## EA Reference Notebook

## REACTANCE-FREQUENCY CHART

This chart can save a great deal of time when selecting values for coupling and bypassing capacitors, etc. Using it you can frequently avoid tedious calculations.

To find the reactance of a capacitor at a given frequency, follow the 45° capacitance value line until it intersects the horizontal frequency line, then read downwards to the ohms scale at the

bottom. The reactance of an inductor can be read in a similar manner.

The chart can also provide information about resonant circuits. For example, locate where particular values of L & C intersect and read off the resonant frequency. If frequency is known and either L or C, find the intersect and read off the remaining value. Again, by following along a particular frequency

line, a variety of LC options for resonance can be determined.

To design simple 6dB/octave speaker crossover networks, follow the appropriate resistance line up to where it intersects the desired crossover frequency and read off the required values of L & C.

Interpolate for values between the lines, using a needle point for increased accuracy.

