

ZTS - 320 series total station data transfer instructions

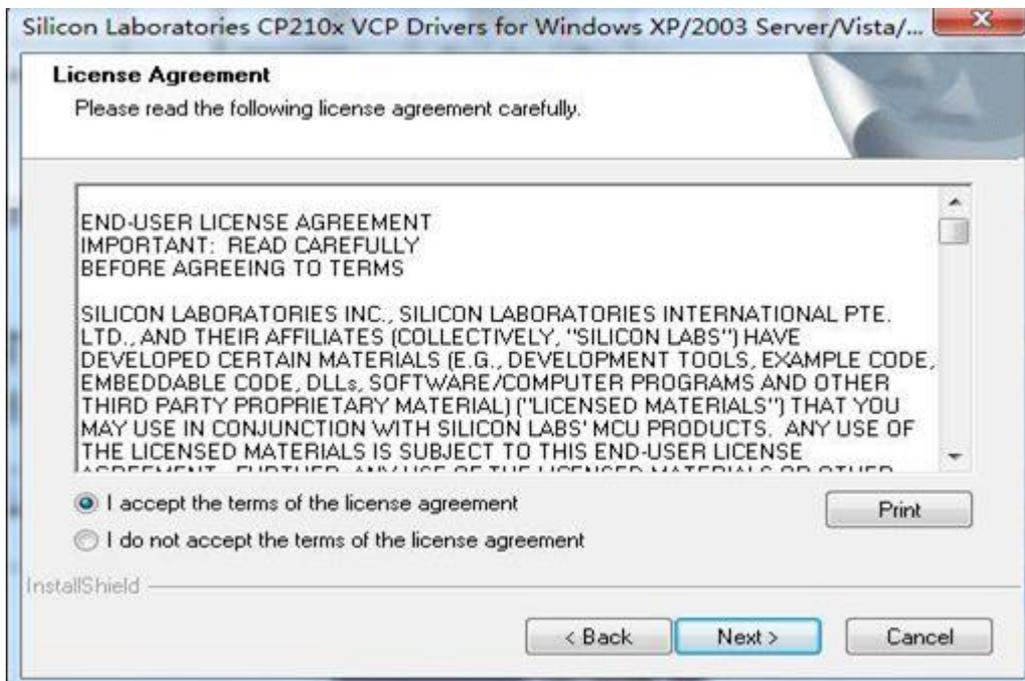
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1. Install driver of data transmission

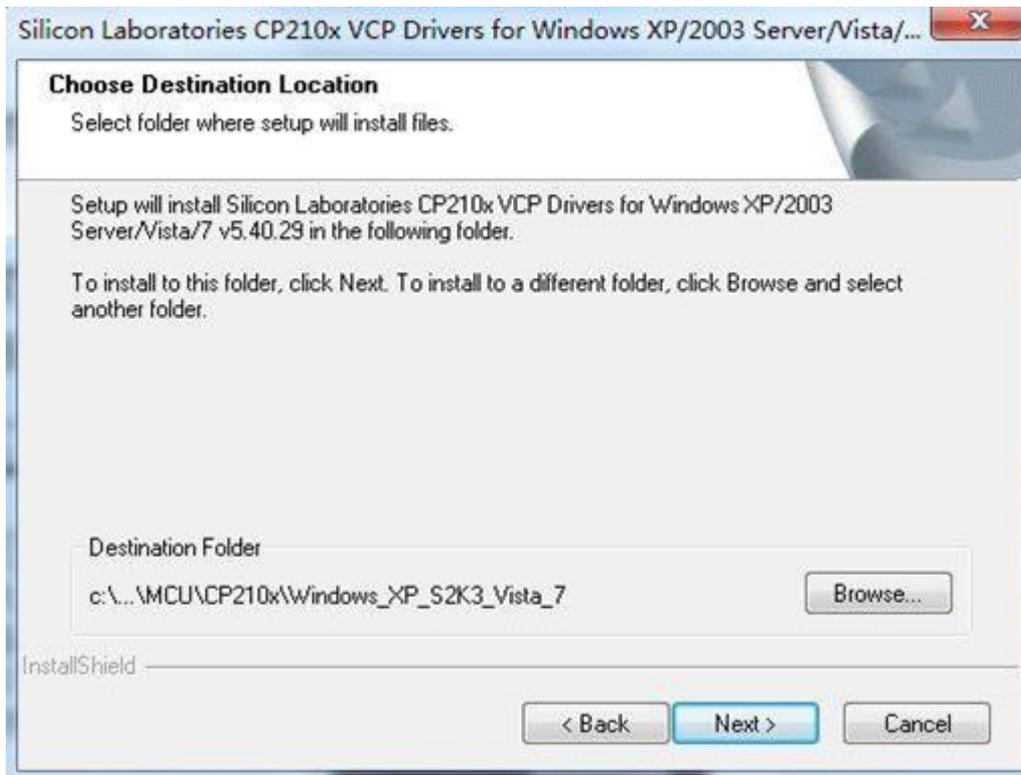
(1) Double click“CP210x_VCP_Win_XP_S2K3_Vista_7.EXE”, install as the default setting. This install program needs to be installed as the administrator. At WIN7 System, please select the icon and right click.



