**TRAINING ON CAME HANDLING AND BASIC SETTINGS FOR SHOOTING**

**AREA OF CONCENTRATION**

**Basic tips for handling a video camera**

**Major kits for shooting and filming**

**Two major factors to be considered before shooting**

**Do’s and don’ts for making videos**

**BASIC TIPS FOR HANDLING A VIDEO CAMERA**

First of all, there are 4 ways to handle your camera to shoot and film videos.

1. Stabilizing (Fixing
2. Panning / Tilting
3. Zooming in & out / Focusing in & out
4. Tracking / Dolling zoom

Each way has distinctive characteristics, and these skills give video clips quite different effects.

It is most important to shoot videos with appropriate ways to handle your video camera along with themes and effects you want to obtain

● **Stabilizing (Fixing)**

The technique of shooting videos with your camera fixed on somewhere and without moving it is called “Stabilizing (Fixing)”.

This skill is quite fundamental for taking video clips.

Basically, it is recommended to shoot fixing your camera on a tripod or something else so that videos will not blur unnecessarily.

Another way to fix your video camera is to shoot holding it with your own hands.

We sometimes use this way intentionally in order to make a subject look swinging or to get viewers of the video feel swinging subtly.

How to swing your camera

● **Panning**

This is a technique of shooting videos in a sequence swinging your camera from the left to the right or in the opposite direction.

* Exactly speaking, Swinging from the left to the right is called “panning” and the opposite direction’s one is called “opposite panning”.

**▲ Effects**

This way of filming videos is effective when you want to

Show how large the space is, such as landscape.

Show details of a horizontally long subject.

Show positions of plural subjects.

Show the view is sliding horizontally.

Follow a subject sliding horizontally.

**Tilting**

Tilting is when you move the camera vertically, up to down or down to up, while its base is fixated to a certain point. Again, like panning, this move typically involves the use of a tripod where the camera is stationary but you move the angle it points to. These shots are popular when introducing a character, especially one of grandeur, in a movie.

Shaking a camera vertically is called “tilting” while panning is swinging one horizontally.

Moving you camera up from the bottom is “tilting up”,

And down from the top is called “tilting down”.

▲ **Effects**

This way of filming videos is effective when you want to

Show a subject that is longer than its width such as a high-rise building.

Show details of the whole figure of a person.

**● Zooming in & out**

Zooming is a technique to change the focal length of lens,

And changing the focal length from a wider view to narrower one (telephoto state) is called “zooming in” and conversely from a narrower view to a wider one is called “zooming out”.

▲Effects

Zooming in is effective when you want to

Show details of certain subjects

Attract attention of viewers to certain one subject.

Zooming out is effective when you want to

Show in a wider perspective the situation where certain subjects are.

Distract viewers from subjects they pay attention to.

**Focusing in & out**

Focusing is, as the name indicates, a technique of handling lens to change the point in focus in your video intentionally so that viewers will see only area that you want them to see.

Focusing in means making a subject focused gradually from a blurry state.

Conversely, focusing in means making a subject blurry gradually from a focused state.

▲ Effects

Focusing in is effective when you want to

Show someone (something) is waking up or remembering something.

Focusing out is effective when you want to

Show someone (something) is fainting away.

**MAJOR KITS FOR SHOOTING AND FILMING**

**Steadicam, Floating Cam, Or Stabilized Shot**

A steadicam is a wearable device that gives the shot stability while providing you with the flexibility of a handheld shot. The operator holds the camera mounted to the device while capturing a smooth, flowing shot around a central subject or character. When you perform this camera movement, make sure to use the range of motion you have to your advantage. This shot can be used for a wide variety of purposes, including to follow characters across uneven terrain.

**Crane Or Jib**

A jib is the projecting arm of a crane, but both terms are used to describe this type of shot where the camera is lifted to a high shooting position by a moving crane or jib. The jib extends the camera over an area, letting it move in various directions to get the shot. It’s best used for establishing shots since it helps set the scene.

If you want to take your camera to new heights, use a drone for this camera movement to give you an aerial perspective. This type of camera movement is often used when you want to show a massive crowd or to move up and away from the actors.

**Video Camera**

A video camera is the centerpiece of your filmmaking gear package. What camera you choose depends on your budget, the type of shooting you're doing (static, stealth, run-and-gun, etc.) and where you plan to showcase your film (web-only, theater, broadcast, etc). You can shoot a documentary on anything from your iPhone to a DSLR to a top of line digital cinema camera such as the RED. Whatever camera you choose, make sure you capture excellent audio.

Tripod

A necessary piece of equipment to keep your footage looking steady and professional.

Get a tripod with a fluid head for smoother looking pans.

**Camera Light**

Sometimes a nice pop of light from the camera can help fill in ugly shadows. A camera light is a nice accessory to have especially in a documentary/news style shoot where you might not have time for a full 3-point lighting set-up.

**Three-Point Lighting Kit**

You only really need a lighting kit if you're planning to do a lot of shooting inside. Creating a well lit scene usually involves a 3-way lighting set-up.

