Audition
Quick Reference Guide

Created By:

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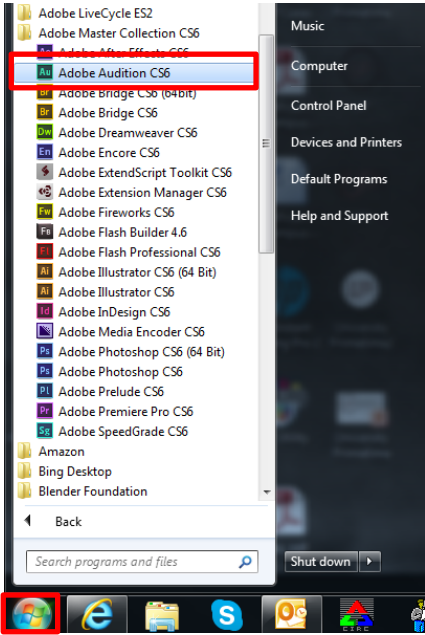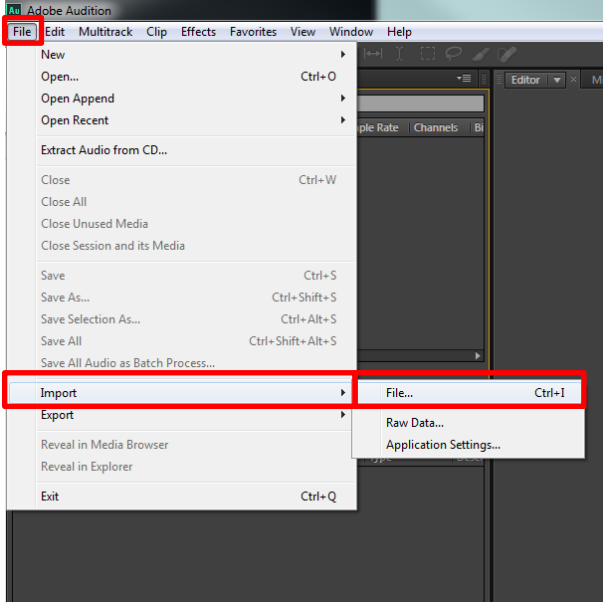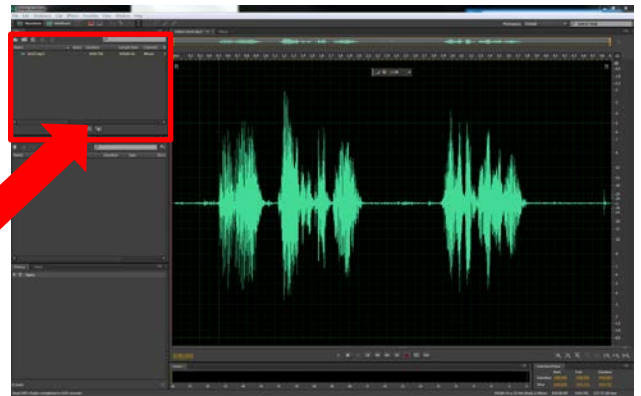
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Adobe Audition Quick Reference Guide

Getting Started

Importing audio files and browsing media:
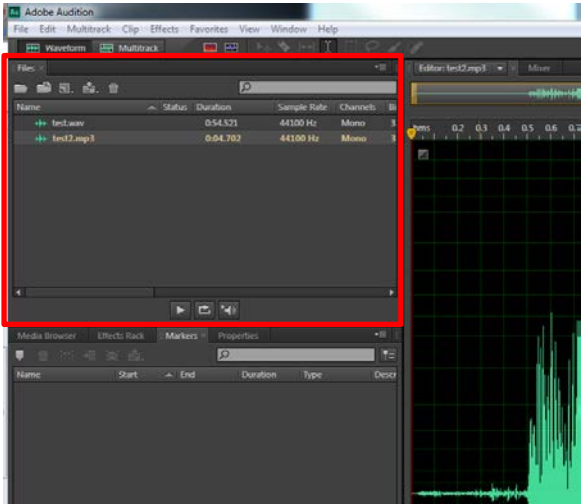
Steps	What You See
Open: Adobe Audition CS6 **Note**: Adobe Audition CS6 is licensed on campus computers. The Adobe program is a part of one of many available Adobe applications. The primary focus of Audition is the ability to edit and create audio tracks. This is not the latest version of what you could purchase. Some of this material will not be available if you are using an older version of Audition or the new CC version with the Adobe Cloud.	
Import File: **Select**: File -> Import -> Audio -Or- **Short Cut Command:** Ctr+I **Browse**: For your audio file **Supported Audio Formats:** "APE, AU, AVR, BWF, CAF (all uncompressed and most compressed versions), FLAC, HTK, IFF, M4A, MAT, MPC, MP2, MP3 (Including MP3-surround ifiles), OGA, OGG, PAF, PCM, PVF, RAW, RF64, SD2, SF, SND, VOC, VOX, W64, WAV (including files with up to 32 channels)" **Source**: http://helpx.adobe.com/audition/using/supported-file-formats.html	

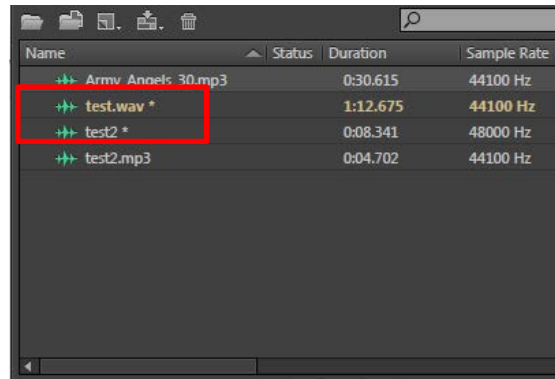| Steps	What You See
After Import is completed your audio file will be available in the Waveform workspace for editing. **Note**: Importing further audio files will only make those files available in the Files panel. Select the specific audio file in the Files panel to work on it in the Waveform workspace.	

Files Panel:

Steps	**What You See**
This panel is an alternative tool to help maintain your imported media files Select to open audio file to both be a selection option in this panel and also have it available immediately for edit in the waveform workspace Select to Import media. Function is VERY SIMILAR to open file. Doing this will only import file to Files panel Select to create a blank slate for an audio track Select after highlighting audio file in the File window to make a new Multi-track session Select after highlighting audio file in the File window to delete item from File Window	

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Note: This will not remove audio file from your computer, rather it removes the asset from your File panel. Also, the files placed here will disappear after closing out this session of Audition. Use this panel as a means to quickly work on multiple audio tracks at once. Files with an asterisk in the title have been altered in the workspace and will write over the original file.	Files With Asterisk Need To Be Saved:
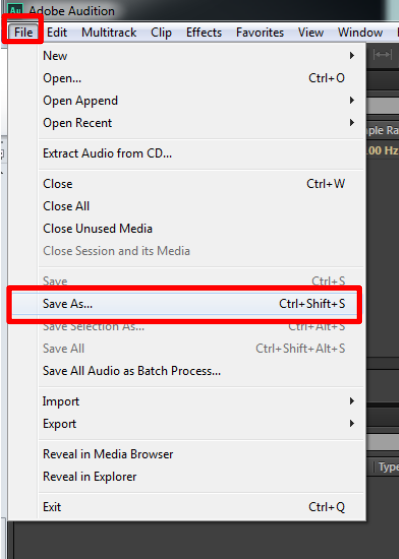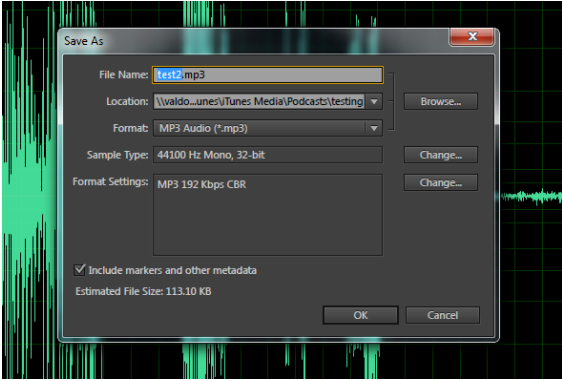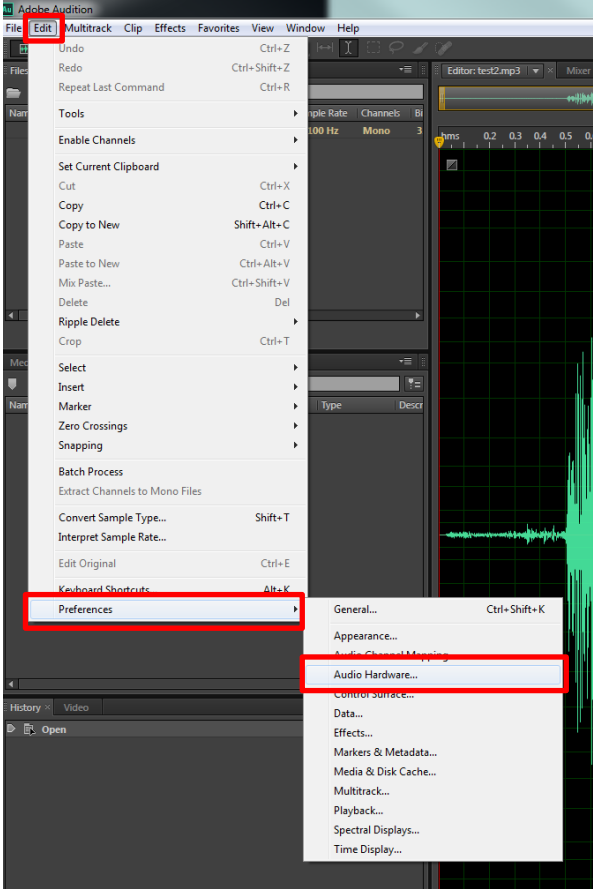
Altering Workspace:

Steps	What You See
The location for the various panels can be altered by switching the "Workspace" option. **Change Workspace simply by:** **Clicking**: "Window" tab and "Workspace" **Select**: The workspace layout you prefer **Note**: We will be using the default workspace throughout this guide.	

Saving Audio File:

Steps	What You See
Click: File -> Save As **Note**: Anything you do in the Waveform workspace will create a permanent change to the original file, thus it is important to "Save As" to change file name and avoid writing over the original copy.	
Choose your desired "File Name" **Browse**: Your computer for a safe location to save your work **Select**: From the "Format" dropdown window what you want your file type to be saved as **Select**: Your "Sample Type" and Format Settings as you please **Click**: "Ok"	

Setting Up Audio Capture Settings:

Steps	What You See
Before the recording process begins, be certain that your audio hardware is configured and ready. Setting up audio can be done through the Audio Hardware Preferences menu system. **Click**: Edit -> Preferences -> Audio Hardware	

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Audio Hardware allows you the chance to select:

Device Class: Based on audio card in computer station. MME and ASIO are common driver types found on Windows machines. ASIO is superior since it is better at reducing latency between input and output sources.

Below Options Based on MME setup (Most Commonly Used In Media Center):
Default Input: Recording device

Default Output: Playback speakers
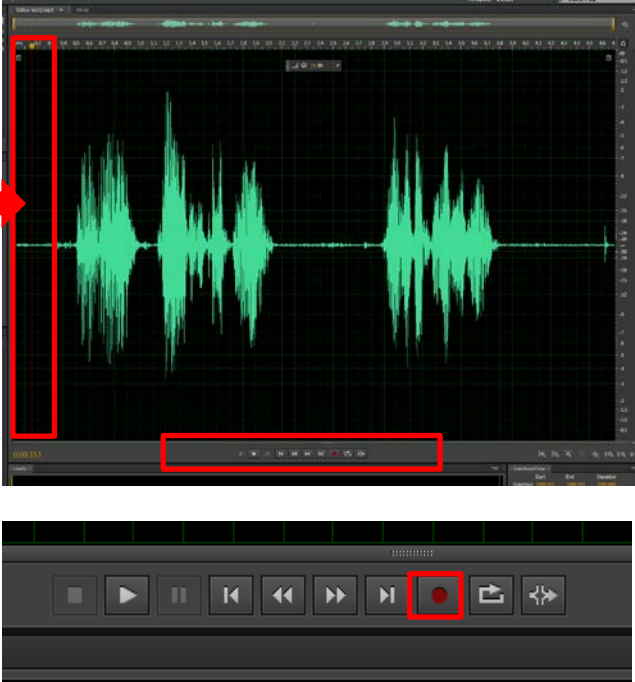
Master Clock: You can choose which device to have everything synchronized with

Latency: Delay between input and output devices. Only change this setting if you hear too much latency between your various input devices. Lowering is idea, however too much can produce audio dropouts or clicks in your recording. The selection of 200 ms is typically used in the Media Center, but experimentation may be required to determine the best setting for your setup.