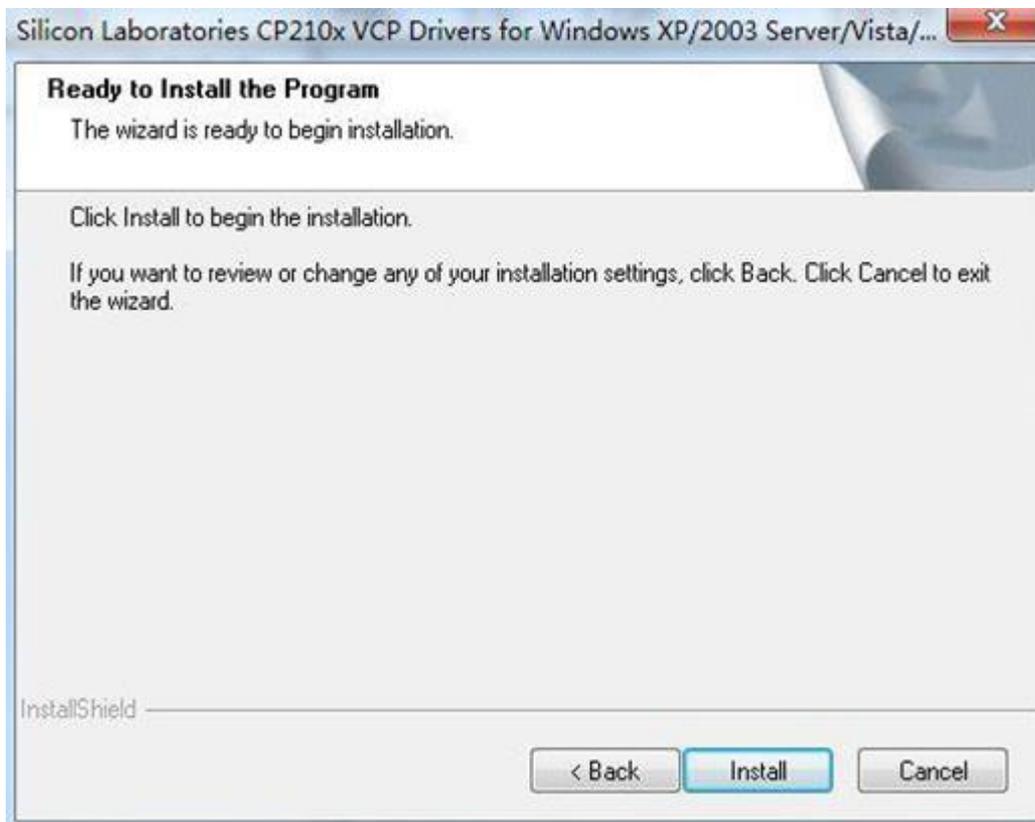
(2) Select as the following, then click “Next>”button.



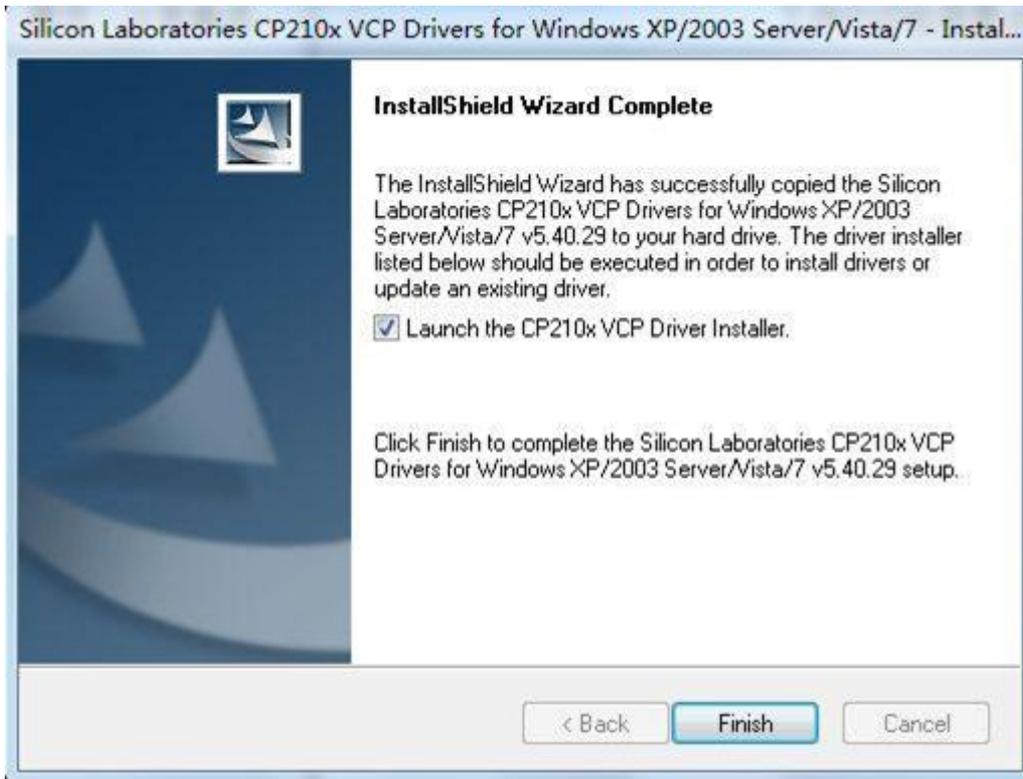
(3) Click “Next>”.



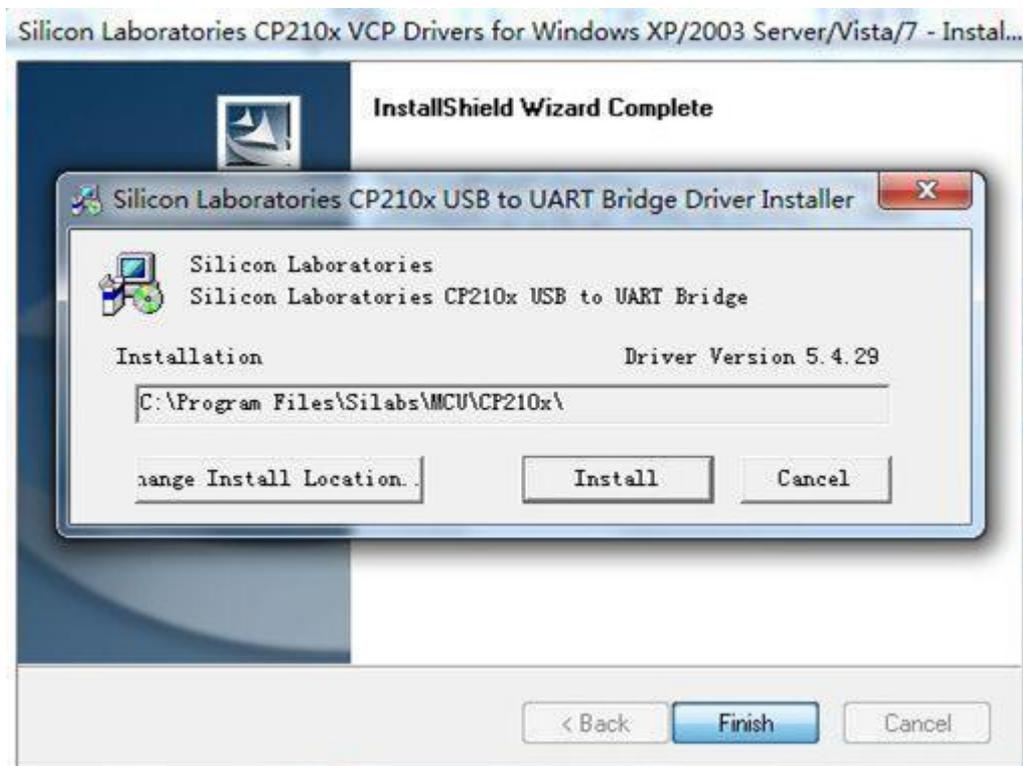
(4) Click “Install” to start installing.



