

9 Data Menu

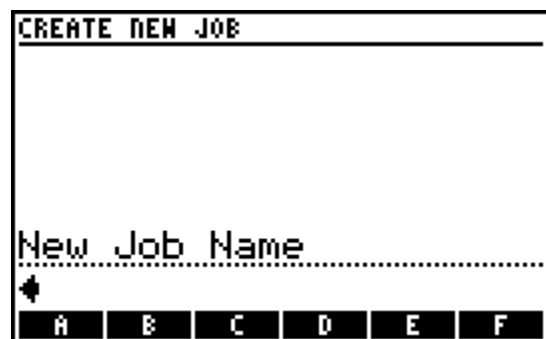
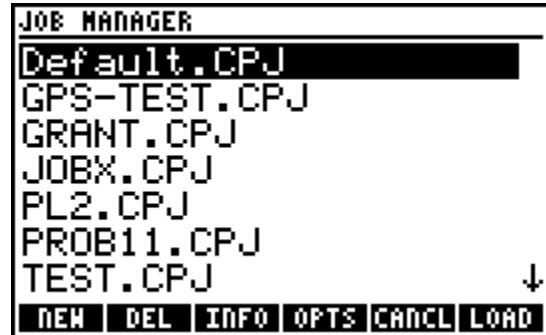
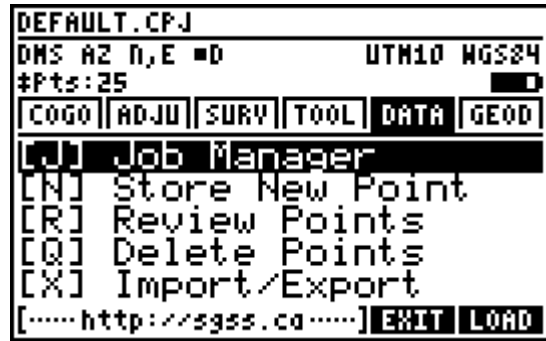
9.1 Job Manager

Easily manage multiple jobs on the calculator with the **Job Manager**, and move or copy jobs to and from the SD card. The main **Job Manager** screen displays all the jobs stored on the calculator, sorted alphabetically by name. The menu provides access to the available functions:

1. **[F1] NEW** – Create a New Job.
2. **[F2] DEL** – [Delete a Job](#).
3. **[F3] INFO** – Display [Job Information](#).
4. **[F4] OPTS** – Read and write jobs to and from the SD card **COGOPLUS\JOBS** directory, or rename an existing alignment
5. **[F5] CANCL** – Exit the **Job Manager** and return to the main interface.
6. **[F6] LOAD** – Load the selected job to make it current.

Create a New Job

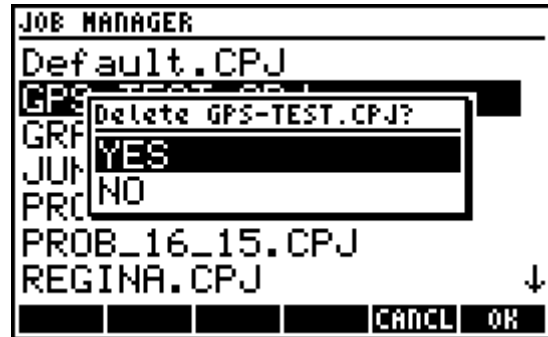
From the main **Job Manager** screen press **[F1]** to create a new job. Enter a job name containing numbers, letters or other special characters. The calculator operating system supports long filenames, however it is recommended to use the [8.3 filename](#) convention if [SD functions](#) will be used. **NOTE: ALL JOB NAMES AUTOMATICALLY RECEIVE A .CPJ EXTENSION.**



Delete a Job

Select the job you wish to delete and press **F2**. A confirmation prompt prevents accidental deletions.

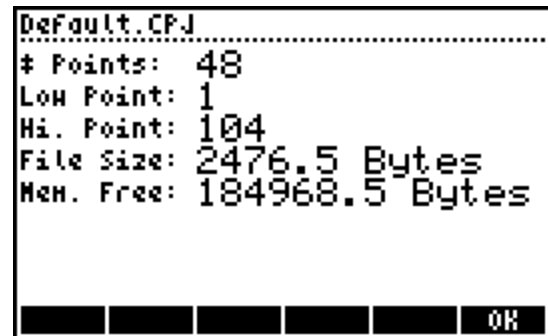
NOTE: IT IS NOT POSSIBLE TO DELETE THE CURRENT JOB.



