, wait a moment as iPhone detects networks in range, then select a network. If necessary, enter a password and tap Join. (Networks that require a password appear with a lock 🔒 icon.)

Once you've joined a Wi-Fi network manually, iPhone automatically joins it whenever the network is in range. If more than one previously used network is in range, iPhone joins the one last used.

When iPhone is joined to a Wi-Fi network, the Wi-Fi icon in the status bar at the top of the screen shows signal strength. The more bars you see, the stronger the signal.

Set iPhone to ask if you want to join a new network: Choose Wi-Fi and turn "Ask to Join Networks" on or off.

When you are trying to access the Internet, by using Safari or Mail for example, and you are not in range of a Wi-Fi network you have previously used, this option tells iPhone to look for another network. iPhone displays a list of all available Wi-Fi networks that you can choose from. (Networks that require a password appear with a lock icon.) If "Ask to Join New Networks" is turned off, you must manually join a network to connect to the Internet when a previously used network or a cellular data network isn't available.

Forget a network, so iPhone doesn't join it automatically: Choose Wi-Fi and tap next to a network you've joined before. Then tap "Forget this Network."

Join a closed Wi-Fi network: To join a Wi-Fi network that isn't shown in the list of scanned networks, choose Wi-Fi > Other and enter the network name. If the network requires a password, tap Security, tap the type of security the network uses, and enter the password.

You must already know the network name, password, and security type to connect to a closed network.

Some Wi-Fi networks may require you to enter or adjust additional settings, such as a client ID or static IP address. Ask the network administrator which settings to use.

Adjust settings to connect to a Wi-Fi network: Choose Wi-Fi, then tap next to a network.

VPN

This setting appears when you have VPN configured on iPhone, allowing you to turn VPN on or off. See "Network" on page 106.

Carrier

This setting appears when you're outside of your carrier's network and other local carrier data networks are available to use for your phone calls, visual voicemail, and cellular network Internet connections. You can make calls only on carriers that have roaming agreements with your carrier. Additional fees may apply. Roaming charges may be billed to you by the carrier of the selected network, through your carrier.

For information about out-of-network coverage and how to enable roaming, contact your carrier or go to your carrier's website.

Select a carrier for phone calls: Choose Carrier and select the network you want to use.

Once you select a network, iPhone uses only that network. If the network is unavailable, "No service" appears on the iPhone screen and you can't make or receive calls or visual voicemail, or connect to the Internet via cellular data network. Set Network Settings to Automatic to have iPhone select a network for you.

Fetch New Data

This setting lets you turn Push on or off for MobileMe, Microsoft Exchange, Yahoo! Mail, and any other "push" accounts you have configured on iPhone. Push accounts automatically deliver new information to iPhone when new information appears on the server (some delays may occur). You might want to turn Push off to suspend delivery of email and other information, or to conserve battery life.

When Push is off and with accounts that do not support push, data can still be "fetched"—that is, iPhone can check with the server and see if new information is available. Use the Fetch New Data setting to determine how often data is requested. For optimal battery life, don't fetch too frequently.

Turn Push on: Tap Fetch New Data, then tap to turn Push on.

Set the interval to fetch data: Tap Fetch New Data, then choose how often you want to fetch data for all accounts.

To conserve battery life, fetch less frequently.

Set fetch or push settings for individual accounts: In Fetch New Data, tap Advanced, then tap an account.

Setting Push to OFF or Fetch to Manually in the Fetch New Data screen overrides individual account settings.

Sounds and the Ring/Silent Switch

Switch between ring and silent mode: Flip the Ring/Silent switch on the side of iPhone.

When set to silent, iPhone doesn't play any ring, alert, or effects sounds. It does, however, play alarms set using Clock.

Set whether iPhone vibrates when you get a call: Choose Sounds. To set whether iPhone vibrates in silent mode, turn Vibrate under Silent 🔕 on or off. To set whether iPhone vibrates in ring mode, turn Vibrate under Ring 🔔 on or off.

Adjust the ringer and alerts volume: Choose Sounds and drag the slider. Or, if no song or video is playing and you aren't on a call, use the volume buttons on the side of iPhone.

Set the ringtone: Choose Sounds > Ringtone.

Set alert and effects sounds: Choose Sounds and turn items on or off under Ring 🔔. When the Ring/Silent switch is set to ring, iPhone plays sounds for alerts and effects that are turned on.

You can set iPhone to play a sound whenever you:

- Get a call
- Get a text message
- Get a voicemail message
- Get an email message
- Send an email message
- Have an appointment that you've set up to alert you
- Lock iPhone
- Type using the keyboard

Brightness

Screen brightness affects battery life. Dim the screen to extend the time before you need to recharge iPhone, or use Auto-Brightness.

Adjust the screen brightness: Choose Brightness and drag the slider.

Set whether iPhone adjusts screen brightness automatically: Choose Brightness and turn Auto-Brightness on or off. If Auto-Brightness is on, iPhone adjusts the screen brightness for current light conditions using the built-in ambient light sensor.

Wallpaper

You see a wallpaper background picture when you unlock iPhone. You can select one of the images that came with iPhone, or use a photo you've synced to iPhone from your computer.

Set wallpaper: Choose Wallpaper and choose a picture.

General

The General settings include date and time, security, network, and other settings that affect more than one application. This is also where you can find information about your iPhone, and reset iPhone to its original state.

About

Choose General > About to get information about iPhone, including:

- Name of your phone network
- Number of songs, videos, and photos
- Total storage capacity
- Space available
- Software version
- Serial and model numbers
- Wi-Fi and Bluetooth addresses
- IMEI (International Mobile Equipment Identity) and ICCID (Integrated Circuit Card Identifier, or Smart Card) numbers
- Modem firmware version of the cellular transmitter
- Legal information

Usage

See your usage statistics: Choose Usage. There, you can see:

- Usage—Amount of time iPhone has been awake and in use since the last full charge. iPhone is awake whenever you're using it—including making or receiving phone calls, using email, sending or receiving text messages, listening to music, browsing the Web, or using any other iPhone features. iPhone is also awake while performance background tasks such as automatically checking for and retrieving email messages.
- Standby—Amount of time iPhone has been powered on since its last full charge, including the time iPhone has been asleep.
- Current period call time and lifetime call time.
- Amount of data sent and received over the cellular data network.

Reset your usage statistics: Tap Usage and tap Reset Statistics to clear the data and cumulative time statistics. The statistics for the amount of time iPhone has been unlocked and in standby mode are not reset.

Network

Use the Network settings to configure a VPN (virtual private network) connection, access Wi-Fi settings, or turn Data Roaming on or off.

Enable or disable 3G: Tap to turn 3G on or off.

Using 3G loads Internet data faster in some cases, but may decrease battery performance. If you're making a lot of phone calls, you may want to turn 3G off to extend battery performance.

Turn Data Roaming on or off: Choose General > Network and turn Data Roaming on or off.

Data Roaming turns on Internet and visual voicemail access over a cellular data network when you're in an area not covered by your carrier's network. For example, when you're traveling, you can turn off Data Roaming to avoid potential roaming charges. By default, Data Roaming is turned off.

Add a new VPN configuration: Choose General > Network > VPN > Add VPN Configuration.

VPNs used within organizations allow you to communicate private information securely over a non-private network. You may need to configure VPN, for example, to access your work email on iPhone.

iPhone can connect to VPNs that use the L2TP, PPTP, or Cisco IPSec protocols. VPN works over both Wi-Fi and cellular data network connections.

Ask your network administrator which settings to use. In most cases, if you've set up VPN on your computer, you can use the same VPN settings for iPhone.

Once you've entered VPN settings, a VPN switch appears at the top level of the Settings menu that you can use to turn VPN on or off.

Change a VPN configuration: Choose General > Network > VPN and tap the configuration you want to update.

Turn VPN on or off: Tap Settings and turn VPN on or off.

Delete a VPN configuration: Choose General > Network > VPN, tap the blue arrow to the right of the configuration name, and tap Delete VPN at the bottom of the configuration screen.

Use Wi-Fi: See "Wi-Fi" on page 102.

Bluetooth

iPhone can connect wirelessly to Bluetooth headsets and car kits for hands-free talking. See "Bluetooth Devices" on page 42.

Turn Bluetooth on or off: Choose General > Network > Bluetooth and turn Bluetooth on or off.

Location Services

Location Services allows applications such as Maps and Camera to gather and use data indicating your location. Location Services does not correlate the data it collects with your personally identifiable information. Your approximate location is determined using available information from cellular network data, local Wi-Fi networks (if you have Wi-Fi turned on), and GPS (if you have an iPhone 3G; GPS not available in all locations).

You can turn Location Services off if you don't want to use this feature. If you turn Location Services off, you'll be prompted to turn it back on again the next time an application tries to use this feature.

Turn Location Services on or off: Choose General > Location Services and turn location services on or off.

To conserve battery life, turn Location Services off when you're not using it.

Auto-Lock

Locking iPhone turns off the display to save your battery and to prevent unintended operation of iPhone. You can still receive calls and text messages, and you can adjust the volume and use the mic button on the iPhone stereo headset when listening to music or on a call.

Set the amount of time before iPhone locks: Choose General > Auto-Lock and choose a time.

Passcode Lock

By default, iPhone doesn't require you to enter a passcode to unlock it.

Set a passcode: Choose General > Passcode Lock and enter a 4-digit passcode, then enter the passcode again to verify it. iPhone then requires you to enter the passcode to unlock it.

Turn passcode lock off: Choose General > Passcode Lock and tap Turn Passcode Off, then enter your passcode.

Change the passcode: Choose General > Passcode Lock and tap Change Passcode, enter your current passcode, then enter and reenter your new passcode.

If you forget your passcode, you must restore the iPhone software. See "Updating and Restoring iPhone Software" on page 142.

Set how long before your passcode is required: Choose General > Passcode Lock > Require Passcode, then select how long iPhone can be idle before you need to enter a passcode to unlock it.

Show SMS Preview when iPhone is locked: Choose General > Passcode Lock and tap to turn SMS preview on.

