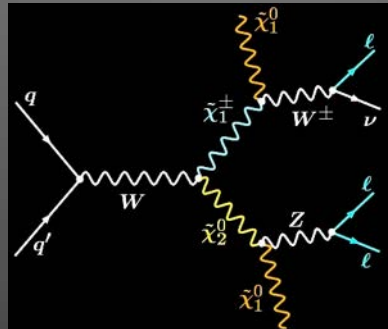




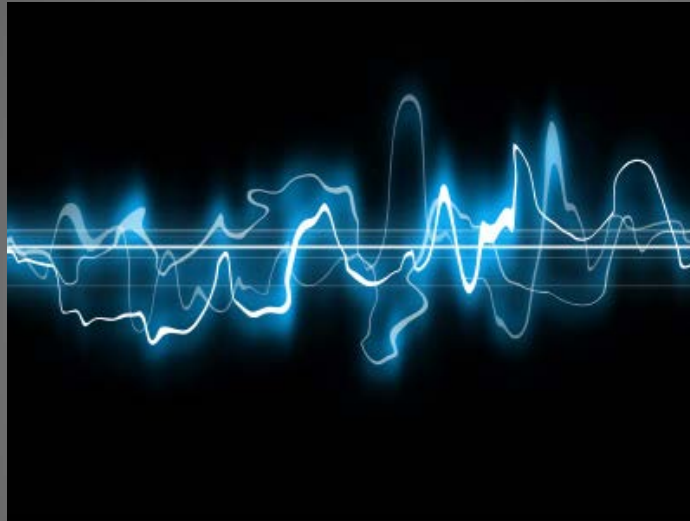
USING MICROPHONES

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.
- The use of DIAGETIC AND NON-DIAGETIC SOUND

MICROPHONE TO CAMERA CONNECTIONS

- **C100 Cameras** → Internal Microphone, Mini Shotgun, Shotgun, Lavalier, Wireless Lavalier, Vocal (all XLR connections),



- **Canon XA35/XA11 Cameras** → Internal Microphone, Mini Shotgun, Shotgun, Lavalier, Wireless Lavalier, Vocal (all XLR connections),



- **Camcorder without XLR inputs** → Internal Microphone, Mini Shotgun & Lavalier (need XLR to Mini Adaptor)



Power Sources

- Shotgun and Lavalier → AA Battery
- Vocal, Mini Shotgun → Phantom Power Source (+48V)



DSLR VIDEO MICS

DSLR cameras only has the 1/8" Mini audio connection, but we have Rode microphones for these cameras



DSLR AUDIO ADAPTORS

Audio adaptors allow you to plug in XLR mics into a camera that only has the 1/8" Mini connection. They also give you the ability to monitor the sound and adjust the input recording level.



MIC PICKUP PATTERNS

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

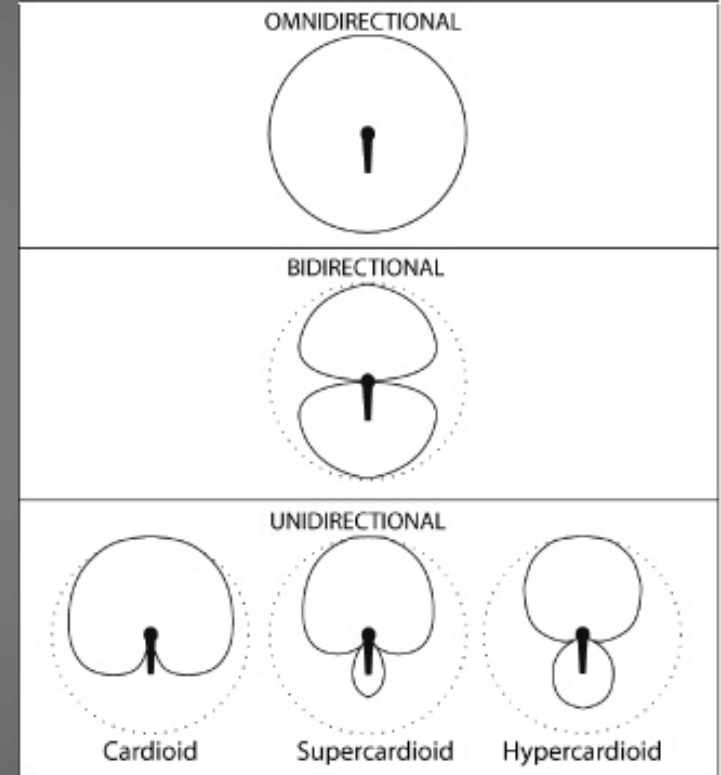
Picks up sound evenly from all directions (omni means "all" or "every").

