

6.101 FM Over Fiber Project Checklist

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- ☐ FM
 - ☐ Wimp goal is 1 channel FM
 - ☐ Medium goal is 2 channels FM
 - ☐ Multiple FM channel mixing
 - ☐ Awesome goal is ≥ 3 channels FM

To achieve our medium or awesome goals we will have to construct a fast mixer. This will be done using a very fast op amp. With radio, this mixer isn't necessary since physics does the mixing for us.

- ☐ Fiber-optic transmission
 - ☐ Wimp goal is to not use fiber-optic and to instead use antenna transmission
 - ☐ Medium/Awesome goal is to actually use fiber optic
 - ☐ Transimpedance amplifier if necessary (probably not)

Testing for good fiber-optic transmission can be done using the oscilloscope on receiver directly or on the output of the (probably unnecessary) transimpedance amplifier.

- ☐ Demodulation
 - ☐ Wimp goal is to just have demodulation working at all
 - ☐ Medium is to have an audio amp built into the demod circuit
 - ☐ Awesome is to do this on a PCB

The goals here are pretty clear: demodulate the signal, potentially amplify the signal, and do it on a PCB if time permits.

- ☐ Project as a whole
 - ☐ Wimp goal is to have audio come out the end
 - ☐ Medium goal is to transmit many channels
 - ☐ Awesome goal is to do all of this on a PCB