

## A Complete Untuned AM Receiver

The circuit below combines an audio amplifier (built with U1, the LM386) with the AM *detector* to form a complete AM broadcast receiver. The receiver is "untuned," meaning that *no* bandpass filtering is attempted on the RF signals prior to detection. You may hear one or many signals with this circuit! Figure 1 shows how to build it.

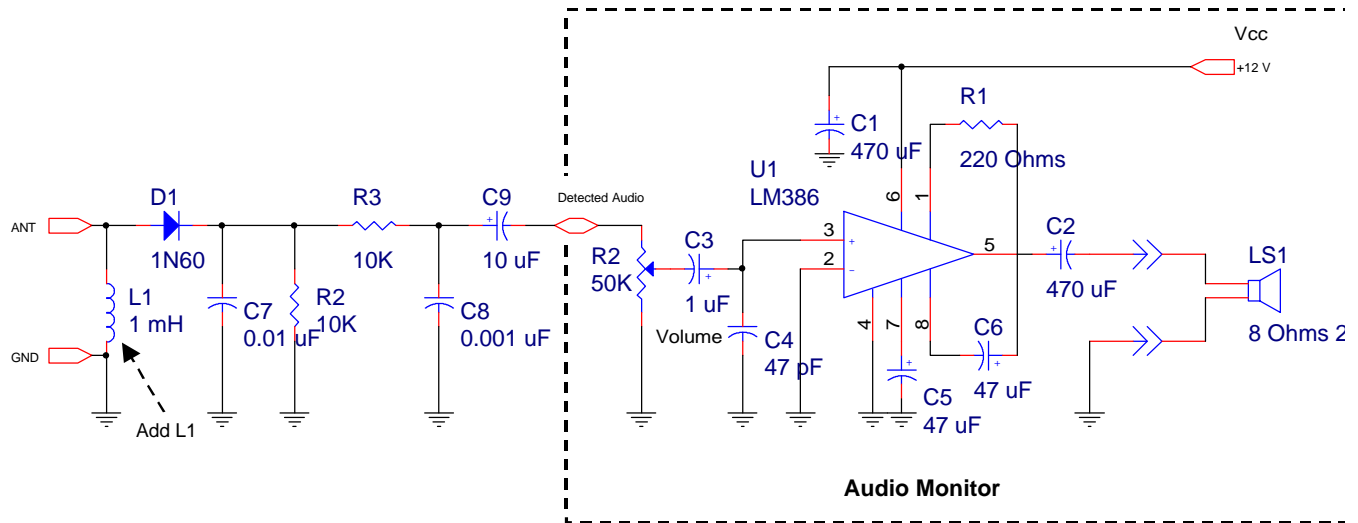


Figure 1: Untuned AM Receiver

A long-wire antenna should be connected to the *ANT* terminal. This should consist of at least 20 feet of wire, preferably hung outside of a building (such as in a tree). Keep the antenna away from overhead power lines! The *GND* terminal should be connected to a good earth ground, such as a copper water pipe, or ground rod. The 10 mH inductor from experiment 2 can be used in place of L1 if desired. Its value is not critical.

For portable operation, a 9-Volt transistor battery will run this little receiver for many hours. Good luck and happy listening!