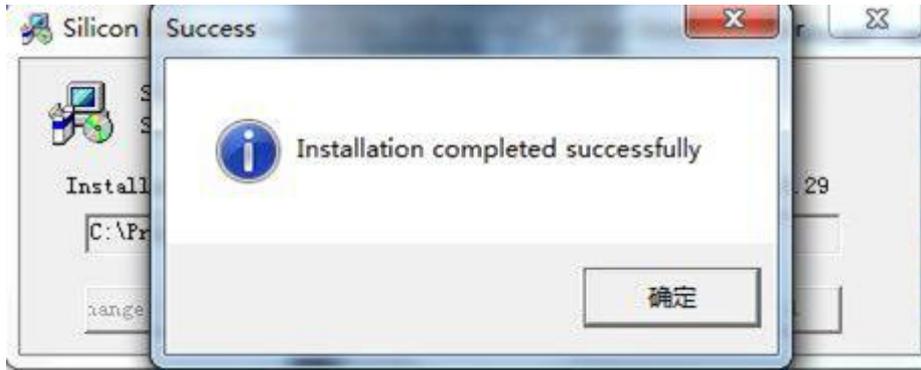
(5) Select as the following, choose the “Launch the CP2102x VCP Driver Installer”, then click “Finish”.



(6) Click the “Install” button, then start to install driver program.



(7) After installing, it will hint “Installation completed successfully” as following.



(8) Connect the data transfer line with the Computer USB Port.

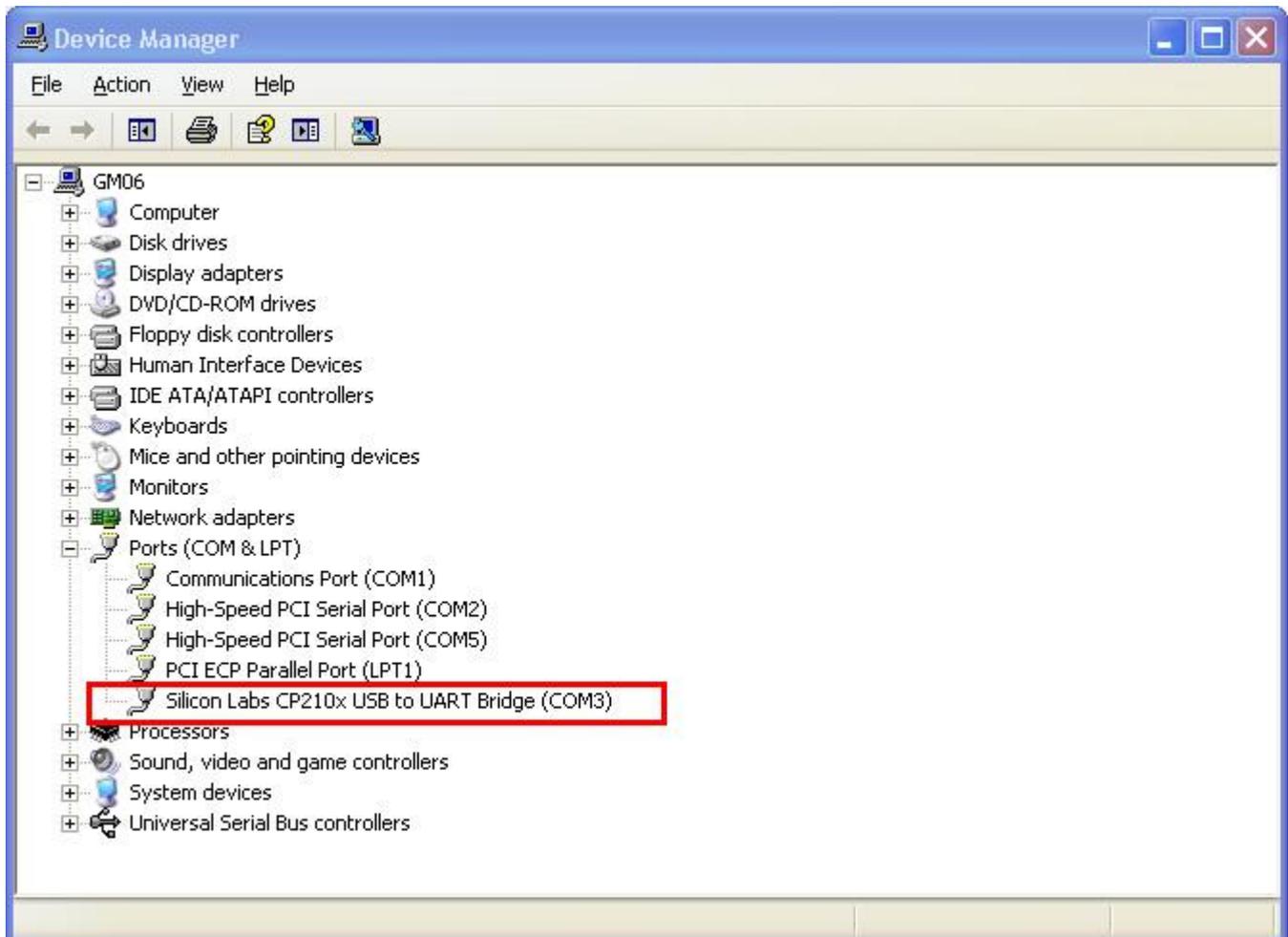


(9) The computer will hints as the following pictures, and inform that the serial port is COM3 (But different computer different COM, COM3 just for example)



(10) Check the COM on PC

Right click "My computer"> Properties->Hardware->Device Manager->Ports



2. Transmit data through RS232C communication line

RS232C communication line:

