

CoreStar Probe Gun Operation Manual

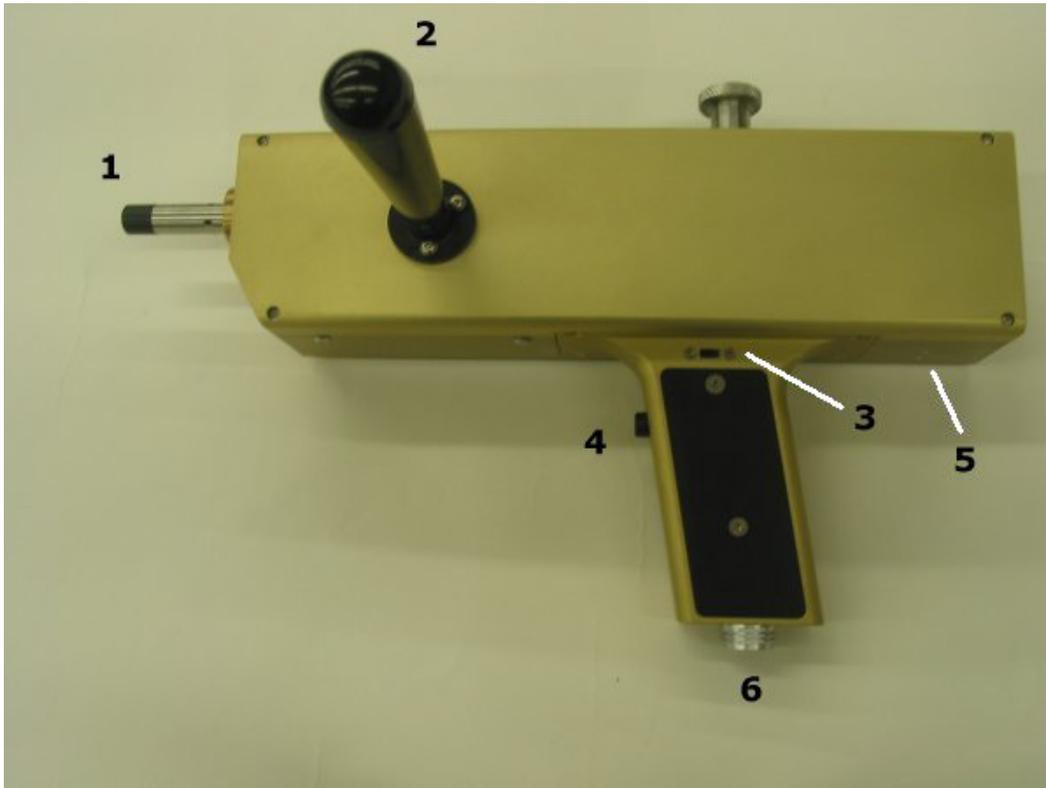


Figure 1

Figure 1 shows the following features:

1. Probe connection side. (Probe not shown) The probe assembly is the same as all RPC probes with a screw on connection.
2. Black handle. Handle position also available on the opposite side.
3. Forward reverse switch located on gun handle above black cover plate. Forward is left reverse is right position.
4. Activation trigger, black button on left side of handle.
5. Acquisition speed and Probe RPM adjustment pots located as 2 white circular dots on underside of gun body towards right side. These pots will allow for either RPM adjustment or travel in and out speed changes.
6. Cable connection at bottom of gun handle.