Unidirectional

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

Bidirectional

Picks up sound from two opposite directions..



Do Not Distort Your Audio!



This is your audio bar

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

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

CANON C100 AUDIO OPTIONS

During shooting, you can record up to two channels of sound on the audio handle . You

can switch the input sound to be recorded on each of the channels using the built-in microphones, external microphones or audio equipment connected to the camera.

Using the built-in microphone:

Switch the AUDIO IN CH1 switch to INT . Audio from the built-in microphone is recorded to an audio channel

Switch the AUDIO IN CH2 switch to INT. Audio from the built-in microphone is recorded to an audio channel

Using an External microphone:

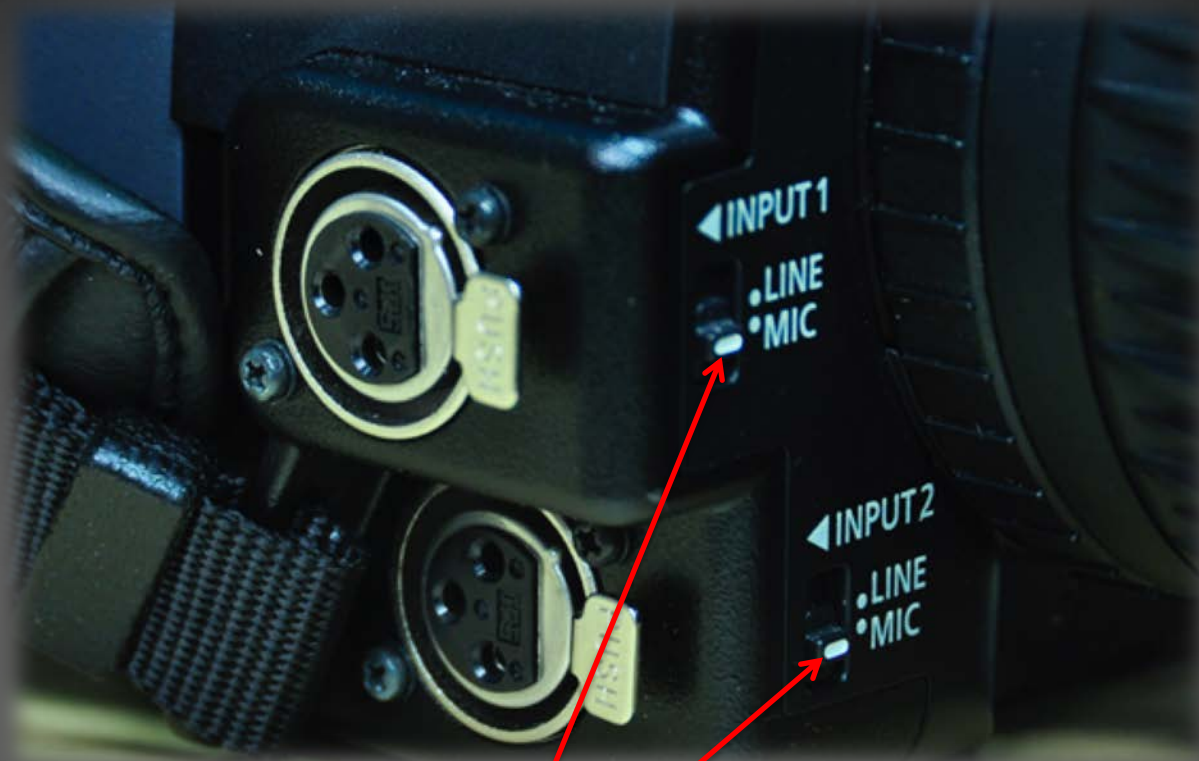
- 1) Attach the Audio Handle and connect the audio cable to the camera.
- 2) Connect the microphone's XLR cable to the XLR connector (CH1 or CH2).
- 3) Change the switch to EXT for an external mic.
- 4) Change the audio switch to MIC or MIC +48V.
- 6) Check the audio meters on the screen to make sure the mic sound is working.
- 7) Decide if you want the Auto or Manual input levels by setting the switch.

