

# Sights N Sounds Good Camera Practices

Our goal is to produce high quality programming for Sights N Sounds. Every step in the production process (from camera work ... to the on-screen talent ... to postproduction and editing) is important to achieving this goal. But no amount of performer talent or editing magic can save a show that does not start out with good original video. So in a very real sense, good camera practices is Step 1 in producing quality programming.

The following document on Good Camera Practices is divided into 4 Sections. The first three sections provide general information that will help you take good original video. Only Section 4 is camera-specific.

1. **Camera Preparation & Setup** – Things you should do before you start to shoot
2. **Shooting Procedures** – Procedures you should use during shooting
3. **Tips & Tricks** – Specific little camera techniques that will improve your videography
4. **SR11 Quick Reference Guide** – Selected operational procedures specific to the Sony HDR-SR11 camera

## Good Camera Practices – Section 1 Preparation & Setup

### ***Equipment Check***

Before heading out for a shoot, make sure you have all the equipment that you will need, including:

1. AC Charger and/or Full Battery Charge (extra batteries)
2. Tripod
3. Microphone(s) and Headphone – if you are recording live audio
4. Lighting – if you are shooting indoors.

### ***Environment Check – Be Aware***

Simply ***BEING AWARE*** of the environment around you can avoid many pitfalls in your videography. Here are some things to watch out for.

## **The Visual Environment (Distracting Background)**

**Avoid superimposition.** Watch out for items behind your subject. A plant directly behind a person may end up looking like flowers are growing out of their head!!!

**Avoid distracting motion.** Be aware of what else is going on in your scene. Avoid any motion that is not directly relevant to your shot. Example: a softball game going on in the background would be relevant to and would complement an interview talking about softball. But if you were talking about anything else, this would be a distraction.

## **The Audio Environment**

**Watch out for background sounds.** Sometimes, one of the hardest things to achieve is to avoid distracting background sounds. Things that we “tune out” in our everyday lives will become major annoyances in a recorded video. Listen for things like air conditioning, voices, or any other extraneous sounds. Then either turn off the offending sound source, or if necessary, relocate your shot to a quieter site.

## **The Lighting Environment**

**Avoiding backlighting.** Make sure your subject is not located in front of a window or other bright light source that will influence camera exposure and cause your subject to be under exposed.

## ***Scene Composition***

**Do not locate your subject “dead center” in the frame.** This might be good for target shooting, but it does not make a pleasing picture. Use the “rule of thirds” (see Tips & Tricks – Scene Composition).

## ***Lighting Setup***

**Use consistent light sources.** While we don’t notice this with our eye, “white” is not always white. Different sources of light have different color “temperatures.” These different sources cast their own characteristic hue (red, yellow or blue) on the scene. Electronic “white balancing” corrects for this effect. But if you have multiple light sources of different color temperatures, white balancing will fail, and you will end up with strange and unrealistic colors in your video. Outdoor light, tungsten lights and fluorescent lights all have different color temperatures and should not be mixed.

Example: If your subject were illuminated from the side with natural light coming through a window and from the front with a tungsten light source, you have two different color temperatures, and white balance cannot do a good job. Faced with this kind of situation, close blinds over the window or relocate the shot.

**Use diffuse light sources.** Avoid harsh lights of any kind (sun, spot lights, etc). Use a light diffuser over studio light sources and bare light bulbs.

**Studio Lighting Setup.** Where you can, use a minimum of 3 lights:

1. Front lighting provides primary illumination
2. Side-front lighting adds dimension
3. Light behind the subject directed against the wall gives separation from the wall.

## ***Microphone Setup***

Where audio is important (as with interviews) use external microphones. Do not rely on the camera's on-board mic. The microphone-camera connection will depend on the situation. The following connections apply to both wired microphones (where you connect the microphone cable directly as described) and wireless microphones (where you would connect the microphone receiver as specified).

**One microphone - One camera** (as you might have with one speaker/narrator – Connect the microphone/receiver directly to the camera MIC-IN jack.

**Two (or more) microphones - One camera** (as you might have where one person is interviewing another) – Connect microphones/receivers to audio mixer inputs; single mixer output to camera MIC-IN jack.

**One/Multiple microphones - One Camera / Second Un-miced camera** – This is a special situation that you might encounter when taping a live presentation, music event, etc. This situation is best covered with one stationary camera as the primary video/audio recorder and one “roving” camera that moves around the room to capture shots from different vantage points and close-ups to add variety. Connect microphone(s)/receiver(s) to the primary camera using one of the above setups. You can use the on-board camera microphone for the roving camera, as this audio will later be discarded. The editor will use video shots from both cameras to achieve a pleasing visual mix, while all the audio will come from the primary (miced) camera only. See Tips & Tricks – Multiple Camera Shoots for more on this technique.

