

Department of Electrical Engineering and Computer Science EECS

--from Robert A. Leskovec, Electronic Services, March 17, 2004

HP 33120A Function Generator Troubleshooting Guide:

Problem:

HP33120A Function Generator appears to put out NO SIGNAL

1. Perform a *power-on* self test, as follows:
 - a. Turn the instrument off.
 - b. Hold down the “Shift” key as you press the “Power On”, and keep holding down the shift key for more than five seconds until you hear a “beep”.
 - c. Then release the shift key and you should see the word “*TESTING . . .*” in the display. A short while later it should display “*PASS,*” then display “1,000.000 Hz”
2. Connect an HP 54600 Series Oscilloscope to display the Function Generator Output and press “Auto-scale” on the Oscilloscope. The waveform should be displayed.
3. Perform the “Default Power On Boot Sequence” outlined elsewhere, and try the above instructions one more time.
4. If there is no signal, disconnect the cable from the HP33120A Output. Turn the power off. Use a meter such as the HP33401A to measure the resistance of the OUTPUT of the HP33120A between the center pin and the ground of the BNC connector. If the resistance is “infinite” or higher than 10 MegOhms, it probably means the output protection network inside the HP33120A has failed. This can only be repaired by a service technician.
5. Report the problem via e-mail to help@eeecs.cwru.edu and be sure to indicate the table number.