

User Data Exchange Tool Manual

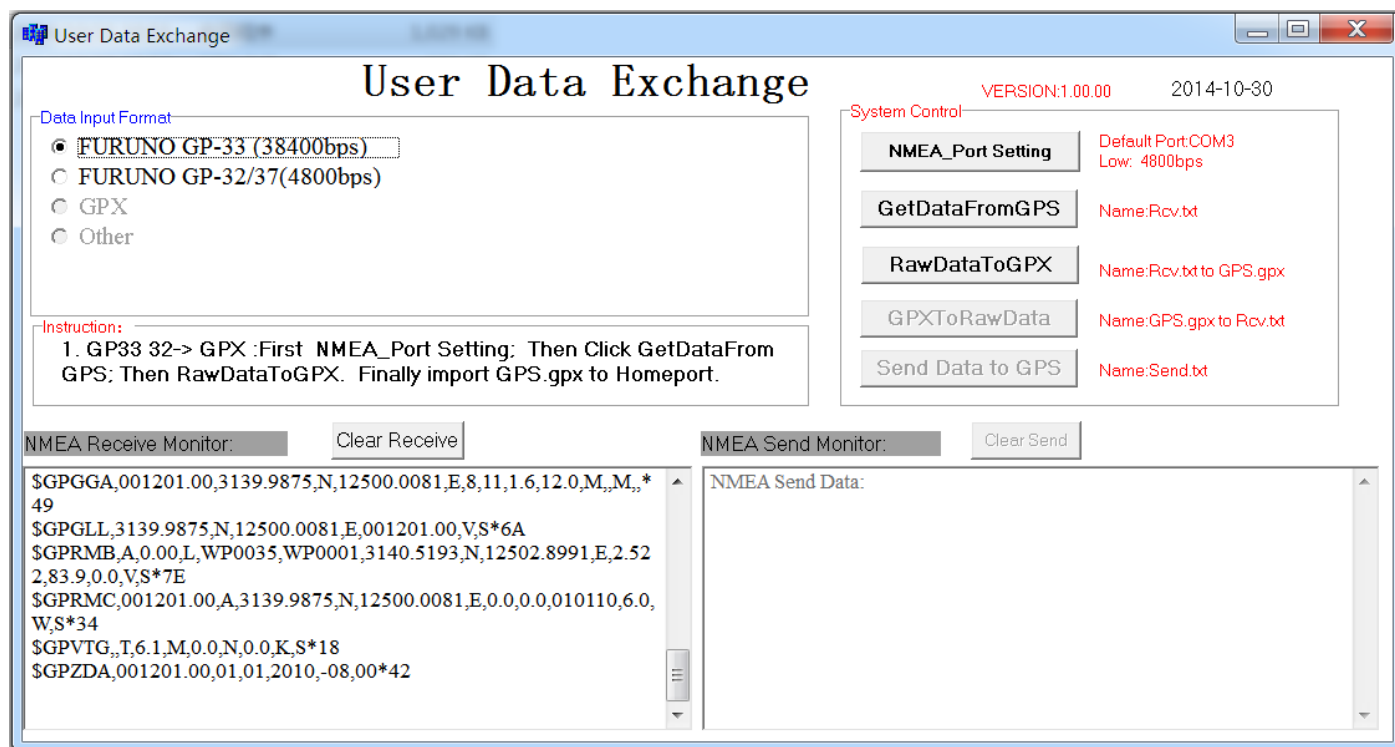
Ver1.12 2014-11-24

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1 Software Description

Now Version:1.12.00 2014-11-11



2 Download User Data from Furuno GP33/GP32 Series

NOTE:

1. Only waypoints and routes can be transferred from GP-33 to PC.
2. GP-33/32 Series only support 30 waypoints in a route.
3. Not all the symbols and colors of waypoint in GP-33 are supported in Garmin format.
4. There is bug in GP33 when transferring over 28 waypoints in a route. The 29th and 30th waypoints will show as garbled character , so Please do not create over 28 waypoints in a route.

```
$PFEC,GPwpl,1881.4623,N,07276.7378,E,WP0220,3,@q09:37 14OCT14,A,,,
$PFEC,GPwpl,1881.4623,N,07276.8351,E,WP0221,3,@q09:37 14OCT14,A,,,
$PFEC,GPwpl,1881.4623,N,07276.9487,E,WP0222,3,@q09:37 14OCT14,A,,,
$PFEC,GPwpl,1881.4623,N,07277.0298,E,WP0223,3,@q09:37 14OCT14,A,,,
$GPRT,1,1,C,1, WP0001, WP0002
$PFEC,GPrtc,1,ABCDEFGHIIFCAAAAAA,AA0000
$GPRT,1,1,C,2, WP0001
$PFEC,GPrtc,2,EFGC ->, KU0001
$GPRT,2,1,C,3, WP0035, WP0037, WP0006, WP0009, WP0039, WP0010, WP0024
$GPRT,2,2,C,3, WP0006
$PFEC,GPrtc,3,WP0035 ->WP0006,RT0000
$GPRT,5,1,C,4, WP0050, WP0035, WP0036, WP0038, WP0039, WP0040, WP0043
$GPRT,5,2,C,4, WP0044, WP0046, WP0047, WP0048, WP0049, WP0050, WP0051
$GPRT,5,3,C,4, WP0052, WP0053, WP0054, WP0055, WP0056, WP0057, WP0058
$GPRT,5,4,C,4, WP0059, WP0151, WP0060, WP0075, WP0166, WP0075, WP0193
$GPRT,5,5,C,4,WP0059,WP0151,WP0075,WP0166,WP0075,WP0193
$PFEC,GPrtc,4,BCBCCBB->CCCCCCC,RT0001
$GPRT,1,1,C,5, WP0036, WP0037, WP0040, WP0043
$PFEC,GPrtc,5,A C B ->A B B,RT2242
$GPRT,5,1,C,6, WP0034, WP0038, WP0039, WP0040, WP0041, WP0042, WP0043
$GPRT,5,2,C,6, WP0044, WP0045, WP0046, WP0047, WP0048, WP0049, WP0051
$GPRT,5,3,C,6, WP0053, WP0054, WP0055, WP0056, WP0057, WP0058, WP0059
$GPRT,5,4,C,6, WP0060, WP0149, WP0061, WP0062, WP0063, WP0064, WP0065
$GPRT,5,5,C,6,WP0060,WP0149,WP0061,WP0062,WP0063,WP0064,WP0065
$PFEC,GPrtc,6,WP0034 ->WP0081,RT0233
$GPRT,4,1,C,7, WP0006, WP0007, WP0009, WP0010, WP0011, WP0012, WP0013
$GPRT,4,2,C,7, WP0014, WP0015, WP0017, WP0018, WP0019, WP0020, WP0021
$GPRT,4,3,C,7, WP0022, WP0024, WP0025, WP0026, WP0027, WP0028, WP0029
$GPRT,4,4,C,7, WP0030, WP0031, WP0032, WP0033, WP0034, WP0035, WP0036
$PFEC,GPrtc,7,SABBBBA->->9E-A>,RT2004
$PFEC,GPxir,CIL,E
```

