Function Generator
Safety Handout

Please observe the following guidelines when operating the engineering department’s function generators:

1) **Do not use a function generator as a power supply**
   A function generator generates small voltage signals at a 50Ω output impedance. It is not intended to nor is it able to supply high currents for powering electronics.

2) **Observe proper polarity of co-axial cable connections**
   Connect function generator ground to your circuit’s ground only. This will prevent short-circuiting portions of your circuit.

3) **Make connections with the power off**
   As with any electronic work, it is safest to make all connections prior to supplying power to the function generator.

4) **Test the function generator output before applying it to your circuit**
   Use an oscilloscope or similar instrument to verify that the function generator is producing the correct signal before you apply the signal to your circuit. Most importantly, verify that the voltage produced by the function generator is not too high. A function generator can produce voltages as high as 40V peak to peak (pk-pk). Voltages this high can easily damage circuit components such as operational amplifiers.

5) **Turn down the amplitude knob when you are finished**
   By turning the amplitude to zero you help the next function generator user prevent over-voltage damage from a careless connection.

February 16, 2015