

Please perform the following:

To help debug this problem with the Trek amplifier, the system needs to be separated into its three major units, and each unit verified in sequence.

Please perform the following tests and send to us a **Vision Dataset** which contains the information as instructed below.

First, disconnect all cables between the Tester, HVI and amplifier.

Confirm Tester HV Monitor Operation:

1. Connect the I2C Communication cable between the Tester and the HVI
2. Connect the I2C Communication cable from the HVI to the ID Module.
3. Connect one Coax cable to the Rear of the Tester between Tester Drive and Tester H.V. Mon. (no other connections are needed at this time.)
3. Power On the Tester and the HVI (there is no need to power on the Amplifier at this time)
4. Start Vision
5. Once Vision has completed its initial calibration, perform a High Voltage (500V 100mS) Hysteresis loop and save the result to a **Vision Dataset**.

Confirm HVI Connections and Operations

In order to verify the connections being made automatically in the HVI please perform the following:

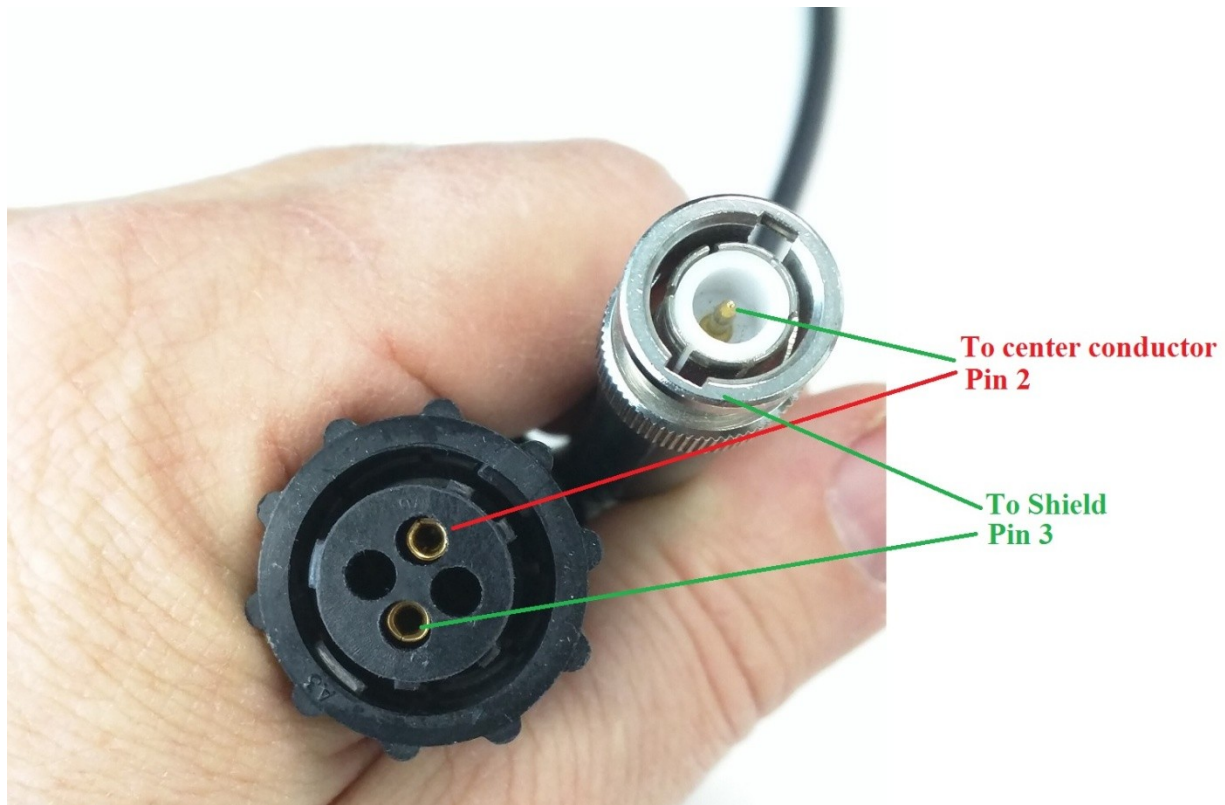
6. Connect the Tester to the HVI and HVA for normal operation EXCEPT do not connect the Amp Stimulus cable or the Amp Monitor cable to the Amplifier.
7. Connect one Coax cable to the Rear of the HVI between Amp Stimulus and Amp Monitor.
8. Power up the Test System and the HVI. (Note: the Amplifier does not need to be powered on for this test)
9. Start Vision
10. Once Vision has completed its initial calibration, perform a High Voltage (500V 100mS) Hysteresis loop and save the result to a **Vision Dataset**.

Verify the Trek input cable:

The Trek amplifier's input cable needs to be checked for damage. Use the photo below to confirm continuity:

Pin2 of Trek connector to Center pin of BNC

Pin3 of Trek connector to Shield of BNC



Confirm Amplifier Operation:

Finally, to verify the amplifier, please perform the following:

11. Please make all connections as normal except do not connect any cables to the front of the HVI.
- 12.. Power up the Tester, HVI and Amplifier.
13. Start Vision
14. Once Vision has completed its initial calibration, perform a High Voltage (500V 100mS) Hysteresis loop and save the result to a **Vision Dataset**.
15. Ensure that the HVI "HV Enabled" light goes OFF at the end of the test.
16. Carefully connect a cable to the HV Drive output on the Front of the HVI.
17. Connect a Volt Meter to the cable (Red to the cable end, Black to Ground reference)
18. In Vision main menu select Quiklook>Hardware Tasks> DC Bias.
19. Configure DC Bias for External High Voltage for 100V. (Please ensure the Meter you are using is capable of measuring 100V)
20. Run DC Bias and measure the HV Drive output of the HVI.

Please report the DC Bias measurement to Radiant a return email and include the **Vision Datasets** which were created in the above steps.

Creating Vision Datasets:

To create a Vision Dataset, open Vision software and from the main menu, choose >File > New Dataset and create and name the new dataset.

From then on, save your test results to this dataset. This is easily done using the function in the lower right corner of the results window as shown below.