Using an External microphone:

When using a phantom power microphone which requires + 48V power supply (no battery compartment), set the switch to MIC +48V

The camera battery will discharge faster if you use a phantom microphone.





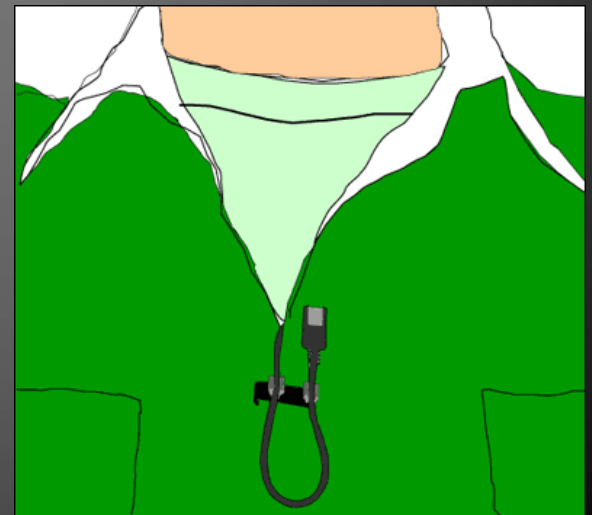
If the camera has a LINE/MIC switch, always set it to MIC if you are an external microphone. The LINE setting is for when you are connected to a mixing board, for example, and getting sound from a live event where the signal is stronger.*

TOOLS OF THE TRADE

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 MICS

Connect the mic into the input of the transmitter. Plug XLR adapter cable into the wireless receiver. Plug XLR adapter into XLR cable and then into the Camera.



Faces you might make when you first use a wireless lav mic kit.



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: Most cameras have a built-in mic, but their recording quality is low. It records too much ambient unwanted sound.
- Use external mics wherever possible.



MOUNTABLE CAMERA MICS

- Supercardioid Mini-shotgun: Plug the XLR connector into XLR input of camera, and slide the base attachment onto the top section (shoe) of the camera.



VOCAL MICROPHONES

- Used for live events, voiceovers/narration or field recording
- These typically need to be powered by Phantom Power from the camera or a PA system (XLR Connection).



XLR CABLES

This cable input connects external microphones to your camera. One input is male, the other female.



DIGITAL SOUND RECORDERS

Simple as an Easy Bake Oven: recording level knob helps adjust sound levels to prevent getting distorted and blown out.

Volume knob is used for determining the levels of sound that you hear in your headphones.

The “Line In” input.

Zoom H5: Detachable Internal Mic, 1/8” Mini and ¼” connections, and (2) XLR inputs

H6 Recorder: Detachable Internal Mic, 1/8” Mini and ¼” connections, and (4) XLR inputs





USB MICS



These are great mics for voiceover/narration into Premiere Pro, Audition, Garageband or any other video or sound editing program.

Record a voice-over on an audio track into a Premiere timeline:

