

<b>Network</b>	<p>Phone is carrier-unlocked and works on major carrier networks. Check with your service provider for more information.</p> <p>North America:</p> <p>GSM/EDGE: 850/900/1800/1900MHz  UMTS/WCDMA: B1/2/4/5/8  CDMA: BC0/1/10  LTE (FDD): B1/2/3/4/5/7/12/13/17/20/25/26/29  LTE (TDD): B41  LTE CA DL: B2-B2, B2-B4, B2-B5, B2-B12, B2-B13, B2-B17, B2-B29, B4-B4, B4-B5, B4-B7, B4-B12, B4-B13, B4-B17, B4-B29, B41-B41</p> <p><i>Verizon customers: If you have a new SIM card and are having problems activating it, try restarting your phone. If that doesn't work, call Verizon Customer Care at <a href="tel:8009220204">S (800) 922-0204</a> . You'll need your IMEI number, which you can find by going to Settings &gt; About phone &gt; Status &gt; IMEI information.</i></p> <p>Hong Kong:</p> <p>GSM/EDGE: 850/900/1800/1900MHz  UMTS/WCDMA: B1/2/5/8  TDS-CDMA : B34/39  LTE (FDD): B1/3/7/8/26  LTE (TDD): B38/39/40/41  LTE CA DL: B1-B3, B3-B3, B3-B7, B3-B8, B39-B41, B41C-B41C</p> <p>Rest of world:</p> <p>GSM/EDGE: 850/900/1800/1900MHz  UMTS/WCDMA: B1/2/4/5/6/8/9/19  CDMA: not supported  LTE (FDD): B1/2 /3/ 4/5/7/8/9/17/18/19/20/26/28  LTE (TDD): B38/40/41  LTE CA DL: B1-B3, B1-B5, B1-B7, B1-B8, B1-B18, B1-B19, B1-B26, B3-B3, B3-B5, B3-B7, B3-B8, B3-B19, B3-B20, B3-B28, B5-B7, B7-B7, B7-B20, B7-B28, B40-B40, B41-B41</p>
<b>Ports</b>	<p>Micro USB Type-C™  3.5 mm audio jack  Single Nano SIM slot</p>
<b>Material</b>	<p>Premium injection molded polycarbonate housing</p>

## Notes

<sup>1</sup>Final resolution may be lower than 12.3 MP.

<sup>2</sup>Storage specifications refer to capacity before formatting. Actual formatted capacity will be less.

<sup>3</sup>Size and weight may vary by manufacturing process.

<sup>4</sup>Actual battery performance will vary and depends on many factors including signal strength, network configuration, age of battery, operating temperature, features selected, device settings, and voice, data, and other application usage patterns.

Testing was conducted by LG and Google using preproduction Nexus 5X devices and software.

- Talk time tests used default settings with Wi-Fi off and LTE on.
- Standby time tests used default settings with WiFi off and LTE on.
- Wi-Fi internet tests had Airplane Mode on with Wi-Fi connected to a test access point, while loading 20 popular websites cached on a local server. The device loaded a page, waited 40 seconds, and then loaded a page from the next site and so on, in a continuous loop.
- LTE internet tests had Wi-Fi off and LTE on, and used the same testing method as the Wi-Fi internet tests.
- Video playback tests used a 10 minute 1080p video playing natively in a continuous loop, full-screen in landscape mode. Device was put in airplane mode, auto-brightness was turned off and brightness was set to 200 nits.
- Audio playback tests used a 3 minute 256-kbps mp3 track playing natively in a continuous loop. Device was put in airplane mode, auto-brightness was turned off and brightness was set to 200 nits.

<sup>5</sup>Only applies to optimized Nexus devices, such as Nexus 6P and Nexus 5X, charged using the included USB Type-C 15W (5V/3A) charger. Battery must be substantially depleted; charging rate slows as charging progresses.

All battery life claims are approximate and based on an average mixed use profile that includes both usage and standby time.

Operating System	Android 6.0, Marshmallow
Display	5.7 inches WQHD (2560 x 1440) AMOLED display at 518 ppi 16:9 aspect ratio Corning® Gorilla® Glass 4 Fingerprint- and smudge-resistant oleophobic coating
Cameras	Rear camera <ul style="list-style-type: none"><li>• 12.3 MP<sup>1</sup></li><li>• 1.55 µm pixels</li><li>• f/2.0 aperture</li><li>• IR laser-assisted autofocus</li><li>• 4K (30 fps) video capture</li><li>• Broad-spectrum CRI-90 dual flash</li><li>• Corning® Gorilla® Glass 4 coverglass</li></ul> Front camera <ul style="list-style-type: none"><li>• 8MP camera</li><li>• 1.4 µm pixels</li><li>• f/2.4 aperture</li><li>• HD video capture (30 fps)</li></ul>
Processors	Qualcomm® Snapdragon™ 810 v2.1 processor, 2.0 GHz octa-core 64-bit Adreno 430 GPU
Storage & Memory <sup>2</sup>	Internal storage: 32 GB, 64 GB, or 128 GB RAM: 3 GB LPDDR4
Size <sup>3</sup>	159.3 X 77.8 X 7.3 mm
Weight	178 grams
Colors	Aluminium Graphite Frost Gold (limited countries)
Media	Dual front-facing stereo speakers 3 microphones (2 front, 1 rear) with noise cancellation

Battery <sup>4</sup> & Charging	<p>3,450 mAh battery</p> <p>Standby time: up to 440 hours</p> <p>Talk time: up to 23 hours</p> <p>Internet use time (Wi-Fi): up to 10 hours</p> <p>Internet use time (LTE): up to 10 hours</p> <p>Video playback: up to 10 hours</p> <p>Audio playback: up to 100 hours</p> <p>Fast charging: up to 7 hours of use from only 10 minutes of charging<sup>5</sup></p> <p>USB Type-C 15W charging</p>
Wireless & Location	<p>LTE cat. 6</p> <p>Wi-Fi 802.11 a/b/g/n/ac 2x2 MIMO, dual-band (2.4 GHz, 5.0 GHz)</p> <p>Bluetooth 4.2</p> <p>NFC</p> <p>GPS, GLONASS</p> <p>Digital compass</p> <p><i>Wi-Fi use requires 802.11 a/b/g/n/ac access point (router). Syncing services, such as backup, require a Google Account.</i></p>
Sensors	<p>Nexus Imprint sensor</p> <p>Android Sensor Hub</p> <p>Accelerometer</p> <p>Gyroscope</p> <p>Barometer</p> <p>Proximity sensor</p> <p>Ambient light sensor</p> <p>Hall sensor</p>

Network	<p>Phone is carrier-unlocked and works on major carrier networks. Check with your service provider for more information.</p> <p>North America:</p> <p>GSM/EDGE: 850/900/1800/1900MHz  UMTS/WCDMA: B1/2/4/5/8  CDMA: BC0/1/10  LTE (FDD): B2/3/4/5/7/12/13/17/25/26/29/30  LTE (TDD): B41  CA DL: B2-B2, B2-B4, B2-B5, B2-B12, B2-B13, B2-B17, B2-B29, B4-B4, B4-B5, B4-B13, B4-B17, B4-B29, B41-B41</p> <p><i>Verizon customers: If you have a new SIM card and are having problems activating it, try turning your phone off and then back on. If that doesn't work, call Verizon Customer Care at <a href="tel:8009220204">☎ (800) 922-0204</a> . You'll need your IMEI number, which you can find by going to Settings &gt; About phone &gt; Status &gt; IMEI information.</i></p> <p>Rest of world:</p> <p>GSM/EDGE: 850/900/1800/1900MHz  UMTS/WCDMA: B1/2/4/5/6/8/9/19  TD-SCDMA: 34/39  CDMA: BC0/1  LTE (FDD): B1/2/3/4/5/7/8/9/17/19/20/28  LTE (TDD): B38/B39/40/41  CA DL: B1-B5, B1-B8, B1-B19, B3-B3, B3-B5, B3-B7, B3-B8, B3-B19, B3-B20, B3-B28, B5-B7, B7-B7, B7-B20, B7-B28, B39-B39, B40-B40, B41-B41</p>
Ports	<p>Single USB Type-C™  Single Nano SIM slot  3.5 mm audio jack</p>
Material	Anodized aluminum
Other	RGB LED notification light

## Notes

<sup>1</sup>Final resolution may be lower than 12.3 MP.

<sup>2</sup>Storage specifications refer to capacity before formatting. Actual formatted capacity will be less.

<sup>3</sup>Size and weight may vary by manufacturing process.

<sup>4</sup>Actual battery performance will vary and depends on many factors, including signal strength, network configuration, age of battery, operating temperature, features selected, device settings, and voice, data, and other application usage patterns.

Testing was conducted by Huawei and Google using preproduction Nexus 6P devices and software.

- Talk time tests used default settings with Wi-Fi off and LTE on.
- Standby time tests used default settings with WiFi off and LTE on.
- Wi-Fi internet tests had Airplane Mode on with Wi-Fi connected to a test access point, while loading 20 popular websites cached on a local server. The device loaded a page, waited 40 seconds, and then loaded a page from the next site and so on, in a continuous loop.
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- Audio playback tests used a 3 minute 256-kbps mp3 track playing natively in a continuous loop. Device was put in airplane mode, auto-brightness was turned off and brightness was set to 200 nits.

<sup>5</sup>Only applies to optimized Nexus devices, such as Nexus 6P and Nexus 5X, charged using the included USB Type-C 15W (5V/3A) charger. Battery must be substantially depleted; charging rate slows as charging progresses.

All battery life claims are approximate and based on an average mixed use profile that includes both usage and standby time.

## Nexus 6



Screen	6" 1440x2560 display (493 ppi) Resolution: QHD 1440x2560
Size	82.98mm x 159.26mm x 10.06mm
Weight	184 grams
Cameras	Front camera <ul style="list-style-type: none"><li>• 2MP @ 1.4 um pixel</li></ul> Rear camera <ul style="list-style-type: none"><li>• 13MP with Optical Image Stabilization (OIS)</li><li>• Dual LED ring flash</li></ul>
Memory	32, 64 GB; 3GB RAM (actual formatted capacity will be less)
Ports	Micro USB Single nano SIM 3.5mm audio jack
CPU/GPU	Quad core Krait 450 CPU 2.7GHz (Qualcomm Snapdragon 805 SOC) Adreno 420 GPU
Sensors	Accelerometer Gyro Magnetometer Proximity sensor Ambient light sensor Haptics Hall effect Barometer
Wireless	Broadcom 802.11ac 2x2 (MIMO) Bluetooth 4.1 Broadcom NFC controller

Connectivity

North America:

- GSM: 850/900/1800/1900 MHz
- CDMA: Band Class: 0/1/10
- WCDMA: Bands: 1/2/4/5/8
- LTE: Bands: 2/3/4/5/7/12/13/17/25/26/29/41
- CA DL: Bands: B2-B13, B2-B17, B2-29, B4-B5, B4-B13, B4-B17, B4-B29

Rest of world:

- GSM: 850/900/1800/1900 MHz
- CDMA: not supported
- WCDMA: Bands: 1/2/4/5/6/8/9/19
- LTE: Bands: 1/3/5/7/8/9/19/20/28/41
- CA DL: B3-B5, B3-B8

Audio

Stereo front facing speakers

3.5mm stereo audio connector

3-microphone support

Battery

3220 mAh non-removable battery

OS

Android 5.0 (Lollipop)



Screen	<ul style="list-style-type: none"><li>• 4.95" 1920 x 1080 display (445 ppi)</li><li>• Full HD IPS</li><li>• Corning® Gorilla® Glass 3</li></ul>
Size	69.17 x 137.84 x 8.59mm
Weight	4.59 ounces (130g)
Cameras	<ul style="list-style-type: none"><li>• 1.3 MP front facing</li><li>• 8 MP rear facing with Optical Image Stabilization</li></ul>
Memory	<ul style="list-style-type: none"><li>• 16GB or 32GB (actual formatted capacity will be less)</li><li>• 2GB RAM</li></ul>
Processing	<ul style="list-style-type: none"><li>• CPU: Qualcomm Snapdragon™ 800, 2.26GHz</li><li>• GPU: Adreno 330, 450MHz</li></ul>
Sensors	<ul style="list-style-type: none"><li>• GPS</li><li>• Gyroscope</li><li>• Accelerometer</li><li>• Compass</li><li>• Proximity/Ambient Light</li><li>• Pressure</li><li>• Hall Effect</li></ul>
Networks	<p>2G/3G/4G LTE</p> <p><b>North America:</b></p> <p>GSM: 850/900/1800/1900 MHz</p> <p>CDMA: Band Class: 0/1/10</p> <p>WCDMA: Bands: 1/2/4/5/6/8/19</p> <p>LTE: Bands: 1/2/4/5/17/19/25/26/41</p> <p><b>Rest of World:</b></p> <p>GSM: 850/900/1800/1900 MHz</p> <p>WCDMA: Bands: 1/2/4/5/6/8</p> <p>LTE: Bands: 1/3/5/7/8/20</p>
Wireless	<ul style="list-style-type: none"><li>• Dual-band Wi-Fi (2.4G/5G) 802.11 a/b/g/n/ac</li><li>• NFC (Android Beam)</li><li>• Bluetooth 4.0 LE</li></ul>