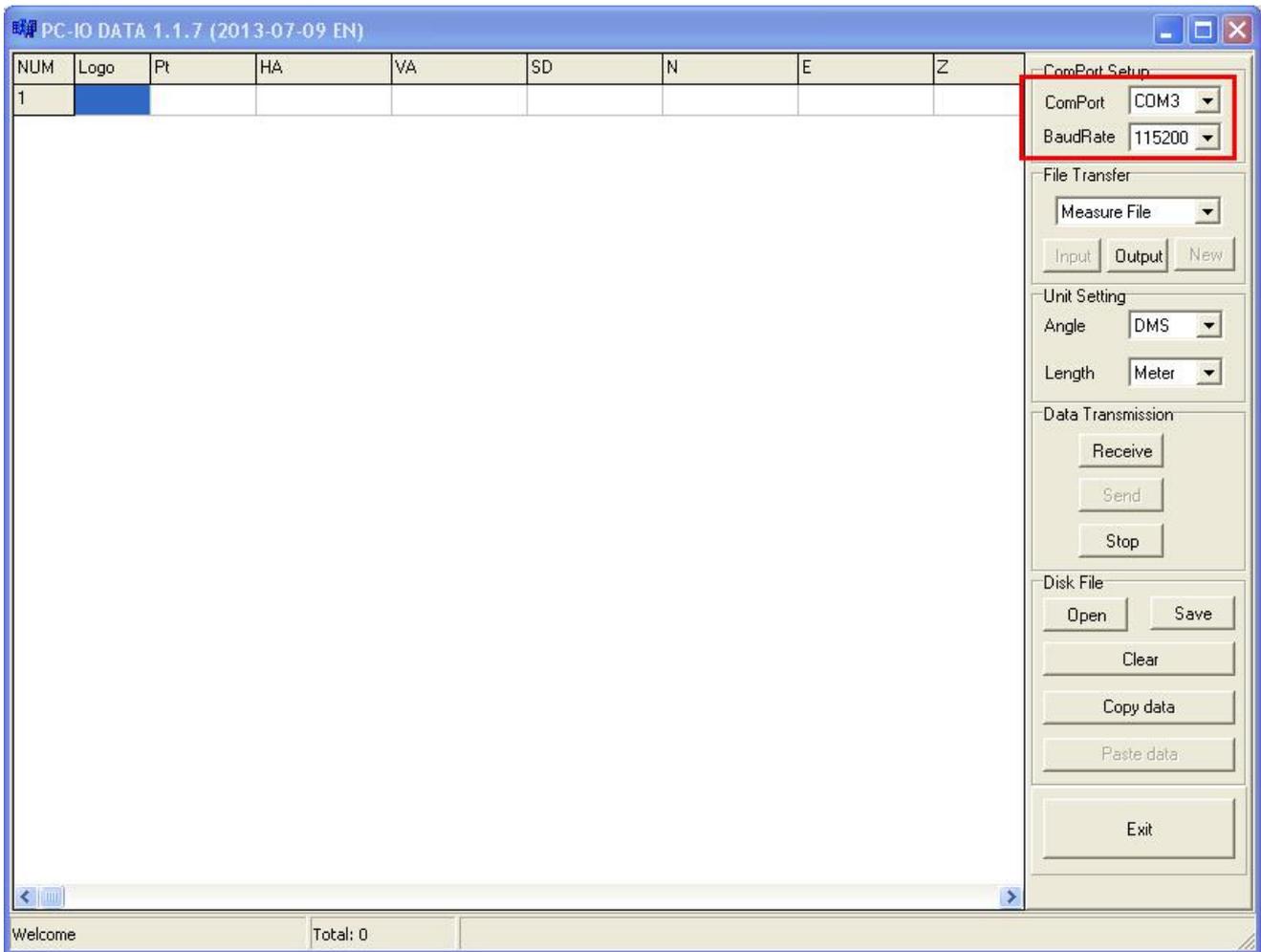


2.1 Export the surveying data (*.MEA) to the computer.

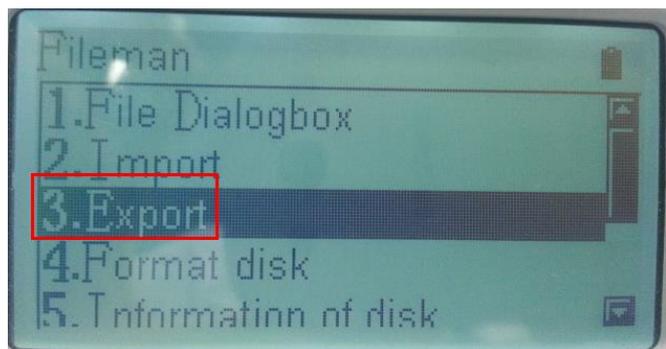
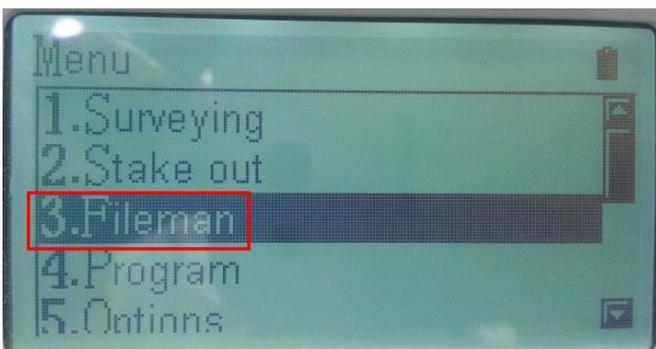
(1) Install the battery of the equipment (Make sure that the capacity of the battery is more than half), then connect the equipment with the transfer line's another end (six pins).



