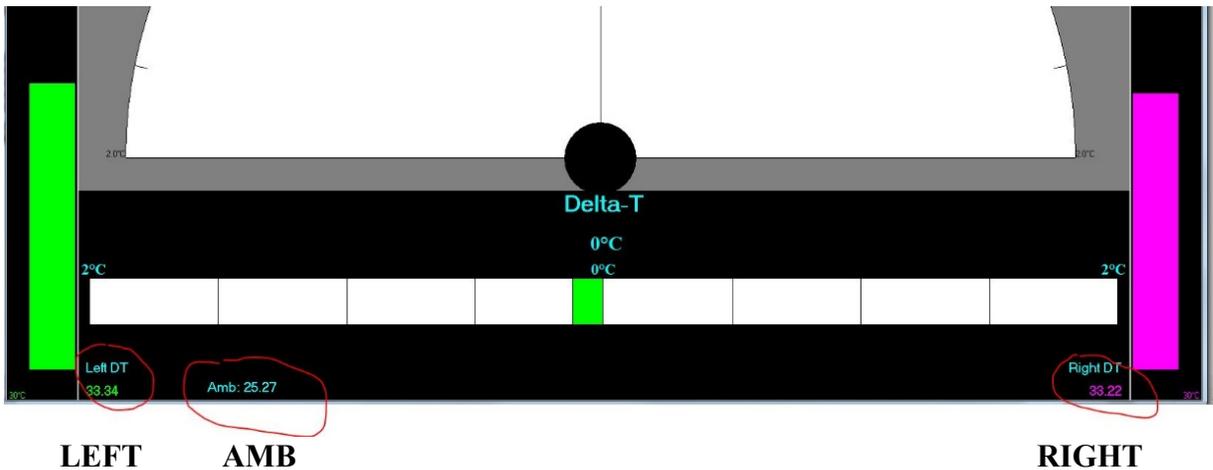# SCANNER "Not Reading Right" Question

First let's confirm that that the barrels are very clean, no dust, not dead skin blocking view. (I see so many scanners come in with a lot of "stuff" in the barrels.)

Then go to the NCM screen and do the following check of the readings:

QUICK CHECK OF SCANNER FUNCTION

If you open the NCM screen:


| LEFT | AMB | | RIGHT |

Please note the three circled temperatures when you pull the trigger and AIM at the floor (AMB should be around 23 C) as well as both Left and Right vertical thermometers.

When you AIM under your chin, the Left and Right thermometers should come up to around 33 C.

If you're not getting any readings at all – let's see if the scanner is detected. In **SETUP** check that the registration number **134251378** is shown in the Main tab

If the scanner is reading temperature and the center line graph is a little off to the RIGHT or LEFT of the center line - check **Center Bar Graph** as shown below.
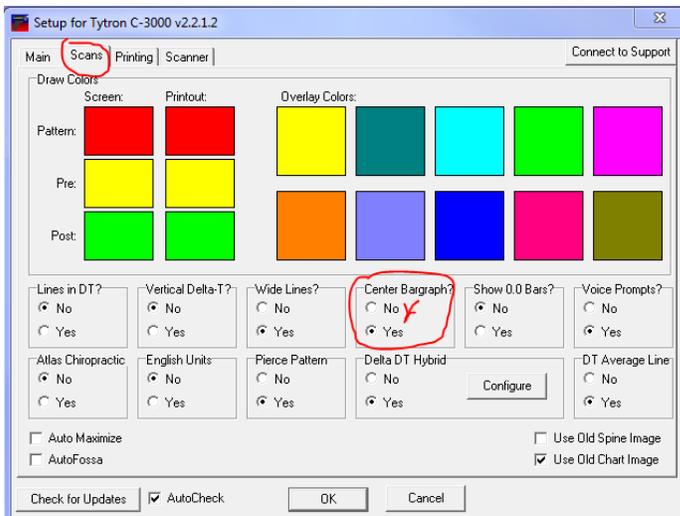
If the barrels are clean, we can use a program called C5000 DIAGNOSTIC UTILITY for adjusting the calibration numbers on C-5000 scanners to remotely change the calibration numbers. The computer needs to be on the internet and several test "patients" should be available for testing. This does not replace a calibration done in our calibration room, but it is a quick, close calibration for remote offices.

If the LINE graphs are all inside their "boxes" "pattern" determination is not an issue.

Checking - CENTER BAR GRAPH will display the DELT BAR GRAPH correctly even if the LEFT – RIGHT calibration is off a bit.

FOR FIELD CALIBRATION OF C-4000 scanners

Once the Offsets are "set" in the factory **there is rarely an occasion to alter them** (Offset 1 if moved up or down will raise or lower the readings equally on both channels.

Scale Factor 0 (SF0) controls the reading of the **LEFT** barrel when viewing a warm target. The nominal setting for this is 1000 - making this number smaller will actually INCREASE the indicated temperature on the graph - a change of 50 counts will move the indicated temperature about 0.5 degrees Centigrade (1 vertical line in the Delta T window). Ideally these numbers are between 850 and 1100 to maximize the resolution and "smoothness" of the displayed graphs.

Scale Factor 2 (SF2) controls the reading of the **RIGHT** barrel when viewing a warm target. The nominal setting for this is 1000 - making this number smaller will actually INCREASE the indicated temperature on the graph - a change of 50 counts will move the indicated temperature about 0.5 degrees Centigrade (1 vertical line in the Delta T window). Ideally these numbers are between 850 and 1100 to maximize the resolution and "smoothness" of the displayed graphs.

EXAMPLE #1

If center graph average is consistently "off" to the **RIGHT** - increase the GAIN of the LEFT channel by lowering the number in **SF 0** window. If the center graph average is off to the left, conversely lower **SF2**. It is usually "dust" or dead skin that partially blocks a barrel - requiring an increase of gain to compensate. View cleaning instructions at ***www.titronics.com*** before changing these numbers

EXAMPLE #2

If the **DELTA T** readings on several patients are all off to the **LEFT**, reducing **SF 2** (GAIN of the RIGHT channel) will actually bring up the RIGHT barrel temperature, and move the graph closer to center. Reducing the number by 50 will increase the RIGHT barrel temperature reading by about 0.5 C - pushing the **DELTA T** graph closer to the center blue line. If it pushes it too far, simply increase **SF 2** a little.

Remember, centering the **BAR GRAPH** is easy, just go to **SETUP** and on the **SCAN** tab choose "**CENTER BAR GRAPH**" - **yes**