# Camera Equipment Tutorial



### Middlesex Community College CENTER FOR NEW MEDIA

#### **Camera Equipment Tutorial**

(1) Tripod Setup	2-3
(2) Camera Setup	4-6
(3) Manual Mode	7-8
(4) Audio	9-10
(5) Shoulder Support Rig	11
(6) Breakdown	12

©2021 MxCC/CNM All Rights Reserved.

### Tripod Setup







Take the tripod and unscrew the arm and extend it out and way from the legs. While holding the tripod like a baby, unlock and extend the lower legs. Extend the legs and place the tripod on the ground. Be sure to push down the center support so that the legs are secure. Depending on what you will be shooting you may have to raise or lower the tripod to get the correct shot.



When shooting an interview, you typically want the lens the same height as the persons head. On the head of the tripod there will be a bubble level to help make sure that your tripod and camera are level. Some tripods Will have a screw under the head. Loosen up the screw and the head will be able to be moved around. Move the head so that the bubble level is in the center of the circle.



On the top there will be a screw on the right side, this will unlock the plate from the tripod. On this tripod loosen up the screw and push it down and lift the plate out. On some tripods there will be a button either on the back or side that you push and slide the plate off. On the bottom of the plate you will see an arrow showing which side the camera lens needs to be. Make sure you have this side of the plate near the lens.

### Tripod Setup



Grab the camera and on the bottom, there will be one or two holes. If there are two, they are different sizes. Screw the plate on using the hole that will fit the screw you have. Tighten the crew on with either a coin, in this case a quarter, or you can use a key, but be sure to use the flat side of the key. Now place the camera on the tripod on an angle push down once in tighten the screw. On the side of the head loosen up the tilt nob while holding the handle and see if the camera is balanced on the tripod.



If it is not balanced the camera will fall to one side or the other. If it is not balanced loosen up the plate screw and carefully slide the plate to make the camera balanced. Tighten up the plate screw and recheck. You may have to do this a few times.



You know you are well balanced when you let go and the camera doesn't fall front or back. Most importantly never leave the tripod without locking the tilt and pan knobs. Otherwise the camera will fall, and you could possibly damage the camera and or tripod.

## Camera Setup







Start by putting on the battery. Look at the battery and locate the electrical connectors. These will go in first. Slide the battery in and push until you hear a click. It may take a few tries. To take the battery off push the button on the top left of the battery compartment and slide the battery up and pull the battery out.



On the side of the camera is a small door in the middle of the camera is where the SD card will go. Gently pull the door from the left side to access the SD card slots. Take your SD card and slide it in slot number 1 with the brass contacts facing the front of the camera. Push it in then close the door. On the top front left of the handle you will see lines that will make up an arrow.



Gently pull this out. Once it is all the way out gently tilt the LCD screen to a comfortable angle. Now on the other side of the camera where the grip is, push in the white bottom and slide down to the on position. Back on the other side of the camera locate the Menu, sel/push set scroll wheel/button. You will use these to navigate the menu options when we change the camera setting.

#### Camera Setup



The LCD screen is also touch screen, so you can touch to select. Press the menu button and look into the LCD. You will see a list of options. Scroll down to SYSTEM Mode. Now press select. Next scroll to record format and press select. Here you can select the video format you would like to record in. Scroll to your preference and press select. We generally us 1080 59.9 i. Now select exit. Once back to the LCD you can now see what setting you have.



Press menu and scroll to Other Function. Format should be already highlighted. Press select. Pick which SD card slot you would like to format. Word of caution make sure you have removed your footage before you continue. Scroll to the SD card and press select. Scroll to highlight yes and press enter. You will be asked again, do you want to continue, scroll and select yes. Once done press select to exit.



Now look in the LCD and you can see how much time you have to record. This will different base on the size of the SD card and what you have your record format set to. This next step is not necessary but if you want your video to have special timecode so you can keep track of things like day 1, 2, 3 or SD Card 1,2,3 you can set your timecode to a specific number. Scroll down until TC preset is highlighted and press select.

#### Camera Setup



Here you can now change the time code to what you want. In this case I will make it 1hr 0 min 0 sec and 0 frames. To do this use the scroll wheel to change number and press select to change between the hr mins and frames. Once you are done, arrow right until you highlight exit and press enter. You will get a notification screen and then it will go back to the display. If you look at the top left, you will see you a new timecode. Now you're ready to record with the correct settings and a clean SD card.



To play back any video you recorded press the Thumbnail button located on the top of the handle. Use the scroll wheel and push select once you have picked you clip you which to play back.

# Manual Mode



You will want to use the camera in manual mode so that your exposure, focus and color balance are correct. Not all cameras are good in auto. First make sure the switch is in manual. Next look in the view finder and you will either see a number in DB STD or F and a number or in some cases open. If it is in STD push the iris button to change the setting.



