

CHC Geomatics Office Software 2.0 Release Note

CGO 2.0 Introduction

CHC Geomatics Office Software (CGO) 2.0 is a powerful office software, designed as an integrated platform to make a link between field and office workflow from multiple sensors and generating rich deliverables. It supports 4 main modules: GNSS post-processing, RTK data management, road design and UAV trajectography, allowing processing of massive fieldwork data in single software.

- GNSS module to process GNSS data with Static, PPK and PPP algorithms.
- RTK module to edit surveyed features and correcting field coordinates by using PPK post-processing results.
- Road module to check and input designed road elements for road stakeout.
- UAV data processing module to get corrected UAV track coordinates by using both RTK and PPK algorithms.

CGO 2.0 Key Features

1. GNSS Module

- Fast Post-processing Engine: deliver absolute accurate georeferenced positions after post-processing static or dynamic data from GPS, GLONASS, BeiDou and Galileo with PP, PPK, PPP, DGPS algorithms. Intuitive post-processing workflow with quality check, selectable online map and CORS reference data downloading.
- Effective adjustment function: CGO 2.0 supports one-click 3D and constraint network adjustment with adjustable parameters of data quality, baseline weighting, adjustment methods and network reference factor to obtain accurate adjustment result.
- Accurate PPP results: CGO 2.0 provides accurate PPP results with auto-downloading of precise ephemeris, clock bias and hardware delay.

- Import/Export GNSS Data:

Format	File
.HCN	Import, CHC observation file
.O	Import/export, RINEX
.NOV	Import, Novatel format
.BD9	Import, Trimble format
.D, .N, .G, .C, .L, .P	Import, ephemeris file
.HRC	Import, CHC compressed observation file
.TXT	Export, station report
.HTML	Export, baseline, loop closure, adjustment and station report

2. RTK Module

- Seamless field-to-office workflow: use PPK post-processing results to correct RTK data. Configure coordinate system, points and features, localization, base shift, import base maps and export to field application.

- Import/Export RTK Data:

Format	File
.KML	Export, Google Earth data
.HTML	Export, web page file
.RAW	Export, raw data
.CSV	Import/export, points data
.TXT	Import/export, points data
.DAT	Import/export, points data
/	Import/export, LandStar 7 project file

3. Road Module

- User-friendly road editor: CGO 2.0 supports road elements editing with Excel data pasting, including road centerline, alignments, sections and slopes data along with facilities such as ditch and bridge. User can also check road data by coordinates or mileage.

- Import/Export Road Data:

Format	File
.ROD	Import/export, CHC road file format
.KML	Export, Google Earth data
.KMZ	Export, Google Earth data
.TXT	Import/export, points data
.DAT	Import/export, points data

4. UAV Module

- Accurate UAV Data Processing: CGO 2.0 corrects UAV track coordinates by using both RTK and PPK algorithms. View of corrected UAV track coordinates for each capture and UAV track with both positioning data and RTK data.

- Import/Export UAV Data:

Format	File
.HCN	Import, CHC observation file
.O	Import/export, RINEX file
.NOV	Import, Novatel format
.BD9	Import, Trimble format
.D, .N, .G, .C, .L, .P	Import, ephemeris file
.HRC	Import, CHC compressed observation file
.TXT	Import/export, POS data and track data

5. Interface and Tools

- Various Base Maps: CGO 2.0 displays process data on various online background maps (Bing Map, OSM, WMS and WMTS) and offline base maps (.DXF, .SHP and .SIT).
- Embedded Help Files: embedded e-user guide and work flows
- Intuitive Interface: CGO 2.0 integrates an easy-to-use interface to complete workflow, customized layout and modules display to adopt your working habits.
- More Tools: additional tools are available such as coordinates converter, antenna manager, TIFF map compressor (SIT), angle calculator, RINEX converter and observation split and merge tools.

6. System Recommendation

Operating System	Microsoft Windows [®] 7, 8, 10 (32-bit and 64-bit)	
Runtime Library	.Net Framework 4.0/VS2008/VS2012/VS2015 runtime	
Hardware	Minimum	Recommended
Processor	Intel [®] Core™ i3	Intel [®] Core™ i5
RAM	4 GB	8 GB
Hard Disk	1 GB	1T
Graphics Card	Direct X9 compatible	
	Integrated graphics	Discrete Graphics 2G or greater