**Shotgun Microphone**

Great audio often separates the pros from the amateurs. Having a shotgun mic prepares you for almost every situation. It's perfect for setting on top of your camera or a boom pole.

**Boom Pole**

A boom mic set-up comes in handy to capture audio from a group interview, crowd scenes or any situation where you need to gather professional audio quickly. In addition to the boom pole (right), you'll need a **[shockmount](https://amzn.to/2PWWytm" \t "_blank)** and a [**shotgun mic**](https://amzn.to/2HVXU10).

**Shock Mount**  
Here's the simple gadget needed to turn your shotgun mic into a boom pole mic. A **shock mount** keeps the mic steady on top of the pole and prevents the mic from picking up "bumping" sounds when the pole is moving around.

**Audio (XLR) Cables**

If you plan to use a professional audio set-up with your camcorder, you'll need XLR cables to go from your camera to the mic.

**Wireless Microphone**

Sure, you can use a "wired mic" which is a bit less expensive, but I wouldn't go on a documentary shoot without my wireless microphone. Unless you have an audio person who can hold a boom mic, this is the next best thing providing tons of flexibility for walk-and-talk interviews with your subjects.

**Portable Digital Audio Recorder**  
If you decide to shoot your documentary with a DSLR or smartphone, it's highly recommended that you either get an external mic or portable audio recorder such as the [**Zoom H5**](http://www.amazon.com/gp/product/B00KCXMBES/ref=as_li_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B00KCXMBES&linkCode=as2&tag=filmmaking-gear-20&linkId=XPN2JK6BE5IYV6MG) (left).

**Headphones**

Getting great audio means monitoring the sound at all times while shooting. Find a good quality, comfortable set of headphones to make sure you avoid any nasty audio surprises when you get back from the shoot  
This is a must-have item for your documentary filmmaking kit. A light reflector can turn an ugly amateur-looking shot into a golden and gorgeously lit scene.

**Lenses: Wide Angle, Clear "Protective" Lens, Polarizer, Zoom Lens, Macros, etc.**  
Have you ever seen those cool fish-eye scenes? That's from using a special wide angle lens. If you're shooting in super sunny situations, an ND filter or circular polarizer can dramatically improve the image. Or what about super close-ups of a bug or flower, that's when you need a macro lens.

**3-4 Extra Batteries**

You never want to get caught without enough batteries out on a shoot. Unless you're heading out into the Amazon, 3-4 extra batteries should be enough for most shooting situations.

**External Hard Drive**

A portable hard drive comes in handy if you plan to do a lot of shooting in the field and need to offload your footage from your camera's memory cards.  We love the rugged lacies (left).

**Video/Photo Camera Bag**

Of course, now that you have all your gear, you need something sturdy and weatherproof to put it in. Lots of great choices here. Just pick something you like that fits the type of shooting you plan to do.

**Shoulder Mount Rig**

Putting your camera on a shoulder mount can add a nice professional touch. It's especially helpful if you don't want to use a tripod and a rig creates smoother-looking footage in a "run-and-gun" shooting situation.

**Two major Factors To Be Considered Before Shooting**

**Time Your Shots**

Here are a few videography tips from professional cinematographers that you may not find in many how-to articles. Keep your shots longer than five seconds but not longer than 10 seconds to effectively hold your viewers’ attention. At the same time, remember to keep your shots steady for at least 10 seconds — no panning or zooming before then. Many beginners find these to be extremely helpful in minimizing camera movements, reducing recording time, and keeping their sequences simple during post-production

**Shoot to Edit**

This particular “pro tip” simply means that you should think like an editor when filming. When recording a scene, you’ll want to capture several angles and a few “safety shots”. This means you’ll have choices later when creating your final cut. This will save you time and effort that you might otherwise spend on refilming. Plus, it will prevent you from settling for subpar shots that will make your work look unprofessional.

And when you edit, use a simple video editing software that you can get used to before moving on to more complicated programs. You can learn from our video editing tips, which includes simple yet professional techniques aside from the simple cutting, clipping, and correction of video clips and audio levels.

**Camera Settings for Video Making**

**The Exposure Triangle**

Before you hold your camera and begin shooting, sit down with a notepad as you ought to know about the magical elixir of filmmaking and photography- the exposure triangle. Aperture, shutter speed and ISO are the three arms of the exposure triangles. They work hand in hand to produce the best quality of pictures and videos by giving them the right exposure to light. These three aspects control and regulate the amount of light entering the camera. Learn the various styles of videography.

**Aspect ratio**

Aspect ratio is nothing but the length/width of a shot. It plays a crucial role in storytelling. Common aspect ratios include 16:9, 1.85:1, and 2.39:1 for video. Whereas, 4:3, and 3:2 for still photography. While there is no “best” aspect ratio, you have to choose the right one depending on:

**Aperture**

Aperture in DSLR or CSC camera decides: The amount of light exposure for a photograph or video

The look of your video – the depth of field, to decide exposure, the aperture opens and closes to let more or less light in. aperture is defined in F-stops. The lower the number, the wider the aperture and more light come in. For the look and feel of the video, aperture decides the depth of field- the amount of scene in focus in front and behind of the thing in focus.

