The Anatomy of an EQ & How To Use It



ReaEQ: is a parametric equalizer plugin included with Reaper. It's a versatile tool that allows you to boost or reduce specific frequency ranges, shape the tonal balance of a track, and make corrective or creative adjustments to your audio. Here's a basic guide on how to use **ReaEQ**:

1. Loading ReaEQ:

- Open Reaper and import or record an audio track.
- Click on the FX button on the track's control panel.
- In the FX window, click on the "Add" button.
- Search for "ReaEQ" in the filter list and double-click to add it to the trac2. Understanding the Interface:
- Bands: By default, ReaEQ starts with four bands, but you can add more if needed.
- **Frequency Control**: The horizontal axis represents frequency, from low on the left to high on the right.
- Gain Control: The vertical axis represents gain, with boosts above the line and cuts below.
- Graphical View: Allows you to visualize your EQ adjustments.

3. Adjusting Bands:

- Type of Band: Right-click on a band's handle (dot) to set its type. Common types include:
- Low Shelf: Affects all frequencies below a certain point.
- High Shelf: Affects all frequencies above a certain point.
- Band (or Bell): Affects a range of frequencies around a center point.
- Low Pass: Cuts off frequencies above a certain point.
- High Pass: Cuts off frequencies below a certain point.
- Adjusting Frequency and Gain: Click and drag a band's handle to adjust its frequency and gain.
- Adjusting Bandwidth (or Q): Scroll your mouse wheel while hovering over a band's handle or adjust the Bandwidth parameter in the band's control panel.

4. Adding or Removing Bands:

- Add: Right-click anywhere on the graph view and select "Add Band".
- Remove: Right-click on a band's handle and select "Delete Band".

5. Using Presets:

ReaEQ comes with some predefined presets for common tasks. Click on the drop-down menu at the top of the plugin window to select and load a preset.

6. Bypassing:

To hear the difference your EQ adjustments make, use the **Bypass** button to toggle the effect on and off.

7. Analyzing the Signal:

 Click on the **UI Options** menu (gear icon) and check "Show spectrogram" or "Show spectral edits" to get a visual representation of the audio's frequency content.

Tips:

- **Subtractive EQ**: Instead of boosting frequencies you want to emphasize, consider reducing frequencies you don't want. This approach often leads to a more natural sound.
- **High-pass Filtering**: If you have unnecessary low-frequency content (like rumble), use a high-pass filter to clean it up.
- **Listen in Context**: If you're EQing an instrument in a mix, make sure to frequently listen to it in the context of the full mix, not just in isolation.
- Remember, EQ adjustments are subjective and should be based on the needs of your specific audio and the desired end result. Always trust your ears and make adjustments that serve the music or content you're working on.