

nexus 7

Guidebook

For Android™
mobile technology
platform 4.1

Copyright © 2012 Google Inc. All rights reserved.

Google, Android, Gmail, Google Maps, Chrome, Nexus 7, Google Play, YouTube, Google+, and other trademarks are property of Google Inc. A list of Google trademarks is available at <http://www.google.com/permissions/guidelines.html>. ASUS and the ASUS logo are trademarks of ASUSTek Computer Inc. All other marks and trademarks are properties of their respective owners.

The content of this guide may differ in some details from the product or its software. All information in this document is subject to change without notice.

The Nexus 7 tablet is certified by ASUS under the name ASUS Pad ME370T.

For online help and support, visit support.google.com/nexus.

Table of contents

1. Get started	1
Turn on & sign in	1
Charge the battery	2
Why use a Google Account?	3
Jelly Bean tips	4
2. Play & explore	7
Browse Home screens	7
Swipe up for Google Now	8
Swipe down for notifications	10
Get around	12
Touch & type	14
Try Face Unlock	15
3. Make yourself at home	16
Relax with Google Play	16
Manage downloads	19
Use apps	20
Organize your Home screens	21
Start Gmail	22
Find People	23
Manage your Calendar	24
Change sound settings	25
Change the wallpaper	25

4. Make Search personal	27
About Google Now	27
Use Google Now	30
Turn off Google Now	32
Control location reporting, history, & services	32
Search & Voice Actions basics	34
Search tips & tricks	36
Use Voice Actions	37
Voice Actions commands	38
Search settings	40
Privacy and accounts	42
5. Tune performance	43
Optimize battery life	43
Optimize data usage	44
Optimize memory usage	46
6. Enter & edit text	49
Use the keyboard	49
Type text by speaking	51

7. Connect to networks	53
Connect to Wi-Fi networks	53
Connect to virtual private networks	57
Control airplane mode & other network settings	58
8. Connect to devices	60
Beam screen content	60
Connect to Bluetooth devices	61
Connect to keyboards, mice, & other devices	64
Connect to a Windows computer via USB	65
Connect to a Macintosh computer via USB	66
9. Manage accounts	68
Add or remove accounts	68
Configure sync options	69
Change backup & reset options	71
10. Secure your tablet	73
Set screen lock	73
Encrypt your tablet	75
Work with certificates	76

11. Accessibility	79
Accessibility overview	79
Accessibility gestures for Android 4.1	80
Set up your tablet	82
Use TalkBack	83
Change TalkBack settings	84
Use Explore by Touch with TalkBack	85
Accessibility settings	86
Navigate the Home screen	87
Try Google Play	89
Use Gmail	91
Browse Chrome	93
Use the lock screen	95
 Appendix: Hardware reference	 96
What's in the box	96
Nexus 7	97
Battery	98
Specs	100

Get started

Turn on & sign in

To turn on your Nexus 7, press the Power button on the right edge near the top for a few seconds, then release it.

The first time you turn on the tablet, you'll see a Welcome screen.

- To choose a different language, touch the menu.
- To continue, touch **Start** and follow the instructions.

When prompted, sign in using the email address and password for your Google Account. If you don't have one yet, create one.

An email address that you use for any of the following counts as a Google Account:

- Gmail
- YouTube
- Google Apps
- AdWords
- Any other Google product

When you sign in with a Google Account, all the email, contacts, Calendar events, and other data associated with that account are automatically synced with your tablet.

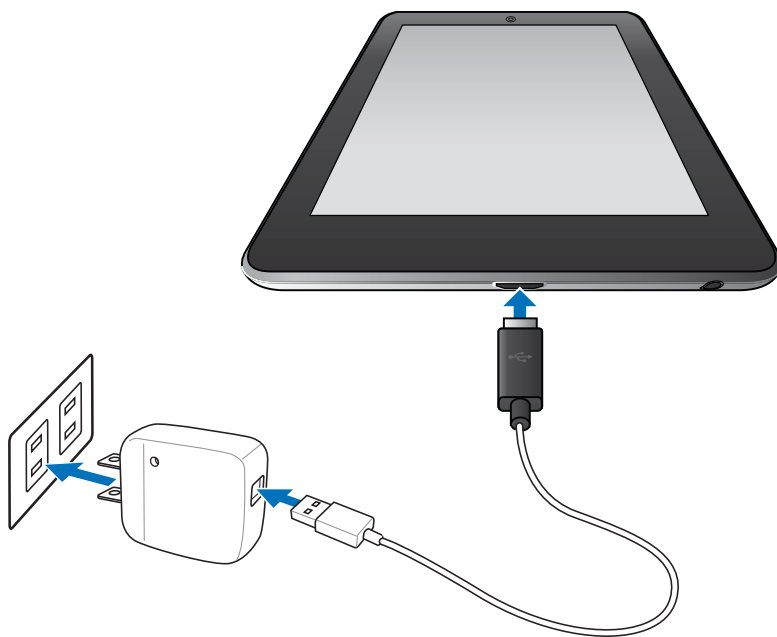
If you have multiple Google Accounts, you can add the others later.

Charge the battery

The printed Quick Start Guide that comes with Nexus 7 contains basic operating instructions for your new tablet.

The battery may not be fully charged at first. It's a good idea to fully charge it as soon as you can.

Connect the micro USB cable to Nexus 7 and to the charging unit, and the charging unit to a power outlet:



IMPORTANT: Use the charging unit and micro USB cable that come with your Nexus 7. Other charging units and USB cables may charge more slowly or not at all.

Why use a Google Account?

A Google Account lets you organize and access your personal information from any computer or mobile device:

- **Use Google Play.** Google Play brings together all your favorite content in one place: movies, TV shows, books, music, magazines, apps, and more. When you sign in with your Google Account, you can reach any of this content from any of your devices – as long as you have a network connection. You can also shop for more in the Google Play store.
- **Synchronize and back up everything.** Whether you draft an email, add an event to your calendar, or add a friend's address, your work gets backed up continuously by Google and synchronized with any computer where you use the same Google Account.
- **Access from anywhere.** Check your latest calendar, email, text messages, or social stream, no matter what computer or mobile device you're using.
- **Keep your stuff secure and available.** Google works round the clock to protect your personal data from unauthorized access and to ensure that you get it when you need it, wherever you need it.
- **Simplify shopping.** You can connect your Google account with Google Wallet, which makes it easy to purchase music, books, apps, and more on Google Play and other online stores.
- **Use other Google services.** Your Google Account also lets you take full advantage of other Google apps and services that you may want to use, such as Gmail, Google Maps, Navigation, Google Play, YouTube, Google Talk, Messaging, and more.

Jelly Bean tips

Whether you're new to Android or an old hand, check out these new features in Android 4.1 (Jelly Bean).

Home screen

Google Play widgets	New widgets on your Home screens display recently used apps, music, movies, books, or games you already have – including free content that comes with your Nexus 7. Other widgets offer suggestions for browsing Google Play.	<i>Touch</i> a widget to access content on Google Play. <i>Touch & hold</i> a widget to resize or remove it.
Rearrange Home screens	Slide an icon slowly to move other icons or widgets gently aside. This makes it much easier to change your Home screen layout.	<i>Touch & hold</i> an icon and slide slowly to the location of your choice. <i>Slide an icon quickly</i> to drop it into a folder.

Google Search

Google Now	Google Now gets you just the right information, at just the right time – such as today's weather before you start your day, how much traffic to expect before you leave for work, and even your favorite team's score while they're playing.	<i>Swipe up</i> from the bottom center of any screen. <i>Touch</i> the Google Search bar at the top of any Home screen.
------------	--	--

Say "Google"	When the Google Now screen is open, you can just say "Google" to activate a voice search.	<i>Touch</i> the Google Search bar at the top of any Home screen, or <i>swipe up</i> from the bottom of any screen. Say <i>"Google"</i> and <i>your query</i> to search.
-----------------	---	--

Notifications

Notification shade	Supports expandable notifications that let you perform additional actions right from the notification itself.	<i>Swipe one finger</i> from the top of any screen to open the notification shade. <i>Swipe two fingers vertically</i> or <i>pinch-zoom</i> to expand or collapse a notification. <i>Touch an icon</i> inside certain notifications to handle a task directly. <i>Swipe</i> to dismiss a notification.
Email guests for a calendar event	You can email attendees from the Calendar app, or send a canned or custom response directly from a calendar notification.	<i>Touch</i> Email guests in the calendar event or notification. From the notification, you'll have the option to choose a canned or custom response.
Notification volume	You can now control the volume for notifications separately from your tablet's main volume.	<i>Press</i> the volume button on the side of your tablet, then <i>touch</i> the Settings icon. <i>Drag slider</i> to change the volume for notifications.
Rotation lock	Lock your screen to keep it in portrait mode.	<i>Swipe one finger</i> from the top of any screen to open the notification shade, and <i>touch</i> the Rotation icon.

Other improvements

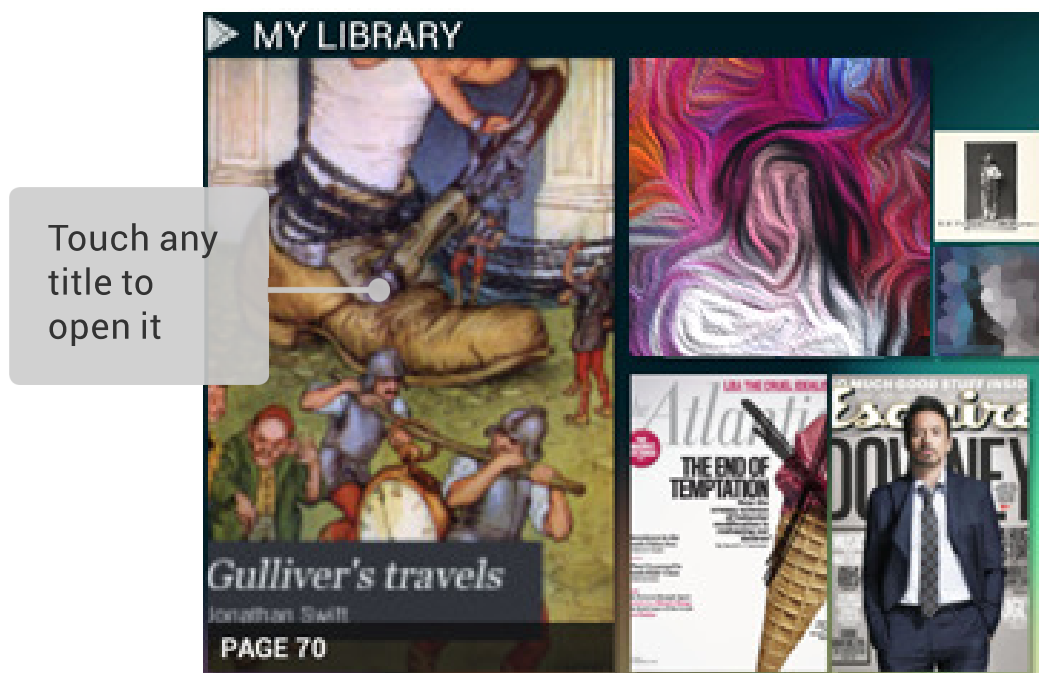
Chrome	Chrome for Android includes unlimited tabs, incognito tabs, and syncs your tabs across your devices when you sign in to your Google Account.	<i>Swipe</i> left or right to navigate through tabs. <i>Touch, hold, & drag</i> a tab to a different position. <i>Touch</i> the tab switcher icon to switch back and forth between incognito mode tabs and regular tabs.
Accessibility	Gesture Mode supports navigation by using touch and swipe gestures in combination with speech output. Platform supports external Braille input and output devices via USB and Bluetooth.	To try shortcut gestures in TalkBack, <i>swipe</i> using a single motion: Up then right: Open notifications Up then left: Home button Down then right: Recent apps button Down then left: Back button
Blink for Face Unlock	For improved security, you can now set Face Unlock to request a blink when you unlock your tablet.	Settings > Security > Screen lock.
Add an account	Easily add an email account to your device from the main Settings screen.	Settings > Accounts > Add account.

Play & explore

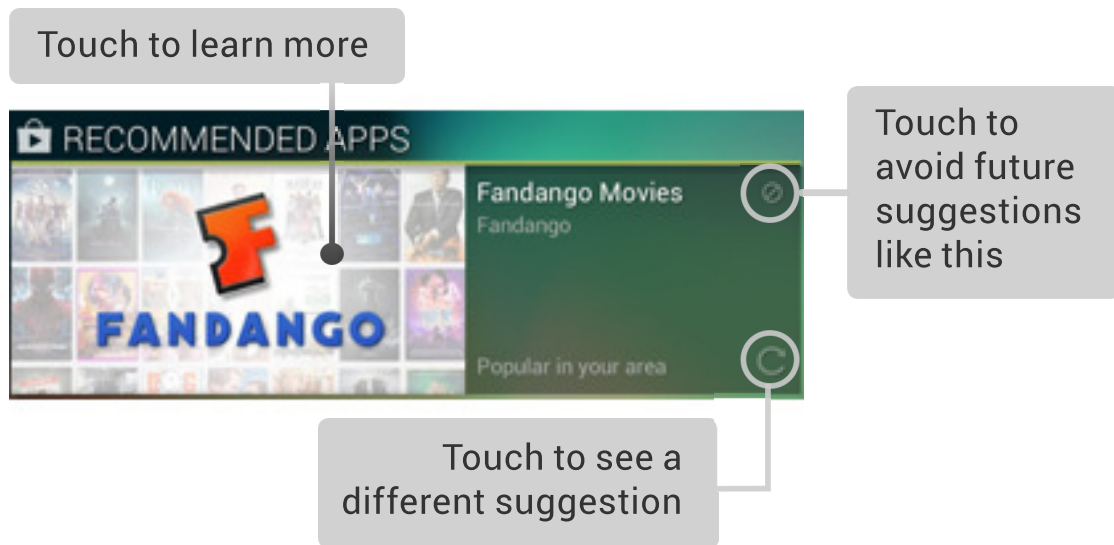
Browse Home screens

To move between Home screens, swipe left or right.

The My Library widget displays apps, music, movies, magazines, books, and games you already have – including free content that comes with your Nexus 7:



When you're ready to shop for more, try the suggestions in one of the Play Recommendations widgets:



To resize a widget, touch & hold, then let go and drag the blue dots. To remove it, touch & hold, then drag it to the Remove icon at the top of the screen.

