## 025:250 COMPOSITION: ELECTRONIC MEDIA I Fall 2009 Introduction to Peak

## 1. Peak

- a. Digital mono or stereo soundfile editor
- b. OK for recording; most students prefer Pro Tools for recording
- c. Good for extracting sounds from a long recording take
- d. Cleans up individual sounds for later use in Pro Tools and Max/MSP
- e. Cleaned up sound:
  - i. normalized (in class definition of normalization)
  - ii. no silence at beginning
  - iii. no silence at end
  - iv. fade in and fade out for smoothing the edit points
- f. OK for pitch change; Pro Tools plug-in "Pitch n Time" excels at that
- g. Very good tool in general for pulling out and cleaning up individual sounds from a recorded take
- h. Batch Processing is a major, majorly useful feature of Peak that is unique to it. (In class definition of batch processing).
- 2. Power up the studio as follows:
  - a. Set the track lighting as discussed in class.
  - b. Activate the computer by waking from sleep (or turn it on)
  - c. Turn on the large monitors, if desired, by finding the remote in the drawer, pointing at monitors, pressing the power on button.
  - d. Turn on the mixer and other hardware by pressing the grey button in the left corner of the power conditioner in the top space of the rack in the left table rack.
  - e. After 30 seconds, turn on the speakers by pressing the grey button of the power conditioner in the right table rack.
- 3. Set the mixer for Peak as follows:
  - a. Find the mixer faders for Digi 003 inputs 1, 2 and Mac faders 1, 2 (or L, R). In class discussion of why both sets of faders.
  - b. Set these faders to U (unity gain)
  - b. Punch in channel selectors 1-2
  - c. Set Pan to L and R appropriately (discussed in class)
  - d. Set the busses to unity gain
  - e. Find the faders directly to the left of the busses. These are for the speaker selections.
  - f. Do not depress the channel selectors
  - g. To test the audio, open iTunes and play a track. The sound will come out either from Pro Tools or Mac.
- 4. Soundfile types and formats:
  - a. aiff, aif, wave, wav are lossless and good.
  - b. mp3 and others are lossy and bad. Convert to aiff if necessary.
  - c. Sampling rate 44.1 khz, 48 khz, 96 khz, 128 khz.
  - d. 44.1 is the CD standard. 48 khz for DVDs.
  - g. Bit depth 16-bit, 24-bit
  - h. 16-bit is the CD and DVD standard
  - i. Mono
  - j. Stereo interleaved
  - k. Stereo dual mono

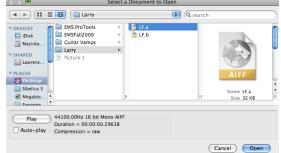
- 5. Create a folder as follows:
  - a. Open the EMS firewire drive
  - b. Make a new folder and name it "Larry", where you use your name, as discussed in class.
  - c. Place at least 2 soundfiles you will be working with in this folder, as discussed in class.
  - d. Name these files "YI.a" and "YI.b" as shown below:

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	2 items, 45.08 GB av	ailable		10

- e. Discussion of appended aif and others
- f. Discussion of quitting other running programs
- 6. Launch Peak as follows:
  - a. Double click on the Peak icon in the dock:
  - b. A window like the one below may appear:

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Megabio A	11		
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Auto-play			

- c. Ignore this for now and hit cancel.
- d. Go to File>Open. A window exactly like the one above will appear (in class discussion on why we do it this way).
- e. Navigate to the "Larry" folder, select "YI.a". Do not open yet.



- f. Read the file info in the lower left corner, as discussed in class.
- g. To open, click "open".

7. A window somewhat like the one below will appear:



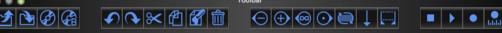
a. Ignore this window and select Window>Transport and Window>Toolbar, as shown below:

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b. A transport window like the one below will appear:

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- c. We will return to this transport later.
- d. A toolbar window like the one below will appear:

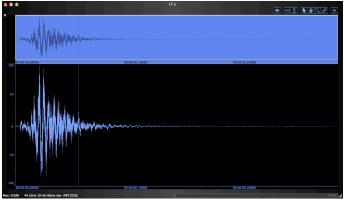


- e. This window is not needed and can be closed by clicking in the upper left corner.
- 8. Go to the Options menu and check the items shown below:

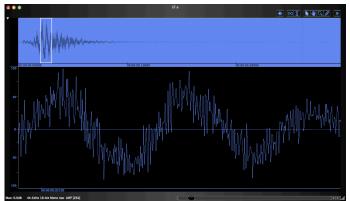
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a. In class discussion of these options.

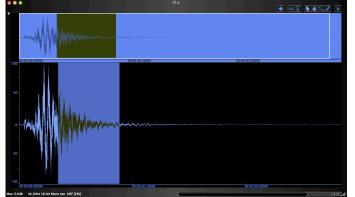
b. Options>Show Overview places on overview of the waveform above the regular waveform as shown below and discussed in class.



- c. Notice the soundfile info in the lower left corner.
- d. Notice the presentation of the waveform in the edit window and overview.
- e. Notice the timing marks and the position of the vertical cursor line. The cursor line can be moved to any location, as discussed in class.
- f. The key commands cmd [ and cmd ] compress and expand the edit window, as shown below:



- g. Use the scroll bar in the lower right to position the wave form in the window.
- h. Notice that the part of the edit window that is selected is shown in the overview with a rectangular box.
- i. To play the sound from the edit point, press spacebar.
- j. To play the sound from the beginning, press return, then spacebar.
- 9. To edit the waveform, click-drag the cursor over the desired area, as shown below:



- a. Use these key commands for copy, cut, paste:
  - i. Copy = cmd c
  - ii. Cut = cmd x
  - iii. Paste = cmd v

- 10. The following actions are very useful:a. Fade in and out

  - b. DSP>Normalize
  - c. DSP>Change pitch, the window of which is shown below:

change riteri
Interval:
-8va M7 M6 P5 P4 M3 M2 0 M2 M3 P4 P5 M6 M7 +8va
Change Pitch by 0 Cents
Fine Tune:
-100 -75 -50 -25 0 25 50 75 100 Cents
Fine Tune by 8 Cents
Preserve Duration
Cancel

11. In class discussion of creative actions on a soundfile.