Sample Rate: The rate at which your device captures the wave form of audio coming in. It cannot be a continuous wave when captured. A higher sample rate signifies a better appearance of a continuous wave form. More samples or a larger discrete-time signal represented in Hertz is best. 44KHz is standard for recording.
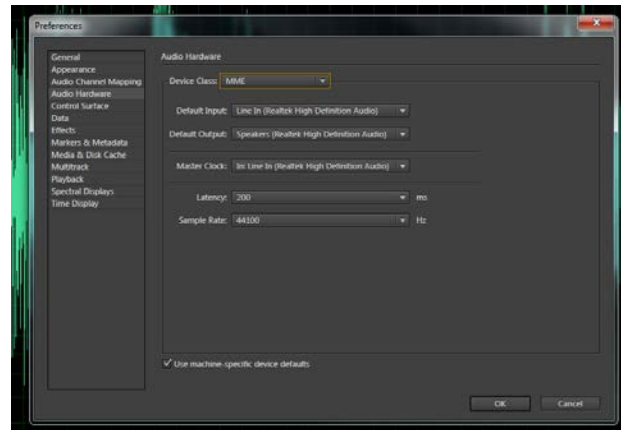
Recording Audio:
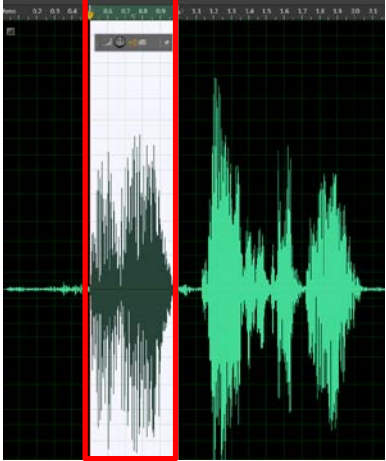
Steps	What You See
Select: "Record" from the play options below the Waveform workspace. **Note**: When you select Record your recording will start where the play head is at in the timeline. Doing this will write over the data following that point, until you select stop.	

Basic Selections:

Steps	What You See
Selecting: This is important when defining which specific components in the timeline you wish to edit. **Click & Drag:** Your mouse over the time line region to select, either by starting left and going right or vice-versa **Note**: Wave forms that are highlighted with a white background are selected regions in your workspace.	**Time Selection:**
Alternatively: **Click:** The Start Point **Shift Click:** The end point on the time line **Note:** Beneficial if doing more exact selections	

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Select All: **Double Click:** Timeline to highlight whole region **Keyboard Shortcut:** Ctrl+a	
In general only the waveform is shown. To see other selections such as Spectral Frequency and Pitch, simply click on the icons shown to the right ➡	
Spectral Frequency View Tool: Select this to view the spectral frequency beneath the waveform Spectral Pitch Display: Select this to view the pitch beneath the waveform Time Selection Tool: Automatically selected for you. Displays the audio waveform	**Spectral Frequency:** **Pitch Display:**

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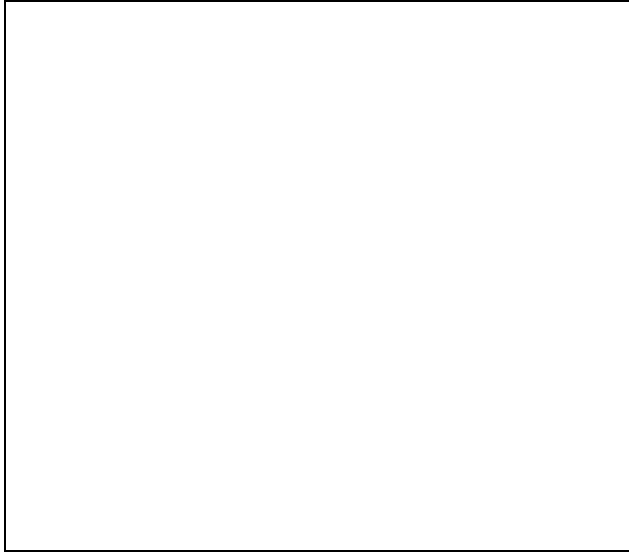
Selecting Stereo Right or Left:

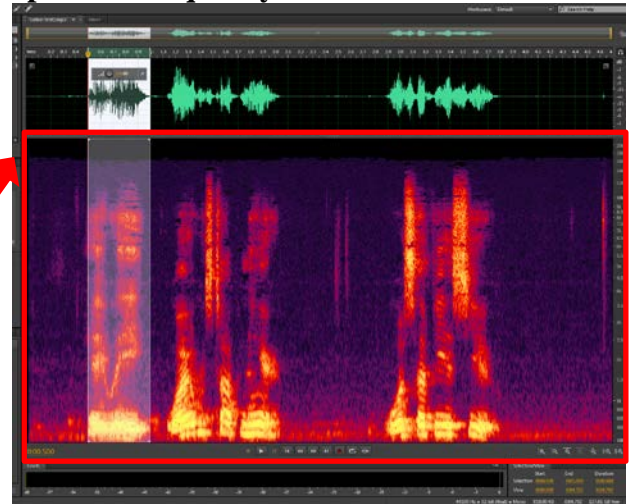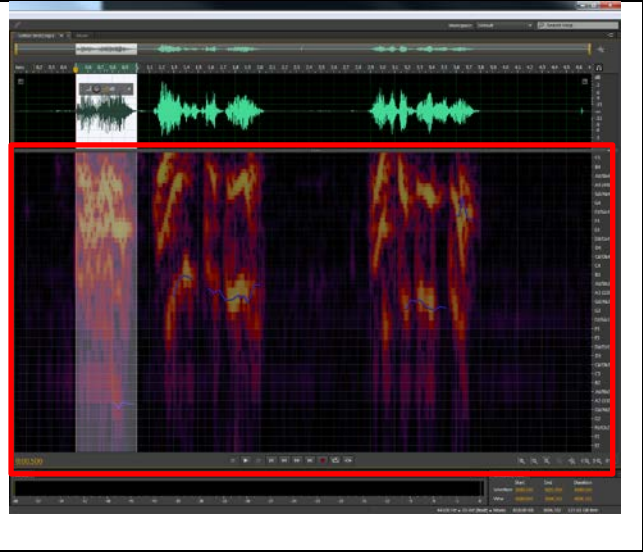| Steps	What You See
	Select L or R:
When you are editing an audio file that has two channels you can select the desired region just like earlier, however, you have even more freedom to select either right or left channel segments when selecting an area to affect **Click**: [L] or [R] to choose which channel you intend to work on. **Note**: The region grayed out will not be influenced or altered until you click on the related channel button L or R	

Adding Markers:

Steps	What You See
Markers can be handy tools when listening for finite spots to remove or as a way to select a specific audio range. Markers will be added to the timeline play head location. Find the "Markers" panel in your workspace. In general this is found in the panels section to the left as the "Markers" tab.	

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Click: Cue marker -Or- **Press**: M on the keyboard each time you want to place a marker in your timeline during play back	
Click: Merge Markers after highlighting selected markers to combine into one merged marker **To highlight multiple markers:** **Ctrl + Click:** to highlight each marker shown in the Markers panel. **Note:** When you merge markers you will have a start and end time to work with. **Double Click**: On the newly generated Merge Marker icon located in the Markers panel. Doing so will highlight the merged region	
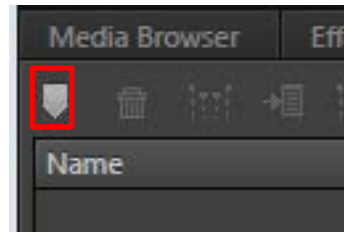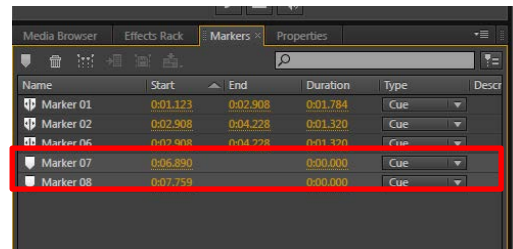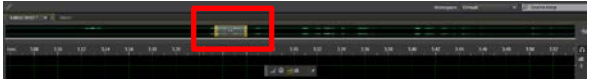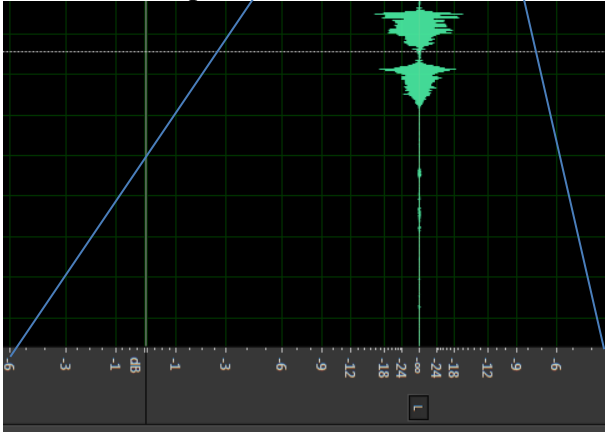
Zooming In & Out:

Steps	What You See
When making a selection you may notice a clicking or popping noise after you delete or remove a specific selection. It may be best to use the zoom function to clearly determine where the sound start and end point reach the zero line (Which is defined by the infinity symbol) on the waveform **Note**: The vertical axis represents the amplitude of your sound wave, which is like saying the loudness of the sound. When zooming in we are changing the depth of the x-axis that we see which is represented by time in seconds. Where we are is determined by the navigational bar at the top of the wave form, which is shown below. Whole timeline in view: We are currently zoomed out completely when the navigation bar is fully highlighted in yellow. Zoomed in region: The region that is shown as a yellow highlighted transparent box is the part that is being viewed in the timeline. This transparent selection in the navigation bar is something that can be dragged (AKA: Scrubbed) to the right or left to move to different parts of the waveform.	A Zeroed Out Selection: Amplitude of wave in dB

Zoom in or out along x-axis:

Click: The "zoom in at **in point**" [icon] tool to zoom in to the start point of your selection made
Shortcut Key: Alt+Home

-OR-

Click: The "zoom in at **out point**" [icon] tool to zoom in to the end point of your selection made
Shortcut Key: Alt+End

Note: Zooming in without making a selection prior would make both zoom tools mentioned above act the same and strictly as simple zoom in functions for the x-axis

-OR-

Click: The "zoom in (time)" [icon] tool to zoom in from the center of the time line currently displayed
Shortcut Key: =

-OR-

Click: The "zoom out (time)" [icon] tool to zoom out from the center of the time line currently displayed
Shortcut Key: -

Zoomed in at in point:

Zoom in or out (time):

Increase zoom of current amplitude:

Be aware that zooming the amplitude is not modifying the loudness of the sound, just the scale being used to measure the sound wave

