## Hewlett Packard 3311A Function Generator Operating Instructions



Press the **LINE** Power Switch IN to turn on the Function Generator. This instrument has no LED or light bulb to indicate that the instrument is ON. So, check to see that it is plugged into the Wall Receptacle and into the back of the instrument.

Choose: SQUARE, SINE, or TRIANGULAR Waveform by pressing one of the **FUNCTION** Buttons in the upper right corner of the instrument.

Select the Frequency you want by pressing a **RANGE** Button, and turning the Analog Multiplier Dial. For example, if you want a 300Hz signal, press the 100 button, and turn the dial to 3.

Set your Peak-To-Peak Voltage Amplitude by turning the AMPLITUDE Knob.

The  $\pm$  **DC OFFSET** Knob moves the waveform positive or negative with respect to Zero Volts DC.



Connect the Scope and Data Acquisition Connector Block to the Sine, Square, or Triangular Waveform through the **600** $\Omega$  **OUTPUT**. Use either a Dual Banana Male to BNC Female Adapter on the Function Generator and BNC Cables; or use Banana  $\leftrightarrow$  Banana Patch Cords and Dual (Banana) 5-Way Binding Post Female to BNC Male Adapters on the Scope and National Instruments BNC 2120 Connector Block. I have connected the two signals using each method in the picture above. Be sure that the Ground Tab is plugged into the LO Banana Jacks. See the pictures below.



The **PULSE OUTPUT** gives +5 Volt pulses as illustrated in the picture at the bottom of page 1.

A **VCO INPUT** is provided on the back of the Instrument to sweep the Waveform Frequency up one whole decade when the Analog Multiplier Knob is set to 1. This function is not used in any of our lab experiments. A greater explanation can be found in the Hewlett Packard 3311A Function Generator Operating and Service Manual, page 3-1, paragraph 3-9.

