Main Goal:
To preserve the integrity of the analog sound signal by amplifying an analog recording by using a non-digital process.

Design Considerations:
- Pre-amp design for voltage gain and master volume control
- Equalizer/Power-amp design for power gain and speaker drive
- Filter design to implement the equalizer
- Master and equalizer volume implementation
- Bridge rectifier center tap implementation for ideal split voltage supplies
- Optimizing Circuits

Overall Operation

Pre-amp Design

The master amp employs a common emitter into a common collector.
Specs:
- Max Voltage Gain ~ 5
- Power Consumption ~ 85mW

Power-amp Design

The equalizer amp design employs a common emitter into a common collector followed by the class AB output stage. The amplifier has a very low output impedance and the potentiometer controls the volume of the selected frequency range.
Specs:
- Output Power ~ 8W
- DC Power Consumption ~ 80mW

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