Zoom in amplitude [icon] to increase how sensitive you want your workspace to be
Shortcut Key: Alt+=
-Or-
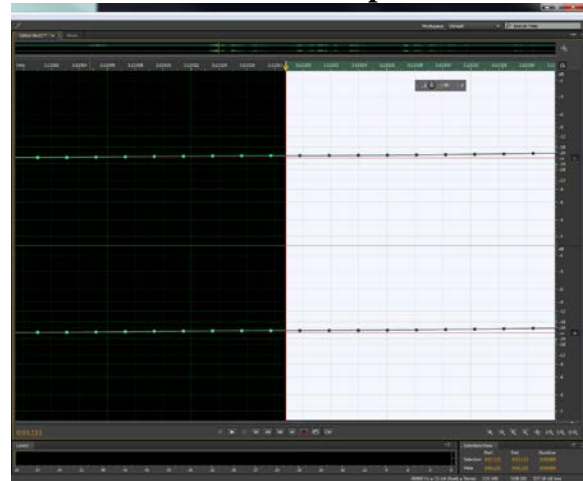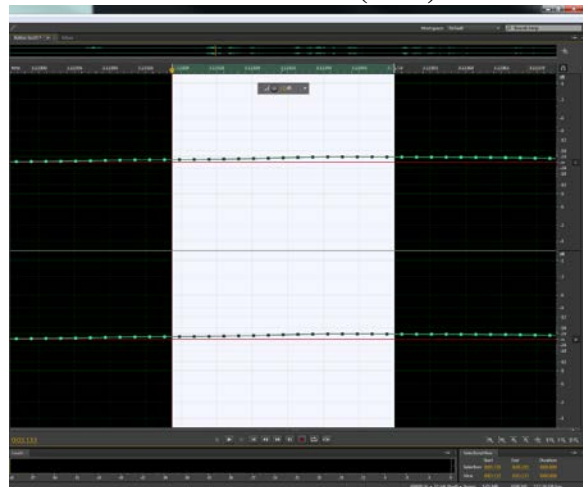
No Amplitude re-scale:
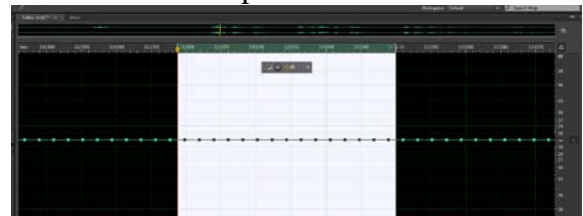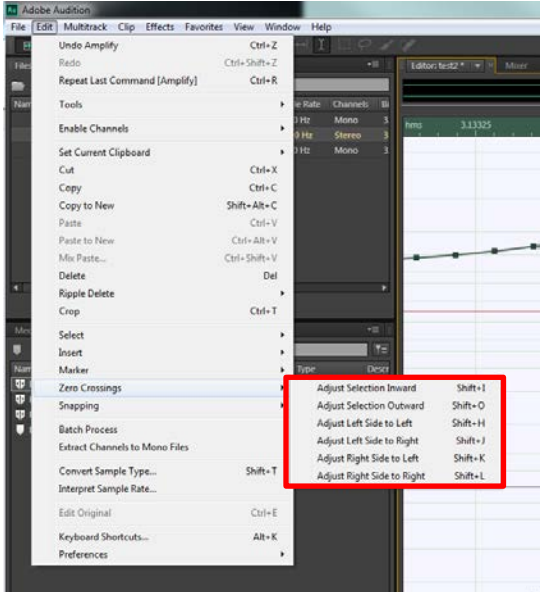
Zoomed in 10 times
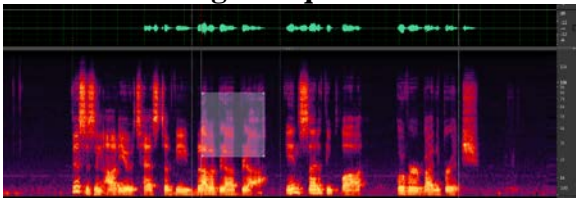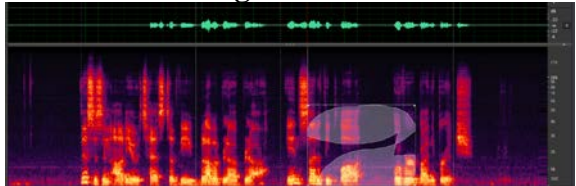
Zoom out amplitude to decrease the sensitivity scale **Shortcut Key: Alt+-**	

Zero Crossing:

Steps	What You See
As shown above when a sound wave reaches the zero line no noise is detected. This can be difficult to determine at times unless you zoom in. However, you can use short cut keys to quickly select the in and out points for this Zero Crossing selection. 1st: Highlight the region you wish to work with using any of the selection methods described above. 2nd:**Click:** "Shift i" on the keyboard to automatically set the end and start points to be both at their respective zero crossings	

Selection Tools for Frequency Spectrum:

Steps	What You See
The tools shown to the right are all selection tools, which will only be accessible when you have the frequency spectrum viewable beneath the waveform. Marquee tool is a way to box out a section in the frequency spectrum. Lasso tool is a way to generate your own selection shape of the frequency spectrum to alter.	 **Using Marquee tool:** **Using Lasso tool:**

Brush tool is a way to brush in the section of the frequency spectrum you wish to alter. **Note**: More will be shown as to why these selection methods are important at a later time Performing these selections is simple as clicking and dragging across the region you want to influence.	
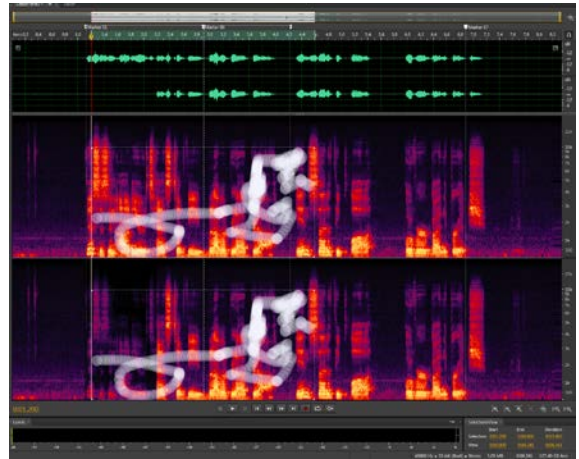
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Standard Waveform Audio Adjustment

Manually Adjusting Audio Level:

Steps	What You See
Amplify your audio for the selected region. This can be done by using the HUD (Heads-up Display). If you don't see the HUD simply use the shortcut key to bring it into view: Shift + U. You can use the same shortcut to remove the HUD from view. **Click**: the ![pin] pin icon to keep the HUD unit pinned in its current location on your display or to unpin it.	
Click & Drag: Over the digital analogue knob to increase or decrease the overall amplitude of your selection.	

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Note: The number you see (in this case +15 dB) is the amount that you are amplifying the region. Because it is in yellow, this is something that you can manually adjust as well.
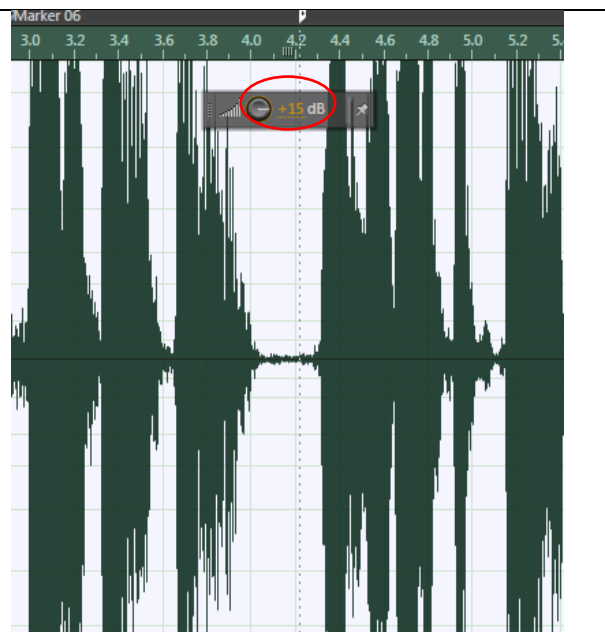
To Manually Input Amplification:	
Click: On the yellow number **Type**: In the value you would like to increase or decrease the amplitude too. 　　　Ex: -15, 15, 20 **Note**: This is a dB range you are varying	
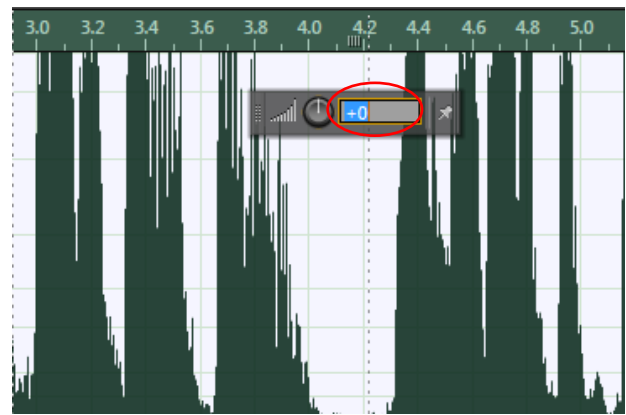
	This is Over Amplified:
When increasing the amplitude be sure not to have the levels bar reach the red region. It is best to aim for just around the lime and yellow region at most. When you see your audio reach the red zone very obvious clipping will occur, knocking out parts of your recordings peaks and troughs in the waveform.	

Normalizing Audio Level:

Steps	What You See
	Audio Levels Display Panel:
Normalizing audio is the process of raising or lowering the amplitude of your audio file so that its loudest points reach 0dB or as close to 0dB as possible. **Note**: As stated before when the audio reaches above the red zone, your audio level will experience clipping. This is because your audio is above 0dB. Normalizing will not fix clipping if it was already present in your audio file.	

To Normalize Across Full Wave Form:

Click: Favorites tab and Normalize to -0.1 dB

The peaks that are reach maximum height will reach the -0.1 dB point, while lower peaks will average to a higher point but not that -.1 dB range.

Note: Select and reduce the amplitude of the largest peaks first and then run the -0.1 dB tool
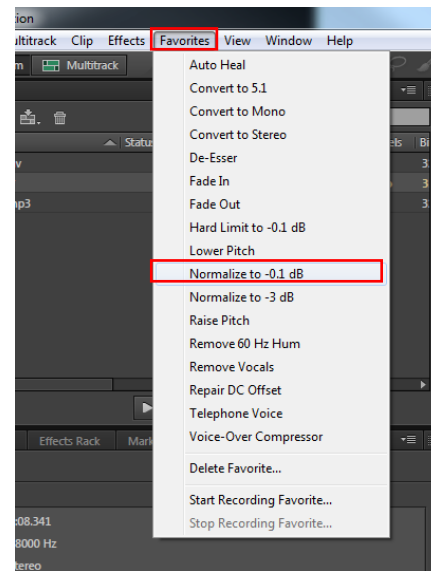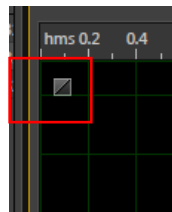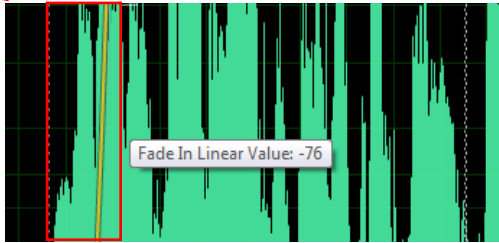
Before:
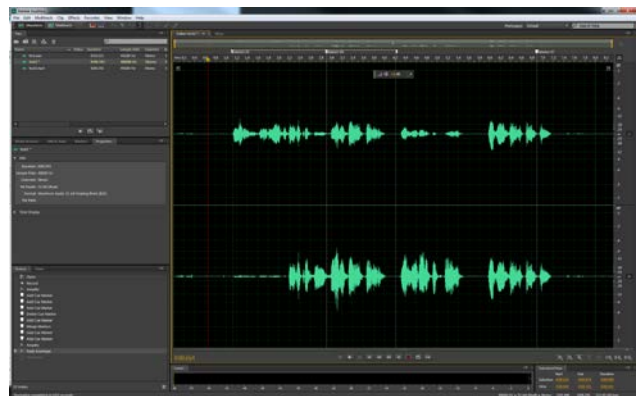
After:

Adding Fades:

Steps	What You See
On the sides are fade boxes. We will use these to adjust the fade in and fade out effect of our audio. **Note**: Fading in or out will adjust the amplitude of the start and end points. Our sound wave only has two fade points.	 Fade In: Fade Out:
Adjust Fade In: **Click & Drag:** Fade in box **Note:** Dragging the fade box to the right, in this case, will affect all the audio that is in the path line of your fade line envelope, Which is represented by the yellow curved line Moving your mouse up or down while dragging the fade line will affect how fast the amplitude of the fade will transition to the original amplitude. A **positive** Fade In Linear Value is going to curve the fade line so that it is concave up. Do this by moving right and up with your fade In box. This will create a relatively fast fade in effect.	 **Fade Line In Yellow:** Fade In Linear Value: -76

The exact opposite is done when moving the Fade In towards a negative value which is shown as a concave down shape for your fade line. Do this by moving the mouse down and to the right.	

