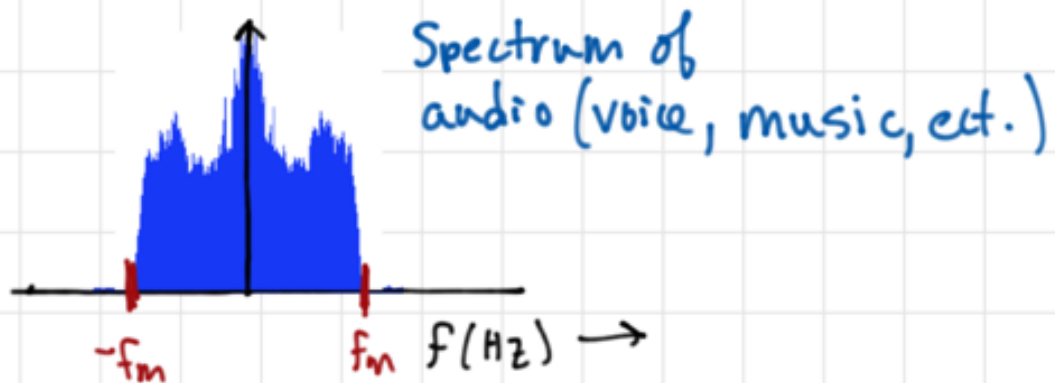
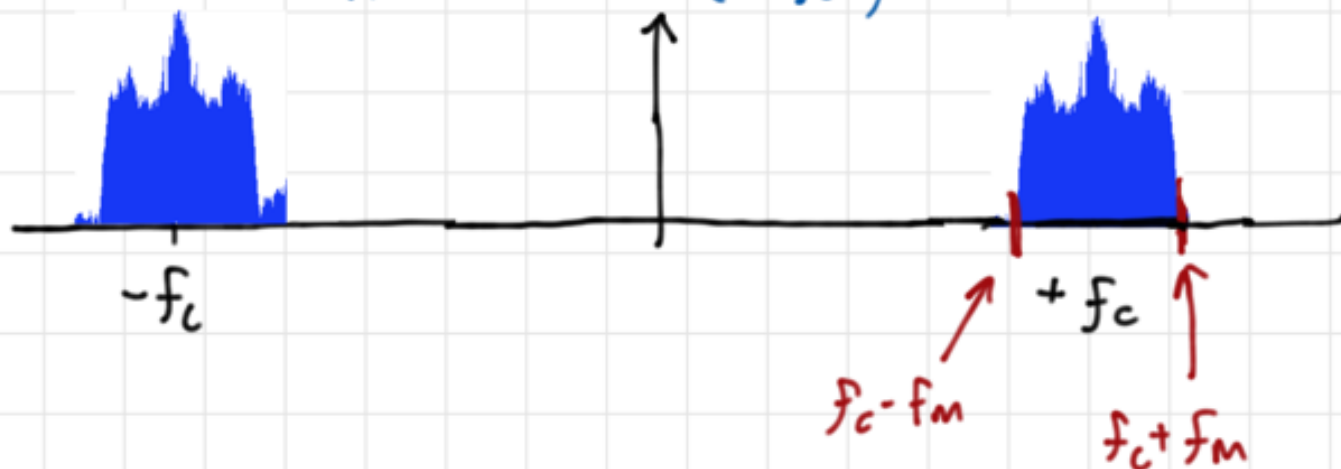


