3. Mixing Down in Adobe Audition: Edit View and Multitrack View

So you've recorded your content and sourced the music and sounds that you'd like to be in your project. It's time to clean them up and then mix them together.

Here's a few simple guidelines for using Adobe Audition to edit content. Adobe Audition is the software that URB has installed on its computers, but you can also download a free 30 day trial of the latest version of Audition from Adobe's website. There is some alternative free editing software on the web, such as Audacity, but Audition is very comprehensive and used by people in the industry (it appears in the backing of some of the BBC Academy's production videos). There's no "right" way to use Audition, though you can get a lot of inspiration from the Youtube Channel of Mike Russell. He's done some very helpful videos.

To edit single recordings one at a time, use the "Edit View." To position and mix down multiple recordings into a bigger file, use the "Multitrack View". You can switch between the two at any time from the View option. It's a good job to combine them so that you edit all of your individual recording, music and sound clips in Edit View and then build them into a project using Multitrack.

BASICS FOR USING EDIT VIEW

Always create a COPY of the original file for editing. There's nothing worse than irreversibly screwing up an original recording. Especially if that original recording happens to be of an interview that you can't redo.

Find your file on the PC, right-click and select Open With> Adobe Audition.

You won't be able to edit or add effects to a recording while it's playing out whilst you're in Edit View. Press the square "stop" symbol before you get cracking. It's easy to forget this –it happens all of the damn time.

To edit anything from scratch, I tend to follow the order:

NORMALIZE - REMOVE BAD TAKES/ PICK GOOD BITS - NORMALIZE - NOISE REDUCTION - NORMALIZE - EXTRA EFFECTS (OPTIONAL)

For documentaries, don't edit the actual spoken content of an interview other than to shorten the length of long pauses. URB could get in SERIOUS trouble for manipulating someone's words in an unrepresentative or scandalous way. However, you can extract the parts of the interview that you want to appear in your documentary by highlighting them, right-clicking and selecting Copy to New.

To edit the content of an audiobook or drama, listen to the clip, highlight bad bits and press Delete or mute them (under Effects) one at a time. Then listen through to be sure the final take has all of the content that you want. Normalize this (Under the Amplify section).

You might notice that certain consonants "pop" a lot. When someone says a loud "P" you'll hear the air. To clean this up a bit you can highlight the offending area and then select Pop/Click Eliminator, or more effectively you can manually zoom in on the P and reduce the length of it a bit. Mind that you don't completely remove it though, as it's considerably worse to have bits of vocals missing than popping loudly.

Most sound recordings tend to have some background noise to them. Sometimes this is a great thing to keep in to accentuate an atmosphere. For example, if you're interviewing people on the streets then let your listener know that's what you're doing. For all other circumstances, you can consider removing a hefty chunk of the background noise. To do this, select an extract of your recording that is just purely a representative sample of the background noise that you seek to remove from the whole file. Then go to Noise Reduction. In this new window, select "Capture Sample". It will then copy that extract you selected. Then click on the "Select Entire File" option in the window, and then Apply. Normalize your file, and listen through to make sure that Noise Reduction hasn't accidentally removed any vocals.

If you find that Noise Reduction has removed too much, then undo it, reopen the window and manually adjust the percentage of reduction to a lower amount. Noise Reduction isn't perfect. You'll still notice a few little saliva clicks and inhales here and there which you can then manually delete depending on your own patience.

You'll notice that Normalize doesn't comparatively bring all bits of speech to the exact same volume. What it does is that it stretches the volume of the entire file so that the loudest bits are a specified limit. To manually adjust volume highlight each speech segment separately and then normalize them one at a time. Or you can just highlight particularly quiet or loud bits and manually amplify them up or down using the Amplify option (the better option).

Congratulations – these are the utmost basics that you'll need to edit a single recording so that's it's ready to be mixed into a Drama or Documentary! However, Adobe Audition is a huge tool with loads of things to play around with. Here's a few interesting things for you to try out in Edit View. Just make sure that you're testing these out with a COPY of your original file:

There's some fancy stuff you can do to the projection and emphasis of a vocal to make it sound like a voiceover, a phone call etc. Either play around with the Presets in Dynamics Processing, or the Presets in Multiband Compressor (my preference). Mike Russell combines both.

There's a couple of really clever adverts on the radio at the moment where it sounds like a person is moving to the left and right of your speakers. Check the Presets in Amplify for how to adjust the fade.

