

# Multimedia Production Aids

Inexpensive DIY tools so you Look Great & Sound Great

Three biggest problems in Multimedia are the same as in TV & Film. In summary you have to...

- Look good with sufficient lighting [cheap solutions available]
- Sound good, preferably without head gear
- Have good engaging script which leaves audience curious as to what happens next.
- then, later pre-record sections of your presentation for best consistency with less manual effort

In this short TIPS guide we will try to help you achieve 85%+ score on top 3 points + #4 pre-record.

## #1 Lighting matters



Good

Audience wants to see you clearly. Sometimes it's quicker for your viewer to understand by holding up something and pointing to what's being discussed. (think of a YouTube cooking lesson).

Everyday lighting is *unbalanced* causing shadows with darkness making images boring. To correct the lighting your DONT need expensive professional light kits. In proper lighting the White's are bleach white, Yellow bright yellow, Red is red.

**Any Darkness = Unhappy Viewers**

What you DO need is called “Bi-Color’ LED lighting which is preferably a lighting ring to give you a bright balance image of your face. The ring is similar to makeup mirror with hole where the mirror



Light ring of Yellow/White LED's with adjustable color to look natural **with No Shadows**



In lighting the terminology is ‘*Color Render Temperature*’ which goes from Yellow’s to White to Blue tints.

3200K      4000K      **> 5000K <**      6000K      6500K

Coloring of light is called the ‘Kelvin’ Temperature

Your target is 4500K to 5000K range

Depending on the brand & mounting stand you buy the costs go \$29.00 up to \$1,000 (ProVideo).

All you need is **Bi-Color LED lighting ring** providing mixed color with 12-18 inch diameter ring of LEDs which is also capable of holding your phone (as camera) shooting through the center while lighting up your happy face. Expect doing some playtime & experiments with few different settings for your best look.



Some sample links which showed inventory available on 23 March 2020  
Your search keywords are “*iphone led bi-color light ring*”

<https://www.adorama.com/I/Photography/Mobile-Photography/Mobile-Photography-Lighting>

<https://www.bestbuy.com/site/searchpage.jsp?id=pcat17071&st=ring+light+stand>

<https://www.bhphotovideo.com/c/buy/LED-Light-Sources/ci/12248/N/3988591953/Ntt/LED+ring+light>

<https://www.target.com/s?searchTerm=bicolor+led+lighting+ring+video+photography>

Sources we trust offer easy returns with long history of honoring the warranty even if manufacture is not. BestBuy.com, Target.com, Adorama.com, and the awesome BHvideo.com have US inventory. It's reasonable to spend \$40 to \$80 depending on brand & type of stand provided. Setup the light ring stand on your desk.

\* Non-US sellers need to be avoided during this China novel corona situation. From our past experience all **lighting on cheaper end does fail** so stick with well established seller to avoid having to buy twice.

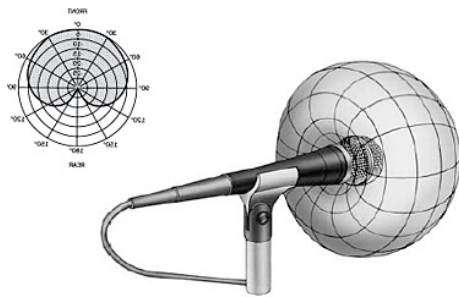
## #2 Sound matters

High quality sound is based on a good microphone. Lets calibrate ourselves to the basic differences in microphones so you will be happy with your choice.

**In noisy environments** *Electret* microphones screen out side & background noise.

Advantages: mutes Side & Background noise

Drawback: Distant hollow sound



**In music production** *Condenser* microphones pick up all the rare tiny sounds for a rich full bodied master recording.

Advantages: Picks up almost every sound in room and outside

Drawback: Lots of sound deadening insulation treatment needed

**For E-learning**, Audible books and Podcasting an **Electret** mic with USB (multichannel serial bus) is very good choice. Electret is the most commonly used & often cheaper microphone available. Unless you are talking broadcast radio where Electret mic of choice is \$350-\$700 and used in sound studio to sound like the announcer is in the car with you. Lets focus on this and wrap up a dual use scenario.