**One/Multiple microphones - Two cameras** (as you might have in a live interview situation) – To realize any benefit from this setup we need a video/audio switcher, which we do not yet own. So we'll skip this situation for now.

## Good Camera Practices – Section 2 Camera Setup & Shooting

### ***Camera Setup & Checkout***

Once you have attended to all the preparation steps above, it's time to do one last check of the entire setup before you start recording for real.

1. Attach the camera on the tripod. ***Double check that the camera is securely locked in place.***
2. Turn the camera on.
3. Insert the memory stick, if available (see SR11 Quick Reference Guide: Insert/Eject Memory Stick)
4. Select the recording media (see SR11 Quick Reference Guide: Select Recording Media).
  - a. Memory Stick - preferred
  - b. HDD - if memory stick not available
5. Select color balance (see SR11 Quick Reference Guide: Setting White Balance)
6. Record test footage
7. Playback test footage
  - a. How does the video look?
  - b. How does the audio sound in headphones?

If all is well, then you are ready to start recording your program.

### ***Shooting Your Program***

After everything checks out, it's time to shoot.

1. Turn the camera on. It's securely mounted on the tripod, right?
2. Frame the subject (see Tips & Tricks: Scene Composition)
3. Start recording

### **About Retakes**

As long as you are not shooting a live event, you can correct mistakes (usually made by the on-camera talent, but could be camera mistakes, as well) by shooting sections of your program over. When stopping and re-starting recording, there are techniques that the videographer can use that will make it easier for the editor to seamlessly put the interrupted scenes together later on (see Tips & Tricks: Correcting Mistakes).

## **Consider the Poor Editor**

The raw video for a single program may consist of many clips of starts, stops and retakes. The editor must now take this raw footage and turn it into a finished, smooth-flowing program. You can make the editor's life a lot easier by taking a few simple measures during shooting.

Moviemakers communicate with the editor by filming a few seconds of the "slate" (clapper) identifying the scene and take at the beginning of each clip. Since we don't have extra staff to prepare the slate, it will be simpler and faster for the videographer to just verbally announce what is on the clip, along with some brief instructions to the editor. In addition to the "head" announcement at the beginning of the clip, it may be useful to make a "tail" announcement at the end of a clip to communicate something that transpired during shooting.

**Example "head" announcement:** "This is a re-take of John Doe, picking up from the previous clip after he says '... and that's the way it is.'"

**Example "tail" announcement:** "Well, we screwed that whole thing up. Just trash this clip, and we'll do it again."

You get the idea. Just tell the editor what is going on, so he/she is not faced with trying to figure it out by watching every piece of footage and trying to understand what you did.

If remote microphones are in use, be sure to speak loud enough that your announcements can be heard on the recording.

Lead-in and Lead-out footage. Be sure to run off extra footage at the beginning and end of each scene and between your verbal announcements and program footage. This is to give the editor some leeway in building transitions.

For more on this subject, see *Tips & Tricks: Shooting for Editing & Post Production*.

## ***Deliver Your Raw Footage***

If you shot your footage on Memory Stick, just remove the media (see *Camera Quick Reference: Insert/Eject Memory Stick*) and deliver it to the editor. You can then place a clean Memory Stick in your camera, and it will be ready for the next shoot.

If you shot on the hard disk, it will be necessary for the editor to download your footage directly from the camera, thus preventing camera usage until the job is done. This is why it is preferable to record on Memory Stick.

## Good Camera Practices – Section 3 Tips & Tricks

The following camera tips and tricks are provided to help Sights N Sounds videographers take good original video. Using these tips and tricks will lead to better, more useful video, regardless of what camera is being used.

### ***Taking Steady Video***

**Rule #1: Use a tripod whenever practical.** Shooting without a tripod is very tempting. It's just so much easier to grab the camera, point and shoot. But regardless of how steady you think you are, you will not be able to hold the camera rock-solid steady. Every little twitch and even every breath you take will cause the resulting video to bob and weave with your slightest movement. This is very distracting for the viewer.

Possibly counter intuitively, small cameras are harder to hold steady than the big shoulder units the professionals use. Our cameras are about as small as they come, so we'll have to pay particular attention to this. So, whenever your subject is stationary, like in an interview, for instance, never shortcut this step. Take the extra 3 minutes to set up and position your camera on a tripod.