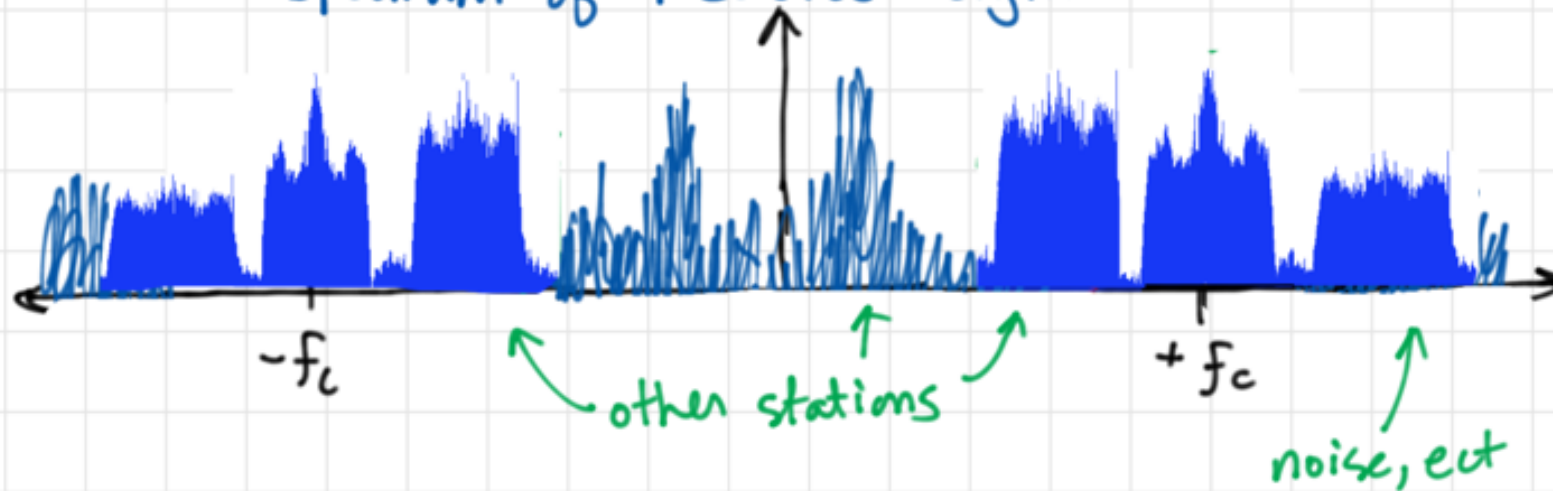
AM Radio

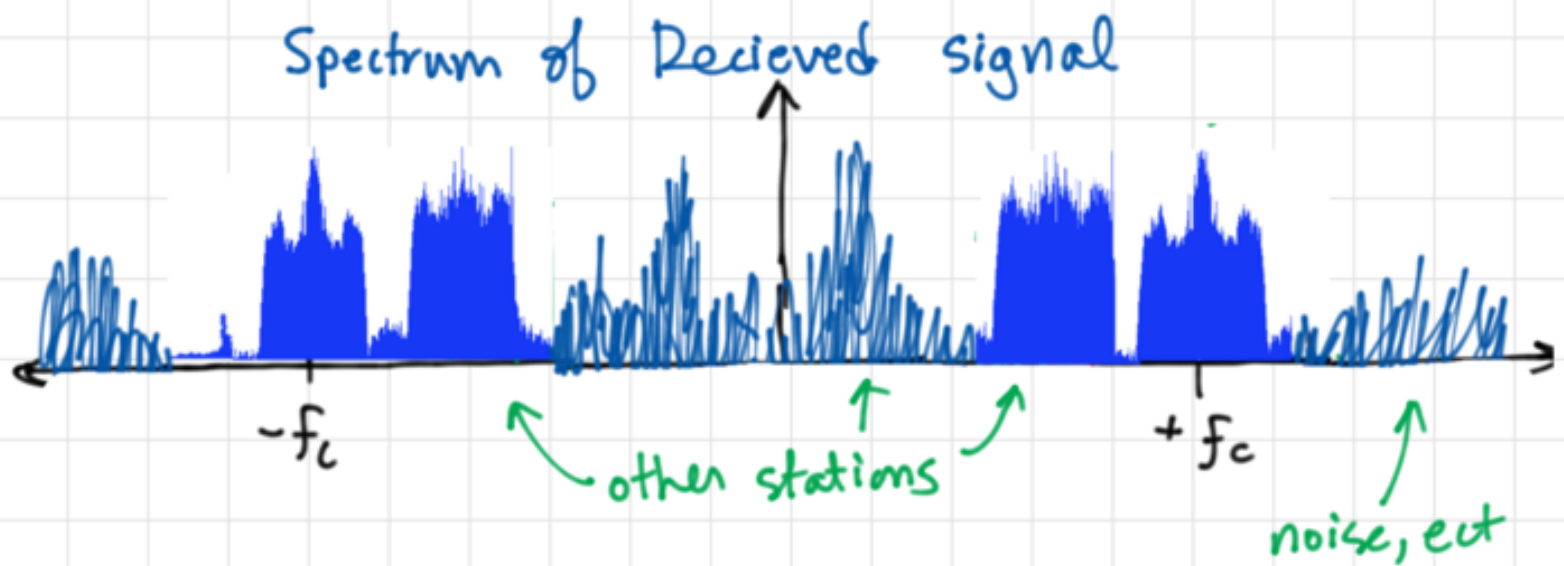


Spectrum of transmit signal
 $x(t) = a(t) \cos(2\pi f_c t)$