Erase data after ten failed passcode attempts: Choose General > Passcode Lock and tap Erase Data to turn it on.

After ten failed passcode attempts, your settings are reset to their defaults and all your information and media on your iPhone is removed by overwriting the data stored on iPhone.

Important: You can't use iPhone while data is being overwritten. This can take one to two hours or more, depending on the storage capacity of your iPhone.

Restrictions

You can set restrictions for iPod content for the use of some applications on iPhone. For example, parents can restrict explicit music from being seen on playlists, or turn off YouTube access entirely.

	Explicit music or video content purchased from the iTunes Store will be hidden. Explicit content is marked as such by content providers (such as record labels) when sold through the iTunes Store.
	Safari is disabled and its icon is removed from the Home screen. You cannot browse the web or access web clips.
	YouTube is disabled and its icon is removed from the Home screen.
	The iTunes Wi-Fi Music Store is disabled and its icon is removed from the Home screen. You cannot preview, purchase, or download content.
	The App Store is disabled and its icon is removed from the Home screen. You cannot install applications while iPhone is syncing with iTunes.
	Camera is disabled and its icon is removed from the Home screen. You cannot take pictures.

Set restrictions:

1. Choose General > Restrictions, then tap Enable Restrictions.
2. Enter a four-digit passcode.
3. Reenter the passcode.
4. Set the restrictions you want by tapping individual controls on or off. By default, all controls are on (not restricted). Tap an item to turn it off and restrict its use.

Turn off all restrictions: Choose General > Restrictions, then enter the passcode. Tap Disable Restrictions, then reenter the passcode.

If you forget your passcode, you must restore your iPhone software from iTunes. See "Updating and Restoring iPhone Software" on page 142.

Home Button

Choose General > Home Button to set preferences for double-clicking the Home button. You can set iPhone so that double-clicking the Home button goes to either to the Home screen, Phone Favorites, or iPod.

Set whether double-clicking the Home button shows iPod controls: Turn on Show iPod Controls to display iPod controls when you're playing music and double-click the Home button. This feature works even when your display is turned off or your iPhone is locked.

Date and Time

These settings apply to the time shown in the status bar at the top of the screen, and in world clocks and calendars.

Set whether iPhone shows 24-hour time or 12-hour time: Choose General > Date & Time and turn 24-Hour Time on or off.

Set whether iPhone updates the date and time automatically: Choose General > Date & Time and turn Set Automatically on or off.

If iPhone is set to update the time automatically, it gets the correct time over the cellular network, and updates it for the time zone you're in.

Some carriers don't support network time in all locations. If you're traveling, iPhone may not be able to automatically set the local time.

Set the date and time manually: Choose General > Date & Time and turn Set Automatically off. Tap Time Zone and enter the name of a major city in your time zone. Tap the "Date & Time" return button, then tap "Set Date & Time" and enter the date and time.

Keyboard

Turn Auto-Capitalization on or off: Choose General > Keyboard and turn Auto-Capitalization on or off.

By default, iPhone automatically capitalizes words after you type sentence-ending punctuation or a return character.

Set whether caps lock is enabled: Choose General > Keyboard and turn Enable Caps Lock on or off.

If caps lock is enabled and you double-tap the Shift ⇧ key on the keyboard, all letters you type are uppercase. The Shift key turns blue when caps lock is on.

Turn the "." shortcut on or off: Choose General > Keyboard and turn "." Shortcut on or off.

The "." shortcut lets you double-tap the space bar to enter a period followed by a space when you're typing. It is on by default.

Turn international keyboards on or off: Choose General > Keyboards > International Keyboards and turn on the keyboards you want.

If more than one keyboard is turned on, tap 🌐 to switch keyboards when you're typing. When you tap the symbol, the name of the newly active keyboard appears briefly. See "International Keyboards" on page 27.

International

Use the International settings to set the language for iPhone, turn keyboards for different languages on or off, and set the date, time, and telephone number formats for your region.

Set the language for iPhone: Choose General > International > Language, choose the language you want to use, and tap Done.

Turn international keyboards on or off: Choose General > International > Keyboards, and turn on the keyboards you want.

If more than one keyboard is turned on, tap 🌐 to switch keyboards when you're typing. When you tap the symbol, the name of the newly active keyboard appears briefly. See "International Keyboards" on page 27.

Set date, time, and telephone number formats: Choose General > International > Region Format, and choose your region.

Resetting iPhone

Reset all settings: Choose General > Reset and tap Reset All Settings.

All your preferences and settings are reset. Information, such as your contacts and calendars, and media, such as your songs and videos, are not deleted.

Erase all content and settings: Connect iPhone to your computer or a power adapter. Choose General > Reset and tap "Erase All Content and Settings."

This feature resets all settings to their defaults and removes all your information and media on your iPhone by overwriting the data stored on iPhone.

Important: You can't use iPhone while data is being overwritten. This can take one to two hours or more, depending on the storage capacity of your iPhone.

Reset the keyboard dictionary: Choose General > Reset and tap Reset Keyboard Dictionary.

You add words to the keyboard dictionary by rejecting words iPhone suggests as you type. Tap a word to reject the correction and add the word to the keyboard dictionary. Resetting the keyboard dictionary erases all words you've added.

Reset network settings: Choose General > Reset and tap Reset Network Settings.

When you reset network settings, your list of previously used networks and your VPN settings are removed. Wi-Fi is turned off and then back on, disconnecting you from any network you're on. The Wi-Fi and "Ask to Join Networks" settings are left turned on.

Reset the Home screen layout: Choose General > Reset and tap Reset Home Screen Layout.

Reset the location warnings: Choose General > Reset and tap Reset Location Warnings.

Location warnings are the requests made by applications (such as Camera and Maps) to use Location Services with those applications. iPhone stops presenting the warning for an application the second time you tap OK. Tap Reset Location Warnings to resume the warnings.

Mail, Contacts, Calendars

Use Mail, Contacts, Calendars settings to set up and customize accounts for iPhone:

- Microsoft Exchange
- MobileMe
- Google email
- Yahoo! Mail
- AOL
- Other POP and IMAP mail systems

Accounts

The Accounts section lets you set up accounts on iPhone. The specific settings that appear depend on the type of account you're setting up. Your service provider or system administrator should be able to provide the information you need to enter.

For more information about adding accounts, see "Setting Up Accounts" on page 12.

Change an account's settings: Choose "Mail, Contacts, Calendars," choose an account, then make the changes you want.

Changes you make to an account's settings are *not* synced to your computer, so you can configure your accounts to work with iPhone without affecting the account settings on your computer.

Stop using an account: Choose "Mail, Contacts, Calendars," choose an account, then turn Account off.

If an account is off, iPhone doesn't display the account and doesn't send or check email from or sync other information with that account, until you turn it back on.

Adjust advanced settings: Choose "Mail, Contacts, Calendars," choose an account, then do one of the following:

- *To set whether drafts, sent messages, and deleted messages are stored on iPhone or remotely on your email server (IMAP accounts only),* tap Advanced and choose Drafts Mailbox, Sent Mailbox, or Deleted Mailbox.

  If you store messages on iPhone, you can see them even when iPhone isn't connected to the Internet.
- *To set how long before messages are removed permanently from Mail on iPhone,* tap Advanced and tap Remove, then choose a time: Never, or after one day, one week, or one month.
- *To adjust email server settings,* tap Host Name, User Name, or Password under Incoming Mail Server or Outgoing Mail Server. Ask your network administrator or Internet service provider for the correct settings.
- *To adjust SSL and password settings,* tap Advanced. Ask your network administrator or Internet service provider for the correct settings.

Delete an account from iPhone: Choose "Mail, Contacts, Calendars," choose an account, then scroll down and tap Delete Account.

Deleting an account means you can no longer access the account with your iPhone. All email and the contacts, calendar, and bookmark information synced with the account are removed from iPhone. However, deleting an account doesn't remove the account or its associated information from your computer.

Mail

The Mail settings, except where noted, apply to all accounts you have set up on iPhone.

To turn alerts sounds for new or sent mail on or off, use the Sounds settings.

Set the number of messages shown on iPhone: Choose "Mail, Contacts, Calendars" > Show, then choose a setting.

Choose to see the most recent 25, 50, 75, 100, or 200 messages. To download additional messages when you're in Mail, scroll to the bottom of your inbox and tap "Download … more."

Note: For Microsoft Exchange accounts, choose "Mail, Contacts, Calendars" and choose the Exchange account. Tap "Mail days to sync" and choose the number of days of mail you want to sync with the server.

Set how many lines of each message are previewed in the message list: Choose "Mail, Contacts, Calendars" > Preview, then choose a setting.

You can choose to see up to five lines of each message. That way, you can scan a list of messages in a mailbox and get an idea of what each message is about.

Set a minimum font size for messages: Choose "Mail, Contacts, Calendars" > Minimum Font Size, then choose Small, Medium, Large, Extra Large, or Giant.

Set whether iPhone shows To and Cc labels in message lists: Choose "Mail, Contacts, Calendars," then turn Show To/Cc Label on or off.

If Show To/Cc Label is on, To or Cc next to each message in a list indicates whether the message was sent directly to you or you received a copy.

Set whether iPhone confirms that you want to delete a message: Choose "Mail, Contacts, Calendars" and turn Ask Before Deleting on or off.

If Ask Before Deleting is on, to delete a message you must tap 🗑, then confirm by tapping Delete.

Set whether iPhone sends you a copy of every message you send: Choose Mail, then turn Always Bcc Myself on or off.

Set the default email account: Choose "Mail, Contacts, Calendars" > Default Account, then choose an account.

This setting determines which of your accounts a message is sent from when you create a message from another iPhone application, such as sending a photo from Photos or tapping the email address of a business in Maps. To send the message from a different account, tap the From field in the message and choose another account.

Add a signature to your messages: Choose Mail > Signature, then type a signature.

You can set iPhone to add a signature—your favorite quote, or your name, title, and phone number, for example—to the bottom of every message you send.