Your laptop, phone and tablet have telephone call grade of microphone. For best sound an external mic gives a big boost to the recording quality. Apple Mac's are designed for native media production and come with all the applications pre-bundled into the basic purchase price.

On Microsoft Windows the media apps both proprietary and are not so well integrated making it often necessary to buy other software. MS-Windows is more like IBM Selectric typewriter by design.

**Moral *Don't assume the rules & steps of your OS vendor apply to the other vendor.***

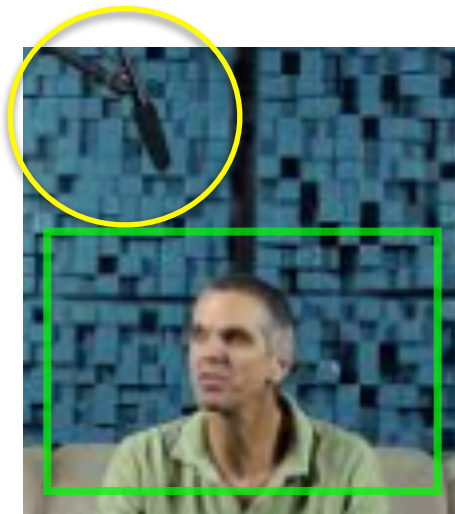
When selecting your microphone of choice there are 3 options on how your video looks to an audience.



Beginner Head Gear  
(gamer)  
\$39+  
*Samson, Logitech*



Radio Announcer  
(some clutter)  
\$130+  
*AudioTechnica AT2020PK*



Professional Host  
(Shotgun Mic)  
\$150+  
*AudioTechnica AT8030xlr*

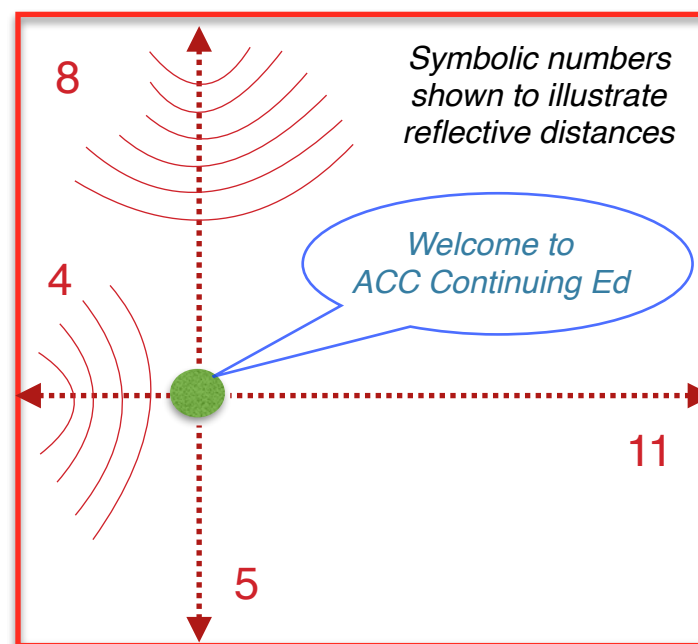
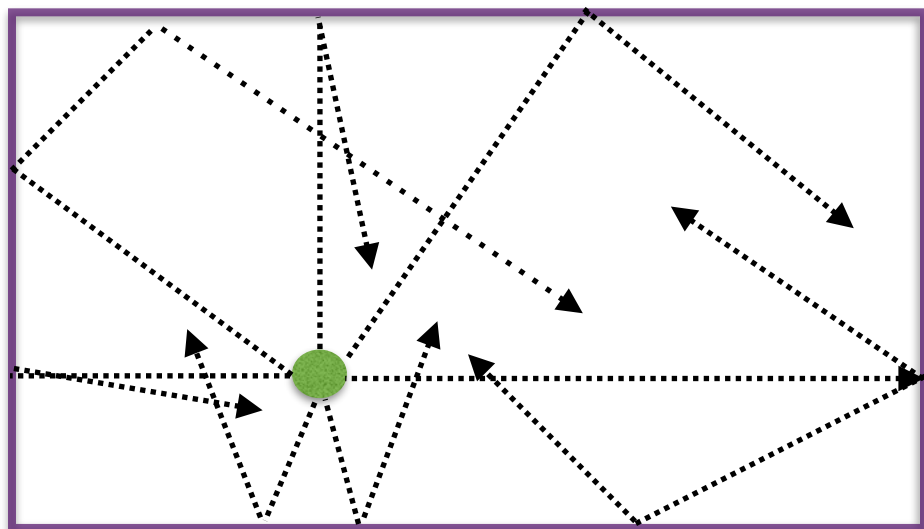
With the increase of Video blogs you achieve a better impression from a clean camera view

