

FM Receiver Project Information

Getting Started

This page contains resources to help you get started with the FM project.

There are two parts to this project: designing a circuit, and programming the PIC to control the FM receiver chip. Circuit design diagrams are included in the "FM Project Details" page. This is a good place to start.

Your approach to programming will depend on whether you have any previous experience with microcontrollers. If you are new to PIC programming, then start with the basics, such as "Introduction to MPLAB". You first need to familiarise yourself with the MPLAB software, and then you will need to try working on some basic PIC programming tutorials.

PIC programming tutorials are best attempted using the PICKit 3 Express Debugger board, which can be obtained from the lab office. You should try <http://ww1.microchip.com/downloads/en/DeviceDoc/41370C.pdf> before looking at the more extensive example source code that is provided on this page. Source code for the tutorials can also be downloaded (see "pickit 3 debug express lessons" below).

Example FM Chip Source Code

Two examples for controlling the FM chip are included. The "pc2fm" code is designed to allow control of the FM chip directly from a PC. In effect, the PC CPU takes the place of a microcontroller. This code allows you to see how to modify the FM chip registers to control tuning. Please note that the code is all written in C and not C++, as the file extension suggests.

The second piece of code, "Example Code For Controlling FM Chip From A PIC", provides complete code for controlling the chip from a PIC. You will need to make some modifications to enhance the functionality of the circuit, but the code contains all of the basics.