Contacts

Set how contacts are sorted: Choose "Mail Contacts, Calendars," then under Contacts tap Sort Order and do one of the following:

- *To show first name first,* tap First, Last.
- *To show last name first,* tap Last, First.

Set how contacts are displayed: Choose "Mail Contacts, Calendars," then under Contacts tap Display Order and do one of the following:

- *To show first name first,* tap First, Last.
- *To show last name first,* tap Last, First.

Import contacts from a SIM: Choose "Mail, Contacts, Calendars," then tap Import SIM Contacts.

The contact information on the SIM is imported to iPhone. If you have both MobileMe and Microsoft Exchange contacts synced with iPhone, you are prompted to choose which account you want to add the SIM contacts to.

Calendar

Set alerts to sound when your receive meeting invitation: Choose "Mail, Contacts, Calendars," and under Calendar tap "New Invitation Alerts" to turn it on.

Set how far back in the past to show your calendar events on iPhone: Choose "Mail, Contacts, Calendars" > Sync, then choose a period of time.

Turn on Calendar time zone support: Choose "Mail, Contacts, Calendars" > Time Zone Support, then turn Time Zone Support on. Select a time zone for calendars by tapping Time Zone and entering the name of a major city.

When Time Zone Support is on, Calendar displays event dates and times in the time zone of the city you selected. When Time Zone Support is off, Calendar displays events in the time zone of your current location as determined by the network time.

Important: Some carriers do not support network time in all locations. If you're traveling, iPhone may not display events or sound alerts at the correct local time. To manually set the correct time, see "Date and Time" on page 110.

Phone

Use Phone settings to forward incoming calls, turn call waiting on or off, change your password, and other things.

Calling From Abroad

Set iPhone to add the correct prefix when dialing from another country: In Settings, tap Phone, then turn International Assist on. This lets you make calls to your home country using the numbers in your contacts and favorites, without having to add a prefix or your country code (not available in all areas).

For more information, see "Using iPhone Abroad" on page 45.

Call Forwarding

You can set iPhone to forward incoming calls to another number. For example, you may be on vacation and want all calls to go somewhere else. If you're going to an area with no cellular coverage, you may want to forward calls to a place where you can be reached.

Set iPhone to forward your calls:

1. Choose Phone > Call Forwarding and turn Call Forwarding on.
2. Tap Forwarding To and enter the phone number you want calls forwarded to.

You must be in range of the cellular network when you set iPhone to forward calls, or calls won't be forwarded.

Call Waiting

Activate or deactivate call waiting: Choose Phone > Call Waiting, then turn Call Waiting on or off. If you turn call waiting off and someone calls you when you're already on the phone, the call goes to voicemail.

Show My Caller ID

Show or hide your caller ID: Choose Phone > Show My Caller ID, then turn Show My Caller ID on or off.

If Show My Caller ID is off, people you call can't see your name or phone number on their phone.

Using iPhone with a Teletype (TTY) Machine

In some regions, Teletype (TTY) machines are used by deaf or hearing-impaired people to communicate by typing and reading text. If you have the iPhone TTY Adapter cable, available at www.apple.com/store, you can use iPhone with a TTY machine.

Connect iPhone to a TTY machine: Choose Phone, then turn TTY on. Then connect iPhone to your TTY machine using the iPhone TTY Adapter.

For information about using a TTY machine, see the documentation that came with the machine.

For more information about other accessibility features of iPhone, go to www.apple.com/accessibility.

Changing Your Voicemail Password

A voicemail password helps prevent others from access your voicemail. You only need to enter the password when you're calling in to get your messages from another phone. You won't need to enter the password when using voicemail on iPhone.

Change your voicemail password: Choose Phone > Change Voicemail Password.

Locking Your SIM Card

You can lock your SIM card, so it can't be used without a PIN number. You must enter the number each time you turn iPhone off and turn it back on again. Some carriers require a SIM PIN in order to use iPhone.

Important: If you enter the PIN incorrectly three times, you may need to contact your carrier for a Personal Unlocking Key (PUK) to enable your SIM card again. Some cellular networks may not accept an emergency call from iPhone if the SIM is locked.

Turn the SIM PIN on or off:

1. Choose Phone > SIM PIN, then turn SIM PIN on or off.
2. Enter your SIM PIN number to confirm. Use the PIN assigned by your carrier, or your carrier's default PIN.

Change the PIN number for your SIM card:

1. Choose Phone > SIM PIN.
2. Turn SIM PIN on, then tap Change PIN.
3. Enter your current password, then enter your new password.
4. Enter your new password again to confirm, then tap Done.

Accessing Your Carrier's Services

Depending on your carrier, you may be able to access some of your carrier's services directly from iPhone. For example, you may be able to check your bill balance, call directory assistance, and view how many minutes you have left.

Access your carrier's services: Choose Phone. Then scroll down and tap the button for your carrier's services.

When you request information such as your bill balance, your carrier may provide the information in a text message. Contact your carrier to find out if there are any charges for these services.

Safari

Safari settings let you select your Internet search engine, set security options, and for developers, turn on debugging.

General

You can use Google or Yahoo! to perform Internet searches.

Select a search engine: Choose Safari > Search Engine and select the search engine you want to use.

Security

By default, Safari is set to show features of the web, such as some movies, animation, and web applications. You may wish to turn off some of these features to help protect iPhone from possible security risks on the Internet.

Change security settings: Choose Safari, then do one of the following:

- *To enable or disable JavaScript,* turn JavaScript on or off.

  JavaScript lets web programmers control elements of the page—for example, a page that uses JavaScript might display the current date and time or cause a linked page to appear in a new pop-up page.
- *To enable or disable plug-ins,* turn Plug-ins on or off. Plug-ins allow Safari to play some types of audio and video files and to display Microsoft Word files and Microsoft Excel documents.

- *To block or allow pop-ups,* turn Block Pop-ups on or off. Blocking pop-ups stops only pop-ups that appear when you close a page or open a page by typing its address. It doesn't block pop-ups that open when you tap a link.
- *To set whether Safari accepts cookies,* tap Accept Cookies and choose Never, "From visited," or Always.

  A cookie is a piece of information that a website puts on iPhone so the website can remember you when you visit again. That way, webpages can be customized for you based on information you may have provided.

  Some pages won't work correctly unless iPhone is set to accept cookies.
- *To clear the history of webpages you've visited,* tap Clear History.
- *To clear all cookies from Safari,* tap Clear Cookies.
- *To clear the browser cache,* tap Clear Cache.

  The browser cache stores the content of pages so the pages open faster the next time you visit them. If a page you open isn't showing new content, clearing the cache may help.

Developer

The Debug Console can help you resolve webpage errors. If turned on, the console appears automatically when a webpage error occurs.

Turn the debug console on or off: Choose Safari > Developer, and turn Debug Console on or off.

iPod

Use iPod Settings to adjust settings for music and video playback on your iPod.

Music

The Music settings apply to songs, podcasts, and audiobooks.

Set iTunes to play songs at the same sound level: In iTunes, choose iTunes > Preferences if you're using a Mac, or Edit > Preferences if you're using a PC, then click Playback and select Sound Check.

Set iPhone to use the iTunes volume settings (Sound Check): Choose iPod and turn Sound Check on.

You can set audiobooks to play faster than normal so you can hear them more quickly, or slower so you can hear them more clearly.

Set audiobook play speed: Choose iPod > Audiobook Speed, then choose Slower, Normal, or Faster.

Use the equalizer to change the sound on iPhone to suit a particular sound or style: Choose iPod > EQ and choose a setting.

Set a volume limit for music and videos: Choose iPod > Volume Limit and drag the slider to adjust the maximum volume.

Tap Lock Volume Limit to assign a code to prevent the setting from being changed.

Setting a volume limit only limits the volume of music (including podcasts and audiobooks) and videos (including rented movies), and only when headphones, earphones, or speakers are connected to the headset jack on iPhone.

WARNING: For important information about avoiding hearing loss, see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.

Video

Video settings apply to video content, including rented movies. You can set where to resume playing videos that you previously started, turn closed captioning on or off, and set up iPhone to play videos on your TV.

Set where to resume playing: Choose iPod > Start Playing, then select whether you want videos that you previously started watching to resume playing from the beginning or where you left off.

Turn closed captioning on or off: Choose iPod and turn Closed Captioning on or off.

TV Out

Use these settings to set up how iPhone plays videos on your TV. For more information about using iPhone to play videos on your TV, see "Watching Videos on a TV" on page 67.

Turn widescreen on or off: Choose iPod and turn Widescreen on or off.

Set TV signal to NTSC or PAL: Choose iPod > TV Signal and select NTSC or PAL.

NTSC and PAL are TV broadcast standards. NTSC displays 480i and PAL displays 576i. Your TV might use either of these, depending on where you bought it. If you're not sure which to use, check the documentation that came with your TV.

Photos

Use Photos settings to specify how slideshows display your photos.

Set the length of time each slide is shown: Choose Photos > Play Each Slide For and select the length of time.

Set a transition effect: Choose Photos > Transition and select a transition effect.

Set whether to repeat slideshows: Choose Photos and turn Repeat on or off.

Set photos to appear randomly or in order: Choose Photos and turn Shuffle on or off.

iTunes and App Store

9

iTunes Wi-Fi Music Store

You can search for, browse, preview, purchase, and download songs and albums from the iTunes Wi-Fi Music Store directly to iPhone. Your purchased content is automatically copied to your iTunes library the next time you sync iPhone with your computer.

To use the iTunes Wi-Fi Music Store, iPhone must join a Wi-Fi network that is connected to the Internet. See "Connecting to the Internet" on page 30.

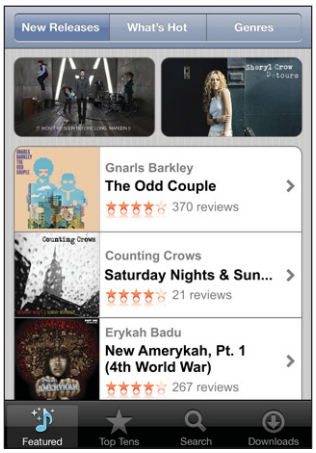
You'll also need an iTunes Store account to purchase songs over Wi-Fi (the iTunes Wi-Fi Music Store is available in some countries only). If you don't already have an iTunes Store account, open iTunes on your computer and choose Store > Account to set one up.