30 points with bug

29 points with bug

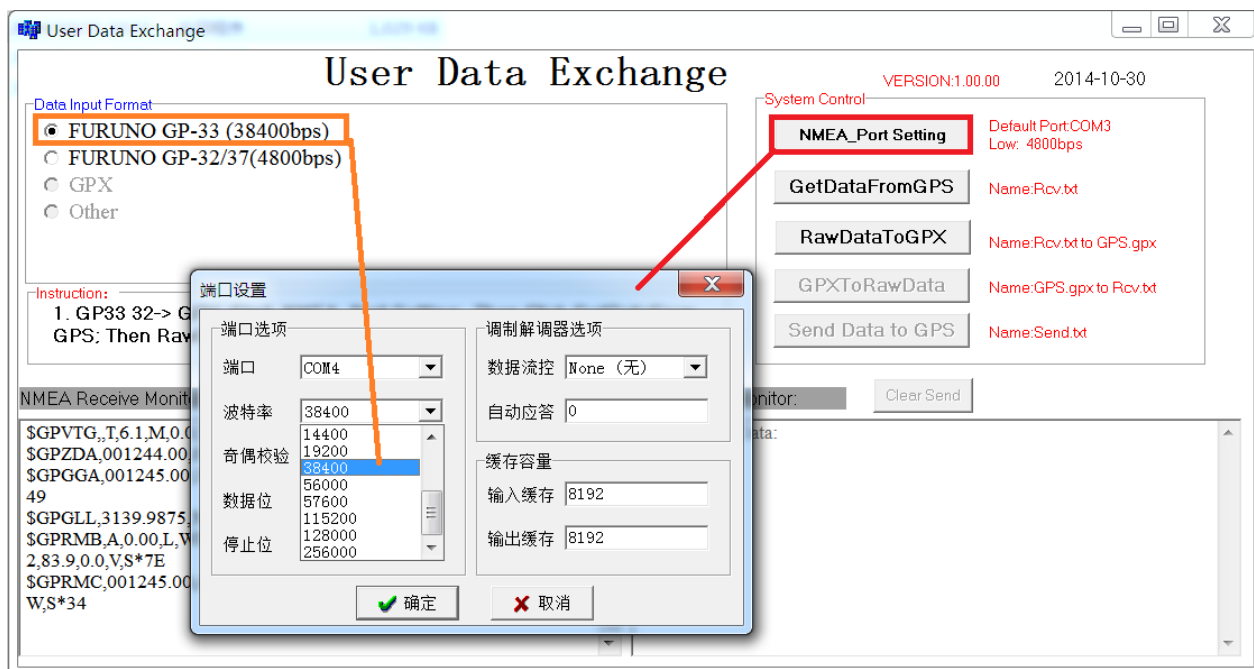
28 points OK

Connect you PC by using RS232 to you GP33 with the NMEA port. Please refer to the user manual of Furuno GP33. Here is a reference picture below:



Open this tool, Garmin_Dat_Change_V100.exe, The default baud rate is 4800, If your connection is right , you can see the GPS NMEA sentences output from GP33 in NMEA Receive Monitor window.

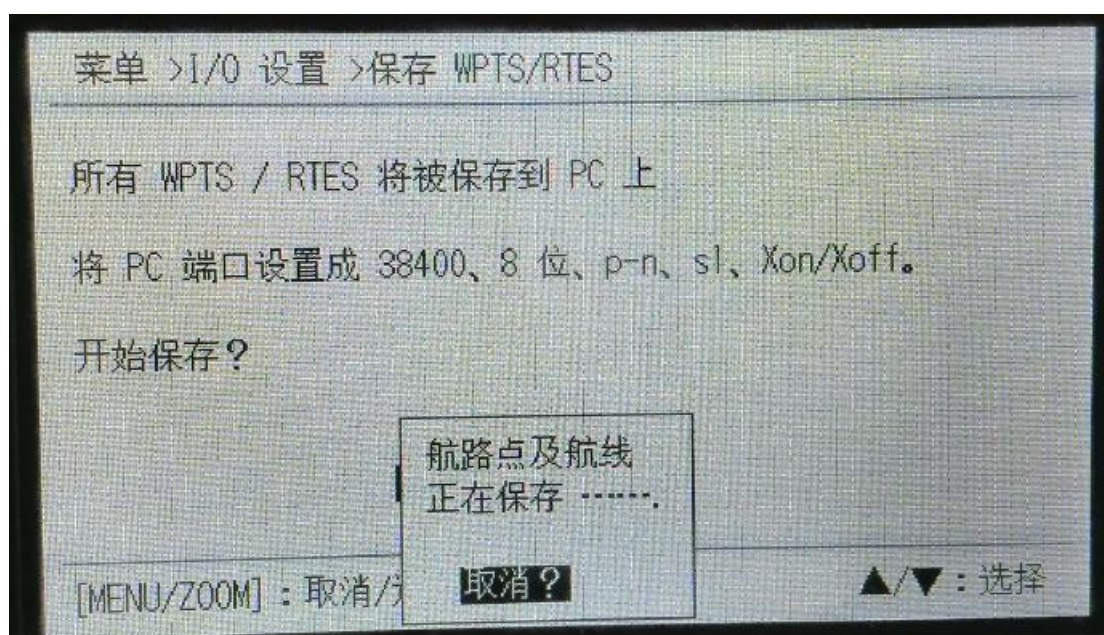
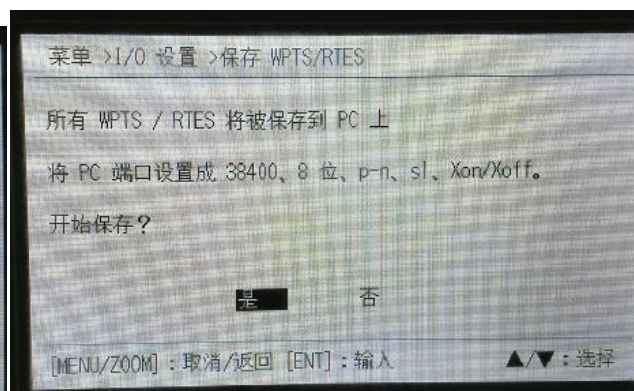
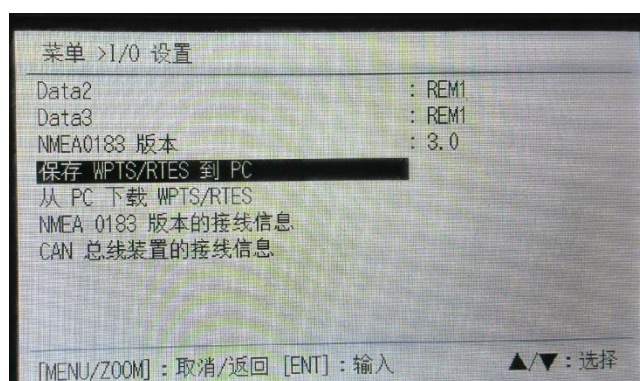
Choose GPS device type then click "NMEA_Port Setting", Select the correct baud rate. For GP-33 its 38400bps and GP-32/37 is 4800bps.