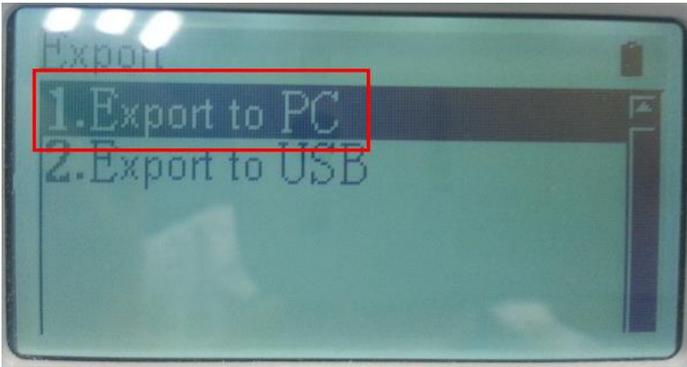
(2) Run the program "PC_IO DATA" as the administrator, and choose the ComPort shown in computer (Here COM3 for example), set the Baud rate (The **default baud rate is 115200**)



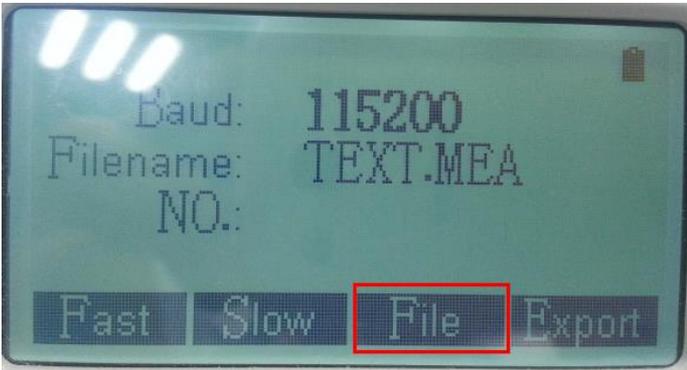
(3) Power on the TS, press "MENU" button ->Fileman->Export(Press "ENT button for enter")



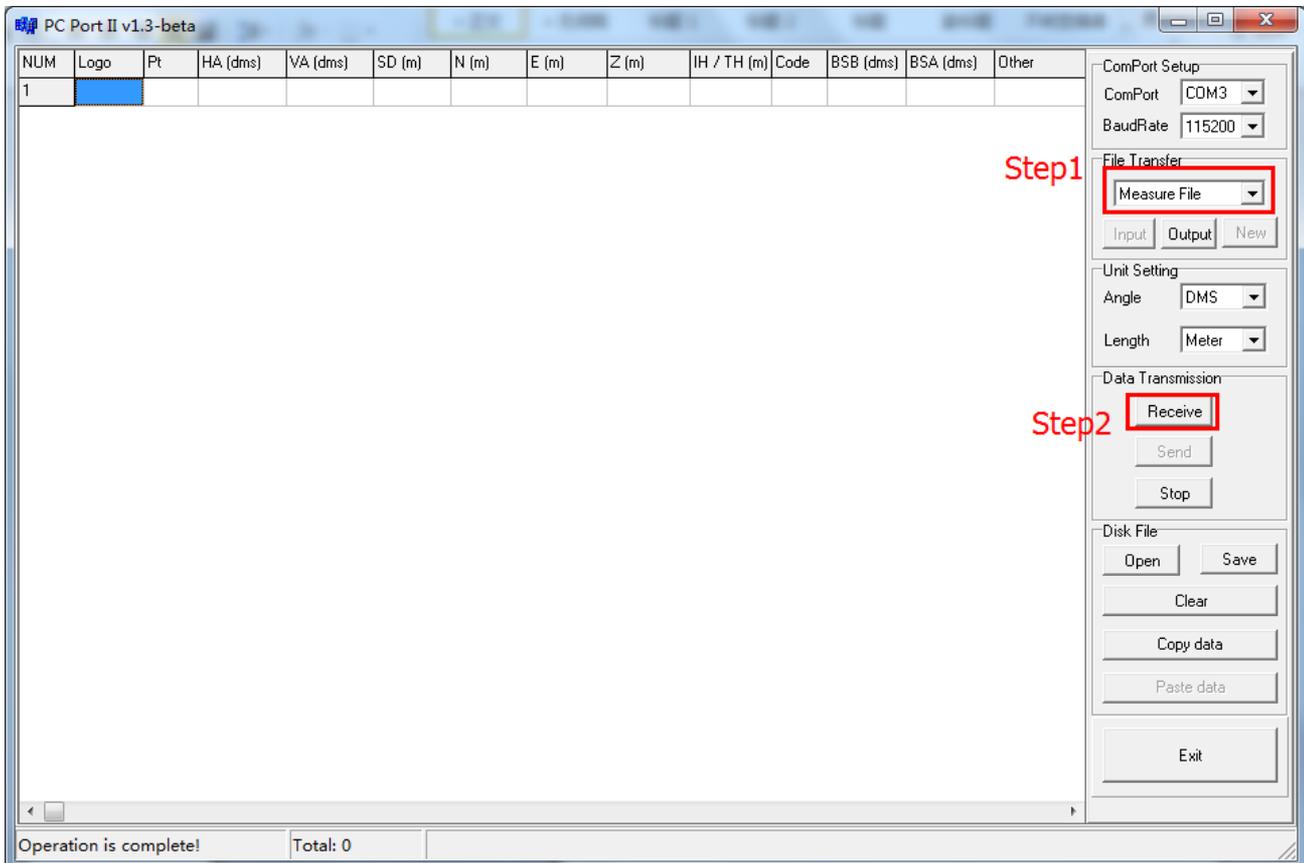
(4) Choose "1.Export to PC"



(5) It exports the current working file when enter this interface, if need to export another one, please choose "File"(Press F3) and choose the one(.NEA format)

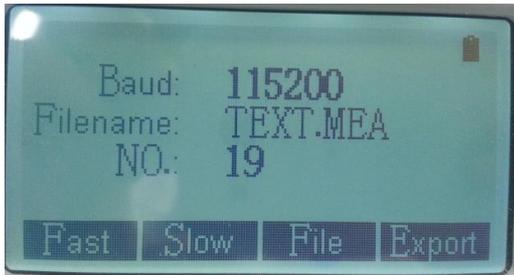


(6) After choosing measurement file, single click "receive" button in PC software to start and ready to transmission.