Note: You cannot access the iTunes Wi-Fi Music Store over a cellular data network. If you attempt to access the iTunes Wi-Fi Music Store without joining a Wi-Fi network, an error message appears.

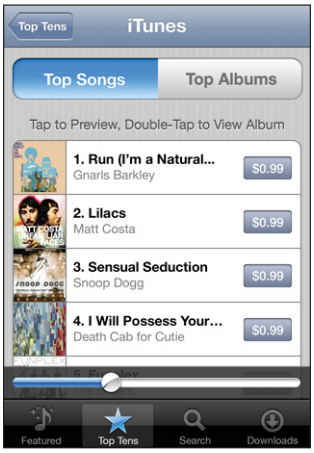
Finding Songs and Albums

Browse the featured selections to see new releases and iTunes Wi-Fi Music Store recommendations. Browse Top Tens to see the most popular songs and albums in each of several categories. If you're looking for a specific song, album, or artist, use Search.

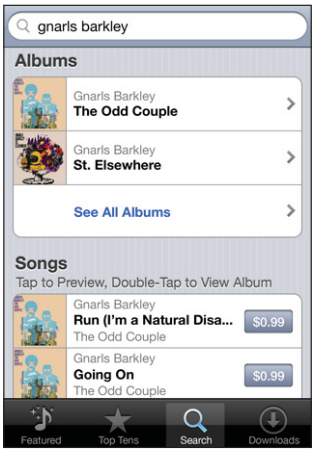
Browse featured songs and albums: Tap Featured, then choose a category at the top of the screen.



Browse top ten songs and albums: Tap Top Tens, then choose a category and tap Top Songs or Top Albums.



Search for songs and albums: Tap Search, tap the search field and enter one or more words, then tap Search.



See the songs on an album: Tap the album.

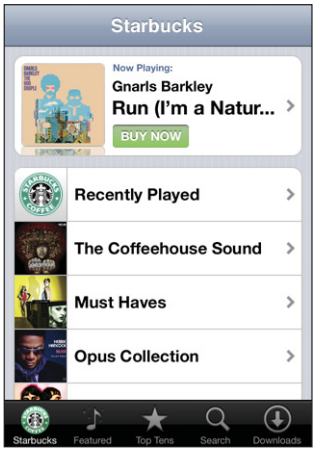
See the album a song is on: Double-tap the song.

Browsing Starbucks Selections

If you join a Starbucks Wi-Fi network in select Starbucks locations (available in the U.S. only), the Starbucks icon appears at the bottom of the screen next to Featured. Tap the Starbucks icon to find out what song is playing in the café and browse featured Starbucks Collections.

For a list of select Starbucks locations, go to www.apple.com/itunes/starbucks.

Find out what song is playing: Tap Starbucks. The currently playing song appears at the top of the screen. Tap the song to see the album the song is on, along with the other songs on the album.



View Recently Played and other Starbucks playlists: Tap Starbucks, then choose Recently Played or one of the Starbucks playlists.

Purchasing Songs and Albums

When you find a song or album you like in the iTunes Wi-Fi Music Store, you can purchase and download it to iPhone. You can preview a song before you purchase it to make sure it's a song you want. In select Starbucks locations (available in the U.S. only), you can also preview and purchase the currently playing and other songs from featured Starbucks Collections.

Preview a song: Tap the song.

Purchase and download a song or album:

1 Tap the price, then tap Buy Now.

If you were signed in to your iTunes Store account in iTunes the last time you synced iPhone, you don't have to enter your account ID. Otherwise, you are prompted to enter your account ID.

2 Enter your password and tap OK.

Your purchase is charged to your iTunes Store account. For additional purchases made within the next fifteen minutes, you don't have to enter your password again.

An alert appears if you've previously purchased one or more songs from an album. Tap Buy if you want to purchase the entire album including the songs you've already purchased, or tap Cancel if you want to purchase the remaining songs individually.

Some albums include bonus content, which is downloaded to your iTunes library on your computer. Not all bonus content is downloaded directly to iPhone.

See the status of downloading songs and albums: Tap Downloads.

To pause a download, tap ❚❚.

If you need to turn off iPhone or leave the area of your Wi-Fi connection, it's okay to pause the download. iPhone starts the download again the next time iPhone joins a Wi-Fi network with an Internet connection. Or, if you open iTunes on your computer, iTunes completes the download to your iTunes library.

Purchased songs are added to a Purchased playlist on iPhone. If you delete the Purchased playlist, iTunes creates a new one when you buy an item from the iTunes Wi-Fi Music Store.

App Store

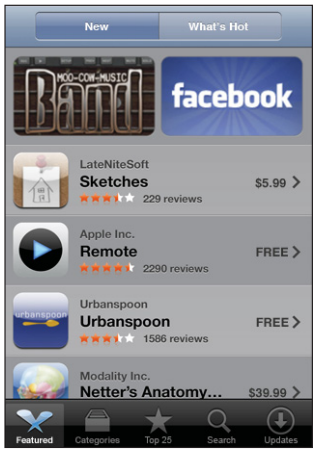
You can search for, browse, review, purchase, and download applications from the App Store directly to iPhone. Applications you download and install from the App Store on iPhone are backed up to your iTunes library the next time you sync iPhone with your computer. You can also install applications you've purchased or downloaded through iTunes on your computer when you sync with iPhone.

To use the App Store, iPhone must be connected to the Internet. See "Connecting to the Internet" on page 30. You'll also need an iTunes Store account (available in many countries) to download applications. If you don't have an iTunes Store account, open iTunes on your computer and choose Store > Account to set one up.

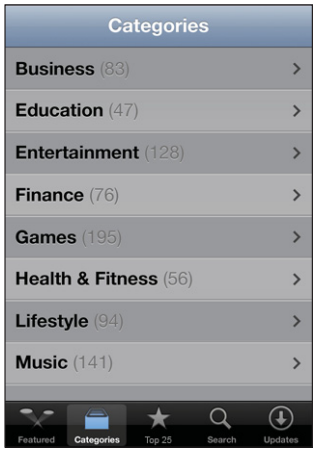
Browsing and Searching

Browse the featured selections to see new releases and App Store recommendations. Browse Top 25 to see the most popular applications. If you're looking for a specific application, use Search.

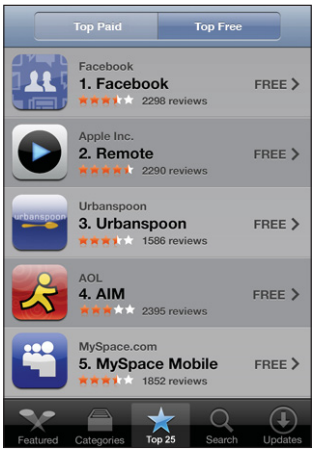
Browse featured applications: Tap Featured, then choose a featured category at the top of the screen.



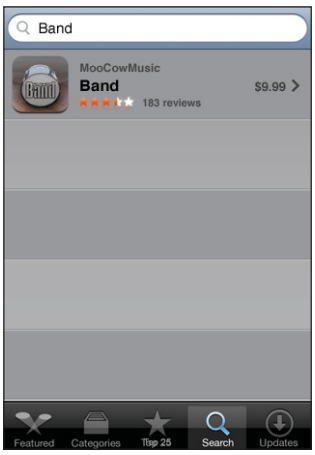
Browse by category: Tap Categories, then choose a category to see a list of applications.



Browse the top 25 applications: Tap Top 25, then scroll through the list of applications.

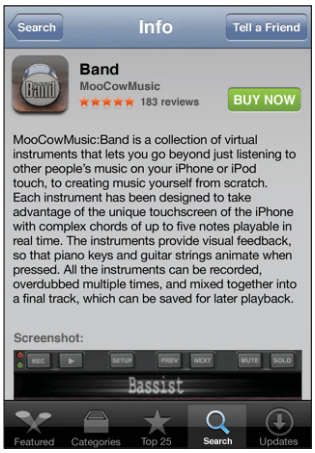


Search for applications: Tap Search, tap the search field and enter one or more words, then tap Search.



Info Screen

Tap any application in a list to see more information, such as the application's price, reviews, and other information.



If you've already installed the application, "Installed" appears instead of the price on the Info screen.

Send a link to an application via email: From the Info screen, tap Tell a Friend.

Read reviews: From the Info screen, tap Reviews.

Downloading Applications

When you find an application you want in the App Store, you can purchase and download it to iPhone. If the application is free, you can download it without charge after providing your iTunes account information.

Once you download an application, it is immediately installed on iPhone.

Purchase and download an application:

1 Tap the price (or tap Free), then tap Buy Now.

If you were signed in to your iTunes Store account in iTunes the last time you synced iPhone, you don't have to enter your account ID. Otherwise, you are prompted to enter your account ID.

2 Enter your password and tap OK.

Downloads for purchase are charged to your iTunes Store account. For additional downloads made within the next fifteen minutes, you don't have to enter your password again.

See the status of downloading applications: After you begin downloading an application, its icon appears on your Home screen and shows the status of the download and installation.

If you need to turn off iPhone or leave the area of your network connection, it's okay to interrupt the download. iPhone starts the download again the next time iPhone joins a network with an Internet connection.

Deleting App Store Applications

You can delete applications you've installed from the App Store. If you delete an application, data associated with the application will no longer be available to iPhone, even if you reinstall the application.

You can reinstall any application and any associated data from your iTunes library as long as you backed up the application by syncing to your computer. If you try to delete an application that hasn't been backed up to your computer, an alert appears.

Delete an App Store application:

1. Touch and hold any application icon on the Home screen until the icons start to wiggle.
2. Tap the "x" in the corner of the application you want to delete.
3. Tap Delete, then press the Home button to save your arrangement.

