

Using MagLog with GPX Export Functionality

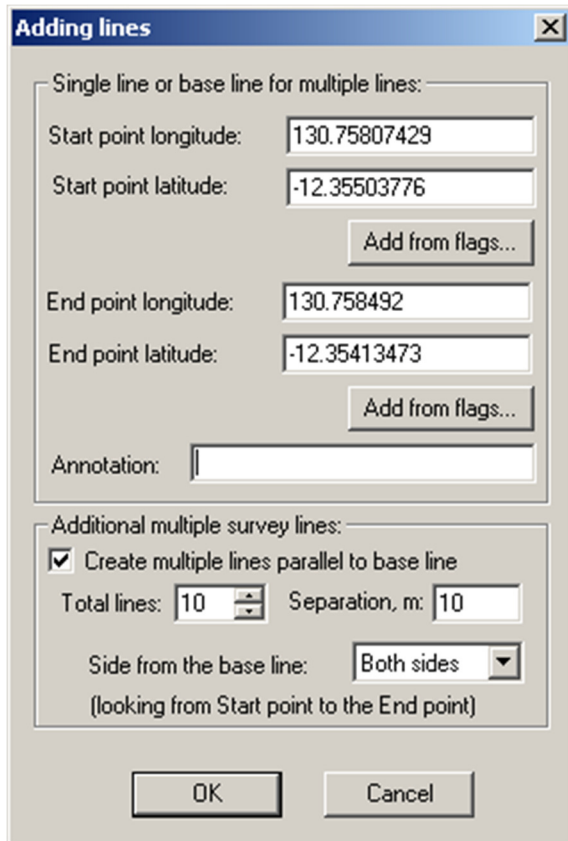
13 Oct 2010 – Preliminary Manual Excerpt

The program is available here:

<ftp://geom.geometrics.com/pub/mag/Software/maglog-3.31b-10-10-10.exe>

This is briefly how it works:

1. Start MagLog. You need not have the program registered, have a software key or a dongle to use the map planning tools or GPX file creation tools. You may receive a message that the program is no registered, click OK.
2. Go to File, Create Survey Plan. A zoomed in world map will appear, you can press the Minus Key to zoom out.
3. Go to File, then "Add Plan Elements, then "Add User Line(s)...".
4. Type the coordinates of the base line start / stop positions as shown here:



Fill in the number of lines, line separation, and which way to generate the additional lines relative to the base line. We recommend that you enter an annotation name which will be used to name the routes in the GPS GPX file as well.

3. Press OK. Note that dialog now changes and the latitude and longitude of each line is shown in the Map Elements window:

Create or import map data

Survey map elements

Line: Start: 130.756400317 -12.354289345 End: 130.756818032 -12.353386315 #1 ▲
Line: Start: 130.756567714 -12.354364187 End: 130.756985429 -12.353461157 #2
Line: Start: 130.756735111 -12.354439029 End: 130.757152825 -12.353535999 #3
Line: Start: 130.756902508 -12.354513871 End: 130.757320222 -12.353610841 #4
Line: Start: 130.757069905 -12.354588712 End: 130.757487618 -12.353685682 #5
Line: Start: 130.757237302 -12.354663554 End: 130.757655015 -12.353760524 #6
Line: Start: 130.757404700 -12.354738395 End: 130.757822412 -12.353835365 #7
Line: Start: 130.757572097 -12.354813237 End: 130.757989809 -12.353910207 #8 ▼

Add user mark... Add user line(s)... Add survey area...
Remove element... Add ArcInfo(TM) shape file...
Edit element... Remove all Save table... Load table...
Export lines as GPX...

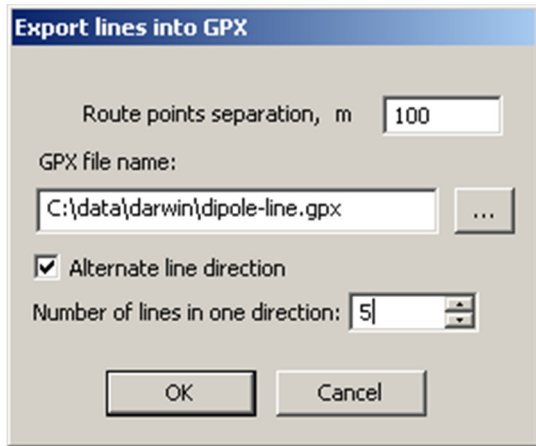
Clip region
☒ Don't clip map North: 90 * North - East - flags
West: -180 East: 180
* South / West - flags South: -90
* Use buttons to get clip region using MagLog Flags

MagLog map file options:
Output file to be used by MagLog:
C:\data\darwin\australia_coastline.maglog Change...
☐ Append data to the file Create MagLog map file...
Close

At this point you are ready to make the GPX file. NOTE: DO NOT CREATE MAGLOG OUTPUT FILE before you create GPX and do not close this dialog before you create GPX.

Alternatively you can save data as "Save table". If you do so you could close the dialog box and possibly make a Maglog map, and then re-load data after with "Load table..." button.

4. Press the "Export lines as GPX" button and see the Export dialog as follows:



Here you specify separation between additional route points to simplify navigation, the GPX file name and whether bi-directional survey if desired. For instance if the normal boat turning radius is about 10 lines wide, it makes sense to alternate the directionality of the lines by a factor of 5. In this case you can make survey as the following (example):

1. Line #1 S->N
2. Turning, going line#6, N->S
3. Turn, going line#2 S->N
4. Turn, going line#7, N->S
5. Turn, line #3, S->N
6. Turn, line#8, N->S
7. Turn, line#4, S->N
8. Turn, line#9 N->S
9. Turn, line#5 S->N
10. Turn, line#10 N->S

The group is complete. Note that lines 1, 2, 3, 4, 5 were made S->N and 6,7,8,9,10 N->S.

5. You can load resulting GPX file into Google Earth (see example below) or better yet into the Garmin BaseCamp program, as Basecamp shows line direction. In any event, a hand held GPS like the Garmin Oregon 450 can be used in the field to steer to the next waypoint and route. A Google Earth import of the GPX file is shown on the next page.

Contact support at support@geometrics.com for additional assistance.