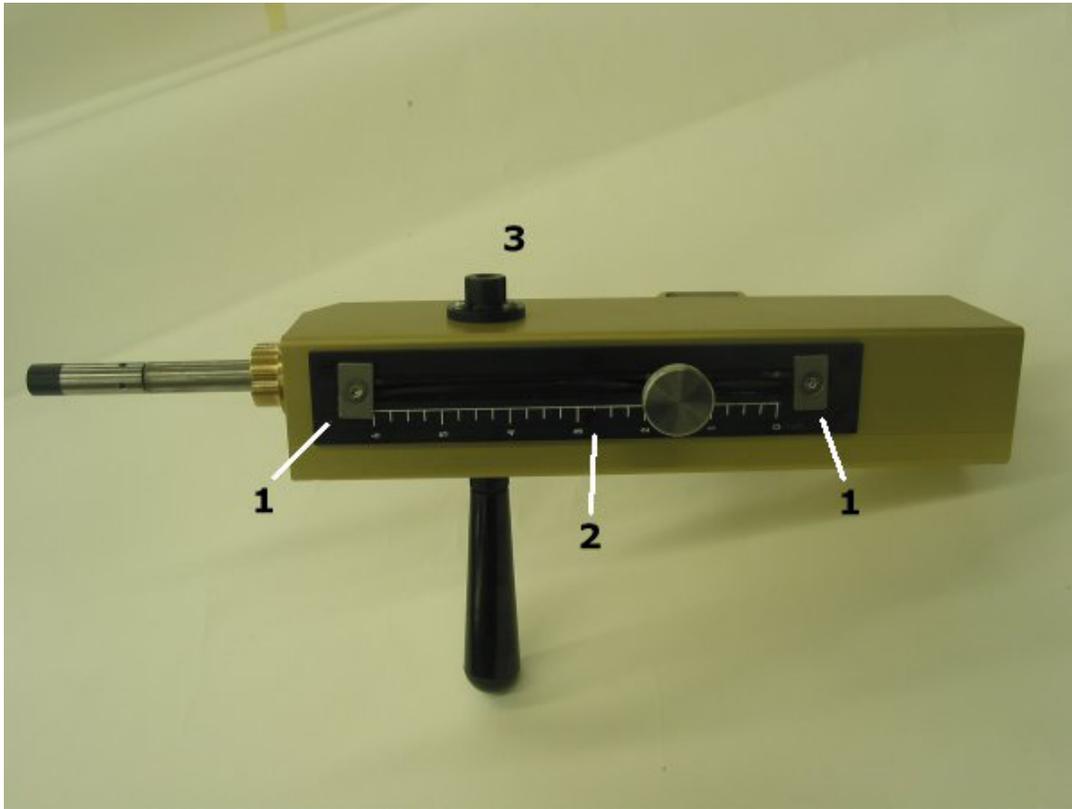


Figure 2

Figure 2 shows the following features:

1. Forward and Reverse stops. Use a 1/8" (.125") hex key to adjust for desired travel. Travel stops have a pinned screw so as not to loosen and drop the screw in the gun body.
2. Travel scale to set desired depth of inspection 0-6" travel.
3. Alternative handle position on opposite side shown. Unscrew and move handle to opposite side threaded bushing.

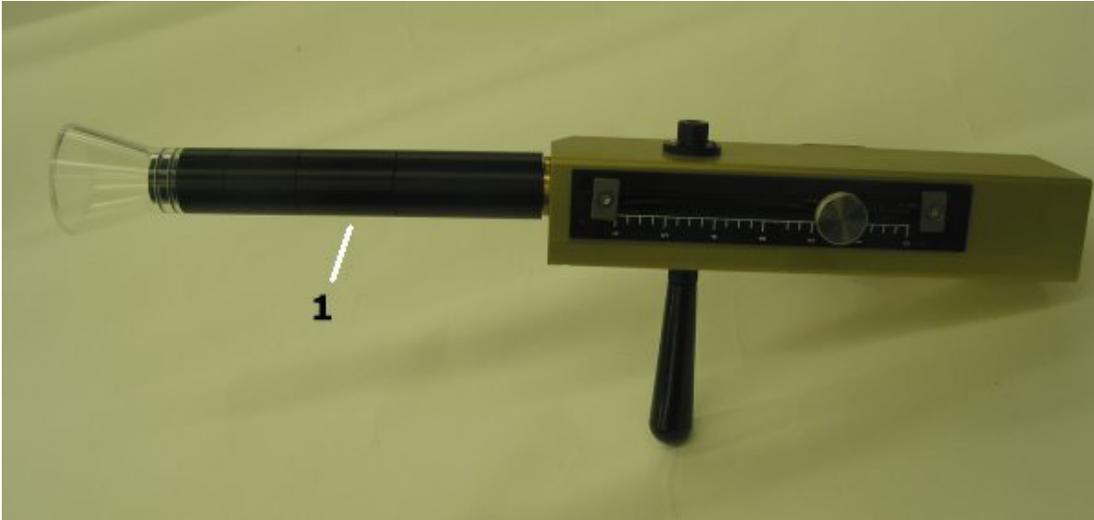


Figure 3

Figure 3 shows the following features:

1. Stand off tube and funnel. Attached with O-rings and no tools required.

1" long stand off, qty = 1

1 1/2" long stand off, qty = 1

2" long stand off, qty = 1

3" long stand off, qty = 1

2 1/2" long clear funnel, qty = 1

Use the extensions and funnel to adjust for probe travel. Each extension will pull apart by hand.