Ports & Connectors	<ul style="list-style-type: none"><li>• microUSB</li><li>• SlimPort™ enabled</li><li>• 3.5mm stereo audio jack</li><li>• Dual microphones</li><li>• Ceramic Power &amp; Volume buttons</li></ul>
Audio	<ul style="list-style-type: none"><li>• Built-in speaker</li><li>• 3.5mm stereo audio connector</li></ul>
Battery	<ul style="list-style-type: none"><li>• 2,300 mAh non-removable battery</li><li>• Standby time: up to 300 hours</li><li>• Talk time: up to 17 hours</li><li>• Internet use time: up to 8.5 hours on Wi-Fi; up to 7 hours on LTE</li><li>• Wireless Charging built-in</li></ul>
Supported Service	<ul style="list-style-type: none"><li>• Unlocked: Use with any provider that offers service on Nexus 5 supported networks</li><li>• Compatible carriers include: T-Mobile, Sprint, AT&amp;T</li></ul>
OS	Android 4.4 (KitKat)

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Screen	<ul style="list-style-type: none"><li>• 4.7" diagonal</li><li>• 1280x768 pixel resolution (320 ppi)</li><li>• WXGA IPS</li><li>• Corning® Gorilla® Glass 2</li></ul>
Size	133.9 x 68.7 x 9.1mm
Weight	139g
Cameras	<ul style="list-style-type: none"><li>• 8 MP (main)</li><li>• 1.3 MP (front)</li></ul>
Memory	<ul style="list-style-type: none"><li>• 8GB or 16GB (actual formatted capacity will be less)</li><li>• 2GB RAM</li></ul>
CPU	Qualcomm Snapdragon™ S4 Pro 1.5GHz
Sensors	<ul style="list-style-type: none"><li>• Microphone</li><li>• Accelerometer</li><li>• Compass</li><li>• Ambient light</li><li>• Barometer</li><li>• Gyroscope</li><li>• GPS</li></ul>
Network	Unlocked GSM/UMTS/HSPA+ GSM/EDGE/GPRS (850, 900, 1800, 1900 MHz)  3G (850, 900, 1700, 1900, 2100 MHz) HSPA+ 42
Wireless	<ul style="list-style-type: none"><li>• Wireless charging compatible</li><li>• Wi-Fi (802.11 a/b/g/n)</li><li>• NFC (Android Beam)</li><li>• Bluetooth</li></ul>
Connectivity	<ul style="list-style-type: none"><li>• Micro USB</li><li>• SlimPort HDMI</li><li>• 3.5mm headphone jack</li></ul>
Battery	<ul style="list-style-type: none"><li>• 2,100 mAh non-removable battery</li><li>• Standby: up to 250 hours</li><li>• Talk time: up to 10 hours</li><li>• Music playback: up to 40 hours</li><li>• Video playback: up to 8 hours</li><li>• Web browsing: up to 7 hours</li></ul>

## Tablets

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[Nexus 9](#)[Nexus 7 \(2013\)](#)[Nexus 7 \(2012\)](#)[Nexus 10](#)

## Related links

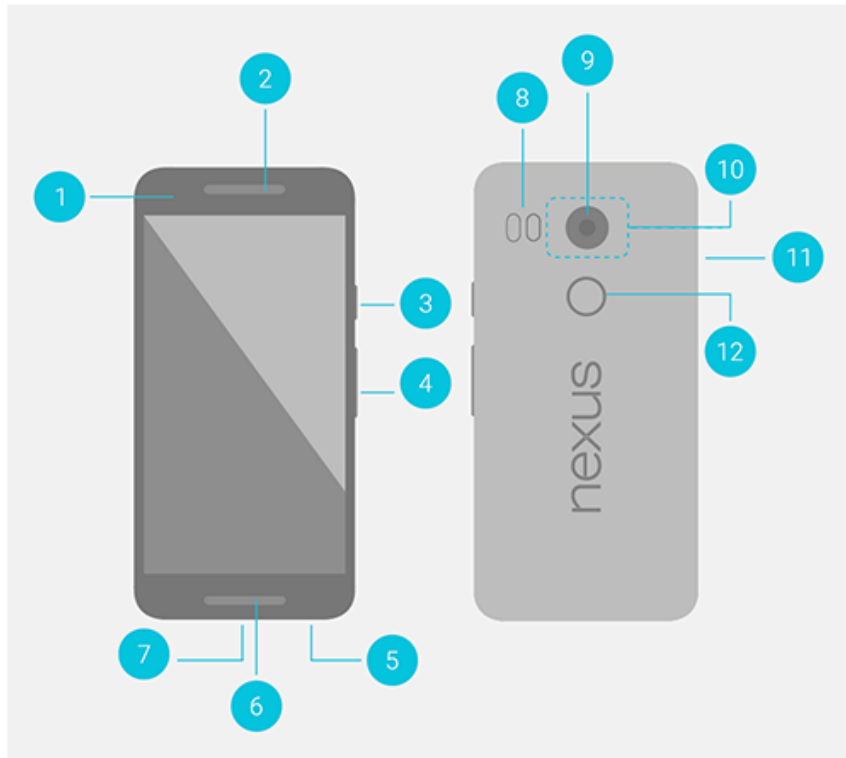
- [Insert a SIM card into a Nexus device](#)
- [Charge your Nexus device](#)
- [Get help switching to Android](#)
- [Get started with your Nexus device](#)

# Nexus hardware

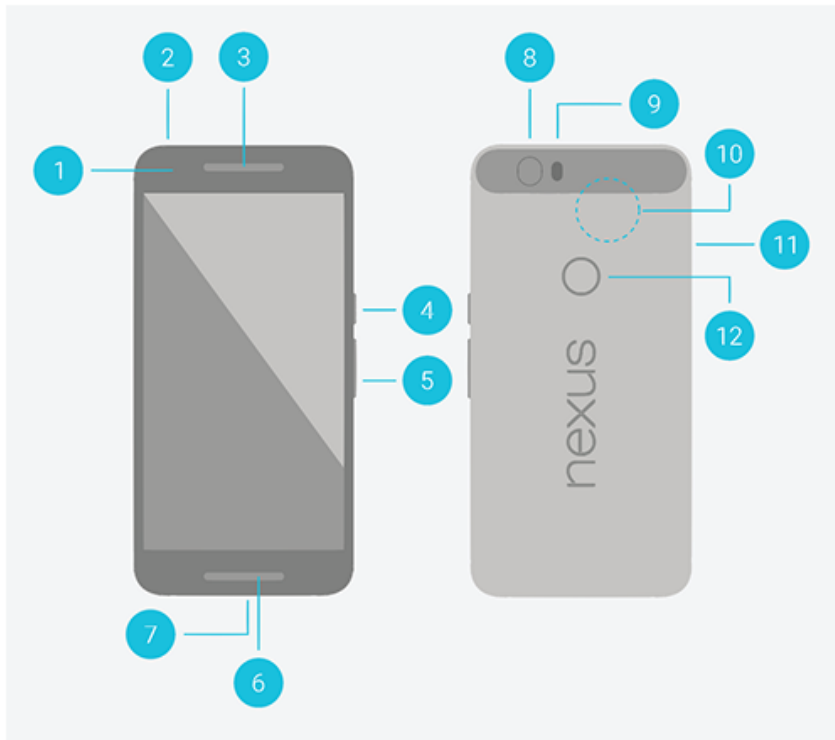
See a diagram of the hardware features of Nexus devices.

## Phones

### Nexus 5X



1. Front-facing camera
2. Earpiece
3. Power button
4. Volume buttons
5. Headset jack
6. Speaker
7. USB Type-C port
8. Laser auto focus & dual-LED flash
9. Rear-facing camera
10. NFC
11. SIM card tray
12. Nexus Imprint sensor



1. Front-facing camera
2. Headset jack
3. Earpiece & speaker
4. Power button
5. Volume buttons
6. Speaker
7. USB Type-C port
8. Rear-facing camera
9. Flash
10. NFC
11. SIM card tray
12. Nexus Imprint sensor

[Nexus 6](#)

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[Nexus 5](#)

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[Nexus 4](#)

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## Tablets

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[Nexus 9](#)

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[Nexus 7 \(2013\)](#)

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[Nexus 7 \(2012\)](#)

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[Nexus 10](#)

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## Related links

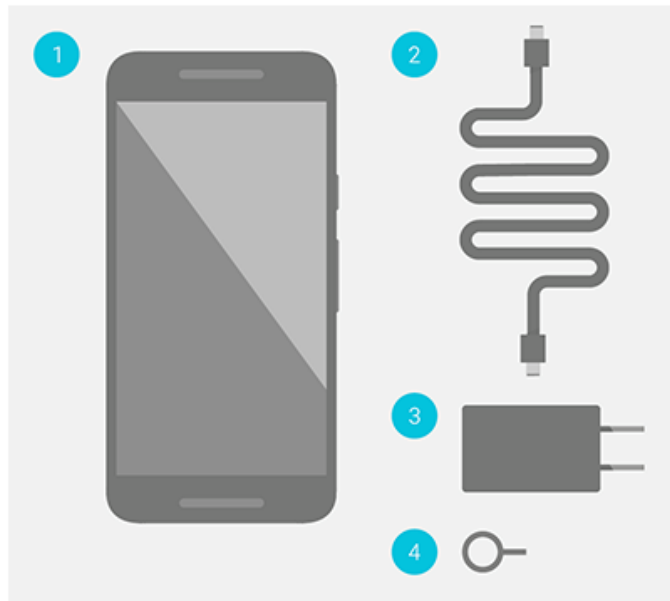
- [Insert a SIM card into a Nexus device](#)
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- [Get help switching to Android](#)
- [Get started with your Nexus device](#)

# What comes with Nexus devices

Here's what comes in the box with your new Nexus device.

## Phones

### Nexus 5X

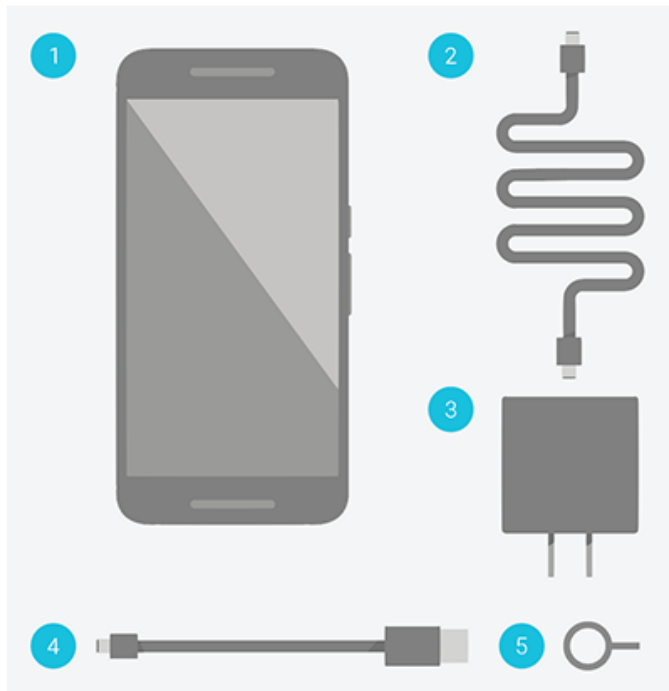


1. Nexus 5X phone
2. USB Type-C to Type-C cable
3. USB Type-C 15W (5V/3A) charger
4. SIM ejection tool
5. Quick start guide (not pictured)
6. Safety and Warranty information (not pictured)

If any item is damaged or missing, contact the store where you bought your Nexus 5X for help. If you bought your device from the Google Store, you can [contact Google Store support](#).

Use only approved accessories (accessories may vary by country or region).





1. Nexus 6P phone
2. USB Type-C to Type-C cable
3. USB Type-C 15W (5V/3A) charger
4. USB Type-C to Standard-A cable
5. SIM ejection tool
6. Quick start guide (not pictured)
7. Safety and Warranty information (not pictured)

If any item is damaged or missing, contact the store where you bought your Nexus 6P for help. If you bought your device from the Google Store, you can [contact Google Store support](#).

Use only approved accessories (accessories may vary by country or region).

[Nexus 6](#)

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[Nexus 5](#)

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[Nexus 4](#)

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## Tablets

[Nexus 9](#)

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[Nexus 7 \(2013\)](#)

---



[Nexus 7 \(2012\)](#)

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[Nexus 10](#)

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## Related links

- [Insert a SIM card into a Nexus device](#)
- [Charge your Nexus device](#)
- [Get help switching to Android](#)
- [Get started with your Nexus device](#)

# Welcome to the Android TV Help Center

## - Get started with Nexus Player

What you need

Set up Nexus Player and pair remote

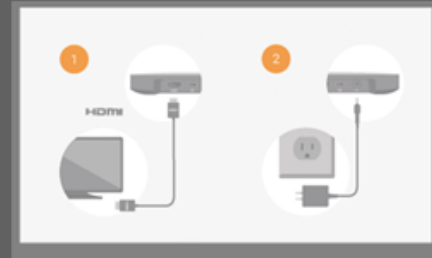
On-screen setup for Nexus Player

Using your Nexus Player remote

Using the Android TV Remote Control app

Set up & use the Gamepad for Nexus Player

Set up Android TV with your Android phone



+ Explore Android TV

+ Android TV Settings

+ Troubleshoot Nexus Player

+ Nexus Player Hardware

# What you need

Here's what you'll need to start using your Nexus Player:



1. TV or monitor with HDMI port\*
2. HDMI cable with male Type A connector on each end
3. Internet connection via Wi-Fi
4. A Google account

\*Note: HDCP compatible HDMI port is required.

# Set up Nexus Player and pair remote

Here's how to plug in your Nexus Player and set up your remote.