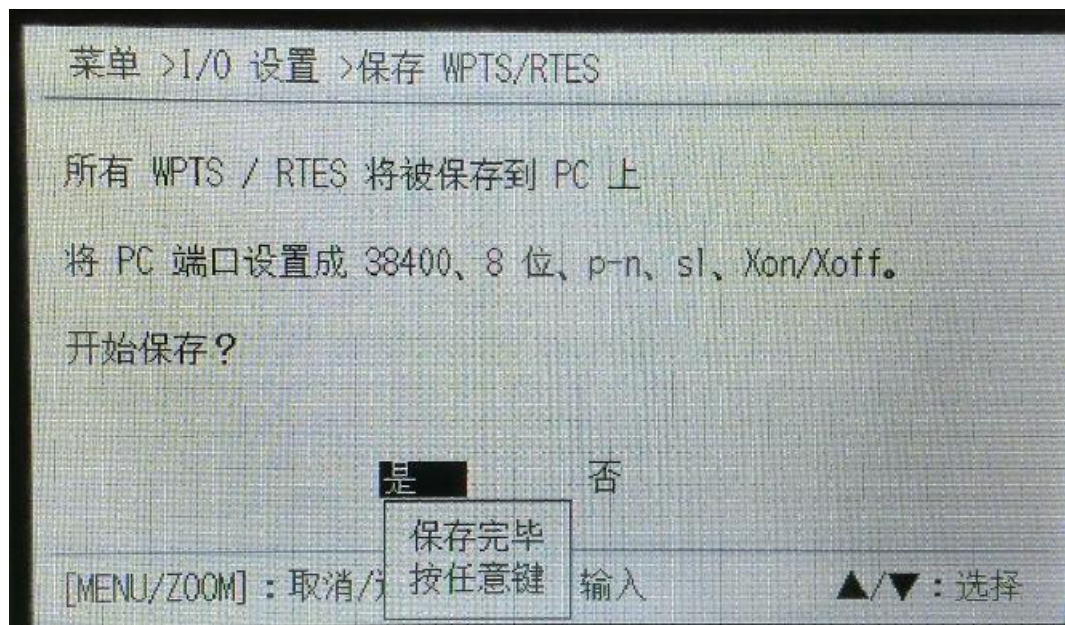
Click **"GetDataFromGPS"** and the caption of this button will change to **"In Getting Data..."**

Then operate your GP33 Menu -> IO settings -> Send WPT/RTE to PC as below picture.

Click OK. Then the user data are transferring from GP-33 to PC.

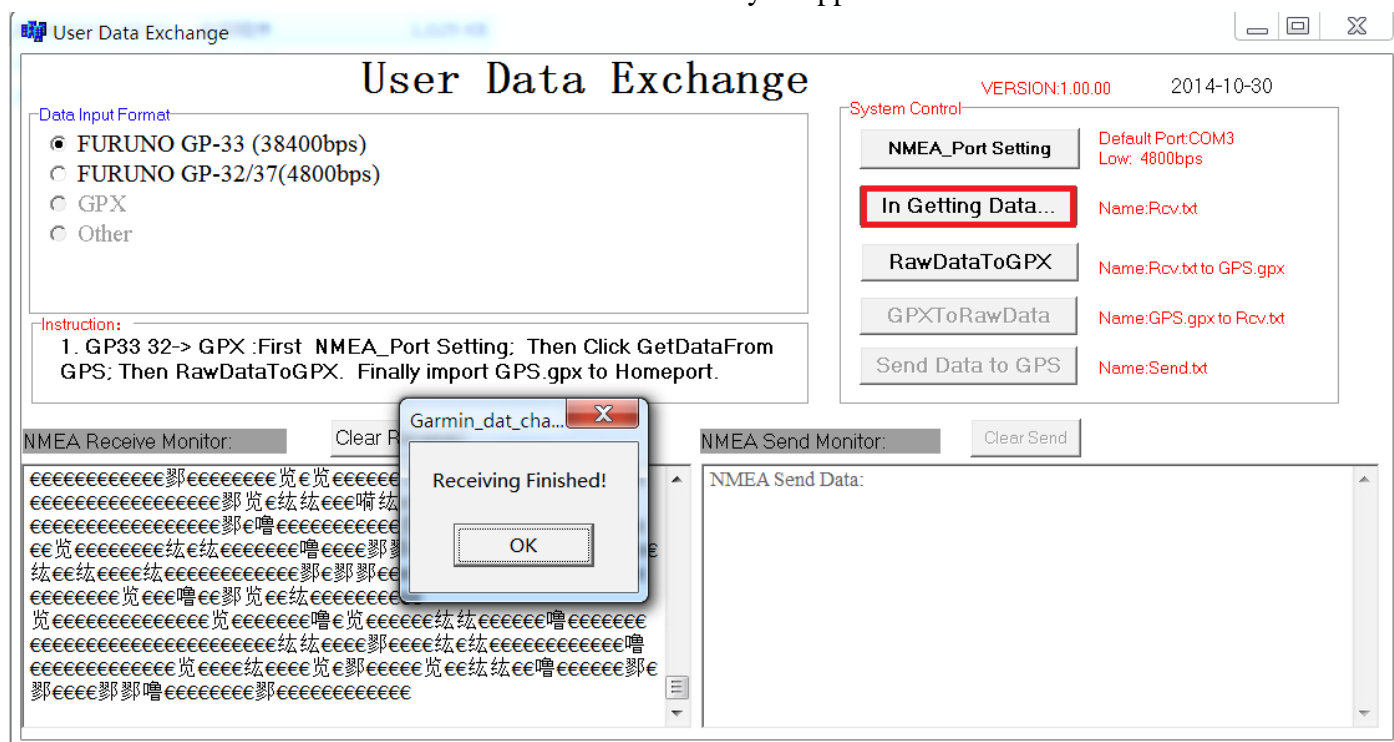


When you see the screen of transfer completed in GP-33.



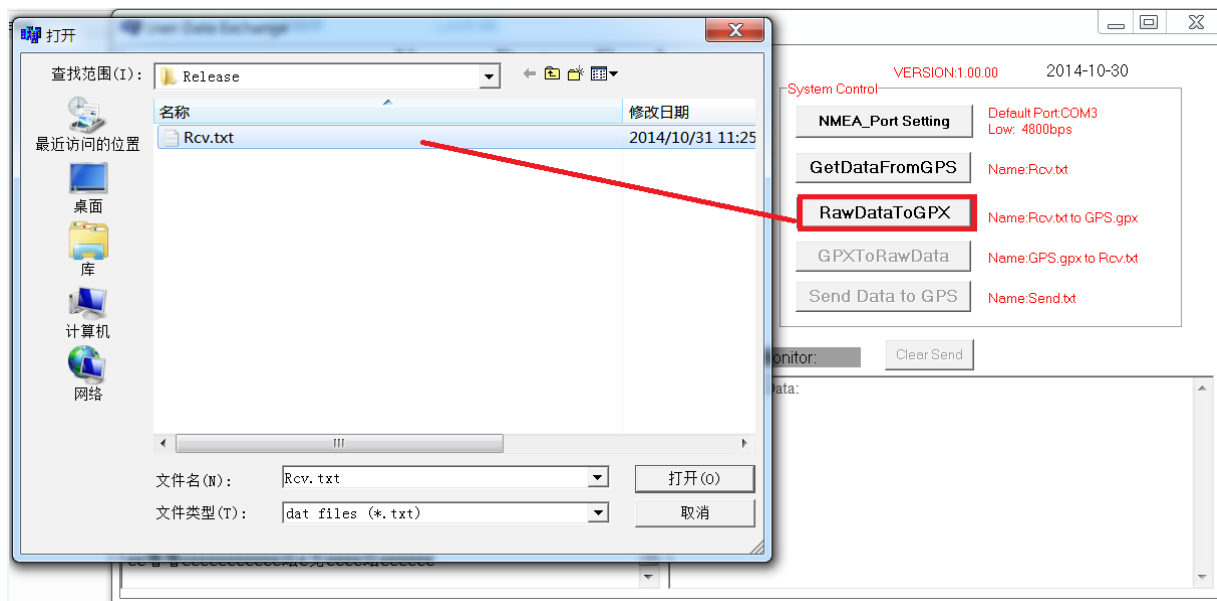
Click "**In Getting Data...**" in PC software to finish receiving , it will prompt a message of **Receiving Finished**.

