
Film and New Media Resource

Explanations and examples of common filmmaking terms and tips

Aperture

Aperture is a component of a wide depth of field. It is the amount of light which comes through a camera lens. Aperture is represented as a number, and appears with an 'f' before it. Eg, f11, f1.8, f5.5 etc. The smaller the number, the larger the aperture, and the more light can be let in.

Aspect Ratio

The aspect ratio refers to the ratio of the width of the image to its height, expressed as two numbers separated by a colon. 4.3 screen ratio is being phased out, so if you are able to record in 16.9 or *Widescreen* do so. You must also use consistent aspect ratio whilst filming to maintain a high quality end product. When editing, you will have to edit in the same aspect ratio you have recorded in, so be sure to select the right ratio on your editing software.

Atmos/Ambient Sound

Atmos refers to the sound of the environment or location. For each location that you use it is a good idea to ask everyone to be quiet and record 2-5 minutes of atmos at the end of filming. Recording atmos is essential for sound editing. Sometimes you might have recorded great overlay vision but a plane was flying over at the time or a truck went past. You might be able to keep the vision but remove the audio in the edit and replace it with atmos in addition to creating a layer of ambience beneath any voice over's which will subtly smooth out any Rough Cuts and creates dimension.

Bins

Bins are folders within a project that can contain clips and sequences. A bin is like a drawer in a filing cabinet. You use bins to organize these elements, sort them, add comments, rename items, etc.

Camera Tips

Batteries – Ensure you have adequate batteries for the entirety of the time you plan to record.

Tapes – If your camera takes tapes, bring extras with you and rewind them beforehand.

Memory – If your camera is digital, bring extra memory cards.

Camera Safety

Dirt – When dirt gets inside your camera it can cause problems with the mirrors, electronics and moving parts. Avoid dusty areas like horse races, beaches and motocross by putting a bought or handmade large zip lock bag over the camera, and securing.

Shock – Very few cameras can resist a fall on a hard surface, so it is best to avoid shock by;

- ensuring there are no broken straps
- never placing the camera on unstable support
- ensuring the camera bag is tightly secured

Water – Unless the camera is waterproof, keep it out of any form of liquid, and if it does happen to come in contact with more than a few drops, open the camera (if possible) and let air dry without touching any of the workings and if possible, take it to a professional repair shop.

Capturing/Digitising

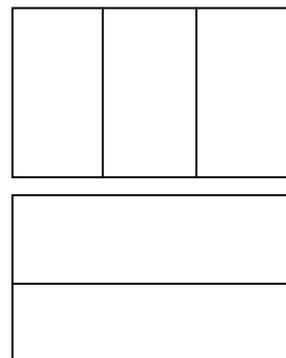
Transferring rushes from your video camcorder or deck to your computer's hard disk, which creates media files.

Clips

Clips represent your media, but they are not the media files themselves. A clip points to, or connects video and audio to easily allow you to cut, trim, rearrange, and sort your media without manipulating it directly.

Composition

Composition refers to the way elements in a shot are arranged, in relation to each other and where each element appears on the screen. The *rule of thirds* is commonly used to help create interesting images. Cut your frame into thirds vertically and horizontally and place the elements of your image on these lines. When the subject is not in the direct centre, it is often more aesthetically pleasing.



Copyright

Copyright is a set of exclusive rights granted by a state to the creator of an original work or their assignee for a limited period of time in exchange for public disclosure of the work. To ensure you fully understand copyright, please visit Copyright Australia's comprehensive website <http://copyright-australia.com>

Coverage

Coverage refers to the variety of shots that cover the action in a scene. A director, in discussion with the camera department, must decide how a scene will be covered.

Crane Shot

Crane shot is when the camera moves up or down, as if it were on a physical crane. The same considerations for *panning and tilting* apply for crane shots.

Depth of Field (DOF)

DOF is the area in front of the camera that is in *focus* at any one time.

A wide DOF means many elements are in focus at a time, while a shallow DOF means only one or two elements are.

- Small aperture number and a long lens = a very shallow depth of field
- Large aperture numbers and a short lens = a very wide depth of field
- This is important to remember for **Pull Focus** shots.

