Canon DSLR

- This is a still photo camera with a video option
- Good quality sound must be recorded on a separate audio recorder
- 12 minute limit to an HD video clip
- Adjustable ISO: much better image in low light
- Depth of Field variations are possible
- Easy time-lapse and stop-motion animation with included Canon software

Precautions

- Reformat the SD card before you shoot
- Make sure the battery is completely charged
- For video the SD card must be Class 6 or higher
- CMOS sensor avoid rapid camera movement or unstable movement – avoid shooting rapid moving objects
- use a tripod with the Image Stabilizer OFF (on the Lens)
- Sensor can overheat in bright light
- The exposure will noticeably change during a shot if you zoom

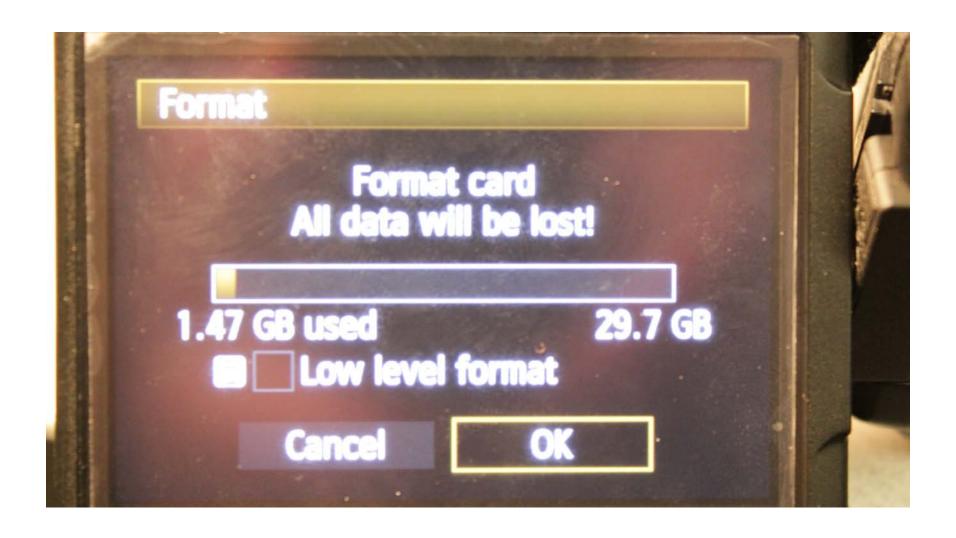
Canon DSLR Recording Times

Movie-recording Size		Total Recording Time		File Ci-e
		4GB Card	16GB Card	File Size
[1920x1080]	[3 0	12 min.	49 min.	330 MB/min.
	[25			
	[<u>2</u> 4			
[1280x720]	6	12 min.	49 min.	330 MB/min.
	(50			
[640x480] [Crop 640x480]	6	24 min.	1 hr. 39 min.	165 MB/min.
	1 50			

