5/3/2019

AMA

Marking Sonic Events chapter 1

Reading an audio waveform 5m 36s

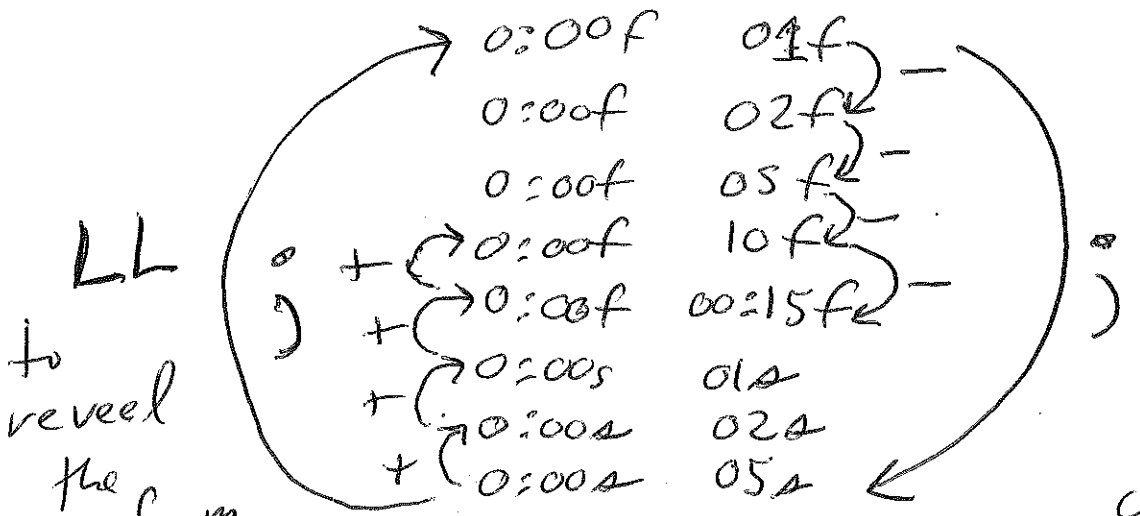
What does pressing + do in AE?

Needed + + + + + + +

7 +s to get to frame view

for example.

- - - - - - - - takes you back up



LL to reveal the waveform

The ; takes + to frame by frame view of timeline or back out to seconds view.

Drag downward to see waveform taller in the layer.

Change the label color — yellow is very visible against the grey background. Label color of the layer with audio and thus waveform.

The ; effects the range of the TIME NAVIGATOR —

What are the two characteristics of the sound you can see with the waveform?

(i) the **PITCH** of the sound — how high pitched or low pitched is it?

(ii) the **AUDIO AMPLITUDE** or **LOUDNESS** of the sound. Loud or soft.
Taller the waveform, louder the sound.
How the air is being pushed and pulled away from / toward your eardrums.

Excursion up and down — big excursion, louder sounds!

F3 reveals the ~~effects~~ control panel.
↖ 3 is like a backward E, i.e. Ɛ,
so think F3, (F3 Effect) controls panel, or (FƐ Effect) controls panel.

F3 or FƐ (Effect)

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Tone effect is shown after BSS

F3 Waveform options → 5 frequencies, 1 level

Decimal point key on Numeric keypad does what?

Frequency is 100 cycles/second (Hertz Hz)

Tutorial raises Frequency to 300 cycles/second. High pitch.

Frequency of 60 Hz — very low hum.

Level is # of decibels or loudness control. Watch waves get higher or lower.

Every halving of the volume is 6Db on the sound level.

Level 100% → 50% → 25% → 12.5%

0db −6db −12db −18db

Spotting beats in music

6:03

Individual waves fluctuating back and forth—

Clipping
distortion

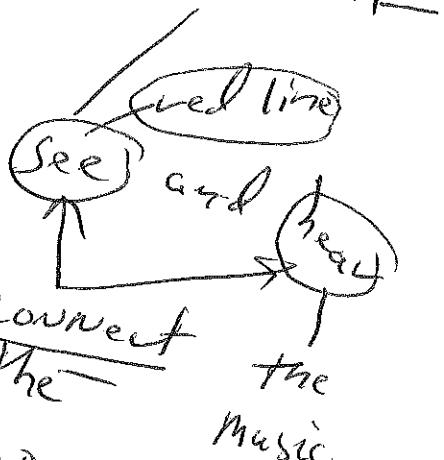
Speaker
phone
pushes
toward our eardrum
and pulls away—

) to zoom in
to frame by
frame level.

Closely
spaced
squiggles
= higher pitches.