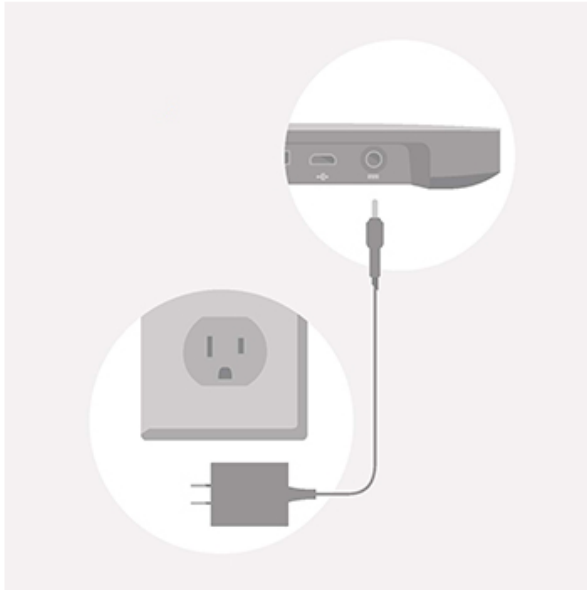
## 1. Connect your Nexus Player to your TV with an HDMI cable

- Make sure your TV or monitor is turned off.
- An HDMI cable is not included.



## 2. Connect your Nexus Player to power, using the power cord

- Plug one end of the power cable into the back of your Nexus Player, and the other into a power outlet.
- Your Nexus Player turns on as soon as you plug it in. You'll see the light on the bottom of your Nexus player turn on.
- Keep in mind, once you start using your Nexus Player, it won't need to be turned off. When you're not using it, it will automatically go into sleep mode.



## 3. Insert batteries in to remote

- On the back of your remote, slide off the cover with the ASUS logo and insert two AAA batteries, following the +/- guidance. Put the cover back on.

## 4. Turn on your TV and press the source or input button until you see the Welcome screen

- The Welcome screen below (first image) will appear when you've selected the correct HDMI port and successfully paired your remote.
- If you have trouble finding the correct input, check if the HDMI ports on your TV or monitor are labeled.
- If you see a pairing screen displaying a timer instead (second image), you will need to manually pair the remote.
  - On your remote, find the Back button ← and Home button ○ shown on the screen.
  - Press and hold the buttons at the same time for five seconds using the timer on the screen. Release the buttons, and a few seconds later a welcome screen will appear.



Your device and remote setup is complete.

## 5. Finish set up

Just follow the [on-screen instructions](#). You can also finish [set up with your Android phone](#) if you have one.

## Trouble connecting remote

Try these troubleshooting steps if your [remote won't connect with your TV](#).

## How to use remote

Learn how to [use your Nexus Player remote](#).

# On-screen setup for Nexus Player

Before you start setting up your Nexus Player, make sure of the following:

- You have a reliable Wi-Fi network you can connect to.
- Your remote is paired with your Nexus Player.

You can also learn how to [use your Nexus Player remote](#). Use the button in center of the remote's wheel to select, and use the Back button ← to see a previous screen.

To set up Nexus Player, just follow the on-screen instructions. Or you can [set it up with your Android phone](#) or tablet if you have one. You'll be prompted to do the following:

- Choose your language
- Choose and join your Wi-Fi network. If you have trouble connecting, try these [troubleshooting tips for connecting to Wi-Fi](#).
- If your Nexus Player needs a software update, it'll automatically install it and then restart.
- Sign in with your Google account. You have a couple options:
  - "Use your password": enter your email and password using your remote.
  - "Use your phone or laptop": Instead of entering your email and password with your remote, you can use a browser on your phone or laptop to sign in. Make sure your phone or laptop is on the same Wi-Fi network as your Nexus Player. Go to [g.co/AndroidTV](http://g.co/AndroidTV) and enter the PIN you see on your TV screen. This feature is not available in every country.

**Tip:** Once you connect to Wi-Fi, you can start [using your phone or tablet as a remote](#). This allows you to use your phone or tablet's keyboard.

That's it! Learn [what you can do with your Android TV](#).

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# Using the Android TV Remote Control app

You need an Android phone or tablet running Android 4.3 or higher to use the Android TV Remote Control app.

You can control your TV through your phone or tablet with the Android TV Remote Control app.

## Set up the remote control app

1. Download and install the [Android TV Remote Control app](#) on your phone or tablet. You can also search for "Android TV Remote Control" on Google Play.
2. Make sure your phone or tablet is on the same Wi-Fi network as your Android TV.
3. Open the Android TV Remote Control app on your phone or tablet.
4. In the app, you'll see your Android TV listed. Touch the name.
5. On your TV screen, you'll see a PIN. Enter this PIN on your phone or tablet.
6. Then touch **Pair**.

## Use the remote control app

You can use the Android TV Remote Control app to navigate your TV screen.

### Search

You can also use your remote to search with your voice, by touching the Voice Search button.

### Keyboard

If you need to type on your Android TV, touch the keyboard icon at the top of the app to bring up a keyboard. The keyboard may not be supported on all apps.

### Remote layout


You can choose from two layouts for your remote:

1. Standard remote layout (D-pad)
  - Touch arrows to move up, down, right, and left on your TV
  - Touch the center circle to select
2. Trackpad remote
  - Swipe your mobile device's screen up, down, left or right to navigate on your TV
  - Touch anywhere on the screen to select

## Trouble connecting remote control app

If your app won't connect to your Android TV, try these [remote control app troubleshooting steps](#).

# Set up & use the Gamepad for Nexus Player

You can play games using the Gamepad for Nexus Player. It's not included with Nexus Player, but you can [buy it on the Google Play store](#) .

Games that work best with the gamepad will be listed under "Gamepad" in the Play Store app. Some games require a gamepad. The gamepad doesn't work with all games.







## Set up your gamepad

Here's how to set it up:






### 1. Insert batteries

- On the back of your gamepad, remove the battery holder. Place two AA batteries inside, following the +/- guide. Then snap the battery holder back into place.

### 2. Turn on & pair gamepad

1. On your gamepad, press and hold the Power button  for three seconds.
2. Your gamepad will automatically go into pairing mode the first time you turn it on. The four lights on the gamepad will flash when it's in pairing mode.
  - If the lights aren't flashing, you can put your gamepad into pairing mode by pressing and holding the Back button  and Home button  at the same time for five seconds. The four lights on your gamepad should start flashing.
3. Next, put your Nexus Player in pairing mode. From the Android TV Home screen, scroll down until you reach Settings .
4. Select **Settings** .
5. Under "Remote & accessories," select **Add accessory** . Your Android TV will search for accessories.
  - Tip: You can also put your Nexus Player in pairing mode by pressing the button on the bottom of your Nexus Player once.
6. You'll see your gamepad listed on the TV screen. Use your remote to select your gamepad's name.
7. Your TV will pair with your gamepad.

## How to use your gamepad

To	Action
Turn gamepad on or off	Press and hold Power button  for three seconds
Go to Home screen	Press Home button 
Go to the previous screen	Press Back button 
Put gamepad in pairing mode	Press and hold the Back  and Home  buttons for 5 seconds

The other buttons and joysticks vary by game.

You can use your gamepad to navigate your Android TV screen, but keep in mind the gamepad will go to sleep after a few minutes if it's not being used. Use the gamepad's D-pad to move up, down, left and right. To select an item, press "A."

# Set up Android TV with your Android phone

If you have an Android phone or tablet, you can use it to set up your Android TV.

This feature is available only on Android TVs running Android 6.0 and up, and is not available for all languages. [Check for updates in the Settings.](#)

If your Android TV can be set up with an Android phone or tablet, you'll see a message on your TV screen asking if you have an Android phone or tablet. Select **Yes** and then, on your phone, continue with the steps below:

1. On your phone, find the Google search box on your home screen. Google search comes pre-installed on your Android phone.
2. In the search box on your phone, type "set up my device," or just say "Ok Google, set up my device"
3. From the list, touch the name of your Android TV. The name will be shown on your TV screen.
4. You'll see a code on your TV screen, as well as on your phone. To confirm that these codes match, select Next.
5. Choose a Wi-Fi network for your Android TV to connect to.
6. Choose the account you want to manage your Android TV with.

When the setup is complete, you'll have the option to download the Android TV remote app on your phone.

# Welcome to the Android TV Help Center

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+ Get started with Nexus Player

## - Explore Android TV

Browse the Android TV Home screen

Search on Android TV

Watch Google Play Movies & TV on Android TV

Listen to Google Play Music on Android TV

Play Google Play Games on Android TV

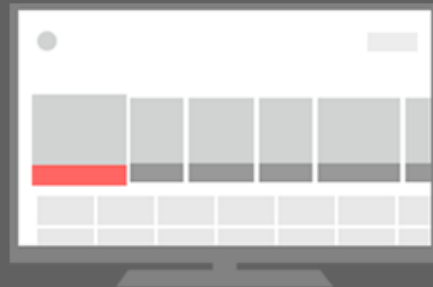
Download apps & games through the Play Store app

Watch YouTube videos on Android TV

Cast content from your device to your Android TV

Watch channels from TV apps or a TV tuner

Connect a USB drive for more storage



+ Android TV Settings

+ Troubleshoot Nexus Player

+ Nexus Player Hardware

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# Browse the Android TV Home screen

From the Android TV home screen, you can easily access movies, TV shows, music, apps, games, and settings. To get to the Home screen at any time, press the **Home** button on your remote.



## (1) Recommendations

On the top row of the Home screen, you'll see recommendations for movies, TV shows, apps, and games. Recommendations come from the apps on your Nexus Player. They're updated based on the recommendations you've selected in the past and apps you use most often.

If you're signed in to these apps on your phone or computer, what you view on these other devices may affect the recommendations on your Android TV if you're using the same account. This includes Google Play apps. You won't be able to manually change the order of the content.

You can remove recommendations from a specific app by uninstalling the app or [turning off recommendations for that app](#).

## (2) Apps & (3) Games

Apps appear in the second row, followed by Games. On the Nexus Player the apps and games you use the most will show up first by default. You can sort your apps manually or by how recently you used them.

### To organize the apps yourself:

1. From the home screen, scroll down to the apps row you want to sort.
2. Select the app you want to move.
3. Press and hold the **Select** button.
4. Use the remote to move the app right or left.
5. Hit the **Select** button again.
6. When you're done, select **Save & Exit**.

You can remove an app by dragging it to the trashcan at the bottom of the screen. If you don't see the trashcan, the app came preinstalled on your Android TV and cannot be removed.

### To organize by recency:

1. From the Home screen, scroll down until you reach **Settings**.
2. Select **Settings**.
3. Under "Preferences," find and select **Home screen**.
4. Select **Apps and games**.
5. Scroll down and select **Organize apps and games**.
6. Select **Recency order**.

To browse and download apps and games that work with Android TV, you can [visit the Google Play Store app on your TV](#). You'll see the Play Store app in the Apps row.

## (4) Settings

The bottom row contains [Settings for Android TV](#).

## Search

You can also search on Android TV by going all the way to the top of the Home screen, by or using your remote. Learn more about [what you can search for on Android TV](#).


# Search on Android TV

To find what you're looking for on Android TV, or to discover more content, you can start a search. You can also get facts and quick answers through your TV.


---

## How to search

### **If your remote has a microphone:**

1. While you are on the Home screen, press the Voice search button  on your remote.
  - If you press the Voice search button on your remote while you're in an app, you'll search within the app.
2. Hold your remote in front of you, and say your question. Your search results appear as soon as you finish speaking.

### **If your remote doesn't have a microphone:**

1. Scroll to the top of the Home screen and select the Search icon . A text window will open.
2. Move to the right to bring up the onscreen keyboard.

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## What you can search for

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## Block inappropriate or explicit images with SafeSearch

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Check out the examples below to learn about some of the things you can search for on your Android TV.

### Voice search language availability

You can say most of these examples in English, French, German, Italian, Japanese, Korean, Russian, Spanish, and Brazilian Portuguese, but some examples aren't available in every language.

### Entertainment

To find a movie, TV show, artist, or song, just say the name:

- "Batman" or "Robin Hood."
- "Ghostbusters" or "Game of Thrones."
- "Billie Jean."
- "Matt Damon" or "Madonna."

You can also:

- Search for content featuring a certain actor. Say: "Show me movies with Meryl Streep."
- Search for a specific genre. Say: "Romantic comedies."
- Find when movies are playing in theaters. Say: "Show me movies playing nearby" or "Show me movies playing in Hermosa Beach."

### Facts and quick answers:

- **Find the time:** "What time is it in London?"
- **Check the weather:** "What's the weather in Seattle?"
- **Answer trivia questions:** "What's the population of Romania?" or "How tall is Mount Kilimanjaro?" or "Where was Albert Einstein born?"
- **Solve a math problem:** "What's 34 times 94."
- **Get sports scores and schedules:** "What was the score of the Jets vs. Broncos game?"
- **Search for images:** "Show me photos of the Golden Gate Bridge."

### What apps show up in search results





You may also see search results from apps you've installed on your Android TV. These results will show up in a separate row. Some search results will be available in few different apps. When you select the content, you'll be able to choose the app you'd like to use.




SafeSearch can help you block inappropriate or explicit images from your Google Search results. The SafeSearch filter isn't 100% accurate, but it helps you avoid most adult content. Learn more about [how SafeSearch works](#).

### Turn SafeSearch on or off



Note: This only turns on SafeSearch on your Android TV.