Format the SD Card



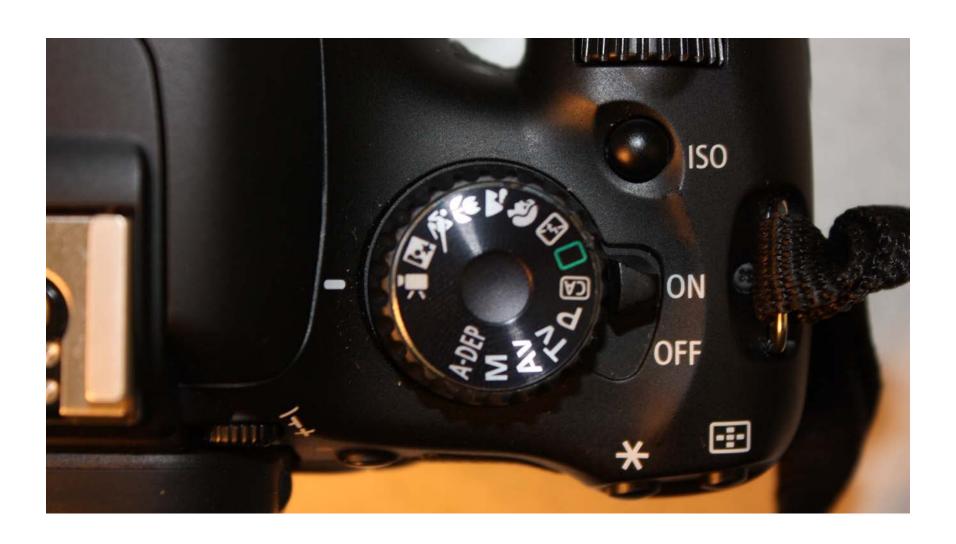
Format the SD Card



Basic Set-Up for Shooting Video

- Movie Mode
- Video System: NTSC
- White Balance: Auto White Balance
- Picture Style: Neutral
- Image Quality: RAW
- 1920 x 1080 24p
- Manual Focus
- Exposure