**Rule #2: When you can't use a tripod ...** Regardless of how desirable it is to use a tripod, there are some situations where it is just not practical. If you are constantly moving the camera from place to place or taking pictures of moving subjects, using a tripod is, at best impractical, if not impossible. For these situations, there are things you can do to minimize the bouncing picture.

First of all, hold the camera as steady as possible. To do this, plant your feet wide apart in a comfortable and stable position. Hold the camera with both hands. Grasp the camera with your right hand and rest the bottom of the camera on your left hand. Rest your arms and elbows on your chest. This will allow you to hold the camera a lot steadier than if you just held it in front of your eye with one hand.

When you pan, move at the waist, rather than just turning your head or, worst of all, moving your feet. When you know you are going to pan, face in the direction of your final shot. Then turn at the waist to point the camera for the beginning of the shot and slowly turn back to your facing and final position as you pan.

The effects of camera movement are magnified at high (telephoto) zoom values. So, the most significant thing you can do to minimize shakiness is to zoom back to the widest possible angle and get close to your subject. If you've ever seen a TV camera operator taping an interview, you may have noticed that the camera was positioned almost right in the subject's face. This is done to reduce the effects of camera shake.

**Rule #3: Knowing when to violate Rule #2.** For the sake of a complete discussion, I will tell you there is an exception that proves the rule on hand-held zoom ratio. I once shot a whitewater kayak event where I was zoomed in at 40x, hand-held, filling the frame with a kayaker shooting the rapids. The effect was dramatic and the shot showed no camera movement at all. The reason is that everything in the frame was already moving. The kayaker was paddling like crazy, bobbing all over the place in the rapidly moving river. The effect of camera movement (while undoubtedly there) was indiscernible from the subject movement. We probably won't be shooting any whitewater events for Sights N Sounds. But if you ever find yourself in a situation where everything in the frame is in motion, you can get away with a hand-held telephoto shot.

## ***Scene Composition***

Composing your frame is how you make the picture pleasing to look at. If you were shooting a rifle, you'd want the "target" to be right in the center cross hairs. But locating the subject dead center in a picture (still or moving) creates a sterile, uninteresting shot.

**Rule #4: The "Rule of Thirds".** In photography, there's something called the "rule of thirds." Imagine your viewfinder divided into thirds, both horizontally and vertically. Artistically, the best place to put your primary subject is at one of the intersection points of those imaginary dividing lines.

If you're shooting a person, it also helps to place something else in the frame. If you're recording a "talking head," place the person near a plant or something else that adds a little warmth to the shot. Then frame the shot with the person along one of the imaginary vertical "one-third" dividing lines and the plant at the other one-third location.

## ***Correcting Mistakes***

"Take 2" ... "Take 3" ... its all part of shooting a production.

Unless you're shooting a live program, you can re-do your shot when things break down beyond the limits of a quality production. Retakes may be especially called for in a talking head situation, where the speaker "flubs" the narration. If you've already recorded a significant portion of the scene, you don't have to start over. Just pick up after the last good shot or other logical place, and start taping again. But there's a camera technique for doing this that will let the editor transition seamlessly to the new take.

**Rule #5: Reframe the shot when you start a new "take".** You've probably been watching a video where the subject seems to unexpectedly jump, maybe ever so slightly, but enough to be noticeable. This is where something was cut out. This jump between deliberate takes can be avoided by reframing the subject before you restart the camera. Zoom in or zoom out or reposition the camera angle by a significant amount. The editor can then transition between the shots and the result will look like a planned transition. If

you restart with the camera and subject just as they were in the previous shot, a distracting jump in the picture will occur.

That said, don't overuse this technique. A different frame setup every 5 seconds would look very unprofessional to the point of being uncomfortable to watch.

**Rule #6: It's OK to be human.** Not every little verbal flub needs to be redone. We are all human after all. In normal conversation, we sometimes misspeak, correct ourselves, and go on. No one notices. As long as your program flows like face-to-face conversation and doesn't deteriorate to complete gobbledygook, keep right on shooting.

## ***Recording High Quality Audio***

**Rule #7: Use an external microphone.** Getting good audio is frequently harder than getting good video. Therefore, special attention needs to be paid to the audio portion of your recording.

Our cameras are equipped with a built-in microphone. While this may be adequate for some situations, this is probably the exception. Not only is the built-in mic remote from your subject, it is also omni directional. That means it will be picking up all the surrounding sounds, as well as the subject. Ambient noise seriously detracts from the quality of the recorded audio.