Sources for USB (multichannel serial bus) sound gear include Samson, Logitech, AudioTechnica, Rode @ [BestBuy.com](#), [BHAudio.com](#), [GuitarCenter.com](#), [Target.com](#)

NOW a quick lesson of how sound reflects so you can place yourself in the BEST SPOT of any room.

Sound reflects off hard surfaces, walls, ceiling, floor and doors. Note the positioning of the Green Dot.

### ***Odd Distances reduce the echo effect***



Distance to each wall is intentionally different. This means the reflected sound arrives in varying interval (less echo). A sound absorbing (deadening) source such as blanket can use used on the nearest wall to reduce reflections. Now listener ears wont get annoyed in the process of listening.

### #3 Tell a great story

Throughout time the best story tellers followed a similar recipe in three Acts. For education the best theme is “overcoming the Beast” also known as the Hero’s Journey.

*If our student is to become a Jedi, we are Yoda the mentor-encourager who shows exactly how.*

**Act 1: Introduce the Characters** (Problem is never a person, it’s regulations, failure, chasm to cross).

Here’s Jessica, a new girl trying to earn a living... Jessica works hard but isn’t getting anywhere.

Jessica is nice to everyone.... Not everyone is nice to Jessica but she keeps trying.

Jessica sees beauty in everything.. Until BOOM something happens She Cant Ignore

**Act 2: Jessica knows she will have to face this problem. Willing steps into Upside Down world.**

Jessica meets a new Friend (Instructor) who shows her the insider tricks she will need.

Jessica practices and experiments with a Fun & Games attitude she grows confident.

**Act 3: Jessica encounters the Beast again. This time she is ready to challenge the Beast to win.**

As she progresses, Jessica almost gives up - but instead tries harder with her new skills.

Jessica has reached Synthesis of Old and New skills. **She’s Victorious & Beast is gone.**

It helps the listener identify with the story when the discovery of problem we shall solve is narrated in first hand account.

1. State the problem as it was discovered in one sentence (which will now be solved).
2. Briefly state what has been observed, what was tried and now what should probably occur.
3. Mention a summary of the steps involved.
4. Now do the steps.
5. Review the steps accomplished.
6. Restate the Payoff for doing this. Move on to the next topic.

Several great tools will help you practice to refine your presentation.

[Zoom.us](#) is video conference platform with Free plan, stereo sound and full recording you can practice on your own and with others attending. None of the audience needs to be a member.

[MovAVI.com](#) Studio is inexpensive HD screen capture program with video editing & publishing where you can record presentations with embedded audio tracks. for Mac OS X and Windows.

Apple Garageband is included free with OS X with studio grade audio recorder/editor. Tutorials are on [apple.com](#) and Youtube. You can integrate this with Apple iMovie or MovAVI to create tutorials and commercials or web commercials to help sell the class.

MS Windows users can check the latest DIY video blogs for recommendations of what to buy.



Version 1.2

Another word replace error fixed.

Revised 24 March 2020

Version 1.1

Corrected 9 typo/spelling/auto-replace errors in text. Added audience view box to #2 the mic section.

Revised 24 March 2020

Version 1.0

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