Dolly and Tracking Shots

A dolly is a small wheeled vehicle, piloted by a dolly grip, that is used to move a camera around in a scene. A dolly shot is a movement parallel to the camera lens axis while a tracking shot is perpendicular to the camera lens axis. The key is creating realistic stops and starts.

Editing

Involves taking the video and audio you've captured, along with any music or graphics you've imported, and arranging these raw materials into a final edited sequence of clips.

Exporting

Once you have finished editing the film, you need to export the video for it to save into a readable file. The Quicktime file type will have a *.mov* extension on the end of your filename. This is the most readily accepted format for any digital medium.

Here's the list of some well-known formats, which YouTube also supports:

- WebM files (Vp8 video codec and Vorbis Audio codec)

- .MPEG4, 3GPP and MOV files - (typically supporting h264 and mpeg4 video codecs and AAC audio codec)
- .AVI (Many cameras output this format - typically the video codec is MJPEG and audio is PCM)
- .MPEGPS (Typically supporting MPEG2 video codec and MP2 audio)
- .WMV
- .FLV (Adobe - FLV1 video codec, MP3 audio)

Fine Edit

A fine edit is where we start to go back through and work out how to “trim” the shots so that they cut together smoothly.

Focus

Most cameras give you the option to set the camera to manual focus. If you are using manual focus then you need to check your focus. To do this you zoom in as far as possible, eg onto someone’s eye, focus on this element, then zoom out again and frame your shot as you wish. Your shot will now be correctly focussed.

Format

Remember that video is always in landscape format. It is incorrect to film a portrait style of image. It is inherently a landscape image and should always be in this style of *aspect ratio*

Gain

Gain is the electronic boost of an image. It is used in low light conditions to increase the exposure of dark shots, however, it also degrades the image adding noise or pixilation to the image. There may be times where you must use gain to achieve a decent exposure but you must know the consequences of using this feature and use it thoughtfully.

Hard Drive Space

Video takes up a lot of hard drive space on your computer so you have to plan ahead and allocate sufficient space for your project. As a rough guide it takes 13 gigabytes (GB) of space to store about one hour of video in standard (DV) format and 40 GB for video in high-definition format (HD), so make sure your hard drive has enough available storage space for the video you’re importing.

HDV and DV

HDV and DV refer to formats for filming. HDV stands for High Definition Video, while DV refers to Standard Definition Video. If possible and applicable, always use HDV for a quality end product.

Logging

The process of viewing your rushes and identifying which shots you want to capture to your hard disk for editing.

Manual or Auto?

It is strongly encouraged to use your camera in manual mode. The only way you will be able to adequately shoot your film in auto is if the environment you are working in is completely stable. This means the lighting is completely consistent throughout the whole time you are filming. We strongly encourage you to read your camera booklet or manual and practice to master this technique.

Media Files

Media files are raw materials you use to create your movie. A media file is a video, audio, or graphics file on your hard disk that contains footage captured from videotape or originally created on your computer.

Neutral Density Filters

Some more advanced cameras have what is called neutral density filters. These are used in very bright conditions i.e. outdoors on a bright sunny day.

Over the Shoulder (OS)

OS refers to when a shot is taken from over the shoulder of the subject.

Panning and Tilting

For both these shots, the camera is stationary and rotates in a horizontal (panning) or vertical (tilting) plane. Panning is used to follow a moving object or character or to show what cannot fit into a single frame while tilting can be used in a similar way.

Point of View (POV)

POV refers to when the camera is the eyes of the subject and shows us their point of view.

Project

A project contains all of the clips and sequences you use while editing your movie. A project file acts as a sort of database or filing cabinet for organising aspects of your edited movie. A project does not contain any media at all, which keeps it small and portable. You can make regular backup copies of your project without filling your hard disk.

Recording Format

Recording Format refers to way a video image is compressed. The recording format can be found in your camera manual and is important information for your filming and post-production. You need to set the correct format when you start to edit your projects. Though all cameras differ slightly, two key formats are HDV and DV.

Rendering

Rendering in an editing program means smoothing out all the cuts and trims you have applied and integrating the audio with the visuals so it runs smoothly in play back. Most edits require one.

Rough Cuts

A rough cut is literally all of the shots in your shot list listed in order of sequence. Once this is done, you can progress to a Fine Edit.

Rushes/Raws

Your tapes or disc or SD card and so containing all the raw, unedited footage you have filmed.