You can find a file named **Rev.txt** in the same location of you application tool.

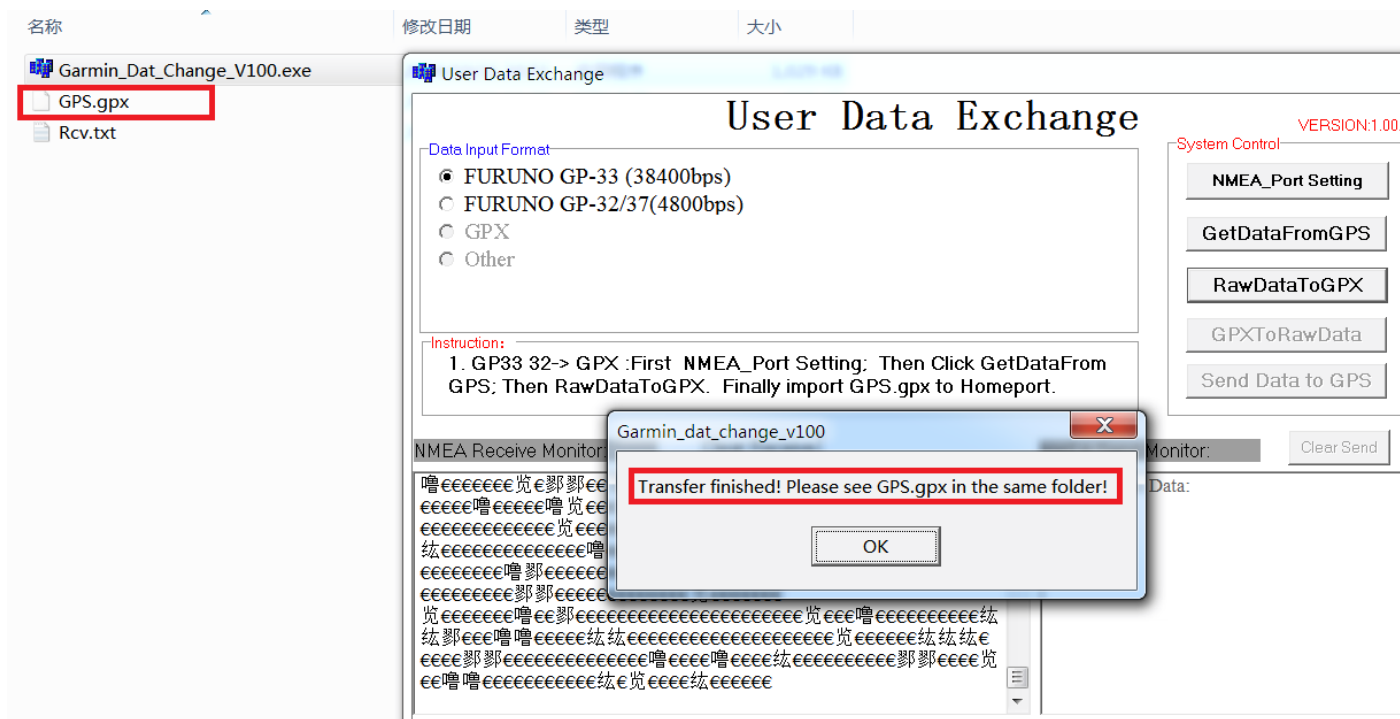


3 Convert Furuno GP33/GP32 Series User Data to GPX format

Click "**RawDataToGPX**", Select the file we just received named as "**Rcv.txt**".



After transferring finished, it will prompt a message "**Transfer finished**", if any error, the error will be reported too, if the errors are too many, you can re-download the GP-33 data to check. After that you can get a file named **GPS.gpx** in your application folder.



4 Convert Haiyang MX Series User Data to GPX format

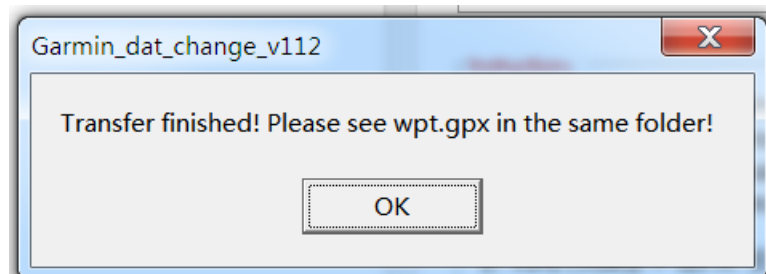
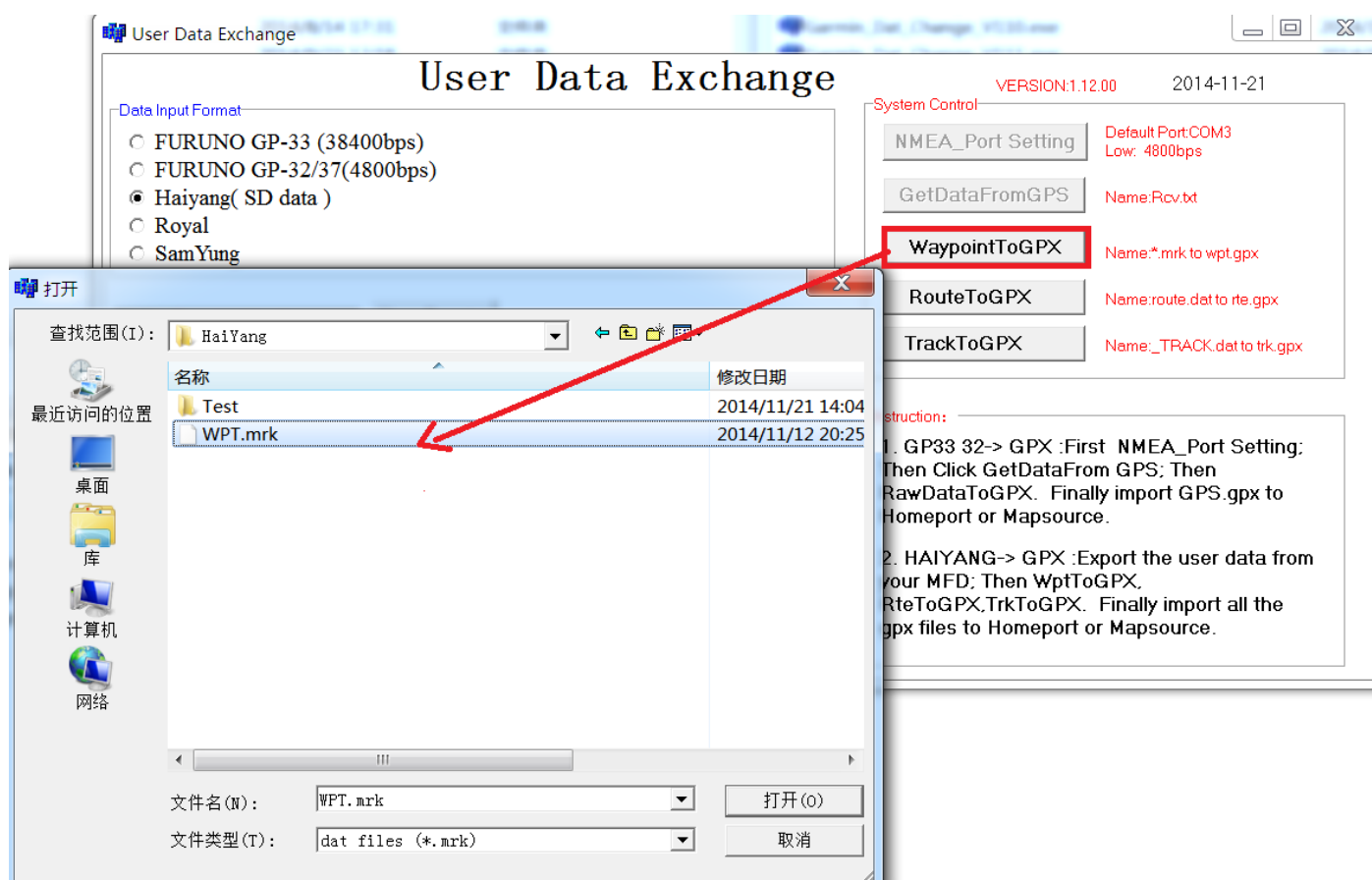
Follow the steps of HaiYang MX Series user manual to download the user data to SD card.