To overwrite the data associated with an application, use "Erase All Content and Settings" in iPhone settings. See "Resetting iPhone" on page 111.

Writing Reviews or Reporting Problems

You can write and submit your own application reviews or report an application problem directly on iPhone.

Write a review:

1. From the Info screen, tap Reviews.
2. From the Review screen, tap , then "Write a Review."
3. Select the number of stars (1–5) for your rating of the application, title for the review, and optional review comments. If you've written reviews before, the nickname field is already filled in. Otherwise, you're asked to create a reviewer nickname.
4. Tap Send.

You must be signed into your iTunes Store account in order to submit reviews.

Report a problem: From the Review screen, tap ✎, then tap "Report a Problem." Select a problem from the list, or type optional comments, then tap Report.

Updating Applications

Whenever you access the App Store, it checks for updates to applications you've installed. By default, the App Store also automatically checks for updates every week. The App Store icon shows the total number of application updates available.

If an update is available and you access the App Store, the Updates screen appears immediately. Application updates are free and are downloaded and automatically installed when you choose to update them. Application upgrades are new releases that can be purchased or downloaded through the App Store on iPhone or the iTunes Store on your computer.

Update an application:

1. At the bottom of the screen, tap Updates.
2. Tap an application to see more information about the update.
3. Tap Update.

If you try to update an application purchased from a different iTunes Store account, you are prompted for that account's ID and password in order to download the update.

Syncing Purchased Content

iTunes automatically syncs songs, albums, and applications you've purchased on iPhone to your iTunes library when you connect iPhone to your computer. This lets you listen to the purchases on your computer and provides a backup if you delete applications or purchased content from iPhone.

Songs are synced to the "Purchased on <name of your iPhone>" playlist. iTunes creates the playlist if it doesn't exist. iTunes also copies your purchases to the Purchased playlist that iTunes uses for purchases you make on your computer, if that playlist exists and is set to sync with iPhone.

Downloaded applications are backed up the next time you sync with iTunes. Afterwards, only application data is backed up when you sync with iTunes.

Applications are synced to the Applications list in your iTunes library. iTunes creates the list if it doesn't exist.

Verifying Purchases

You can use iTunes to verify that all the music, videos, applications, and other items you bought from the iTunes Wi-Fi Music Store or App Store are in your iTunes library. You might want to do this if a download was interrupted.

Verify your purchases:

1. Make sure your computer is connected to the Internet.
2. In iTunes, choose Store > Check for Available Downloads.
3. Enter your iTunes Store account ID and password, then click Check.

   Purchases not yet on your computer are downloaded.

   The Purchased playlist displays all your purchases. However, because you can add or remove items in this list, it might not be accurate. To see all your purchases, make sure you're signed in to your account, choose Store > View My Account, and click Purchase History.

Updating Your Account

iPhone gets your iTunes Store account information from iTunes. You can view and change your iTunes Store account information using iTunes on your computer.

View and change your iTunes Store account information: In iTunes, choose Store > View My Account.

You must be signed in to your iTunes Store account. If "View My Account" doesn't appear in the Store menu, choose Store > Sign in.

Purchase music or applications from another iTunes Store account: Sign in to that account when you connect to the iTunes Wi-Fi Music Store or when you purchase or download an application from the App Store.

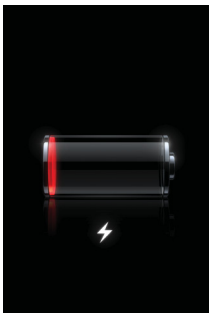
Troubleshooting

A Appendix

General

Low-Battery Image Appears

iPhone is low on power and needs to charge for up to ten minutes before you can use it. For information about charging iPhone, see "Charging the Battery" on page 32.



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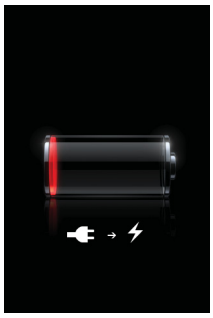


iPhone Doesn't Respond

- iPhone may be low on power. Connect iPhone to your computer or to its power adapter to charge. See "Charging the Battery" on page 32.
- Press and hold the Home button below the screen for at least six seconds, until the application you were using quits.
- If that doesn't work, turn iPhone off and turn it on again. Press and hold the Sleep/Wake button on top of iPhone for a few seconds until a red slider appears, and then drag the slider. Then press and hold the Sleep/Wake button until the Apple logo appears.
- If that doesn't work, reset iPhone. Press and hold both the Sleep/Wake button and the Home button for at least ten seconds, until the Apple logo appears.

iPhone Still Doesn't Respond After Reset

- Reset iPhone settings. From the Home screen choose Settings > General > Reset > Reset All Settings. All your preferences are reset, but your data and media aren't deleted.

- If that doesn't work, erase all content on iPhone. See "Resetting iPhone" on page 111.
- If that doesn't work, restore the iPhone software. See "Updating and Restoring iPhone Software" on page 142.

"This accessory is not made to work with iPhone" Appears

Make sure the dock connector is free of debris.

If you connect iPhone to an accessory not specifically made for it, iPhone may ask if you want to turn on airplane mode. This is to eliminate radio interference from cellular signals coming from iPhone. You may be able to use iPhone with the accessory whether or not you turn on airplane mode. However, the accessory may not charge iPhone.

If you turn on airplane mode, you won't be able to make calls, send or receive text messages, access the Internet, or use Bluetooth devices with iPhone until you disconnect iPhone from the accessory or turn off airplane mode.

"This accessory is not supported by iPhone" Appears

The accessory you attached may not work with iPhone. Make sure the dock connector is free of debris.

Connect-to-iTunes Screen Appears

iPhone needs to be activated. Connect iPhone to your computer and open iTunes if it doesn't open automatically.

iPhone Is Too Warm

If the interior temperature of iPhone 3G exceeds normal operating temperatures, you may experience the following as it attempts to regulate its temperature:

- iPhone stops charging
- display dims
- weak cellular signal
- temperature warning screen appears

Important: You cannot use iPhone while the temperature warning screen is displayed except to make an emergency call. If none of the above measures succeeds in lowering the internal temperature, iPhone automatically goes into a deep sleep mode until it cools. You cannot make an emergency call when iPhone is in this mode. Move iPhone to a cooler location and wait a few minutes before trying to use iPhone again.

iTunes and Syncing

iPhone Doesn't Appear in iTunes

- The iPhone battery might need to be recharged. For information about charging iPhone, see "Charging the Battery" on page 32.
- Disconnect other USB devices from your computer and connect iPhone to a different USB 2.0 port on your computer (not on your keyboard).
- Turn iPhone off and back on again. Press and hold the Sleep/Wake button on top of iPhone for a few seconds until a red slider appears, then drag the slider. Then press and hold the Sleep/Wake button until the Apple logo appears. Tap Unlock and enter your SIM's PIN if the SIM is locked.

  Important: If you enter the PIN incorrectly three times, you may need to contact your carrier for a Personal Unlocking Key (PUK) to enable your SIM card again.
- Restart your computer and reconnect iPhone to your computer.
- Download and install (or reinstall) the latest version of iTunes from www.apple.com/itunes.

Syncing Doesn't Work

- The iPhone battery might need to be recharged. For information about charging iPhone, see "Charging the Battery" on page 32.
- Disconnect other USB devices from your computer and connect iPhone to a different USB 2.0 port on your computer (not on your keyboard).
- Turn iPhone off and back on again. Press and hold the Sleep/Wake button on top of iPhone for a few seconds until a red slider appears, then drag the slider. Then press and hold the Sleep/Wake button until the Apple logo appears. Tap Unlock and enter your SIM's PIN if the SIM is locked.

  Important: If you enter the PIN incorrectly three times, you may need to contact your carrier for a Personal Unlocking Key (PUK) to enable your SIM card again.
- Restart your computer and reconnect iPhone to your computer.
- Download and install (or reinstall) the latest version of iTunes from www.apple.com/itunes.

Contacts, Calendars, or Bookmarks Don't Sync

- Download and install (or reinstall) the latest version of iTunes from www.apple.com/itunes.

- If you've set up a MobileMe or Microsoft Exchange account on iPhone, iTunes won't sync the contacts, calendars, or bookmarks you set to sync in the iPhone Info preference pane. You must disable any items in MobileMe or Exchange that you want to sync through iTunes. In Settings, tap "Mail, Contacts, Calendars," tap the MobileMe or Exchange account, and deselect any items you want to sync through iTunes. If you have both MobileMe and Exchange accounts, you must deselect those items in both accounts.

  Note: When you deselect Contacts or Calendars in your MobileMe or Exchange account, the contact or calendar information is no longer accessible via iPhone.

You Don't Want to Sync Info on iPhone to Your Computer

Replace contacts, calendars, mail accounts, or bookmarks on iPhone with information from your computer.

Replace iPhone information:

1. Open iTunes.
2. As you connect iPhone to your computer, press and hold Command-Option (if you're using a Mac) or Shift-Control (if you're using a PC) until you see iPhone in the iTunes sidebar. This prevents iPhone from syncing automatically.
3. Select iPhone in the iTunes sidebar and click the Info tab.
4. Under "Replace information on this iPhone," select Contacts, Calendars, Mail Accounts, or Bookmarks. You can select more than one, if you like.
5. Click Apply.

   Information of the selected type is erased from iPhone and replaced with what's on your computer. The next time you sync, iPhone syncs normally, adding information you've entered on iPhone to your computer, and vice versa.

Yahoo! or Google Address Book Doesn't Sync

iTunes may not be able to connect with Yahoo! or Google. Make sure you are connected to the Internet, and that you've entered the correct ID and password in iTunes. Connect iPhone to your computer, click the Info tab in iTunes, click Configure in the Contacts section, then enter your current ID and password.

Yahoo! Address Book Still Has Contacts Deleted From iPhone

Yahoo! Address Book doesn't allow contacts containing a Messenger ID to be deleted through syncing. To delete a contact containing a Messenger ID, log in to your Yahoo! account online and delete the contact using Yahoo! Address Book.