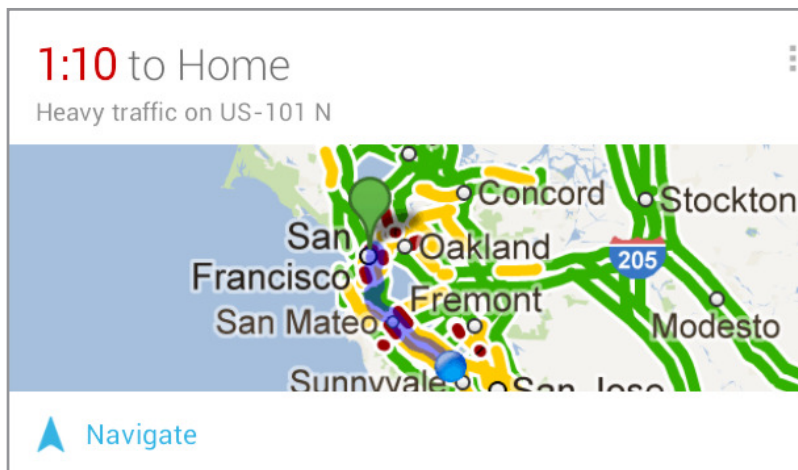
Swipe up for Google Now

Google Now is about getting you just the right information, at just the right time.

It tells you today's weather before you start your day, how much traffic to expect before you leave for work, and even your favorite team's score while they're playing.

All of this happens automatically. Google Now intelligently brings you the information you want to see, when you want to see it. No digging required.

For example, here's a Google Now card that appears when you're about to start your commute home:



Give it a try! Swipe your finger up from the bottom of any screen, or touch the Google Search bar at the top of the screen.

When you want to see more cards, touch **Show more cards** at the bottom of the screen. When you don't need them any more, swipe them out of the way.

You're in control

When you decide to use Google Now, you're turning on location reporting and location history. Google Now also uses location information provided by Google's location service and GPS, if those are currently turned on.

Google Now also uses data that you may have stored in other Google products. For example, if you have searches stored in your Web History, Google Now can show cards based on sports scores, flight status, and so on.

Similarly, Google Now can use data that you may have stored in third-party products that you allow Google to access. For example, your tablet's synced calendar may include entries from non-Google calendar products. If you have such an entry for a dentist appointment that includes the dentist's address, Google Now can check traffic and suggest when to leave.

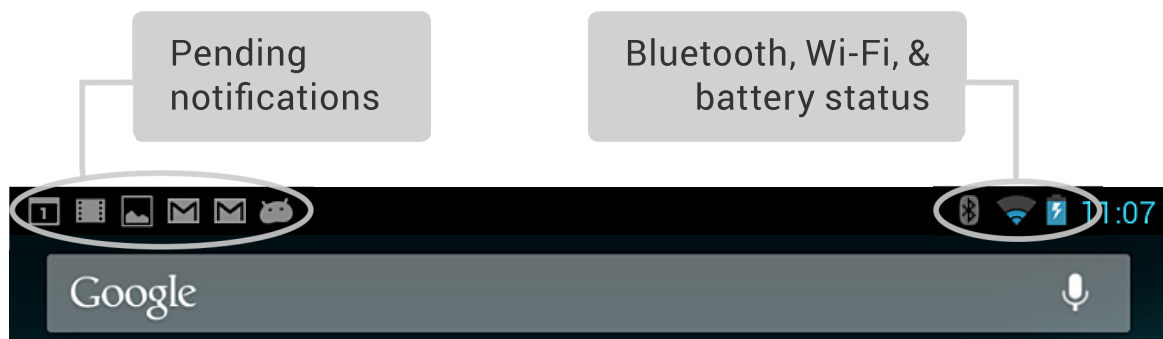
You're in control. You can choose exactly which cards you'd like to see, adjust the details of what they display, and adjust your privacy settings.

For more information about Google Now and your location information, see "Chapter 4, Make Search personal," on page 27.

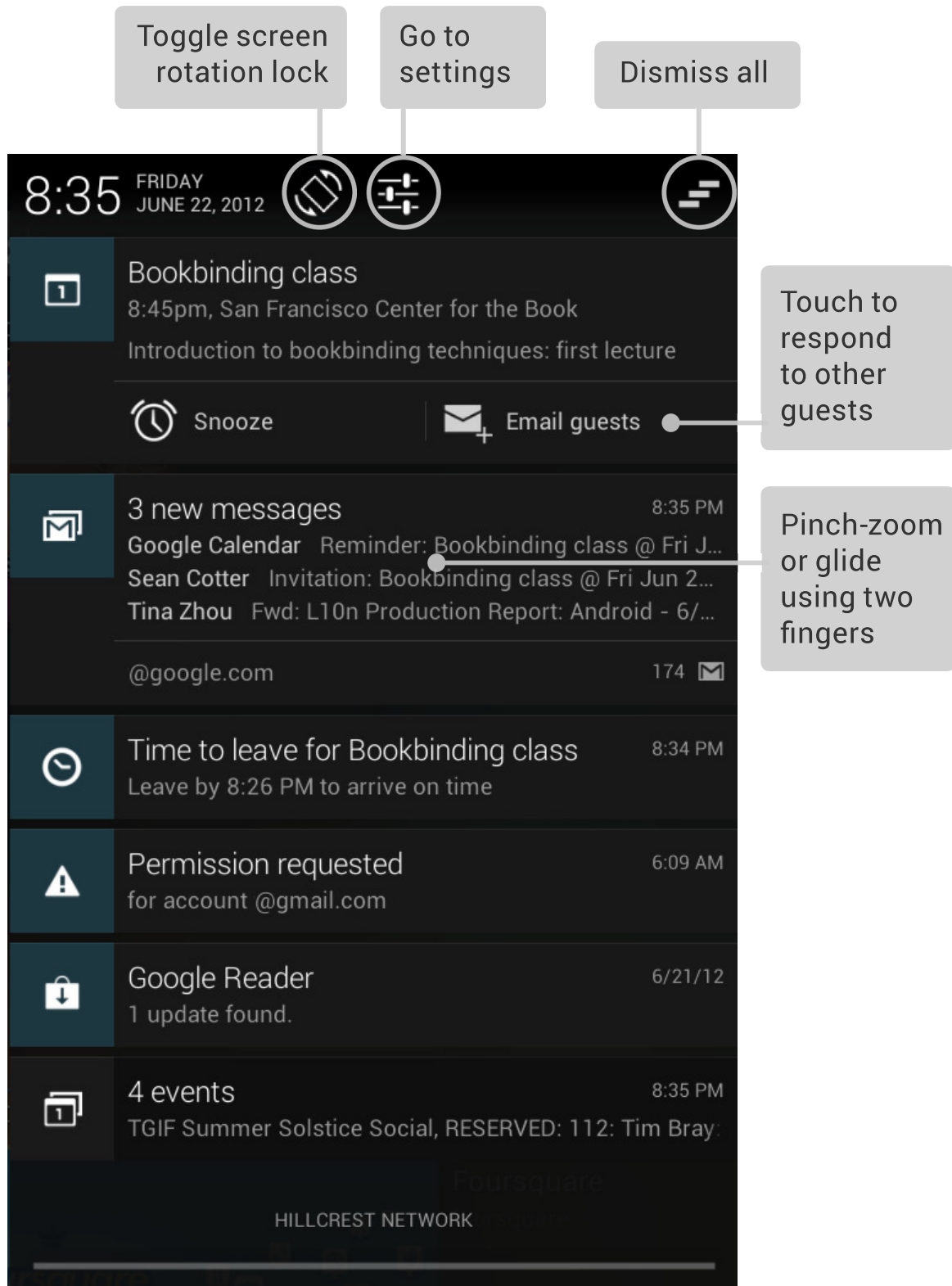
Swipe down for notifications

Notifications alert you to the arrival of new messages, calendar events, and alarms, as well as ongoing events, such as video downloads.

When a notification arrives, its icon appears at the top of the screen. Icons for pending notifications appear on the left, and system icons showing things like Wi-Fi signal or battery strength on the right:



To open the notification shade, swipe down from the top:



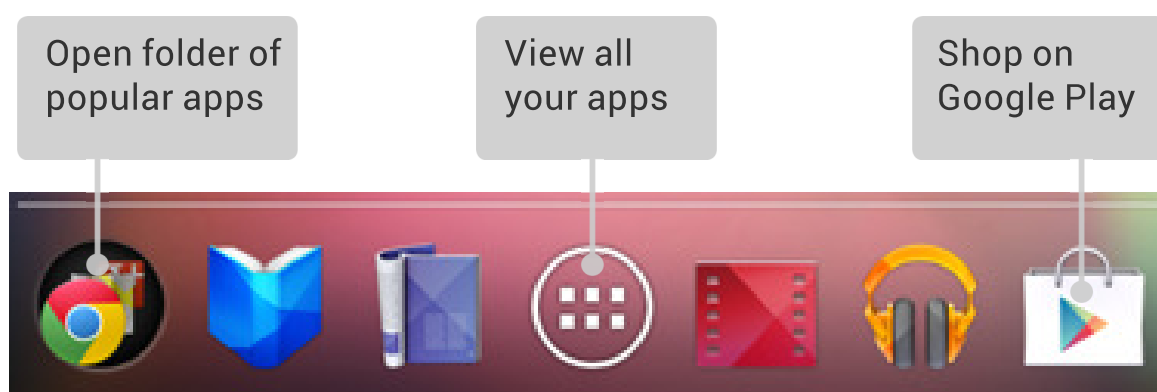
Certain notifications can be expanded to show more information, such as email previews or calendar events. The one at the top is always expanded when possible. To expand or collapse a notification, pinch-zoom or glide using two fingers..

To open the related app, touch the notification icon on the left. Some notifications also allow you to take specific actions by touching icons within the notification. For example, Calendar notifications allow you to Snooze (remind you later) or send email to other guests.

When you're finished with a notification, just swipe it away. To dismiss all notifications, touch the Dismiss icon at the top right of the notification shade.

Get around

At the bottom of each Home screen, notice the Favorites tray: another quick way to get to your books, magazines, apps, movies, and music:



At the bottom of every Nexus 7 screen, no matter what you're doing, you'll always find these three navigation buttons:

-
- Back**
- ← Opens the previous screen you were working in, even if it was in a different app. Once you back up to the Home screen, you can't go back any further in your history.
-



Home

Opens Home. If you're viewing a left or right Home screen, opens the central Home screen. To open Google Now, swipe up. Google Now gives just what you need to know, right when you need it.



Recent apps

Opens a list of thumbnail images of apps you've worked with recently. To open an app, touch it. To remove a thumbnail from the list, swipe it left or right.

After a short time without getting used, these buttons may shrink to dots or fade away, depending on the current app. To bring them back, touch their location.



Settings

On the All Apps screen available from the Favorites tray, notice the Settings icon. This brings you to the Settings screens for your tablet, where you can adjust things like network, sound, and account settings, among many others.

TIP: To get to Settings quickly no matter what screen you're on, swipe down your Notifications from the top of any screen and touch the small  Settings icon near the top.

At the top of the screen you'll find Google Search, which lets you search your tablet or the Internet. Touch **Google** to type your search terms, or the  Microphone icon to speak them.

Touch & type

Use your fingers to manipulate icons, buttons, menus, the on-screen keyboard, and other items on the touchscreen. You can also change the screen's orientation.

To select or activate something, touch it.

To type something, such as a name, password, or search terms, just touch where you want to type. A keyboard pops up that lets you type into the field.

Other common gestures include:

- **Touch & hold.** Touch & hold an item on the screen by touching it and not lifting your finger until an action occurs.
- **Drag.** Touch & hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. For example, you can move apps around on the Home screen.
- **Swipe or slide.** Quickly move your finger across the surface of the screen, without pausing when you first touch (so you don't drag something instead). For example, you can slide a Home screen left or right to view the other Home screens.
- **Double-tap.** Tap quickly twice on a webpage, map, or other screen to zoom. For example, double-tap a picture in Browser to zoom in, and double-tap again to zoom out.
- **Pinch.** In some apps (such as Maps, Browser, and Gallery), you can zoom in and out by placing two fingers on the screen at once and pinching them together (to zoom out) or spreading them apart (to zoom in).
- **Rotate the screen.** The orientation of most screens (excluding Home screens) rotates with your device as you turn it. To lock or unlock the screen's vertical orientation, touch the Rotation icon at the top of the notification shade.



Settings

To change your tablet's notification sounds, volumes, and more, go to  **Settings > Device > Sound**.

To change your tablet's brightness, font size, and more, go to  **Settings > Device > Display**.

Try Face Unlock

Depending how you use your tablet, you may want to set some form of automatic screen lock to prevent unauthorized access. If a lock has been set, the screen locks when your tablet's display goes to sleep.

When you touch the power button to wake up a locked tablet, you must take some action, ranging from a simple swipe to typing a lengthy password, to unlock it.

You can set locks of different strengths using your tablet's lock settings. To do so, go to  **Settings > Personal > Security > Screen lock** and touch the type of lock you'd like to use.

Face Unlock is one of the options available. After you've set it up, you can unlock your tablet simply by looking at it. Although Face Unlock is not very secure, it can be convenient and fun to use.

Give it a try. Go to the **Screen lock** setting described above, touch Face Unlock, and follow the instructions.

TIP: After you set up Face Unlock, look under **Settings > Personal > Security** for two additional settings: **Improve face matching** and **Liveness check**. Use these to make Face Unlock more reliable and secure.

Make yourself at home

Relax with Google Play

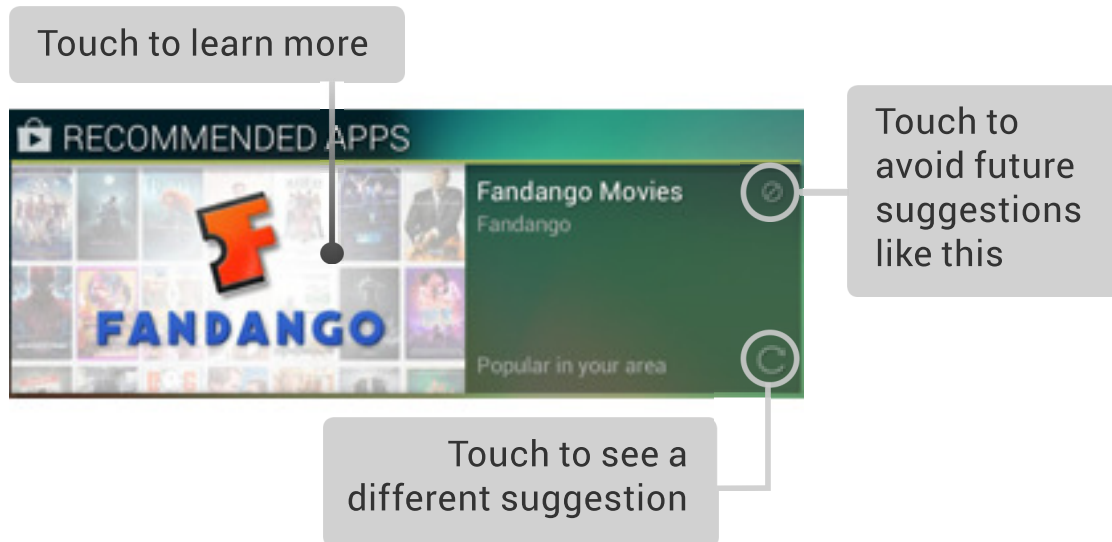
Google Play brings together all your favorite content in one place – movies, TV shows, books, music, magazines, apps, and more – so you can reach it from any of your devices.