**Shutter Speed**

Shutter speed affects exposure. It is a way to creatively blur or freeze motion in your production. When light travels through the camera lens, it goes through the aperture and reaches the shutter. Here, the shutter plays the role of a curtain that blocks the light out from the sensor. When you press the button on your DSLR to record or click a picture, it lifts up the curtain. This is the phenomenon of shutter speed and is represented as a fraction of a second like 1/30th of a second, 1/50th of a second, 1/100th of a second and so on. When you increase the shutter speed, less light can enter. Therefore, shooting a video at a slower shutter speed (say at half a second or a full second), it will create overly exposed pictures or recording and vice versa. Hence, shutter speed is essential to create the mood of the video you are going for and can be adjusted as per the lighting in your surroundings. Remember that a slower shutter speed is equivalent to more light/exposure and is ideal while shooting in darkness. While a faster shutter speed lets in less light and is perfect to shoot in excess light. To shoot a moving object, and capture a blurless motion, a faster shutter is best to freeze the picture.

**ISO**

The shutter speed, aperture and ISO is the dynamic trio in photography. Within this trio, ISO shows how sensitive your camera is to available light. A high ISO indicates your sensor’s sensitivity to light. When you increase your camera’s ISO it produces a very grainy image called noise. This noise is in the form of very visible pixels. If you aren’t going for that effect, stick to your camera’s base ISO (generally 60 or 100) to produce high-quality videos and pictures. Ideally, go for a lower ISO in bright light and a higher ISO in low light. But solely depending upon ISO for lighting/exposure is not right. Use natural or artificial lighting to properly expose your subjects.

**DO’S AND DON’TS FOR MAKING VIDEOS**

***Do’s for video production***

**DO have good lighting.**

Good lighting is probably the single biggest determining factor in the quality of your video image. Well-lit subjects shot with an average camera will produce a better picture than poorly-lit subjects shot with a high-quality camera.

**DO have good sound.**

Viewers will put up with poor image quality before they will tolerate poor sound quality. If they cannot hear your video, they will click out of it.

DO use a tripod,Monopod,track dolling, steady cam, shoulder mount e.t.c

Shaky video has to be controlled to be interesting. Otherwise, it’s just shaky video. Use a tripod or other stabilization techniques.

**DO plan.**

Write the narration. Plan the shots. Have a vision for the editing. Plan the shoot. Scout the location. The more you plan ahead (called pre-production), the better the video will turn out.

**DO keep it organized.**

As you shoot, create and use a system of organization for the footage. Naming the raw files to identify the project and the shots is helpful for editing.

**DO backup**.

Keep multiple copies of raw footage and edits as you go. A dedicated hard drive is recommended.

**DO emphasize the visuals.**

If you watch the evening news, you’ll notice that what you’re really paying attention to is the video, not the script. The script does enhance the video, but at the end, you remember what you see more than what you hear.

**DO keep it short and concise.**

If your topic is complex, such as explaining the world’s political conditions that lead up to World War II, then two hours would be concise. But most online videos should be simple enough that one or two minutes would be sufficient. Base the length of the video on its ability to keep the audience’s attention.

**DO keep it simple.**

Video projects both big and small should start with a clear storyline, if it’s a narrative, or an objective, if it’s a presentation or something similar. Having a clear objective for your video can be very simple and useful and will save time and energy.

**DO make decisions based on the audience’s needs and/or desires and not yours.**

The video is really for them, not you. Who will be watching your video? What do you want them to do as a result of viewing your video? Now ask yourself what is the most critical thing you can show them in your video to reach this outcome? That is your objective.

**DO pay attention to storytelling.**

Storytelling is the mission of any video. Imparting your message, i.e. story, is the heart and soul of video making.

**DO vary your shots.**

Variety keeps your audience awake. Use a variety of shots, including long shots, medium shots and close-ups. Use shots that show motion rather than just a static image of someone talking. Edit with a flow and a pace in mind. Add background music, making sure it’s properly balanced to emphasize the narration or voiceover. Watch other videos to get ideas for your own.

**DON’T take your audience for granted.**

No one (except your mother) will watch your video simply because it exists. Please your audience.

**DON’T be too static.**

Avoid showing just a single person sitting in front of a camera talking.

**DON’T be too restless.**

Constant zooming, panning or cutting between moving shots can give your viewer a headache. Mix motion with easy-to-view still shots to keep audience interest and focus

**DON’T say everything.**

Let the visuals tell some of the story. If you can show it, don’t say it. It makes for more interesting video.

**DON’T shoot from a million miles away.**

Get close up to the subject. Fill the frame. Be aware of every inch of space. Don’t let anything into the frame that distracts from the subject or scene focus.