AV314 - Self study / Programming Assignment 6.

DSB modulation / demodulation , SSB modulation / demodulation.

You would need to download dsbsc-demonstration.m and helper files. tar.bz2 for this assignment. Extract the tar.bz2 file and this file to the same directory.

a) Read through and run the dsbsc-demonstration.m file. Draw a block diagram / flow chart of the sequence of operations which are done within this file.

b) Modify and run the code for different values of the "phase" variable. How will decide the right value to use ? (What signals should you compare to come up with the right value for phase).

c) Experiment with different input signals – use the c, b vectors to change the spectrum of the signal m.

d) Experiment with different channel responses.

$\cancel{\#}$ SSB modulation / demodulation.

Can you write / code a ssb-demonstration.m file that uses the helper files in order to generate an SSB signal and demodulate that. You can use ssb-demonstration.m included in the assignment files as a guide.