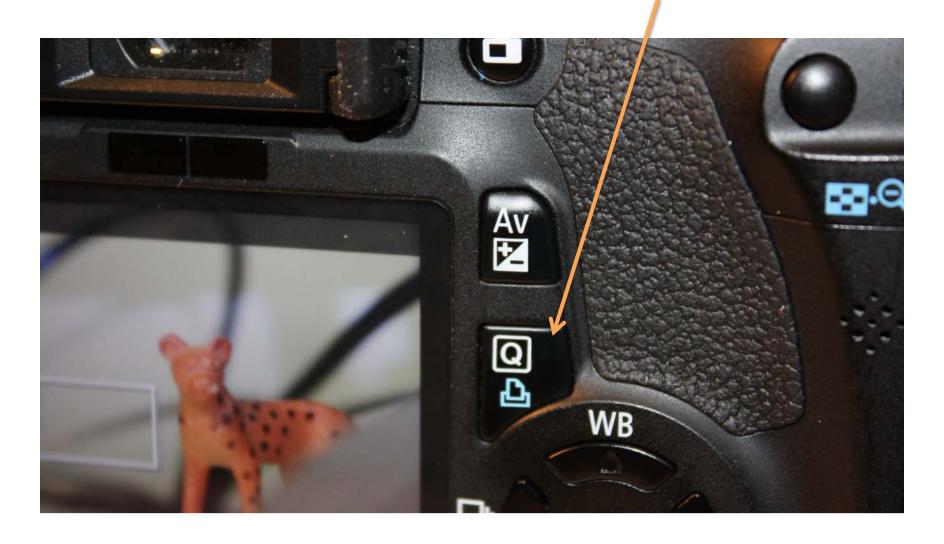
Movie Mode



Video System NTSC



Quick Menu Button



Quick Menu



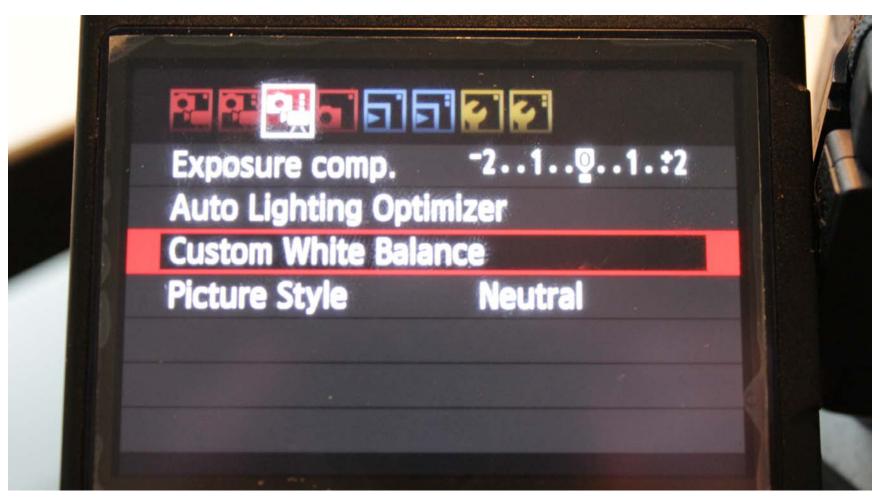
White Balance



AWB (auto) is the best choice



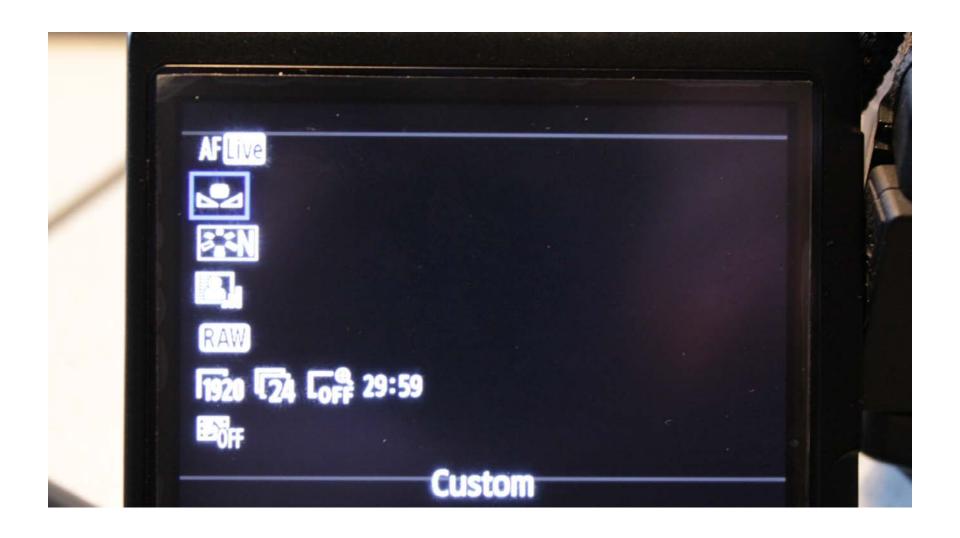
Custom White Balance: take a picture of a white page