For this reason, we ordered cameras with a remote microphone input. This will allow us to use a higher quality microphone right at the source to capture superior audio. When conducting an interview, affix one of our remote mics to the speaker and plug the remote mic receiver into the mic input of your camera.

## ***Shooting for Editing & Postproduction***

All of our "on location" shooting will be edited and some of our studio tapings will also go to the editor before being burned for broadcast. The resulting edited program will be better if the videographer pays particular attention to a few techniques.

**Rule #8: Record lead-in and lead-out footage.** In the editing suite, we can cut out anything that is extra. But we cannot add video that you did not shoot. Also, we will also likely be adding transition effects between your shots ... dissolves, fades, or other animated transitions. This cannot be done over the top of content footage. We need leader video at the front and trailing video at the end. It's up to the camera operator to give the editor the extra footage.

So start shooting the subject at least 5 seconds before the action starts and don't stop shooting until at least 5 seconds after the scene ends. If you're shooting an interview, for instance, start the camera rolling and tell the subjects to hold still for the camera until you

signal. Then count down with your fingers or simply signal the subjects when they can start. Also coach your subjects to hold their pose after they are finished while you roll off extra footage that will give the editor flexibility in how they put the scenes together.

**Rule #9: Never use on-camera effects.** Our cameras have the ability to generate some effects on the fly, like fade-in and fade-out. NEVER USE THESE. As long as you follow Rule #8 and provide lead-in/lead-out footage, it's much easier for the editor to add professional-looking effects after the fact, than it is for you to anticipate what might work and insert the effects into the original video, thereby tying the editor's hands.

## ***Multi-Camera Shoots***

There are times that we will be covering an event with more than one camera. This will happen frequently in the studio and sometimes on location at a live event.

There are two ways to merge the video from two cameras:

Option 1: real time in the studio with a video switcher;

Option 2: in postproduction by the editor, who will handpick the shots and put them together for the best coverage.

Because of initial equipment limitations, we will probably not be using the real-time option to start with. So for now, we'll address only Option 2, where the editor will be merging the footage from both cameras in postproduction.

While it's the editor's responsibility to put the footage together, it's the camera operator's responsibility to give the editor coordinated shots to work with. This requires a pre-planned strategy.

The strategy will usually go something like this:

**Camera 1 – Stationary on a tripod.** A stationary camera fixed on a tripod will capture the “overall shot”. The camera operator may pan and zoom for effective coverage, but the camera position will not change during the shoot. Primary audio (remote mic hookups, etc) will be recorded on Camera 1, because of the simpler logistics of making connections to a stationary camera.



**Camera 2 – Roving camera.** This may be modified as the situation dictates, but in general Camera 2 will wander around to places that will provide the best close-up shots and/or interesting camera angles. The necessity for mobility will probably dictate that Camera 2 will be hand-held. Audio will be recorded with the camera's built-in mic. In the end, Camera 2 audio will probably be thrown away

by the editor. But even if Camera 2 audio is not used in the final program, it serves a very important function in helping the editor synchronize the two videos.

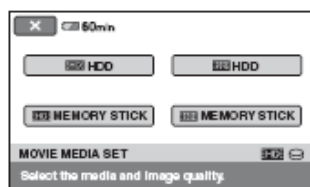
**Rule #10: For 2-camera shoots, let both cameras run continuously.** This is definitely counterintuitive, especially for Camera 2, which will be moving around from place to place, collecting a lot of “garbage video” along with the good stuff. But this is the key to making it easy for the editor to merge the two videos. Since this is “Camera School” not “Editing School,” I’ll leave out the editing techniques. But suffice it to say, that if the editor is provided with 2 continuously running videos (one from each camera), all the editor has to do to synch the videos is to match the audio tracks from both cameras one time. Then the editor is free to pick and choose the picture he/she wants to use at any given point in the program.

## Good Camera Practices – Section 4 SR11 Quick Reference Guide



### Select Recording Media

- 
- 1** Touch  (HOME) →   
(MANAGE MEDIA) → [MOVIE  
MEDIA SET] on the LCD screen of  
your camcorder.

The media setting screen for movies  
appears.



- 
- 2** Touch the desired media and  
image quality.

 indicates HD (high definition)  
image quality, and  indicates SD  
(standard definition) image quality.

- 
- 3** Touch [YES] → .

The media for movies is changed.