Use Google Play widgets

These widgets are available on your Home screens:

- **My Library.** Displays your most recently used music, books, and so on. Touch any of the images to see your content – plus free gifts from Google.
- **Recommended on Play.** Suggests music, movies, and other content that may interest you. Touch the suggestion to learn more about it.
- **Recommended apps.** Recommends apps that you can add to your Home screen. Touch the recommendation to learn more about it.

All Google Play recommendation widgets work the same way:



To resize a widget, touch & hold, then let go and drag the blue dots. To remove it, touch & hold, then drag it to the Remove icon at the top of the screen.

To add another Play widget, touch the  All Apps icon, then **Widgets**, and swipe from right to left until you see the one you want. Then touch & hold, and let go in the Home screen location you want.

Shop on Google Play



Play Store

To open the Google Play Store app, touch the Play Store icon in your Favorites tray at the bottom of every Home screen.

Most things you purchase on Google Play are available from your computer as well as from any of your Android mobile devices. (Android apps are one exception – they run only on Android devices.)

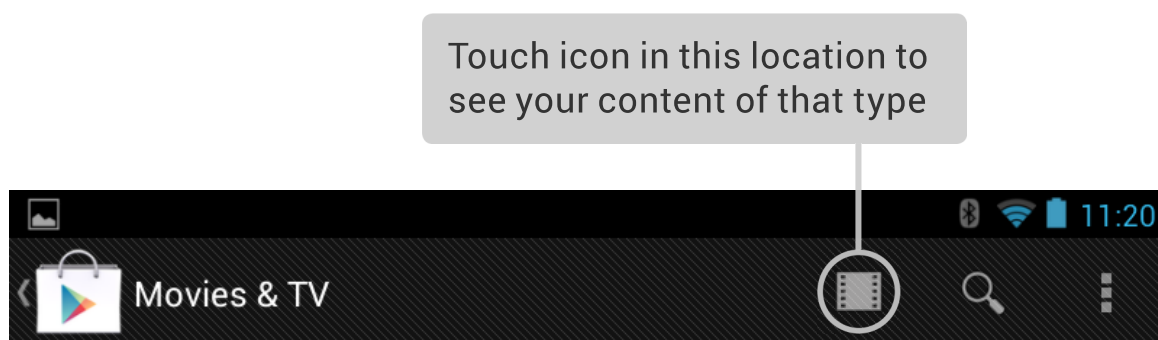
Sign in to play.google.com to get your entertainment from anywhere.

Find your content

If you purchased on Google Play in the past, you'll automatically have access to this content on your Nexus 7 — just make sure you're signed in using the same account that you used to purchase it.

You can get to your content using any of the Google Play icons in your Favorites tray, including Books, Magazines, Movies, and Music.

Or, touch the  Play Store icon to open Google Play. In the top right corner, to the left of the Menu and Search icons, you'll find a My Library icon corresponding to the section of Google Play you're currently viewing. For example, while browsing the Movies & TV section, you'll see the Google Play Movies app icon, which will take you to My Movies & TV:



You can quickly access your content this way, from the Google Play Store app, even if you originally purchased it on Google Play using a different phone or tablet. If you get a new device, all your media will automatically be waiting for you here when you turn on and sign in.

Google Play settings

To adjust your Google Play settings, switch accounts, or get help, choose the option you want from the  **Menu** in the top right corner.

The Google Play Settings screen lets you control when you're notified about updates to apps and games, clear your search history, and enable user controls. To filter Android apps based on maturity level or require a PIN before completing any purchase, touch **Content filtering** or **Set or change PIN**.

Google Play support

For more detailed information about Google Play, including phone and email support options, visit support.google.com/googleplay.

Manage downloads



Downloads

To manage most downloads, touch the Downloads icon on the All Apps screen. Note that movies and some other content can be downloaded to your tablet but won't show up in the Downloads app.

Unless you pin (download) content such as books or movies to your tablet so you can access it offline, Google Play streams your purchases and rentals from Google servers while you're playing them – so they don't occupy any permanent storage space.

In addition to downloading content from Google Play, you can download files from Gmail messages or a variety of other sources. Use the Downloads app to view, reopen, or delete what you've downloaded in this way.

From the Downloads app:

- Touch an item to open it.
- Touch headings for earlier downloads to view them.
- Check items you want to share. Then touch the  Share icon and choose a sharing method from the list.
- Check items you want to delete. Then touch the  Trash icon.

- At the bottom of the screen, touch **Sort by size** or **Sort by date** to switch back and forth.

Files available in the Download app can also be viewed in the Download directory that's visible when your tablet is connected to a computer. You can view and copy files from this directory.

Use apps

To see all your apps, touch  All Apps in the Favorites tray on any Home screen.

The main All Apps screen opens. This is where you can see all your apps, including those downloaded on Google Play. You can move app icons to any of your Home screens.

From All Apps, you can:

- **Move between screens.** Swipe left or right.
- **Open an app.** Touch its icon.
- **Place an app icon on a Home screen.** Touch & hold the app icon, slide your finger, and lift your finger to drop the icon in place.
- **Browse widgets.** Touch the Widgets tab at the top of any All Apps screen.
- **Get more apps.** Touch the Play Store icon in the list of app icons, or the Shop icon at the upper right.

To remove an app icon from the Home screen, touch & hold it, slide your finger toward the top of the screen, and drop the app over the  Remove icon .

To view info about an app from an All App screen, touch & hold it, slide your finger toward the top of the screen, and drop the app over the  App Info icon .

Most apps include a  Menu icon near the top or bottom of the screen that lets you control the app's settings.

Organize your Home screens

To add a widget to a Home screen:

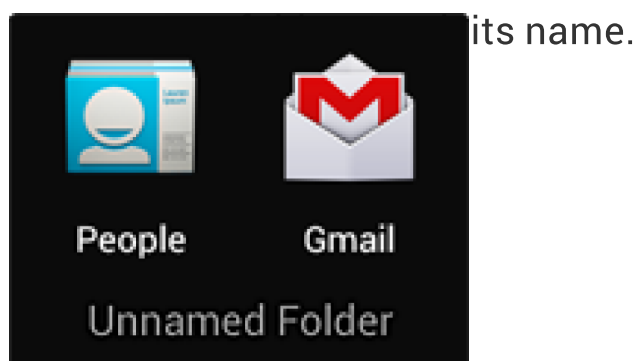
1. Go to the Home screen where you want to place the widget.
2. Touch the  All Apps icon.
3. Swipe right to the Widgets tab and keep swiping, if necessary, to find the widget.
4. Touch & hold the widget until the Home screen appears, slide it into place, and lift your finger.

To move an app or widget icon to a different location on a Home screen:

1. Touch & hold the icon.
2. Slide your finger to the new position.
To move between Home screens, slide toward the edge of the screen.
To bump another icon out of the way, slide slowly into it.
3. Lift your finger.
The icon drops into its new position.

To combine two icons in a folder, slide one quickly over the other.

To open a folder, touch it.



Start Gmail



Gmail

The Gmail app lets you read and write email from any mobile device or browser. To open it, touch the Gmail icon on a Home or All Apps screen.

But Gmail isn't just about email. You can use your Gmail account to sign in to all Google apps and services, including Google Now, for getting just the right information at just the right time; Calendar; People, for keeping track of your contacts; Google Documents, for working with documents, spreadsheets, or drawings; and many more.

The first time you open Gmail, you're asked to sign in or create an account, if you didn't already do so when you first set up your tablet. Then the Inbox opens. From here, touch a message to read it. Unread messages are bold.

While you're reading a message:

- Touch the icons and menu along the top of the screen to archive, throw away, label, or perform other actions on that message.
- Swipe left or right to read the previous or next conversation.

To organize your email, check the box beside a message to select it. Then use the icons and menu along the top of the screen to manage the selected messages.

To change your settings, add an account, or get help, touch the  Menu icon.

No matter where you are within Gmail, you can always get back to the Inbox by touching the  Gmail icon at the top left corner of the screen.

Find People



People

The People app gives you quick access to everyone you want to reach. To open it, touch the People icon on a Home or All Apps screen.

When you first turn on your tablet and sign into a Google Account, any existing contacts from that account are synced with your People app. After that, all your contacts stay in sync automatically, whether you make changes on your tablet, from another device, or from any Web browser.

If you use Exchange, you can also sync that contact information with People.

All your People information is available from Gmail, Google Talk, and other apps where it's useful. As you add contacts from different sources, they're synced automatically across all the places you need them.

The first time you open People, you're asked to sign in or create an account. Then the app opens to the main list of your contacts on the left. Select a contact to display it on the right. Or:

- **View all contacts, favorites, or groups.** Choose from the top left of the screen.
- **Read details.** Touch a name to see details for a contact or group.
- **View recent activity.** When viewing a contact, swipe to the right to see recent updates.
- **Edit details.** While viewing a contact, touch icons at the top of the screen or the  Menu icon to search contacts, add a contact, edit or share contact details, delete a contact, and so on. You can also touch the star beside the contact's name to add that contact to your Favorites list.
- **Change your settings.** While viewing the main list screen,

touch the  Menu icon to import or export contacts, choose display options for the Groups and All tabs, and add or edit accounts.

No matter where you are within People, you can always get back to the main lists by touching the  People icon at the top left corner of the screen.

Manage your Calendar



Calendar

The Calendar app lets you view and edit your schedule. To open it, touch the Calendar icon on a Home or All Apps screen.

When you first set up your tablet, you configured it to use an existing Google Account (such as Gmail), or you created a new one. The first time you open the Calendar app on your tablet, it displays any existing calendar events from that Google Account on the web.

As you edit events from any mobile device or web browser, they're synced automatically across all the places you need them.

To change the Calendar view, choose **Day**, **Week**, **Month**, or **Agenda** from the top left of the screen. Swipe to scroll vertically or horizontally. In the Day or Week views, spread your fingers apart or pinch them together to zoom in or out.

From any of these views, you can:

- **Read or edit event details.** Touch an event to view its details.
- **Manage events and calendars.** Touch icons across the top of the screen or  Menu to search or create events, return to today, or adjust settings.

To email everyone who's invited to an event, you have two options:

- Open the event from the Calendar app at any time and touch **Email guests**.
- When a notification of the event arrives just before the meeting starts, swipe down the notification shade, spread the event notification apart with your fingers if necessary, and touch **Email guests**.

Change sound settings

Your tablet uses sounds to communicate, including notifications, alarms, and navigation feedback.

To customize the sounds your tablet makes, go to  **Settings > Device > Sound**:

- **Volumes** sets the master volume separately for music, notifications, and alarms. You can still use the physical volume control on the tablet to raise or lower volume of whatever sound is currently playing.
- **Default notification** announces the arrival of notifications unless you specify a different sound in an individual app.
- **Touch sounds** give audible feedback when you touch active icons or buttons on the screen.
- **Screen lock sound** is triggered when you unlock the screen.

Change the wallpaper

Wallpapers can include images from Gallery, still images included with the system, and live images, such as an animation or a map that centers on your location. They take the place of the default background for your Home screens.

1. Touch & hold anywhere on a Home screen that's not occupied. A list of options appears.

2. Touch a wallpaper source:

Gallery. Choose from pictures that you've synced with your tablet.

Live Wallpapers. Choose from a scrolling list of animated wallpapers.

Wallpapers. Choose from thumbnails of default images, or touch a thumbnail for a larger version.

You can download additional wallpapers on Google Play.

3. To set a wallpaper, touch **Set wallpaper** or, for Gallery images, determine the cropping and touch **Crop**.



Settings

To change your tablet's wallpaper, go to **Settings > Device > Display > Wallpaper**.

Make Search personal

About Google Now

Google Now gives you just the right information at just the right time. Just swipe up from the bottom of your tablet to get commute traffic before work, popular nearby places, your favorite team's current score, and more.

You can turn Google Now on or off at any time. Swipe up the same way and touch  **Menu > Settings > Google Now**. If the keyboard's covering the menu, touch the modified  Back button to lower it.

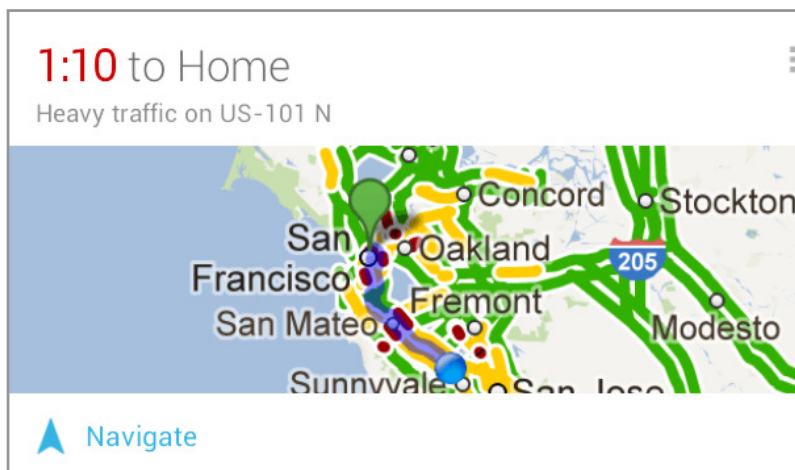
After you decide to start using Google Now, you don't need to do anything else. If you like, you can fine-tune some settings, but Google Now doesn't need any elaborate setup. The information you need is always at your fingertips.

To know when to display what information, Google Now uses contextual data from your tablet and from other Google products, plus data from third-party products that you allow Google Now to access.

For example, Google Now uses the time of day, your current location, and your location history to show you what the traffic on your commute is like when you wake up in the morning. It also uses information from Google services such as your Web History for sports or flight updates, or from your synced calendar entries for appointment reminders.

About Google Now cards

A Google Now card is a short snippet of useful information that slides into view right when you're most likely to need it. For example, here's a traffic card:



To see some sample cards from the main Google Now screen, touch  **Menu > Sample cards**. When you're finished and want to get back to the main Google Now screen, touch **Hide sample cards**.

About location reporting, history, & services

Location reporting refers to your tablet's ability to report your current location for the purposes of recording your location history.

Location history refers to your tablet's ability to store your past locations, including home and work.

Location services allow your tablet to obtain your current location. Location services provide the locations used by location reporting and history.

IMPORTANT: Turning off location reporting does not turn off location services or delete any location history that Google has already stored.

When you decide to use Google Now, you'll start reporting your location and turn on your location history. Google won't share this information with other users or marketers without your permission.

If you opted in to location history in the past, Google Now uses your previously recorded locations as well as ongoing details when making suggestions. Turning off location history pauses the collection of location information, but doesn't delete your history. To manage or delete your location details, visit <http://google.com/locationhistory>.

Along with location history, Google Now uses Google's location service and GPS. To manage these settings from the Google Now screen, touch  **Menu > Settings > Privacy and accounts > Location services**.

For more details, see "Control location reporting, history, & services" on page 32.