Phone and Voicemail

Can't Make or Receive Calls

- Check the cell signal icon in the status bar at the top of the screen. If there are no bars, or if it says "No service," try moving to a different location. If you're indoors, try going outdoors or moving closer to a window.
- Check to make sure you're in an area with network coverage. Go to your carrier's website to see network coverage areas.
- Make sure airplane mode isn't on. From the Home screen choose Settings, then turn airplane mode off. If that doesn't work, turn airplane mode on, wait 15 seconds, then turn airplane mode off again.
- Turn iPhone off and back on again. Press and hold the Sleep/Wake button on top of iPhone for a few seconds until a red slider appears, then drag the slider. Then press and hold the Sleep/Wake button until the Apple logo appears. Tap Unlock and enter your SIM's PIN if the SIM is locked.

  Important: If you enter the PIN incorrectly three times, you may need to contact your carrier for a Personal Unlocking Key (PUK) to enable your SIM card again.
- There may be a problem with your wireless service. Call your carrier or go to your carrier's website.
- Restore the iPhone software. See "Updating and Restoring iPhone Software" on page 142.

Can't Make Calls over Wi-Fi

iPhone doesn't support calling over Wi-Fi.

Visual Voicemail Is Not Available

Visual Voicemail is delivered over the cellular data network or a Wi-Fi connection. Because Data Roaming is turned off by default, you may not have access to the Internet when traveling abroad unless you turn Data Roaming on or connect to a Wi-Fi network. To turn Data Roaming on, in Settings choose General > Network and tap Data Roaming. Data roaming charges may apply.

Important: Data roaming charges may apply. To avoid data roaming charges, turn Data Roaming off.

Voicemail Service Is Called When You Tap Voicemail

If the voice instructions prompt you, enter your voicemail password. Otherwise, wait until you hear any voice instruction, then end the call. After a time, Voicemail should become available again.

This may occur if you removed the SIM card from iPhone and replace it with another SIM card.

Safari, Text, Mail, and Contacts

Websites, Text, or Email Aren't Available

- Check the cell signal icon in the status bar at the top of the screen. If there are no bars, or if it says "No service," try moving to a different location. If you're indoors, try going outdoors or moving closer to a window.
- Check to make sure you're in an area with network coverage. Go to your carrier's website to see network coverage areas.
- If the cellular network is not available, connect to a Wi-Fi network if possible.
- Make sure airplane mode isn't on. From the Home screen choose Settings, then turn airplane mode off. If that doesn't work, turn airplane mode on, wait 15 seconds, then turn airplane mode off again.
- Make sure to include an area code for every phone number in your contacts list that you use to send or receive text messages.
- Turn iPhone off and back on again. Press and hold the Sleep/Wake button on top of iPhone for a few seconds until a red slider appears, then drag the slider. Then press and hold the Sleep/Wake button until the Apple logo appears. Tap Unlock and enter your SIM's PIN if the SIM is locked.

  Important: If you enter the PIN incorrectly three times, you may need to contact your carrier for a Personal Unlocking Key (PUK) to enable your SIM card again.
- There may be a problem with your wireless service. Call your carrier or go to your carrier's website.
- If you're traveling abroad, you may not have Internet access because Data Roaming is turned off (the default). Turn Data Roaming on or connect to a Wi-Fi network. To turn Data Roaming on, in Settings choose General > Network and tap Data Roaming. Data roaming charges may apply.

  Important: Data roaming charges may apply. To avoid data roaming charges, turn Data Roaming off.
- Restore the iPhone software. See "Updating and Restoring iPhone Software" on page 142.

Email Attachment Won't Open

The file type may not be supported. iPhone supports the following email attachment file formats:

.doc	Microsoft Word
.docx	Microsoft Word (XML)
.htm	webpage

.html	webpage
.key	Keynote
.numbers	Numbers
.pages	Pages
.pdf	Preview, Adobe Acrobat
.ppt	Microsoft PowerPoint
.pptx	Microsoft PowerPoint (XML)
.txt	text
.vcf	contact information
.xls	Microsoft Excel
.xlsx	Microsoft Excel (XML)

Email Can't Be Delivered (Port 25 Timed Out)

You may need to change the port setting on an outgoing mail server for one of your email accounts. For information, go to www.apple.com/support/iphone and search for "I can receive email on iPhone but can't send it."

Can't Text over Wi-Fi

iPhone doesn't support texting over Wi-Fi.

GAL Contacts Don't Appear

Check your Microsoft Exchange settings to make sure you're on the right server. In Settings, tap "Mail, Contacts, Calendars" and choose an account to display its settings.

If you're trying to search for GAL contacts in Contacts, tap Groups and tap Directories at the bottom of the list.

Sound, Music, and Video

No Sound

- Unplug and reconnect the headset. Make sure the connector is pushed in all the way.
- Make sure the volume isn't turned down all the way.
- Music on iPhone might be paused. Try pressing the mic button on the headset to resume playback.Or from the Home screen tap iPod, tap Now Playing, then tap ▶.
- Check to see if a volume limit is set. From the Home screen choose Settings > iPod > Volume Limit. For more information, see "Music" on page 118.
- Make sure you are using the latest version of iTunes (go to www.apple.com/itunes).

- If you are using the optional dock's line out port, make sure your external speakers or stereo are turned on and working properly.

Pressing Mic Button Doesn't Resume Music Playback

iPhone goes to sleep after music has been paused for five minutes. Press the Home ▢ or Sleep/Wake button to wake up iPhone.

Headphones Don't Fit in Jack

iPhone supports third-party headsets and headphones with a standard 3.5 millimeter stereo miniplug. If you have an original iPhone, some headsets and headphones may not connect properly to iPhone because the plug body is too large to fit in the jack inset. Third-party adapters may be available.

Song, Video, or Other Items Won't Play

The song may have been encoded in a format that iPhone doesn't support. The following audio file formats are supported by iPhone. These include formats for audiobooks and podcasting:

- AAC (M4A, M4B, M4P, up to 320 Kbps)
- Apple Lossless (a high-quality compressed format)
- MP3 (up to 320 Kbps)
- MP3 Variable Bit Rate (VBR)
- WAV
- AA (audible.com spoken word, formats 2, 3, and 4)
- AAX (audible.com spoken word, AudibleEnhanced format)
- AIFF

The following video file formats are supported by iPhone:

- H.264 (Baseline Profile Level 3.0)
- MPEG-4 (Simple Profile)

A song encoded using Apple Lossless format has full CD-quality sound, but takes up only about half as much space as a song encoded using AIFF or WAV format. The same song encoded in AAC or MP3 format takes up even less space. When you import music from a CD using iTunes, it is converted to AAC format by default.

Using iTunes for Windows, you can convert nonprotected WMA files to AAC or MP3 format. This can be useful if you have a library of music encoded in WMA format.

iPhone doesn't support WMA, MPEG Layer 1, MPEG Layer 2 audio files, or audible.com format 1.

If you have a song or video in your iTunes library that isn't supported by iPhone, you may be able to convert it to a format iPhone supports. See iTunes Help for more information.

iTunes Stores

iTunes Wi-Fi Music Store Isn't Available

To use the iTunes Wi-Fi Music Store, iPhone must join a Wi-Fi network that is connected to the Internet. See "Connecting to the Internet" on page 30. The iTunes Wi-Fi Music Store is not available in all countries.

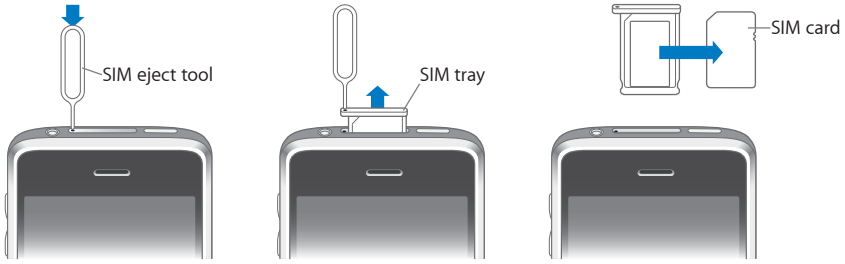
Can't Purchase Music or Applications

To purchase songs from the iTunes Wi-Fi Music Store (only available in some countries) or applications from the App Store, you must have an iTunes Store account. Open iTunes on your computer and choose Store > Create Account.

Removing the SIM Card

If you need to send your iPhone in for service or if you want to loan your iPhone to someone and you still want to be able to make calls, you may be able to use the SIM card inside iPhone with another GSM phone.

Remove the SIM card: Insert the end of the SIM eject tool (or a small paper clip) into the hole on the SIM tray. Press firmly and push it straight in until the tray pops out.



Backing Up iPhone

iTunes creates backups of settings, downloaded applications and data, and other information on iPhone. You can use a backup to restore these items to your iPhone after a software restore or to transfer the information to another iPhone.

Backing up iPhone or restoring from a backup is not the same as syncing content and other items (such as music, podcasts, ringtones, photos, videos, and applications that you download via iTunes) with your iTunes library. Backups include settings, downloaded applications and data, and other information that resides on iPhone. You can restore these items from a backup using iTunes, but you may also have to sync your iTunes library content again.

Applications downloaded from the App Store are backed up the next time you sync with iTunes. Afterwards, only application data is backed up when you sync with iTunes.

Creating Backups

Backups can be created in the following ways:

- Once iPhone has been configured to sync with a particular computer, iTunes automatically makes a backup of iPhone on that computer when you sync. iTunes won't automatically back up an iPhone that is not configured to sync with that computer. If you have configured iPhone to automatically sync with iTunes on a specific computer, iTunes will back up iPhone every time you connect it to that computer. Automatic syncing is turned on by default. iTunes only makes one backup each time you connect, even if you sync multiple times before disconnecting.
- If you choose to update the software on iPhone, iTunes will back up iPhone automatically, even if it is not configured to sync with iTunes on that computer.
- If you choose to restore the software on iPhone, iTunes asks if you want to back up iPhone before restoring.

If you use a Bluetooth headset or car kit with iPhone and you restore settings, you must pair the Bluetooth device with iPhone again to use it.