Job Information

Select a job and press **F3** to display job information.

The job name, number of points stored within the job, the lowest used point number, the highest used point number, the file size of the job, and the available free memory on the calculator are displayed.



Job Options

Several options exist to make use of the SD card. **NOTE:** THE SD CARD FUNCTIONS ARE DESIGNED TO USE THE COGOPLUS\JOBS DIRECTORY ON THE SD CARD.



Import Job

Copy a job that was previously moved or copied to the SD card back to the calculator. **NOTE:** WHEN A JOB WITH

THE SAME NAME ALREADY EXISTS ON THE CALCULATOR, A PROMPT ASKS WHETHER TO OVERWRITE THE EXISTING JOB.

Backup Job

Store a copy of the selected job within the COGOPLUS\JOBS directory. **NOTE:** WHEN A JOB WITH THE SAME NAME ALREADY EXISTS ON THE SD CARD, A PROMPT ASKS WHETHER TO OVERWRITE THE EXISTING JOB.

Backup All

Stores copies of all the jobs created on the calculator within the COGOPLUS\JOBS directory. **NOTE:** WHEN A JOB WITH THE SAME NAME ALREADY EXISTS ON THE SD CARD, A PROMPT ASKS WHETHER TO OVERWRITE THE EXISTING JOB.

Move Job

Move the selected job to the COGOPLUS\JOBS directory, thereby deleting the job from the calculator. The current job cannot be moved. **NOTE:** WHEN A JOB WITH THE SAME NAME ALREADY EXISTS ON THE SD CARD, A PROMPT ASKS WHETHER TO OVERWRITE THE EXISTING JOB.

Rename Job

Rename the selected job. . **NOTE:** THE NEW NAME FOR A JOB CANNOT ALREADY EXIST, THERE IS NO OPTION TO OVERWRITE AND DELETE A JOB WITH THE SAME NAME.

9.2 Store New Point

It is possible to store and edit points in the same input form. The menu changes depending on the current field selected or edited. Available for all fields:

```
STORE/EDIT POINTS
Pt #: 1
North: 0.0000m
East: 0.0000m
Elev: 0.0000m
Desc: COGO

Point Number
EDIT COPY CANCL STORE
```

1. **F1** **EDIT** – Edit the current field.
2. **F4** **COPY** – Copy the coordinates and description from another point in the job.
3. **F5** **CANCL** – Exit the **Store New Point** program and return to the main interface.
4. **F6** **STORE** – Store the point with the entered values. A overwrite prompt informs the user of the coordinate changes when points are overwritten.

'Point Number' Field

Enter a point number to edit its coordinates or to store a new point. The coordinate and description fields automatically populate with existing coordinates and description if the point exists. Options while editing this field:


1. **F1** **BROWS** – Browse for an existing point to edit.
2. **F2** **LOW** – Search for the lowest unused point number in the job.
3. **F3** **NEXT** – Search for the lowest unused point number starting from the current value.

'Northing', 'Easting' and 'Elevation' Fields

Enter coordinate values for each field. All the standard [distances](#) input options are available for these fields. Options while editing these fields:

1. **F1** **ft->m** or **m->ft** – Converts the input between metric and imperial units. The appearance of this softkey varies depending on your [primary distance unit](#) setting.
2. **F2** **xUSF** – Multiplies the input by the [user defined scale factor](#).
3. **F3** **/USF** – Divides the input by the [user defined scale factor](#).

'Description' Field

This field is only visible when the [description prompts](#) toggle is set. Alpha mode is automatically set when editing this field. The  cursor key opens the [codelist](#) to choose a code while this field is current. When the [codelist translation](#) toggle is set, the user can enter any defined code in the codelist and the program will automatically look up the description and store the code's description.