About Web History & other data

Google Now uses data from multiple sources to help predict what you need. For example, if you have a synced calendar entry for a dentist appointment, Google Now can check traffic and suggest

when to leave. And if you have relevant searches saved in your Web History, such as for your favorite sports team or for upcoming flights, Google Now can also show cards for sports scores, flight status, and more.

To manage your Web History, visit google.com/history. You can delete or pause your Web History and still use Google Now, but certain kinds of information, such as flight details, won't show up.

Use Google Now

To view the Google Now cards that are waiting for you at any particular time, swipe up from the bottom of your tablet, or touch the Google Search bar on any Home screen.

Google Now displays cards when they're most likely to be useful and relevant based on the current time and your current location. To expand that search and get additional ones, touch **Show more cards** at the bottom of the main Google Now screen.

When you're finished with a card, just swipe it away to dismiss it from the Google Now screen. Don't worry – it appears again when a new update is available.

Edit card settings

To change the settings for an individual Google Now card:

- Touch  **Menu > Settings** on the card.

OR

- From the lower right corner of the Google Now screen, touch  **Menu > Settings > Google Now**.

The Google Now settings screen appears, where you can turn a specific card **On** or **Off** or adjust its settings.

After you turn off a card, it won't appear when you open Google Now.

Dismiss cards

To dismiss a card from the Google Now screen, swipe it away. The card will return the next time it's relevant, which may be hours or days from now.

Adjust notifications

When a card has a new update, you'll receive a notification at the top of your screen. You can pull down the notifications shade to open the card or dismiss the notification.

Most notifications for Google Now cards can be turned off or set to low or standard priority. Low priority notifications appear at the bottom of the notifications shade without any additional signal. Standard notifications appear like the others, in chronological order, and you can set vibration and a ringtone to accompany them.

To set notifications to low or standard priority for an individual card that supports both options:

- Touch  **Menu > Settings** when the card appears.
- OR
- From the lower right corner of the Google Now screen, touch  **Menu > Settings > Google Now > *card name* > Notifications**.

To change ringtone and vibrate options for all standard notifications, start from the Google Now screen, touch  **Menu >**

Settings > Google Now, and adjust the options under **Standard Notifications**.

Turn off Google Now

Turning off Google Now stops the display of cards and returns Google Now settings to their defaults.

1. Open the Google Now screen.
Touch the Search bar at the top of a Home screen, or swipe up from the bottom of your tablet while viewing any screen.
2. Touch **Menu > Settings > Google Now**, then slide the switch at the top right to **Off**.
3. In the **Turn off Now cards** dialog, decide whether you also want to turn off location history. If you do, check **Also turn off Location history**.
Turning off location history may affect the way other Google products work.
4. Touch **Turn off**.

Turning off Google Now and location history doesn't delete existing history or turn off location reporting. For more information, see the next section, "Control location reporting & history."

Control location reporting, history, & services

This section describes how to set your home and work addresses and manage other location-related features used by Google Now.

Define home & work

As you use Google Now, you may be asked to confirm your home or work address to get commute traffic information, travel help, and more. You can change these addresses in several other ways:

- When a Traffic card appears for home or work, touch  **Menu** > **Edit**.
- Open the Latitude app, find your own location, touch your name on the map, and then **Location history** > **Change home location** / **Change work location**.
- Visit maps.google.com from a browser and open **My Places**.
- Visit <https://www.google.com/latitude/b/0/history/dashboard> from a browser, click **Change** next to Time at Work or Time at Home, edit the address, and click **Save**.

You can turn off and delete your location history and still use Google Now, but certain kinds of information, such as commute traffic, may be limited or won't show up at all.

Turn off location reporting & history

To turn off both location reporting and location history from the Google Now screen:

1. Touch **Menu** > **Settings** > **Privacy and accounts** > **Manage location settings**.
This brings you to the Settings screen for Google Maps. You may have to sign in to Google Maps if you haven't done so already.
2. Touch **Location settings**.
3. To turn off location reporting, touch **Location reporting** > **Do not update your location**.
4. To turn off location history, uncheck **Enable location history**.

Delete location history details

Even if you turn off both location reporting and location history, your previously recorded history is still available to Google services such as Google Now.

To delete location history details, follow these steps from a desktop computer:

1. Open a web browser and make sure you're signed in with the account whose location history you want to manage.
2. Visit <http://google.com/locationhistory>.
A page appears that allows you to view your location history for any date.
3. To delete all your recorded location history, click **Delete all history**.
Alternatively, from this screen you can delete a portion of your location history starting from a date you choose in the calendar.
4. Click **OK**.

Turn off Google's location service & GPS support

Even when location reporting and location history are turned off, Google periodically reports data for use by various apps from sources such as Wi-Fi, mobile networks, and GPS to determine your approximate location at any given time.

To turn off these services from the Google Now screen, touch  **Menu > Settings > Privacy and accounts > Location services** and uncheck both **Google's location service** and **GPS satellites**. Doing so will disable Google Now as well as many other useful features of your tablet.

Search & Voice Actions basics

To use Google Search, touch the search bar at the top of any Home screen or swipe up from the bottom of your tablet.

You can use Voice Actions with Google Search to get directions, send messages, and perform a number of other common tasks.

Voice Search & Voice Actions

You can initiate a Voice Search or Voice Action in several ways:

- Touch the  Microphone icon in the Google Chrome omnibox.
- Touch the  Microphone icon on the Home screen or Google Now screen and speak.
- Touch the search bar on the Home screen and say “Google”.
- When you’re viewing the Google Now screen, you don’t have to touch anything. Just say “Google.”

Next, speak the terms to search for or the Voice Action to perform. For more details on Voice Actions, see “Use Voice Actions” on page 37.

The ability to trigger a search or action by saying “Google” is called *hotword detection*. To turn it off or on, start from the Google Now screen and touch **Menu > Settings > Voice > Hotword detection**.

IMPORTANT: To detect when you say “Google” to launch Voice Search or Voice Actions, Google analyzes sound picked up by your tablet’s microphone in intervals of a few seconds or less. The sound is immediately discarded after analysis and is not stored on the device or sent to Google.

For more information about Voice Actions, see “Use Voice Actions” on page 37 and “Voice Actions commands” on page 38.

Search by typing

Type your query in the search box on the Home or Google Now screen, or in Google Chrome’s omnibox.

As you type, suggestions appear below the Search box.

The first few suggestions attempt to complete what you're typing:

- To search for a suggestion immediately, touch it.
- To search for the contents of the search field, touch the Search icon on the right side of the keyboard.

Search tips & tricks

What you want	What to type or say	Examples
Sports information	[team's name]	San Francisco Giants
Pictures	Pictures of [topic] images of [topic]	Pictures of San Francisco Images of cats
Convert measurements	[original measurement] in [new measurement]	30 degrees Celsius in Fahrenheit
Movie show-times	Movie Movie [location] [movie name]	Movie Movie Chicago The Horse's Mouth
Word definition	Define [word]	Define campanile
Weather forecast	Weather Weather [location]	Weather WeatherDetroit
Identify an area code	Area code [###]	Area code 215
Identify zip code	Zip code [#####]	Zip code 46202

Time	Time Time [location]	Time Time in London
Flight information	[Airline] [flight number]	American airlines flight 390
Translation	Translate to [language] [phrase]	Translate to Spanish, Where is the Palace Hotel?’
Calculator	[A math phrase]	75 divided by 6
Food	[Type of food] [Type of food] in [location]	Mexican food Mexican food in Urbana, Illinois

Use Voice Actions

You can use Voice Actions with Google Search to get directions, send messages, and perform a number of other common tasks.

You initiate a Voice Action the same way you initiate a voice search, by touching a  Microphone icon in a search box or the Chrome omnibox, or by saying “Google” when the Google Now screen is open. For details, see “Search & Voice Actions basics” on page 34.

Next, speak the Voice Action you want to use. Here are some typical examples:

- “Set alarm for 8:30 a.m.”
- “Send email to Marcus Foster. Subject: Coming tonight? Message: Hope to see you later.”
- “Navigate to Mike’s Bikes in Palo Alto.”

As you speak, Voice Search analyzes your speech and initiates the action.

If Voice Search doesn't understand you, it lists a set of possible meanings. Just touch the one you want.

Some Voice Actions, such as "send email" and "note to self," open a panel that prompts you to complete the action by speaking or typing more information.

- Touch any text already entered in the panel to add or edit the text by typing.

To speak text instead of typing, first touch the  Microphone key near the bottom right of the onscreen keyboard.

- Touch underlined words or phrases or drag across multiple words to view a list of alternate transcriptions, or to edit by speaking or typing.

When confident that the transcription is accurate, Voice Search displays transcribed words as regular text. Words or phrases for which it has provided alternate transcriptions are underlined.

- Touch a button at the bottom of the window to add any optional fields (you can also speak the name and content of any of these fields in your original voice action).
- When you're done, touch the button appropriate to complete the action, such as **Send**.

Voice Actions commands

You can search and control your tablet with the following Voice Action commands. For details, see "Use Voice Actions" on page 37.

Say	Followed by	Examples
Words you want to search for		"bike shoes"
"Map of"	Address, name, business name, type of business, or other location	"Map of Golden Gate Park, San Francisco."
"Directions to" or "Navigate to"	Address, name, business name, type of business, or other destination	"Directions to 1299 Colusa Avenue, Berkeley, California" or "Navigate to Union Square, San Francisco."
Contact name		"Mike LeBeau" (opens Mike's contact card)
"Go to"	Search string or URL	"Go to Google.com"
"Send email"	One or more of: "To" & contact names, "Cc" & contact names, "Bcc" & contact names, "Subject" & subject text "Message" & message text (speak punctuation)	"Send email to Hugh Briss, subject, new shoes, message, I can't wait to show you my new shoes, period."
"Note to self"	Message text	"Note to self: remember the milk"

"Set alarm"	"Time" or "for" & time, such as "10:45 a.m." or "20 minutes from now," "Label" & name of alarm	"Set alarm for 7:45 p.m., label, switch the laundry"
"Listen to"	Words to search YouTube for, such as the name of a song, artist, or album.	"Listen to: Smells Like Teen Spirit"

Search settings

To view Google Search settings, including those for Google Now, scroll to the bottom of the Google Now screen and touch  **Menu** > **Settings**.

The first three types of settings are described here. For Privacy & accounts, see the next section.

Google Now

Google Now settings let you turn Google Now on or off. If you turn it on, you're taken through a brief introduction and given the chance to opt in.

While Google Now is on, you can also set your preferences for individual Google Now cards and related notifications from the Google Now settings screen.

Options for each card vary. Most include a Notifications section that lets you control how you're informed when a card changes. Typically, you can choose between Off, Low priority, or Standard notifications.

Low priority notifications appear at the bottom of the notifications shade without any additional signal. Standard notifications appear like the others, in chronological order, and you can set vibration and a ringtone.

To set the ringtone and vibrate options for standard notifications, go to touch  **Menu > Settings > Google Now** and look at the end of the list.

Voice settings

Voice settings control different aspects of speech input and output when you search by voice or use voice actions:

- **Language.** The language you select here for Voice Search input and output can be different from the language displayed by your tablet.
- **Speech output.** To turn on speech output only when you've got a headset attached to your tablet, select **Hands-free only**.
- **Block offensive words.** Check to ensure that search results with offensive language are blocked.
- **Hotword detection.** When this is checked, you can say "Google" when viewing the Google Now screen rather than touching the Microphone icon to initiate a voice search or action.
- **Download offline speech recognition.** Check to select one or more additional languages for speech recognition when you don't have a network connection.

IMPORTANT: To detect when you say "Google" to launch Voice Search or Voice Actions, Google analyzes sound picked up by your tablet's microphone in intervals of a few seconds or less. The sound is immediately discarded after analysis and is not stored on the device or sent to Google.

Tablet search

Tablet search settings let you select which apps on your tablet are included in Google searches.

Privacy and accounts

These settings control the account for use with Google Search and search-related privacy options for that account. You can view them in two ways:

- From the Google Now screen:  **Menu > Settings > Privacy & accounts.**
- From your tablet's main Settings app:  **Settings > Accounts > Google > Privacy > Search.**

Touch each setting to learn more:

- **Google Account.** The account used with Google Search and Google Now.
- **Manage location history.** Opens Google Maps settings, where you can turn location settings related to Google Maps on or off.
- **Location services.** Opens your tablet's Settings screen for these services, including Google's location service and GPS.
- **Show recent searches.** Check if you want search suggestions based on your recent searches.
- **Manage Web History.** Opens your Web History settings in a browser. You may have to sign in to reach them.

Tune performance

Optimize battery life

To control Battery settings, go to  **Settings > Device > Battery**.

You can extend your battery's life between charges by turning off features that you don't need. You can also monitor how apps and system resources consume battery power.

Extend the life of your battery

- If you aren't using Wi-Fi, Bluetooth, or GPS, use the Settings app to turn them off. The GPS setting is located in **Settings > Personal > Location services**.
- Don't leave the Maps or Navigation apps open on the screen when you're not using them. They use GPS (and thus more power) only when they're running.
- Turn down screen brightness and set a shorter Sleep timeout: **Settings > Device > Display**.
- If you don't need it, turn off automatic syncing for all apps: **Settings > Accounts > Google *account-name***. This means you

need to sync manually to collect messages, email, and other recent information, and won't receive notifications when updates occur.

- If you know you won't be near a Wi-Fi network for a while, switch to Airplane mode: press and hold the Power button, or go to **Settings > Wireless & Networks > More > Airplane mode**.

Check battery level and usage details

Open **Settings > Device > Battery**.

The list at the bottom of the screen shows the breakdown of battery usage for individual apps and services. Touch a graph for more details. The details screen for some apps includes buttons that allow you to adjust settings affecting power usage, or stop the app completely.

WARNING: If you stop some apps or services, your device may not work correctly.

Battery status (charging, discharging) and level (as a percentage of fully charged) are displayed at the top of the screen.

The discharge graph shows battery level over time since you last charged the device, and how long you've been running on battery power.

Optimize data usage

Data usage refers to the amount of data uploaded or downloaded by your device during a given period. To monitor your data usage, go to  **Settings > Wireless & networks > Data usage**.

Data usage settings allow you to:

- View data usage by app and access app settings.
- Identify mobile hotspots and restrict background downloads that may result in extra charges.

To view mobile hotspot settings, touch  **Menu > Mobile hotspots.**

Near the top of the screen, note the data usage cycle. Touch it to choose a different cycle. This date range is the period of time for which the graph displays data usage.

The vertical white lines on the graph show a period of time within the data usage cycle. This range determines the usage amount displayed just below the graph. Drag lines to change the period.

View data usage by app

Some apps transfer data in the background — that is, when you're not actually using the app, it may download data for future reference. Some apps allow you to restrict background data usage from the app's own settings. Touch the graph for any app in the bottom part of the screen for more usage details and access to its settings.