---



Memory Stick Record Times (minutes):

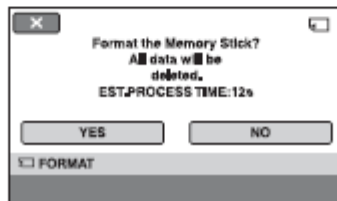
	SD 9M (HQ)	SD 6M (SP)	SD 3M (LP)
1GB	10 (10)	20 (10)	35 (25)
2GB	25 (25)	40 (25)	80 (50)
4GB	55 (50)	80 (50)	160 (105)
8GB	115 (100)	170 (100)	325 (215)

## Formatting the Memory Stick


### Formatting the “Memory Stick PRO Duo”

**1** Insert the “Memory Stick PRO Duo” to be formatted into your camcorder.

**2** Touch  (HOME) →   
(MANAGE MEDIA) → [MEDIA  
FORMAT] → [MEMORY STICK].



**3** Touch [YES] → [YES].

**4** When [Completed.] appears, touch .

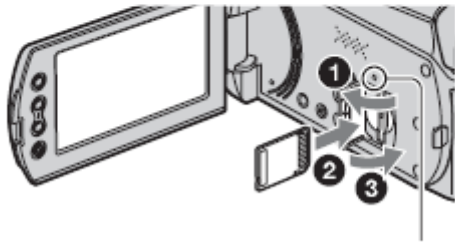
#### Notes

- While the ACCESS lamp is lit, do not eject the “Memory Stick PRO Duo” from your camcorder.
- Even the still images protected with another device against accidental deletion are also deleted.
- Do not attempt the following operations when [Executing...] is on the screen:
  - Operate the POWER switch or buttons
  - Remove the “Memory Stick PRO Duo”

## Insert/Eject Memory Stick

### 1 Insert the “Memory Stick PRO Duo.”

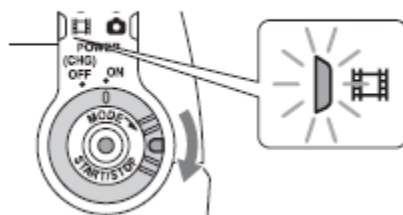
- 1 Open the Memory Stick Duo cover in the direction of the arrow.
- 2 Insert the “Memory Stick PRO Duo” into the Memory Stick Duo slot in the right direction until it clicks.
- 3 Close the Memory Stick Duo cover.



ACCESS lamp (“Memory Stick PRO Duo”)

### 2 If you have selected “Memory Stick PRO Duo” as the movie media, turn the POWER switch until the (Movie) lamp lights up.

If the POWER switch is set to OFF (CHG), turn it on while pressing the green button.



The [Create a new Image Database File.] screen appears on the LCD screen when you insert a new “Memory Stick PRO Duo.”



### 3 Touch [YES].

To record only still images on a “Memory Stick PRO Duo,” touch [NO].


### To eject the “Memory Stick PRO Duo”

Open the Memory Stick Duo cover and lightly push the “Memory Stick PRO Duo” in once.

#### Notes

- Do not open the Memory Stick Duo cover during recording.
- If you force the “Memory Stick PRO Duo” into the slot in the wrong direction, the “Memory Stick PRO Duo,” the Memory Stick Duo slot, or image data may be damaged.
- If [Failed to create a new Image Database File. It may be possible that there is not enough free space.] is displayed in step 3, format the “Memory Stick PRO Duo” (p. 63). Note that formatting will delete all data recorded on the “Memory Stick PRO Duo.”
- When inserting or ejecting the “Memory Stick PRO Duo,” be careful so that the “Memory Stick PRO Duo” does not pop out and drop.

## Setting White Balance

 Touch Option Menu (lower right corner of screen)

 Camera 3 Tab

### WHITE BAL. (White balance)



You can adjust the color balance to the brightness of the recording environment.

#### ▶ AUTO

The white balance is adjusted automatically.

#### OUTDOOR (☀)

The white balance is appropriately adjusted for the following recording conditions:

- Outdoors
- Night views, neon signs and fireworks
- Sunrise or sunset
- Under daylight fluorescent lamps


#### INDOOR (☼)

The white balance is appropriately adjusted for the following recording conditions:

- Indoors
- At party scenes or studios where the lighting conditions change quickly
- Under video lamps in a studio, or under sodium lamps or incandescent-like color lamps

#### ONE PUSH (📷)

The white balance will be adjusted according to the ambient light.

- ① Touch [ONE PUSH].
- ② Frame a white object such as a piece of paper, to fill the screen under the same lighting conditions as you will shoot the subject.
- ③ Touch [📷].  
 flashes quickly. When the white balance has been adjusted and stored in the memory, the indicator stops flashing.