Restoring from a Backup

You can restore the settings, downloaded applications, and other information from a backup, or use this feature to transfer these items to another iPhone.

Restore iPhone from a backup:

1. Connect iPhone to the computer you normally sync with.
2. In iTunes, select iPhone in the sidebar and click the Summary tab.
3. Click Restore to reinstall the iPhone software, restore its default settings, and delete data stored on iPhone. In iTunes, you can also restore from a backup without deleting data stored on iPhone.

   Deleted data is no longer accessible via the iPhone user interface, but is not permanently erased from your iPhone until it is overwritten by new data. For information about permanently erasing all content and settings, see "Resetting iPhone" on page 111.

When prompted, select the option to restore your settings, downloaded applications, and other information from a backup and select the backup you want to use. Multiple backups are listed by device in chronological order with the most recent backup for a device listed first.

Removing a Backup

You can remove a backup of iPhone from the list of backups in iTunes. You may want to do this, for example, if a backup was created on someone else's computer.

Remove a backup:

1. In iTunes, open iTunes Preferences.
   - *Windows:* Choose Edit > Preferences.
   - *Mac:* Choose iTunes > Preferences.
2. Click Devices (iPhone does not need to be connected).
3. Select the backup you want to remove and click Delete Backup.
4. Confirm you wish to remove the selected backup by clicking Delete Backup.
5. Click OK to close the iTunes Preferences Window.

For more information about backups, including the settings and information stored in a backup, see support.apple.com/kb/HT1766.

Updating and Restoring iPhone Software

You can use iTunes to update or reinstall iPhone software, restore default settings, and delete all data on iPhone.

- *If you update,* the iPhone software is updated but your downloaded applications, settings, and songs are not affected.
- *If you restore,* the latest version of iPhone software is reinstalled, default settings are restored, and data stored on iPhone is deleted, including downloaded applications, songs, videos, contacts, photos, calendar information, and any other data. In iTunes, you can also restore from a backup without deleting data stored on iPhone.

Deleted data is no longer accessible via the iPhone user interface, but is not permanently erased from your iPhone until it is overwritten by new data. For information about permanently erasing all content and settings, see "Resetting iPhone" on page 111.

Update or restore iPhone:

1. Make sure you have an Internet connection and have installed the latest version of iTunes from www.apple.com/itunes.
2. Connect iPhone to your computer.
3. Select iPhone in the iTunes sidebar and click the Summary tab.

4 Click "Check for Update." iTunes tells you if there's a newer version of the iPhone software available.

5 Click Update to install the latest version of the software. Or click Restore to restore. Follow the onscreen instructions to complete the restore process.

For more information about updating and restoring iPhone software, see support.apple.com/kb/HT1414.

iPhone Accessibility Features

The following features may make it easier for you to use iPhone if you have a disability.

TTY Support (Available in Some Areas)

Use iPhone in TTY mode with the iPhone TTY Adapter (available separately) to use a Teletype (TTY) machine. See "Using iPhone with a Teletype (TTY) Machine" on page 116.

Closed Captioning

When available, you can turn on closed captioning for videos. See "Video" on page 119.

Minimum Font Size for Mail Messages

To increase readability, set a minimum font size for Mail message text to Large, Extra Large, or Giant. See "Mail" on page 113.

Large Keypad

Make phone calls simply by tapping entries in your contacts and favorites lists. When you need to dial a number, iPhone's large numeric keypad makes it easy. See "Phone Calls" on page 35.

Zooming

Double-tap or pinch webpages, photos, and maps to zoom in. See "Zooming In or Out" on page 25.

Visual Voicemail

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 is hard to understand. See "Checking Voicemail" on page 39.

Downloadable, Assignable Ringtones

You can download and assign distinctive ringtones to individuals in your contacts list for audible caller ID. Create and download additional ringtones of your favorite songs from the iTunes store (sold separately). See "Setting Ringtones" on page 41 and "Creating Ringtones" on page 41.

Instant Messaging (IM) Chat

Use the built-in Safari web browser to take advantage of web-based Internet Messaging (IM) services optimized for iPhone like Meebo.com, BeeJive.com, and eBuddy.com that support popular IM chat services like AIM, MobileMe, ICQ, Yahoo, Google talk, and MSN.

Universal Access in Mac OS X

Take advantage of the Universal Access features in Mac OS X when you use iTunes to sync information and content from your iTunes library to iPhone. In the Finder, choose Help > Mac Help, then search for "universal access."

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

Other Resources

B Appendix

Safety, Software, and Service Information

The following table describes where to get more iPhone-related safety, software, and service information.

To learn about	Do this
Using iPhone safely	See the *Important Product Information Guide* at www.apple.com/support/manuals/iphone for the latest safety and regulatory information.
iPhone service and support, tips, forums, and Apple software downloads	Go to www.apple.com/support/iphone.
Service and support from your carrier	Contact your carrier or go to your carrier's website.
The latest information about iPhone	Go to www.apple.com/iphone.
Using iTunes	Open iTunes and choose Help > iTunes Help. For an online iTunes tutorial (available in some areas only), go to www.apple.com/support/itunes.
MobileMe	Go to www.me.com.
Using iPhoto on Mac OS X	Open iPhoto and choose Help > iPhoto Help.
Using Address Book on Mac OS X	Open Address Book and choose Help > Address Book Help.
Using iCal on Mac OS X	Open iCal and choose Help > iCal Help.

To learn about	Do this
Microsoft Outlook, Windows Address Book, Adobe Photoshop Album, and Adobe Photoshop Elements	See the documentation that came with those applications.
Finding your iPhone serial number or International Mobile Equipment Identity (IMEI) number	You can find your iPhone serial and IMEI numbers on the iPhone packaging. Or, on iPhone, choose Settings > General > About from the Home screen. In iTunes on your computer, hold down the Control key and choose Help > About iTunes (Windows) or iTunes > About iTunes (Mac), then release the Control key. (Press the Space bar to pause the scrolling.)
Obtaining warranty service	First follow the advice in this guide and online resources. Then go to www.apple.com/support or see the *Important Product Information Guide* at www.apple.com/support/manuals/iphone.
Battery replacement service	Go to www.apple.com/support/iphone/service/battery.
Using iPhone in an enterprise environment	Go to www.apple.com/iphone/enterprise.

iPhone-Optimized User Guide

The *iPhone User Guide,* optimized for viewing on iPhone, is available at help.apple.com/iphone.

View the guide on iPhone: In Safari, tap 📖, then tap the *iPhone User Guide* bookmark.

Add a web clip for the guide to the Home screen: When viewing the guide, tap +, then tap "Add to Home Screen."

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019-1345/2008-09

https://web.archive.org/web/20080920182535/http:/www.cellucity.co.za:80/phones/3G%20iphone%20-%20I900%20omnia%20comparison.pdf

Apple 3G iPhone / Samsung i900 Omnia comparison

Specification sheet

3G iPhone VS Omnia		
Price	16 Gig @ 569 Euro (Vodafone Italy)	
Operating System	Apple OS	Windows Mobile 6.1
Network	Quad Band	Quad Band
Dimensions (mm)	115.5 x 62.1 x 12.3mm	112 x 56.9 x 12.5
Weight	133 grams	?
HSDPA/3G/EDGE/GPRS	HSDPA? / 3G / EDGE	HSDPA 7.2 / 3G / EDGE
Screen	QWVGA (240 x 400)	QWVGA (240 x 400)
Camera	2MP (No video conf cam)	5MP Autofocus / VGA
Connectivity	Bluetooth / WiFi	Bluetooth / WiFi
Multimedia	H.264 (VGA at 30fps) / MP4 / MOV / MP3 / AAC-LC / AIFF / WAV	Divx / Xvid / MP4 / WMV / H.264 / MP3 / Ogg / WAV / AAC+ / ASF
Memory	8 and 16gig	8 and 16gig / MicroSD (up to 8gig)
GPS	Geotagging / Streamed Maps	Geotagging / Garmin
Battery	?	1440 mAh
Talk Time / Standby	5hrs (3G) / 300hrs (3G)	?
Processor	620mHz ?	625mHz
Interface	Multi Touch	Full Touch / Optical Mouse / TouchWiz
TV out	No	Yes
Push Mail	MessageME ($99 pa) and ActiveSync	Exchange Push Mail
FM Radio	No	Yes with RDS
Documents	Document Viewers	Full MS Office suite

Better Specification
Worse Specification
Similar spec or irrelevant
Specifications not yet confirmed

Important Considerations

1. Navigation

Both products have integrated GPS units. The iPhone does not come with a licensed Navigation software package, and so uses a streamed mapping solution (Google Maps currently). It is important to understand that these mapping solutions require substantial data to be streamed in real time when in use. This pushes potentially significant costs on to the customer when the service is being used. Google maps from a mobile perspective suits the American market substantially better than the South African one due to their 'all you can eat' data plans.

The i900 will be included in the ongoing strategic partnership with Garmin in South Africa. This provides a licensed mapping solution for the life of the product, which will incur no additional data costs to the customer when used for navigation.

It is worth noting that the Google Maps application is free, and a Windows Mobile version is available. This means the i900 can offer what the iPhone currently offers, ***as well as*** the additional full mapping solution from Garmin.

Google maps currently do not have comprehensive coverage in South Africa.

2. Business Features

The 3G iPhone was launched with great hype as "the best phone for business….EVER" due to its support for push mail, document management, open operating system and device management. Below we examine each of these elements:

(i) Push Mail

Apple now offer a push mail solution called *mobileME.* This service is available through Apple for $99 US per annum. For this you get 20 Gigabytes of online storage for your email solution. It is very much a consumer offering, and is not suited to Enterprise customers. The iPhone now supports Microsoft's Exchange ActiveSync.

The i900 natively supports ActiveSync, as it is part of the Microsoft suite of solutions for the business professional. As such, push mail and real-time synchronization of your email, contacts, tasks and calendar are provided.