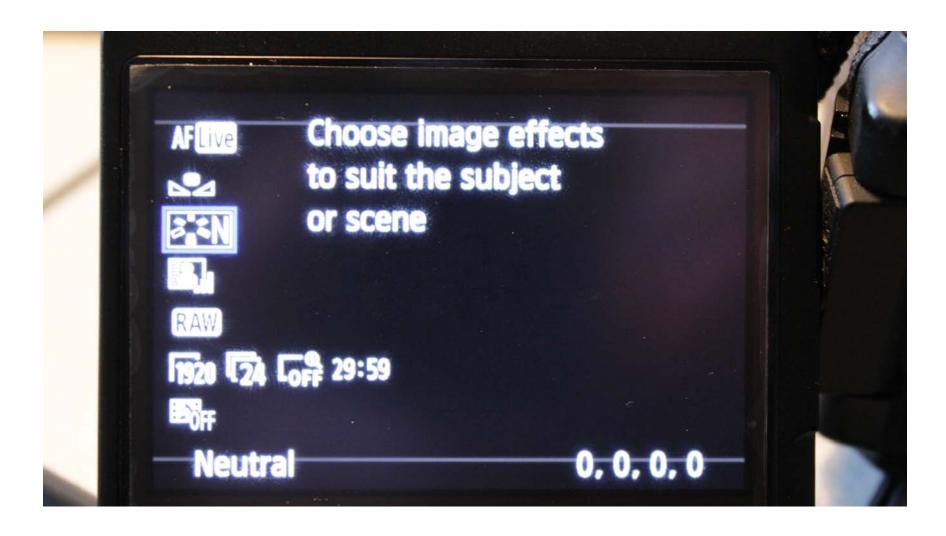
Select the image of the page



Select Custom in Quick Menu



Picture Style



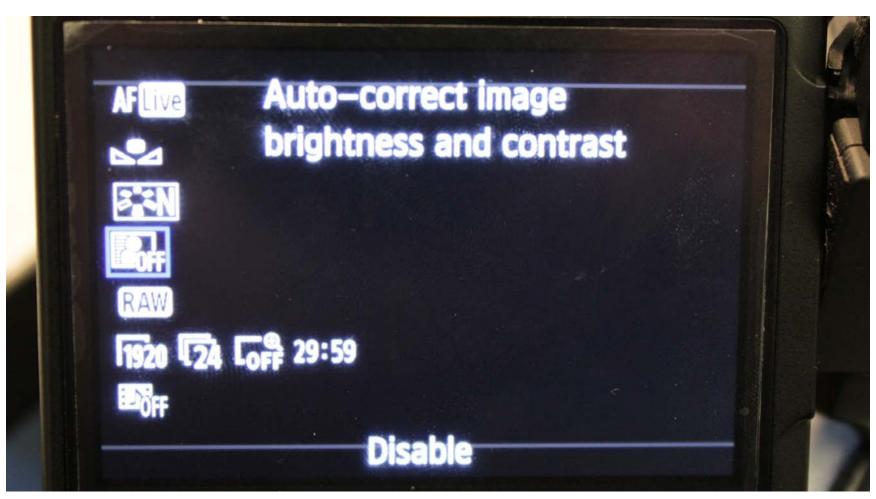
Neutral is an unaffected image



Menu: Picture Style Neutral



Auto Correct Brightness and Contrast (if you wish)



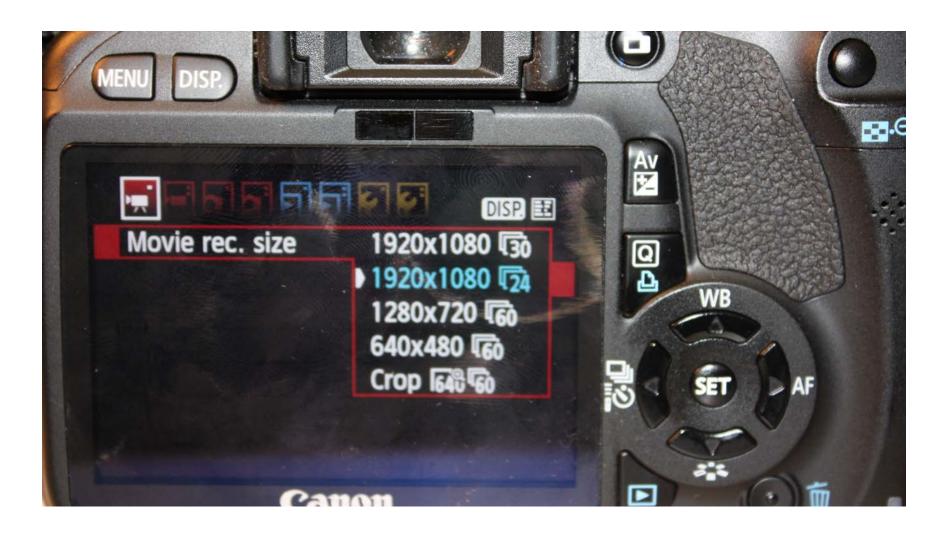
Picture Quality: Choose RAW



Recording Quality: 1920 x 1080 24p is the most common



Menu: Recording Quality



Movie Recording Sizes and Frame Rates

1920 x 1080 24p: most common for NTSC displays 1920 x 1080 30p: for more accurate fast motion reproduction

1280 x 720 60p: for a slow motion effect (frame rate will be conformed later to 30p or 24p)

640 x 480 30p: if you need a longer duration for one shot (45 minutes as opposed to 12 minutes)

All frame rates are progressive.

