

Sound

Music and Other Sound Effects

If you saw the movie *Jaws*, you probably remember the music that was used to build tension. That bum-bum, bum-bum, bum-bum sound made you sure the shark was about to appear.

In *Star Wars*, deep, low music was used whenever an evil character was getting into a scene — and light, classical music played when the scene featured one of the good guys.

Sound is an incredibly important part of a movie. It helps set a mood.

Good sound effects (**SFX** for short) not only make a movie a lot more interesting, they help tell the story as well. For example, if the audience sees a close-up of a woman's face while hearing the SFX of footsteps approaching, they know someone is coming, even if the audience cannot see the person coming. If the footsteps sound heavy and make an echo-type sound, they know — or, at least, are *led to*

believe — that something bad is about to happen. If there is scary music playing at the same time, it increases the tension even more.

The audience doesn't need to see something to know it's there. Sometimes it's more effective if people don't see everything because their imaginations can take over.

Creating SFX is lots of fun. You can make sounds using anything.

When you are trying to create the sound of something that you cannot record live, like the sound of hot lava, you could record the sound of spaghetti sauce boiling. A substitute sound will work, as long as it sounds believable to the audience. You just have to *experiment* until you find the right ones.

If you have editing capabilities (discussed later in this manual), you will be able to record your SFX separately, and add them to your movie after it is shot. You might also be able to **score** the movie, which means to add music to it.

If you don't have the editing equipment to add sound after your shoot, you will have to do the SFX *while* you are shooting. You will need to do your experimenting well before the shoot. Then you will need to rehearse in order to perfect the timing, so that the SFX can match the action. Also, you will need to do a few tests before the day of the shoot, to determine the most effective distance to the camera microphone to get the best sound.





Ideas to get you started:

- To create the sound of thunder, wiggle a flimsy cookie sheet.
- In order to make a thud sound heavier when someone falls, drop some heavy books off-camera.
- To make the sound of fire, crinkle up some cellophane or some dead leaves. If you wanted to add the sound of popping sparks, have someone crack their bubble gum a few times into the microphone.
- Walking in very wet sneakers makes a nice squelching sound.

Garbage-In Means Garbage-Out

During the shoot, microphones are the tools we use to gather sound for recording. Microphones work very much like our ears except for one thing — they have no brain.

Our brains help us filter out distracting noises so we can concentrate on what we want to hear. *Microphones take in everything*, indiscriminately — the voice and natural sounds you want, along with the noise and garbage that can garble your audio track.

To help solve this problem, microphones are designed with different “listening” or pickup patters, and with different ways of mounting.

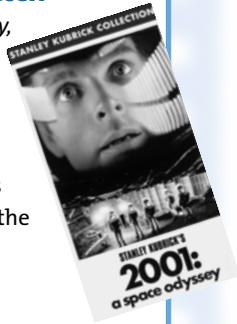
The job of the audio person is to choose the right microphone, and put it as close as possible to the source of sound in order to get the most program audio and the least garbage (unwanted noise).



A Movie to Watch

2001: A Space Odyssey, directed by Stanley Kubrick.

How do you think music enhanced this movie? What about the cinematography?



Microphone Types

On-Camera Microphone

The camera-mounted microphone is very convenient, but it is also very far from the source of sound. For interviews, the voice gets mixed with too much other noise. At a shoot, you may hear a person fidgeting in the back louder than the person on camera.

Use the camera microphone for getting ambient or “natural” sounds of crowds, traffic, rustling leaves, etc.

There is a MICROPHONE SELECT SWITCH next to the camera’s built-in microphone. The zoom setting will help direct the built-in microphone toward the actors (or subjects) according to the setting of the zoom lens. This directional function will work better on a close-up shot than a wide shot.

The TELE setting increases the built-in microphone’s sensitivity when recording sound from a distant source.

The WIDE setting records the widest range of sound. Under normal shooting conditions, the WIDE setting is most commonly used. This will allow the best recording of ambient sound.

Hand-Held Microphone

Designed to be hand-held or put on a stand, this is a general-purpose microphone. Plug it into the camcorder’s microphone input, and hold it as close as practical to the actors.

Clip-On Microphone

The clip-on microphone (also called LAPEL or LAVALIERE) is small enough to be clipped onto the actor’s lapel, shirt, necktie, or dress. It is not very noticeable and tends to make the person less self-conscious than a hand-held microphone in the face.



Tips from the Experts

Because video is such a visual medium, the audio is often neglected in beginning video production. But audio can be just as important as the picture. What follows are some suggestions and considerations for capturing good sound.

Always, always, always:

- Test your equipment before you plan to use it. It is better to find out a microphone is not working before you start shooting, rather than after.
- When you are using the camera, always check your sound before you start. Do a brief test, and then play it back.
- Ideally, a microphone is held or placed 4-6 inches away from your subject's mouth in order to capture clear audio. If you use the on-camera microphone, the ideal distance is about 3 feet — just far enough away to focus on good head and shoulder shots. Be careful about any noise you make. Because you will be closer to the on-camera microphone than the subject will be, you will sound louder.

Solving Audio Noise Problems

Wind can play havoc with your program audio, causing loud pops and crackles which cannot be removed later. Windscreens over your microphone can help.

A common windscreen is the plastic foam “sock” that slides over the microphone’s pickup element. The porous foam baffles much of the wind while causing minimal interference to voice and music.

Indoors or out, the audio operator quickly discovers the world is a noisy place. Many unwanted sounds intrude on your production track and obscure the audio you want.

Indoor nuisances include air conditioners, refrigerators, motors, other voices, phones, and pagers. Outdoors, you have traffic, sprinklers, airplanes, wind, voices, and all sorts of things you never notice until you start recording.

Make the best of a noisy situation. Choice of microphone, windscreen, position and timing will all help to minimize unwanted noise and make the sound for your film cleaner and better.

Your choice of microphone is important. A unidirectional (one direction) type will help reduce noise when filming in a crowd or on the street.

Outdoors, try to find a quiet spot for the shoot. Move around the building to escape traffic noise.

It is a good practice to record ambient, or natural sound for each location you are shooting. After you get the scenes you want in a location, ask people to stop talking and turn the camera on in order to record a couple minutes or more of the natural location sounds. In editing, natural sound mixed with program audio can help create smooth audio transitions.



ADDING MUSIC TO YOUR FILM: *

If you plan to use music, be aware of the impact of music and sound effects on your film. Choose them carefully to reflect the feeling and pace of your shoot.

One way to experiment with adding music and sound effects after you shoot is to use the **AUDIO DUB** feature on your camera, if it has one. This feature allows you to record audio (music, voice, or other sounds) over the video you have captured, just by pressing down the button while you play the video in the camera. Bear in mind, if you use this feature, you will erase all other audio on that part of the tape — like the actors' dialogue!

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And a Few “Sound” Tips

- Always check to make sure the audio is recording when you are shooting. You can do this by playing back a short test recording to make sure that both audio and video are working.
- Try to shoot in locations that are not noisy. If you are shooting in a noisy building, or outside where there is traffic, the sound will likely come out poorly.
- If you are shooting an actor talking in an area that is noisy, think about showing the source of the noise, at least in one of the shots.