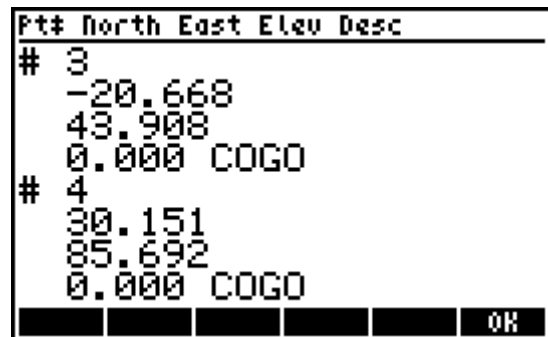
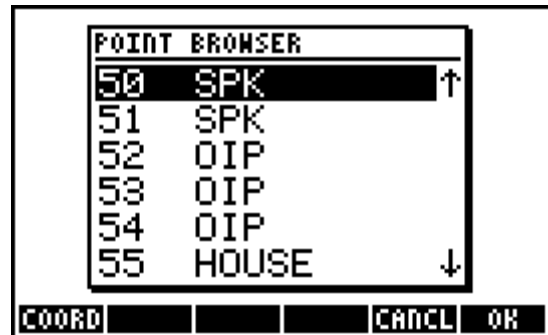
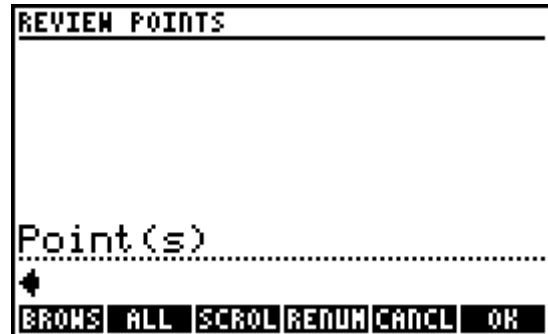
9.3 Review Points

Review point coordinates using various methods and renumber points in the current job.

View Point Coordinates

To view coordinates of individual points or ranges of points, enter points using any of the [point numbers](#) input options. The menu:

1. **F1** **BROWS** – Browse a list of all the points in the job. Use **F1** **COORD** while browsing to view the coordinates of the selected point.
2. **F2** **ALL** – View the coordinates of all points in the job.
3. **F3** **SCROL** – Scroll through a coordinate listing of all the points in the job. The **▲** and **▼** cursor keys scroll up and down through the listing. Use **→** followed by **▲** or **▼** to jump to the top or bottom of the point listing.
4. **F4** **RENUM** – Renumber points, see below.



Renumber Points

Two methods are available for point renumbering. Neither method overwrites conflicting point numbers.

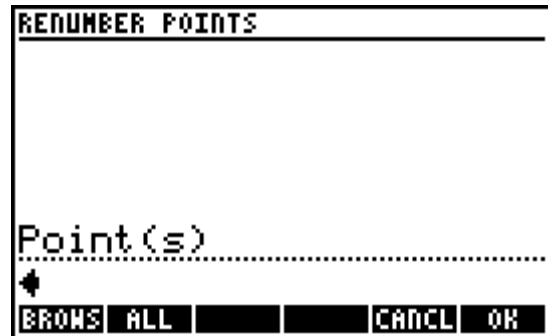
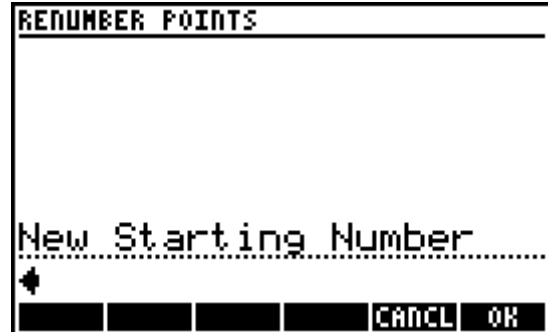
Renumber by New Starting Number

In the first input screen, enter the new starting number to use for renumbering. The points' new numbers will begin at this starting number, or in the case where the provided starting number exists, the next available number.

In the second input screen, enter the points to be renumbered using any of the [point numbers](#) input options, or use **ALL** to renumber all the points in the current job.