Focus can be difficult

- T3i adjustable viewfinder helps with focus
- Continuous auto focusing is not available in "movie mode" – determine your focus manually or automatically (live mode) before you start shooting
- Auto focus cannot be used while shooting video
- Use manual focus if the focus has to change during the shot: practice the focus pull

Change to MF on the Lens



Movie Exposure: Manual



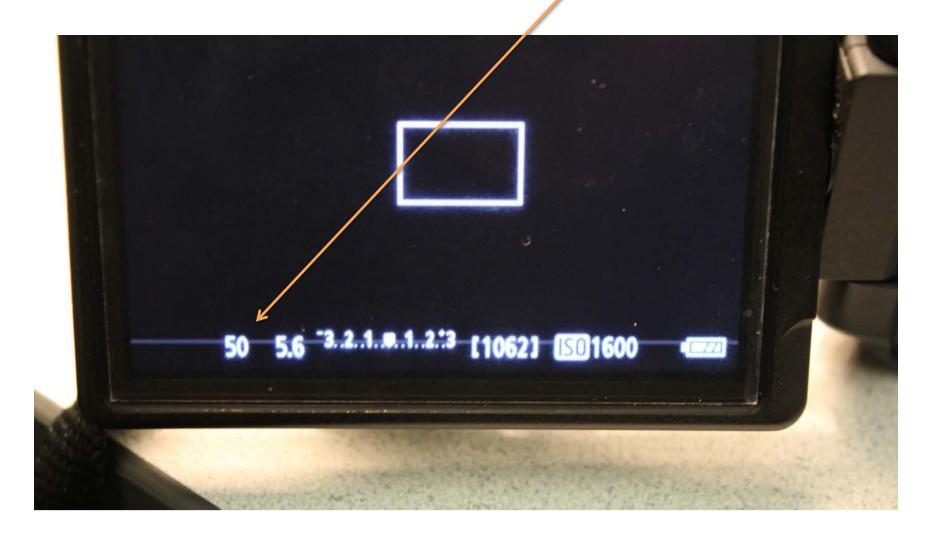
Aspects of Manual Exposure

- Shutter speed:
- determines the length of each exposure (each frame)
- Aperture:
- controls the amount of light on the sensor
- ISO speed:
- controls the sensitivity to light

Shutter Speed

- Display exposure menu (info or display) or press AV button
- Turn dial to adjust shutter speed –number on the far left
- Normal shutter speed is twice the frame rate
- There is no 48th of a second on the camera: use 50th of a second for 24p
- Faster shutter speed = less motion blur