Sequences

Is essentially the movie you are editing. A sequence is a container for editing clips together in chronological order. The editing process involves deciding which video and audio clip items to put in your sequence, what order the clips should go in, and how long each clip should be.

Shot sizes

Shot sizes are the basic building blocks of film and TV. It refers to the size of the image in relation to the subject. It's important for all members of the production team, cast and crew, to have the same understanding of what each shot size represents.

Here are some examples of shot sizes.

In addition there are other types of shots which can be used;

- Pan – horizontal movement of the camera from one side to another (camera left or right)
- Tilt – Vertical movement of the camera, up and down
- High Angle (HA) – The camera is placed above eye level and is looking down
- Low Angle (LA) – The Camera is below eye level and is looking up
- Handheld (HH) – A tripod is not used and the camera operator simply holds the camera in their hands.

Shutter Speed

In video cameras, the term refers to how often the information is recorded and saved. For example if the shutter speed is 1/50, this means that every 50th of a second, all the current camera information is saved

A slower shutter speed like 1/6 is going to allow more light to come through and give you better low light properties, but not record as much detail in the image and create a motion blur where the image seems to be trailing or ghosting.

The higher or faster the shutter speed, the more detail you're going to get, because you're recording the information more often. This is used commonly to record fast moving objects like a car. If you were filming a helicopter at 1/60th of a second, you won't see the blades. Move it up to 2000 or 4000 or even 10000, and the blades not only become visible, they look like they are standing still, an effect you may not want to create. You need to be conscious of the effect you want to create and manipulate the shutter speed accordingly.



Very Long Shot (VLS)



Long Shot (LS)



Medium Long Shot (MLS)



Mid Shot (MS)



Medium Close-up (MCU)



Close-up (CU)



Big Close-up (BCU)



Extreme Close-up (ECU)

Software

Software refers to computer based programs which you can install and use to do various things. Some affordable options for video editing software include;

Windows Movie Maker –

<http://www.microsoft.com/windowsxp/downloads/updates/moviemaker2.mspx>

iMovie – <http://www.apple.com/ilife/imovie/>

More advanced software includes Final Cut Pro - <http://www.apple.com/finalcutpro/top-features/>

Television System

There are different television systems all around the world. In Australia we use PAL so make sure you record and edit a PAL film. If you bought your camera in Australia then it is most likely to be a PAL camera and once again you need to maintain this setting when you go to edit.

Transitions

Transitions can occur from one camera angle, zoom or DOF to another. The main goal is to provide a fluidity between different shots in a playback. Experiment with transitions to achieve the desired effect.

[ AUTO]*
Settings are automatically set by the camcorder. Use this setting for outdoor scenes.
[ DAYLIGHT]
For recording outdoors on a bright day.
[ SHADE]
For recording in shaded places.
[ CLOUDY]
For recording on a cloudy day.
[ TUNGSTEN]
For recording under tungsten and tungsten type (3-wavelength) fluorescent lighting.
[ FLUORESCENT]
For recording under warm white, cool white or warm white type (3-wavelength) fluorescent lighting.
[ FLUORESCENT H]
For recording under daylight or daylight type (3-wavelength) fluorescent lighting.
[ SET]
Use the custom white balance for special situations not covered by the other options. The custom white balance will ensure that white subjects appear white under various lighting conditions.

White Balance

The white balance function helps accurately reproduce colours under different lighting conditions so that white objects will always look truly white in your recordings. Because the camera does not know automatically what white is, we have to do a white balance for each different location. Most cameras have a number of automatic white balance settings as well as the ability to set a manual white balance. Being able to set a manual white balance will give you the greatest control of your image.

Youtube

Youtube is a video-sharing website where people can sign up, upload, share and view videos. You can sign up via an existing Google or Facebook account or simple via the website. To create a Youtube account;

- Visit www.youtube.com and click on 'Create Account' in the upper right hand corner of the window.

- Enter a valid e-mail address and choose a unique username to which you can access Youtube and press 'I Accept'

Don't forget about Youtube's *Policies* and *Copyright*

- http://www.youtube.com/t/community_guidelines?hl=en_US

- <http://www.youtube.com/t/terms>

- http://www.youtube.com/t/howto_copyright

- <http://copyright-australia.com>