Set auto-sync

You can also conserve data usage by syncing your apps manually, only when you need the data, rather than relying on auto-sync. To turn auto-sync off or on, touch  **Menu > Auto-sync data.**

Optimize memory usage

You typically don't need to worry about managing apps beyond installing, opening, and using them. But there may be times when you want to know more about what's happening behind the scenes.

Apps use two kinds of memory: internal storage and RAM. They use internal storage for themselves and any files, settings, and other data they use. They also use RAM (memory designed for temporary storage and fast access) when they're running.

Android manages and carefully guards the portion of internal storage where the system, apps, and most data for those apps are stored, because this area may contain your private information. It's not possible to view this portion of internal storage when you connect your device to a computer with a USB cable. The other portion of internal storage, where music, downloaded files, and so on are stored, remains visible for your convenience.

Android also manages how apps use RAM. It may cache some things you've been using recently, for quicker access if you need them again, but it will erase the cache if it needs the RAM for new activities.

You affect the way apps use internal storage directly and indirectly in many ways — for example, by:

- Installing or uninstalling apps.
- Downloading files in Chrome, Gmail, and other apps.
- Creating files (for example, by taking pictures).
- Deleting downloaded files or files you created.
- Copying files between your device and a computer via USB or Bluetooth.

You rarely need to manage the way apps use RAM. But you can monitor apps' RAM usage and stop them if they misbehave.

Use the Apps screen



Settings

The Apps screen allows you to adjust several aspects of the way your device uses memory. To view these settings, go to **Settings > Device > Apps**.

You'll see three tabs at the top of the screen, each displaying a list of apps or their components:

- **Downloaded.** Displays apps you've downloaded on Google Play or other sources.
- **Running.** Displays all apps, processes, and services that are currently running or that have cached processes, and how much RAM they are using.

The graph at the bottom of the Running tab shows the total RAM in use and the amount free. At the top right of the screen, touch **Show cached processes** or **Show running services** to switch back and forth.

- **All.** Displays all apps that came with Android and all apps you downloaded on Google Play or other sources.

To switch the order of the lists displayed in the **Downloaded** or **All** tabs, touch  **Menu > Sort by name** or **Sort by size**.

To view details about an app or other item listed under any tab, touch its name. The information and controls available vary among different types of apps, but commonly include:

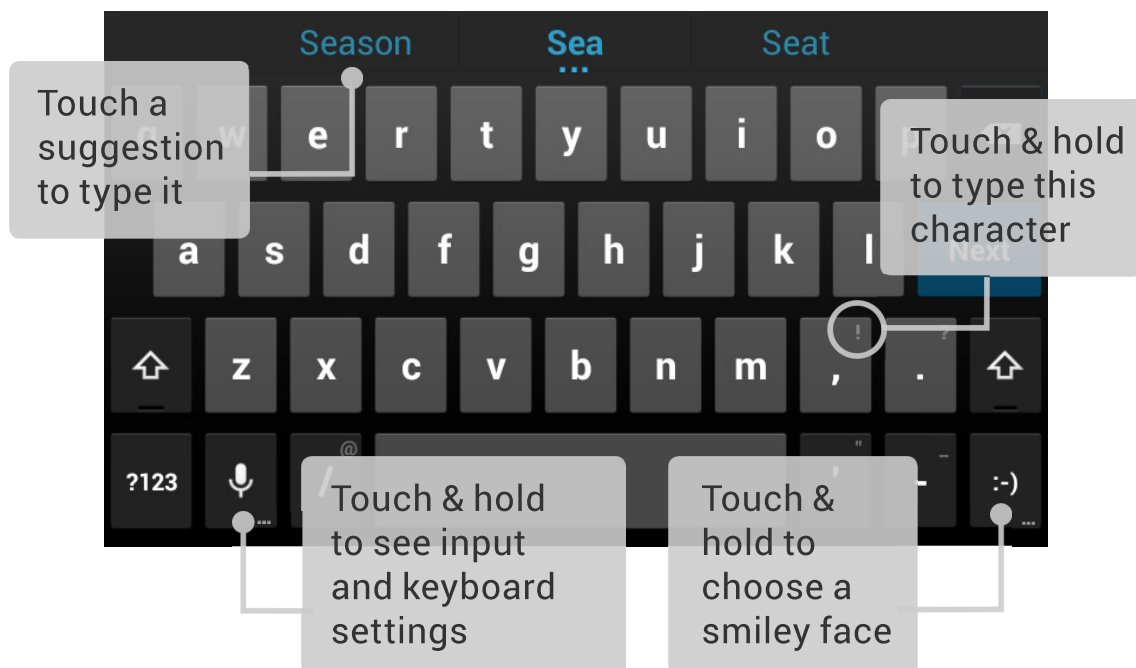
- **Force stop** button. Stops an app that is misbehaving. Stopping an app, process, or service may cause your device to stop working correctly. You may need to restart your device after doing this.

- **Uninstall** button. Deletes the app and all of its data and settings.
- **Disable** button. Prevents the app from running, but does not uninstall it. This option is available for some apps and services that can't be uninstalled.
- **Clear data** button. Delete an app's settings and other data without removing the app itself.
- **Clear cache** button. If the app stores data in a temporary area of the tablet's memory, lists how much information is stored, and includes a button for clearing it.
- **Launch by default**. If you have configured an app to launch certain file types by default, you can clear that setting here.
- **Permissions**. Lists the kinds of information about your tablet and data the app has access to.

Enter & edit text

Use the keyboard

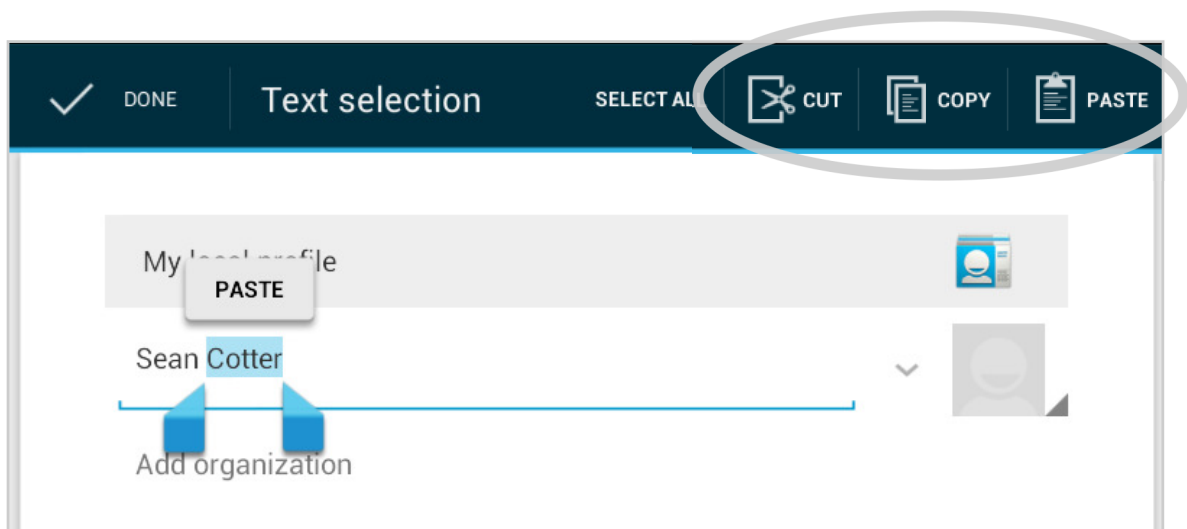
You can enter text using the onscreen keyboard. Some apps open it automatically. In others, you open it by touching where you want to type.



To make the keyboard go away, touch the modified  Back button below it.

Basic editing

- **Move the insertion point.** Touch where you want to type. The cursor blinks in the new position, and a blue tab appears below it. Drag the tab to move the cursor.
- **Select text.** Touch & hold or double-tap within the text. The nearest word highlights, with a tab at each end of the selection. Drag the tabs to change the selection. The tab disappears after a few moments. To make it reappear, touch the text again.
- **Delete text.** Touch  to delete selected text or the characters before the cursor.
- **Type capital letters.** Touch the Shift key once to switch to capital letters for one letter. Or touch & hold  Shift key while you type. When you release the key, the lowercase letters reappear.
- **Turn caps lock on.** Double-tap or touch & hold  Shift key, so it changes to . Touch  Shift key again to return to lowercase.
- **Cut, copy, paste.** Select the text you want to manipulate. Then touch  Cut,  Copy or  Paste button:





Settings

To change your tablet's keyboard and input methods, go to **Settings > Personal > Language & input**.

Type text by speaking

You can use voice input to type text by speaking. This feature uses Google's speech-recognition service, so your tablet must be connected to a Wi-Fi network to use it.

Text that you enter by speaking is underlined. You can continue entering text to keep it, or delete it.

You can speak to enter text in most places that you can enter text with the onscreen keyboard.

- Touch a text field, or a location in text you've already entered in a text field.
- Touch the  Microphone key on the onscreen keyboard.
- When you see the microphone image, speak what you want to type.

Say "comma," "period," "question mark," "exclamation mark," or "exclamation point" to enter punctuation.

When you pause, what you spoke is transcribed by the speech-recognition service and entered in the text field, underlined. You can touch the Delete key to erase the underlined text. If you start typing or entering more text by speaking, the underline disappears.

To improve processing of your voice input, Google may record a few seconds of ambient background noise in temporary memory

at any time. This recording remains on the device only fleetingly and is not sent to Google.



Settings

To change your tablet's speech settings, go to **Settings > Personal > Language & input**.

Connect to networks

Connect to Wi-Fi networks

To work with Wi-Fi settings, go to  **Settings > Wireless & networks > Wi-Fi**.

Wi-Fi is a wireless networking technology that can provide Internet access at distances of up to 100 meters, depending on the Wi-Fi router and your surroundings.

To use Wi-Fi, you connect to a wireless access point, or “hotspot.” Some hotspots are open and you can simply connect to them. Others implement security features that require other steps to set up, such as digital certificates or other ways to ensure that only authorized users can connect.

To extend the life of your battery between charges, turn off Wi-Fi when you’re not using it. You can also set your device to disconnect automatically from Wi-Fi networks when it’s sleeping.

Turn Wi-Fi on & connect to a Wi-Fi network

If you're adding a Wi-Fi network when first setting up your device, Wi-Fi is turned on automatically.

1. Touch  **Settings > Wireless & networks > Wi-Fi**.
2. Slide the Wi-Fi switch to the **On** position.
The device scans for available Wi-Fi networks and displays the names of those it finds. Secured networks are indicated with a Lock icon. If the device finds a network that you connected to previously, it connects to it.
3. Touch a network name to see more details or connect to it, and type a password if necessary.
Or, if your Wi-Fi router supports Wi-Fi Protected Setup, touch the  WPS icon on your tablet, and then touch the same button on your router.

To modify a network's settings, touch & hold the network name.

Add a Wi-Fi network

You can add a Wi-Fi network so your device will remember it, along with any security credentials, and connect to it automatically when it's in range. You must also add a Wi-Fi network if the network does not broadcast its name (SSID), or to add a Wi-Fi network when you are out of range.

To join a secured network, you first need to learn security details from the network's administrator.

1. Turn on Wi-Fi, if it's not already on.
2. Touch the  Plus icon at the top of the screen.
3. Enter the SSID (name) of the network. If necessary, enter security or other network configuration details.
4. Touch **Save**.

The information about the network is saved. Your device will connect to this network automatically the next time you come within range.

Forget a Wi-Fi network

You can make the tablet forget about the details of a Wi-Fi network that you added—for example, if you don't want the tablet to connect to it automatically or if it's a network that you no longer use.

1. Turn on Wi-Fi, if it's not already on.
2. In the Wi-Fi settings screen, touch the name of the network.
3. Touch **Forget** in the dialog that opens.

Configure proxy settings for a Wi-Fi network

Some network administrators require you to connect to internal or external network resources via a proxy server. By default, the Wi-Fi networks you add are not configured to connect via a proxy, but you can change that for each Wi-Fi network you've added.

Proxy settings are used by Browser but may not be used by other apps.

1. Touch & hold a network in the list of Wi-Fi networks you've added.
2. Touch **Modify network** in the dialog that opens.
3. Select **Show advanced options**.
4. If the network has no proxy settings, touch **None** under Proxy Settings, then touch **Manual** in the menu that opens.
5. Enter the proxy settings supplied by your network administrator.
6. Touch **Save**.

The proxy settings apply only to the Wi-Fi network you modified. To change the proxy settings for other Wi-Fi networks, modify them individually.

Set Wi-Fi notifications, disconnect policy, & other advanced options

To work with advanced Wi-Fi settings:

1. Turn on Wi-Fi, if it's not already on.
2. In the Wi-Fi settings screen, touch  **Menu > Advanced**.

These are the settings you can adjust:

- **Network notification.** By default, when Wi-Fi is on, you receive notifications in the Status bar when your device detects an open Wi-Fi network. Uncheck this option to turn off notifications.
- **Keep Wi-Fi during sleep.** To conserve mobile data usage, your device stays connected to Wi-Fi when the screen goes to sleep. Touch this option to change this default behavior: either to stay connected to Wi-Fi only when the device is connected to a charger (when battery life isn't a problem), or never to stay connected to Wi-Fi during sleep.

This screen also displays the following information:

- **MAC address.** The Media Access Control (MAC) address of your device when connected to a Wi-Fi network.
- **IP address.** The Internet Protocol (IP) address assigned to the device by the Wi-Fi network you are connected to (unless you used the IP settings to assign it a static IP address).



Settings

To turn Wi-Fi on or off, go to  **Settings > Wireless & networks > Wi-Fi**.

To manage data usage and mobile hotspots, go to  **Settings > Wireless & networks > Data usage**.

Connect to virtual private networks

Virtual private networks (VPNs) allow you to connect to the resources inside a secured local network, from outside that network. VPNs are commonly deployed by corporations, schools, and other institutions to let people access local network resources when not on campus, or when connected to a wireless network.

To configure VPN access, you must first obtain the details from your network administrator. Depending on your organization's solution, you may need to obtain a VPN app, either from your administrator or on Google Play.



Settings

The VPN settings screen allows you to add VPN networks and adjust their settings. To view this screen and perform the tasks described here, go to **Settings > Wireless & networks > More > VPN**.

Add a VPN

1. From the VPN screen, touch **Add VPN profile**.
2. In the form that appears, fill in the information provided by your network administrator
3. Touch **Save**.

The VPN is added to the list on the VPN screen.

Connect to a VPN

1. From the VPN screen, touch the name of the VPN.
2. In the dialog that opens, enter any requested credentials.
3. Touch **Connect**.

When you're connected to a VPN, a Status icon and notification are displayed continuously. To disconnect, touch the notification for the VPN connection.

Edit a VPN

1. From the VPN screen, touch & hold the name of the VPN profile.
2. In the dialog that opens, touch **Edit profile**.
3. Edit the VPN settings you want.
4. Touch **Save**.