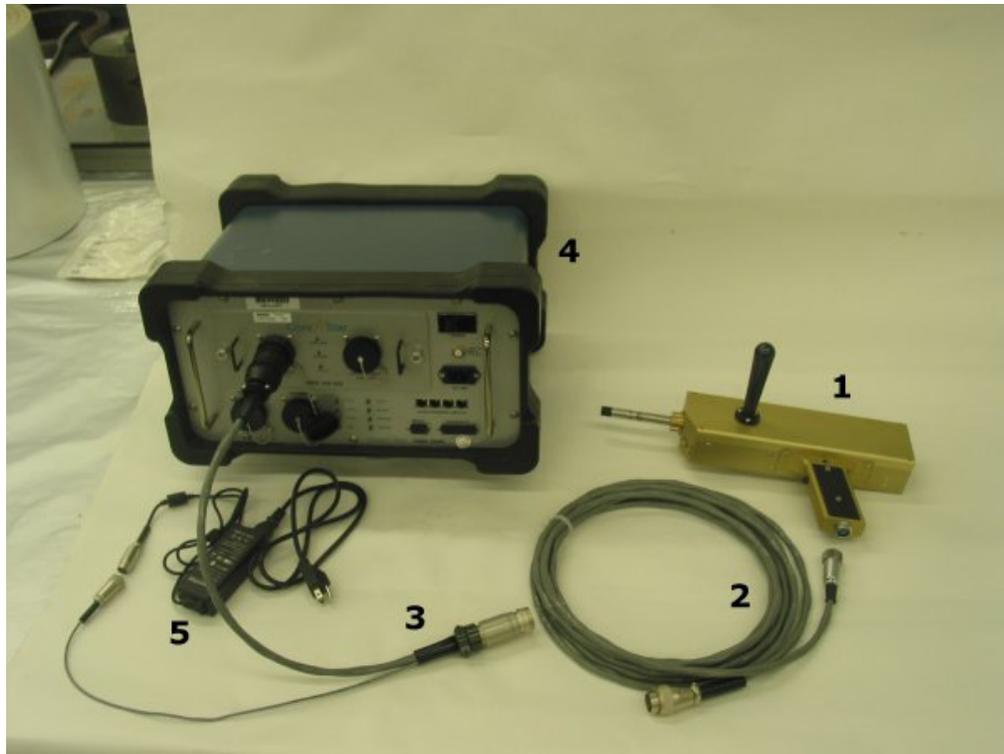


Figure 4

Figure 4 shows the following features:

1. Probe Gun Assembly
2. 20 foot cable
3. Adapter Cable (power supply and tester connection)
4. Omni 200 Remote
5. AC Power Supply

This figure shows the interconnections between all parts of the system. The actual connections were not coupled to make clear the individual parts.

System Setup:

1. Assemble the components as shown in figure 4. Connect from the tester to the computer used for testing.
2. Verify operation by moving the manual quick slide forward and press the trigger. Note the gun will not operate until the slide is moved off the forward or return switch. Move the quick slide by hand off the 0 (zero) or 6 inch position.
3. Determine the depth of inspection. Set the stop to the desired depth. Use a 1/8" hex key and slide the stop back from the 6" position to the desired position.
4. Power off the gun by unplugging.
5. Attach a probe to the gun. (Depending on probe size the extension and funnel must be placed on the gun first, then attach the probe).

Collecting Data on the Pull

1. Set ensure the direction switch in **Figure 1** is set to **PULL**.
2. Set the left travel scale limit in **Figure 2** to the desired pull distance.
3. Setup software
 - a. Create a project
 - b. Open the Acquisition and Analysis software
 - c. Select Edit > Screens and ensure the configuration is set to look like **Figure 5**.