Some examples to illustrate this method of renumbering points:

1. When a new starting point number is given as 101, and existing points 1 to 4 are to be renumbered, Point 1 becomes 101, 2 becomes 102, etc.
2. Same as above but in fact there already exists a Point 101, then Point 1 becomes 102, 2 becomes 103, etc.
3. Same as above but there is no Point 3, then 1 becomes 101, 2 becomes 102, and 4 becomes 103.



Renumber by Additive Number

In the first input screen, enter an additive number to add to existing point numbers as a renumbering method. In the case where this added number creates a point number that already exists, the next available number will be used.

In the second input screen, enter the points to be renumbered using any of the [point numbers](#) input options, or use **ALL** to renumber all the points in the current job.

Some examples to illustrate this method of renumbering points:

1. When an additive number is given as 100, and existing points 1 to 4 are to be renumbered, Point 1 becomes 101, 2 becomes 102, etc.
2. Same as above but in fact there already exists a Point 101, then Point 1 becomes 102, 2 becomes 103, etc.
3. Same as above but there is no Point 3, then 1 becomes 101, 2 becomes 102, and 4 becomes 104.

The image shows two screenshots of the 'RENUMBER POINTS' menu. The top screenshot displays the 'Additive Number' input field with a cursor. The bottom screenshot displays the 'Point(s)' input field with a cursor and the 'BROWS ALL' option selected.

Always ensure that the range of numbers you wish to use are not already in use.

9.4 Delete Points

Delete individual points, a range of points or all the points from the current job. To delete individual points or ranges of points, enter points using any of the [point numbers](#) input options. The menu:

1. **BROWS** – Browse a list of all points in the job to choose a single point or multiple points to delete.
2. **ALL** – Delete all points from the job. A prompt asks to confirm the action.

The image shows a screenshot of the 'DELETE POINTS' menu. The 'Point(s)' input field is visible with a cursor, and the 'BROWS ALL' option is selected.

9.5 Import/Export

Import and Export ASCII files from/to the SD card or the HOME directory. **NOTE: ALL SD CARD IMPORT/EXPORT OPERATIONS ARE DESIGNED TO USE THE COGOPLUS\ASCII DIRECTORY.**

Import ASCII points

Import a delimited ASCII points file into the current **COGO+** job database.

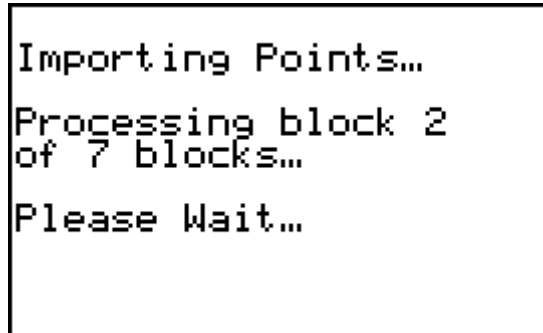
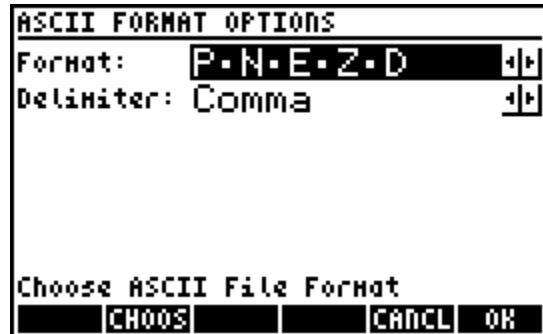
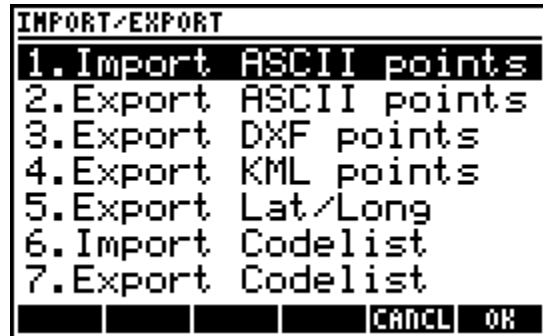
First, select the format and delimiter of the ASCII file you wish to import. **NOTE: THIS STEP IS CRITICAL TO ENSURE THAT THE DATA IS STORED CORRECTLY.**

When the SD card is present in the card slot, the software will automatically look for the **COGOPLUS\ASCII** directory and show its contents. When the SD card is not present or the required directory does not exist on the card, the software displays the HOME directory contents.