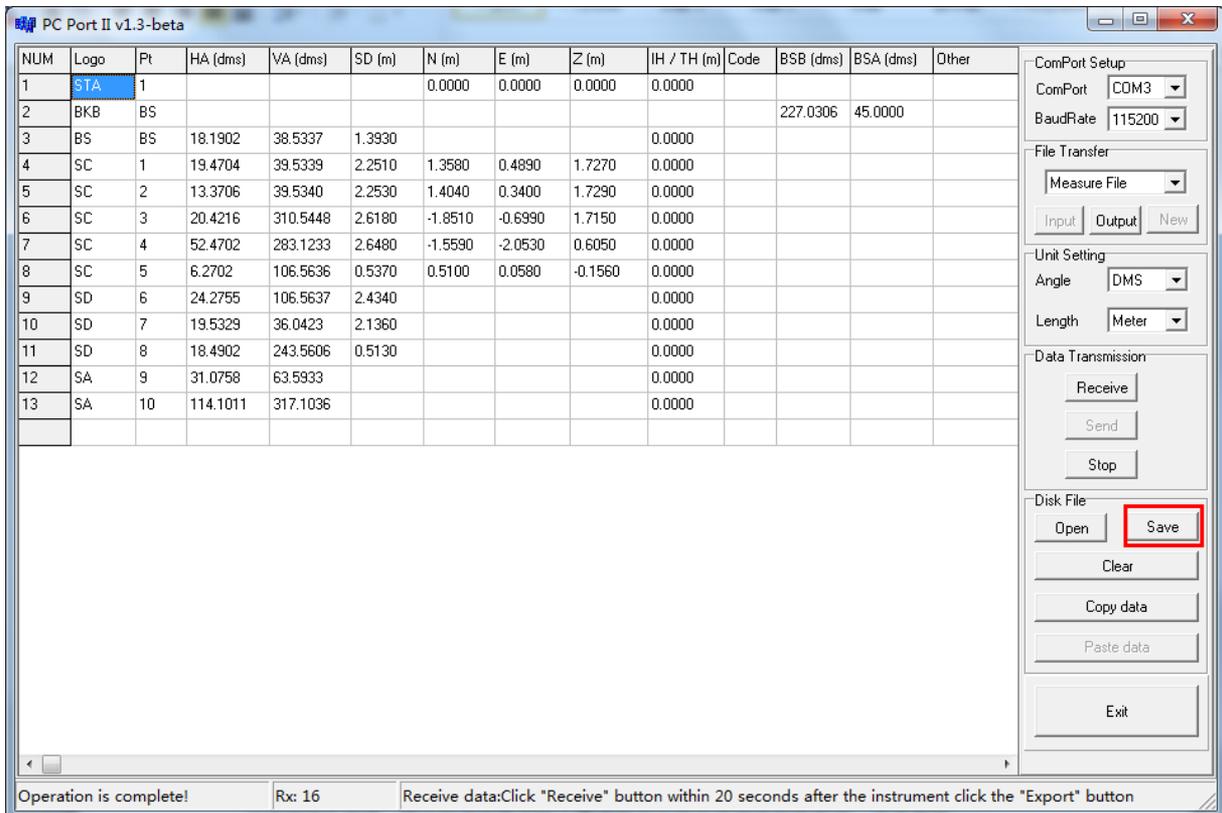


HI-TARGET

(7) Then press "F4" button to do exporting operation, after exporting, it will show you how many data you exporting.

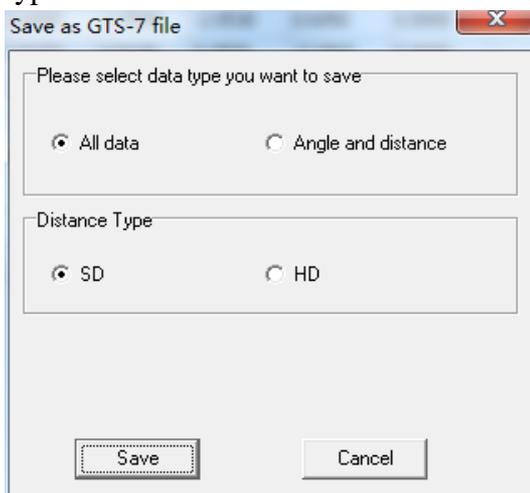


(8) After the PC receives the data, click "Save" button, GTS-7 data for example.



(9) In the "save as" dialog, saving types select the "GTS - 7 files (*.Gt7)", input the file name ->click "save" button.

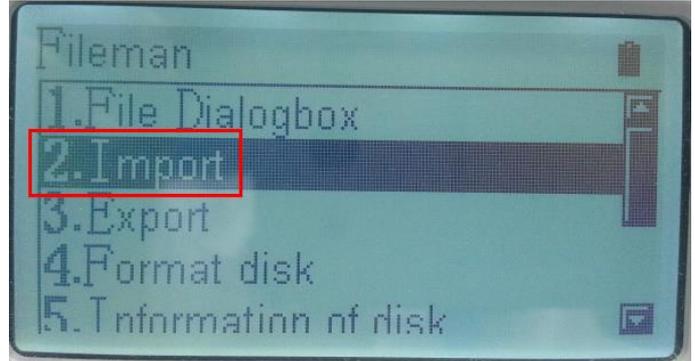
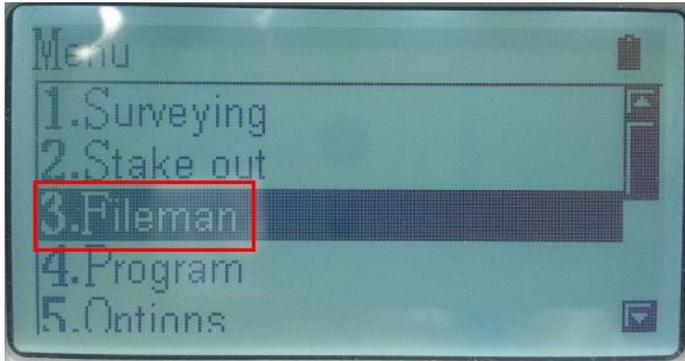
(10) In the window following Pop-up, you can choose to save all the data or corner data only, the distance type can choose horizontal distance and slant distance.



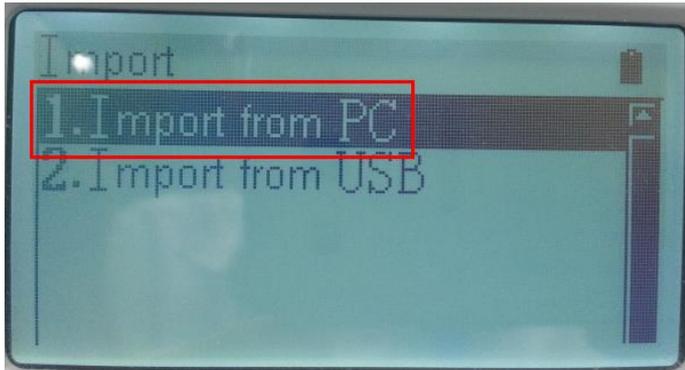
2.2 Import coordinates data into Total station (.COO file)

(1) Connect the TS to the computer, steps as the 1 to 2 steps in 1.2 .