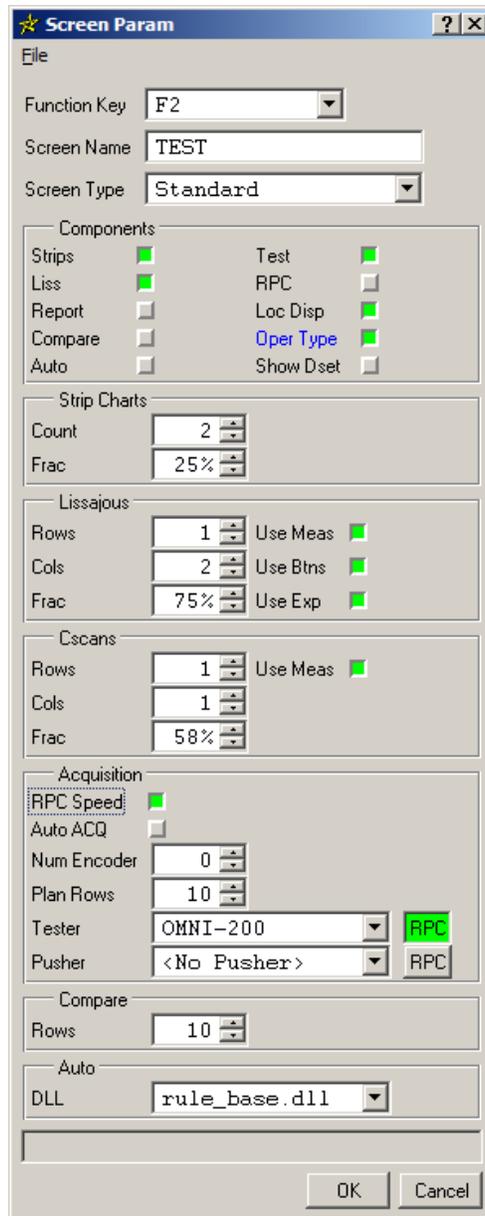


Figure 5

Note: RPC settings displayed in the software do not control the RPC gun. The software can only display the rotation speed.

d. The screen should look similar to **Figure 6**.

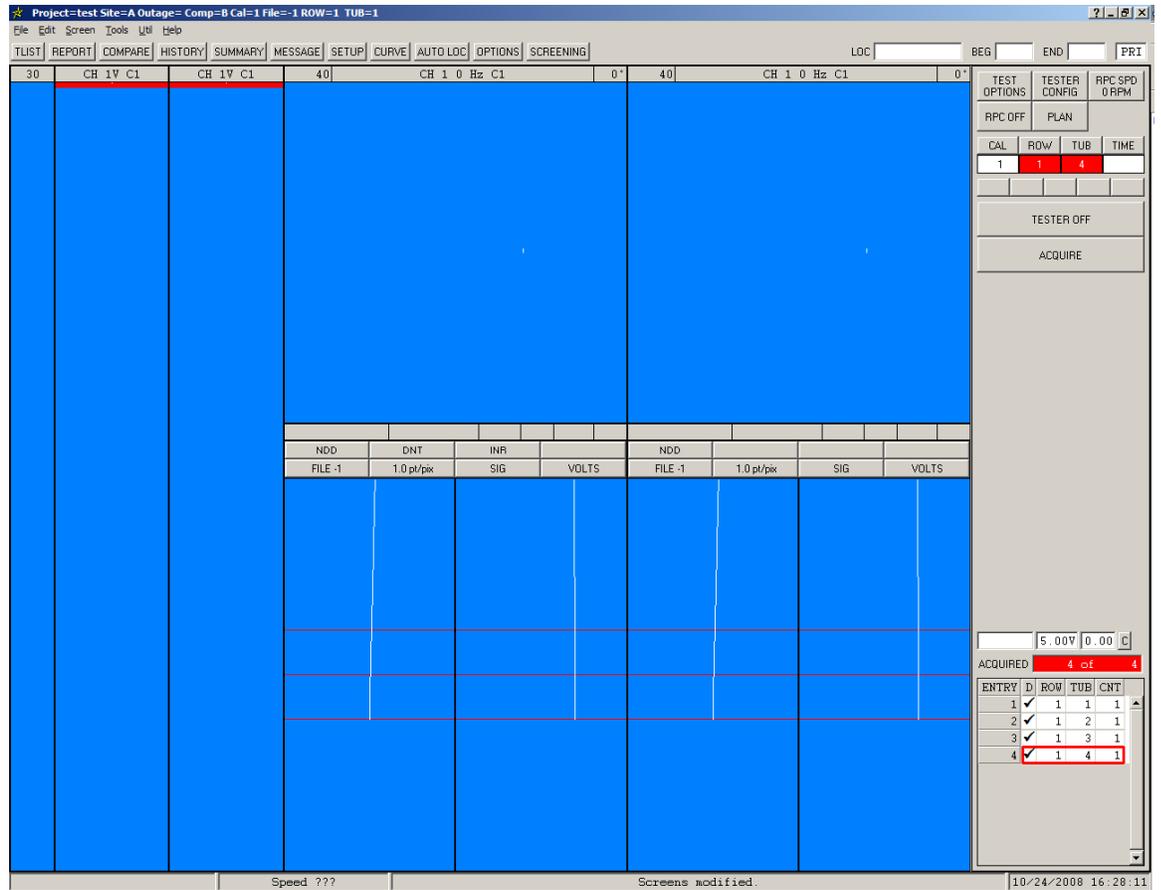


Figure 6

- e. Select tester config and create a valid setup. Coil 1 is the coil that should be used for one coil probes and coil 4 is used for the trigger. Shown is **Figure 7** is a sample RPC config.