1. From Android TV's Home screen, scroll down until you reach **Settings** 
  2. Select **Settings** 
  3. Under "Preferences," select **Search** 
  4. Select **SafeSearch filter** 
  5. Select **On** or **Off**
-

# Watch Google Play Movies & TV on Android TV

You can watch movies and TV shows that you rent or buy through the Google Play Movies & TV app .

## Find and play movies and TV shows

1. From the Home screen, scroll down to the Apps row.
2. Find and select Google Play Movies & TV .
3. You can browse or search for titles.
  - **To browse:** Move up or down to view different categories. When you find a category you're interested in, move to the right to view titles. If you select a TV show, you may have to scroll down to see seasons or episodes that you can buy.
  - **To search:** Scroll to the top of screen and select Search  or click the Voice search button on your remote while in Google Play Movies & TV. Speak or type your search.
4. When you come across a movie or show you're interested in, select it. You'll see the following options:
  - Watch a trailer, if available
  - Rent or buy it
  - Add to wishlist

## Control what you're watching

While you're playing a movie or TV show, press Select to bring up the controls. While the controls are visible, you can:

- Press to pause or resume (or use the Play/pause button on your remote)
- Press right to fast forward, or press left to go back
- Scroll down to see related information, like what song is playing or info about actors, when content is paused

## Additional information

Here's some more information about watching movies and shows through Google Play:


- [Find your movies and shows](#)
- [Learn about rental periods](#)
- [Learn about the refund policy for Google Play Movies & TV](#)
- [Turn on closed captioning](#)
- [Watch movies and shows using a different account](#)
- [Fix problems playing videos](#)

# Listen to Google Play Music on Android TV

You can play music right from your Android TV through Google Play Music.


## Listen to music

To start listening to music:

1. From the Home screen, scroll down to the Apps row.
2. Find and select Google Play Music .
3. Navigate up or down to choose from the following:
  - Listen now (recommendations)
  - My library
  - Instant mixes (mixes based on your favorite artists & songs)



## Buy music

To buy music:

- You need to purchase music on your computer or mobile device. You can't purchase new music or [sign up for All Access](#)  through your Android TV.
- Learn how to [buy music through Google Play](#).

## Additional information

Here's some more information about listening to music through Google Play:

- Learn how to [create an instant mix](#)  (mixes created based on your favorite artists & songs)
- Get help if [your music won't start playing](#) 

# Play Google Play Games on Android TV

You can play your favorite games using Google Play Games on your Android TV. Compete with friends, track your achievements, and pick up wherever you left off. As you play games, you can highlight your skills in your Game Profile.

You'll be able to:

- See what your friends are playing - Discover cool new games and see what they've accomplished.
- Track achievements - Complete challenges, earn awards, and track them all right from the app.
- View leaderboards - See how you stack up against other players.
- Join multiplayer games - Play friends in real-time and turn-based matches.

**To see your games, profile, friends (players), and game inbox:** From the Home screen, scroll down to the Apps row. Navigate to Google Play Games, and select it.

**To buy and download games:** Use the [Play Store app](#) on your Android TV. Keep in mind that some games require a gamepad while others can be played with a simple TV remote. They are labeled as gamepad games in the Play Store. You can use any compatible Android gamepad to play gamepad games.

**To start playing games:** From the Home screen, scroll down to the Games row. Navigate to the game you'd like to play, and select it.

**If a game you installed with your Google account doesn't show up on Android TV:** Your game may not be compatible with Android TV. To check:


1. In a browser on a computer, go to the [Google Play Store](#) .
2. Find the game you want to play.
3. Click Install or Installed.
4. Under "Choose a device," look for your Android TV device. If it's greyed out, the game isn't compatible.

## Additional information



Here's some more info about playing games on your Android TV through Google Play Games:

- [How to play games on Android TV](#)
- [Send & request game gifts](#)
- [See your progress with Saved Games](#)
- [Play games with people in your circles](#)
- [Change game notification & visibility settings](#)
- [Get achievements, complete quests & earn experience points \(XP\)](#)

# Download apps & games through the Play Store app

You can get apps and games for your Android TV through the Play Store app .

To get apps and games:

1. From the Home screen, scroll down to the Apps row.
2. Find and select Google Play Store .
3. You can browse or search for apps and games.
  - To browse: Move up or down to view different categories. When you find a category you're interested in, move to the right view items.
  - To search: Scroll to the top of screen and select the Search icon  or press the Voice search button on your remote. Speak or type your search.
4. When you come across an app or game you're interested in, select it to purchase or install.
  - For paid apps and games, you'll need to set up a Google Wallet account, if you haven't already. You'll have to visit [Google Wallet](#) to add new forms of payment on another device.

Keep in mind:

- Some games require a gamepad. They'll be listed under "Gamepad Games" in the Play Store app.
- Content from Google Play Books and Google Play Newsstand can't be viewed on Android TV.
- You can listen to Google Play Music on Android TV, but you can't purchase new music or sign up for [All Access](#) through your TV.

## Additional information




Here's some more info about using the Google Play Store on Android TV:

- [Buy apps and games through Google Play](#)
- [Review app permissions for Android TV](#)
- [Prevent accidental or unwanted purchases](#) by setting up password protection
- [Request a refund or fix problems with in-app purchases](#)
- [Return paid apps & games](#)
- [Restrict app downloads by maturity level](#) though content filtering
- [Get help when you can't find an app or game](#)
- [Add or change a credit card or payment method](#)
- [Update your downloaded apps](#)
- [Remove searches you've made on Google Play](#)
- [Keep track of apps and games you want through wishlists](#)


# Watch YouTube videos on Android TV

You can easily find and watch videos and keep up with your favorite YouTube channels on your Android TV through the YouTube app. When you're signed in to the YouTube app, you can see your subscriptions, playlists, uploads, history, and more.

## Find and play videos


1. From the Home screen, scroll down to the Apps row.
2. Find and select YouTube.
3. You can browse or search for videos.
  - To browse: Move up or down to view different categories. When you find a category you're interested in, move to the right view videos.
  - To search: Scroll to the top of the screen and select the Search icon  or click the Voice search button  on your remote while in the YouTube app. Speak or type your search.
4. When you come across a video you're interested in, select it.
5. Once you select a video to play, a control bar will appear. Learn more about [YouTube controls](#) .

## Hide videos with inappropriate content






You can hide videos that may contain inappropriate content by turning on Safety mode. While Safety mode isn't 100 percent accurate, we use community flagging, age-restrictions, and other signals to identify and filter out inappropriate content. Learn more about [hiding inappropriate content on YouTube](#) .

### Turn Safety mode on or off

**Note:** This only turns on Safety mode on your Android TV.

1. From the Home screen, scroll down to the Apps row
2. Find and select **YouTube**
3. On the left hand menu, scroll down to **Settings** 
4. Select **Safety mode**
5. Select **Enabled** or **Disabled**

## Additional information

- [Paid content on Android TV](#) 
- [Sign in or sign out of YouTube on Android TV](#) 
- [Find and delete YouTube search history](#) 
- [View and manage videos you recently watched](#)  in your YouTube watch history
- [Visit the YouTube help center](#) 



# Cast content from your device to your Android TV

You can cast movies, TV shows, photos, websites and more to your Android TV's screen using your phone or tablet.

You can also:

- [Cast to your TV from the Chrome browser](#) on your computer.
- [Mirror your Android device's screen](#) on your TV.

## Cast content to your TV

1. Make sure your phone or tablet is connected to the same Wi-Fi/home network as your Android TV.
2. On your phone, tablet, or laptop, open up an app that supports casting. Below you'll find a list of apps that work with casting.
3. Touch or click the Cast icon .
4. Choose the Android TV you'd like to cast to.
5. Press play on your phone or tablet. The content should start playing on your Android TV, and the Cast icon on your device will be filled in .

## Apps that work with casting

- YouTube app
- Google Play Movies & TV
- Google Play Music
- Google+ Photos
- [Other apps](#)

Supported apps vary by country. For more information about available apps in your country, visit [g.co/castapps](https://g.co/castapps).

## Trouble casting to your Android TV

If you can't cast to your Android TV, follow these [troubleshooting steps](#).

Some Google Cast apps may not support casting to other Android TV devices. If the troubleshooting steps don't fix the issue, please contact the device manufacturer for more info.



## Additional information

Learn more about [casting from supported apps to your TV](#).

Here are answers to some other questions you may have about casting to your Android TV:

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[How will my Android TV get Google Cast updates?](#)



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[Can I change the name of my Android TV?](#)



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[Will my Android TV show up in my Chromecast app?](#)





# Watch channels from TV apps or a TV tuner

The live channels feature on Android TV loads shows, sports, news, and more from your participating TV apps or TV tuner so you can watch them all from one place. On Nexus Player, you can access this feature using the Live Channels app. Different Android TVs may have their own versions of the feature. Check with your TV's support to find its version.

## Set up TV channels

The live channels app will automatically be downloaded when you install an app that publishes live channels, or connect a USB tuner to your Android TV device. If your TV doesn't have a local channel connection or any apps with live channels, the live channels app won't appear.

The setup may vary depending on which Android TV you have. Check with the TV's support to learn more.

### Set up Live Channels on the Nexus Player:

1. From the apps row, open the Live Channels app.
2. Select the source you want to load channels from.
3. When you're finished loading all the channels you want, select **Done**.

Once your channels have been loaded, you'll be able to view them whenever you open the live channels app.

### Add or remove channels on the Nexus Player Live Channels app:

1. From the apps row, open the Live Channels app.
2. Press the **Select** button.
3. Scroll down to **TV Options**.
4. Select **Channel Setup**.
5. Choose **Customize channel list**.
6. Choose which channels you want to show up in your program guide by checking or unchecking the box next to each channel.
7. When you're done, press the **Back** button to return to watching your live channels stream.

## Watch TV channels on the Nexus Player

To start watching channels, open the live channels app from the apps menu.

You can change the channel with the remote. You can also choose a channel from the program guide:

1. Press the **Select** button.
2. Choose the **Program Guide**.
3. Use the remote to browse channels from all the channel sources.

# Connect a USB drive for more storage

You can connect an external USB drive to your Android TV to add more space for apps and content.

What you'll need:

- A micro-USB to USB adapter (if your Android TV has a micro-USB port instead of a USB port)
- An external USB drive to format for Android TV

## Connect and format the USB drive

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[1 Connect the USB drive to the Android TV](#) 

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[2 Set up the USB drive](#) 

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[Change the storage type](#) 

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## Free up space on your Android TV

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[Move downloaded apps to a USB drive](#) 

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[Migrate data to USB drive](#) 

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## Access content on the USB drive

**If your drive was formatted as internal storage:** Its content automatically appears alongside all of the other content on your Android TV.

**If your drive was formatted as removable storage:** To access content, you'll need to use an app that supports reading content from an external drive such as a file manager or a media player.

## Eject the USB drive

Before unplugging your external USB drive from Android TV, make sure to eject it. This keeps the content on your drive safe:

1. From the Home screen, scroll down until you reach **Settings** .
2. Select **Settings** .
3. Under "Device," find and select Storage & reset .
4. Find and select your removable storage device name.
5. Choose **Eject**.

Once you've ejected your drive, you won't be able to access any apps or games installed on the drive.

# Welcome to the Android TV Help Center

+ Get started with Nexus Player

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## - Android TV Settings

Restart or reset your Nexus Player

Add Bluetooth accessories

Change Wi-Fi Network

Block apps from appearing in recommendations

Set your Android TV screensaver (Daydream)

Set when Android TV goes to sleep

Permissions & other settings



+ Troubleshoot Nexus Player

+ Nexus Player Hardware

# Restart or reset your Nexus Player

In certain situations, you may need to restart your Nexus Player or reset it to factory settings.

## Restart your Nexus Player

1. Unplug the power cord. Wait 10 seconds.
2. Plug the power cord back in.

## Reset your Nexus Player to factory settings




You can reset through Android TV settings (recommended) or by using the button on the bottom of your Nexus Player.

**Important:** By performing a factory data reset, all data will be wiped from your Nexus Player. Data associated with your Google Account can be recovered. Any device settings will also be removed.

After you reset your Nexus Player to factory settings, you may need to reinstall some apps or games.

### Reset through settings (recommended)

To reset your Nexus Player to factory settings, follow these steps:

1. From the Home screen, scroll down until you reach Settings .
2. Select Settings .
3. Under "Device," find and select Storage & reset .
4. Select **Factory data reset**.
5. Then select **factory data reset** again.
6. Select **Erase everything** to confirm and reset your device.


## Reset using the button on Nexus Player

To reset using the button on the bottom of your Nexus Player, follow these steps:

1. Unplug the power cord.
2. Press and hold the button on the bottom of the Nexus Player. As you're holding the button, plug the power cord back in. Keep holding the button until you see "Google" on your TV screen.
3. Next, you'll see a screen with an Android on its side, and the words "Normal Boot" at the top.
4. Press the button once. The text at the top will change to "Recovery mode."
5. Press and hold the button for two seconds to select **Recovery mode**. You'll see an Android robot with a red exclamation mark and the words "No command."
6. Press and hold the button for two seconds to bring up a menu.
7. Press the button to move down the menu until you get to "wipe data/factory reset." Then press and hold the button for two seconds to select **wipe data/factory reset**.
8. Press the button to move to "Yes - delete all user data." Then press and hold the button for two seconds to select. Your Nexus Player will reset.

### Reinstall apps and games after resetting your Nexus Player






After you reset your Nexus Player to factory settings, you need to reinstall any apps or games.

