

EE 40 PROJECT 1: AN AUDIO AMPLIFIER

Part 2: Audio Amplifier

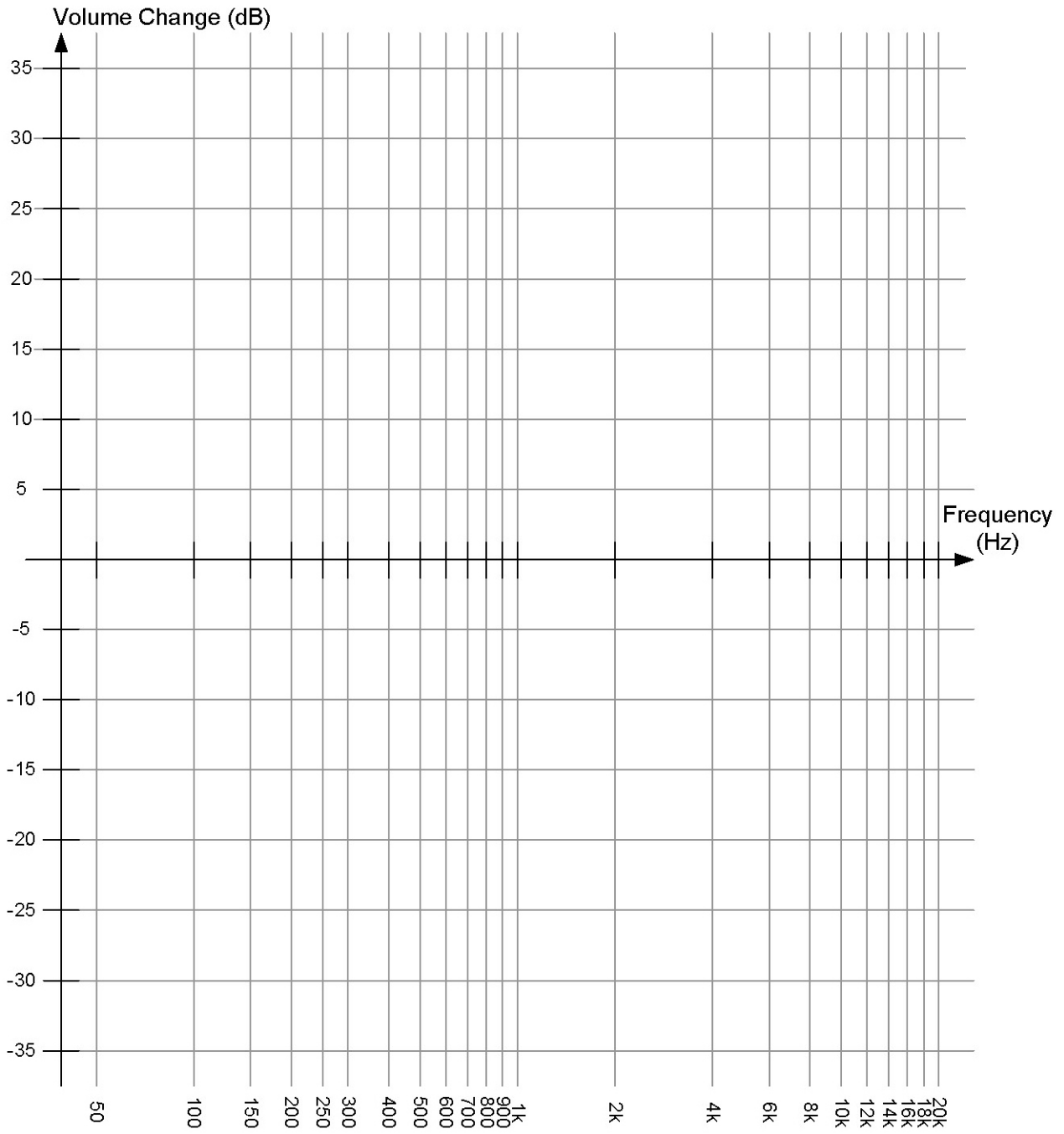
Report

1 Audio Amp Stage Build your audio amp. When you are satisfied with your circuit, plug in your audio device and your headphones and power it up. Play with the volume knob. How does it sound? You need at least 4 sentences here.

2 Tone Control Circuit Build the tone control circuit. Once you have this built, reconnect your audio player and power it up. Play with the volume, bass, and treble knobs. How does it sound? Write at least 2 sentences here.

3 Measuring the Transfer Function Set the treble, bass, and volume knobs to something interesting (not a flat response – distort it slightly). Set up the signal generator and oscilloscope as described in the lab guide, and measure the transfer function.

| Frequency (Hz) | V_{in} | V_{out} | dB |
|----------------|----------|-----------|----|
| 50 | | | |
| 100 | | | |
| 150 | | | |
| 200 | | | |
| 250 | | | |
| 300 | | | |
| 400 | | | |
| 500 | | | |
| 600 | | | |
| 700 | | | |
| 800 | | | |
| 900 | | | |
| 1k | | | |
| 2k | | | |
| 4k | | | |
| 6k | | | |
| 8k | | | |
| 10k | | | |
| 12k | | | |
| 14k | | | |
| 16k | | | |
| 18k | | | |
| 20k | | | |



REVISION HISTORY

| Name | Date | Note |
|-----------|---------|---|
| David Lin | 7/28/05 | Revised Fall 2004 audio amplifier project for use with <12V supply and summer schedule. |