Once you have the iris in manual where you see F and a number or open, you can now move the iris ring which is the ring closest to the camera body up and down to open and close the iris to get the correct exposure.



To get the proper focus you will use the ring at the front of the lens. When shooting a person, you will want to focus in on the persons eyes. If it is an object pick something that is defining. Always zoom in as far as you can so that you can get the best focus. Focusing on a wide shot will not get you the best focus. Focusing on a wide shot will not get you the best focus. After you zoom in all the way push the focus assist button and your shot will zoom in even more allowing you to really fine turn the focus. Once you are done make sure to turn off focus assist.

Manual Mode



Always do a manual white balance. While looking at the LCD push the white balance button to get out of ATW. Once you see something other than ATW use the scroll wheel and look for either Ach or Bch.



Once you are on Ach or Bch place a white card in your shot where you will be shooting. Zoom in so that the white card fills as much as possible of the frame. You may have to open or close the iris a bit to get a proper exposure. Now press and hold the white balance button until LCD screen goes black. You will then see a confirmation window saying WB set ok. Make sure to reframe your shot and fix your iris if needed.



Lastly press the shutter button and you will see 1/XX. You will want to scroll to set this to 1/120 or 1/180. Anything slower will cause your motion to blur. Anything faster will make your motion crisper which is used more for sports. The higher the shutter the more light you will need.



To plug in the XLR into the mic and the camera make sure to line up the pins with the cable. Push in the cable and make sure it is tight. To remove the cable push in the button on the cable pull on the connect and the microphone to separate the two. On the side of the camera there is a clear door. Gently pull the door open from the right side.



Depending on which input you are using switch to mic. Depending on the type of microphone you are using you may or may not need 48 volts. In this example with our hand-held mics we just need mic. On channel two, make sure that you select input two.



Now plug in the male side of the XLR into channel two. Make sure the connector is all the way in. To remove the XLR, push in the tab above the connector and pull the XLR out. You will want to use headphones to monitor the audio. Take the headphone connector and plug it into the headphone jack located on the right side of the camera under the audio 2 input. Gently lift up the door where the headphone symbol is.



Now make sure you are in manual for audio level control. Press the menu button. Scroll until you see Audio setup and press select. Audio level ch1 and ch2 should be in manual. If not scroll to that channel and press, select. Scroll to manual and press select. Scroll to exit and press select. While using the audio dial for channel two, which is your external microphone, you can adjust the level.



Looking in the LCD you will see are bar and dots on the bottom off the view finder. This shows you the audio level for each of your channels. First look at channel two and adjust the level using the dial. Adjust the level so that the audio is peaking just past the vertical line which indicates good audio levels.

Do the same thing for channel one which is the on-camera microphone. To adjust the volume of the headphones press, select until you see volume then press select. Volume level will appear on the screen. Use the scroll wheel to raise or lower the volume. When done press select and you will be taken back to the LCD screen.

### **Shoulder Support Rig**



If you use the AG AC30 camera you will notice that the camera is half the size of the other cameras we use. If you plan to shoot on a shoulder you will need a shoulder rig to help you keep your camera shot stable. First loosen the lock slide of the plate back while pressing the red pin in. If you don't press the red pin in the plate it will not slide out.



To put the camera plate on the camera, locate the front of the plate indicated by an arrow showing where the lens should be place the brass pin in the front hole on the bottom of the camera. Screw the bolt in the second hole. Use a coin or the side of a key to make sure the bolt is tightened. Make sure the lock is loose and slide the camera plate on from the back to the front while holding the red pin in. Once the plate is on and in the location you think you want tighten up the lock.



You may need to slide the camera plate forward or back to adjust how close the camera is to your face. If for some reason you need the camera plate closer or further and there's not enough slide on the camera plate you may need to take the camera plate mount off and move it to another mounting point. On the bottom of the rig is a screw handle. Unscrew it and remove the mount. Pick a new hole based on where you need the plate to be. Insert the screw and make sure to use the back middle hole on the mount to screw it onto. Make sure the screw is nice and tight. Now you're ready to shoot handheld.

### Breakdown



Now you are ready to record your shoot. Once you are done make sure you turn off the camera. On the AG-AC30 camera make sure you tilt the LCD flat and gently push the LCD screen back into the handle. Properly disconnect the XLR, remove the tripod plate and leave it with the tripod, collapse the tripod legs and fold it in along with the arm, and neatly put away all the equipment in the bag.

lame	<ul> <li>Date Modified</li> </ul>	Size				манентэпре
C. C			Feering ADDrop Encents	Name	A Date Modified	
Constructions Co	Norm	One Modies     Today at 844	A splotation     Posto     Douments     Douments	C 3 Frantis Marcent A taplaction	Nore Mare	

Don't forget to remove the SD card and transfer all of the contents of the SD card to your computer or external hard drive so that you can edit the video later. Once you have transferred your footage put the SD card back into the camera and return the equipment to the loan room.