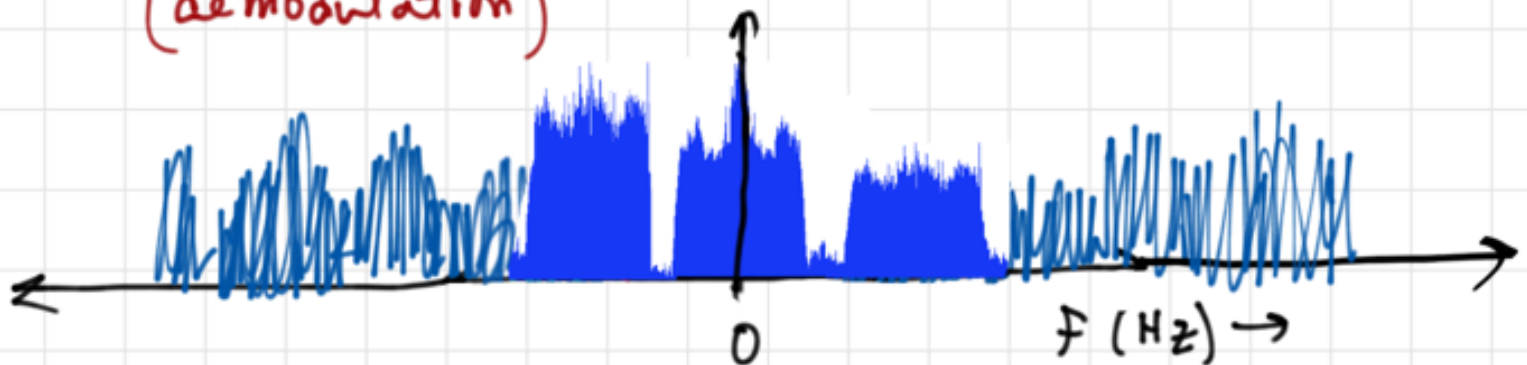
Spectrum of Received signal



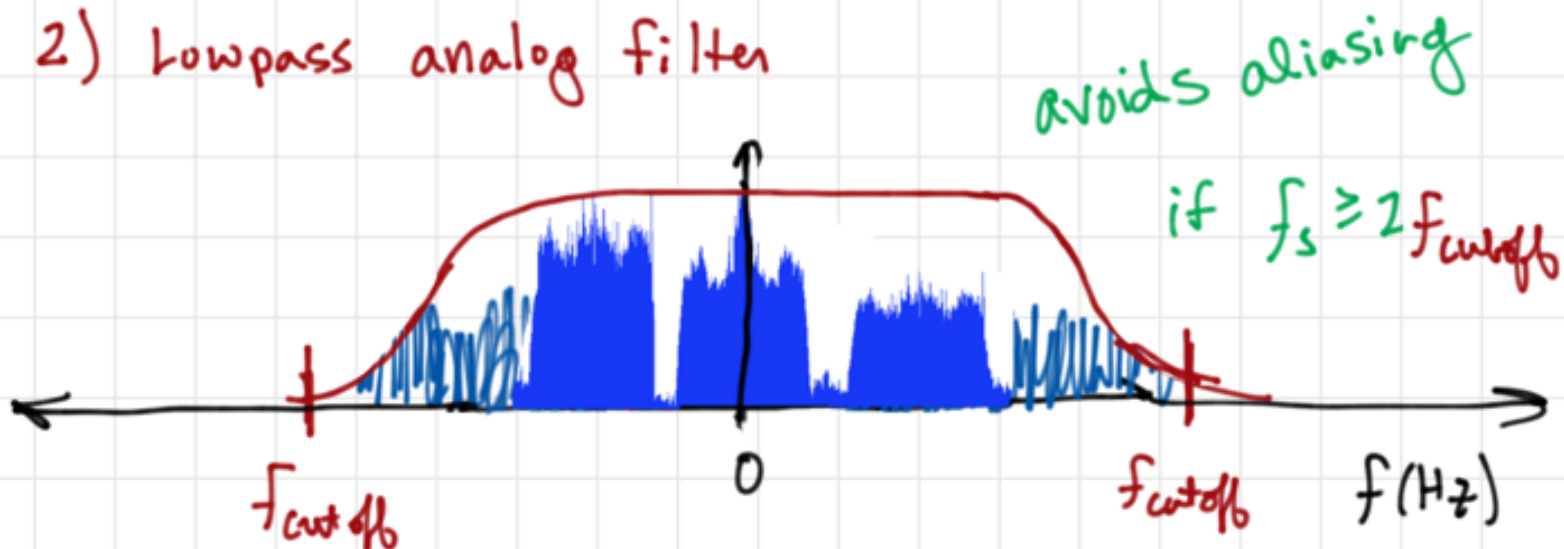


HOW DO WE GET BACK $a(t)$?

1) Multiply received signal by $\cos(2\pi f_c t)$