You can adjust the fade effect line to be an S curve (Cosine function curve) in nature instead of Linear/Logarithmic line simply by: **Keyboard Shortcut:** Ctrl+Shift+K -OR- **By Clicking:** Edit tab->Preferences->General Now you are able to drag up and down to obtain an S shape instead of the one curve fade effect	**Preferences Window: General Section**
Even More Fade Effects! **Click**: Effects -> Amplitude and Compression -> Fade Envelope (Process) Doing this will open a window to use to select all the various preset options of fading out your audio.	
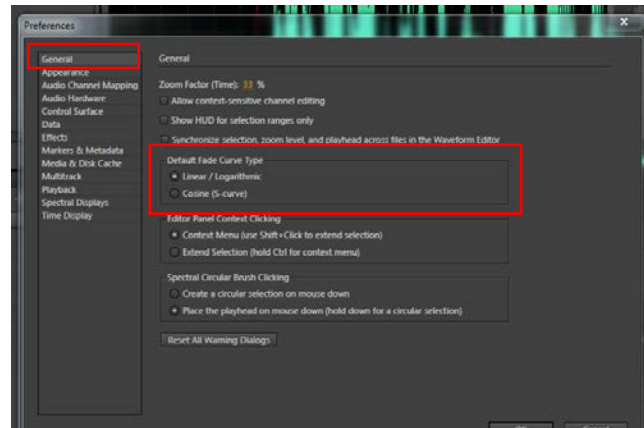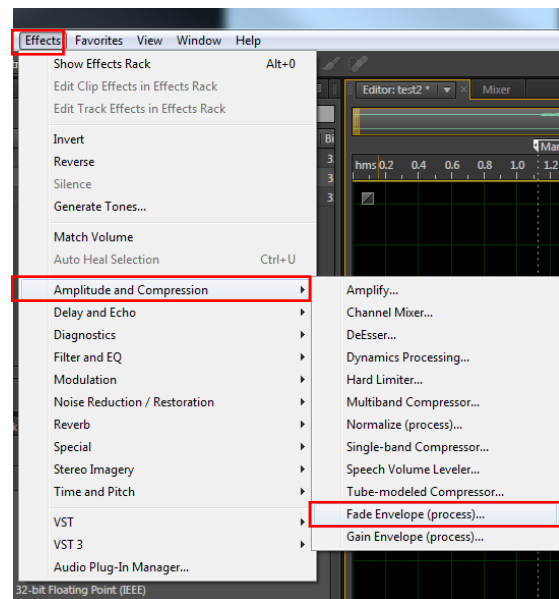
Select: From the preset options dropdown menu to find the amplification that is to your liking.

Note: With all selections you will be able to adjust the yellow fade line as you wish.

Place Mouse: Cursor over yellow line before start

   Note: Cursor icon will change from time selection tool icon [icon] to move tool icon [icon]

Click & Drag: Yellow line to desired decibel range

Note: Each point you click and drag will make a distinct dot along the envelope

Preview what you have done simply by clicking the play button.

Click: Apply when satisfied or close to cancel edit

Note: Fade effect will take place, further fade applications will not erase the fade you just created, but instead apply it to the most current version of your audio file.

Again, doing this work is **de-constructive**. Be sure to **save-as** if you want to make separate copies of your work

Tremors Fade:

Close up of Effects: Fade Envelope Window
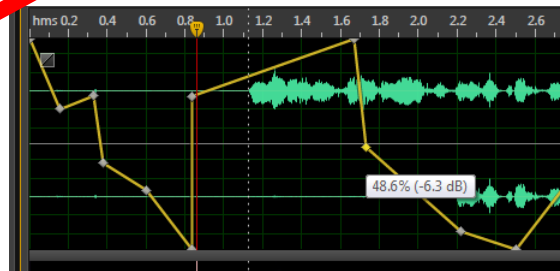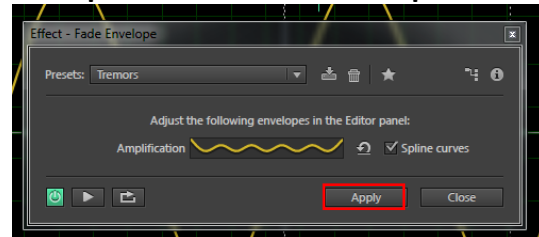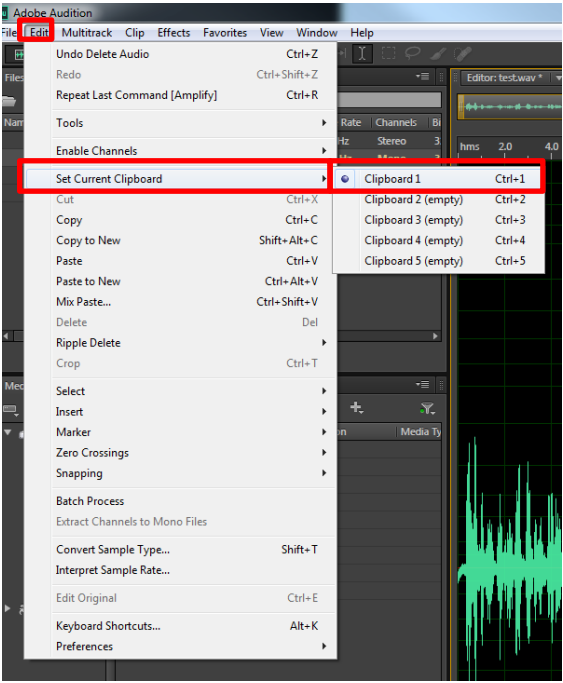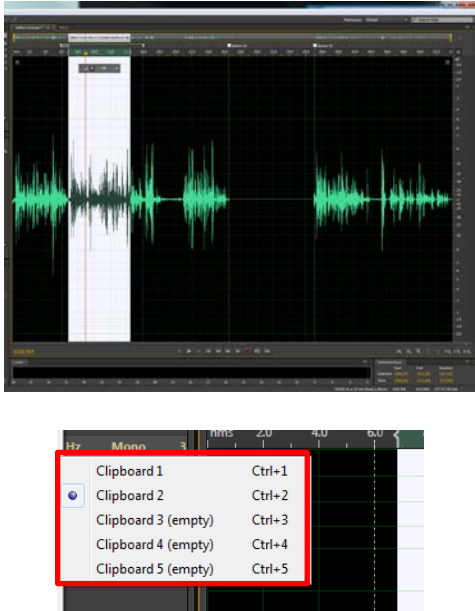
Copy Paste Using the Clip Board

Using the Clipboard:

Steps	What You See
Copy and Paste are two commands that can come in use, especially with a clipboard to contain your copied selections for pasting at a later time. **How To Alternate Clipboards:** Found in the Edit menu -> Set Current Clipboard -> Clipboard # **Note**: The clipboard item with the purple dot next to it is the active copy position **Ctrl**+**#**: To switch between one of the five clipboard positions **Note:** Currently Clipboard 1 contains a copied selection I previously made, while the alternate clipboards are empty.	
Make A Selection: **Highlight**: The region you wish to select **Enter**: Ctrl+C to copy the highlighted region to the current clipboard selected **Note**: In this example Clipboard 2 got filled.	

Paste Clipboard Selection:	
Move the red play head to any section you want to insert your copy	
Press: Ctrl+V to paste in your clipboard copy.	
Note: This will write over the section you are at	
You can repeat segments of a play list doing the following:	
Copy selection to clipboard as described above.	
Press: end on the keyboard to move the play head to the very end of your audio clip	
Press: Ctrl+# to select which clipboard option to paste in	
Press: Ctrl+V to paste in the audio segment	
Press: g to remove the automatic highlighted region and retain the play heads position before pasting in your selection	
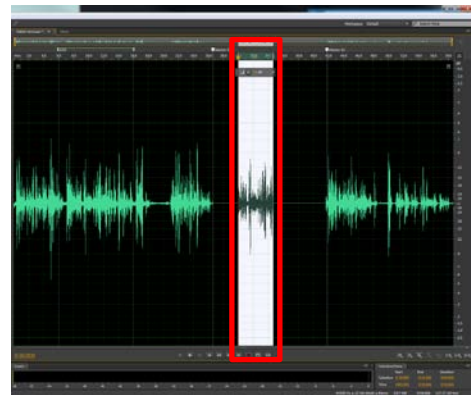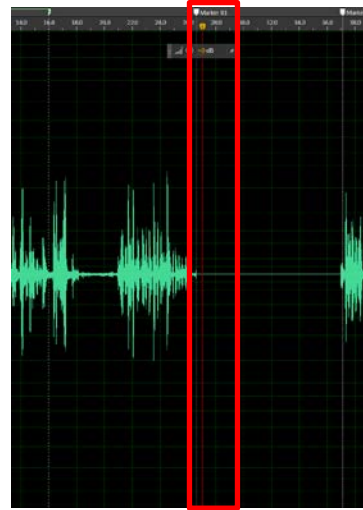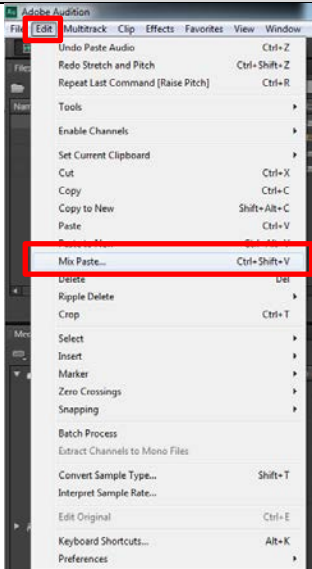
Using Mix Paste:

Steps	**What You See**
Mix Paste allows you to use the clipboard, or copy paste function, to a broader sense of its typical use, depending on what you choose in the Mix Paste menu will control how your audio files will combine. **Found Under**: Edit -> Mix Paste… -OR- **Short Cut Key:** Ctrl+Shift+V	

The audio clip you have stored in your clipboard will be what is pasted in the area your play head is located at in the time line.

Copied Audio/Existing Audio:
Adjust the scrubber bar to change the intensity of the audio part you are blending in

- 100% will not decrease or increase the audio segment
- An audio level of 50% is half the original sound
- An audio level of 200% is double the original sound

Invert Copied Audio: Reverses the phase of the audio wave being inserted. This will exaggerate or reduce phase cancellation if the existing audio contains similar content. **Essentially, if the waveforms are similar and are in phase (the waves crest and troughs line up) then you won't have much cancelation occurring. If they don't line up initially and you hear a lot of cancelation occurring attempt the invert copied audio option.**

Modulate: Multiplies the waveforms copied and existing into one type.

Click: Ok to accept changes
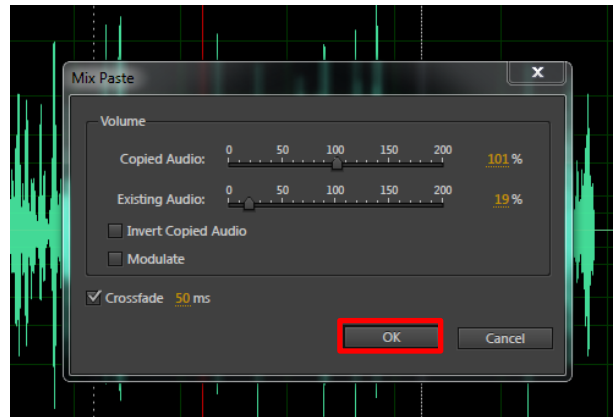
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Special Effects

Using the Effects Rack:

Steps	What You See
The effects rack is useful to test multiple effects at once on the sound file shown in the workspace before committing to the modification. **Location**: Left panel under Files panel in Effects Rack tab	

Note: The effects rack can hold up to 16 effects at once. Applying the effects selected is a de-constructive process. Again, remember to use "Save As" to avoid writing over the original audio file.	
Adding Effects to Effects Panel: **Click**: On the side arrow in the column you wish to add the effect in. **Select**: Effect from the list that appears Repeat up to 16 times to try out multiple the effects. Listen to how new effects apply by pressing space on your keyboard. **Note**: Items in red imply that your computer system may have a difficult time applying those effects in real time. If you notice lag in play back then remove these selections and test them individually. All items that have this symbol are currently active in the Effects Rack. De-activate simply by clicking on to turn off this effect; press the space bar to listen for the changes made in real time.	
Adjust Input and Output: Both allow amplification to the respective audio sources. The input audio source is essentially the original wave file; the output is what you will	
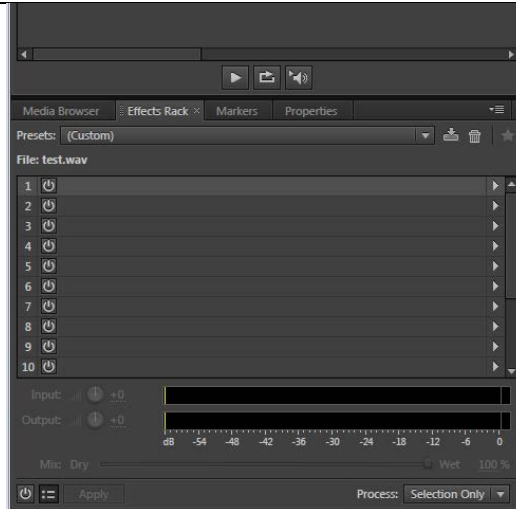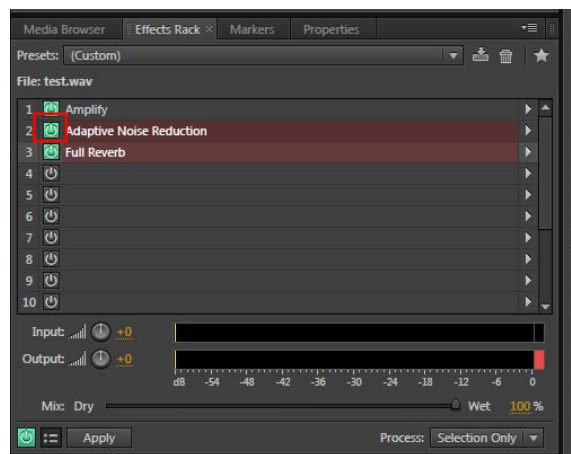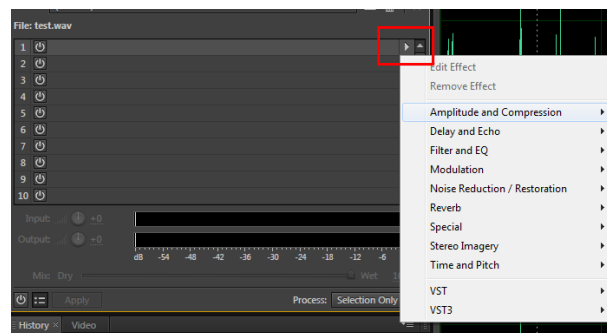
be creating with the effects you choose to apply.

