

Troubleshooting Directional Measurements with the FONIX 8000 Hearing Aid Test System and the 8120 Polar Plot Sound Chamber

If you are having trouble with your polar plot measurements, try the following steps:

1. Level the sound chamber. This should always be the first step of troubleshooting any coupler measurement.
2. Make sure the hearing aid is in directional mode and a fresh battery is installed. We recommend using an actual battery for this test instead of a battery pill, which has a cord that could get in the way during the rotating measurement.
3. If possible, program the aid to be in a linear mode, or at least to not be in an adaptive directional mode that switches directionality in ways that may be unexpected.
4. Make sure the rotational shaft is fully inserted. When inserting the shaft, make sure to push past the initial point of resistance. If the shaft is not fully inserted, it will not be able to rotate properly and you will get poor measurements. *See Figure 1.*
5. Make sure the rotator is not slipping during the polar plot measurements. In order to protect the fragile microphone cord, the rotator is designed to slip if there is any resistance caused by the cord. This saves the microphone cord, but it will cause you to have bad directional measurements. Open the

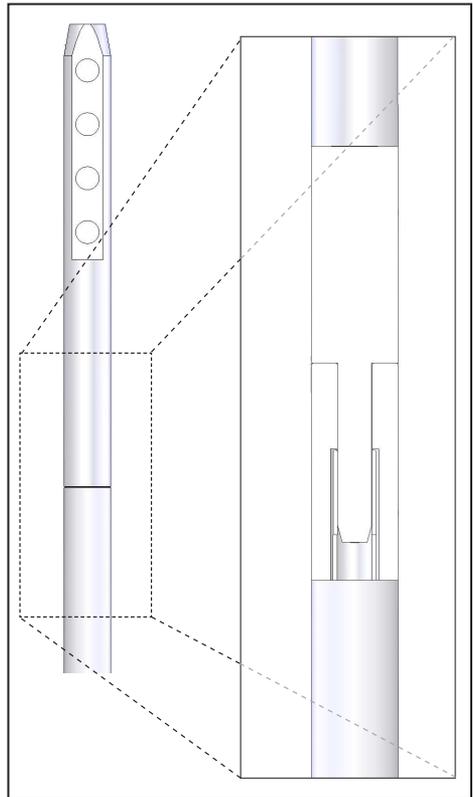


Figure 1: Fully inserted shaft (no gap)

sound chamber and watch what is happening to make sure that nothing is causing the rotating shaft to slip or bind during the measurement.

If the rotator is slipping during the measurements, determine what is causing the problem. Usually, rotational problems will be caused by the microphone cord tightening around the rotator shaft during the measurement. If necessary, remove the hearing aid and coupler to determine the cause of the slip. Make sure the microphone cord is not looped around the rotating shaft and that it has plenty of room to move when the shaft rotates.

5. Make sure the hearing aid is positioned correctly. The two microphones of the directional hearing aid should form a horizontal line that is perpendicular to the speaker.