Delete a VPN

1. From the VPN screen, touch & hold the name of the VPN profile.
2. Touch & hold the VPN you want to delete.
3. In the dialog that opens, touch **Delete profile**.

Control airplane mode & other network settings

These settings are available under **Settings > Wireless & networks > More**. Follow the links for detailed instructions:

- **Airplane mode.** Check to turn off all data transmission from the device.
- **VPN.** Touch to adjust settings that allow you to connect to websites and other resources within a secured local network from outside that network. See "Connect to virtual private networks" on page 57.

- **NFC.** Check to turn on Near Frequency Communication (NFC) feature (required for Android Beam).
- **Android Beam.** Touch to turn Android Beam off or on. When **NFC** is checked and Android Beam is on, you can touch your tablet to other devices to exchange web pages, contact info, and other data. See “Beam screen content” on page 60.

Connect to devices

Beam screen content

You can beam a web page, a video, or other content from your screen to another device by bringing the devices together (typically back to back).

Before you begin: Make sure both devices are unlocked, support Near Field Communication (NFC), and have both NFC and Android Beam turned on.

Follow these steps:

1. Open a screen that contains something you'd like to share, such as a Browser page, YouTube video, or place page in Maps.
2. Move the back of your tablet toward the back of the other device.

When the devices connect, you hear a sound, the image on your screen reduces in size, and you see the message **Touch to beam**.

3. Touch your screen anywhere.

Your friend's device displays the transferred content. Or, if the necessary app isn't installed, Google Play opens to a screen where your friend can download the app.

TIP: When you touch another device to the back of your Nexus 7, make sure it's near the "u" in "nexus" to successfully beam content.



Settings

To turn on NFC, go to **Settings > Wireless & networks > More > NFC**.

To turn on Android Beam, go to **Settings > Wireless & networks > More > Android Beam**.

Connect to Bluetooth devices

Bluetooth is a short-range wireless communications technology used to communicate between devices over a distance of about 8 meters. The most common Bluetooth devices are headsets for making calls or listening to music, hands-free kits for cars, and other portable devices, including laptops.

To connect to a Bluetooth device, first turn on your tablet's Bluetooth. Then, the first time you use a new Bluetooth device, you need to "pair" it with your tablet so that both devices know how to connect securely to each other. After that, they connect automatically.

To extend the life of your battery between charges, turn off Bluetooth when you're not using it. You may also be required to turn Bluetooth off in some locations. Bluetooth is turned off when you switch to Airplane mode.

System bar icons indicate Bluetooth status.

Turn Bluetooth on or off

1. Touch  **Settings > Wireless & networks**.
2. Slide the Bluetooth switch on or off.

Change your tablet's Bluetooth name

Your tablet has a generic Bluetooth name by default, which is visible to other Bluetooth devices when you connect them. You can change the name so that it is more recognizable.

1. Under **Settings > Wireless & networks**, make sure Bluetooth is turned on.
2. Touch **Bluetooth**.
3. In the Bluetooth screen, touch  **Menu icon > Rename tablet**.
4. Type a new name and touch **Rename**.

Pair your tablet with a Bluetooth device

You must pair your tablet with a device before you can connect to it. Once you pair your tablet with a device, they stay paired unless you unpair them.

If the device you want to pair with isn't in the list, ensure that the it's turned on and set to be discoverable. See the documentation that came with your device to learn how to make it discoverable.

1. Under **Settings > Wireless & networks**, make sure Bluetooth is turned on.
2. Touch **Bluetooth**. Your tablet scans for and displays the IDs of all available Bluetooth devices in range.
3. If your tablet stops scanning before your Bluetooth device is ready, touch **Search for devices**.
4. Touch the ID of the Bluetooth device in the list to pair with it. Follow the instructions to complete the pairing. If you're

prompted to enter a passcode, try entering 0000 or 1234 (the most common passcodes), or consult the documentation that came with the device.

If the pairing is successful, your tablet connects to the device.

Connect to a Bluetooth device

Once you've paired with a Bluetooth device, you can connect to it manually—for example, to switch devices or to reconnect after it is back in range.

- Under **Settings > Wireless & networks > Bluetooth**, make sure Bluetooth is turned on.
- In the list of devices, touch a paired but unconnected device. When the tablet and the device are connected, the device is displayed as connected in the list.

Configure or unpair a Bluetooth device

Some Bluetooth devices have multiple profiles. Profiles can include the ability to transmit your conversations, play music in stereo, or transfer files or other data. You can select which profiles you want to use with your tablet. You can also change the name of the Bluetooth device as it appears on your tablet.

1. Under  **Settings > Wireless & networks > Bluetooth**, make sure Bluetooth is turned on.
2. In the Bluetooth settings, touch the Settings icon beside the connected Bluetooth device you want to configure.
A screen opens that allows you to change the device's name, unpair it, or select profiles. Touch the Back button when you're finished.

Connect to keyboards, mice, & other devices

You can connect a keyboard, mouse, or even a joystick or other input device to your tablet via USB or Bluetooth and use it just as you would with a PC.

You may need an adapter to connect the keyboard or other device to your tablet's USB port. To connect more than one USB device at a time, use a powered USB hub to reduce the drain on your tablet's battery.

IMPORTANT: Using external devices such as keyboards via USB will cause a significant additional drain on your battery, as will continuous use of a mouse via Bluetooth.

You pair and connect Bluetooth input devices to your tablet in the same way as any other Bluetooth device.

Keyboards

In addition to entering text, you can use your keyboard to navigate your tablet's features:

- Use the arrow keys to select items on screen.
- Pressing Return when an item is selected is equivalent to touching that item.
- Pressing Escape is equivalent to touching Back.
- Press Tab or Shift-Tab to move from field to field in a form or other screen with multiple text fields.

Mice

When you connect a mouse to your tablet and move the mouse, an arrow-shaped cursor appears, just as on a computer:

- Use the mouse to move the cursor.
- Clicking, pressing, and dragging with the mouse button is equivalent to touching, touching & holding, and dragging with your finger.
- Only one mouse button is supported.
- If your mouse has a trackball or scroll wheel, you can use it to scroll both vertically and horizontally.

Other input devices

You can connect joysticks, gamepads, and other input devices to your tablet. If they work without special drivers or adapters on your PC, they will likely work with your tablet. However, games and other apps must be designed to support any special features of an input device, such as dedicated buttons or other controls, to take full advantage of them.

Connect to a Windows computer via USB

You can use a USB cable to connect your tablet to a Windows computer and transfer music, pictures, and other files in both directions. This connection uses the MTP protocol, which is supported by most recent versions of Windows.

When you connect your tablet to the USB port on your computer, its USB storage is mounted as a drive and appears on your computer screen. You can now copy files back and forth as you would using any other external device.

When you're finished, eject the tablet from within Windows before unplugging the USB cable.



Settings

To change your tablet's USB connection options, go to **Settings > Device > Storage > Menu > USB computer connection**.

Connect to a Macintosh computer via USB

You can use a USB cable to connect your tablet to a computer running Mac OS X with a USB cable and transfer music, pictures, and other files in both directions.

This connection uses the MTP protocol, which is not supported by Mac OS X natively. Therefore, you first need to install the free Android File Transfer application on your Macintosh. It's available from www.android.com/filetransfer, along with instructions on how to install it.

After you install Android File Transfer, follow these steps:

1. If you are using Android File Transfer for the first time, double-click it to open it.
After you start Android File Transfer once, it opens automatically whenever you connect your device to your computer.
2. Connect your device to your computer with a USB cable.

Android File Transfer starts, if it's not already running, and opens a window that displays the contents of your device, along with storage space details at the bottom of the window.

You work with this window much as if it were a Finder window: opening and closing folders, creating new folders, and dragging

files to or from it and other Finder windows. Disconnect the USB cable when you're finished.



Settings

To change your tablet's USB connection options, go to **Settings > Device > Storage > Menu > USB computer connection**.

Manage accounts

Add or remove accounts

To reach the settings described here, start from  **Settings > Accounts**.

You can use multiple Google Accounts and Microsoft Exchange ActiveSync accounts on your device. You may also be able to add other kinds of accounts, depending on your apps. Some you can add in the Accounts section of Settings, as described here. Others you add using an app that works with those kinds of accounts. For example, you can add IMAP and POP3 email accounts with the Email app.

Add an account

To add some accounts, you may need to obtain details from system administrator about the service to which the account connects. For example, you may need to know the account's domain or server address.

1. Go to **Settings > Accounts > Add account**.
2. Touch the kind of account to add.
3. Follow the on-screen instructions.

Most accounts require a username and password, but the details depend on the kind of account and the configuration of the service you're connecting to.

Depending on the kind of account, you may be asked to configure what kinds of data you want to sync, name the account, and other details.

When you're finished, the account is added in one of two places:

- Google Accounts show up under **Settings > Accounts > Google**.
- Other accounts show up under **Settings > Accounts**.

Remove an account

You can remove any account and all information associated with it from your device, including email, contacts, settings, and so on.

To remove a Google account, touch its name under **Settings > Accounts** or **Settings > Accounts > Google**, then  **Menu > Remove account**.

For any other type of account go, to **Settings > Accounts > account-name** and look for the Remove option.

Configure sync options

To reach sync settings for Google accounts, start from  **Settings > Accounts > Google**.

You can configure synchronization options for any of your apps. You can also decide what kinds of data to synchronize for each account.

For some accounts, syncing is two-directional; changes that you make to the information on your device are made to the copy of that information on the web. Your Google Account works this way. Other accounts support only one-way sync: the information on your mobile device is read-only.

Some apps, such as Gmail and Calendar, have separate synchronization settings that provide more fine-grained control. For example, to control message syncing in the Gmail app, touch  **Menu > Manage** labels, touch a label, and then **Sync messages**.

Configure auto-sync for all apps

To control Auto-sync for all apps that use it, open **Settings > Data usage >  Menu** and check or uncheck **Auto-sync data**.

If you turn off Auto-sync, you need to sync manually to collect messages, email, and other recent information, and won't receive notifications when updates occur. For example, changes that you make in your People app are automatically made to your Google contacts on the web.

If this option is not checked, you may be able to use an app's tools to sync data manually. You can also sync manually to collect messages, email, and other recent information. Leaving Auto-sync off can help extend your battery life, but will prevent you from receiving notifications when updates occur.

Configure Google Account sync settings

To adjust a single Google Account's sync settings:

1. Go to **Settings > Personal > Accounts > Google**.



indicates that some or all of an account's information is configured to sync automatically.



indicates that none of an account's information is configured to sync automatically.

2. Touch the account whose sync settings you want to change.
3. The Sync Settings screen opens, displaying a list of the kinds of information the account can sync.
4. Check or uncheck items as needed.

Unchecking an option does not remove the information from your device; it simply stops it from being kept in sync with the version on the web.

Sync a Google account manually

1. Go to **Settings > Accounts > Google**.
2. Touch the account whose data you want to sync.
3. Touch **Menu > Sync now**.

Change backup & reset options

To view the settings described here, go to **Settings > Backup & reset**.

You can back up settings and other data associated with one or more of your Google Accounts. If you need to replace or factory reset your device, you can restore your data for any accounts that were previously backed up.

These options are available:

- **Back up my data.** If you check this option, a wide variety of your personal data is backed up automatically, including your Wi-Fi passwords, Browser bookmarks, a list of the apps you've installed on Google Play, the words you've added to the dictionary used by the onscreen keyboard, and most of your customized settings. Some third-party apps may also take

advantage of this feature, so you can restore your data if you reinstall an app.

If you uncheck this option, your data stops getting backed up, and any existing backups are deleted from Google servers.

- **Backup account.** Displays the Google Accounts whose information gets backed up. You must sign in with one or more of these accounts on a new or reset device to retrieve the associated information.

To add a new account, touch **Backup account > Add account.**

- **Automatic restore.** Check this option to restore settings and other data when you reinstall an app. This feature requires that you are backing up your data with your Google Account and that the app is using the backup service.
- **Factory data reset.** Touch this option, then **Reset tablet** to erase all your personal data from internal storage, including information about your Google Account, any other accounts, your system and app settings, any downloaded applications, and your music, photos, videos, and other files.

After resetting your tablet, you'll need to re-enter the same information requested when you first set up your tablet. If you've been backing up your data to a Google account, an option during the setup process allows you to restore it.

Some third-party apps also make use of the backup service, so if you reinstall one, its settings and data are restored.

Secure your tablet

Set screen lock

Depending how you use your tablet, you may want to set some form of automatic screen lock to prevent unauthorized access. If a lock has been set, the screen locks when your tablet's display goes to sleep.

If your tablet's playing music when the screen locks, you can continue listening or pause the selection without unlocking.

To adjust your lock settings:

1. Go to  **Settings** > **Personal** > **Security** > **Screen lock**.
2. Touch the type of lock you want and follow the onscreen instructions.

If you have previously set a lock, you must enter the pattern, PIN, or password to unlock the lock settings.

You can choose among these lock options, listed in approximate order of strength:

- **Slide** provides no protection, but lets you get to the Home screen quickly, or open Camera and start taking pictures immediately.
- **Face Unlock** lets you unlock your tablet by looking at it. This is the least secure lock option.

TIP: Face Unlock lets you unlock your tablet by looking at the screen. After you set it up, look under **Settings > Personal > Security** for two additional settings: **Improve face matching** and **Liveness check**. Use these to make Face Unlock more reliable and secure.

- **Pattern** lets you draw a simple pattern with your finger to unlock the tablet. This is slightly more secure than Face Unlock.
- **PIN** requires four or more numbers. Longer PINs tend to be more secure.
- **Password** requires four or more letters or numbers. This is the most secure option, as long as you create a strong password.

Password tips: For best security, specify a password that is

- A least 8 characters long.
- Contains a mixture of numbers, letters, and special symbols.
- Doesn't contain any recognizable words or phrases.



Settings

To change when your tablet goes to sleep, go to **Settings > Device > Display > Sleep**.

To see your passwords when you input them, go to **Settings > Personal > Security > Make passwords visible**.

Encrypt your tablet

You can encrypt all the data on your tablet: Google Accounts, app data, music and other media, downloaded information, and so on. If you do, you must enter a numeric PIN or password each time you turn on your tablet. Note that this is the same PIN or password that you use to unlock your tablet without encryption, and cannot be set independently.

WARNING: Encryption is irreversible. The only way to revert to an unencrypted tablet is to perform a factory data reset, which erases all your data.

Encryption provides additional protection in case your tablet is stolen, and may be required or recommended in some organizations. Consult your system administrator before turning it on. In many cases the PIN or password you set for encryption is controlled by the system administrator.

Before turning on encryption, prepare as follows:

1. Set a lock screen PIN or password.
2. Charge the battery.
3. Plug in your tablet.
4. Schedule an hour or more for the encryption process: you must not interrupt it or you will lose some or all of your data.

When you're ready to turn on encryption:

1. Touch **Settings > Personal > Security > Encryption > Encrypt tablet**.
2. Read the information about encryption carefully.
The **Encrypt tablet** button is dimmed if your battery's not

charged or your tablet's not plugged in. If you change your mind about encrypting your tablet, touch the Back button.

