

10. Tone Controls:

- Various Classic Tone Control Modules + PC-based LabWindows/CVI DAQ
- Electronics Work Bench/SPICE Simulations.
- Measurements of EQ response with actual Amps. Compare w/ Simulations.

11. Phase Inverters:

- Various Classic Phase Inverter Modules + PC-based LabWindows/CVI DAQ

12. Output Transformers:

- Measurement of Transformer Properties - `Scope + LCR Meter, Function Generator + DMM
- PC-based LabWindows/CVI DAQ

13. Single-Ended Class A Tube Amplifiers:

- Measure Operating Voltages vs. Variac AC Line Voltage.

14. Push-Pull Class A/Class AB Tube Amplifiers:

- Measure Operating Voltages vs. Variac AC Line Voltage.

15. Speaker Properties & Speaker Enclosures:

- Comparison of Loudspeaker Properties: Impedance vs. Frequency
- Measurement of Loudspeaker's Thiele-Small Parameters.
- Comparison of Open-Back vs. Closed Back Cabinets.
- Design Loudspeaker Enclosure(s) e.g. Using Bass-Box Pro Software, Then Build Loudspeaker Enclosure, Measure Acoustic Properties as a Function of Frequency and Compare to Theoretical Predictions.
- Design 2-Way/3-Way Cross-Over Networks e.g. Using Cross-Over Pro Software, Then Build Cross-Over and Compare to Theoretical Predictions.

VII. FX-Related Experiments:

1. Distortion FX Boxes:

- PC-based LabWindows CVI Simulations of Distortion/Non-Linear Response
- LabWindows/CVI Arbitrary Waveform Generator DAQ sytem
- Electronics Work Bench/SPICE Circuit Simulations
- Build simple distortion box circuits.
- Comparison of IC Op-Amp Loading Characteristics

2. Spring Reverb Tanks:

- Pulse Generator + RVB Tank + `Scope-based Experiment

3. Tape Echo/Dimension-IV FX:

- Study/Measure Echoplex, WEM CopyCat and/or Dimension-IV Performance?