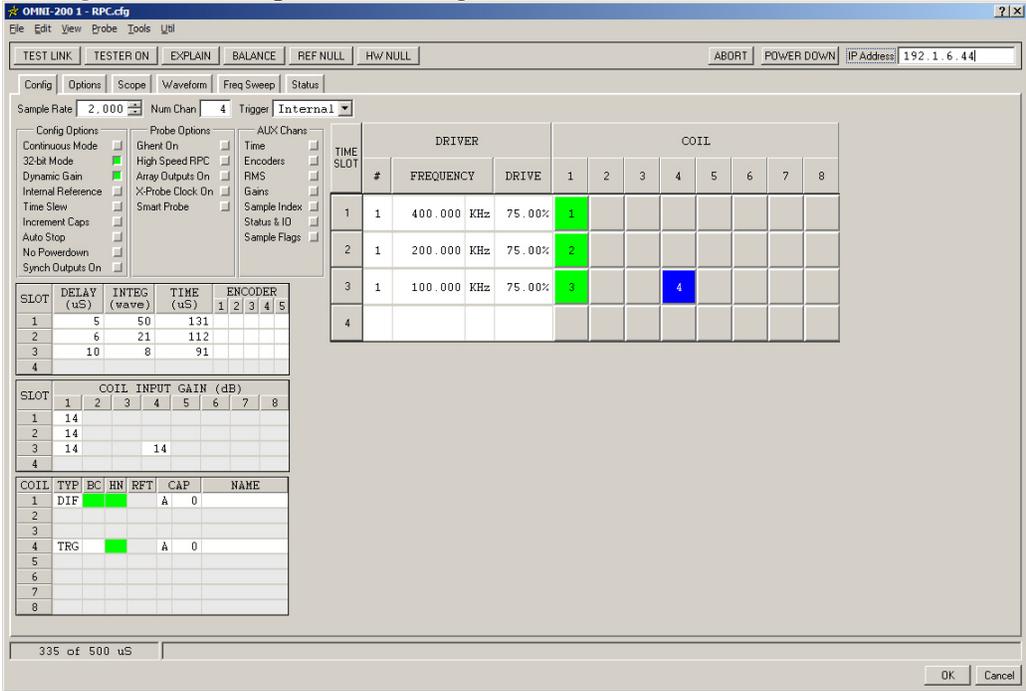


Figure 7

- f. To show the RPC speed on the screen, do the following, else go to step g.
- In TEST OPTIONS, select the trigger channel and RPC tolerance. **Figure 8** shows the trigger channel 4 (trigger channel used in **Figure 7** sample config) and a tolerance of 30 RPM.
 - Set RPC speed to desired operation speed. **Figure 9** shows a speed of 570 RPM.