WARNING: If you interrupt the encryption process, you will lose data.

3. Touch **Encrypt tablet**.
4. Enter your lock screen PIN or password and touch **Continue**.
5. Touch **Encrypt tablet** again.

The encryption process starts and displays its progress. Encryption can take an hour or more, during which time your tablet may restart several times.

When encryption is complete, you're prompted to enter your PIN or password.

Subsequently, you must enter your PIN or password each time you power on your tablet, to decrypt it.

Work with certificates

You can use digital certificates to identify your device for a variety of purposes, including VPN or Wi-Fi network access as well as authentication to servers by apps such as Email or Browser. To use a certificate to identify your device, you must obtain it with help from your system administrator, and install it in your device's trusted credential storage .

Android supports DER-encoded X.509 certificates, saved in files with a .crt or .cer file extension. If your certificate file has a .der or other extension, you must change it to .crt or .cer or you won't be able to install it.

Android also supports X.509 certificates saved in PKCS#12 key store files with a .p12 or .pfx extension. If your key store has some other extension, you must change it to .p12 or .pfx or you won't be able to install it. When you install a certificate from a PKCS#12 key store, Android also installs any accompanying private key or certificate authority certificates.

Install client & CA certificates

To install a certificate from your tablet's internal storage:

1. Copy the certificate or key store from your computer to the root of your device's internal storage (that is, not in a folder).
2. Touch  **Settings > Personal > Security > Credential storage > Install from storage.**
3. Touch the filename of the certificate or keystore to install. Only certificates that you haven't already installed are displayed.
4. If prompted, enter the key store password and touch **OK**.
5. Enter a name for the certificate and touch **OK**.

Typically, a CA certificate included with a client certificate is installed at the same time. You can also install separate CA certificates using the same steps.

If you have not already set a pattern, PIN, or password for your device, you're prompted to set one up. The type of lock that's acceptable may be predetermined by your system administrator.

You can now use the certificate that you installed when connecting to a secure network or for client authentication with Email, Browser, and third-party apps. After a certificate is installed successfully, the copy in storage is deleted.

IMPORTANT: Apps such as Email that support certificates allow you to install certificates directly from within the app. For details, see the Help or other instructions that come with each app.

Work with CA certificates

If a certificate authority (CA) certificate gets compromised, or for some other reason your organization doesn't want to trust it, you can disable or remove it. To do so, follow these steps:

1. Touch  **Settings > Personal > Security > Credential storage > Trusted credentials**. The trusted credentials screen has two tabs:
System displays certificate authority (CA) certificates that are permanently installed in the ROM of your tablet.
User displays any CA certificates that you have installed yourself, for example in the process of installing a client certificate.
2. To examine the details of CA certificate, touch its name.
A scrolling screen displays the details.
3. To remove or disable a CA certificate, scroll down to the bottom of the details screen and touch either **Disable** for system certificates or **Remove** for user certificates.
When you disable a system CA certificate, the button at the bottom of its details screen changes to **Enable**, so you can enable the certificate again if necessary. When you remove a user-installed CA certificate, it is gone permanently and must be re-installed if you want it back.
4. In the confirmation dialog that appears, click **OK**.

Accessibility

Accessibility overview

Your tablet's accessibility features make it easier to use if you have visual impairments:

TalkBack is a pre-installed screen reader service provided by Google. It uses spoken feedback to describe the results of actions, such as opening an app, and events, such as notifications.

Explore by Touch is a system feature that works with TalkBack, allowing you to touch your tablet's screen and hear what's under your finger via spoken feedback. This feature is helpful to users with no vision.

Accessibility settings let you modify your tablet's display and sound options, such as increasing the text size, changing the speed at which text is spoken, and more.

Users with low vision

If you have low vision and don't plan to use Explore by Touch, go to support.google.com/nexus to see Help content formatted for sighted users. You can make reading and navigating this material easier by increasing the text size – just go to **Settings > Accessibility**, and check the **Large text** option.

Related Settings

- To view Accessibility settings, go to **Settings > Accessibility**.
- To control sound feedback and other TalkBack behaviors, go to **Settings > Accessibility > TalkBack** and touch **Settings** at the top right corner of the screen.

Accessibility gestures for Android 4.1 (Jelly Bean)

When TalkBack and Explore by Touch are turned on, you can use simple gestures to navigate your Nexus 7:

- **Drag one finger.** Explore your screen and hear audible feedback for what is being touched.
- **Double-tap anywhere on the screen.** Opens or activates the item that you last touched.
- **Swipe up or down using two fingers.** Scroll within lists.
- **Swipe left or right using two fingers.** Change pages and screens.
- **Swipe right (or down) using one finger.** Move to the next item.
- **Swipe left (or up) using one finger.** Move to the previous item.
- **Swipe down then up using a single motion.** Transition to the next reading level when reading blocks of text, then swipe right to read forward or left to go back.

- **Swipe up then down using a single motion.** Transition to the previous reading level when reading blocks of text, then swipe right to read forward or left to go back.
- **Swipe right then left using a single motion.** Move to the next page.
- **Swipe left then right using a single motion.** Move to the previous page.

While you're exploring with one finger, you can use another finger to double-tap to open an app, widget, and so on.

IMPORTANT: The way these gestures are interpreted is specific to TalkBack. Other accessibility services may use the same gestures for different actions

Shortcut gestures in TalkBack

Note: These gestures work only when Explore by Touch is turned on.

TalkBack has shortcut gestures to help you get to your Home screen, go back, and more. To try these shortcuts, swipe using a single motion:

- **Up then right.** Open notifications
- **Up then left.** Home button
- **Down then right.** Recent apps button
- **Down then left.** Back button

You can modify your shortcut gestures and the corresponding actions in TalkBack by going to **Settings > Accessibility > TalkBack > Settings > Manage shortcut gestures**.

Set up your tablet

Your Nexus 7 has the following hardware:

- **Power button/lock key.** The Power button is located on the right side of your tablet.
- **Volume.** The Volume key is directly under the Power button.
- **Front-facing camera.** The camera is located at the top center of your screen.
- **Micro USB port.** The USB is at the bottom of your tablet.
- **Headset jack.** The headset jack is in the lower right side at the bottom of your tablet.

When you turn on your tablet for the first time, you'll arrive at a Welcome screen.

- To turn on TalkBack and Explore by Touch, place two fingers slightly apart on your screen. You'll hear spoken feedback when your tablet recognizes the gesture. Keep holding your fingers for two more seconds to enable TalkBack and Explore by Touch. After turning on these features, the Explore by Touch tutorial starts, giving you a chance to experience navigating on Android. When you've completed the tutorial, the tablet displays the Welcome screen again.
- To choose a different language, swipe right and double-tap the menu.
- To finish setting up your tablet, swipe right and double-tap **Start** towards the center of the screen.

A series of screens takes you through the setup process. When prompted, you can sign in using the email address and password for your Google Account. When you sign in with a Google Account, all the email, contacts, Calendar events, and other data associated with that account are automatically synced with your tablet. If you have multiple Google Accounts, you'll be able to add the others later.

Overlays

After completing the setup process, you'll encounter several overlays that explain how to use various features on your tablet. To dismiss an overlay, swipe right and double-tap **OK**.

Use TalkBack

TalkBack provides spoken feedback to help you navigate your tablet, describing what you touch and activate.

Note: Sighted assistance is needed for users with no vision to enable TalkBack if it wasn't turned on during the initial setup.

To turn TalkBack off or on:

1. Go to **Settings > Accessibility > TalkBack**.
2. Slide the TalkBack switch to the **On** or **Off** position.
3. Touch **OK** to turn on TalkBack.
4. When asked if you want to enable Explore by Touch, touch **OK** only if you want to change the way your tablet works and have your tablet describe each item that your finger moves over on the screen.

When you turn on Talkback, spoken feedback starts immediately. As you navigate your tablet, TalkBack describes your actions and alerts you of notifications and other occurrences.

If you also enabled Explore by Touch, moving your finger around the screen triggers a description of each item it touches. Double-tap activates the last spoken item, and swipe with two fingers to perform swiping actions that normally require just one finger.

Change TalkBack settings

To modify TalkBack settings, go to **Settings > Accessibility > TalkBack**, then double-tap **Settings** in the top right corner.

When to speak

- **Speech volume.** You can set this as a percentage of media volume.
- **Use pitch changes.** Check to speak keyboard feedback at a lower pitch.
- **Speak when screen is off.** Check to turn on spoken feedback when the screen is off.

Feedback settings

- **Sound feedback.** Check to control navigation sounds.
- **Sound volume.** Available when **Sound feedback** is checked. You can set this as a percentage of media volume.

Touch exploration

- **Launch “Explore by touch” tutorial.**
- **Manage shortcut gestures.** Allows you to assign the operations that different gestures trigger.

Control speed of Text-to-Speech

To control the speed of TalkBack’s speech, go to **Settings > Accessibility > Text-to-speech output > Speech rate**.

Manage TalkBack volume

To change the volume settings for TalkBack, go to **Settings > Sound > Volumes**. Use the slider for **Music, video, games, & other media** to change the volume level.

You can also use the volume control on the right side of your tablet when you hear spoken feedback.

Enhance web accessibility

In order to have full accessibility support for products such as Gmail and Chrome, you'll need to turn on the **Enhance web accessibility** option. Go to **Settings > Accessibility > Enhance web accessibility**, and double-tap **Allow**. This allows apps to install scripts that make web content more accessible.

Use Explore by Touch with TalkBack

When TalkBack is turned on, you have the option to use the Explore by Touch feature. Explore by Touch allows you to drag your finger slowly over your screen and describes each item that your finger touches.

Talkback must be turned on for Explore by Touch to be available. When you turn on TalkBack for the first time, you'll receive a prompt to turn on Explore by Touch.

Important: If you chose not to turn on Explore by Touch when you switched on TalkBack, you can bring the prompt back by disabling TalkBack and turning it on again. Go to **Settings > Accessibility > TalkBack**, then slide the TalkBack switch to **Off**. Repeat the step to turn TalkBack on. Once you turn on Explore by Touch, you can't turn it off separately from TalkBack unless you factory data reset your tablet.

Each action you take with your finger alerts you with spoken feedback, as well as sound (if enabled).

To navigate your tablet using Explore by Touch, you can:

- **Explore your screen using one finger** to hear what icons and buttons are on the screen and can be selected.
- After finding icons and buttons, **double-tap** anywhere on the screen to open apps, menus, and more.

To learn about the gestures you can use with TalkBack and Explore by Touch, visit “Accessibility gestures for Android 4.1 (Jelly Bean)” on page 80.

Recommended tutorial: To learn more about Explore by Touch, go to **Settings > Accessibility > TalkBack > Settings > Launch “Explore by touch” tutorial**.

Accessibility settings

To modify your tablet’s Accessibility settings, go to **Settings > Accessibility**.

A list of options appears:

- **TalkBack.** Controls spoken feedback for visually impaired users.
- **Large text.** Check to increase the text size on all your tablet’s screens. (*For users with low vision*)

This option changes the font size to the largest available. For more fine-grained control over font size, go to **Settings > Display > Font size**. Note that this setting does not apply to the Google Chrome app – it has its own text scaling control.

- **Auto-rotate screen.** Check to have the screen rotate automatically when you change the tablet’s orientation.
- **Speak passwords.** Check to get spoken feedback while typing passwords.

If this option is not checked, you will need a headset to hear the letters you type for passwords.

- **Text-to-Speech output.** Lets you specify text-to-speech engine details and speech rate.
- **Touch & hold delay.** Lets you adjust the delay required for the tablet to notice that you're touching and holding an item (for example, to move an app to a Home screen).
- **Enhance web accessibility.** Enable this option to have Chrome-Vox provide spoken feedback as you browse and interact with web sites and apps.

To make sure specialized accessibility apps work correctly on your tablet, be sure to turn on this option.

Navigate the Home screen

Note: These instructions assume that you have turned on Explore by Touch.

At the bottom of the screen, you'll find three Navigation buttons. They're always available. No matter what you're doing with your tablet, you can always get back to the main Home screen or return to previous screens:

- **Back.** Opens the previous screen you were working in, even if it was in a different app. Once you back up to the Home screen, you can't go back any further in your history.
- **Home.** Opens Home. If you're on a left or right Home screen, this button opens the central Home screen.
- **Recent apps.** Opens a list of thumbnail images of apps you've worked with recently. To open an app, touch and double-tap. To remove a thumbnail from the list, use two fingers to swipe it left or right.

After a short time without getting used, these buttons may shrink to dots or fade away, depending on the current app. To bring them back, double-tap in their approximate location.

You can use easy gestures to activate the Navigation buttons and access your notifications. Swipe with a single motion:

- **Up then right.** Open notifications
- **Up then left.** Home button
- **Down then right.** Recent apps button
- **Down then left.** Back button

Just above the Navigation buttons, you'll find the Favorites tray. The apps you keep in the tray are available on every Home screen.

The Apps icon in the center is permanent. Find it and double-tap to reveal all your apps and widgets.

Your Home screen can hold app and widget icons, plus folders.

- To open an app, folder, or widget, find its icon and double-tap.
- To see additional Home screens, swipe left then right or right then left in a single motion, or left or right using two fingers.

At the top of the screen, you'll find the status bar:

- **Status icons** on the left tell you which apps have sent you notifications—for example, that a message has arrived, or it's time for a meeting. If you have TalkBack or another accessibility service running, it will speak the notification when it first appears.
- To find your notifications, use two fingers to pull down the notification shade from the top of the screen, or swipe up then right using a single motion.
- **System icons** on the right display the current wireless and network connection strength, battery level, time, and more.

Google Search, just below the status and system icons, lets you search your tablet or the Internet. Find **Search** and double-tap to type your search terms, or **Voice Search** to speak them.

Try Google Play

Note: These instructions assume that you have turned on Talk-Back and Explore by Touch.

Google Play brings together all your favorite content in one place – movies, books, music, magazines, apps, and more – so you can reach it from any of your devices.

Use Google Play widgets

These widgets are available on your Home screens:

- **Recommended on Play:** Suggests music, movies, and other content that may interest you. Find the suggestion and double-tap to learn more about it.
- **Recommended apps:** Recommends apps that you can add to your Home screen. Find the recommendation and double-tap to learn more about it.

To remove a widget, double-tap & hold on the second tap, then drag it to the Remove icon at the top of the screen.

To add another Google Play widget, find the Apps icon and double-tap, then **Widgets**, and swipe from right until you find the one you want. Then double-tap & hold on the second tap, and let go in the Home screen location you want.

Shop on Google Play

To open the Google Play Store app, find and double-tap the Play Store icon in your Favorites tray at the bottom of every Home screen.

Most things you purchase on Google Play are available from your computer as well as from any of your Android mobile devices.

(Android apps are one exception – they run only on Android devices.) Sign in to play.google.com to get your entertainment from anywhere.