1. Go to the Google Play Store app .
2. Find the app or game, and select it.
3. In the window that opens, select **Install**.

# Add Bluetooth accessories

You can use Bluetooth accessories, such as a keyboard or game controller, with your Android TV.

Here's how to add a Bluetooth accessory:

1. From Android TV's Home screen, scroll down until you reach Settings .
2. Select **Settings** .
3. Under "Remote & accessories," select **Add accessory** . Your Android TV will search for accessories.
  - Tip: You can also put your Nexus Player in pairing mode by pressing the button on the bottom of your Nexus Player once.
4. Put your accessory in pairing mode.
  - Tip: To put your Gamepad for Nexus Player in pairing mode, press and hold the Back  and Home  buttons for 5 seconds.
5. You'll see your accessory listed on the TV screen. Use your remote to select your accessory.
6. Your TV will pair with your accessory.

## Trouble adding Bluetooth accessory




You can try these troubleshooting steps if your [Bluetooth accessory won't pair](#).



# Change Wi-Fi Network

You'll connect to the Internet as part of your Android TV setup. You can always change the Wi-Fi network your Android TV is using.

To change your Wi-Fi network:

1. From Android TV's Home screen, scroll down until you reach Settings .
2. Select **Settings** .
3. Under "Device," select **Network** .
4. Select **Wi-Fi**.
5. You'll see a list of available networks.
6. Select a network and follow the onscreen instructions to connect.
  - If you don't see your network listed, scroll to the bottom of the list and select **Add new network**. Follow the onscreen instructions to connect.

## Trouble connecting to Wi-Fi



Try these troubleshooting steps if your [device won't connect to Wi-Fi](#).

# Block apps from appearing in recommendations

You can stop specific apps from showing up in the recommendations row at the top of your Android TV Home screen. You can do this by turning off notifications for that app, or by uninstalling the app.

## Turn recommendations (notifications) on or off



If you don't want an app to show up in top row of the Android TV Home screen, you can turn off notifications for that app. Here's how:

1. From Android TV's Home screen, scroll down until you reach **Settings** .
2. Select **Settings** .
3. Under "Device," select **Apps**.
4. Find and select an app.
5. From the list that opens, select **Notifications**.
6. Select **On** or **Off**.

If you decide to allow an app that has previously been blocked, it may take a few minutes for the app to reappear on your Home screen.

## Uninstall an app




Here's how to uninstall an app:

1. From Android TV's Home screen, scroll down until you reach **Settings** .
2. Select **Settings** .
3. Under "Device," select **Apps**.
4. Under "Downloaded apps," select the app you'd like to uninstall.
5. Select **Uninstall**.
6. Select **OK** to confirm.

# Set your Android TV screensaver (Daydream)




You can set up a screensaver (Daydream) for your Android TV that displays photos and colorful designs. Daydream uses a collection of scenic photos. You can't customize the photos that appear.

## Choose your screensaver (Daydream)

1. From Android TV's Home screen, scroll down until you reach Settings .
2. Select **Settings** .
3. Under "Device," select **Daydream** .
4. Select **Daydream** again.
5. Choose from the available options.




## Set wait time for screensaver

You can choose how long it takes for your screensaver to start when you're not using your Android TV. Here's how:

1. From Android TV's Home screen, scroll down until you reach Settings .
2. Select **Settings** .
3. Under "Device," select **Daydream** .
4. Select **When to Daydream**.
5. Select one of the options.

# Set when Android TV goes to sleep

You can choose how long it takes for your screen to turn off, or go to sleep, when you're not using your Android TV. Here's how:

1. From Android TV's Home screen, scroll down until you reach Settings .
  2. Select **Settings** .
  3. Under "Device," select **Daydream** .
  4. Select **When to Sleep**.
  5. Select one of the options.
-

# Permissions & other settings

[Restrict app use](#)

[Turn Android TV sounds on or off](#)

[Change Android TV date & time](#)

[Change the account on your Android TV](#)

[Turn Android TV location on or off](#)

[Update your Nexus Player](#)

[Turn captions on or off](#)

[Android TV accessibility features](#)

[Review app permissions for Android TV](#)

# Welcome to the Android TV Help Center

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+ Android TV Settings

- **Troubleshoot Nexus Player**

Pairing & accessory issues

Audio & video issues

Google Play issues

My Nexus Player won't connect to Wi-Fi

Nexus Player won't wake up

My Nexus Player ran out of space

My Android TV Remote Control app isn't working

Troubleshoot voice search

+ Nexus Player Hardware

## Pairing & accessory issues

[My remote won't pair with Nexus Player](#)

[My gamepad won't pair with Nexus Player](#)

[My Bluetooth accessory won't pair with Nexus Player](#)

## Audio & video issues

[I'm not hearing any sound](#)

[My screen is blank](#)

## Google Play issues

[Refunds for Google Play content](#)

[Prevent accidental or unwanted purchases on Android TV](#)

[Update your Google Play payment method](#)

# My Nexus Player won't connect to Wi-Fi

Here are some troubleshooting steps if your Nexus Player won't connect to the Internet.

## If your Wi-Fi network shows up on the Nexus Player

If you see your Wi-Fi network listed but can't connect, try the following:




- Make sure you're using the correct network password.
- Restart your Nexus Player by unplugging the power cord. Wait 10 seconds. Then plug the power cord back in.
- Check if other devices can connect to the Wi-Fi network that you're using. If not, there may be an issue with the router. Try the following to fix the router:
  - Unplug your modem and/or router for 15 seconds. Then plug it back in.
  - Make sure that your router's security settings are set up properly.
  - Confirm that your router's firmware (software used by the router) is up-to-date by following the manufacturer's instructions.
- If you're using a Wi-Fi network at a business, hotel, or school, you may have trouble connecting. Networks at these locations don't always work with Nexus Player. Contact the people in charge of the Wi-Fi network for assistance.

## If your Wi-Fi network isn't showing up on the Nexus Player

If you don't see your Wi-Fi network listed, your network name (SSID) may be hidden.

Note: If you are setting up your Nexus Player for the first time, when you get to the Wi-Fi network as part of on-screen set up, start at step 5 below.

Here's how to add a hidden network:

1. From Android TV's Home screen, scroll down until you reach **Settings** .
2. Select **Settings** .
3. Under "Device," select **Network** .
4. Select **Wi-Fi**.
5. Find and select **Add new network**.
6. Enter the network name (SSID) and other security details, if needed.

# Nexus Player won't wake up

If your TV screen is blank, your Nexus Player may be on, but stuck in sleep mode. You'll see a the light on the bottom of your Nexus Player if your device is on.

To wake up your device, try the troubleshooting steps below. After each step, check if your Nexus Player wakes up.

1. Press the button on the bottom of your Nexus Player.
2. Restart your Nexus Player by unplugging the power cord. Wait 10 seconds. Then plug the power cord back in.
3. [Reset your Nexus Player to factory settings](#) using the button on the Nexus Player.





# My Nexus Player ran out of space


If you have a lot of apps or games on your Nexus Player, you may run out of storage space. If you are out of space on your device, you'll get a notification the next time you try to install a game or app from the Play Store.

If you run out of space but you'd like to install new apps or games, you have to uninstall some of your other apps or games.

Here's how to uninstall apps or games:

1. From Android TV's Home screen, scroll down until you reach **Settings** .
2. Select **Settings** .
3. Under "Device," select **Apps**.
4. Under "Downloaded," find and select an app.
5. Find and select **Uninstall**.
6. Select **OK** to confirm.

# My Android TV Remote Control app isn't working

You can control your TV through your phone or tablet with the Android TV Remote Control app . You can connect the app to Android TV through by being on the same Wi-Fi network, or through Bluetooth. Learn how to [set up and use the Android TV Remote Control app](#).


If your remote control app isn't working, follow these steps. Check the app after each step to see if it starts working.

## 1. If you're trying to connect using Wi-Fi, make sure your phone or tablet is on the same Wi-Fi network as your Android TV.

- Your remote control app will only work if it's on the same Wi-Fi network as your Android TV.
- Learn how to view or [change your Android TV Wi-Fi network](#) or how to [troubleshoot your Wi-Fi connection](#).
- You can also try turning off your Wi-Fi network's AP (access point) isolation. Follow the instructions from your router's manufacturer. AP isolation may also be called "Client Isolation" or "Guest Mode."

## 2. If you can't connect using Wi-Fi, try to connect using Bluetooth. Make sure Bluetooth is turned on on your phone.

Here's how to connect through Bluetooth:

1. On your phone, turn on Bluetooth.
2. Open the Android TV Remote Control app .
3. You'll see the Wi-Fi error message: "Android TV and this device need to be on the same Wi-Fi network." Wait a few seconds.
4. In the app, you'll see your Android TV listed. Touch the name.
5. On your phone, you'll see a Bluetooth notification asking you to pair.
6. Touch **Pair**.

## 3. Restart your Android TV.

- Restart your Nexus Player by unplugging the power cord. Wait 10 seconds. Then plug the power cord back in.

## 4. Follow app troubleshooting steps.

- Here's how to [fix an app that isn't working properly](#) .

# Troubleshoot voice search

Here are some troubleshooting steps if voice search with your Android TV remote isn't working.

## Troubleshoot the remote

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### Check the remote's batteries

Try replacing the batteries in your Android TV's remote with a fresh set.

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### Make sure your remote is paired

If your Android TV isn't responding to the remote buttons or voice search, troubleshoot the [remote's connection to your TV](#).

## Troubleshoot Android TV

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### Check to make sure your Android TV is connected to the Internet

1. From Android TV's Home screen, scroll down until you reach Settings .
2. Select Settings .
3. Under "Device," select Network .

If you have trouble connecting, try these [troubleshooting tips for connecting to Wi-Fi](#).

---

### Check your app settings

Make sure the Google app has the microphone permissions switch set to On. Learn how to [turn on permissions for apps](#).

# Welcome to the Android TV Help Center

+ Get started with Nexus Player

+ Explore Android TV

+ Android TV Settings

+ Troubleshoot Nexus Player

- **Nexus Player Hardware**

Nexus Player tech specs

Nexus Player hardware

What comes with Nexus Player



# Nexus Player tech specs

Chipset	1.8GHz Quad Core, Intel® Atom™ Imagination PowerVR Series 6 Graphics 2D/3D Engine
Memory	1GB RAM 8GB storage*
Ports	18W DC power HDMI out (1920 x 1080 @ 60Hz) Micro-USB 2.0
Connectivity	802.11ac 2x2 (MIMO) Bluetooth 4.1
Weight	235g
Size	120mm x 120mm x 20mm
Remote	2 AAA batteries (included in box) Bluetooth Smart 40g (excluding batteries) 37mm x 140mm x 16mm

*\*Actual local storage may be less.*

# Nexus Player hardware

Here's a guide to the hardware features of the Nexus Player.

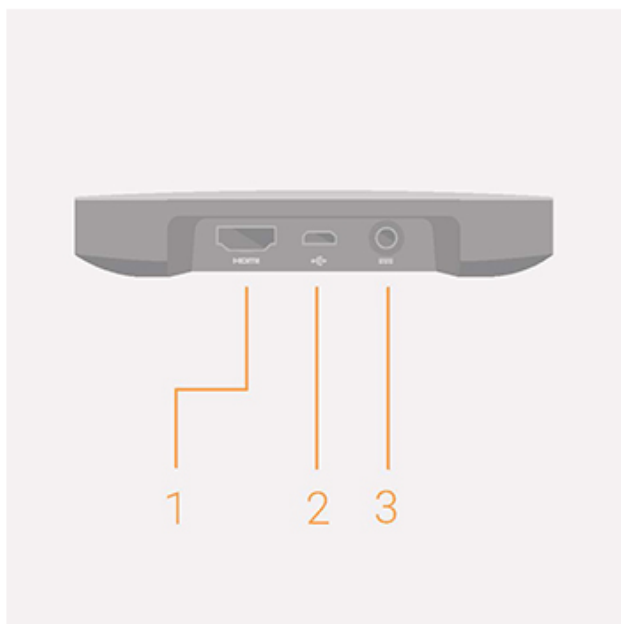
## Nexus Player

### Top & bottom



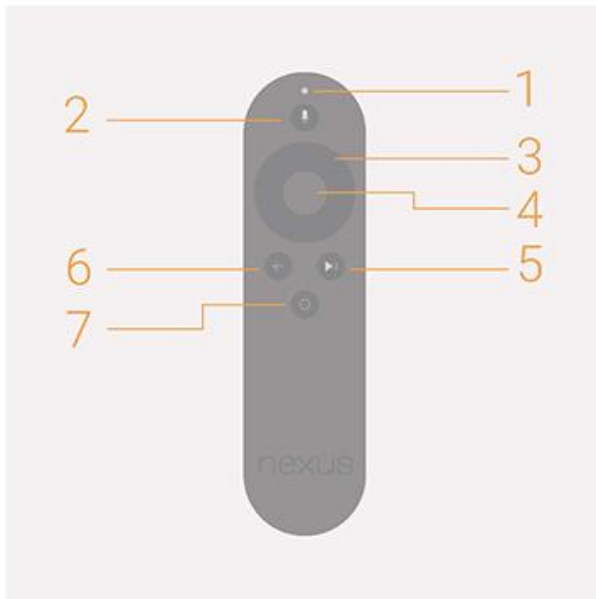
1. Indicator light
2. Reset button

## Back



1. HDMI port
2. Micro USB port
3. Power port

## Remote

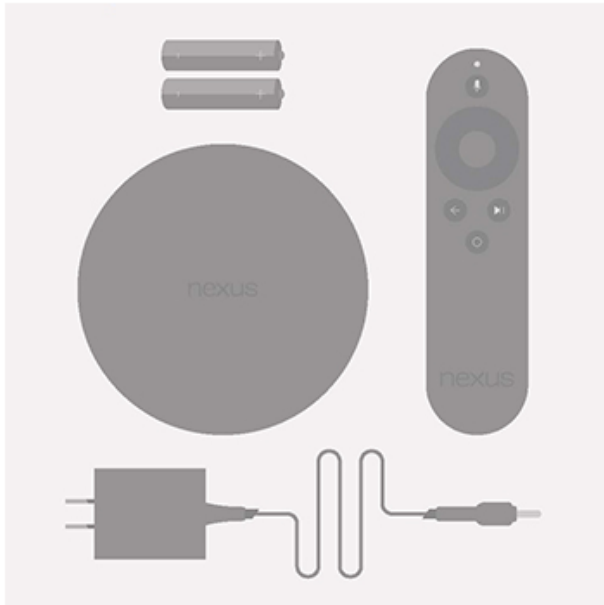


1. Indicator light
2. Voice search
3. Navigation D-pad
4. Select
5. Play/Pause
6. Back
7. Home



# What comes with Nexus Player

Nexus Player comes with the following:



- Nexus Player
- Remote
- Power adapter
- Two AAA batteries for remote

A Quick Start guide and Warranty, Safety and Regulatory booklet are also included.

