

PHY 202/182 Lab Instructor notes
Lab 7: Alternating Current Measurements
Spring 2004

- Explain how the coax cables works and the two leads. (The ground lead should be connected to ground on the circuit.)
- Show students how to plug in the BNC cables correctly.
- Students often switch to UNCAL for either the voltage gain or the time base. (The red lights should be off.)
- You might want to show the groups how to use the GND to easily center the sine wave on the horizontal axis.
- In measuring ratio of amplitudes, students often choose different scales for CH1 and CH2.
- For the RC circuit, I chose 1000 Hz and 3000 Hz so that the phase differences would be roughly 30° and 60° .
- For the RL circuit, I chose 1000 HZ so that the phase difference would be roughly -60° . The amplitude ratio should be about one half.
- When checking notebooks, make sure that students have found the phase for the RL circuit to be negative.
- At the end of the lab, disconnect all of the cables.