<https://helpx.adobe.com/premiere-pro/using/recording-audio.html>

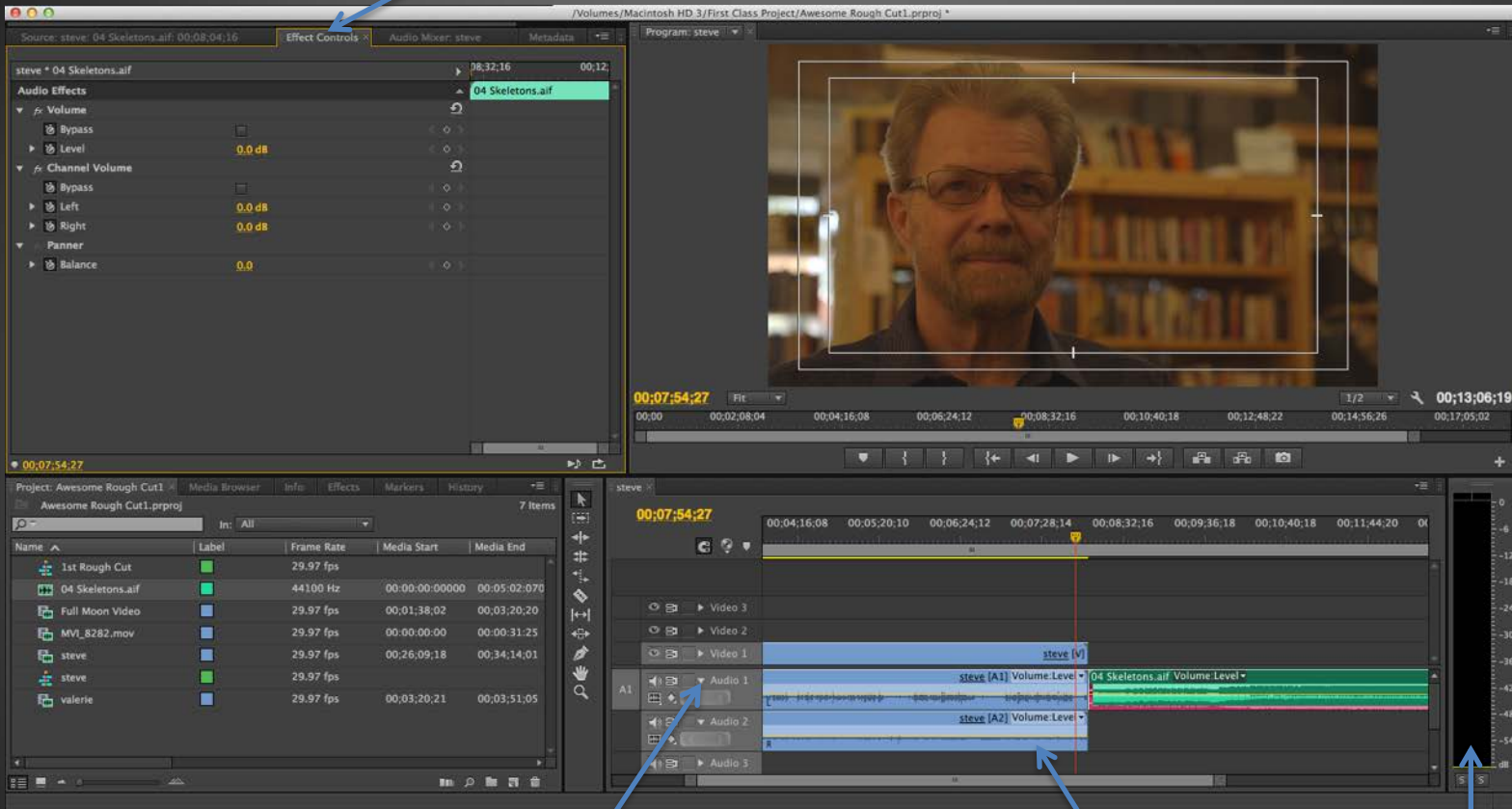


Recording Audio? You Need Headphones. Good ones.

**WEARING HEADPHONES WHEN RECORDING IS A
GOOD LIFELONG PRACTICE THAT MAKES YOU A
BETTER HUMAN BEING AND INCREASES YOUR
LIFE EXPECTANCY.***

*THIS IS AN OPINION OF THE MEDIA STUDIES DEPARTMENT AND NOT A SCIENTIFIC FACT.

