# Slice

Frequency Selector

- One of the defining features of our plug in is the ability to make frequency specific modifications
- Users choose how to segment the full frequency range into 3 portions
- This applies three filters on the audio samples - low pass, mid pass, and high pass
- Users can select any of the portions to modify - low, middle, high
- Selected portion is visibly bolded

780
720
660
600
540
480
420
360
300
240
180
120
60
0

Depth 0

Rate 0

Character 0
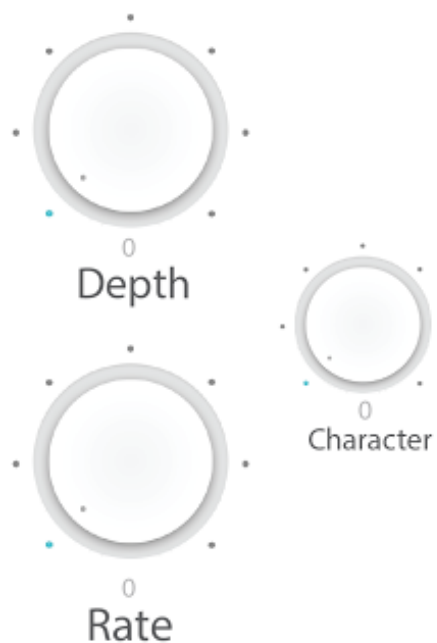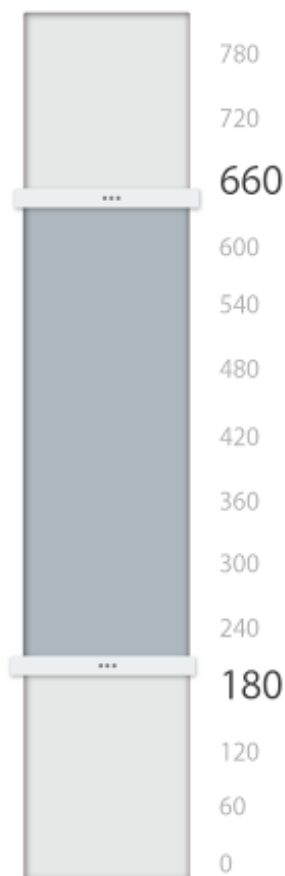
Panning

- Users can set the depth and rate of the panning for the selected frequency range
- Depth determines how far into each ear the audio is transmitted
- Rate determines how quickly the audio is manipulated
- Currently, we use a linear panning where the gain in each ear is linearly changed
- Future work includes converting this into constant power panning
- This is the standard for audio production and relies on manipulating the angle the audio appears to come from

Character

- Users can manipulate the 'character' of the track
- This is built on a downward dynamic range compression algorithm
- Increasing the character results in an increase in both the threshold and ratio aspect of the DRC
- A fixed relationship between those two values is included in the plug-in

- As it stands, audio production that is specific to a given frequency band involves manually creating copies of tracks to pass through a filter
- With this plug in, we aim to automate the process of selecting a frequency band, and applying panning and a dynamic range compression based effect on it

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