

Android mobile devices -- Lesson 3

Cameras

What we will explain in this lesson:-

- Using the Camera

The camera is such an effective tool that we will spend this lesson on that alone.

The camera on an Android Smartphone or tablet is one of the most useful functions/tools available. The quality of the camera should be one of the major considerations when buying a new phone or tablet. Generally the lower the cost of the phone or tablet, the lower the quality and functions of the camera.

- ✓ It can more useful than a normal digital camera, because it is so light and portable that it can be with with you at all times.
- ✓ It has extra tools for transferring pictures and has the ease of displaying them.
- ✓ It is both a still camera and a video camera with sound recorder.
- ✓ The quality is very high, especially with recent models.
- ✓ It can also be used as a a photocopier for documents.
- ✓ It can be used as a magnifier to read small text such as medication instructions, removing splinters or other delicate tasks.
- ✓ It can be used of proof of events, such as a dash cam.
- ✓ It is used for Video calls such as Skype.
- ✓ It can copy instructions and directions.

Photos or videos can be transferred or copied in several ways to PCs, other mobile devices and the Internet. Back ups to the Cloud can be automatic or manual.

Micro SD card slot.

Most Android devices have a Micro SD card slot. This enables storage on a replaceable card so you never run out of storage. This is a major advantage over iPhones and iPads which do not have replaceable storage.

This can be very useful for a holiday trip, wedding, or other social event, where you can keep all your records on a separate SD card.

Flash

All current mobile devices have a flash available. It is also a very useful tool, not just for photos, but as a torch, and can also be used for a heart rate monitor.

Camera settings

There are many settings or controls for your camera. The variety of settings can differ between makes and models. Generally the more expensive, the more available settings and options.

Cameras are generally set by default to "Auto".

While Auto covers a wide range of situations, it is important to use special settings where needed.

On the left we have the **Auto setting**.

On the right the **Night setting** has been used.



General camera usage.

To switch on the camera tap the Camera icon.



There can be a huge range of settings, here is just the main menu for a Galaxy S5.

Behind each of these are more selections.

Picture size is a very important setting. It is available on all cameras now. We will look at that now.



Picture size.

The larger the size, the sharper definition. Larger sizes will be much slower to email or copy. For many situations a large size will not affect the quality as seen. On most cameras, if you reset the size it will remain, even when switched off and on, until you reset it.

Here is a typical set of sizes, ranging from 2.4Mp to 13 Mp. (mega pixels)

The range available generally depends on the cost of the mobile device.

Be aware that 2.4Mp is acceptable for general photo work. My first expensive digital camera had a maximum of 2 Mp!

For general purpose I suggest one of the lower settings.



The photo below was taken on that 2Mp camera and looks excellent even when printed out to a full A4 size.



Size Ratio.

Note:

As well as size, there is a choice of ratios (width to height).

This is important. If you want to print the photos on standard photo paper you should choose one of the **4:3 ratios**. This is also the best selection for **maximum quality**.

Note: the ratio of 13 Mp compared to 9.6Mp.

The 16:9 ratio is best for viewing on current **computers and TV screens**.



Flash

You should have the flash **turned off** for general use.

You **should use it** -

On bright sunny days when snapping a person within 2 to 4 meters. This softens shadows and brightens the face.



Also in dim situations when snapping subjects within **2 to 4 meters**.

Do not use when snapping **objects such as concerts, entertainment or sports events** in dim light. Such shots will generally be much darker as the camera will not adjust for the low light conditions. The flash is only effective for **close ups**.

As a torch

You can use the flash as a torch.

If the Torch app is not already installed, download it from Google Play store.

Likewise you can install a **heart rate monitor app**.

As a Magnifier

There are several apps which use the camera as a magnifier.

How to setup your camera

First choose either **still Camera**



or

Video camera

Tap the Video Icon to select.



Special settings:-

HDR -- High Dynamic Range mode

This is a very useful setting to correct exposure in photos with high contrast.

The camera does not have the dynamic range of the human eye. So many photos are greatly enhanced using HDR mode.



It automatically takes several images in very quick succession, from low to high exposure and then combines them.

There are many settings available. These tend to vary between different makes and models. Refer back to page 2.

We can discuss some of these.

Working with photos

Having taken your photos, you will often need to copy or transfer to a computer, Cloud storage, print out copies, or share with others.

There are many ways to do this.

Printing

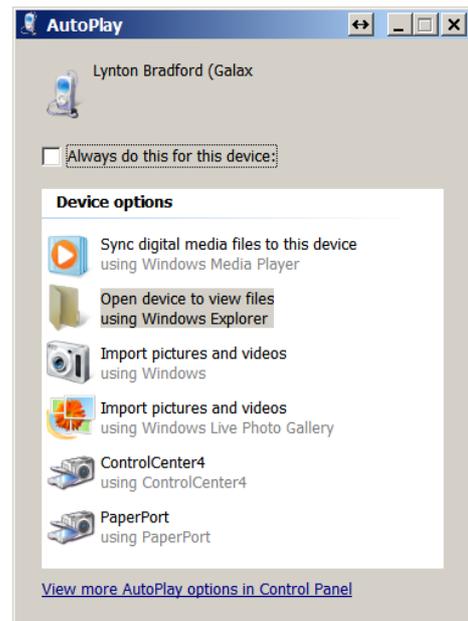
If you have a wireless printer you can set up your mobile device to print wirelessly when within range of your printer. Otherwise you will need to copy them to your computer and print from

Copying photos to Computer with cable

Connect a USB to Micro USB cable from phone or tablet to the computer.