Select an ASCII file from the list to import. The menu:

1. **F1** **PURGE** – Delete the selected file from the SD card.
2. **F2** **VIEW** – View the file to inspect its contents.
3. **F5** **CANCL** – Exit the **Import Points** program and return to the main interface.
4. **F6** **IMPRT** – Import the selected file.

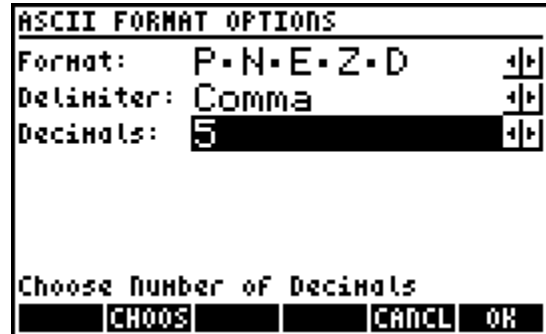
The selected file is parsed line by line and the coordinates are stored if valid data is found. Point number conflicts result in a screen showing the coordinate differences and **YES/NO/YES TO ALL/NO TO ALL** options to overwrite the existing point(s). The import progress is displayed while the file is processed, and the total number of points added or modified in the job database is reported when import is completed.



Export ASCII points

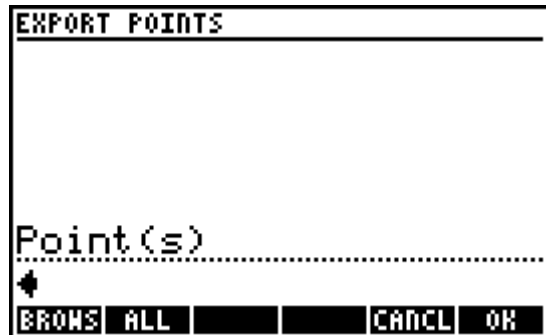
Write a delimited ASCII points file of points in the current job for archiving or importing into CAD software on your PC, or any number of other possible uses. ***It is highly recommended to have the optional SDfiler software installed for exporting ASCII files.***

First, select the ASCII file format, the delimiter and the number of decimals to export. **NOTE: THE AVAILABLE NUMBER OF DECIMALS FOR SELECTION RANGES FROM 0 TO 11, HOWEVER IT SHOULD BE NOTED THAT THE CALCULATOR IS CAPABLE OF A MAXIMUM OF 12 DIGITS FOR REAL NUMBERS. THE ACTUAL NUMBER OF DECIMALS MAY NOT BE POSSIBLE WHEN POINT COORDINATES ARE STORED IN HIGHER NUMERICAL RANGES.**



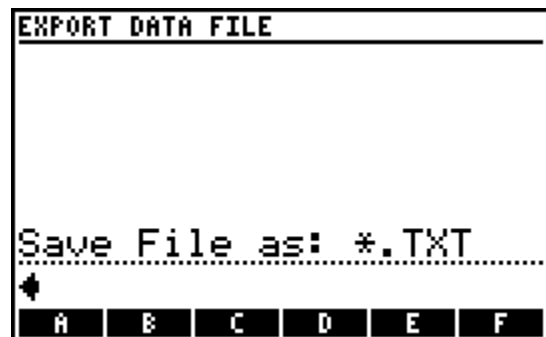
```
ASCII FORMAT OPTIONS
Format: P.N.E.Z.D
Delimiter: Comma
Decimals: 5
Choose Number of Decimals
CHOOS CANCL OK
```

Next, enter the points you wish to export using any of the [point numbers](#) input options, or optionally select **F2** **ALL** to export all points. The export progress is displayed while the program is working.



```
EXPORT POINTS
Point(s)
BROWS ALL CANCL OK
```

Next, enter a file name to save the exported points. The ASCII [file extension](#) is automatically added to the file name, and is displayed next to the *Save File as:* prompt.



```
EXPORT DATA FILE
Save File as: *.TXT
A B C D E F
CANCL OK
```

Finally, choose the destination for the exported file, either the SD card or the HOME directory.