The Effect Controls tab also can control the audio tracks

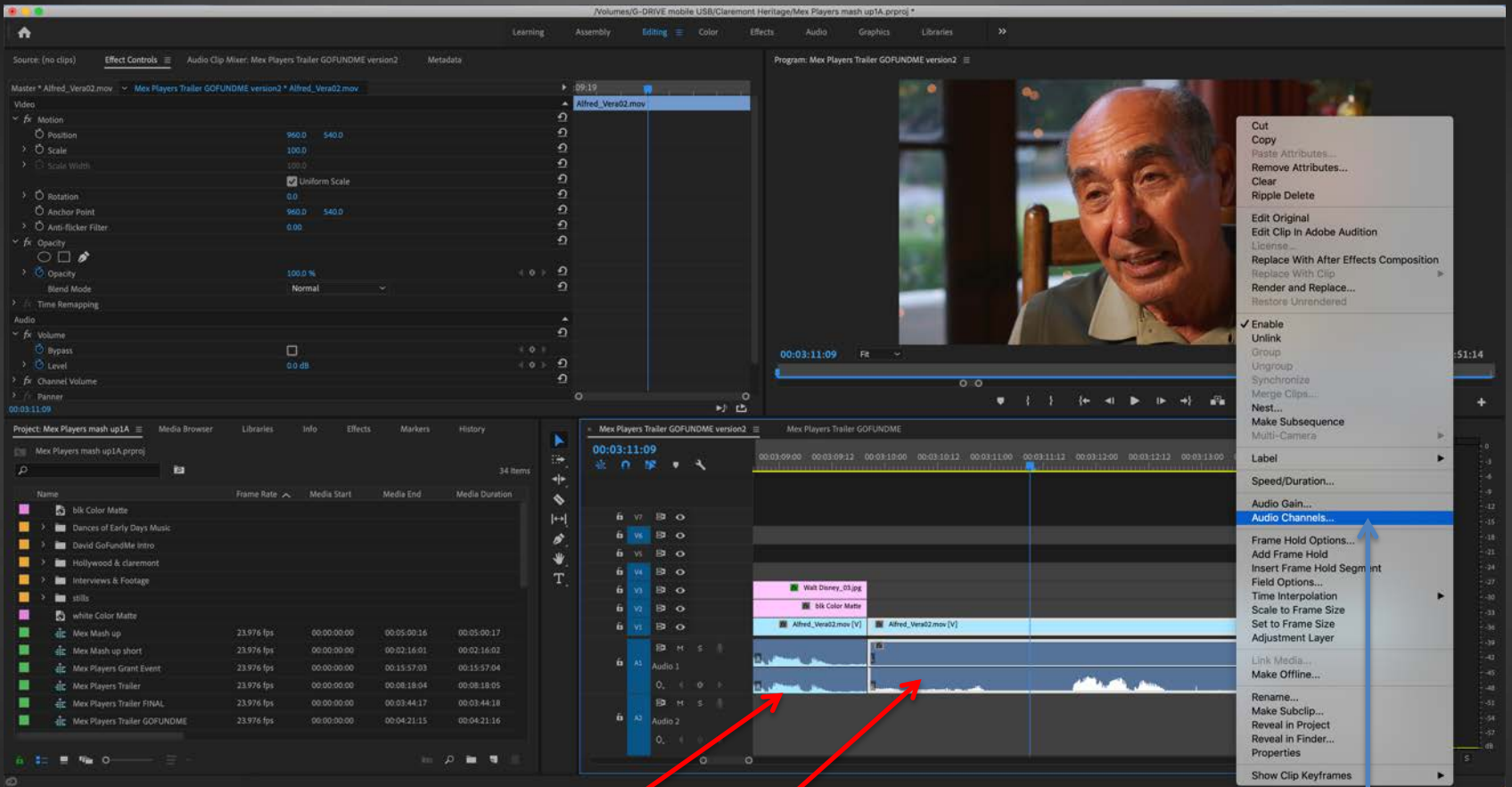


See audio waveforms with this

Audio meters area

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.

