

## Setting up the total station with SurvCE 2.09 - 2.51 Data Collector Program

1. Turn on total station and choose STD (newer models may not have STD). Turn on data collector. Site on benchmark and zero set.
2. Tap "**SurvCE**". The program takes several seconds to load.
3. Tap "**Select New/Existing Job**".
4. Type in a name for the new job. (note: the .crd extension is not important). Tap **V**.
5. Double check Units on **System and Format tabs** to make sure readings are what you want.
  - a. Recommended:
    - i. Zero Azimuth: **North**
    - ii. Vertical Obs: **Zenith**
    - iii. Distance Obs: **Slope**
    - iv. Angle: **Azimuth**
6. Tap **V**.
7. Enter the following for coordinates:
  - a. Point ID: **1**
  - b. Northing: **5000**
  - c. Easting: **5000**
  - d. Elevation: **0**
  - e. Description: **sta**
8. Tap **V**.
9. Tap "**Survey**" tab.
10. Tap "**Store Points**".
11. Enter the following:
  - a. Occupy Point: **1**
  - b. Instr. Height: **whatever you measure**
  - c. Target Height: **whatever rod reading you set prism pole to**
12. Tap "**Remote Benchmark**" tab.
13. Put in **BM ELEV. 100** (Do not put in PT#). Check target height again.
14. Sight prism.
15. Tap "**Read**" button on data collector screen.
16. Tap "**Store**".
17. Instrument set-up or Single set-up tab appears. Put in **BS PT# 100**.
18. Tap "**Backsight**" on data collector screen.

19. Hit **Use Azimuth**.
20. Hit **Backsight**, then **Continue**.
21. Make sure the pull-down menu reads "**Set to Zero**".
22. Stay sighted on prism. Tap "**Set Angle and Read**" button on data collector screen.
23. Tap **V** on the data collector screen. **Change the description of the point to TBM**. Tap **V**.

You are ready to survey!!! For SurvCE ver.2.09, you must type in a description and, if necessary, change the target height **FIRST** before taking each shot. For SurvCE ver.2.51, you can change description or target height either before or after taking shot. Sight on your first shot and hit "**Enter key**" on data collector to read and save the shot.

If you escape during survey to check points list or something, and you need to get back to survey screen, Go to Survey tab - Store Points - Tap **V**.

### **Ranger - SurvCE - Turning Points**

- 1) Enter the first point number for that set-up. (i.e. 2)
  - 2) Enter description. (i.e. **sta**)
  - 3) Sight the next shot and Tap "**R**" on the screen.
  - 4) Tap "**T**" on the screen.
  - 5) Tap "**Move Now**".
  - 6) Turn everything off and move to the new set-up.
  - 7) Once you've set up, turn everything back on and backsight the station you were just set up on. "**Zero Set**" the horizontal angle on the total station.
  - 8) Measure for new Instrument Height and change on data collector. Tap "**Backsight**" button.
  - 9) Tap "**Read**".
  - 10) Tap "**OK**".
- Continue your survey and Name Next Point 201.