Continental Geoid Installation Carlson SurvCE

Step	Action	Display			
1	In SurvCE version 5.01.15 and higher there is support added for a Continental USA Geoid that loads fas and does not require the making of a smaller and limited Geoid GSF files for the lower 48 states in the USA. The complete continental Geoid 12B is include in SurvCE and does not require any additional downloads. The purpose of this guide will be to show how to load the Geoid 12B model for the entire continental US				
2	 a) Launch Carlson SurvCE b) Create or use an existing Job c) Select the "Equip" Tab NOTE: Carlson SurvCE 5.01.15 is required to install the continental Geoid 	JOB:CONTINENTAL GEOID 12B File Equip Survey COGO Road 1 Total Station 6 Localization 2 GPS Base 7 Monitor/Skyplot 3 GPS Rover 8 Tolerances 4 GPS Utilities 9 Peripherals 1 5 Configure About SurvCE			
3	 a) From the "Equip" tab select "Localization" 	System TS GPS Points By Helmert Projection: Edit Projection List USA/NAD83/PA South Projection: Lambert_Conformal_Conic_2SP Datum: NAD83 Ellipsoid: GRS 1980 Convert WGS84 to NAD83			

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Step	Action	Display
 4	a) Select the "GPS" tab b) Select the "Geoid File" button	Display System TS GPS Points By Helmert Base Translation by Rover Readings Image: Cocalization Method Image: Cocalization Method Image: Cocalization Method Multi Point Method: Plane Similarity Image: Cocalization Method Image: Cocalization Method One Point Azimuth: State Plane Grid Image: Cocalization Method Image: Cocalization Method Geoid File: None Recoid Interpolation Method: Quadratic Image: Cocalization Use Grid to Ground: Use Grid to Ground: Image: Cocalization Image: Cocalization
5	 a) Select the "ContinentalUS_NGS2012B.grd" b) Press the "Green Check Mark" c) It will take 10 to 30 seconds for it to load this new file do not tap anything until it returns to the GPS tab of the Localization screen. NOTE: This will only be available in versions of SurvCE greater than 5.01.15. The version number can be found in the "Equip" tab, "About SurvCE" 	Geoid Separation File Type: GSF/GRD F Drive: C C:\Carlson Projects\Data\Geoids\ ContinentalUS_NGS2012B.grd Name: ContinentalUS_NGS2012B.grd
6	 a) Once SurvCE has returned to the "GPS" tab it will show that the new Geoid is loaded b) Press the "Green Check Mark" 	System TS GPS Points By Helmert Base Translation by Rover Readings Localization Method Multi Point Method: Plane Similarity One Point Azimuth: State Plane Grid Geoid File: ContinentalUS_NGS2012B.grd Geoid Interpolation Method: Quadratic Use Grid to Ground:

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Step		Action	Display
	a) To verify that your Geoid is being applied finish setting up the Rover.	Monitor/Skyplot	
7	b)	Then go to the "Equip" tab Then press the "Monitor/Skyplot" Button.	Quality Position SATView SATInfo Ref Status: FDXED(Sim) Satellites: 14 Local Elev: 397.3109 Local Northing: -191020.5796 06/22/16 06/22/16 Local Easting: 252024.8164 09:44:05.3 HDOP: 2.90 VDOP: 3.80 TDOP: 2.00 PDOP: 3.20 GDOP: 3.77 HSDV: 0.047 VSDV: 0.093
8	a) b) c) d)	Select the "Position" tab. If the Geoid is being applied the "Geoid" name will be seen There will be a "Geoid Shift" And the "Local Elevation" will be different then the "Ellipsoid Elevation"	Monitor/Skyplot C Quality Position SATView SATInfo Ref Latitude: N 38°38'55.62454" Longitude: W 83°45'42.43190" Ellipsoid Elevation: 397.2997 Geoid Shift: 00.00 Geoid: OntimentalUS_NGS2012B.grd Localization: None Base Shift: None Local Rasting: 252052.2539 Local Elevation: 497 2997 Projection: USA/NAD83/PA South
Pleas	e con	tact Champion Instruments or you	r local distributor with any additional questions.