You can modify the speed and/or pitch of a sound extract! Look under Stretch Process. Be warned though: Chipmunk voices sound funny to a producer but can get annoying really quickly for a listener. Use sparingly.

To make a recording sound like it has the echo of a specific location, you'll want to play around with Reverb. There are different types (Full, Studio, Surround etc), so simply have a play around with the Presets in each to find what you're looking for. You can go mad with this, but it isn't strictly necessary. Great for Dramas where you're trying to accentuate a change of location. For an advanced technique to create spectral voices check out Mike Russell's Youtube video on how to "Reverse Reverb."

Audition has a crazy load of FFT, Scientific and Parametric Filters. You might hear these being referred to as High Pass or Low Pass Filters, depending on which bands of treble or bass they filter out. They're really useful if you want a piece of background music to sound like it's happening in a club downstairs or underwater!

Regardless of what editing you do, remember to keep it all bearable for the listener. They don't want to be caught in the gimmicks – they care about the story of your Documentary or Drama. Sound design is only there to help immerse them in the story. Sometimes less is more. A lot of BBC audiobooks have only a clean vocal and nothing else.

BASICS OF USING MULTITRACK VIEW

Here's where you put together all of your cleaned up recordings into one project. You'll notice that there are multiple tracks in which you can position your recordings (hence the name). Simply drag your file into an empty track, and move it around. Then move all of your inserted clips in multitrack around like a jigsaw. If you want to move across more than one file at any time then hold Control and click on each file you want to be grouped, and then drag them. You can overlap files.

You can adjust which parts of clips you want to use in Multitrack by clicking on and dragging the boundaries of the clip, or by right-clicking on a specific part and selecting "Split". Even after using "Split" you can drag the boundaries of the clip.

If you have a particularly sound that you'd like to continue repeating over and over, right-click and select "Loop". Then drag the boundaries of the clip.

You can modify the volume of each track using the left circular dial. If you want to completely mute out an entire track, Right click the track and select the option.

If you've run out of empty tracks (you messy miscreant), you can create a new one by dragging a file into the "Master" track at the bottom.

Big multitrack sessions are in danger of crashing. As such, REGULARLY SAVE YOUR PROGRESS and keep an eye on file types. WAV files can be pretty huge, so it doesn't hurt to save them down to mp3 before you start.

All Multitrack sessions use Macros. What this means is that Audition relies on a pathway to find where your files are located on your computer. So if you move these files to a new location between uses of Multitrack then your Audition session will no longer be able to find them as the pathway is broken. You' Il need to relocate the files and open them up all over again in Multitrack, and you'll lose your progress.

By using multiple tracks in Audition you can overlap sound recordings to make quicker and cleaner transitions in your content. For example, you can overlap the ending of a speech segment with a transitional sound effect, and then overlap the end of that with the beginning of a piece of music, and then overlap the next speech segment over the remainder of that same piece of music.

For that last bit (speech recording over a song), you might want your song to fade down during speech and up again during quiet parts. Rather than using Edit View, you can click and drag the green line on your audio clip to manually indicate volume changes that you want to happen throughout it. Doing so doesn't affect the file beyond the multitrack session.

When you're happy with how everything is positioned and how the volume is balanced, you can then mix down all of your clips in the multitrack session into a single file. Go to Edit – Bounce to New Track. You can either mixdown everything in your multitrack session, or just a selection of clips that you've already Control-Selected.

Be warned that if your session is exceptionally huge then you might need to separate the session by selecting a few chapters of your content at a time, bouncing these into files, saving each of them as mp3 to reduce the file sizes, and then mixing these combined files into the complete project through a new Multitrack session. So, for example Episode 4 of the RavenTales series "Crowe" crashed a lot because it was too big an Audition session. So I highlighted Scene 1 sounds and bounced them into an mp3. Then I did the same for Scene 2. Etc. Then I created a new multitrack session and opened each of these mixed down scenes. Then I mixed this down into the full Episode 4.

Normalize your mixed-down files and check how spiky they look in Edit View just to be sure that the volume's okay and roughly similar throughout.

When your project's mixed down, save two copies. One in WAV format, and another in MP3 format. The former will be broadcast, the second can be uploaded later as a podcast. I'd recommend this system as some uploading websites will struggle with the size limits of files, and WAV files can be ridiculously large.