

Ultrasound Notes, Part 0 – Roadmap

- Introduction
- Physics: reflections, wave equations, pulse functions, attenuation, dispersion.
- The ultrasound signal: bandpass signals, reflections, speckle noise.
- 2D imaging: voltage, derivation of the point spread function.
- The lateral point spread function and diffraction: steady state, pulsed analyses.
- Array systems: sampling, grating patterns
- System components
- Doppler – if time permits.