



# TECH NOTES

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**August 6, 2009**

WELCOME TO TECH NOTES - FRONTIER PRECISION'S MONTHLY E-NEWSLETTER!!! TECH NOTES IS DESIGNED TO KEEP YOU UP TO DATE WITH TIPS AND INFORMATION ON THE LATEST TECHNOLOGY IN SURVEYING, CONSTRUCTION, AND GIS. OUR COMPANY GOAL IS TO HELP YOU BE MORE EFFICIENT AND MORE PROFITABLE BY UTILIZING TODAY'S TECHNOLOGY.

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please open the attached PDF file.

**TECH SUPPORT HOTLINE 888.797.4774**

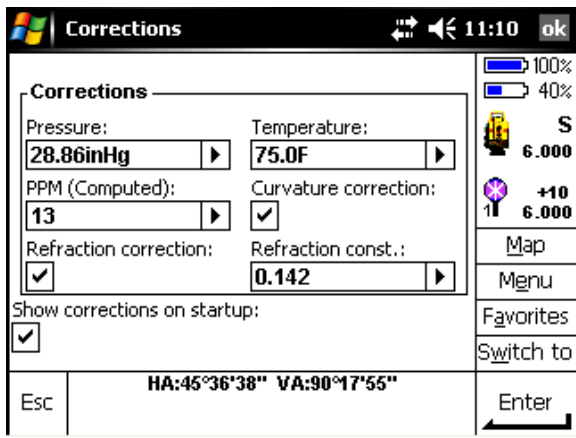
## Temperature and Pressure affects when using Trimble Survey Controller Software

Temperature and Pressure settings in the Trimble Survey Controller Software can be an often overlooked setting that can greatly impact your Total Station measurements. With temperatures changing greatly throughout the day, it is important to change these values from early morning to late afternoon as this will have an affect on your measurements.

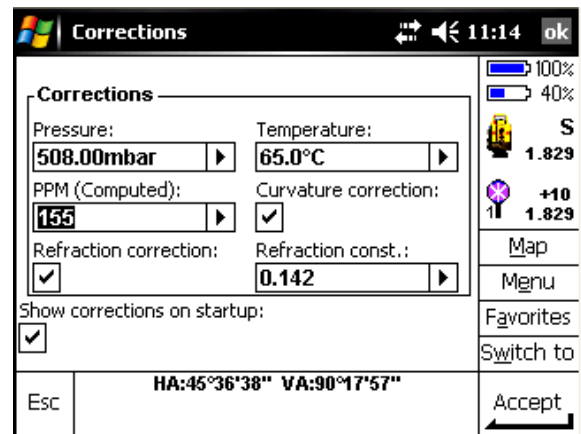
The pressure also has an affect on your measurements. If you are using the Trimble S6 Total Station, you can change the Pressure setting using the "right arrow" key to make sure it is reading the pressure from the gun since the S6 has an internal barometer. Otherwise make sure to type in a sea level corrected barometric pressure.

However, one thing that can have a large negative impact on your measurements is if the temperature and pressure units are incorrectly set. The correct setting for the temperature is Fahrenheit and the correct setting for pressure is Inches/Mercury (InHg).

You can confirm the correct units are being displayed on the Corrections Page of Survey Controller as the Pressure and Temperature values display the units immediately after each value entered. See example below:



Sometimes when uploading Road files or jobs from Land Desktop or Civil 3D, the settings are changed back to metric and you will see a display with metric units:



Notice in the example on the right the PPM differences are over 140. This will result in a very large difference in measurements. To change the settings back to InHg and Fahrenheit, go to Files / Properties of Current Job / Tap on Units Setting and change the Temperature setting to Fahrenheit and the Pressure setting to Inch Mercury. Tap Accept, then Accept. Now you are reading the correct values.

**If you have further questions regarding this function please contact our Tech Support Department at 888-797-4774.**

Frontier Precision has Tech Support Procedure sheets for many common problems online.

[Click here to view procedure sheets online!!!](#)

## Current FW / SW Versions

Trimble 5700/5800	<b>2.32</b>	Trimble TSCe Survey Pro w/ TSX	<b>4.6.0</b>	Trimble S6	<b>R11.0.76</b>
Trimble R8 GNSS	<b>4.01</b>	Trimble NetRS	<b>1.20</b>	Trimble R7 GNSS / R6	<b>4.01</b>
Trimble TSC2/ TCU Survey Controller	<b>12.44</b>	Trimble NetR5	<b>3.60</b>	Trimble HPB450 / PDL450	<b>2.42</b>
Trimble ACU/TSCe Survey Controller	<b>11.40</b>	RealWorks	<b>6.3.1</b>	Trimble VX Spatial Station	<b>R11.0.76</b>
		Trimble GeoMatics Office	<b>1.63</b>	Trimble GX 3D Scanner	<b>4.0.5</b>

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