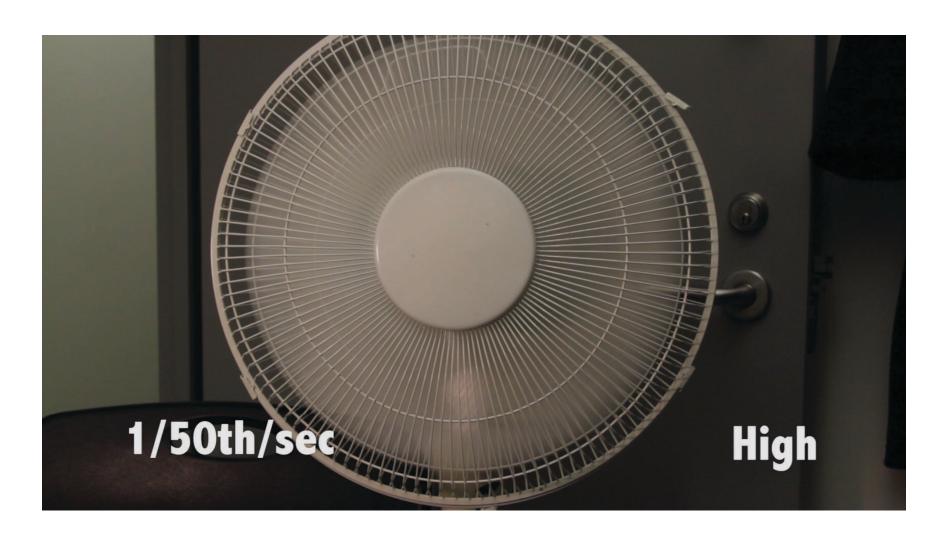
Shutter Speed



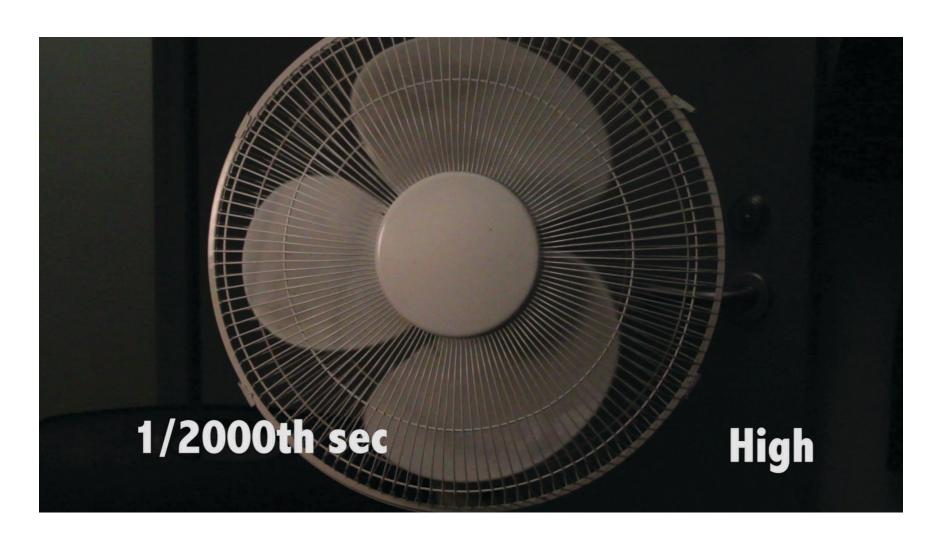
Dial for adjustment



Normal Shutter Speed at 24p



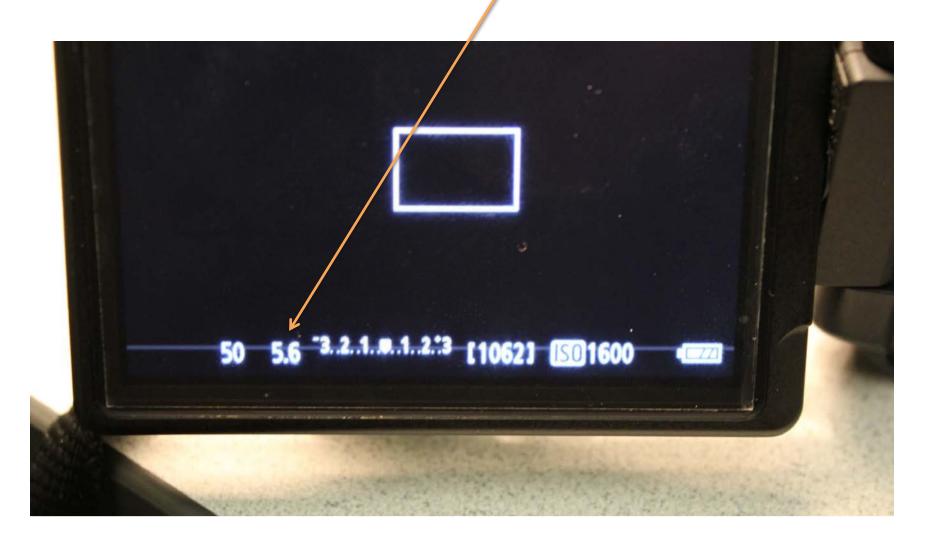
Faster Shutter Speed at 24p



Aperture (lens opening)

- Keep holding down the AV button and turn dial
- Lower numbers create a larger aperture: this increases exposure (more light)
- Higher numbers decrease exposure by narrowing the lens opening
- Lower numbers create a shallower depth of field

Aperture



AV button



Depth of Field

- Use a shallow depth of field to isolate a subject in the frame
- Use a greater depth of field to ensure that multiple subjects are in focus