CHANGING A MONO RECORDING TO STEREO

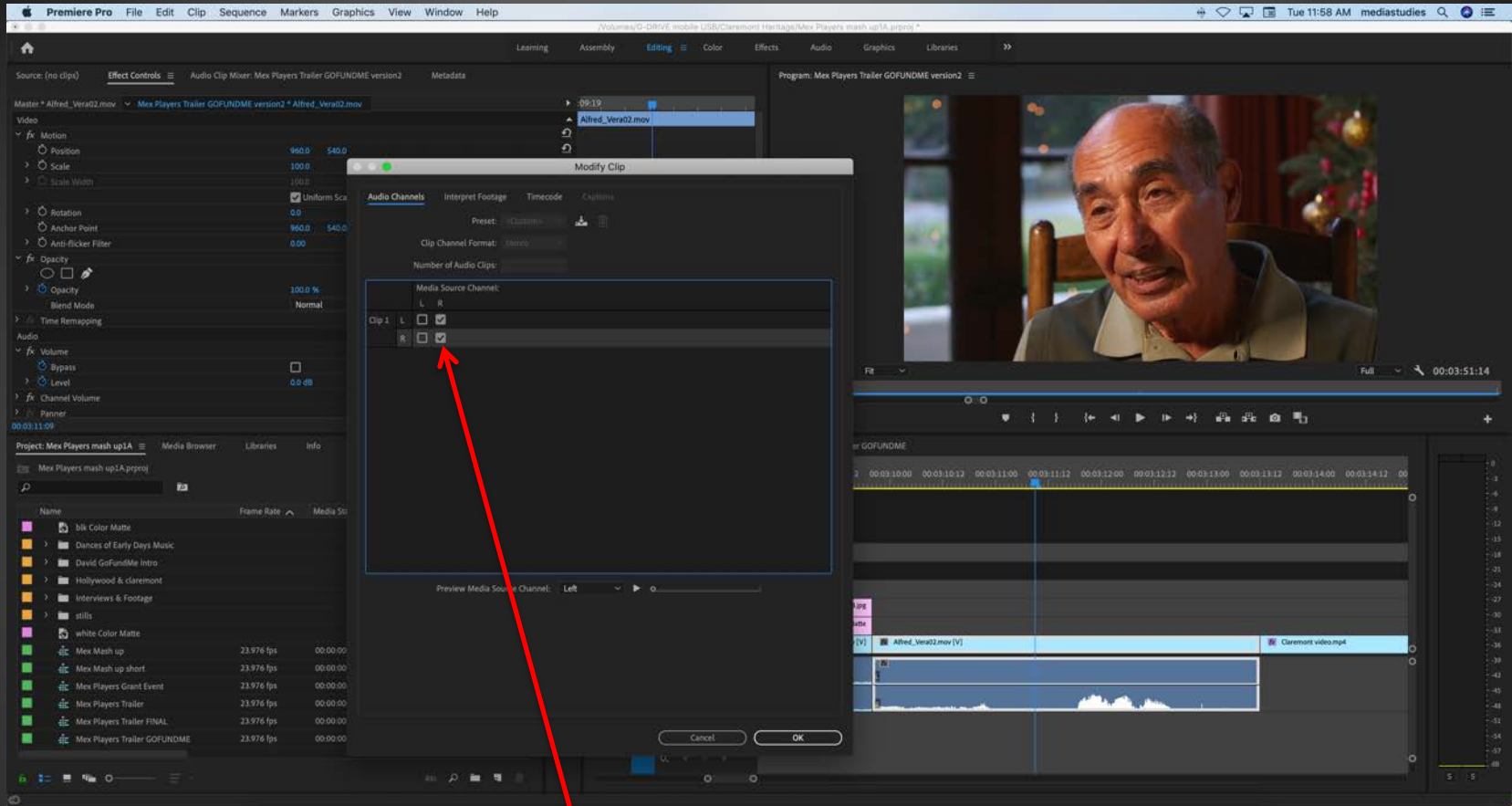


Stereo recordings display two waveforms on the channel (either left and right)

Mono recordings display only one waveform on the channel (either left or right)

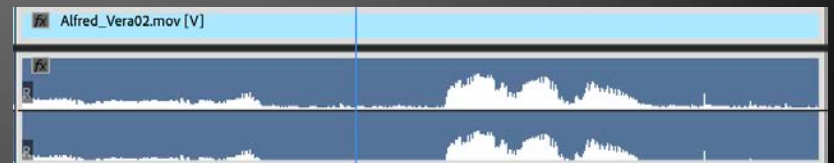
Right-Click, and select Audio Channels

CHANGING A MONO RECORDING TO STEREO



Select the channels you want to hear
(This example will have the Right audio playing on both channels)

The waveforms will be displayed as shown, and it will be heard equally on both of the speakers



AND THANK YOU FOR SPENDING TIME WITH US.
SINCERELY, MEDIA STUDIES PRODUCTION CENTER.

