



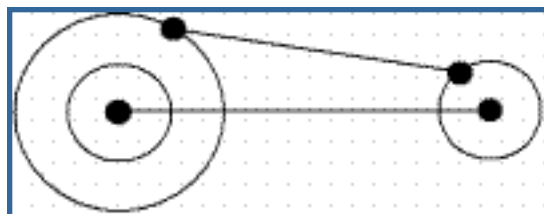
How Do I Connect the Agilent 4155A/B or Agilent 4156A/B to Coaxial Probes?

Question:

How do I connect the Agilent 4155A/B or Agilent 4156A/B to coaxial probes?

Answer:

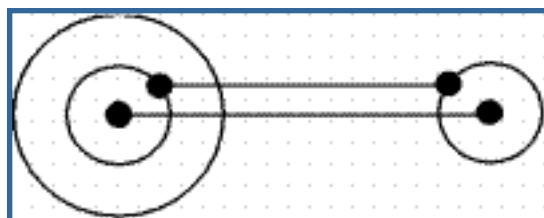
The recommended connection depends upon the current range of your measurement. For measurements above 1nA, the triaxial guard is not necessary. In addition, you probably do not need to test your device in a dark shielded box. In this case, you can place triax to coax adapters directly onto the back of the Agilent 4155A/B or Agilent 4156A/B. In the case of the Agilent 4156A/B, you can ignore the SENSE connection (leave it open), and place one adapter on each SMU FORCE connector. The adapter must have the guard connection floating as shown below.



In the United States, this adapter is available from Trompeter Electronics, phone (818) 707-2020, web site hyperlink is listed below. Request part number AD-BJ20-E2-PL75.

For measurements below 1nA, you can still use coaxial cables but you must use the proper triax to coax adapter. See Module 2 of the Self-paced Training Manual (refer to the Agilent 4155/4156 FAQ, "Is there an Agilent 4155B or Agilent 4156B training class?"). Outside the prober dark box, only triax or Kelvin triax cables are recommended. Inside the dark box you can use coax cable. The outside of the coax cable must be connected to the driven guard as shown below.

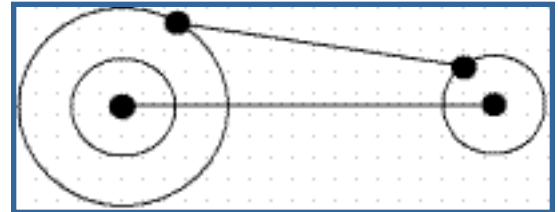
WARNING!!!! Shock Hazard!!!!



Please review the Agilent 4155/4156 FAQ on interlock usage.

In the United States, this adapter is available from Trompeter Electronics, phone (818) 707-2020. Request part number AD-BJ20-E1-PL75. You can also order adapters from Agilent (although the delivery time is usually longer than with Trompeter). Outside of the United States, this is the only option (unless you can find an equivalent local supplier). Please refer to the following table.

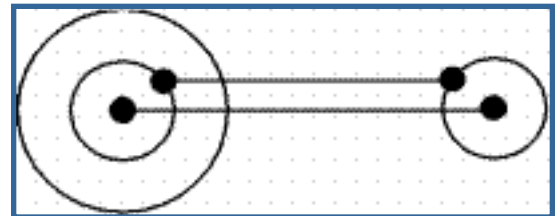
Agilent Part Number	Description
1250-2652	Triax(F) - BNC(M)
1250-2653	Triax(M) - BNC(F)



Safe

Not suitable for low-current measurements.

Agilent Part Number	Description
1250-2650	Triax(M) - BNC(F)
1250-2651	Triax(F) - BNC(M)
1250-1830	Triax(F) - BNC(F)



WARNING!!!! Shock Hazard!!!!

Required for low-current measurements.