HOW TO SET THE ZERO OFFSET OF THE A/D CARD

Question:

When starting up ThermalPro, I get a message that says I need to set the Zero Offset. What is this, and how is this done?
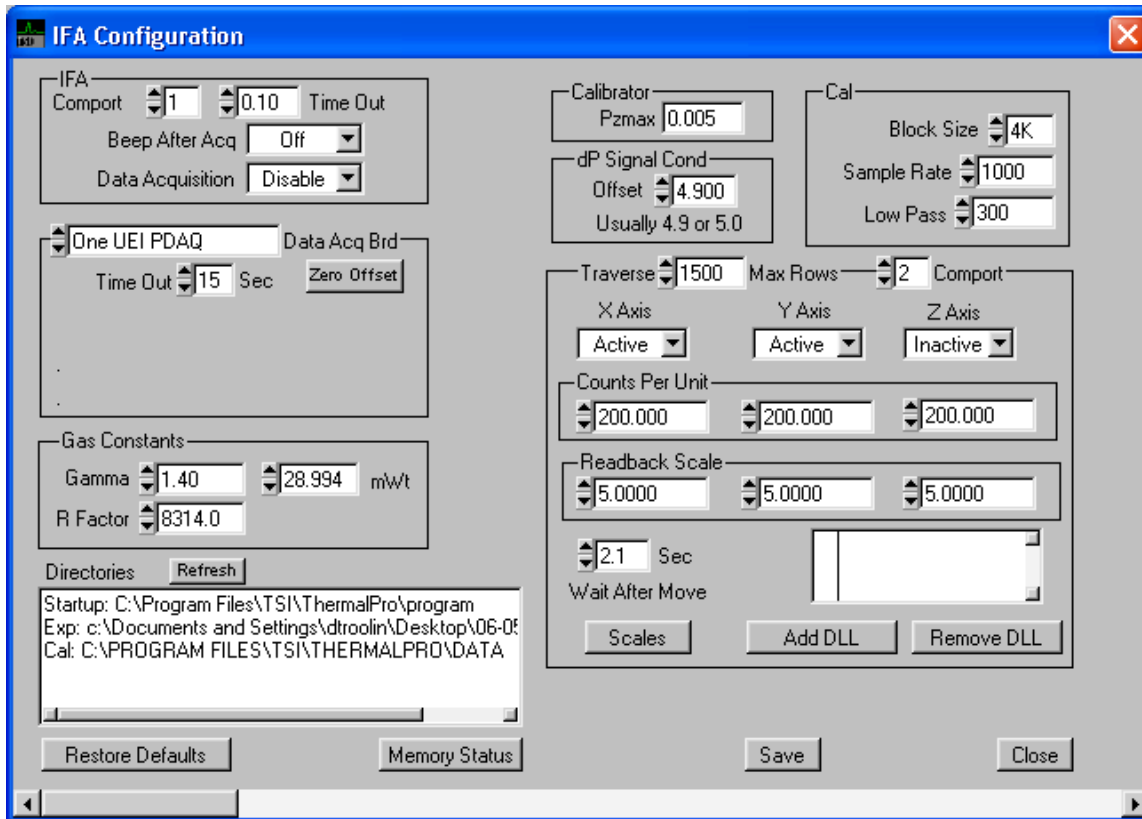
Answer:

It is important to zero the A/D card before you begin taking data or calibrating probes with the TSI IFA300. This step is only required for the first time you use the system. You will not have to repeat it unless the card is removed from the computer. When you first start up ThermalPro, you may get a message like the following:
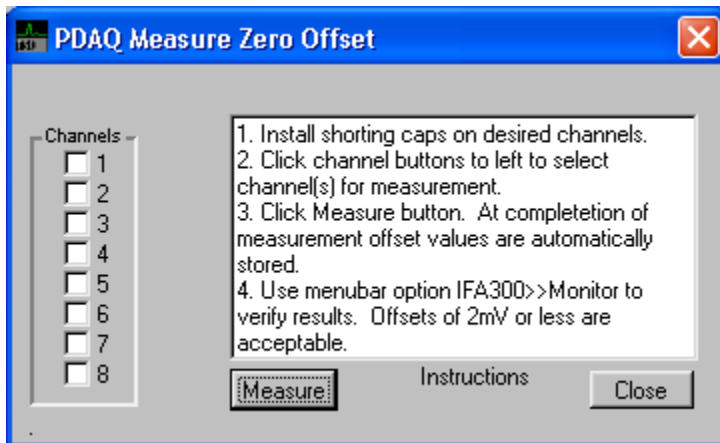

Go to IFA300 >> Configure Screen:

Click on the "Zero Offset" Button:

From here, you can follow the instructions that are given:

