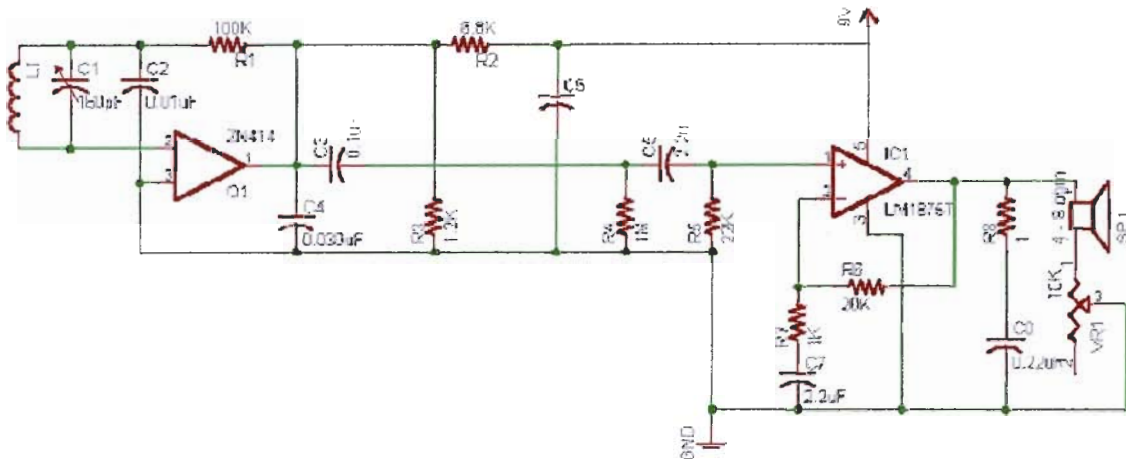


We are planning on building a simple AM radio receiver with a built-in signal amplifier. There is a variable capacitor for adjusting the frequency of the incoming signal and a variable resistor for adjusting the volume of the speaker. A circuit diagram is included below. We will need to purchase several components not available in the lab.



| Part | Description | Qty | Notes |
|--------|---|-----|----------------------------|
| R1 | 100K ohm resistor | 1 | All resistors 5% tolerance |
| R2 | 6.8K ohm resistor | 1 | |
| R3 | 1.2K ohm resistor | 1 | |
| R4 | 1M ohm resistor | 1 | |
| R5 | 22K ohm resistor | 1 | |
| R6 | 20K ohm resistor | 1 | |
| R7 | 1K ohm resistor | 1 | |
| R8 | 1 ohm resistor | 1 | |
| C1 | 160pF variable capacitor | 1 | |
| C2 | 0.01uF ceramic capacitor | 1 | |
| C3, C6 | 0.1uF ceramic capacitor | 2 | |
| C4 | 0.039uF ceramic capacitor | 1 | |
| C5, C7 | 2.2uF bipolar electrolytic capacitor | 2 | |
| C8 | 0.22uF ceramic capacitor | 1 | |
| VR1 | 10K potentiometer | 1 | Substitute: >1K<100K |
| L1 | Broadcast band ferrite rod antenna coil | 1 | |
| Q1 | ZN414 AM radio receiver IC | 1 | Substitute: MK484 |
| IC1 | LM1875 audio amplifier IC | 1 | |
| SP1 | 4-8 ohm speaker | 1 | Must be low wattage |
| 9V | 9V battery | 1 | |