The Wet and Dry scrubber bar:
Determines how much influence the effects will create to your original sound when you click apply.

Closer to Dry means less effect is applied to your work.

Click: The switch [icon] at the bottom left of this panel to turn off and on all effects at once

Select: Apply when you are ready to commit to these modifications

Note: Leaving the process as "selection only" works the same as selecting the "entire file" option unless you have a highlighted region in your workspace that is less than the entire timeline
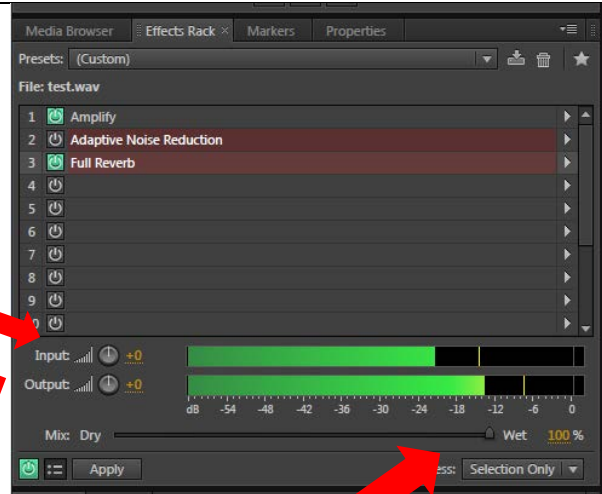
Automatic Pitch Correction:

Steps	What You See
Ever want to fix the pitchy sections of a song? Here is how: **Go to:** Effects Rack->Empty Effects column->Time and Pitch -> Automatic Pitch Correction	

Here we reach the technicalities of our work.

We will not change the Preset value.

If you know the Scale and Key that you're audio should play in then select the right fit in the scale and key drop down menu.

Attack: Determines how aggressive this effect will be applied to the selected audio clip

Sensitivity: Is the level at which Audition can detect how off the pitch is in the audio clip

Reference Channel: Is the channel you are picking up the pitch from. Example: Stereo will have a left and right channel.

FFT Size: Is a mathematical function that is used to correct the audio segment sample size.

- Human voice -> Choose either 4096 or 2048
- Low frequency input then go with the higher sample size and vice versa.
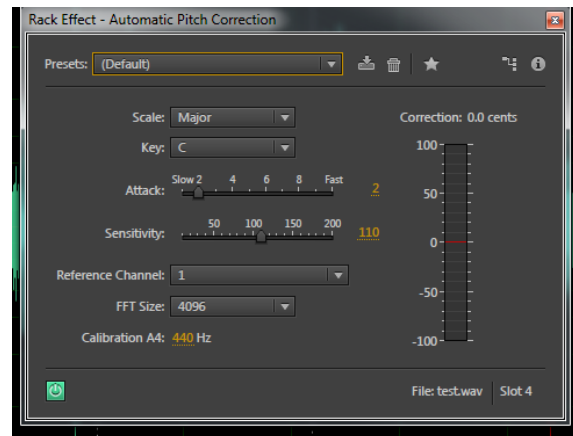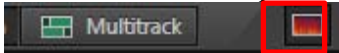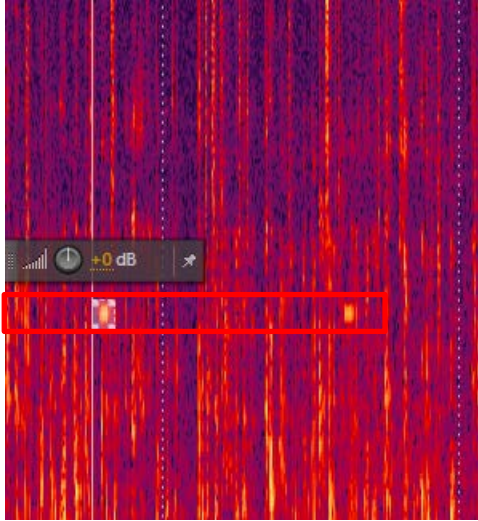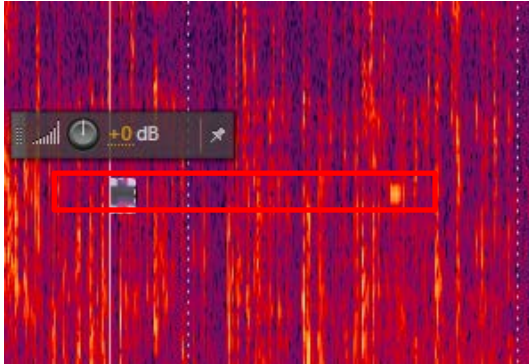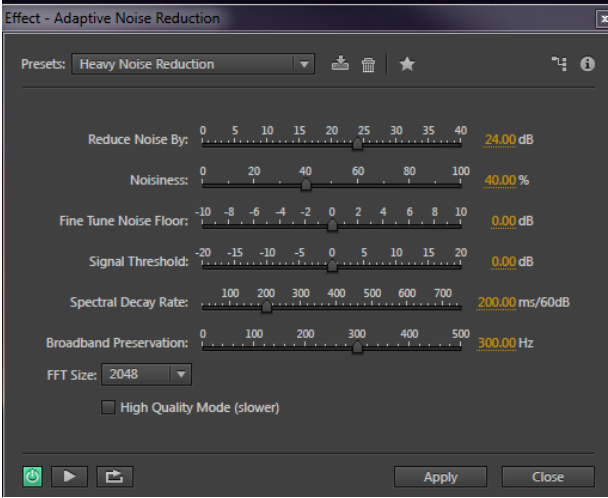
Cleaning Up Audio

Using The Spectral Frequency Display To Clean Up:

Steps	What You See
Using the Spectral Frequency Display helps you pinpoint areas of noise interference in your audio track. As described in an early segment on this lesson the Spectral Frequency can be brought up by clicking on the quick launch tool at the top left. What you may notice is that there are several points in this file where a dot consistently appears in the 3.5Khz frequency band We can select each region using the marque tool: **Select**: The Marque tool **Click and Drag:** Over the area to highlight the region to remove **Click:** Delete on your keyboard **Note**: Audition will automatically smooth the frequency around the perimeter of the selection you deleted. This helps make the noise removal less noticeable	**Before:** **After:**

Adaptive Noise Reduction:

Steps	What You See

Adaptive noise is a tool that allows Audition to work on the fly to identify frequencies that should not be there vs. frequencies that should be in your waveform based on 7 different adjustments. Commonly this is used to remove hiss, rumble, and wind from the background.
 	
Note: Doing the adaptive noise reduction effect will require you to make a selection a little before your desired start time on the timeline. Hence the name **<mark>ADAPTIVE</mark>** noise reduction. The modifications you choose are all applied after a few seconds of running the audio clip.
 	
7 Different Factors In Adaptive Noise Reduction:
    1.) Reduce Noise By:
        Specifies in decibels by how much the selected region will reduce unwanted noise.
    2.) Noisiness:
        Percentage of noise that is left in the audio clip
    3.) Fine Tune Noise Floor:
        Adjusts the noise floor above or below the automatically calculated floor level.
        • **Noise Floor** is the MIN. amount of noise required for a microphone to pick up audio. In Audition, there is a pre-calculated Noise Floor level.
    4.) Signal Threshold:
        Manually adjust the threshold to a desired level above or below the pre-calculated threshold rating.
        • **Threshold** is the loudest level your audio signal has to reach before being compressed
        • **Compression** is the process of lowering the dynamic range of the loudest and quietest parts.
	
	Effect - Adaptive Noise Reduction
	
	Presets: Heavy Noise Reduction
	
	Reduce Noise By: 24.00 dB
	Noisiness: 40.00 %
	Fine Tune Noise Floor: 0.00 dB
	Signal Threshold: 0.00 dB
	Spectral Decay Rate: 200.00 ms/60dB
	Broadband Preservation: 300.00 Hz
	FFT Size: 2048
	☐ High Quality Mode (slower)
	
	Apply Close

Steps
5.) Spectral Decay Rate: Determines how rapid noise processing drops by 60 dB. Increasing this effect will create a re-verb effect, decreasing this will generate a bubbly sound.
6.) Broadband Perspective: Generates a start point in the frequency bandwidth to start removing unwanted noise. Frequencies below say a selected value of 100Hz will not be touched; however, frequencies above will be altered.
7.) FFT Size: Determines how many individual frequency bands are analyzed. High FFT setting will work best for artifacts of long duration (squeaks, or continuous hum noise). Low FFT setting will work best for artifacts of short duration (clicks, or pops).
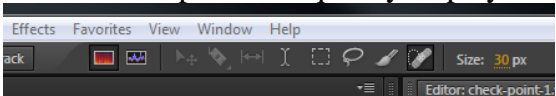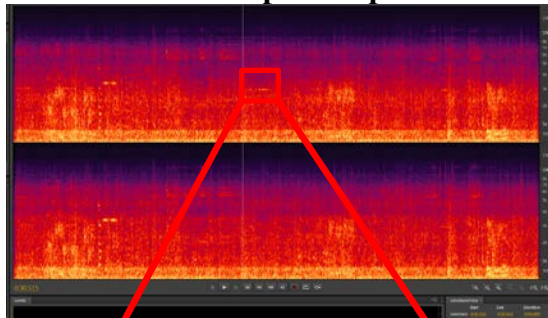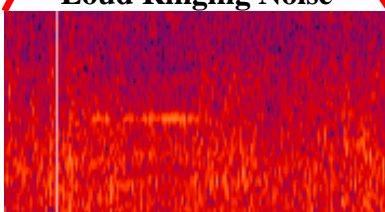
Removing a Specific Noise:

Steps	What You See
Spot Healing Brush Tool: This is a wonderful tool to help remove unwanted sound when there are overlapping frequencies in your bandwidth. Spot heal brush is located on the top right section with spectral frequency display. **Select:** Spot healing brush **Click & Drag:** Cursor over the spectral frequency that appears to be the cause of unwanted noise.	**Audio Clip of Airport** **Loud Ringing Noise**