You may get a screen saying "Connect USB?" or something similar. If this appears accept it.

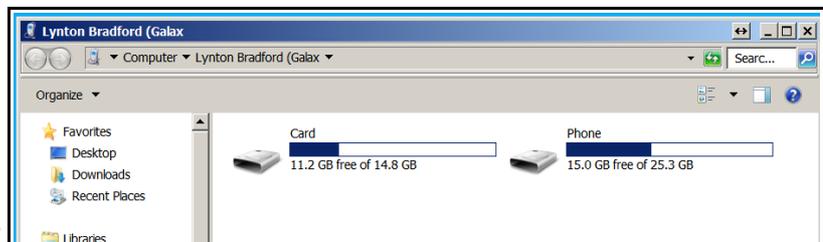
After about 10 to 15 seconds this window should pop up. Click on *Open devices to view files*.



The next screen should show 2 folders --- *Card* and *Phone*.

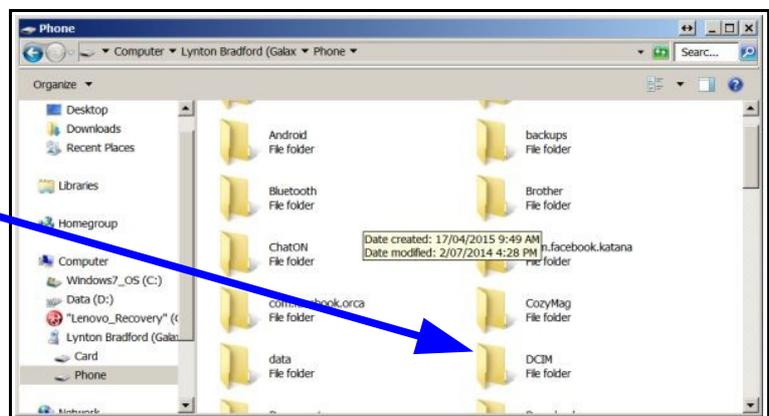
Note: *Card* will only appear if you have a micro SD card in your phone or tablet.

Your pictures may be saved either on your phone/tablet or *Card*.

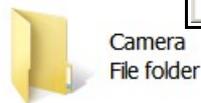


Find a folder called *DCIM file folder* and click on it.

Within that folder is a further folder called :-

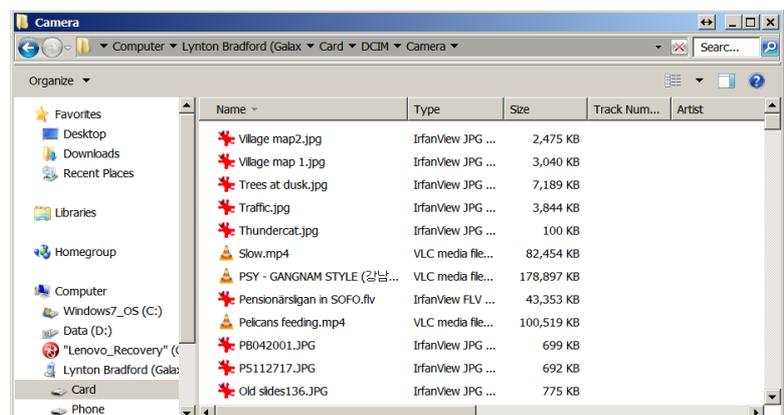


Camera file folder,



Click on that to show all your pictures.

You can now copy and paste, or move pictures to your computer.

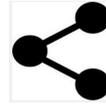


Sharing

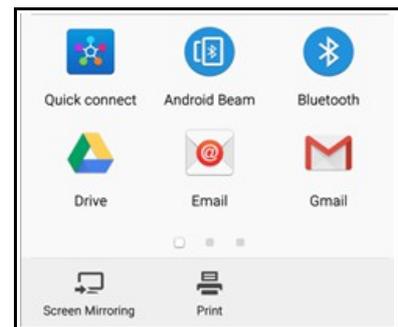
There are many ways to "share" a photo.

With a photo open there are various share options.

This is the "Share" icon, clicking that will open the options available on your mobile device.



Here is an example of the choices, including Bluetooth, Drive (cloud storage), email, Gmail, print and others.



If you are connected to the Internet, you can save your pictures to a "Cloud" storage service like "Drive", "Dropbox" or many others. You do this by choosing "Share".

You can then access your photos, from anywhere you have Internet Access.

http://eguides.sprint.com/support/eguides/samsunggalaxytab3/index.html#samsung_galaxy_tab_3_ug/share_photos_and_videos.html#_Toc392692906%3FTocPath%3DCamera%20and%20Video%7CGallery%7C_____2