

Quick Guide Calibrating BRx6 Sensors in SurvCE/SurvPC

This guide is a quick overview of the steps to follow when calibrating the BRx6 sensors using SurvCE/SurvPC version 5.05 or higher. A longer more detailed guide titled "BRx6 Sensor Calibration using SurvCE/SurvPC" can be found on the Carlson website in the Knowledgebase.

- Launch SurvCE
- In Equip/Rover/Receiver, the Use IMU box must be checked.

Step 1: Calibrate the Tilt Sensors

- Mount the BRx6 on a calibrated level tribrach or pole.
- Go to Equip/GNSS Utilities. Press the button for *Sensor Calibration* and then choose *Full Calibration*. Select 1. *Tilt Calibration (set hz)*



• The electronic bubble displayed on the screen. Make sure the BRx6 is level, and then press the "Calibrate" button to zero the tilt sensors. The electronic bubble should now be centered.



• If you are only using the electronic bubble in SurvCE, calibration is complete. If you wish to use Tilted Pole correction feature in SurvCE, then proceed and complete steps 2 and 3.

Step 2: Magnetic Step-by-Step

- Attach the BRx6 to a tribrach or pole for the vertical spin as shown
- Tap the 2.Magnetic Spin button to start Step 2
- Tap the *Start Vertical* button
- Slowly rotate the BRx6 as shown until the vertical progress bar is complete.





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			Roll: 1.140 Progress:	
Start Vertical	Start Horizontal		Cancel	Start Horizontal
Update Calibration	Help		Update Calibration	Help

- Now attach the BRx6 to the pole or tribrach for the horizontal spin as shown.
- Tap the *Start Horizontal* button.
- Slowly rotate the BRx6 as shown until the horizontal progress bar is complete.
- When the horizontal spin is complete, tap the *Update Calibration* button. Tap the *OK* button and the *Orange Arrow* button to complete step 2.



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Incline: 0.090 Progress:				Fixed	0°56'23" successful! K 2.040 s:0.010
Start Vertical	Cancel	Start Vertical	Start Horizontal	Start Center	Start Incline
Update Calibration	Help	Update Calibration	Help	Update Calibration	Help

Step 3: Directional Incline

- Mount the BRx6 on a pole. Make sure the BRx6 is RTK FIXED and the correct antenna is set in SurvCE.
- Tap the 3. Directional Incline button to start Step 3.
- With the pole vertical and the position FIXED, tap the *Start Center* button
- o 10 readings will be stored to establish the center point.







- Tap the *Start Incline* button
- Face the east, with the BRx6 display facing you. Tilt the pole to the east, inclined between 25 and 35 degrees. Check the pole position on the display. When correctly positioned, the progress bar will advance. Hold the pole steady until the 10 readings are stored.
- Repeat for the South, West and North directions.



• This four picture sequence shows the proper orientation for the BRx6 for each E, S, W, N direction (camera is pointing south).



- When the four ordinal directions are complete, tap the *Update Calibration* button
- Tap *OK* to close the "Calibration Successful" notification, then tap the *Orange Arrow*.
- The calibration was successfully completed.
- o If multiple BRx6 batteries are used, repeat Steps 2 and 3 for each battery.