4.1 Transfer Waypoint

Open this PC- tool, Choose Haiyang(SD data) in the Data input format box.

Click "**WaypointToGPX**", Select the file "***.mrk**".

After transferring finished, it will prompt a message "**Transfer finished**", if any error , the error will reported too. A file named **wpt.gpx** exists in your application folder.



4.2 Transfer Route

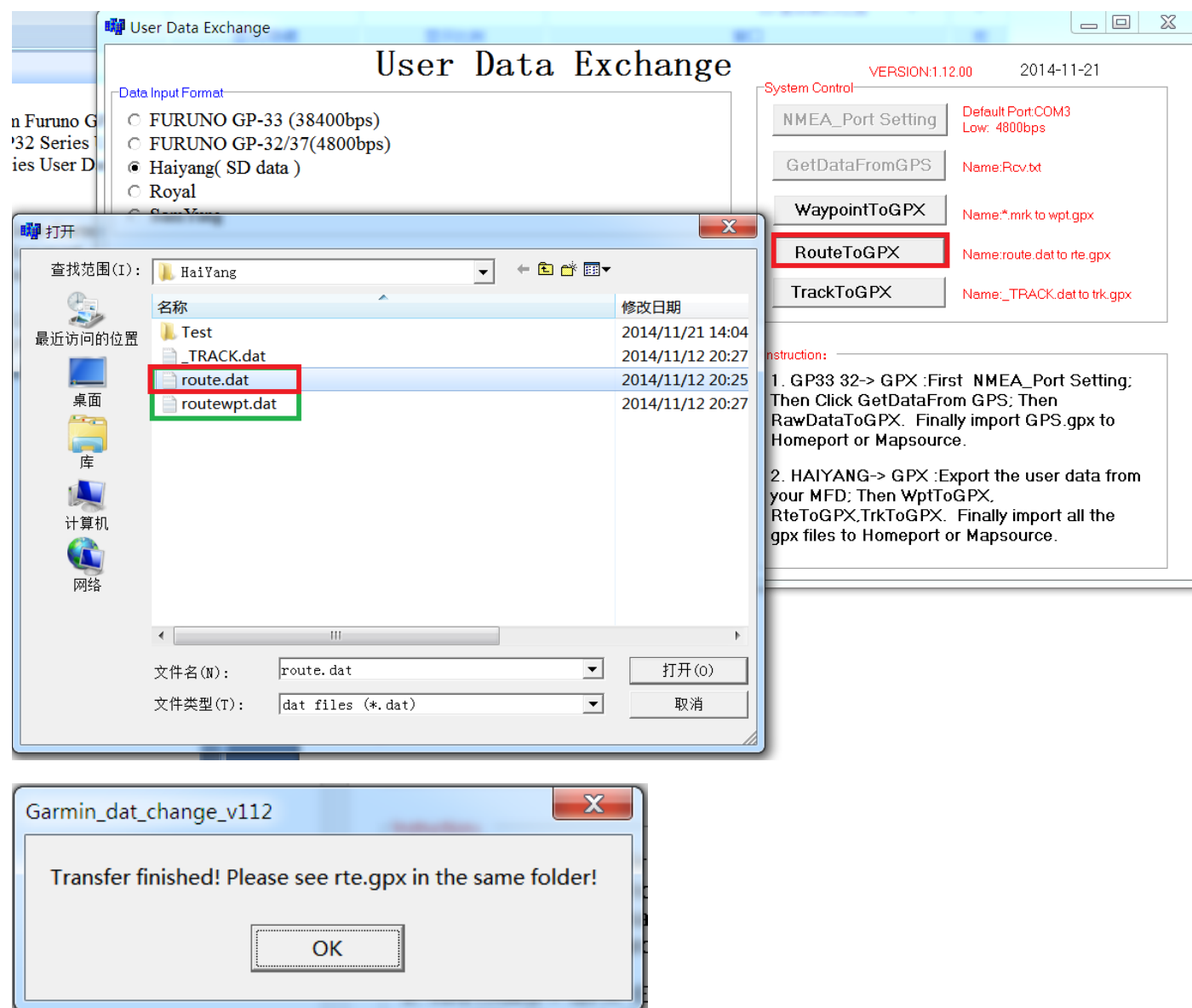
Open this PC- tool, Choose Haiyang(SD data) in the Data input format box.

Click "**RouteToGPX**", Select the file "**route.data**".

Please noted:

The routewpt.dat stores the waypoint information of the routes, the name should not be changed.

After transferring finished, it will prompt a message "**Transfer finished**", if any error , the error will reported too. A file named **rte.gpx** exists in your application folder.