# Troubleshoot issues

## App issues

[Fix an Android app that isn't working](#)  
[Turn off iMessage to enable texts on Android](#)  
[Find problem apps by rebooting to safe mode](#)

## Hardware & operating system issues

[My Nexus device won't charge or turn on](#)  
[My device feels too warm or hot](#)  
[My device restarts on its own or crashes](#)  
[My device freezes or is unresponsive](#)  
[Speed up a slow device](#)  
[My device's screen isn't working correctly](#)  
[Prevent cracked screen on your device](#)  
[Reset your Nexus device to factory settings](#)  
[Find problem apps by rebooting to safe mode](#)  
[Transfer files between your computer and Android device](#)  
[Connect to keyboards, mice, & other devices](#)

## Battery issues

[My device's battery drains too fast](#)  
[My Nexus device won't charge or turn on](#)

## Account, sign-in, & screen lock issues

[Can't sign in to Google on your Android device](#)  
[Re-enable backup on your Nexus 6](#)  
[Can't unlock my Android device](#)  
[My account is having issues syncing](#)

## Connectivity issues

[Troubleshoot connecting to Wi-Fi networks](#)  
[Service plan questions](#)

## Location & GPS issues

[Turn location on or off for your device](#)  
[Manage and delete your Location History](#)

# Welcome to the Nexus Help Center

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+ About Nexus devices

- **Get started with your Nexus device**

Get help switching to Android

Start using your Nexus device

Set up your Nexus device

Get around on your Nexus

Connect to Wi-Fi networks

Get the most life from your battery

Make and receive phone calls

Send and receive text messages (SMS & MMS)

Use Google Keyboard

+ Explore your Nexus device

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+ Use your apps

---

+ Settings

---

+ Accessories

---

+ Device support

# Switch to Android

Learn how to get going on Android with this step-by-step guide. After you go through the steps, you'll be set up to use your new Android device. Along the way you'll see links to resources where you can find more information.

## Before you get started

Go through your [Android device's initial setup process](#) and sign in with a Google Account. If you don't have a Google Account yet, you can [create one](#). Then make sure you have:

- Your old device
- Your new Android device and charger
- Your computer
- [Wi-Fi connection](#)

**Note:** Not all Android devices have settings in the same place, so if you don't see the exact setting or wording, look for something similar. You can also go to your [manufacturer's support site](#) to learn how to navigate your device's settings.


## 1 Transfer your contacts, music & photos

### Transfer your contacts

Before you transfer your contacts, first find out which account your contacts are saved to on your device – this might be your Google Account, iCloud, or directly on your iPhone or SIM card. Then use one of the options below to transfer your contacts from that account.

If you're switching from an iPhone, you can check what account your contacts are saved to by touching **Settings > Mail, Contacts, Calendars > Default Account**.

#### Option 1: My contacts are saved to Gmail or Google Account

If your contacts are saved to your Google Account, they'll be automatically added to your Android device when you sign in with your Google Account. To see them, just open the Contacts app . You can also [manually add contacts](#).

## Option 2: My contacts are saved to iCloud


If your contacts are saved to iCloud, you need to move them to your Google Account.

### First, make sure your contacts are synced


You can skip this step if you keep your contacts on your iPhone synced with your iCloud account.

1. On your iPhone, go to **Settings**.
2. Scroll down to **Mail, Contacts, Calendars** and touch your **iCloud** account.
3. Switch "Contacts" to **On**. You'll be prompted to merge your device's contacts with iCloud.

### Next, export your contacts from iCloud

1. On your computer, open a web browser and go to [icloud.com](https://icloud.com)  and sign in with your Apple ID.
2. Click **Contacts**.
3. In the bottom left corner, click on the gear icon, then **Select All**.
4. Click the gear icon again and then **Export vCard**. The file will be saved on your computer. If you have issues downloading the file, try using a different browser.

### Last, import contacts to your Google Account

1. On your computer, go to [gmail.com](https://gmail.com)  and log in with your Google Account.
2. In the top-left corner, click **Gmail > Contacts**. You should see a list of your Gmail contacts.
3. Above the contacts list, click **More > Import**.
4. Click **Choose File** and select your saved vCard file to import it.


**Tip:** You can merge any duplicate contacts by clicking **More > Find & merge duplicates**.



## Option 3: My contacts are saved on my iPhone or other account

If your contacts are stored directly on your iPhone or you're using an account other than iCloud or Gmail, you can use your computer to move them to your Google Account.

1. Connect your iPhone to your computer.
2. Open iTunes.
3. In the top right of the screen, click **iPhone**.
4. In the left panel, click the **Info** tab and check the box next to "Sync Contacts with."
5. Choose **Google Contacts** from the drop-down menu and enter your Google Account information when prompted.
6. Wait for your iPhone or iPad to sync before disconnecting.

## Option 4: My contacts are saved on my SIM card

If your contacts are stored on your SIM card, follow these steps to [import contacts from a SIM card](#) .

After adding your Google Account to your Android device, [check to make sure all your contacts are available](#)  in the Contacts app .



## Transfer your music



You can transfer music to your Android device using your computer. Before you get started, make sure the music from your old device is fully synced with your computer. Your music should all be backed up on your computer when this process is done.

Transfer your music in one of the following ways:

- **Option 1: Use your Chrome browser.** Just follow [these steps to drag and drop songs](#) to your Google Play account library using your computer's Chrome browser.
- **Option 2: Use the Music Manager app.** If you're not using a Chrome browser, install [Google Play Music Manager](#) on your computer and follow [these steps to upload music](#) to your Google Play account.
- **Option 3: Use a USB cable.** Transfer music from your computer to your mobile device [using a USB cable](#).

When you're done, any music you purchase from Google Play will automatically sync to your device from your account and you can listen to using [Google Play Music](#).

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## Sync your photos



You can save the photos on your old device to your Google Account so they're available from any Android device you're signed into.

### Option 1: My old device is a smartphone




1. On your old device, download and open the Google+ app . You can get this from the [App Store](#) or for your [Windows Phone](#).
2. Sign in with your Google Account.
3. Touch menu .
4. At the top right, touch the gear .
5. Touch **Camera and Photos > Auto Backup** and turn the switch on.

### Option 2: My old device isn't a smartphone or my photos are on a storage card



You can use [use Auto Backup on your Windows or Mac computer](#) to upload your photos.


When you're done, all the photos from your old device will be saved to your Google Account. To see your photos and videos, sign in to your Google Account on your new Android device and open the Photos app .

## 2 Set up messaging





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### Switching from iPhone? Turn off iMessage to get texts on Android


iMessage is an Apple messaging service that allows messages to be sent between Apple devices. If you're not switching from an iPhone, you don't need to worry about this step.

Before you can get texts on your Android device, [follow these steps to turn iMessage off](#)  on your old iPhone. Otherwise, text messages might accidentally go to your old iPhone instead and you won't see them.

### Set up messaging on Android

Your device likely came with messaging apps installed, like Messenger from Google  or the Hangouts app . If you have a messaging app you prefer, you can download it from the [Google Play Store](#)  or Play Store app on your device .

**To send text messages:** Just open the messaging app, sign in with your Google Account if needed, and start texting away. You can also learn more about the specifics of sending messages with [Messenger from Google](#)  or [Hangouts](#) .


Your device will choose one to be the default messaging app, but if you want to use a different one, you can [follow these steps to change your default messaging app](#)  at any time.



## 3 Set up apps, email & "find my phone" features

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### Get your apps ^

Many Google apps are already on your Android device, but you can get other apps and discover new ones using the [Google Play Store](#) or the Play Store app on your device .


- **Transfer apps you subscribe to:** For apps where you're a subscriber, just download the app and sign in with your account to transfer your service over to Android for free. Get help [installing apps](#).
- **Reinstall apps you've purchased:** If you've downloaded any apps using your Google Account, you can [reinstall them on your new device without purchasing them again](#).
- **Get new apps:** Follow these steps to [install or purchase apps and digital content on your Android device](#).

**Don't see the Google Play Store app on your device?** [Get help finding it](#).

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### Set up email ^

#### Use Gmail

The Gmail app is ready to go when you set up your Android device with your Google Account. Just open and sign in to the Gmail app .

**Tip:** Learn more about [using Gmail on your Android device](#) and make sure your account is protected with [2-step verification](#).

#### Use other email apps

You can access your other email accounts on your Android device by installing that email service's app. Just search for it on the [Google Play Store](#) or your device's Play Store app .

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### Turn on "find my phone" features ^

Android Device Manager can help you find, lock, and erase your Android device if you lose it. Make sure you have the right [settings turned on to use Android Device Manager](#) if you ever need to.

**Tip:** You can also [link your phone to Google](#) so you can find or ring it by searching for **find my phone** on [www.google.com](#).

## 4 Customize your device

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### Pick your security settings

Secure your device by setting a screen lock with a PIN, password, or pattern. Each time you turn on your device or wake up the screen, you'll be asked to unlock your device.

Follow these steps to [set up a screen lock](#) and learn about new ways to have your device automatically unlock when you have it with you using [Smart Lock for Android](#).

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### Set up notifications

Notifications alert you to things like new messages, calendar events, and alarms on your device.

- [Set your notifications](#): Set up your device so that you get interrupted by notifications only at certain times, for certain types of things, or from specific people.
- [Manage what shows on your lock screen](#): Set up your device so that only the notifications that you want show up on your lock screen.

When you're all set up, get a [quick overview on viewing and using your notifications](#).

---

### Personalize your Home screens, sounds & wallpaper

- [Home screens](#): Your Home screens are the first ones you see when you turn on or unlock your device. You can customize them and add apps and widgets.
  - [Ringtones](#): Change your default ringtone, have different ringtones for different people, and get new ringtones.
  - [Sound and vibrate settings](#): Customize your device and app sound and vibrate settings, like touch sounds and volume levels.
  - [Wallpaper](#): Change the wallpaper that's displayed on your Home screens.
- 

### Set your device to automatically show info you want


Get the information you want when you need it most with Google Now. 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.

Follow these steps to [turn Google Now on](#) and [customize your cards](#). If you have a Nexus or Google Play edition device, swipe your finger up from the bottom of any screen to view your Google Now cards at any time.

## 5 Get the most out of your Android


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### Install system updates

It's always a good idea to keep your system up to date. Learn how to [check your Android version number and install the latest software updates](#). 


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### Get tips for maximizing your battery life


There are a lot of ways you can optimize your settings to get the most out of your Android device. Check out our [tips for maximizing your Android's battery life](#) 

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### Download the Device Assist app

Get tips, proactive troubleshooting, and easy access to live support directly on your device with the [Google Device Assist app](#) . This app is available to Nexus, Google Play edition, and Android One devices running Android 5.0 and up.

## Bonus step: Check out our Nexus secrets

**Do you have a new Nexus device?** Check out [6 Nexus secrets](#)  to learn some cool things your new Nexus phone or tablet does that you might not know about.

# Start using your Nexus device

[Charge your Nexus device](#)

[Insert a SIM card into a Nexus device](#)

[Use your Nexus 9 keyboard](#)

# Set up your Nexus device

Some of this information applies only to devices running Android 5.0 and higher.

To make sure your phone doesn't lose power during setup, it's recommended that you keep it plugged in until setup is complete. Learn how to [charge your device](#).

## Set up your device

The first time you turn on your device, it'll walk you through the steps to get it set up. You'll be prompted to do the following:

1. Choose the language you want your phone to use.
2. Connect to a [Wi-Fi network](#) or your [cellular data network](#).
3. Sign in with your Google Account.

If you use Gmail, you have a Google Account. Just use the same email address and password to sign in here. By signing in, all of your email, contacts, calendar events, and other data associated with that account will be synced to your phone. If you have more than one Google Account, you can add them later.

If you don't have a Google Account, you can create one during the setup process. You can also skip this step and create one later. Learn more about [creating a Google Account](#) [↗](#).

## Transfer your Google Account information to a new device

This information applies only to devices running Android 5.0 and higher. Tap & Go is not available for Nexus 9 or Nexus 10 devices.