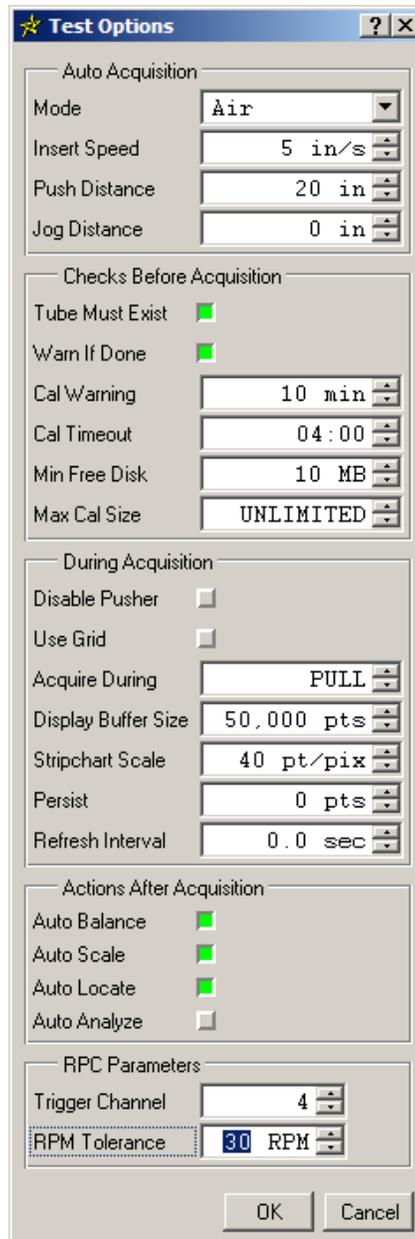


Figure 8

- iii. Select RPC OFF to allow the screen to show RPC speed, then TESTER OFF to turn on the tester. When the trigger is pressed the rotation speed will be displayed in the box to the left of the box that says 5.00V. **Figure 9** shows a rotation speed of 571.1 RPM.

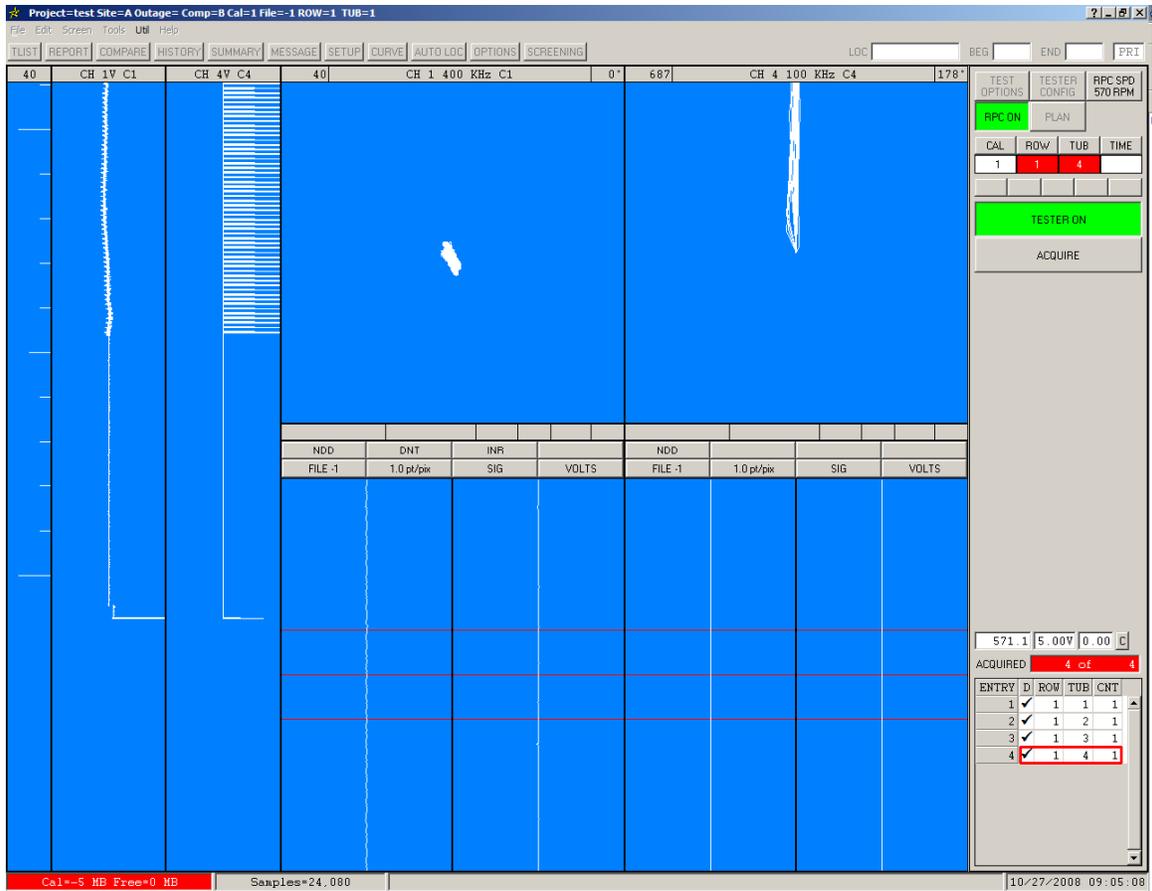


Figure 9

- g.** Set the desired rotation speed using the pots shown in **Figure 1**.
- h.** Set the desired pull speed using the pots shown in **Figure 1**.
- i.** Move probe to desired distance.
- j.** Open cal group, select TESTER OFF to turn on tester, select ACQUIRE to begin acquiring data.
- k.** Once data is being acquired, push the trigger on the gun to begin the pull of data.