Assignment 5 Test Set-ups

Problem 2: Tunable Notch Filter Testing

Music Source → Tunable Notch Filter → To AD2 Scope & PC Speakers

Sinusoidal Jamming Tone 100 - 16 kHz

Solution A: Write Software

GUI Sliders $f_c$, $r$ → Tunable Notch Filter → To AD2 Scope & PC Speakers

Music Source → + → Tunable Notch Filter

DDS of Assignment 3, Problem 3

Cos($2\pi(f_0/f_s)n$)

GUI Slider $f_0$

FM4

Solution B: Hardware Combiner

Music Source → 1k → FM4 → Tunable Notch Filter → To AD2 Scope & PC Speakers

AD2 Sinusoid → 1k → Line-In

On breadboard with 3.5mm audio interfaces
Solution B: Hardware Combiner (cont)

3.5mm Stereo Wire Interfaces (you have these)

Gen 1 on AD2

3.5mm Stereo Female-to-Female (need)

3.5mm Stereo Male-to-Male Cable (need)

You may not need these! Omit these adaptors if wire-to-3.5mm male can plug directly in your cell phone