

Introduction to Android Tablets and Smartphones

The name "Android" describes mobile devices which use the Android operating system developed by Google and used in many brands of Smartphones and Tablets types and models. Such as Samsung, Sony, Aldi, Huawei, etc.

Other operating systems are Apple (iPad/iPhone), and Windows mobile.

In this introductory lesson we will use the name "Mobile device" to cover both Tablets and Smartphones.

What will be presented in this lesson?

- What your mobile device can do
- How do Smartphones and Tablets compare?
- Using the Main Controls, switching ON
- Switching OFF and/or setting Airplane mode
- Finger tapping techniques
- Wi-Fi or mobile phone tower connection
- What is data, voice and SMS?
- Mobile device major functions

What can a Mobile device do?

Recent model Mobile devices can shoot video, take photos and videos, record audio, play music and videos. Also browse the Internet functions and emailing. Other functions — games, reference, GPS navigation, social networking, etc.—can be enabled by downloading and installing Apps; (applications or programs). The Google "Play Store" is the source of reliable Apps and has more than 800,000 available. Many Apps are free, others can be purchased if you have registered a credit card or bank account with your Google account. The possible applications are expanding every day.

Many paid Apps cost less than \$10. Very few are more than \$20.

How do Smartphones and Tablets compare?

Size: Smartphones range from approximately 3.5" to 6"

Tablets approximately 7" to 10"

Larger phones are often called Phablets - ie cross between phone and tablet.

Functions: Generally much the same, except phones include phone calls and SMS messaging. Some functions have different formats to allow for size differences.

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Using the Main Controls:

Switching ON: HOLD DOWN the ON/OFF button for a FEW SECONDS until there is a small beep and the name of the device appears. The device will start in about 20 to 30 seconds. The ON/OFF button is generally at RH side on the phone, similarly on the tablet, except this is often used in landscape.



Sleep/Wake

Your device is set to sleep after a short time usually 1 or 2 minutes (you can alter this if you wish). You can put it to sleep manually by quick pressing the ON/OFF button. It is desirable to sleep fairly quickly when not in use, to save the battery. The screen is the main user of battery.

To Wake up your Mobile device: Quick Press the HOME button.

The HOME button

Located at the bottom, centre of a phone, left on tablet, the HOME button has several uses, including waking up the Mobile device,

- On some models, if you HOLD the home button, you will be greeted with a list of recently opened applications which you can switch to at any time.



The BACK button The BACK button is one of the most used controls.

Press this button to go back to the previous operation or setting. Press it repeatedly to go back several steps.



Previous apps button

This double-box shaped icon shows recently used apps. This enables swapping quickly between apps.



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Menu button



If you see 3 vertically spaced dashes or dots, this indicates a MENU of selections. Such menus appear in many applications and in some devices at the bottom.

Different button arrangements

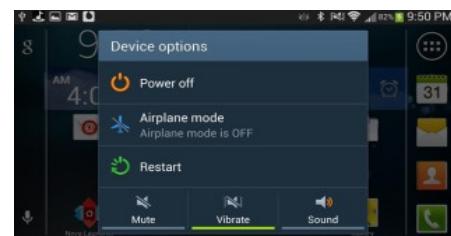
As the Android system developed, differing button arrangements have occurred, but they generally have similar actions.

For this type, hold the Home button to show recent apps.



Switching OFF and/or setting Airplane mode

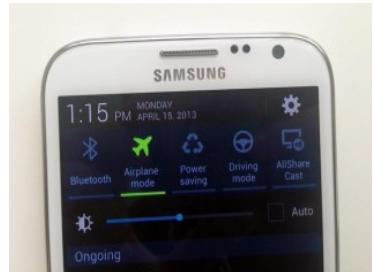
While sleeping, the device still uses the battery at a very low rate. If you are not going to use it for some time you can save the battery by switching off.



Press and hold the ON/OFF button to select--- - Switch off - or - Airplane mode.

Airplane (or Flight) mode

Airplane mode is a setting to stop the Mobile device transmitting wireless signals. This is required when using the device on aircraft and also in many medical situations like hospitals. It stops the risk of wireless signals interfering with nearby essential equipment. It also slightly reduces battery usage.



You can also switch to Airplane Mode on the top tool bar.

You should switch your Mobile device to Airplane mode when required to do so.

Finger tapping techniques

It is important to learn the various finger taps used to control Mobile devices.

The physical switches such as On/Off, volume up/down, etc, require positive pressure to depress the switch, but the screen only requires a very light tap.

The screen responds to the slightest touch.

In fact pressing the screen may actually give the wrong result.

Quick tap: is used to open an app, take an action.

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Tap and hold: is used to Select an app or other item to move, delete or take some other action.

Swipe: is used to drag screens, photos etc. It should be one quick movement without a pause. If you pause before swiping, you may open an app.

Two finger Squeeze: Is used to shrink, or Zoom out a screen.

Two finger Spread: Is used to enlarge or Zoom in a screen.

Multi finger actions: Some Mobile devices have multiple finger (3 or more) controls, we will not cover these at present.

Using a Stylus: Seniors generally have very soft fingers which flatten easily. If you have difficulty tapping, try using a stylus. A pen which uses a special sponge tip.

Some Mobile devices come with an electronic stylus or pen. If your device has one, use this in preference. This is has more functions than a sponge tip stylus.

