

The cell phone camera is nearly ubiquitous and most smart phones can output good, high definition footage. While this is the case, it's also important for the camera operator to understand how this tool works and to have knowledge of some basic videography rules. Here are a few tips and tricks on how to use your cell phone (or Flip-style) camera to capture solid, documentary-style footage. Many of these tips will be useful whether using a cell phone or camcorder.

- **Audio**

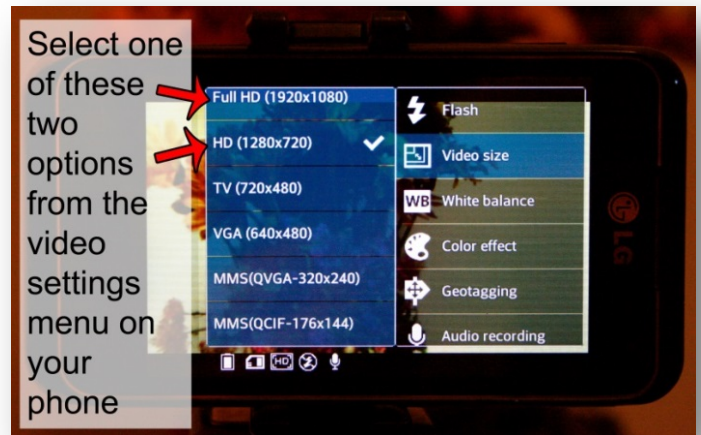
- Getting good audio is very important, but is difficult to do at events. Try these tricks:
 - Move slightly away from the crowds
 - Move in closer to your subject
 - If they are a soft talker, ask them to speak up
- Consider purchasing a Cell Phone Microphone or Microphone Adaptor

- **Lighting**

- Is the room bright enough? If the light seems dim to your eyes, it is likely too dark for your camera. Move to a brighter room if possible
- Don't back light your subject - avoid placing bright lights, windows or other light sources directly behind your subject (unless you're going for the *Unsolved Mysteries* silhouette)

- **Camera operation**

- Video Quality Settings
 - *Cell phones have either HD or Full HD options. Choose, at minimum, the HD settings for a good quality video.*
 - Full HD (1920 x 1080p)
 - HD (1280 x 720p)
- Crop Settings
 - *To ensure a seamless video, stay consistent with your crop settings.*
 - Wide (16:9)
 - Regular (4:3)
 - Square (1:1)
- Stabilization
 - Hold camera steady. Tucking your elbows into your body and using a "defensive stance" will turn your body into a natural tripod
 - If you can, use a tripod or monopod for stabilization.
- Orientation
 - Make sure to keep your phone flipped to landscape mode, not portrait. Filming in the portrait orientation will create "black bars" on either side of your shot.



- Record a few seconds before and a few seconds after the action
- B-roll is supplemental or alternate footage that gets intercut with the main shot in an interview or documentary film. Basically, b-roll covers the details of all the stuff around your subject - shots of a robot on the field, for example. Here are a few guidelines:
 - You can never have too much b-roll
 - Shot length should be at least 10 seconds, longer if action directs

Tips for Shooting Quality Cell Phone Videos

- Try different camera angles when shooting b-roll. Shoot low, high, close-up, then get closer
- **Framing an interview**
 - When shooting an interview, it's important to make the shot look nice
 - Use the rule-of-thirds to position your subject (watch the YouTube clip below)
 - Find an interesting, but not overly distracting, background. Make sure there isn't anything there you don't want - i.e. unsafe situations, horseplay, overly messy pit areas, etc.
 - Pay attention to the amount of space between the subject's head and the top of the frame (called head room). Eyeball this, but it should be about 10% of the total height of the shot
 - Everything is shot in widescreen, so hold your phone horizontally. Or, if you want to think about it this way, how would your shot look on your TV at home?

Common mistakes

- Avoid zooming in and out with your camera. There are several reasons:
 - Your cell phone camera likely only has digital zoom. This means it isn't actually zooming, but is simply magnifying the pixels, which results in poor image quality later
 - Zooming in and out during a shot can make the viewer uncomfortable
- Walking/moving shots
 - Avoid these as much as possible, as they create shaky, unusable footage
- Back lighting and Background - As mentioned before, make sure your subject isn't directly in front of a bright light and that the background isn't overly busy or distracting

Online Resources

- Here's a short video on the building blocks of documentary-style shooting: <http://www.youtube.com/watch?v=ZCCSEVtkY7E&feature=youtu.be&t=3m18s>
- Online Guide to Smartphone and Tablet Video: <http://www.mediacore.com/blog/ultimate-guide-to-smartphone-and-tablet-video>
- Android Smartphone Filming: <http://thenextweb.com/creativity/2014/07/27/shoot-edit-upload-movie-android-smartphone/>