After you select your region Audition will process the job and make the adjustment.	**Selecting the unwanted audio**
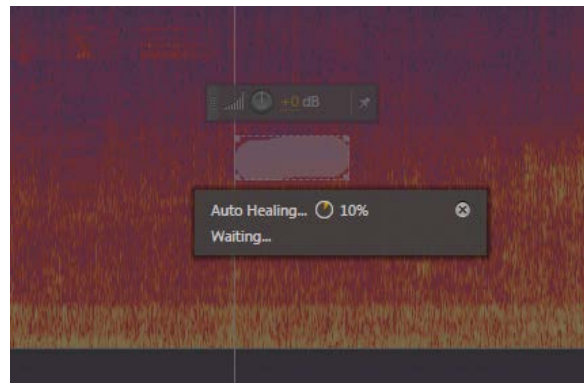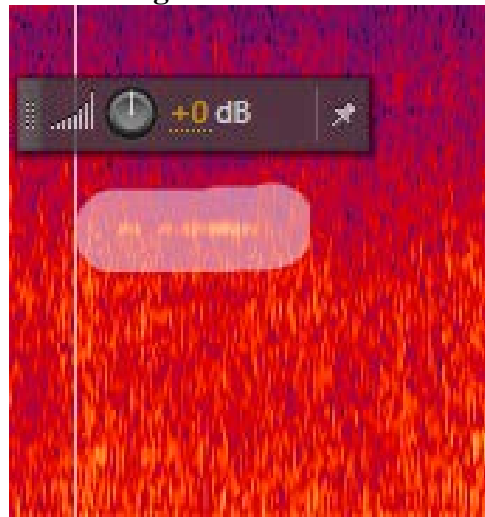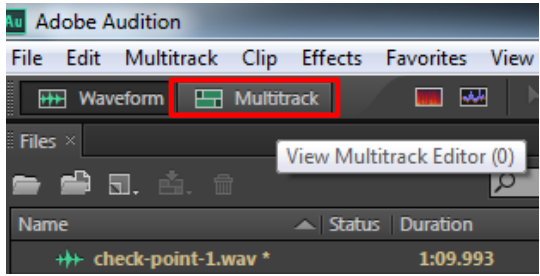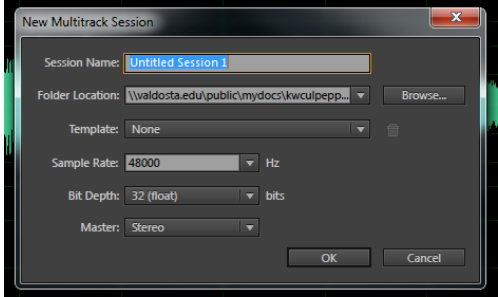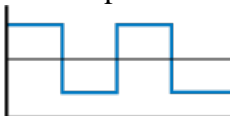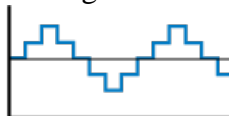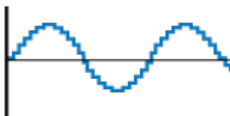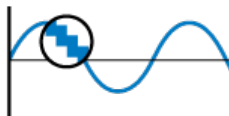
Starting a Multi-track:

Steps	What You See
Click: Multitrack, which is to the right of the Waveform option **Note:** Clicking on Waveform will bring you back to the Waveform segment of Audition, and clicking back on Multitrack will take you back to your multi-track session. When clicking on Multitrack without having a Multitrack session already generated will force you to create a Multitrack session.	Select Multitrack Prompt Appears After Selecting Multitrack for the first time during your session
Initial Multitrack Setup: **Session Name:** Title of your Multitrack **Folder Location:** Where you will be saving your work at **Template:** Allows for preset values for Sample Rate, Bit Depth, and Master values **Note:** If "None" is selected you will need to manually enter in the values below **Sample Rate:** The number of samples of audio carried per second, measured in Hz. **Note:** The average maximum frequency a human ear can perceive is 20,000 Hz. To achieve this properly you will need at most double the sample rate. This is why 48000 Hz is automatically selected for you. **Bit Depth:** The number of bits of information making a waveform. This describes the resolution of each sample. The more bits you have the more sinusoidal a wave form appears to match the true audio wave form.	**Bit Depth:** "When the number of bits per sample is increased, each sample can more accurately represent the audio signal." From: https://documentation.apple.com/en/finalcutpro/usermanual/index.html#chapter=52%26section=7%26tasks=true
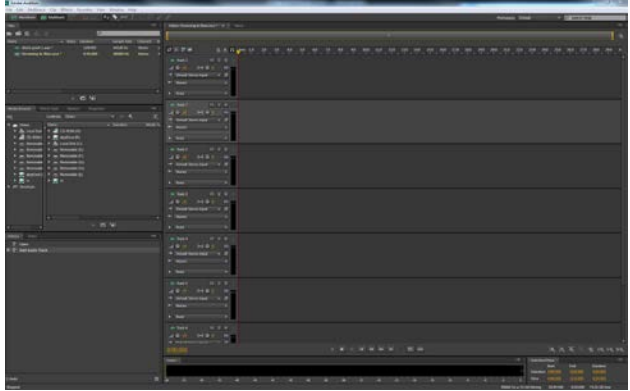
Master: Determines how many outputs your audio file will play from.

- **Example:** Stereo is good for when making sound for two audio outputs (Left and Right).

Click: Ok when you are satisfied with your selections
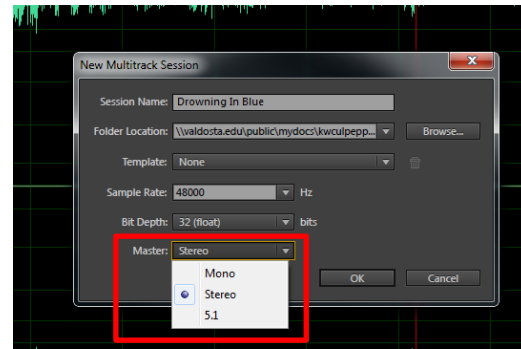
Navigating Multi-track:

Steps	What You See
Welcome to the Multitrack view! Currently we are looking at a trackless Multitrack session. Don't worry; we will go over inserting tracks soon. First let's go over some of the panels in this new view. **Note:** Any work done in Multitrack is considered ==non-destructible==. Meaning altering audio in this mode does not change the original audio file. **Note:** All that will be described is when using the Default Workspace settings in Audition.	**Multitrack View:**

Without Any Audio Files:
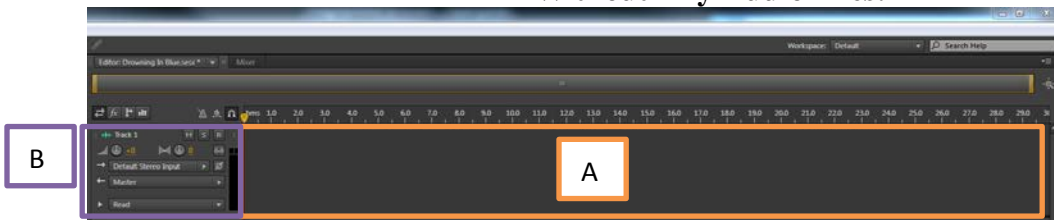
C.) Track:
This is where an audio file is added, resized, and modified. This highlighted region is among many other tracks in the multi-track session.

B.) Track Controls:
Quick audio controls are found here to normalize, record, add key frame envelopes, all of which are non-destructive edits to the original file.

With Two Audio Tracks:
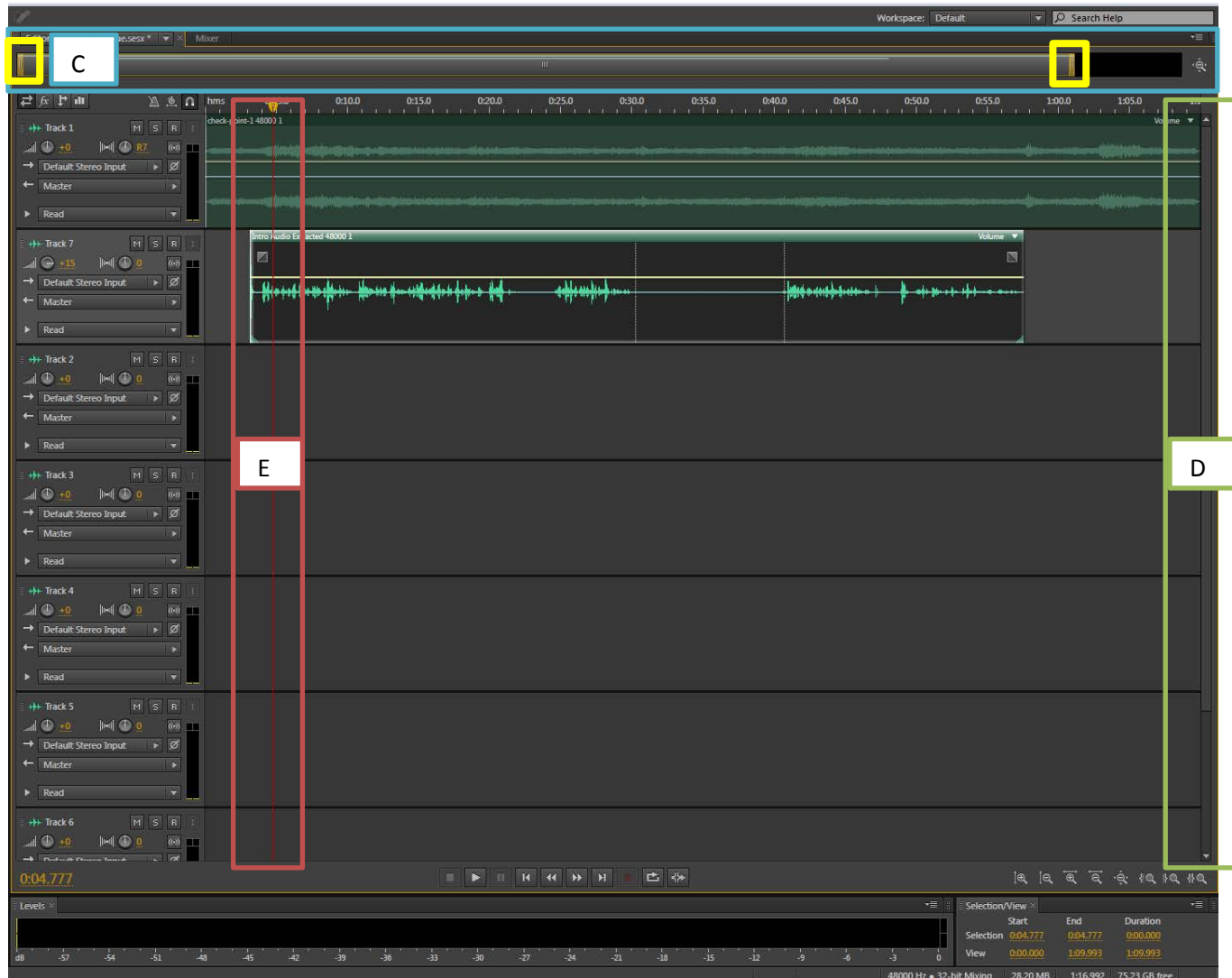
A.) Zoom Navigator:
Adjust the zoom bar size by clicking, holding left click, and dragging the yellow end point towards (Zoom in) the center or away from the center (Zoom out) of the zoom bar. This bar can also be moved anywhere in the timeline (left or right) to view specific segments of all audio tracks.
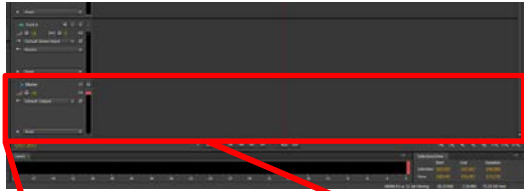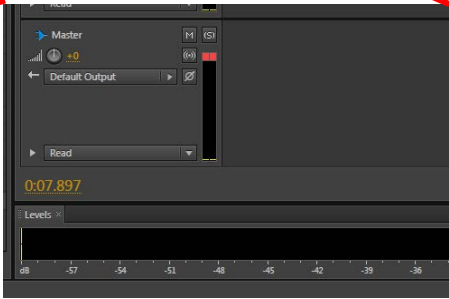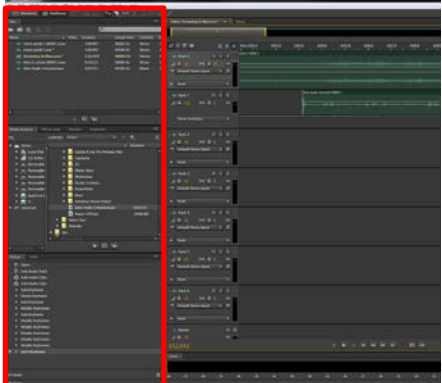
D.) Scroll Bar:
Click and drag up or down on this bar to navigate up and down your track list.

E.) Play Head:
This is a movable bar that shows where in the timeline you are at. Finer adjustments can be done by using the j,k,l key commands on your keyboard. J- Rewind, k- Pause, l-forward

Double tap or triple tap k or l commands to fast-forward or fast-rewind at different speeds.

