

Anti-Static Mod

For Grundig G5, Eton E5, Degen DE1103, and Kaito KA1103
without anti-static protection.

All of the radios listed above use the same receiver board (there are different versions). Some may already have anti-static diodes installed. If yours does not, this is written for you. Unfortunately, there is no way to tell without opening up your radio. In my Kaito KA1103, the board was not the newer modified board, but simply had the diodes installed between the whip antenna connection and chassis ground. In this mod, you will be doing the same thing. Please read the entire text, and look at the picture and diagram before starting this mod!

Parts needed:

2-1n914 diodes (available at Radio Shack)

Tools needed:

Phillips screwdriver

knife

small (30 watts or less) soldering iron

rosin core electronics solder (DO NOT use plumbers acid-core solder!!!!!!!!!!)

Warning! I will take no responsibility for any damage or injuries caused by performing (or attempting to perform) this modification! Please be careful! If you have never soldered before, or are not comfortable with taking apart electronic devices, you may not want to try this!

First, you need a place to work. A well lit desk or table with an outlet nearby will work. Place a soft cloth or towel on the table. Place the radio face down on the cloth with the whip antenna facing away from you. Remove the batteries from the radio. Remove the six screws on the back of the radio that have arrows pointing to them, and the screw inside the battery compartment. DO NOT remove the screw on the back that does not have an arrow pointing to it!

Carefully lift the back of the radio about an inch or so, and move it to the left so you can see the area shown in the picture below. Be careful, as there are wires and a ribbon cable connecting the two halves of the radio together. Note the two areas circled on the picture below, labeled 1 and 2. These will be the points where you will solder the diodes. You will need to carefully scrape the green coating from the board in the area of circle number 2, and add a small amount of solder.

Next, take two 1n914 diodes, and place them next to each other so that the banded ends are facing the opposite way from each other. Twist the leads together on the two diodes, and solder them one end at a time, waiting a minute or two after soldering the first end. You will need to be quick, so that you do not overheat the diodes. Cut the excess length off of the diode leads, making sure that you have the correct length to fit and solder to the antenna connection, and the area you scraped and soldered earlier. Solder each end of the pair of diodes in place, waiting a minute or two between soldering each end.

Look carefully at the board and connections to make sure that you have not shorted out anything, or dropped any loose solder into the radio. Carefully put the back into place, and replace the screws. Insert the batteries, and you are done.

The radio should work as just as before, but now you will have some protection from the preamp being blown by static electricity. Please be aware that that there is no perfect way to protect an electronic device 100% from static electricity. Please disconnect all antennas when the radio is not in use, and try not to touch the whip antenna unnecessarily.