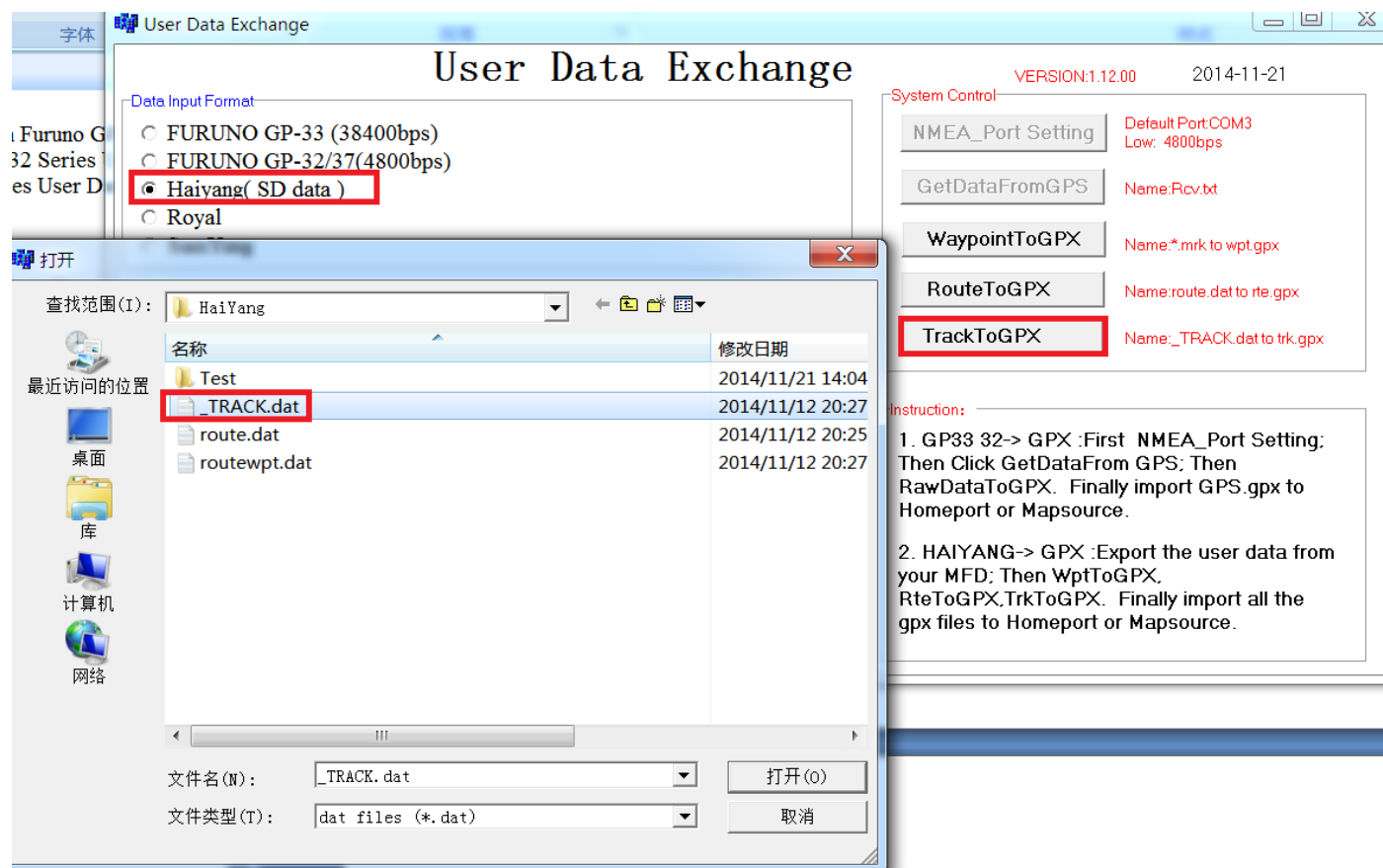


4.3 Transfer Track

Open this PC- tool, Choose Haiyang(SD data) in the Data input format box.

Click "**TrackToGPX**", Select the file "**_TRACK.data**".

After transferring finished, it will prompt a message "**Transfer finished**", if any error , the error will reported too. A file named **trk.gpx** exists in your application folder.



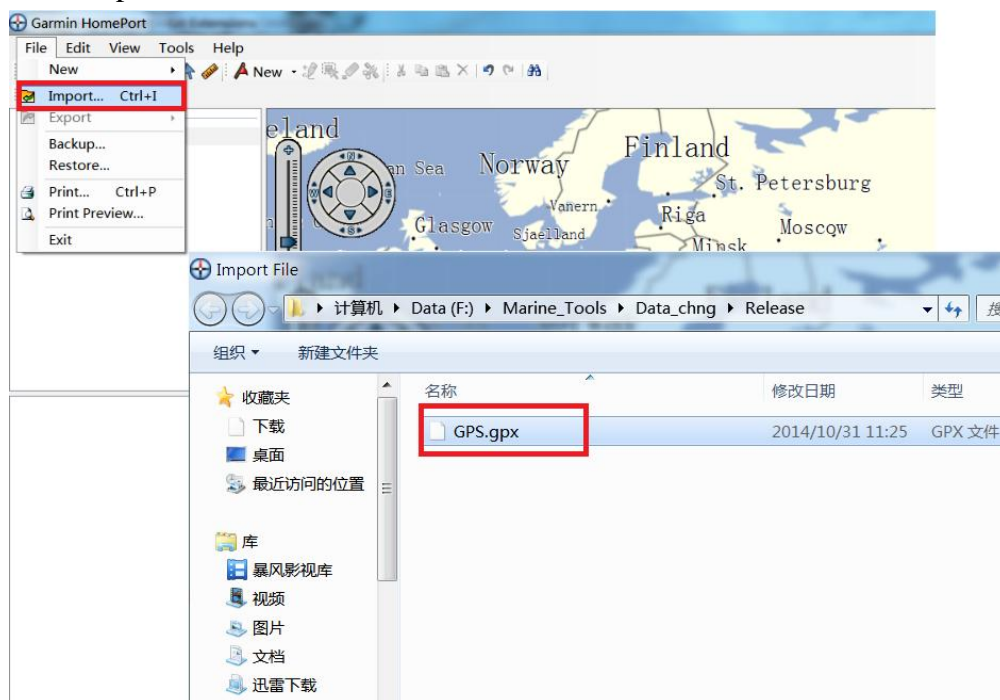
5 Download GPX format file to Garmin Device

5.1 Import GPX data to Homeport

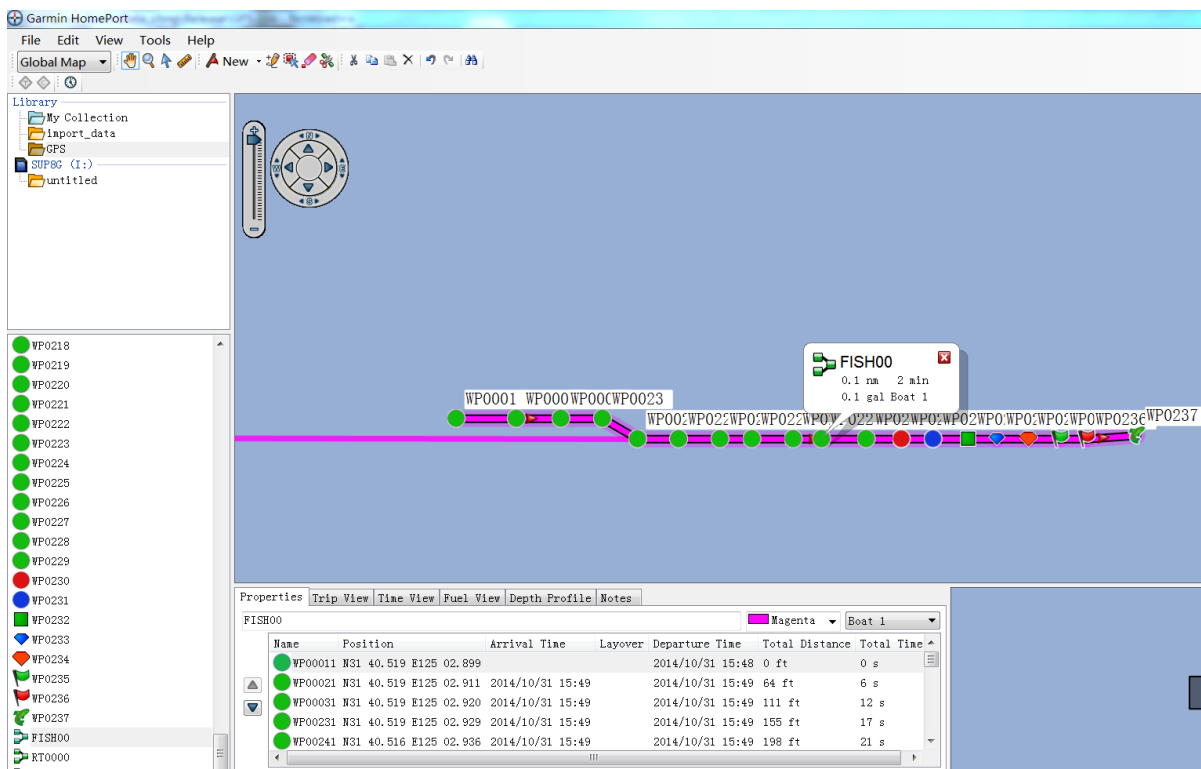
Open you homeport on PC, Click **File -> Import ...**

If the input device is Furuno GP32 series, Select your **GPS.gpx** just converted.