NOTE: WITH THE SD FILER SOFTWARE INSTALLED, A MESSAGE INFORMS THE USER THAT THE EXPORT IS COMPLETED WHEN WRITTEN TO THE SD CARD, HOWEVER WITHOUT SD FILER INSTALLED A MESSAGE REMINDS THE USER TO EDIT THE FILE ON THE PC USING NOTEPAD OR SIMILAR SOFTWARE TO DELETE THE FIRST LINE OF CHARACTERS.

SD Filer enables COGO+ to write a raw ASCII file without the HP header information included.



```
EXPORT DESTINATION
1. SD Card
2. HOME Dir
CANCL OK
```

Export DXF File

Points in the current job can be written to a DXF file, which can then be imported into CAD software on your PC. ***It is highly recommended to have the optional SDfiler software installed for exporting DXF files.***

First, enter the points you wish to export using any of the [point numbers](#) input options, or optionally select **ALL** to export all points.

Next, choose whether to write the points as a 2D or 3D DXF file. This option determines whether the point nodes in the DXF file will be at a zero elevation or at the elevation that the point is stored in the job.

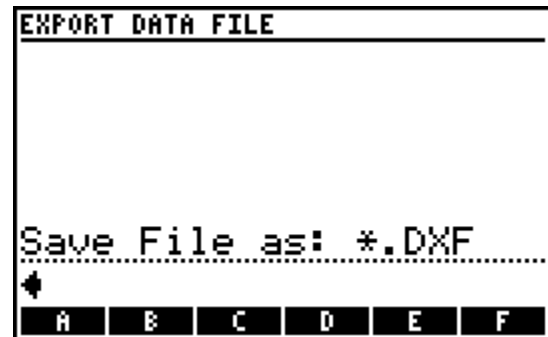
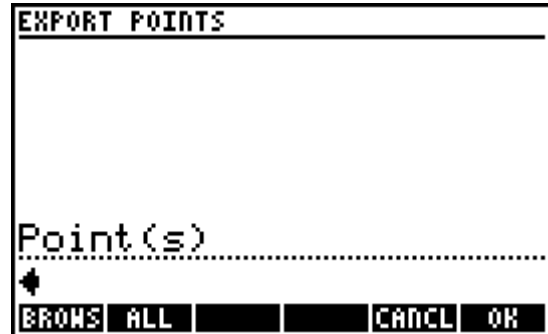
The export progress is displayed while the program is working.

Next, enter a file name to save the exported points. The .DXF extension is automatically added to the file name, and is displayed next to the *Save File as:* prompt.

Finally, choose the destination for the exported file, either the SD card or the HOME directory.

NOTE: WITH THE SD FILER SOFTWARE INSTALLED, A MESSAGE INFORMS THE USER THAT THE EXPORT IS COMPLETED WHEN WRITTEN TO THE SD CARD, HOWEVER WITHOUT SD FILER INSTALLED A MESSAGE REMINDS THE USER TO EDIT THE FILE ON THE PC USING NOTEPAD OR SIMILAR SOFTWARE TO DELETE THE FIRST LINE OF CHARACTERS.

SD Filer enables COGO+ to write a raw ASCII file without the HP header information included.



Export KML File

Points in the current job can be written to a KML file so that they may be viewed in Google Earth. ***It is highly recommended to have the optional SDfiler software installed for exporting KML files.***

The points exported to a KML file must be in a grid projection based on the GRS80 or WGS84 reference ellipsoid. NAD83 UTM or State Plane grid coordinates are an example of valid coordinates. A projection based on a different ellipsoid or coordinates in an assumed local coordinate system will result in incorrect positions written to the KML file.

First, select the icon style and coordinate units. Available icon styles for the points to be displayed as in Google Earth are: red ● orange ● yellow ● green ● blue ● violet ● and white ●. The unit selection must match the unit that the coordinates are in. A note reminds the user that the current settings will be used to export the point positions.