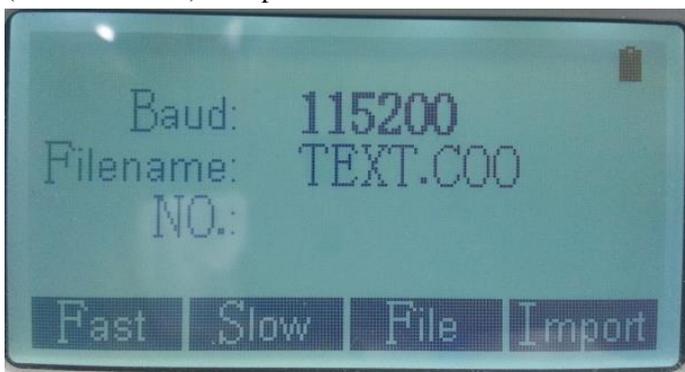
(2) Power on the Total station->press “NMENU” button to enter the MENU->choose “3.Fileman”->“2.Import”



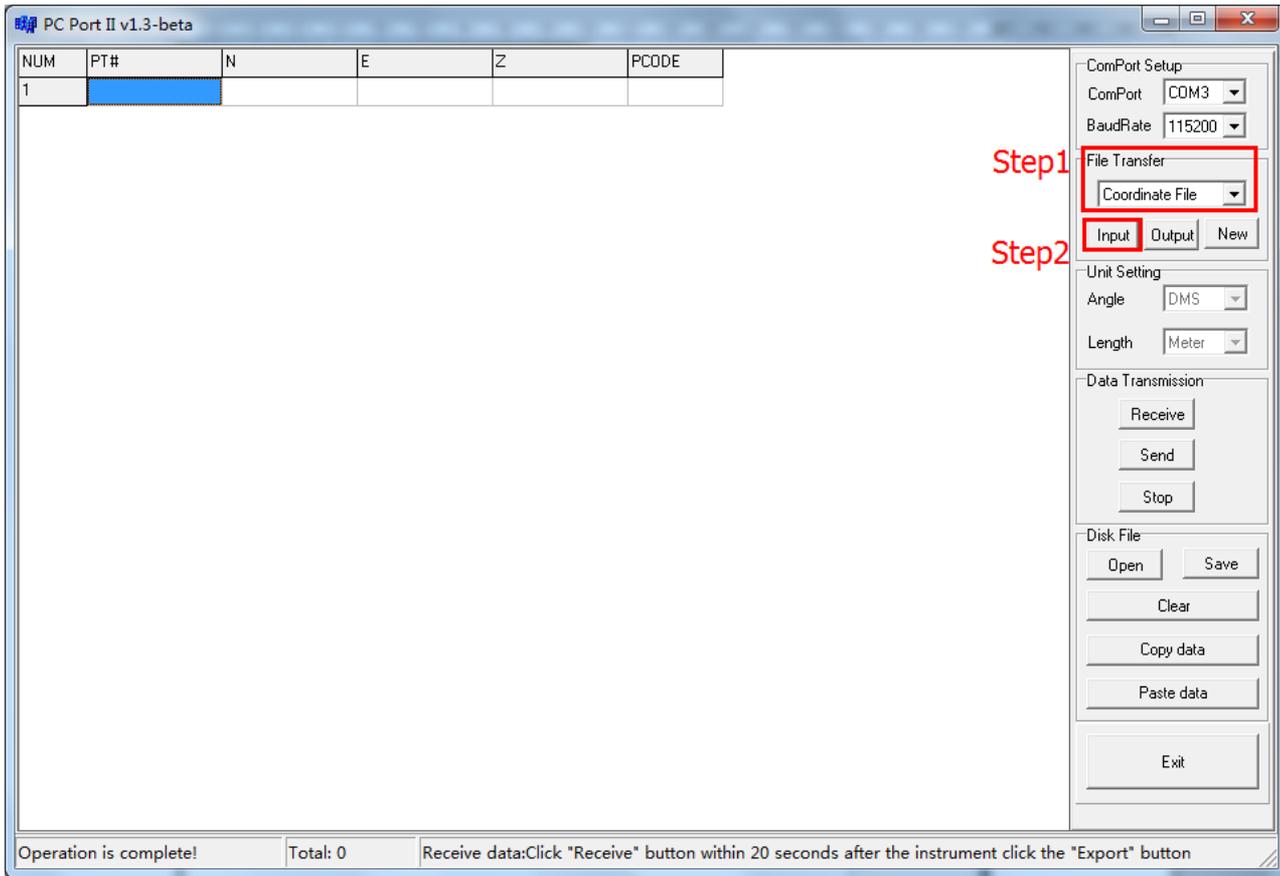
(3) Choose “Import from PC->press “ENT” button for enter.