Watch the red current time indicator
as you do decimal point audio
preview— red line goes through
the waveform—

Also watch the audio levels
to see the fluctuating
up and down,
higher peaks and
lower peaks—
See if there is
clipping—



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Spotting beats in music—
— identifying measures and downbeats

The first beat of a measure (bar) is often referred to as the "downbeat" or "the One".

The Ones are the starts of phrases—

Have waveform hidden so you have more screen real estate available, plus avoid cost of drawing the graph of audio.

How do this?
LAYER MARKERS to indicate the SPOTS you determined.

PLACING MARKERS

- Layer markers
- adding comments to markers
- marking other events in the music
- placing markers in realtime
- tempo as FPB (frames per beat)

PLACING MARKERS

6:10

* key on numeric keypad does what?

Places a marker on the comp, if no layer is selected. Comp marker.
Otherwise places a layer marker on the selected layer, at the position where the CTI is at.

Audio waveforms have changes that occur much faster than individual video frames.
Audio is much finer in detail than video frames.
Should audio lead or lag an audio event? Chris says to lead, video frame goes before audio wave start — up to 1/29.97 second before

Are you starting or ending a transition?

Earlier than waveform or later than waveform?

Chris goes a little bit before!

Alt + * num keypad key — add marker and leave a comment —

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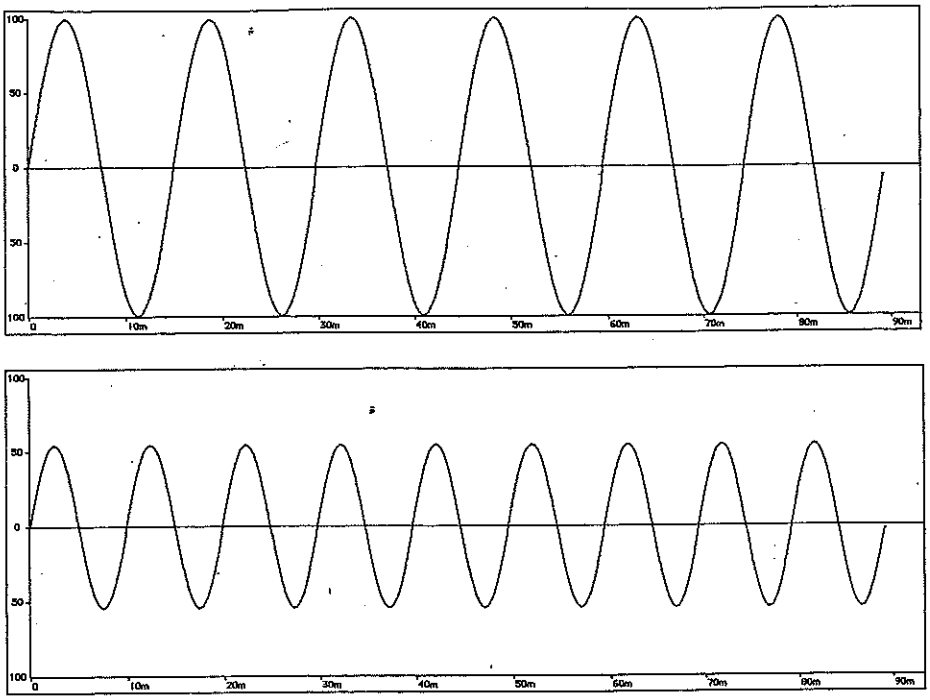
Tapping the * key to the music — adding markers as the music plays —

Spotting Audio

When we are animating or editing visuals to sound, the most interesting points in the audio tend to be the loudest ones: the moment a door slams, lightning cracks, a drum is hit, or a client's wails crescendo. By looking for these *peaks* – taller points in the audio waveform, going in either the upward or downward direction – we have a tremendous head start in finding the more interesting audio events, which we can then use as a reference point for visual edits and effect keyframes. Strong drum beats produce these peaks, as do syllables in words. Areas with no peaks or other visible waveform indicate pauses between words and sentences.

Starting the process of spotting important points in a piece of music. We've used both numbered comp markers along the top, plus named layer markers. Comp markers have the advantage of letting you jump directly to the first 10 numbered markers by using the numbers on the regular keyboard. You can have any number of comp or layer markers, and add your own comments.

MARKERS



Here are two simple waveforms displayed in an audio editing application, zoomed in the same amount. As the curve of the wave goes above the centerline, air is being pushed toward you; as it goes below, air is being pulled away. Time passes from left to right; the markings along the bottom of this particular display are in 10-millisecond (hundredth of a second) increments – giving an idea of how fast sound vibrates. Since the up and down excursions for the second waveform are not as tall as for the first, you know the second sound is relatively quieter; because its up and down excursions are also happening faster, you know it is higher in pitch.

PITCH AND AUDIO LEVEL (Loudness or softness)

frequency ← soprano, ~~tenor~~, alto, bass →