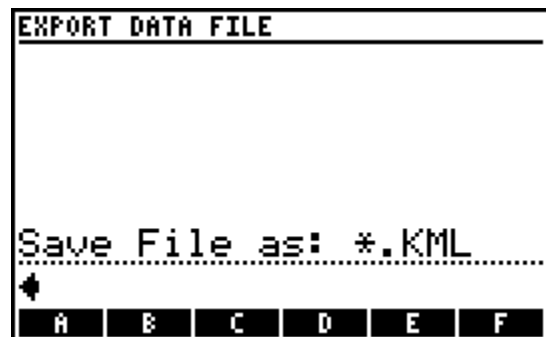
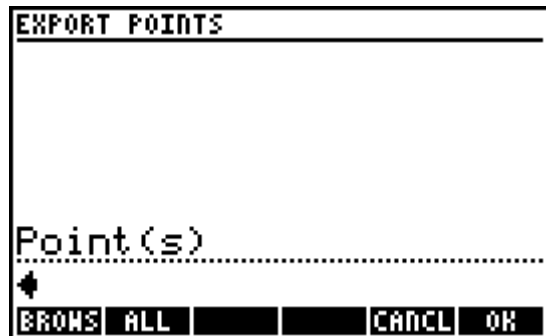
Next, enter the points you wish to export using any of the [point numbers](#) input options, or optionally select **F2** **ALL** to export all points. The export progress is displayed while the program is working.

Next, enter a file name to save the exported points. The .KML extension is automatically added to the file name, and is displayed next to the *Save File as:* prompt.

Finally, choose the destination for the exported file, either the SD card or the HOME directory.

NOTE: WITH THE SD FILER SOFTWARE INSTALLED, A MESSAGE INFORMS THE USER THAT THE EXPORT IS COMPLETED WHEN WRITTEN TO THE SD CARD, HOWEVER WITHOUT SD FILER INSTALLED A MESSAGE REMINDS THE USER TO EDIT THE FILE ON THE PC USING NOTEPAD OR SIMILAR SOFTWARE TO DELETE THE FIRST LINE OF CHARACTERS.

SD Filer enables COGO+ to write a raw KML file without the HP header information included.

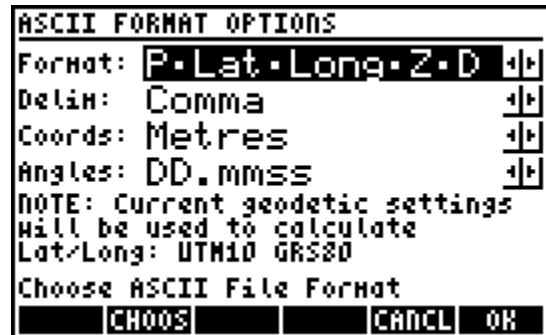


Export Lat/Long ASCII File

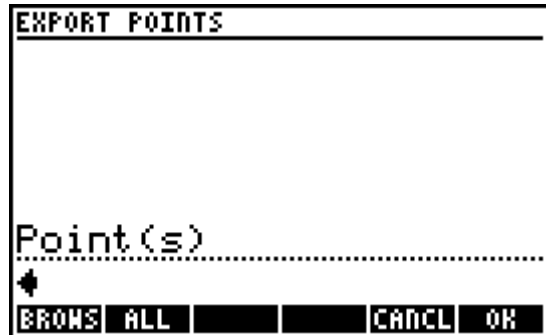
Points in the current job can be converted to Latitude/Longitude from their grid projection and written to a ASCII file. ***It is highly recommended to have the optional SDfiler software installed for exporting ASCII files.***

The points exported to a Lat/Long ASCII file must be in a grid projection. UTM or State Plane grid coordinates are an example of valid coordinates. The Lat/Long values will be calculated on the same ellipsoid that the projection is based on.

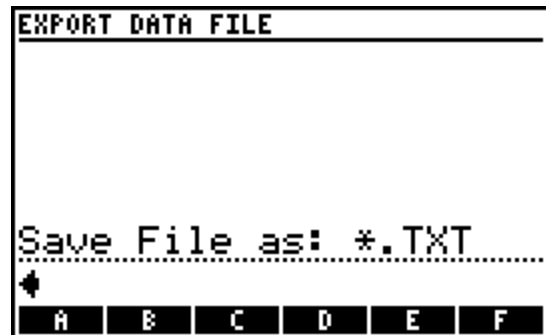
First, select the ASCII file format, the delimiter, the job coordinates unit, and the Lat/Long output mode. The unit selection must match the unit that the coordinates are in. A note reminds the user that the current settings will be used to export the point positions.