If the input device is HaiYang etc, there are 3 gpx files wpt.gpx,rte.gpx and trk.gpx. Please import them all to Homeport.



After you finished this step, you can find a folder named GPS and its detailed user data below and on the blue chart at right.



Here is a comparison picture of route named FISH00 with GP-33.

We support most of the symbols and the colors from GP-33 now but not all.



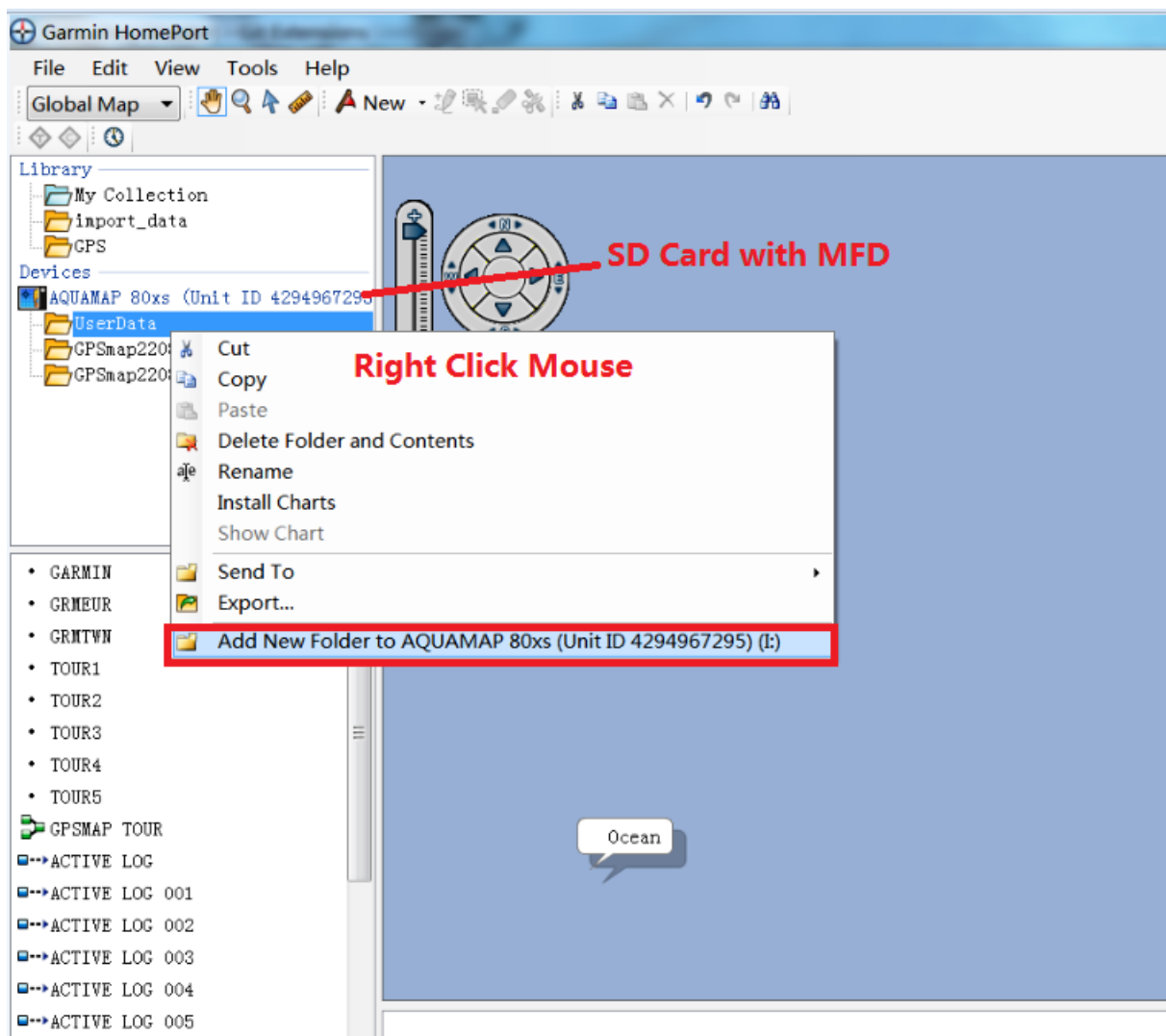
5.2 MFD/Aquamap/GPSmap2208/GPSmap3310

For Garmin MFD with SD card support, we can export gpx file to adm file in you SD card.

First Insert the SD card into your PC.

Then open **Homeport**, you can find below picture with your device shown with its adm data files.

Right click your mouse to create a new folder, Here we name it as **Import_GPS**.

