

Birzeit University
Electrical and Computer Engineering department
Communications Systems EE339

Building Wireless FM Transmitter/Receiver System

As an introduction to this project, read the information provided in these links

<http://www.circuitstoday.com/fm-transmitter-circuits>

<http://www.boondog.com/>

<http://www.buildcircuit.com/simple-steps-for-making-fm-transmitter/>

1. Build the circuit of the transmitter
2. Test it and make sure it is working on one of the standard FM radios.
3. Adjust the circuit so that it is transmitting around the following frequency:
 - 75MHz
 - 80MHz
 - 95MHz
4. Explain your steps and note down all your observations.
5. Build the FM receiver and make sure it working by using the above transmitter.

6. Assume a single tone input at the microphone. Explain how this circuit works in light of what you have studied in the course. Show the signal at different points in the circuit. You may do that by measurements (Oscilloscope with enough Bandwidth).

Report Format:

- Provide a report by the end of the project. It should include Introduction, body, and conclusion. Do not copy !!!
- Writing style and organization are very important.
- Work in groups of 4 students.
- Start as early as possible to avoid any last minute problems.