Next, enter the points you wish to export using any of the [point numbers](#) input options, or optionally select **F2** **ALL** to export all points. The export progress is displayed while the program is working.



Next, enter a file name to save the exported points. The ASCII [file extension](#) is automatically added to the file name, and is displayed next to the *Save File as:* prompt.



Finally, choose the destination for the exported file, either the SD card or the HOME directory.

NOTE: WITH THE SD FILER SOFTWARE INSTALLED, A MESSAGE INFORMS THE USER THAT THE EXPORT IS COMPLETED WHEN WRITTEN TO THE SD CARD, HOWEVER WITHOUT SD FILER INSTALLED A MESSAGE REMINDS THE USER TO EDIT THE FILE ON THE PC USING NOTEPAD OR SIMILAR SOFTWARE TO DELETE THE FIRST LINE OF CHARACTERS.

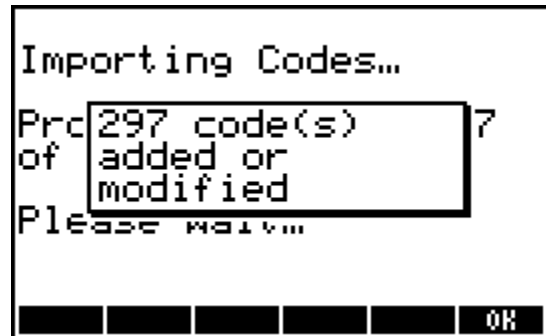
SD Filer enables COGO+ to write a raw ASCII file without the HP header information included.

Import Codelist

[Codelists](#) can be imported from comma-delimited ASCII files to save time entering the codes and descriptions. The codelist files **MUST** be in the format *Code,Description* where *Code* would generally be a numeric code and *Description* would be a longer point description, for example:

```
001,CodeDescription001
002,CodeDescription002
003,CodeDescription003
004,CodeDescription004
...
100,CodeDescription100
...
```

The imported codes will be added to the existing codelist and sorted by description for use on the calculator. The user is prompted to overwrite existing codes when duplicates are found. A message displays the number of codes that have been added to the codelist (or modified) when the process is complete.

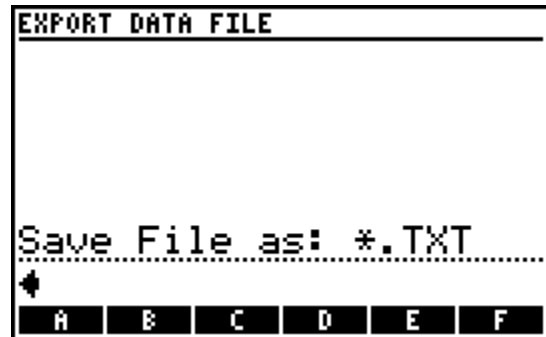


Export Codelist

Write your [codelist](#) to a comma-delimited ASCII file for archiving or for editing on a PC. The codelist file created will be in the same *Code,Description* format as required for importing. ***It is highly recommended to have the optional SDfiler software installed for exporting ASCII files.***

Enter a file name to save the exported codelist. The ASCII [file extension](#) is automatically added to the file name, and is displayed next to the *Save File as:* prompt.

Finally, choose the destination for the exported file, either the SD card or the HOME directory.



NOTE: WITH THE SD FILER SOFTWARE INSTALLED, A MESSAGE INFORMS THE USER THAT THE EXPORT IS COMPLETED WHEN WRITTEN TO THE SD CARD, HOWEVER WITHOUT SD FILER INSTALLED A MESSAGE REMINDS THE USER TO EDIT THE FILE ON THE PC USING NOTEPAD OR SIMILAR SOFTWARE TO DELETE THE FIRST LINE OF CHARACTERS.

SD Filer enables COGO+ to write a raw ASCII file without the HP header information included.