Find your content

If you purchased from Google Play in the past, you'll automatically have access to this content on your Nexus 7—just make sure you're signed in using the same account that you used to purchase it.

You can get to your content using any of the Google Play icons in your Favorites tray, including Books, Magazines, Movies, and Music. (*Note: To read magazines in text mode, visit **Reading in text mode** at the end of this article.*)

Or, find the Play Store icon and double-tap to open Google Play. In the top right corner, to the left of the Menu and Search icons, you'll find a My Library icon corresponding to the section of Google Play you're currently viewing. For example, while browsing the Movies & TV section, you'll find the Google Play Movies app icon, which will take you to My Movies & TV.

You can quickly access your content this way, from the Google Play Store app, even if you originally purchased it on Google Play using a different phone or tablet. If you get a new device, all your media will automatically be waiting for you here when you power on and sign in.

Google Play Settings

To adjust your Google Play settings, switch accounts, or get help, choose the option you want from the Menu at the top right.

The Google Play Settings screen lets you control when you're notified about updates to apps and games, clear your search history, and enable user controls. To filter Android apps based on maturity level or require a PIN before completing any purchase, find and double-tap **Content filtering** or **Set or change PIN**.

For more detailed information about Google Play, visit support.google.com/googleplay.

Use Gmail

Note: These instructions assume that you have turned on Talk-Back, Explore by Touch, and Enhanced Web Accessibility.

Read your messages

- From a Home or Apps screen, find the Gmail app and double-tap to open it. Gmail opens to your Inbox.

To hear the subject lines of your conversations, swipe right or down. When you find a conversation you want to hear:

- Double-tap to open it. If you have chosen to allow enhanced web accessibility, you can touch once to hear a conversation.
- To navigate back to your Inbox, find the Gmail icon at the top of the screen and double-tap.

OR

Using the Navigation buttons at the bottom of the screen, find and double-tap the Back button, or swipe down then left using a single motion.

Compose and send a message

1. From a conversation list, find the Compose icon at the top of the screen and double-tap.

2. To use the keyboard to fill in the **To**, **Subject**, and **Compose email** fields, slide your finger across the keyboard and lift your finger on the chosen key to input text.
3. Find and double-tap the Send icon in the main action bar at the top of the screen to send your message.

Search your Inbox

1. From a conversation list, find the Search icon in the action bar at the top of the screen and double-tap.
2. To use the keyboard to edit the **Search mail** field, slide your finger across the keyboard and lift your finger on the chosen key to input text.
3. As you type, suggestions appear below the Search field. Find a suggestion and double-tap to search for it immediately.
4. To search, find and double-tap the Search key on the right side of the second row of the keyboard.

Gmail settings

You can change a number of settings for Gmail from any Gmail screen.

- Find and double-tap **More options** at the top right corner of the screen, then find and double-tap **Settings**.

General settings apply to all Gmail accounts. Other settings apply only to a specific account.

More Gmail help

To get more detailed Help while reading your conversations, composing a message, and so on, find and double-tap **More options** in the top right corner of the screen, then find and double-tap **Help**.

Note that the content you'll find covers general Gmail behavior, but not accessibility features like TalkBack and Explore by Touch.

Related settings

- To modify the font size for Gmail messages, go to **More Options > Settings > General Settings > Message Text Size**.

Browse Chrome

These instructions assume that you have turned on TalkBack, Explore by Touch, and Enhanced Web Accessibility.

- From a Home or Apps screen, find the Chrome icon and double-tap to open it.

Chrome opens to display your homepage or the most recent page you were browsing.

The web address (URL) of the current page is located at the top of the screen in the address box (also called the *omnibox*).

To edit or input a web address, you can:

1. Swipe right to find the omnibox at the top of the screen, and double-tap to edit.
2. Slide your finger across the onscreen keyboard and release a key to input text.
3. As you type, a list of matching suggestions appears. You can keep on typing or find a suggestion and double-tap to open the page.
4. To search for the contents of the omnibox or open a specific web address it contains, find and double-tap the **Go** key on the right side in the second row of the keyboard.

To navigate within a webpage, you can:

- **Navigate forward and backward.** Swipe left to right to move forward and right to left to go backward.
- **Scroll.** Slide two fingers in any direction.
- **Receive spoken feedback.** Touch anywhere on the screen to hear the contents of the webpage.
- **Change the reading level.** Swipe down then up using a single motion to transition to the next reading level when reading blocks of text, or swipe up then down using a single motion to go back to the previous reading level.
- **Zoom.** To zoom out, touch the screen with two fingers and pinch them together. To zoom in, spread them apart. Ascending and descending tones alert you when zooming in or out.

To customize web page zooming, go to **More options > Settings > Accessibility**.

You can also browse in Incognito mode. To open an Incognito tab, find and double-tap **More options > New Incognito tab**. To toggle between standard tabs and Incognito tabs, find and double-tap the **Toggle tabs switcher**, or find and double-tap the **Incognito tabs** (or **Non-Incognito tabs**) button at the top right corner.

Adjust text size on webpages (for low-vision users)

1. Touch **Menu > Settings > Accessibility**.
2. Drag the slider under to adjust the text size scaling. In the “Preview” box, you can see how it’ll appear on webpages.

Force enable zoom

On some sites designed for mobile devices, you can’t to zoom in or out. Choosing “Force enable zoom” will allow you to zoom in or out on those sites.

More Chrome Help

To get more detailed Help while navigating a webpage, working with tabs, and so on, go to the [Chrome Help Center](#). Note that the content you'll find does not cover accessibility features like Talk-Back and Explore by Touch.

Use the lock screen

About the lock screen

Your tablet's lock screen is enabled if any of the following occurs:

- The tablet goes to sleep (and it locks automatically).
- The screen turns off after a specified timeout (depending on your display settings).
- You force your screen to turn off and the tablet to lock by pressing the power button.

Unlock your tablet

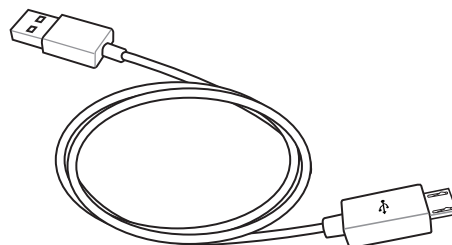
1. Hold the screen in portrait mode and turn it on by pressing the Power button on the right side of your tablet.
2. Touch the lower center of the screen.
3. Slide your finger all the way across the screen to the right. You'll receive spoken feedback that the device is unlocked if you do this successfully.

Appendix: Hardware reference

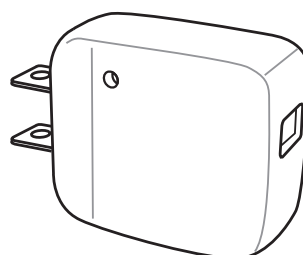
What's in the box



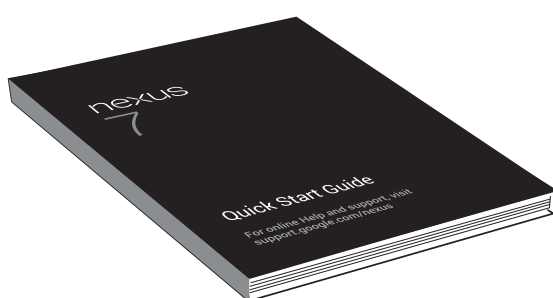
Nexus 7



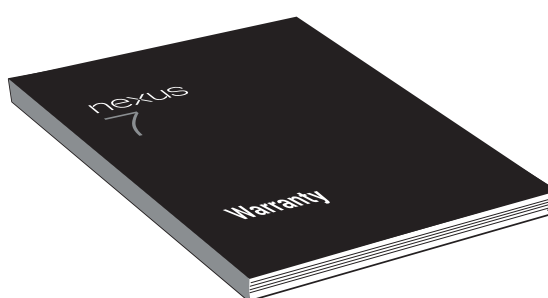
Micro USB cable



USB charging unit



Quick Start Guide

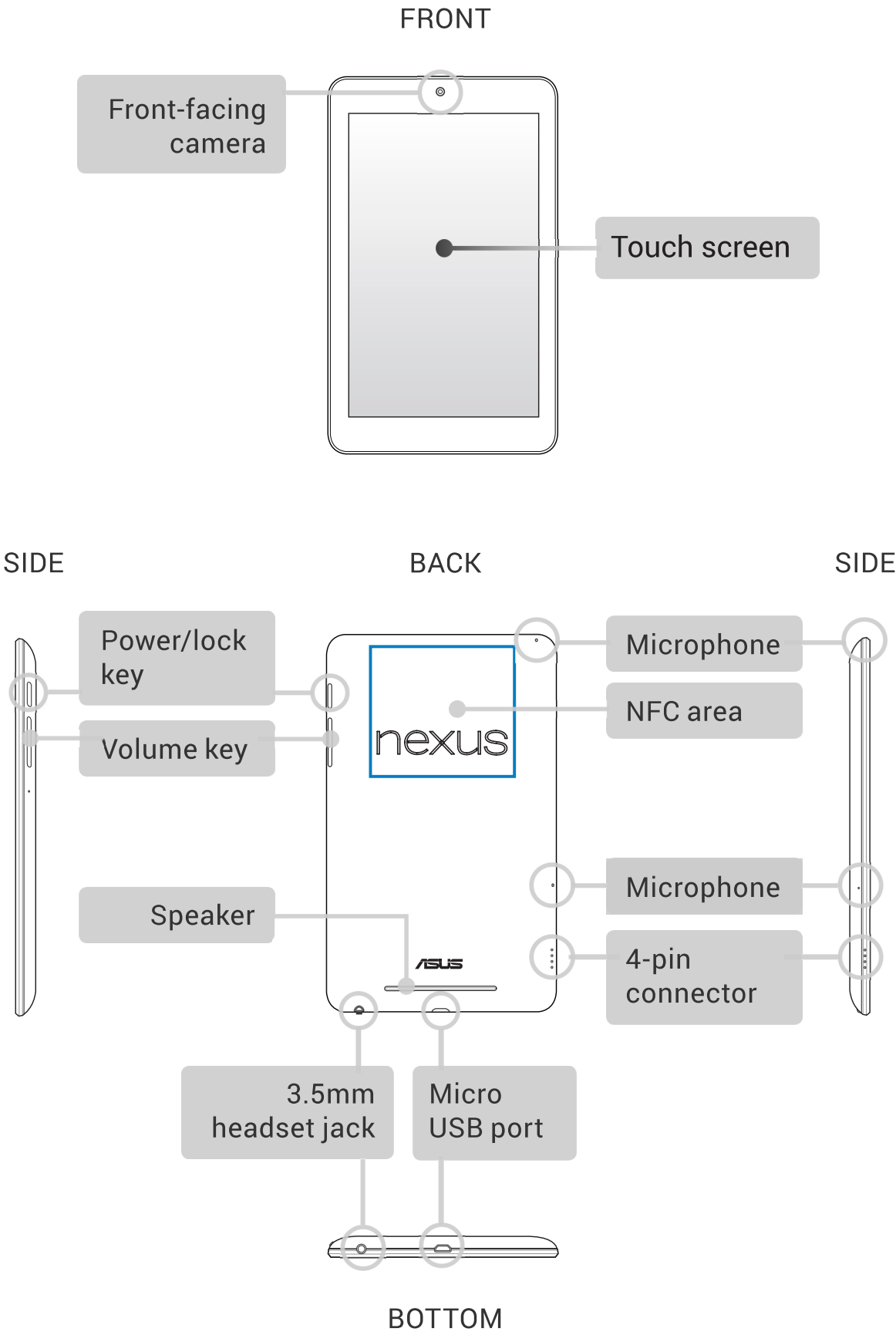


Warranty

The bundled USB charging unit varies by country or region.

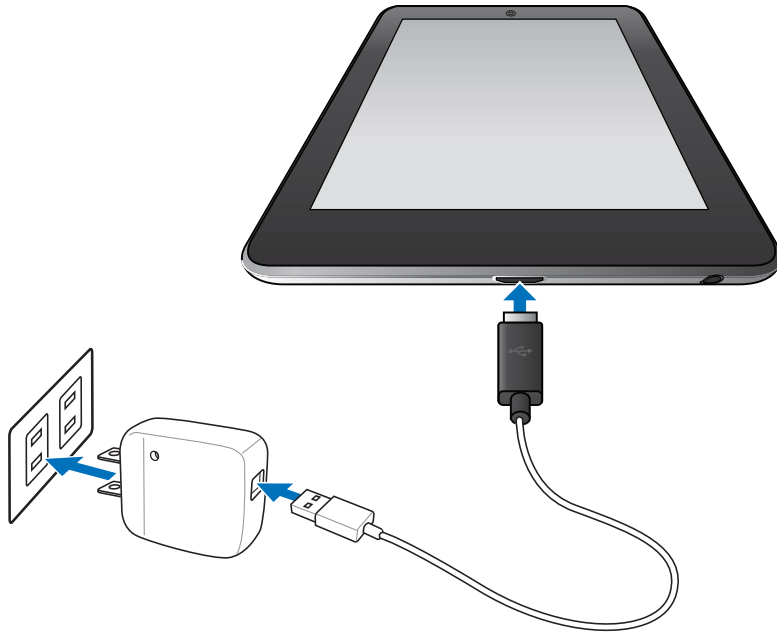
For online help and support, visit support.google.com/nexus.

Nexus 7



Battery

To charge the battery, connect the Micro USB cable to Nexus 7 and to the charging unit, and the charging unit to a power outlet:



IMPORTANT: Use the charging unit and micro USB cable that come with your Nexus 7. Other charging units and USB cables may charge more slowly or not at all.

- The USB charging unit varies by country or region.
- Use only the USB charging unit that comes with your Nexus 7. Using a different charging unit may damage your tablet.
- To avoid risk of injury or damaging your device, peel the protective film from the USB charging unit and USB cable before charging the battery.
- The input voltage range between the wall outlet and this charging unit is AC 100V–240V, and the charging unit's output voltage is DC 5V, 2A.
- Your Nexus 7 can be charged via the USB port on a computer

only when Nexus 7 is in sleep mode (screen off) or turned off. Charging through the USB port will take longer than charging with the USB charging unit.



DO NOT throw the battery in municipal waste.

The symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

DO NOT throw Nexus 7 in municipal waste.

This product has been designed to enable proper reuse of parts and recycling. The symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

Specs

Screen	7" 1280x800 HD display (216 ppi) Back-lit IPS display Scratch-resistant Corning glass 1.2MP Front-facing camera
Size	198.5 x 120 x 10.45mm
Weight	340g
Wireless	WiFi 802.11 b/g/n Bluetooth
Memory	8 or 16 GB internal storage 1 GB RAM
USB	Micro USB
Battery	4325 mAh (up to 8 hours of active use)
OS	Android 4.1 (Jelly Bean)
CPU	Quad-core Tegra 3 processor
Features	Microphone NFC (Android Beam) Accelerometer GPS Magnetometer Gyroscope