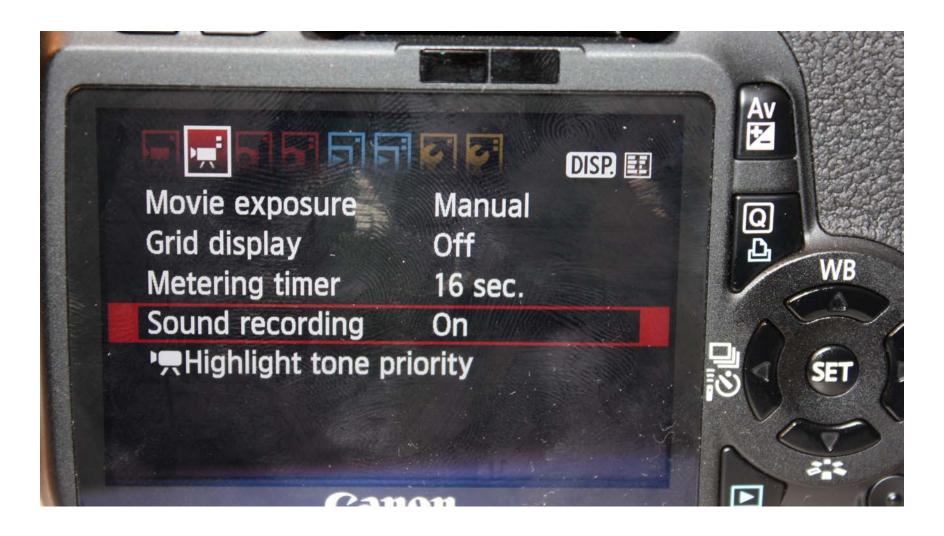
ISO adjustment

- ISO changes the camera's sensitivity to light
- Press ISO button and turn dial
- The higher the number the higher the sensitivity but above 400 ISO you will start to see some image noise in the shadows

ISO Adjust button



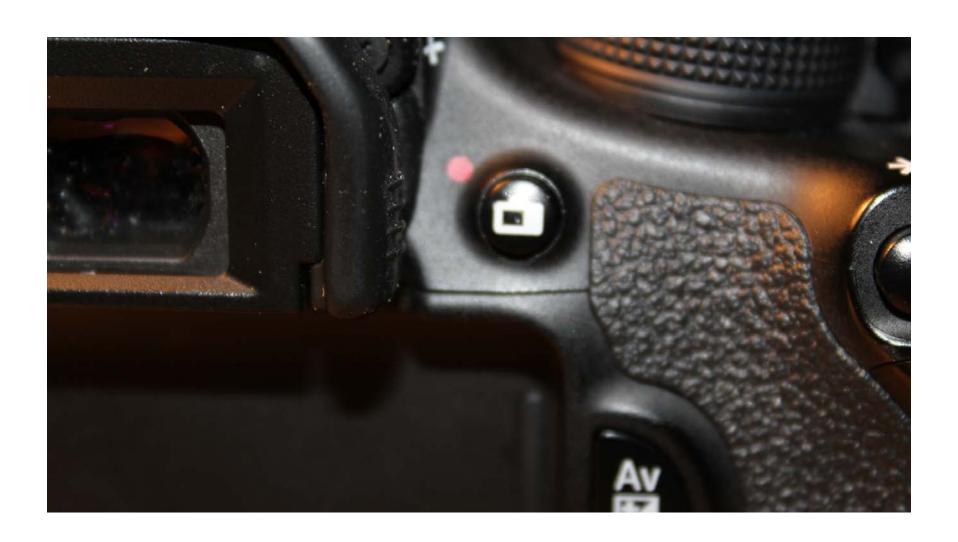
Turn on Sound Recording if needed



Check list

- White Balance
- Movie Exposure: Manual or Auto Exposure?
- Manual: Shutter Speed, Aperture, ISO
- Focus (auto or manual)
- Image Stabilizer
- Sound Recording ON?
- Start Recording
- Do not zoom!