1. Install shorting caps on desired channels.
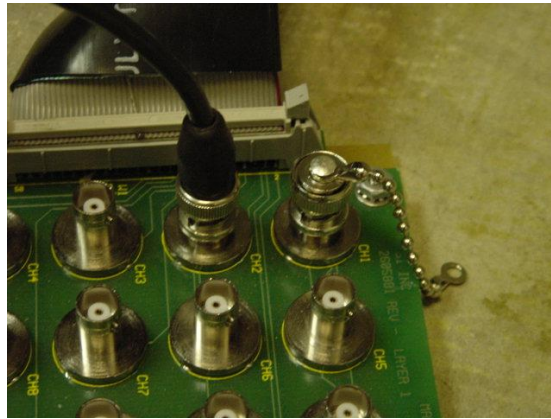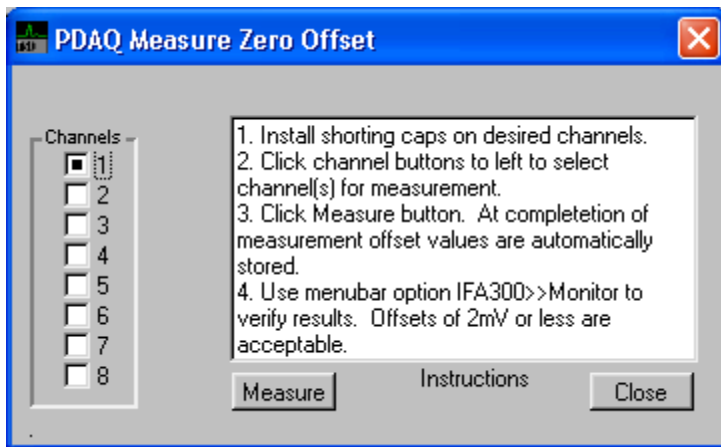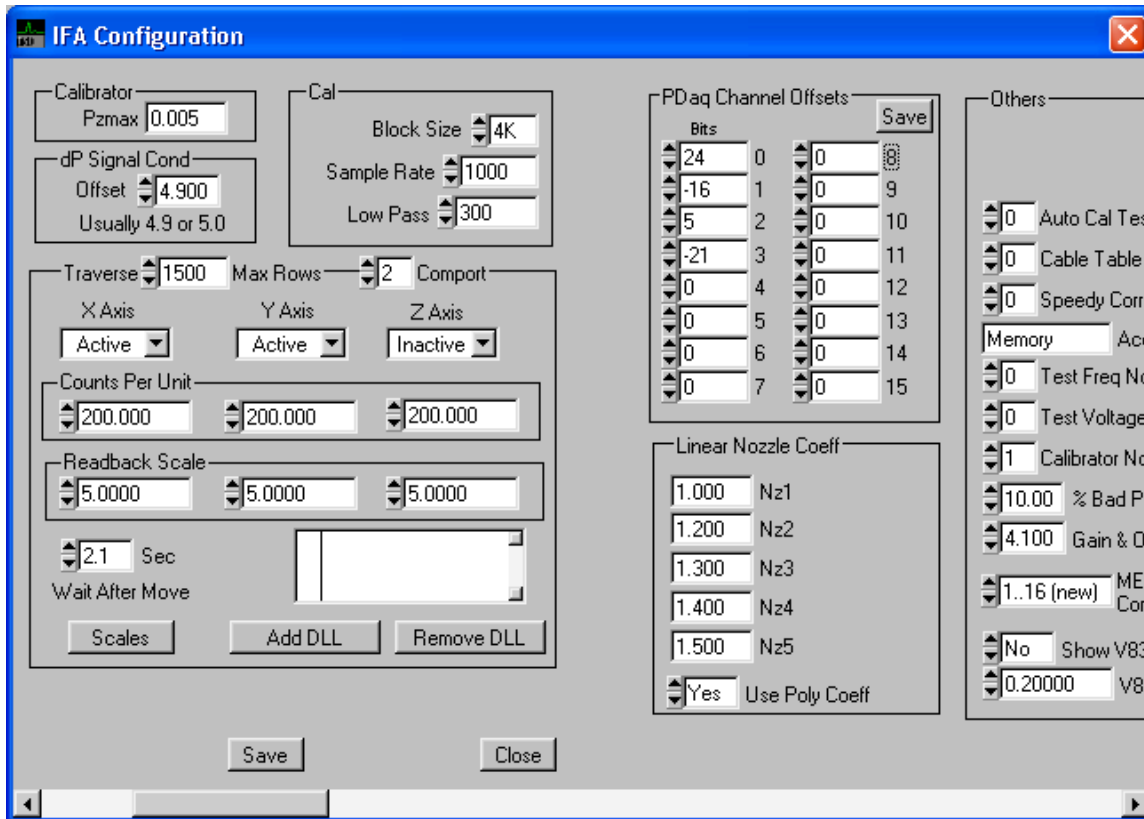
Figure 1: Shorting Cap (Plug).   **Figure 2: Shorting Cap installed on Ch 1.**

2. Click channel buttons to left to select channel(s) for measurement.

3. Click Measure button. At completion of measurement offset values are automatically stored. (Repeat steps 1-3 for all of the A/D channels you will be using.)

4. Use menubar option IFA300>>Monitor to verify results. Offsets of 2mV or less are acceptable.

You can also check the offset values by sliding the slider bar on the configure window, over to the left:

The "PDaq Channel Offsets" are shown. These are bit values, so anything within about ±40 is acceptable. Very large readings (in the thousands) indicate that the shorting cap was not installed, and you should repeat the steps.

Click "Save." You are now ready to use the IFA300!