Points of Interest:

Steps	What You See

Master Track:
 	
The master track is designed to apply effects and other sound adjustments across all tracks. This track is at the very bottom of your track list.
 	
Note: When scrolling using your mouse wheel you will have two separate effects.
    1.) Scrolling with your mouse over Track Controls will cause the track list to grow in size or appear smaller
    2.) Scrolling with your mouse over any individual track will allow you to scroll across the track list to find the master track at the bottom of your workspace
	Master Track:
	
	Zoomed in view:

Track Panel Vs. Mixer Panel: The Multitrack session contains two ways to view your tracks. All the prior information above has described using strictly the Multitrack session view. A separate tab next to your track session is called "Mixer." This style of audio editing may be more attractive to users accustomed to using an analogue setup for mixing tracks.	
Other Panels: As described when discussing Waveform view there are alternate panels available in the Multitrack session. All left hand panels shown in the Waveform view are likewise available in the same location in Multitrack view.	

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The Multi-track Tools:

Steps	What You See
While in Multitrack mode you will have access to several tools that help make audio compiling engaging and interesting. You will work a lot with the individual track controls to further adjust your audio tracks. Depending on which of the four options you have selected (Inputs/Outputs, Effects, Sends, or EQ) you will be able to control what is available for you from the track control section. Note: To view all options in the track controls section use the scroll wheel on your mouse while over the tracks control area to expand or collapse the controls available to you by each track.	EQ Selection:
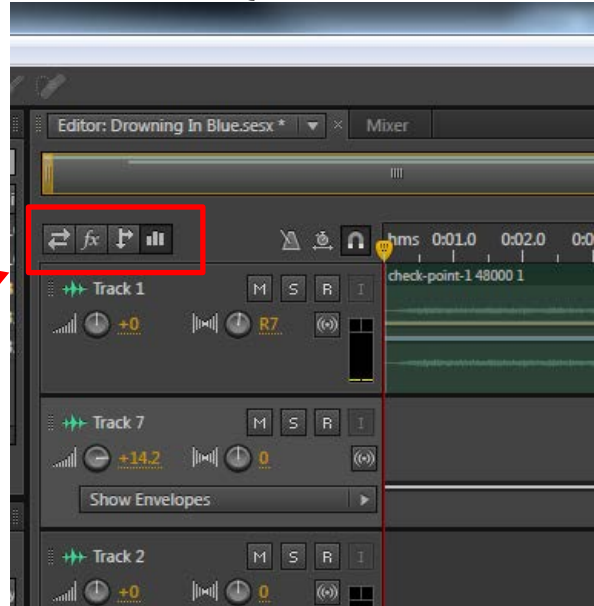
Important controls to know:
 	
Mute: Allows you to mute the audio of a particular track
 	
Solo: Mutes all other tracks except others that are highlighted as solo too
 	
Record: Allows you to record over a track
  • Note: This item only enables the ability to record to a specified track
 	
Monitor Input button: Allows you to listen to the track while you are recording to it.
  • Note: This button is unable to be engaged unless the record button is activated.
	Track Controls:
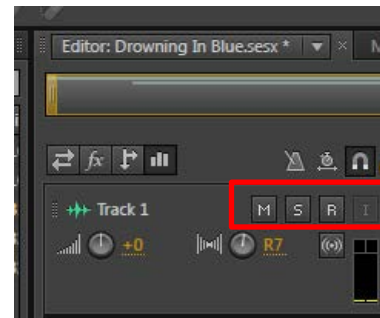
Track Name:	

You can alter the name of your track simply by double clicking the track name, typing in a new name, and pressing enter on the keyboard	
Audio adjustment tool: Allows the ability to increase or decrease the sound level of your audio track Note: Any text that is yellow is an adjustable number or value	
Pan tool: This is what is used to change the intensity from which speaker the individual track appears to come from Note: Holding down shift allows you to pan quickly to either left or right stereo When dealing with Stereo 5.1 tracks you will have a more intensive pan option At 0 your effect is applied to both right and left outputs.	
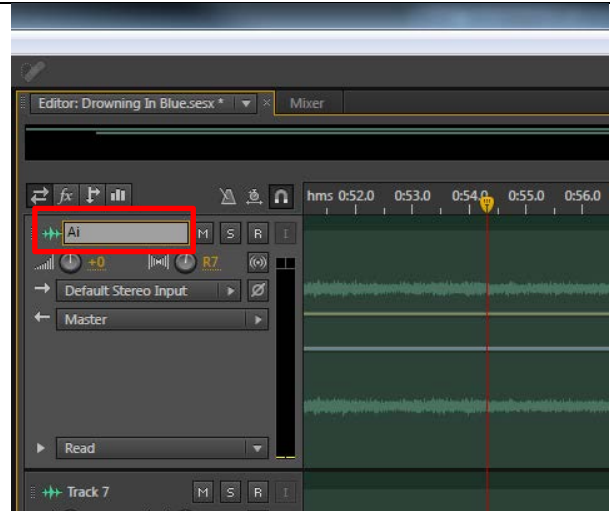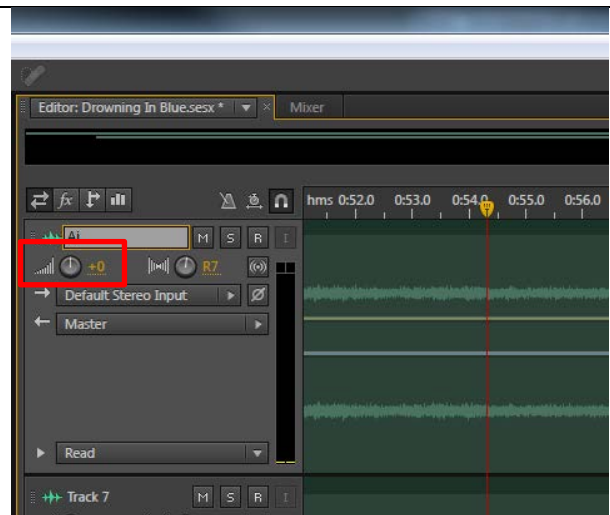
6/26/2018
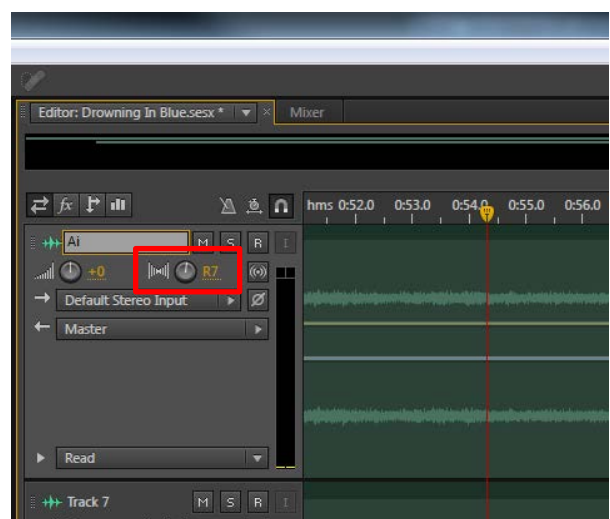
Sum to Mono: This option allows for a dual track (right and left stereo track) to be played back as a mono track.	
Controlling Inputs/Outputs: Inputs: This controls which device you can record with Outputs: This controls whether the track is to be mono, stereo, or 5.1 surround sound quality - Note: You will not be able to identify the difference of sound quality during creation of an audio multi track unless you have a device that can handle the output selected - If the output selection Stereo is being heard from a mono speaker system then you will not get the full benefit of hearing the correct pan adjustments, it will always sound as if it is in mono setting The input and output options are only available while the Input/Outputs button is selected. 	
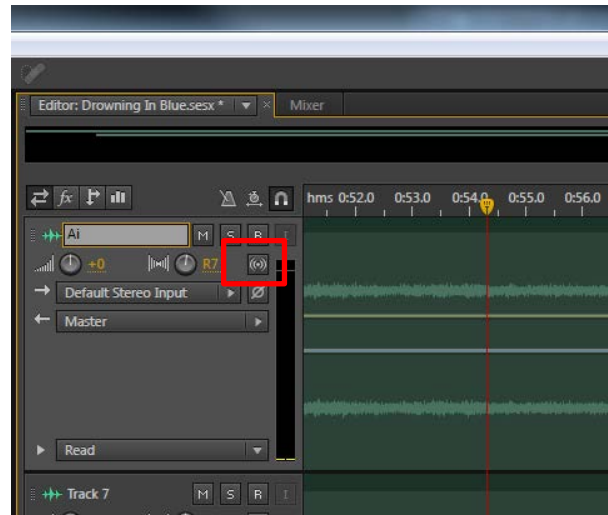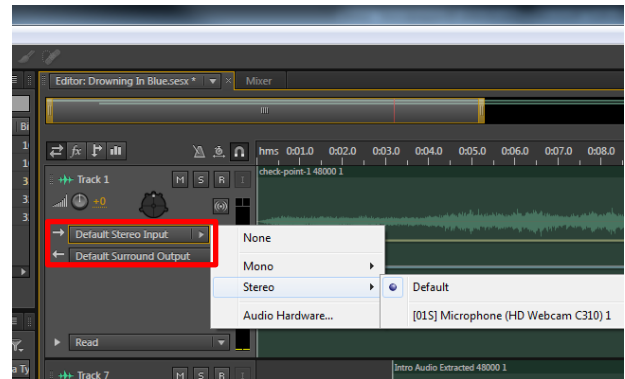
Effects Rack:
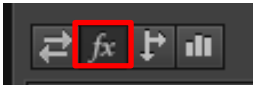
This tool set acts just like the effects panel discussed in the Special Effects section. However, all effects shown in the effects rack are track specific. Meaning that only the track or bus you are adding effects to will be effected.

Note: Some track effects can be labor intensive. Be sure to use a machine that can handle a lot of processes at once.

Track effects applied to either the master track or the effects panel on the left will affect the all audio tracks.

Sends:

Sends provide an ability to have audio tracks sent to different monitors attached to your computer.
- Note: Monitor devices can be stereo headsets, Surround sound speakers, mono speakers etc.
- Understanding the full scope and applying sends is not a simple task these tools go beyond the scope of this guide, however, there are resources available in atomic learning and other areas online.
http://blog.infiniteskills.com/2012/07/adobe-audition-cs6-tutorial-how-to-route-sends/
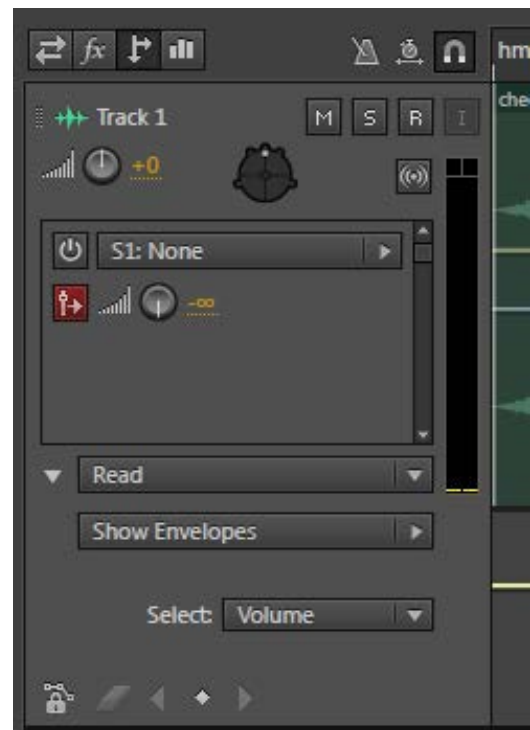
Equalizer (EQ):

This mode allows you to apply EQ on each track. The blue line shown to the right is a representation of how much gain (high or low) in the y-axis is presented across the different frequency bands of the x-axis.

Double Click: The graph to modify the equalizer applied to the track

A pop-up window will appear for you to adjust the EQ levels.