When you set up your device, you can quickly copy any Google Accounts, backed-up apps, and data from your current Android device to your new Android device using Tap & Go.

Your new device must be running Android 5.0 or higher, and your current device must be running Android 4.0 or higher and have NFC enabled.

When you're prompted to use Tap & Go during the setup wizard, follow these steps to complete the process:

1. Turn on and unlock your current device.
2. Make sure NFC is turned on for your current device. Learn how to [turn on NFC](#).
3. Briefly place your current device and your new device back to back until you hear a sound confirming the touch.
4. When the screen on your current device says, "Copy accounts and data from this device?," touch **OK**. Keep in mind that Bluetooth will be used to complete this process.
5. The screen on your current device will lock. Use your pin, pattern, or password to unlock it.
6. When you get a notification on your current device that says, "New device setup completed," touch the notification.
7. If you have [2-Step Verification set up for you Google Account](#) [↗](#) or don't have a screen lock set up on your new device, you'll be asked to enter your account password.

When you're done, all your Google account data and associated apps will be available on your new device.

# Get around on your Nexus

[Get around on your device](#)

[Use Quick Settings to change common settings](#)

[Add apps & widgets to your Home screens](#)

[View and use notifications](#)

# Connect to Wi-Fi networks



You can connect to Wi-Fi networks with your device, as well as add networks you use often or remove networks you don't use any longer. You can also change the settings for saved Wi-Fi networks on your device.


**Note:** Some of this information may not apply to all devices because Android isn't exactly the same on every device. These instructions are for devices with Android 5.0 and up. [See what version of Android you have.](#)

## Turn on Wi-Fi and connect to a network

Keep in mind that your device will remember networks you connect to, along with security details, and connect automatically when in range.

### Steps to connect to Wi-Fi on your mobile device

1. Open your device's **Settings** app .
2. Under "Wireless & networks," touch **Wi-Fi**.
3. Touch the Wi-Fi switch to turn it to the **On** position.
4. You'll see a list of saved and available networks.
5. Touch a network name from the list of available networks to connect to it. You'll see a lock icon  if the network is secured and you need to enter a password to connect.
6. Once connected, your device will say "Connected" under the network name and it will show up in your saved networks list. Your device will automatically connect to it when in range.

**Tip:** If your device is running Android 5.0 or higher and the saved network you want to connect to isn't showing up in the list of networks, touch the Menu icon  in the top right corner of the screen. Then touch **Refresh** to reload the list of networks. Touch **Add network** and enter the network's name (SSID) and other security details, if needed, then touch **Save**.




If you have trouble connecting to Wi-Fi networks, try [these troubleshooting steps](#).

## Add, change, or remove saved Wi-Fi networks

## Add a Wi-Fi network



You can add a Wi-Fi network that isn't showing up in the list of networks on your screen, doesn't broadcast its name (SSID), or is out of range. To add a Wi-Fi network, follow these steps:

1. Open your device's **Settings** app .
2. Under "Wireless & networks," touch **Wi-Fi**.
3. Make sure the Wi-Fi switch is in the **On** position.
  - *Android 4.4 or lower:* Touch the Plus icon .
  - *Android 5.0 or higher:* Touch the Menu icon  in the top right corner of the screen. Then, touch **Add network**.
4. Enter the network name (SSID) and other security details, if needed.
5. Touch **Save**.
6. Once connected, your device will say "Connected" under the network name.



Your device will connect to this network automatically the next time you are in range.

---

## Remove a Wi-Fi network



You can forget a saved Wi-Fi network if you don't want your device to connect to it automatically. To remove a Wi-Fi network from your device, follow these steps:


1. Open your device's **Settings** app .
2. Under "Wireless & networks," touch **Wi-Fi**.
3. Make sure the Wi-Fi switch is in the **On** position.
4. In the Wi-Fi settings screen, touch the name of a saved network. If you're using Android 5.0 and you don't see the network in the list, touch the Menu icon , then touch **Saved networks** and touch the network.
5. Touch **Forget**.

---

## View Wi-Fi network details and change network settings



You can view your saved Wi-Fi networks' details and change network settings by following these steps:

1. Open your device's **Settings** app .
2. Under "Wireless & networks," touch **Wi-Fi**.
3. Connect to the network you want to view details for.
4. Touch the network name. You can see information about:
  - Connection status
  - Signal strength
  - Link speed
  - Frequency
  - Security



5. To change network settings, touch and hold the network name. You can choose to:



- Forget the network
- Modify the network

## Advanced Wi-Fi settings

---



### Configure proxy settings ^

For each Wi-Fi network you add, you can connect via a proxy by following these steps:

1. Open your device's **Settings** app .
2. Under "Wireless & networks," touch **Wi-Fi**.
3. Touch and hold a Wi-Fi network in the list of networks.
4. Touch **Modify network**.
5. Select **Show advanced options**. (You may have to lower the keyboard first. To do so, touch the modified back button .)
6. Touch **None** under Proxy Settings, then touch **Manual** in the menu that opens.
7. Enter the proxy settings.
8. Touch **Save**.

Proxy settings for each Wi-Fi network must be set up separately.

You can choose to change the advanced Wi-Fi settings on your device. Follow these steps to edit advanced Wi-Fi options:

1. Open your device's **Settings** app .
  2. Under "Wireless & networks," touch **Wi-Fi**.
  3. In the Wi-Fi settings screen, touch **Menu**  > **Advanced**.
  4. Touch one of the setting options below. Some of these settings may vary by your device and version of Android.
    - **Network notification:** Turn on to receive a notification in the Status bar when your device finds a Wi-Fi network it can connect to.
    - **Scanning always available:** Turn on to allow apps to scan for Wi-Fi networks even when Wi-Fi is off. This is primarily used to improve location services when Wi-Fi is off.
    - **Keep Wi-Fi on during sleep:** Touch to choose how your device handles Wi-Fi when it's asleep. You can choose to keep Wi-Fi on all the time, only if your device is charging, or turn it off completely. If you turn Wi-Fi off, you may increase the amount of mobile data you use.
    - **Avoid poor connections:** Check the box to automatically avoid using networks with a low-quality or unreliable Internet connection.
    - **Wi-Fi frequency band:** Touch to specify the frequency range of operation.
    - **Wi-Fi optimization:** Check the box to minimize battery usage when Wi-Fi is on.
    - **Install certificates:** You can use digital certificates to identify your device for a variety of purposes, including VPN or Wi-Fi network access.
    - **Wi-Fi Direct:** Allow your devices to connect with other Wi-Fi Direct capable devices.
    - **WPS Push Button:** Select to turn on Wi-Fi protected setup for a Wi-Fi protected setup capable network.
    - **WPS Pin Entry:** Select to enter the Wi-Fi protected setup pin.
-

# Get the most life from your battery

To get the most out of your Android phone or tablet's battery, you can choose regular settings and uses that help your battery last.

**Note:** Some of this information may not apply to all devices because Android isn't exactly the same on every device. These instructions are for devices with Android 6.0 and up. [See what version of Android you have.](#)

## Top battery charge tips

---

### Use the charger that came with your device

Other power adapters and chargers can charge slowly, not at all, or damage your device or battery.

For Nexus devices, see [what came in the box](#) and learn [how to charge](#).

### Keep it cool

Avoid situations where your device can overheat.

Your battery will drain much faster when it's hot, even if you're not using it. This kind of drain can damage your battery.

Learn [why a device may get warm](#) and what to do about it.

**Tip:** Your device warms up when it's plugged in, so don't keep it charging all the time.

### No need to drain to zero

You don't need to teach your device how much capacity the battery has by going from full to zero charge.

# Choose displays that reduce battery drain


---

## Change screen display

^


### Let your screen turn off sooner

Your sleep setting controls how long until your device's screen goes black when you're not using it. To reduce battery drain when you're not using the screen, set a shorter time before your screen turns off.

1. Open your device's Settings app .
2. Tap **Display** > **Sleep**.
3. Pick **15 seconds** or **30 seconds**.


### Reduce screen brightness

To save battery, lower your screen's brightness.

1. Open your device's Settings app .
2. Tap **Display**.
3. Tap **Brightness level**.
4. Move the slider left.

### Turn on adaptive brightness

To save battery, have your screen's brightness change with the light around you.

1. Open your device's Settings app .
2. Tap **Display**.
3. Switch on **Adaptive brightness**.

### Turn off live wallpapers

You can save battery life by [turning off live wallpapers](#).

---


## Turn off notification light

^

If your device has an LED notification light, you can save battery life by turning it off. The notification light is usually on the front. It flashes when you get a notification while your screen is turned off.

If you turn off the light, you'll still get notifications, but the light won't blink.

To turn the notification light on or off:

1. Open your device's Settings app .
2. Tap **Sound & notification**.
3. Tap **Pulse notification light**.

**Note:** If your device doesn't support this feature, you won't see this setting.

## Turn off keyboard sound and vibration



You can save battery life by [turning off your device's keyboard sound and vibration](#).

## Reduce background battery drain

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### Keep battery optimization on



To have apps use your device's battery only when they need to, [keep battery optimization on](#) for all apps.

### No need to close apps



In general, you don't need to close apps. Android automatically manages the memory that apps use.

Swiping apps closed doesn't save battery.

But if something goes wrong with an app, you can "[force stop](#)" [that app](#). This completely turns off the app, including any background services that may be using battery.

### Turn off high-drain features when you're not using them



You can save battery by turning off [tethering and hotspots](#) when you're not using them.



You can change your [advanced Wi-Fi settings](#) to let Wi-Fi turn off during sleep.

Learn more about [what drains a battery most](#).

### Delete unused accounts



Having fewer accounts on a device can save battery. For a device with multiple accounts on it, the device's owner can delete inactive users.

1. Open your device's Settings app .
2. Tap **Users**.
3. Next to the inactive user, tap Settings .
4. Tap **Remove user**.

## Related links

- [Use battery saver mode](#)
- [Check battery level](#)
- [My device's battery drains too fast](#)
- [Stretch a low battery's power](#)

# Make and receive phone calls

[Make and receive phone calls](#)

[Check your voicemail](#)

[Change call settings](#)

[Use caller ID & spam protection](#)

[Make calls over Wi-Fi](#)

[Manage your contacts and call log](#)

[Block or unblock a phone number](#)

# Send and receive text messages (SMS & MMS)

## **Messenger app**

- [Get started with Google Messenger](#)
- [Text messages on Google Messenger](#)
- [Send photos, videos or voice recordings](#)
- [Change your Messenger settings](#)
- [Clean up conversations](#)
- [Block messages from someone](#)
- [Accessibility for Messenger on Android](#)

## **Messaging app**

- [Send or respond to a message](#)
- [Read & manage messages](#)
- [Change Messaging settings](#)

## **Move from iMessage to Android**

- [Turn off iMessage to enable texts on Android](#)

# Use Google Keyboard

[Use Google Keyboard](#)

[Manage Google Keyboard settings](#)

[Use Gesture Typing](#)

[Use emoji in Google Keyboard](#)



# Welcome to the Nexus Help Center

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+ About Nexus devices

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+ Get started with your Nexus device

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- **Explore your Nexus device**

6 Nexus Secrets

Open and use Google Now

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Tap & pay with your device

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Print from your Nexus device

Type text by speaking

Use Gesture Typing

Set up a screensaver

Record and play back audio with USB host mode on Nexus

+ Use your apps

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+ Settings

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+ Accessories

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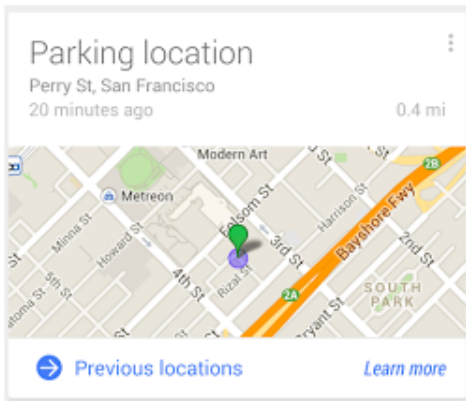
+ Device support

# 6 Nexus Secrets

Nexus phones and tablets can do all kinds of cool things you might not know about yet. Read on for some of the best Nexus tips.

## 1. Your Nexus comes with a free personal assistant

Stop writing reminders on your hand. Google Now remembers where you parked your car, lets you know when your favorite TV show is on, and reminds you to pick up milk when you get to the grocery store.




### Try it out:

1. Turn on Google Now by opening the **Google** app.
2. In the top left, go to menu ≡ > **Settings** > **Now cards** > **Show cards**.
3. Once you're set up, you can swipe to your Home screen all the way to the left to see your cards.

## 2. Wi-Fi wherever you are

You don't need to go searching for the nearest coffee shop to get online. You can use your phone as a Wi-Fi hotspot to connect your computer or tablet to the internet.

### Try it out:


1. Open the Settings app .
2. Under "Wireless & networks," touch **More**.
3. Touch **Tethering & portable hotspot**.
4. Switch on **Portable Wi-Fi hotspot**.

Keep in mind that your mobile hotspot uses mobile data, so be sure to watch your data usage if you don't have an unlimited data plan.

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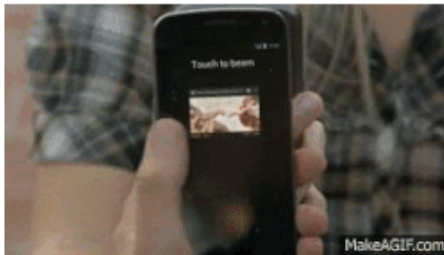
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Keep in mind that your mobile hotspot uses mobile data, so be sure to watch your data usage if you don't have an unlimited data plan.