This push mail solution from Microsoft carries no additional costs to the consumer (apart from associated data costs). The only enterprise requirement for this solution is that they have a Microsoft Exchange server (Exchange 2003 with Service Pack 2 is required) installed. Most enterprise customers are already using this solution, and so no additional costs will be incurred to utilize this solution.

Apple is proud of their full HTML supported email – so your email will arrive in exactly the same format in which it was sent. Windows Mobile 6.1 supports HTML mail, and as such will provide the same user experience.

(ii) Document Management

Apple have built in support for the Microsoft Office suite. Word, PowerPoint and Excel documents can be viewed on the device.

The i900 is a Windows Mobile Professional device, and as such offers viewing capabilities for Word, PowerPoint and Excel similar to the iPhone, but significantly, *these document types can be **edited** on the device too.*

(iii) Operating System

The iPhone operating system is now"Open" in that it supports 3rd party developed applications. This puts it into the powerful "Smartphone" category of devices. Many applications should become available in the coming months for the iPhone.

Windows Mobile has 10s of thousands of applications already available. It was strategically important for Microsoft to deliver the same model on a mobile device that they have on the desktop for many years with clear success. From a Microsoft perspective, the focus with Windows Mobile has always been application driven instead of hardware or technology driven.

(iv) Device Management

Remote device management is becoming more important for the enterprise. The iPhone supports remote device management, including:

- Remotely enforceable security policies
- VPN
- Remote device configuration
- Remote device wipe

Windows Mobile 6.1 supports all of the above, with additional remote management capabilities such as remote application installation etc.

3. Pricing

The iPhone launch event has caused significant confusion about the price of the device. The announcement indicated the 8 gig version of the iPhone would sell for $199 US and the 16 gig for $ 299 US. What the announcement did not disclose, is that the quoted prices are ***pay-in*** prices, assuming a 2 year, $30 per month contract with AT&T in the US.

Vodafone in Italy have shown pre-paid prices for the iPhone and they are: 8 Gig - 499 Euro and 16 Gig – 569 Euro.

This link is the English translated version of the page:

http://translate.google.com/translate?hl=en&langpair=it%7Cen&u=http://www.iphone.vodafone.it/

The indicative pricing for the i900 is directly competitive with the iPhone pricing on both 8GB and 16GB versions. Obviously we will monitor “actual” SA Rand pricing once we can get access to this information, and will market our unit(s) accordingly.

Key Points Summary

Technology: The i900 has a higher specification than the iPhone in almost every category. The only significant technology supported by the iPHone that is not supported by the i900, is their “Multi-touch” touch-screen technology. The i900 will offer the “TouchWiz” solution found on the F480 by comparison, as well as the well known Windows Mobile interface.

Navigation: Both products offer full navigation solutions, with the i900 offering a more comprehensive, as well as more cost-effective solution for consumers.

Business: Apple says: “The best phone for business. Ever.” This is not at all the case. Windows Mobile offers everything that Apple does with their product, and significantly more – Document Editing, remote management tools etc.

Pricing: The initial prices quoted at the iPhone launch were confusing and have created a misconception in the market about the actual cost of the product. The i900 should compete directly with the 3G iPhone from a price perspective.

https://web.archive.org/web/20080804210148/http:/www.iphoneaustralia.com.au/export.php?ID=16&type=PDF

Apple iPhone Specifications

Author: Hussein Jaafar
Saved From: http://iphoneaustralia.com.au/article-16.html

- **Talk time**
- **8**

- **Standby time**
- **250**

-

- **Camera resolution**
- **2-megapixel**

-

- **Networks**
- **GSM 850, GSM 900, GSM 1800, GSM 1900**

- **Wireless technology**
- **Bluetooth, 802.11b, 802.11g**

- **Data services**
- **GPRS, EDGE**

- **USB connectivity**
- **Yes**

-

- **Main display: Screen resolution**
- **320 x 480 pixels**

-

- **Video player**
- **Yes**

- **Games**
- **No**

- **FM radio**
- **No**

- **Music player**
- **Yes**

-

- **Input method**
- **Touchscreen**

- **Ringtone options**
- **Polyphonic, MP3**

- **Push-to-talk**
- **No**

- **Java**
- **Yes**

- **Supported audio file formats**
- **AAC, AAC+, MP3**

- **Supported video file formats**
- **MPEG-4**

- **Supported picture file formats**
- **JPG, PNG**

- **Video calls**
- **No**

- **Web browser**
- **Yes**

-

- **Phone type**
- **Fashion, Multimedia, Music, Business, Smartphone, Easy-to-use**

- **Form factor**
- **PDA**

- **Dimensions (W x D x H)**
- **61 x 11.6 x 115 mm**

- **Weight**
- **135 g**

EXHIBIT C

Apple iPhone 3G (8GB & 16GB variants) **Carrier**: AT&T

Software tested: 2.0, 2.0.1

How to find the software version: On the Home screen touch **Settings → General → About**

Note: **BMW makes no guarantees or warranties as to the performance of each phone while connected to your BMW via Bluetooth® Wireless Technology. Furthermore, software releases by BMW, the phone supplier or the wireless carrier dated after testing might alter compatibility results.**

Vehicles compatible:	**Produced after:**
1-series	September 2005
3-series	September 2005
5-series	September 2004
6-series	September 2004
7-series	March 2005
X3	September 2006
Z4	September 2006
X5	September 2006

Pairing Instructions:

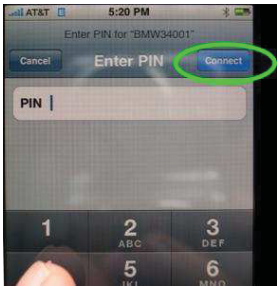
1. Set vehicle in pairing mode. For details please see the vehicle user's manual

2. On the Home screen touch **Settings → General → Bluetooth**
Your phone will display a list of any Bluetooth device(s) that it discovers in range and available to be paired

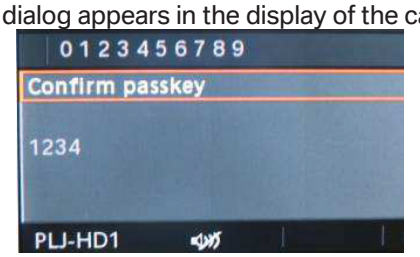
Select the name of the Bluetooth enabled device (e.g. BMW xxxxx) with which you are pairing. Please note that the Bluetooth enabled device name may first appear as

“Handsfree”.

3. Type in a 4-16 digit passkey on the cell phone first (on some BMW models like X3, Z4 and 7 series the passkey that is required for this step is fixed. See the car manual for the passkey. On all other cars the 4-16 digit passkey can be selected by the user). Touch "Connect"



4. Then the Confirm Passkey dialog appears in the display of the car:



Repeat the passkey that was used on the device to authenticate the cell phone and press Confirm passkey.

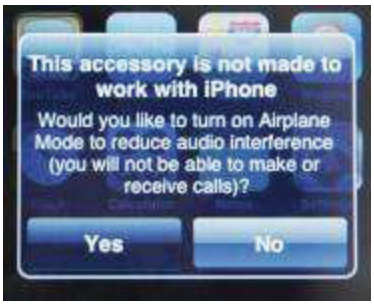
Please note: If a different passkey is entered on the vehicle side, cell phone will displayed Passkey incorrect. If you try to reenter the correct passkey on the cell phone side, cell phone will still display Passkey incorrect and won't pair to vehicle.

To recover from this situation, Bluetooth has to be switched off on the cell phone and then switched back on. Then pairing process has to be restarted from the beginning.

To delete the device list from the phone, choose “Unpair”

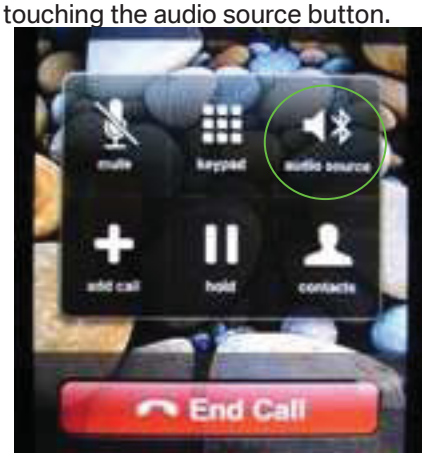
Limitations:

1. **Accessory message pop-up**
All current BMW software levels have been approved before the availability of cell phone. The message has no effect on function and times out automatically after approx. 15 sec.



2. **iPod/USB adapter cable (Y-cable for connecting iPod/iPhone to the USB connector)**
The currently available cable will charge the iPhone with 100mA max (which is not detected by the iPhone and thus not indicated on the iPhone).
The revised y-cable for the iPhone charges with up to 500mA and the iPhone will indicate it's charging (available since mid August 2007)

3. **Accepting incoming calls at cell phone**
If user accepts an incoming call at the cell phone the call remains in privacy mode, but may be transferred to the car by touching the audio source button.



4. **Call waiting**
During a Bluetooth® hands free phone call, the hands free audio connection will be lost if a call waiting call is acknowledged via the handset. Please note: Bluetooth protocol does not support call waiting functions.
Scenarios:
   - During an active phone call, a second incoming call (call waiting call) is received and 'accept call' is selected. The communication menu shows the call time counter still counting and the radio remains muted for approximately 40 seconds. The second incoming call will be lost.
   - If first call is terminated via the vehicle when the handset has a second incoming call. The communication menu shows the call time counter still counting and the radio remains muted for approximately 40 seconds. The second incoming call will be lost.

BMW of North America, LLC does not recommend using the handset to answer a call or switch between two calls while driving. There are two options to avoid this handset issue:
   - Call waiting can be disabled via the cell phone. To turn call waiting off, please go into Settings -> phone -> Call waiting and set it to off.
   - During an active phone call, if a second incoming call (call waiting call) is received to not 'accept' or 'reject' the second incoming.

5. **No entries from SIM card are transferred to car kit**
The telephone directory of the SIM card is not accessible over Bluetooth interface.

6. **@-Symbol Character**
On phonebook entries containing the @-symbol the @-symbol and following characters may not be transferred to the car.