Note: Just like in the effects rack and panel, you can turn on and off the EQ effect by clicking the power icon to make it highlighted in green (on) or grayed out (off).
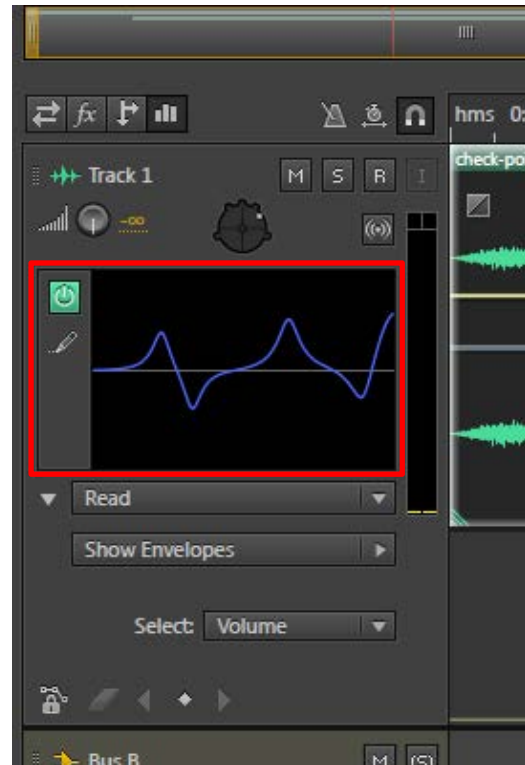
Pop-up window
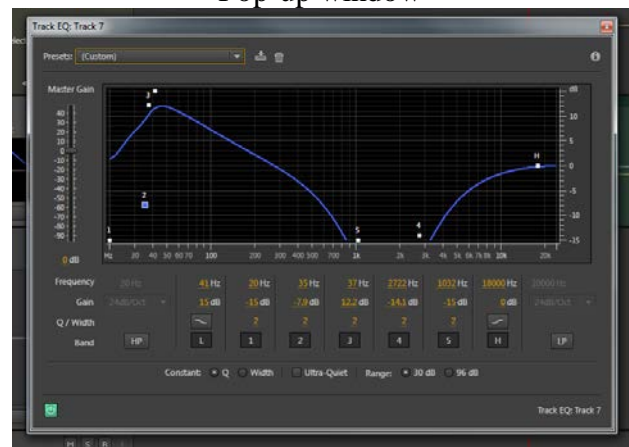
Working with keyframes:

Another tool that is hidden away, unless you expand the tracks control section by scrolling the mouse wheel while over the track controls panel, is the ability to manipulate the volume, pan, and other audio effects using keyframes.

Something new to CS6 is the ability to read, write, latch, and touch your audio track using whats called an automated envelope system.

Description of each mode:

Off: Turns off automation data associated with the specified track

Read: Allows for playback of automation data

Write: Overwrites ALL Modified Track data after playback modifications are made. (Use with caution)

Latch: Overwrites only values you changed during playback. When a change is made the new value is "latched" on untill you make further modifications or stop playback.

Touch: Like latch mode this will overwrite only values you changed during playback. The difference is that a gradual change will be made to the parameter adjusted back to its original value based on a modifiable adjustment speed.

A deeper understanding of these modes will only be benificial when working in specialized scenarios. Further information will go beyond the scope of this tutorial.

Before Expanding:
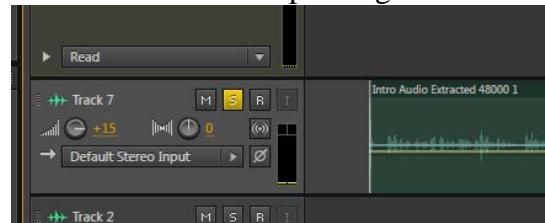
After Expanding:
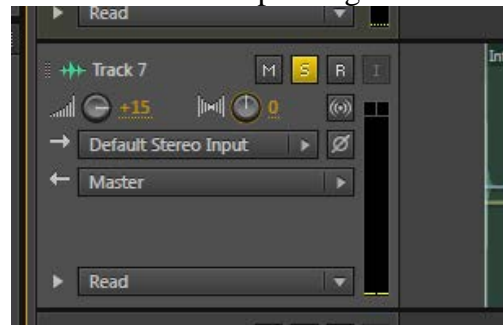
Automation Mode Selections:

Exporting Multitrack Session

Saving Multitrack Using Mixdown:

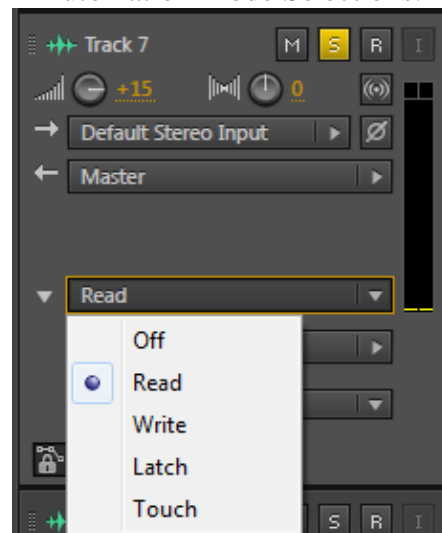| Steps	What You See
How to save a Multitrack out as one track: Note: Do this only when you are ready to upload your compilation or burn your compilation out as one file.	
Click: File -> Export -> Multitrack Mixdown -> Entire Session	
Breakdown of Export Multitrack Mixdown Window: **File Name:** Name of the file you are creating **Location:** Where on your computer you are choosing to save your content **Format:** This is the type of file you are generating. See format type document for more information on the different types of formats. **Sample Type/ New Sample Type:** Remember 48000 Hz is the recommended sample rate for burning to an audio disc. The New Sample Type field displays what you have chosen when changing the Sample Type **Format Settings:** Affects your audio bit rate **Mixdown Options:** Allows you to separate source files by track and bus.	

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More on Mixdown Options:

Click: Change next to Mixdown Options to reach the window you see on the right

What each field means:
Selecting other options under the primary field called Master will allow different types of files to be exported out as Mono, Stereo, and 5.1 surround sound, depending on what you have checked. In this case, only Stereo is selected, and thus, only a Stereo audio file will be generated.

Individual tracks can be exported out:
You will want to select the appropriate track or tracks by clicking the check box next to the track you are interested in exporting out. Doing so will create an isolated audio file for the track you clicked on.

Note: An icon will appear next to "OK" this notifies you that Audition will add the sources name to the end of my filename that I chose earlier.

Click: Ok when done selecting
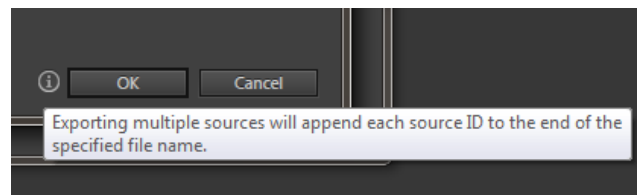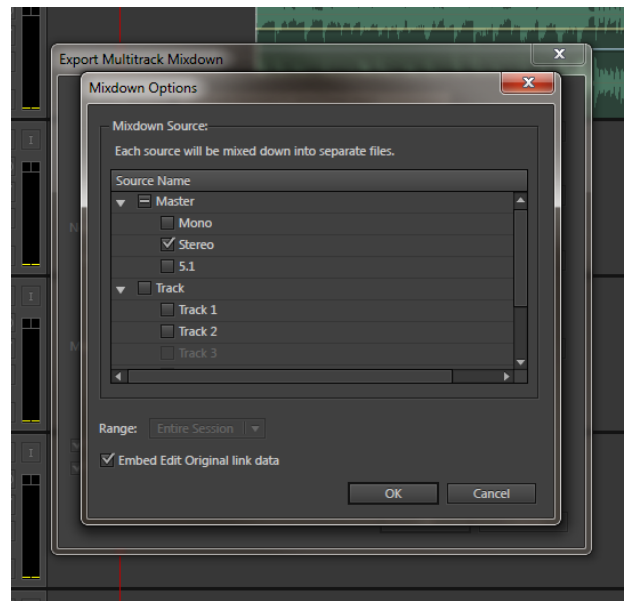
Include Markers and other metadata:
This option if left checked will include markers and other metadata that you have added. This will not be a lot of extra space added to your file being exported, but it may or may not be necessary

Open files after export:
Leaving this option checked will automatically open all files separately in Audition for review. I often leave this option unchecked.

Click: Ok to export project file
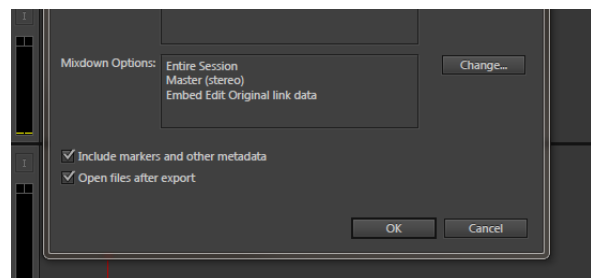
I have placed my exported multitrack files to my desktop as their own audio compilation.

The file titled "Test mixdown_Stereo" is a master (encompasses all audio tracks) audio compilation in stereo mode.

The file titled "Test mixdown_Tra.." is a single track of the track 1 item I left checked while in the Mixdown options menu.
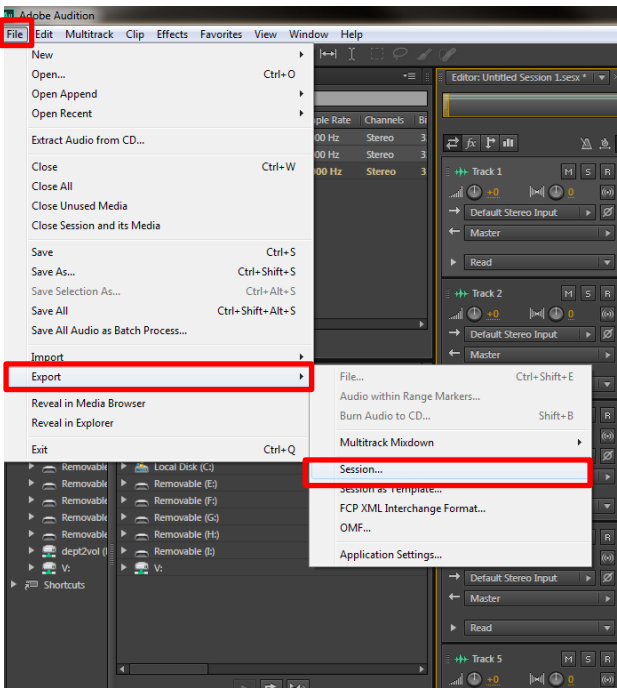
There are two separate wav files generated as shown here. There are also two .pkf files, which honestly aren't needed.

Note: The only purpose of having a .pkf file is so that when you open the wav file in Audition you won't need to experience a load wait period. When you insert an audio track into audition it will generate automatically a .pkf file somewhere in the adobe programs folder to reduce the load wait time in the future.

Also, it is important to note that the icons representing these file types may be different than what is showing on your computer. This is because what programs are DEFAULTED to your file type will take over how the file appears on your computer. A wav file set as to open as default with iTunes will have the iTunes logo for its icon as shown in this example to the right.
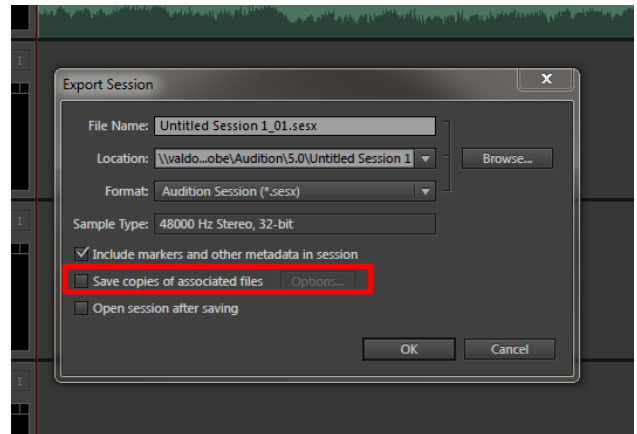
Exporting the Session:

Steps	What You See
Multitrack sessions are non-destructive, meaning the files you work on in individual tracks are not writing over the original file brought in from a different location on your computer. The only drawback for having this scenario is when transferring an incomplete job that needs further editing between multiple computers. Using the process described for exporting a mixdown will prevent you from making further edits to the master or the individual track if opened in Audition.	
To export your multitrack session as a usable form so it can be opened on another computer exactly as you saved it: **Click:** File -> Export -> Session	

Click: Ok after making desired modifications **Note:** See earlier Breakdown of Export Multitrack Mixdown Window to get more information on individual sections **Be sure to check "Save copies of associated files" before clicking ok**	
An SESX file, which is your project file, is what will be opened on a different computer for you to edit the session further. **Note:** This file will require Adobe Audition CS6 for further editing to be done A separate folder associated with your SESX file will also be made available if you checked the "save copies of associated files" check box from the previous prompt shown earlier **Note:** This folder contains all media associated with your SESX file. If you don't keep these items together you will not be able to edit your session further on a separate machine.	