## 3. Beam cool stuff to friends

There's an even faster way to share websites, videos, and pictures than email. With Android Beam, you can touch your Nexus to your friend's and send cool stuff in a jiffy.

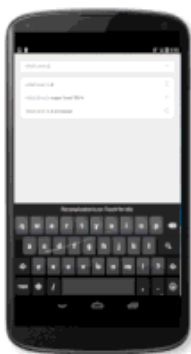


### Try it out:

1. Make sure both devices have [Android Beam](#) turned on.
2. Open a website, YouTube video, or photo you want to share.
3. Touch the back of your device to the back of your friend's device.
4. Touch your screen to beam content over to your friend.

## 4. Send texts even faster

Want to add even more speed to your texts, emails, and searches? [Gesture Typing](#) lets you type without ever lifting your finger from the keyboard.



## Try it out:


Start any search or text message, and write your message by sliding your finger slowly across the letters that make up the word you want to write.

## 5. Tap and pay

Stop lugging that hefty wallet around. Once you've downloaded a payment app, like Android Pay, you can pay for things without taking out your credit card.



## Try it out:

1. Open your payment app and turn on tap & pay.
2. Then, open your device's **Settings** app .
3. In the "Wireless and networks" section, touch **More**.
4. Switch on **NFC**.

## 6. Remotely ring, lock, or erase your phone if you leave it somewhere

Can't find your phone or tablet? With Android Device Manager, you can try to locate your device, and remotely lock, erase, or ring it.

## Try it out:

1. Turn on [Android Device Manager](#) on your device and sign in with your Google Account.
2. When you need to locate your device, visit [android.com/devicemanager](https://android.com/devicemanager)  and choose which device you want to find.
3. You can ring, lock, or erase your device.

## Bonus secret: Take 360° pictures

Are your pictures feeling a little flat? Add some dimension by creating photo spheres that let you look up, down, and all around to explore an entire scene.



### Try it out:

1. Open your phone's camera app.
2. Swipe to the right and touch **Photo sphere**.
3. Align the donut and the blue dots as you move the phone in a circle.

## What's your favorite Nexus secret?

Post your favorite Nexus tip on Google+ or Twitter and use [#nexussecrets](#) in your post.

# Open and use Google Now

You can get more of the right information at the right time with Google Now cards in the Google app.

You'll see cards with information like:

- Today's weather
- Traffic reports and when to leave for work
- Game updates for your favorite sports teams

## Open Google Now and find cards

To open Google Now and see Google Now cards:

- On any Home screen, swipe to the right until you reach the leftmost Home screen.
- Open the Google app.

You'll see a list of cards with useful information.

If you see only one card, you probably haven't yet set up Google Now. Tap **Get started** and follow the on-screen steps.

## Dismiss a Google Now card

To clear a Google Now card, swipe the card to the right.

## Use Google Now in other apps

To open Google Now without leaving the app you're using, [turn on Now on Tap](#).

## Related links


- [Turn Google Now on or off](#)
  - [Use Google Now cards](#)
  - [Customize Google Now cards](#)
-

# Take a screenshot on your device

You can capture your phone or tablet's screen as an image by taking a screenshot. Then you can view, edit, and share the image from your mobile device.

## Take a screenshot


To capture your screen as an image on your phone or tablet:

1. Open the screen that you want to capture.
2. Press and hold the **Power** and **Volume down** buttons at the same time for a few seconds. Your device will save the screen as an image.
3. At the top of the screen, you'll see the Screenshot capture .

**Tip:** If you don't see the Screenshot capture icon, return to a Home screen to see it.

## View your screenshot



### To see the screenshot you just took

1. Swipe down from the top of a screen with the Screenshot capture .
2. Tap the "Screenshot captured" notification.

### To see all your screenshots

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#### View screenshots on Android 5.0 and up


1. Open your device's Photos app .
2. Tap Menu .
3. Tap **Device folders**.
4. Look under "Screenshots."

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#### View screenshots on Android 4.4 and below

1. Open your device's **Gallery** app.
2. Choose the "Album" view and look in the "Screenshots" folder.

## Share your screenshot

To share a screenshot, view it and tap **Share** .

## Related links

- [Edit photos with the Photos app](#)
- [Find things in photos with the Photos app](#)

# Use Android Beam to share content by NFC


With Android Beam turned on, you can share content directly from your device's screen to another device by bringing the devices together (usually, back to back). You can beam content including webpages, directions, videos, photos, and contacts.

To share content by beam, both devices must support "Near Field Communication" (NFC), have both NFC and Android Beam turned on, and be unlocked with their screens on.

**Note:** Some of this information may not apply to all devices because Android isn't exactly the same on every device. These instructions are for devices with Android 6.0 and up. [See what version of Android you have.](#)

## Make sure NFC and Android Beam are on

Both NFC and Android Beam are turned on by default. To check that they're on:

1. Open your device's **Settings** app .
2. Under "Wireless & networks," tap **More**.
3. Check that **NFC** is switched on. This lets your phone exchange data when it touches another device.
4. Tap **Android Beam**.
5. Check that the **On/Off** switch is on.

You can also turn off NFC or Android Beam with these settings at any time.

## Share content by Android Beam

Before sharing content, make sure that both devices are unlocked, have their screens on, and have NFC and Android Beam turned on. Then follow these steps:

1. On your device, open the exact content that you want to share, like a map, photo, or webpage.
2. Move the back of your device toward the back of the other device.
3. When the devices connect, your device will make a sound or vibrate, and the image on your screen will get smaller.
4. When you see the message **Touch to beam**, tap your screen. A notification will say "Beaming..."
5. When the beam is done:
  - On your device, a notification will say "Beam complete."
  - On the other device, a notification will show the shared content.

## When the other device needs an app

If the other device doesn't have the app needed to see the shared content, then the notification on the other device will open Google Play, where the other device can download that app.



## Where to touch backs for Android Beam

With some devices, you may need to touch a specific part of your device to the other device.

- For a Nexus 7, make sure that the other device touches its back near the "u" in "Nexus."
- For the HTC One Google Play edition, place the HTC logo against the lower part of the other device.

For the exact location of your NFC antenna, see these [Nexus device diagrams](#).

## Related links

- [Tap & pay with your device](#)
- [Transfer files between your computer and Android device](#)


# Tap & pay with your device

You can use tap & pay with your compatible Android device to pay for purchases at thousands of merchants that accept contactless payments.


**Note:** Some of this information may not apply to all devices because Android isn't exactly the same on every device. These instructions are for devices with Android 4.4 and up. [See what version of Android you have.](#)

## Set up tap & pay on your device

To use tap & pay, you'll first need to turn on NFC (near field communication).


1. Open your device's **Settings** app .
2. Under "Wireless & networks," touch **More**.
3. Switch on **NFC**. If you don't see the NFC setting, your device doesn't have NFC and you won't be able to tap & pay.

## Manage apps using tap & pay

There are many payment apps that let you tap and pay. You can [browse Google Play](#)  for payment apps.

### Set a default payment app


If you have multiple apps that use tap & pay, you can choose which one to use by default when you tap and pay at a store.

1. First, open the payment app and make sure tap & pay is turned on.
2. Then, open your device's **Settings** app . Scroll down to **Tap & pay** and select your default payment app.

**Note:** Your payment apps need to support the tap & pay functionality in order to show up in settings. Money transfer apps and Android Beam aren't supported.

## Turn off tap & pay

You can turn off tap and pay in two ways:

- Turn off the tap & pay functionality in your payment app. Not all payment apps support this option.
- Turn off NFC on your device by going to **Settings**  > **More** (under "Wireless & networks") > switch off **NFC**. Keep in mind that turning off NFC also turns off Android Beam and other NFC features.

## Related links

- [Get started with Android Pay](#)
- [Make purchases with Android Pay](#)

# Transfer files between your computer and Android device

You can transfer photos, music, and other files between your computer and device with a USB cable. You can also transfer files from your device to a computer.

**Note:** Some of this information may not apply to all devices because Android isn't exactly the same on every device. These instructions are for devices with Android 4.4 and up. [See what version of Android you have.](#)

## Transfer files

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### Windows transfer

1. Unlock your device's screen.
2. With a USB cable, connect your device to your computer.
3. Swipe down from the top of your device's screen to see your notifications.
4. Tap the **USB for...** notification. Then tap **Transfer files (MTP)**.
5. A File Transfer window will open on your computer. Use it to drag and drop files, just like with other external devices and storage.
6. When you're done, eject your device from Windows.
7. Unplug the USB cable.

### Mac transfer

To transfer files, you must have Android File Transfer installed on your computer. Android File Transfer is compatible with Mac OS X 10.5 or later and Android 3.0 or later.

1. Download and install [Android File Transfer](#) on your computer.
2. Open **Android File Transfer**. (The next time that you connect your device, it should open automatically.)
3. Unlock your device's screen.
4. With a USB cable, connect your device to your computer.
5. Swipe down from the top of your device's screen to see your notifications.
6. Tap the **USB for...** notification. Then tap **Transfer files (MTP)**.
7. An Android File Transfer window will open on your computer. Use it to drag and drop files.
8. When you're done, unplug the USB cable.

## Manage your music

You can upload music on your computer to your Google Play library using Music Manager. Learn how to [get started with Google Play Music](#) or [add your music using Music Manager](#).

## Troubleshoot transferring files through USB

If you're having trouble transferring files:

- Try a different USB cable. Not all USB cables can transfer files.
- Test the mini-USB port on your device by connecting your device to a different computer.
- Test the USB port on your computer by connecting a camera or other device with USB.
- [Update your Android version](#) to the latest available.
- Reboot your device by pressing the Power button for about 30 seconds, until your device restarts.
- Restart your computer.

## Windows troubleshooting

Check your computer's settings to make sure that Windows automatically detects new hardware.

## Mac troubleshooting

- Make sure that Android File Transfer is compatible with your computer. You must have Mac OS X 10.5 or later and Android 3.0 or later. [See what version of Android you have](#).
- Make sure that the Android File Transfer application is open.

## Related links


- [Find & delete downloads](#)
- [Add or import contacts](#)
- [Transfer music from a computer to your device](#)
- [Use Android Beam to share content by NFC](#)

# Print from your Nexus device

You can print from your Nexus phone or tablet with apps that support printing. To print from your device, add a printer that can receive data by Wi-Fi or cellular network.

**Note:** Some of this information may not apply to all devices because Android isn't exactly the same on every device. These instructions are for devices with Android 4.4 and up. [See what version of Android you have.](#)


## Turn printing on or off for your Nexus device


1. Open your device's Settings app .
2. Under "System," tap **Printing**.
3. Tap a print service and then tap its **On/Off** switch.

## See and add printers for your Nexus device

### Use Google Cloud Print on Nexus

To see and choose from available printers:


1. Open your device's Settings app .
2. Scroll down and tap **Printing**.
3. Tap **Cloud Print**.

To add a printer or manage print settings, tap More .


You can learn more about [using Google Cloud Print](#).

### Add and use a new print service on Nexus

To add a new print service:

1. Open your device's Settings app .
2. Under "System," tap **Printing**.
3. Tap **Add service**.
4. Enter the printer information.

To use a new print service after adding it:

1. Open your device's Settings app .
2. Under "System," tap **Printing**.
3. Tap the print service, like **HP Print Service Plugin**.

To manage print settings, tap More .

# Print from apps on a Nexus device

How to print depends on the app from which you're printing. Often, you can tap Menu ☰ or More ⋮, and then tap **Print**.

Not all apps support printing. You can always [take a screenshot](#) of an app's screen and then print the screenshot.



## Related links

- [How to print from Gmail](#)
- [How to print from Google Calendar](#)
- [How to print from Google Docs, Sheets, and Slides](#)

# Type text by speaking

On your mobile device, you can speak to enter text in most places where you can enter text with the onscreen keyboard.

## Use your voice to type text

1. Touch where you want to type.
2. In the onscreen keyboard, touch the Microphone key .
3. 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.
4. When you pause, your device's speech-recognition service transcribes what you said into words in the text field. What you said last will be underlined.
5. To delete what you last said, touch **Delete** .

## How we improve voice input recognition

To improve how well your device recognizes what you say, Google may record a few seconds of ambient background noise in your device's temporary memory at any time. This recording isn't stored on your device and isn't sent to Google.

# Use Gesture Typing

With Google Keyboard, you can enter words by sliding your fingers from letter to letter and choosing the suggested words. This is known as Gesture Typing.

## How to use Gesture Typing

1. To open the keyboard, touch where you want to type.
2. On the keyboard, slide your finger across the letters of the word you want. As you slide your finger, words will appear at your fingertip.
3. To enter your word, lift your finger.
4. To enter your next word, slide your finger across its letters. (You don't need to touch the space bar between words.)

## Replace words

To change a word you entered, touch it and then touch a word in the suggestion strip. You can also manually type changes.

## See more suggestions


To see more words, touch and hold a word in the suggestion strip.

## Enter double letters

If there's a double letter in your word, slide your finger over that letter as usual. You'll see suggestions with the double letter.

## Turn Gesture Typing on or off

Gesture Typing is on by default. To turn it off or back on:

1. On your device, open the Settings app .
2. Scroll down and touch **Language & input**.
3. Touch **Google Keyboard**.
4. Touch **Gesture Typing**.
5. Switch **Enable gesture typing** on or off.