Connecting to a Wi-Fi or mobile phone tower

To use the full functionality of a Mobile device, you need access to the Internet, There are 2 ways to access the Internet on a Mobile device -

Via local Wifi. This can be your home WiFi or at Shopping centers, motels and other locations. It operates within about 50 to 100 meters of the local WiFi router.

More on this later.



Via mobile tower, this requires a SIM card. For phones it uses a mobile phone frequency, for tablets it uses a mobile data frequency. Both radiate from mobile phone towers, only difference between phone and data, being the setup by the Internet Service Provider and the cost. Using a "data only" connection is very much cheaper than using phone/data. However you can't make calls on a "data only" connection.



All tablets and phones have WiFi built in, but most tablets do not have a SIM card slot. If you require a tablet with a SIM card it will cost about \$150 to \$250 extra.

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Wireless Broadband Router

While you cannot have a SIM card fitted to a Mobile device if there is not the inbuilt electronics needed, you can buy a separate Wireless Broadband Router and a SIM card. This can then be used as a WiFi router for any Mobile device which operate via the mobile phone towers.

These provide a lower cost access to data than a phone.



Setting up WiFi connections

We will explain how to setup WiFi Connections in the Lesson 2, next meeting.

What is data, voice and SMS?

It is important to understand the differences between data, voice and SMS (Small Messaging Service).



Data: Internet access is needed for web searching, downloading or transferring photos, text, email, on line maps, music and video. These use data and use more download capacity.

Voice: is speaking on the phone. If you also use your phone for data it can cost considerably more. Many people have been stung very large bills by using data on their phones. Fortunately you can either have your Internet Service Provider block your access to data, or you can set your phone. Either way ensures you will not get bill shock. If you do use data on your phone be aware of your limits.



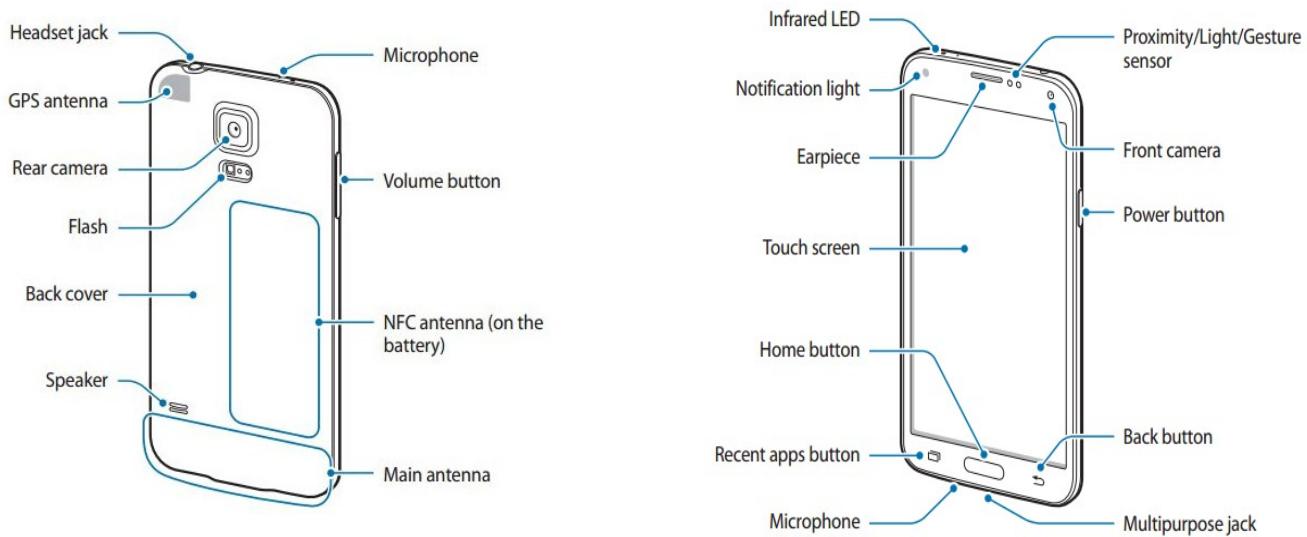
SMS: Is a very low cost way of texting short messages of less than 160 characters. It is part of the phone network. If you have a phone only connection, you can still SMS. It can cost 25 cents or less. You cannot email or send photos on SMS.

Now let us look at main features and functions of typical Mobile devices :----

We will use the Samsung phone and tablet as examples.

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Example - Samsung phone features. Example



Samsung Note 10.1 Tablet controls



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Mobile device major functions/features

Understand your main functions:----

- Sound volume controls - up/down
- Cameras back and front- flash (also used as torch or pulse counter)
- Microphone - speech, sound recording
- Speakers - phone, music
- Micro SD card slot - extended storage, very handy, never run out of memory
- SIM card slot - phone and/or Wireless Broadband (not on most Tablets)
- Battery - replaceable in many cameras, built-in for tablets
- Charging & USB cable port - also used to transfer files to/from computer
- HDMI or USB flash port - if fitted, connections
- GPS - navigation, exercise, location
- Bluetooth - like a short range WiFi only 5 to 10 meters - hands free car, other devices

Next lesson:

- Setting up WiFi connections.
- Setting up and using accounts, Google, Samsung, Amazon, Bank, PayPal etc.
- Passwords
- Setting up Email, Gmail, Thunderbird, Live mail etc.
- Choosing and installing apps, cautions.
- Security settings. Also do you need an Antivirus on not?
- Some very useful apps