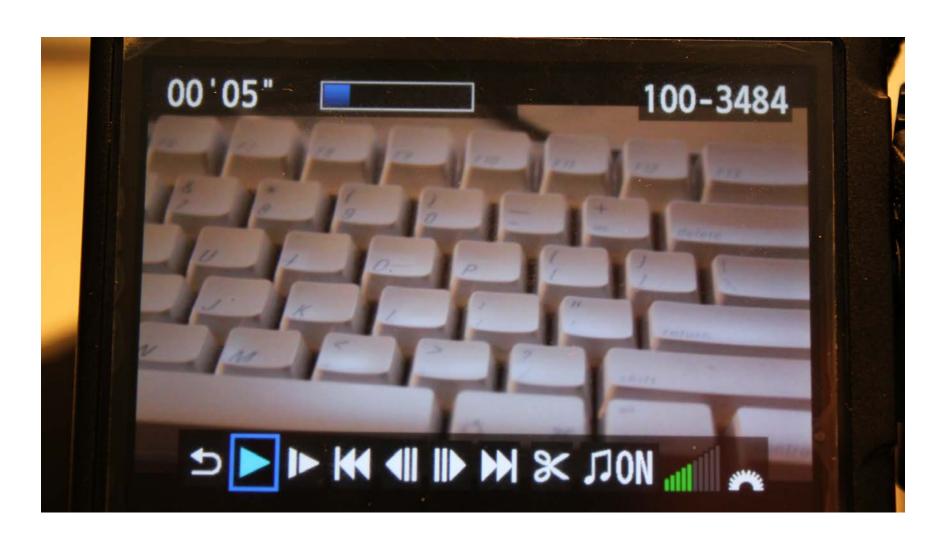
Record button



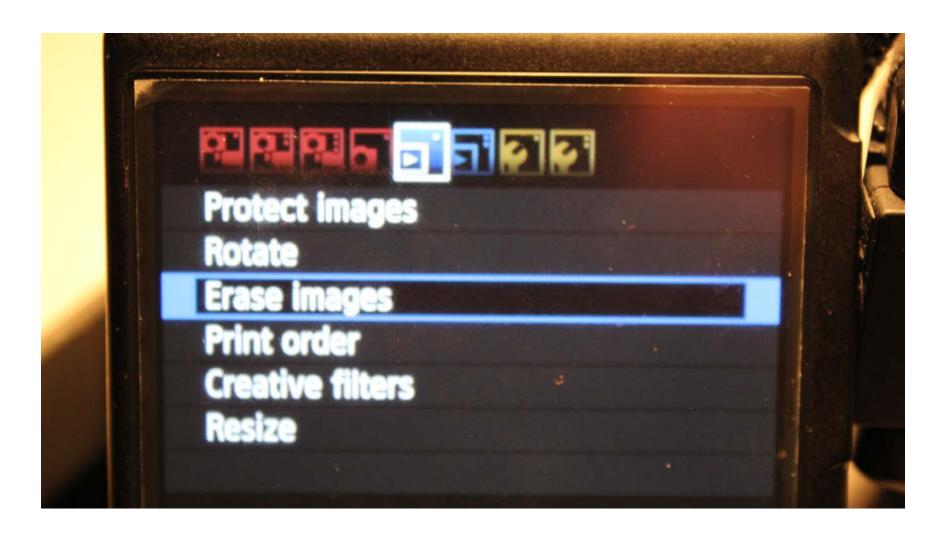
Playback



Playback Controls



Erase Images before returning camera



Recording External Sound

- The CDA has ZOOM audio recorders for external sound recording.
- If you are using an external audio recorder you must slate each shot. You can create a slate from two pieces of wood.
- Announce the name of the shot and if possible identify the shot on the slate.
- SCENE/SHOT/TAKE
- Ex: 05/02/01 = Scene 5 Shot 2 Take 1

Using a Slate



Zoom Recorder



Record to SD card



Format SD card



Choose Mode in Menu to select Recording Format



Record in Stereo



REC Format 48 hKz 16 bit



Input is Mic REC button to see levels