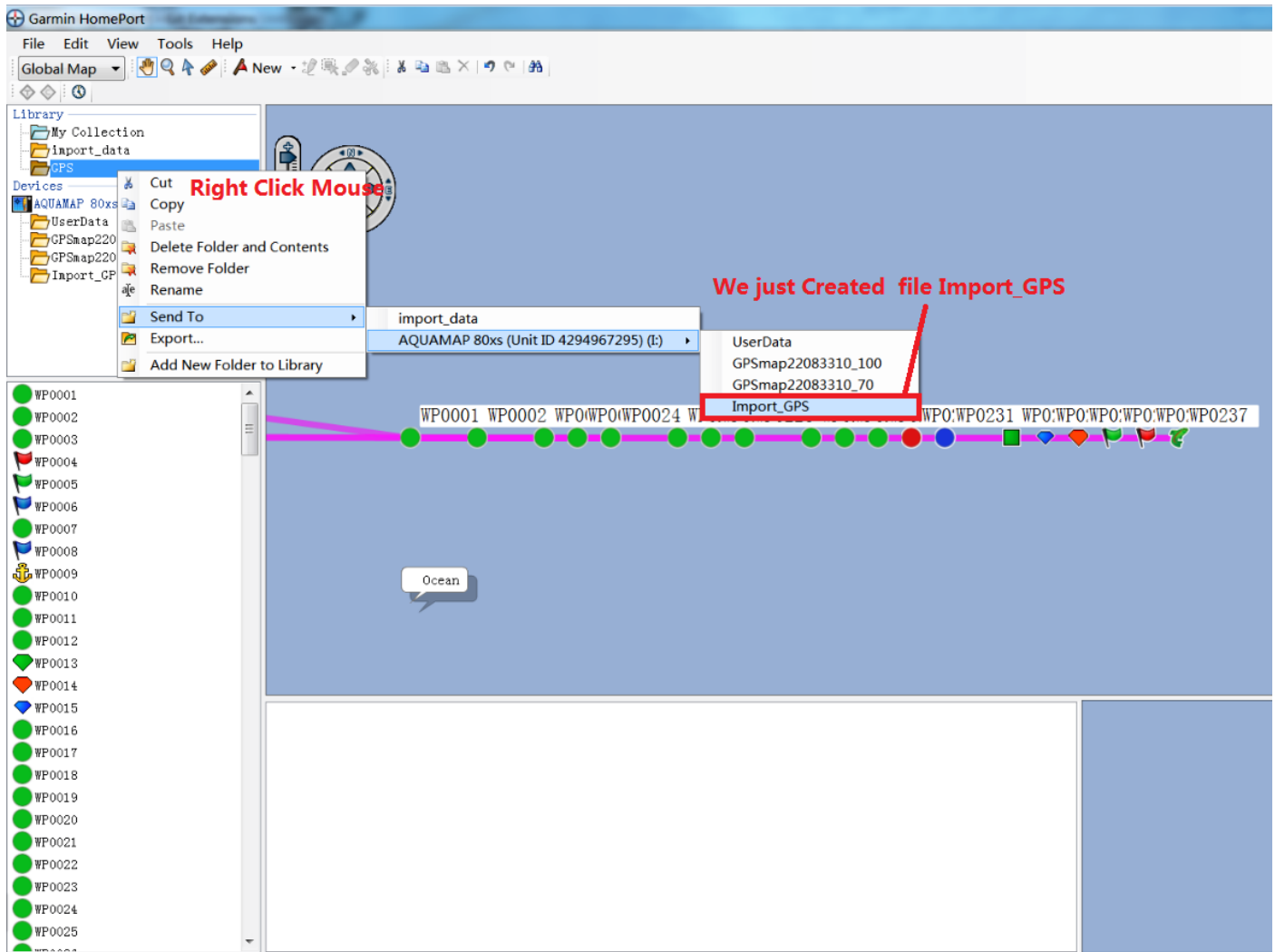


Then you can see an **Import_GPS** folder under you device.

Choose the GPS folder we just imported from gpx files. Right click mouse , then choose send to **Import_GPS**.

After these actions, all the user data in GPS folder were copied to **Import_GPS** in you SD card.

Pull out the SD card and insert to your MFD Device, you can copy or merge these data to you MFD device.



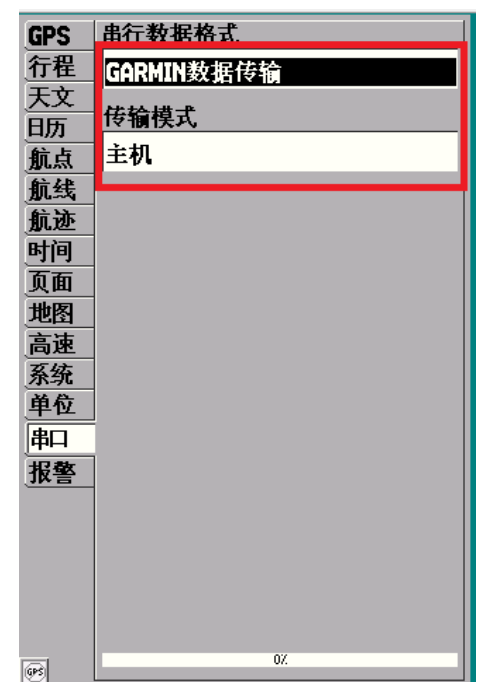
5.3 GPS158

For Garmin GPS without SD card support, we must connect NMEA port to exchange the user data with PC tool by **Mapsource**.

5.3.1 Step1: Connect GPS158 with PC UART

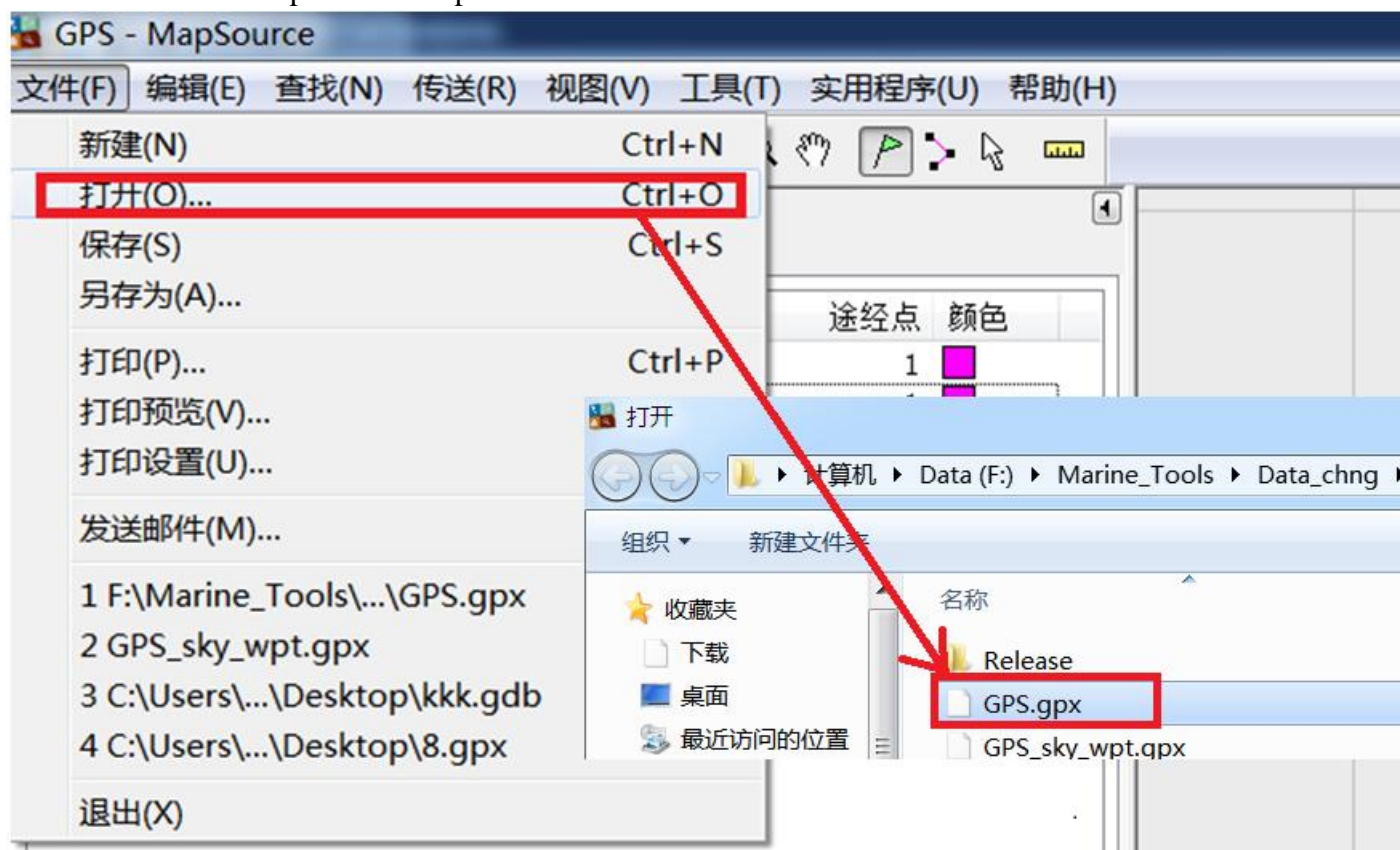
Connect the NMEA port with PC, Please refer to the user manual .
Set GPS158' UART mode to NMEA mode first to check the connection of GPS158.

Then set the **UART mode to Garmin Data Transfer** mode.



5.3.2 Step2: Import GPX data to Mapsource

Open Mapsource and click "File"-> "Open", Open the GPS.gpx we just created. Then the waypoints and routes and tracks are imported to Mapsource.



5.3.3 Step3: Download User data to GPS158

Click Download Icon, It will pop up a dialog, System will find your GPS158 with its UART port number. Select the content, waypoint, route and track you want to download. Then click Send.

You can see the sending progress bar and the GPS158 will pop up "Transfer complete" Message when finished.