(demodulation)

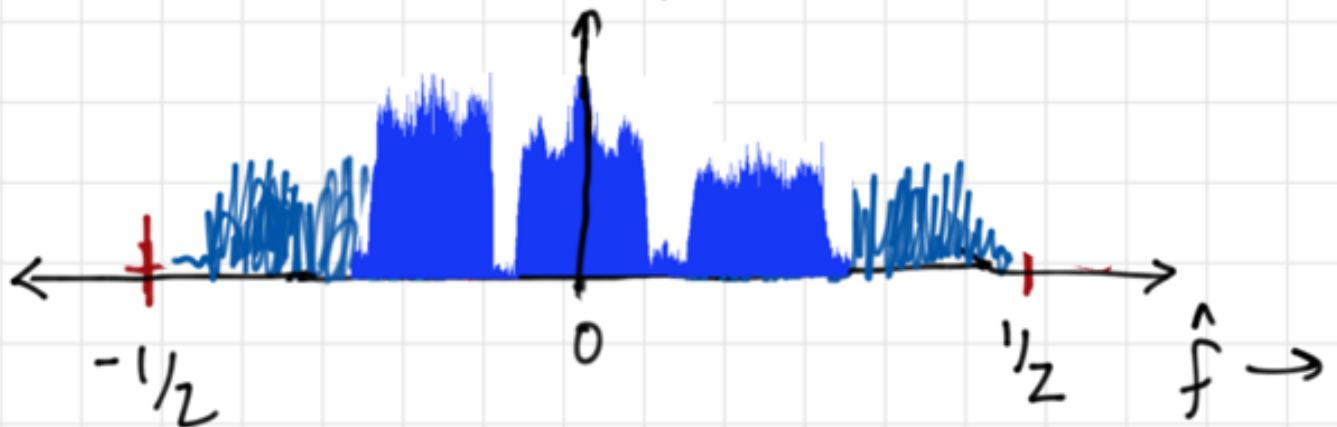


2) Lowpass analog filter



3) Sample with A/D at f_s

Spectrum of $x[n]$



4) Apply digital filter (FIR, ect)

