Using Microphones

Matter and energy are composed of variant harmonic frequencies
Sound Is As Important As Your Image

• Adeptly recorded audio can incite an emotional response in the viewer.

• Music should never be distracting
• Dialogue should be slightly more audible than you think, because you’ve heard your subject say their line many times, but your viewer may be hearing it for the first time. If they can’t fully engage, you will lose their attention.
Microphone Summary

- **Panasonic HMC 150 Camera** → Internal Microphone
  - Mini Shotgun, Shotgun, Lavalier, Wireless Lavalier, Vocal (all XLR),
- **Canon Camcorder** → Internal Microphone
  - Stereo Microphone, Mini Shotgun & Lavalier
    (need XLR to Mini Adaptor)

**Power Sources**

- Shotgun, Lavalier, and Stereo Mic → AA Battery
- Vocal, Mini Shotgun → Phantom Power Source
Do Not Distort

This is your audio bar

If it extends to the red line(s), you are risking clipping your audio.

Often, you will use both of the two audio meters if you are recording stereo. Mono recording means only one channel.
HMC150 Audio Options

During shooting, you can record up to two channels of sound. You can also switch the input sound to be recorded on each of the channels to the built-in microphones, external microphones or audio equipment connected to the camera.

**Using the built-in microphone:**
Switch the CH1 SELECT switch to INT (L). Audio from the built-in microphone Lch is recorded to audio channel 1.
Switch the CH2 SELECT switch to INT (R). Audio from the built-in microphone Rch is recorded to audio channel 2.

**Using an External microphone:**
Connect an external microphone to the INPUT 1 or 2 (XLR 3-pin) terminals.
Use the INPUT 1 or 2 switches to switch the audio input
MIC: (an external microphone is connected)
**DO NOT USE LINE INPUT UNLESS YOU HAVE A AUDIO DEVICE LIKE AN AUDIO MIXER.**

**Using an External microphone:**
When using the phantom microphone (which requires +48V power supply), set the INPUT 1 or 2 (MIC POWER +48V) switches to ON.
ON: (When using the phantom microphone) +48V power supply to INPUT 1 or 2 terminals.
OFF: (When a phantom microphone is not connected) No power supply for INPUT 1/2 terminals.
The battery will discharge faster if you use a phantom microphone.
Every microphone has a property known as directionality. This describes the microphone's sensitivity to sound from various directions. Some microphones pick up sound equally from all directions, others pick up sound only from one direction or a particular combination of directions.

The types of directionality are divided into three main categories:

**Omnidirectional**
Picks up sound evenly from all directions (omni means "all" or "every").

**Unidirectional**
Picks up sound predominantly from one direction. This includes cardioid and hypercardioid microphones

**Bidirectional**
Picks up sound from two opposite directions.
Lavalier (Lav) Mic:

- This is the primary mic used for recording dialogue. Always try to conceal the lav wire, this can be accomplished by running the mic up the bottom of the subject’s shirt.
YOUR LAV MIC USES ONE AA BATTERY

Unscrew the round cover to ensure there is a battery inside. (First trouble shooting step with this mic if you’re not getting Sound)
Wireless Lav Mic

To Function: Connect mic into mike input of the transmitter. Plug headphones and XLR adapter cable into mike out of the wireless receiver. Plug XLR adapter into XLR cable and then into the Camera. Listen to your free voice!

Be able to hear your voice WHEREVER!! OMG!! In the Desert? YAHH. Want to hear your “OM”INGG and meditating in a Buddhist monastery IN THE MIDDLE OF NOWHERE? YAHH.
Tools of the Trade

• **Shotgun Mic:**
  • This mic is directional, it records where you point it.
  • It can be placed on a boomstick, and your subject can be savagely beaten with it.
  • Note: Many cameras have a built-in mic, but their recording quality is low. Use external mics wherever possible.
Mountable Camera Mics

- Panasonic super-directional mountable shotgun: Plug XLR adapter into XLR input of camera and slide base attachment onto the top section of the Panasonic camera.
Stereo Microphone

- Used for voiceovers and narration
- Sound effects can help enhance the viewing experience. Avail yourself of the application Soundtrack Pro’s large library of sound effects.
This cable input connects external microphones to your camera. One input is male, the other female.

**XLR CABLE**
Be absolutely certain the inputs are set to “mic”
Otherwise your people will get snatched up.
DIGITAL SOUND RECORDERS

Simple as an Easy Bake Oven: recording level knob (on right of Sony D50) helps adjust sound levels to prevent getting distorted and blown out. Volume knob (on left of Sony D50) is used for determining the levels of sound that you hear in your headphones. Record sound with red circular button and to upload onto a computer, insert USB adapter into the left side of the Sony D50. Import Sound File into Final Cut. Microphones can also be inserted into the Sound Recorders into the “Line In” input on the right side of the Sony D50.

Microtrack Recorder: Mini inputs
Sony D50 Recorder: Mini inputs
Zoom H4n Recorder: Mini, Phono and XLR inputs

Exquisite for recording any sound (i.e. A slinky toy sliding down your uncle Ish’s back when he’s sleeping and dreaming of Yum Yum Donuts.)
Recording Audio? You Need Headphones. Good ones.

HEADPHONES
Audio tracks in Premiere corresponding to the input levels that were recorded on the camera. You can adjust them by dragging the volume levels either up or down.

The Effect Controls tab also can control the audio tracks.

See audio waveforms with this.

Audio meters area.
AND THANK YOU FOR SPENDING TIME WITH US.
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