



SCHOOL OF DESIGN AND MASS COMMUNICATION

AMM262 - SOUND DESIGN

TOPIC:
EDITING, NOISE REDUCTION, AND EFFECTS IN
ADOBE AUDITION

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INTRODUCTION :-

Adobe Audition is a pro digital audio workstation (DAW) popular for radio, podcasts, movies, music, and sound design. It lets you record, edit, restore, mix, and master audio all in one place. When making audio, picking up background noise is common. Things like hums, wind whooshes, and electrical static mar your clean lines. But Audition's got solutions for these nuisances. It makes your audio crisp by erasing those unwanted sounds.

More than just noise removal, Audition adds flavor with features like reverb, delay, EQ, and compression. Using these effects lets you craft high-quality sound tracks and clips. So combining edits, cleanup, and cool sound tweaks opens up awesome possibilities in audio magic. Since film, radio, podcasts, and media are all about the ears, learning Audition well sets students up to rock any project thrown at them.

OPENING A NEW AUDIO PROJECT

Before editing audio, it is important to create and organize a project properly.

Step 1: Launch Adobe Audition

Open Adobe Audition from your computer. The main workspace will appear, displaying tools, panels, and timeline windows used for audio editing.

Step 2: Create a New Project

- Click File → New → Multitrack Session
- Enter a project name.
- Select the desired save location.
- Choose the sample rate (usually 48000 Hz for video production).
- Click OK.

Step 3: Import Audio Files

- Click File → Import → File
- Browse and select the audio recordings.
- Click Open.

The imported audio files will appear in the Files Panel and can be dragged into the timeline for editing.

AUDIO EDITING PROCESS

Audio editing involves trimming, arranging, and refining recordings.

Step 1: Place Audio on the Timeline

- Drag the audio clip into a track.
- Use the Selection Tool to navigate through the waveform.

Step 2: Trim Unwanted Sections

- Select unwanted portions of audio.
- Press Delete to remove them.
- Remove long pauses, mistakes, or unwanted sounds.

Step 3: Split Audio Clips

- Position the playhead at the desired location.
- Press Ctrl + K to split the clip.
- Rearrange clips as needed.

Step 4: Adjust Clip Volume

- Select the clip.
- Use volume controls to increase or decrease audio levels.

This process creates a cleaner and more organized recording.

NOISE REDUCTION TECHNIQUES:-

Background noise is one of the most common problems in recorded audio.

Step 1: Capture Noise Print

- Select a section containing only unwanted noise.
- Go to Effects → Noise Reduction / Restoration
- Select Capture Noise Print

This allows Audition to identify the unwanted sound.

Step 2: Apply Noise Reduction

- Select the entire audio clip.
- Go to Noise Reduction (Process).
- Adjust:
 - Noise Reduction Percentage
 - Reduce By (dB)
- Preview the result.
- Click Apply.

Step 3: Use Adaptive Noise Reduction

For recordings with changing background noise:

- Go to Effects → Noise Reduction / Restoration
- Select Adaptive Noise Reduction
- Adjust sensitivity and reduction levels.

This method automatically removes varying noise throughout the recording.

Step 4: Spectral Frequency Display

- Press Shift + D to open Spectral View.
- Locate unwanted sounds visually.

- Use the Spot Healing Brush or Marquee Tool.
- Remove clicks, coughs, and background disturbances.

Spectral editing allows precise restoration of audio recordings.

APPLYING AUDIO EFFECTS:-

Audio effects help improve clarity and create realistic sound environments.

Reverb Effect

Reverb simulates sound reflections within a space.

Steps:

- Select the audio clip.
- Go to Effects → Reverb → Studio Reverb
- Adjust:
 - Room Size
 - Decay Time
 - Wet/Dry Mix

Reverb creates a sense of depth and environment.

Delay Effect

Delay creates repeated echoes of a sound.

Steps:

- Select the audio clip.
- Go to Effects → Delay and Echo → Analog Delay
- Adjust:
 - Delay Time

- Feedback
- Mix Level

Delay is commonly used in music production and sound design.

Equalization (EQ)

Equalization adjusts specific frequency ranges.

Steps:

- Go to Effects → Filter and EQ → Parametric Equalizer
- Increase or decrease:
 - Low Frequencies (Bass)
 - Mid Frequencies
 - High Frequencies (Treble)

EQ improves speech clarity and overall tonal balance.

Compression

Compression controls volume dynamics.

Steps:

- Select the audio clip.
- Go to Effects → Amplitude and Compression → Dynamics Processing
- Adjust:
 - Threshold
 - Ratio
 - Attack
 - Release

Compression creates consistent and professional audio levels.

MULTITRACK AUDIO MIXING:-

Adobe Audition supports multiple audio tracks for advanced sound design.

Step 1: Create Multiple Tracks

- Add dialogue track.
- Add music track.
- Add sound effects track.
- Add ambient sound track.

Step 2: Balance Audio Levels

Adjust each track's volume to ensure proper mix balance.

Step 3: Use Pan Controls

Position sounds across the stereo field for realism.

Step 4: Add Effects to Individual Tracks

Apply different effects to dialogue, music, and ambience separately.

Step 5: Export Final Mix

- Click File → Export → Multitrack Mixdown
- Choose format (WAV or MP3)
- Save the final audio file.

AUDIO EDITING WORKFLOW

OPEN ADOBE AUDITION



CREATE NEW MULTITRACK SESSION



IMPORT AUDIO FILES



EDIT AND TRIM RECORDINGS



REMOVE NOISE



APPLY AUDIO EFFECTS



MIX MULTIPLE TRACKS



EXPORT FINAL AUDIO

PRACTICAL APPLICATIONS

Adobe Audition is widely used for:

- Film dialogue editing
- Podcast production
- Radio broadcasting
- Music mixing
- Foley sound editing
- Sound restoration
- YouTube content creation
- Audiobook production

Its powerful editing and restoration features make it an essential tool in modern audio production workflows.

CONCLUSION

Adobe Audition allows you to transform a recording into a polished and professional production by utilizing a comprehensive suite of tools for editing, restoration, enhancement, multitrack mixing, noise reduction, spectral repair, equalization, dynamics processing, and audio mastering. Good editing techniques will clearly define your audio file by removing unsightly or unwanted sounds and allowing the audio to be more enjoyable for the listener. In addition, learning how to effectively utilize the Audition workflow will give students valuable skills needed for future employment opportunities in film, television, sound design, radio, and many other audio-related fields. Therefore, quality audio editing can have an impact beyond sound quality alone, as it is often used to help tell stories and maintain audience engagement.

THANK YOU