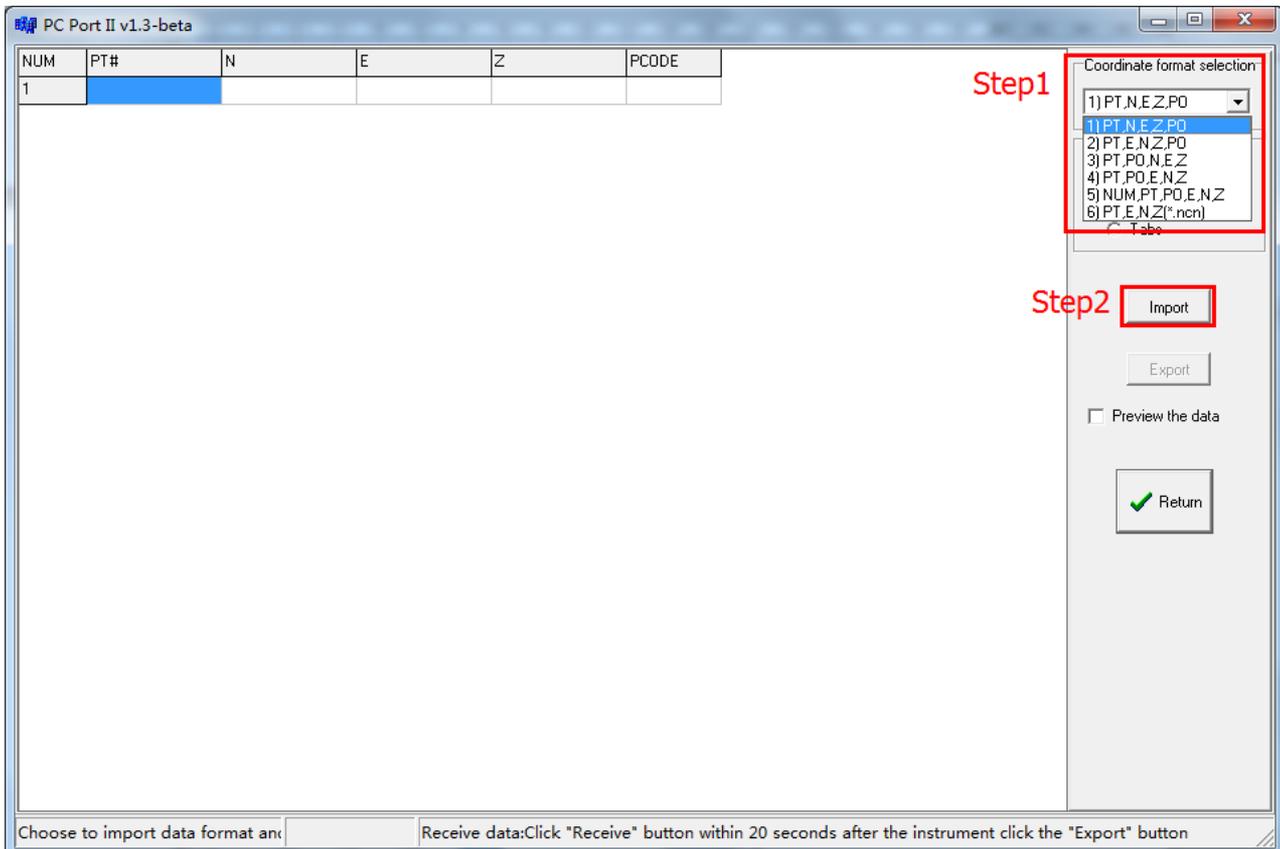
(4) It defaults importing the current file, if need to change, please choose "File" then select or create a new .COO (coordinates file) to export.

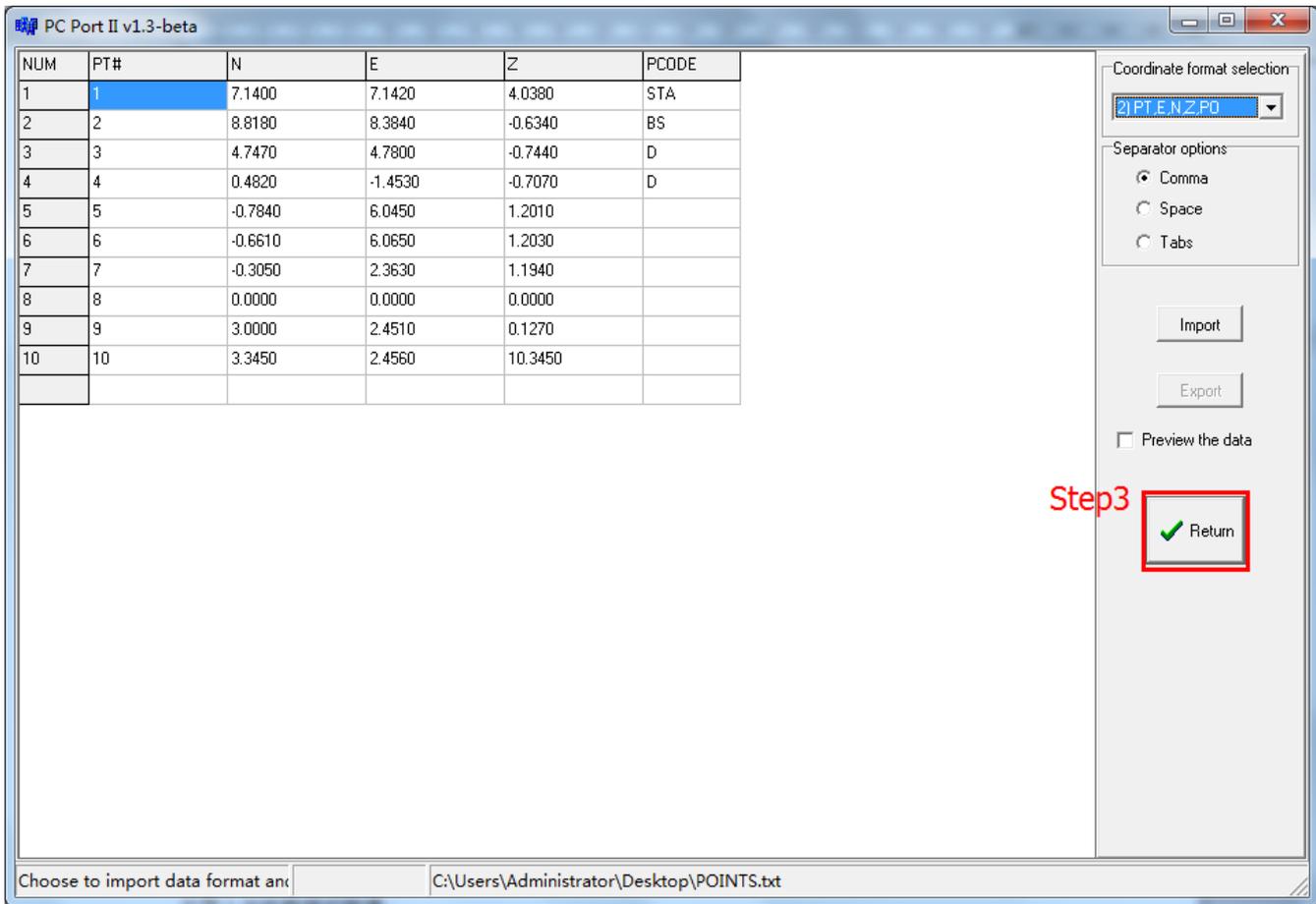


(5) For coordinate data file need to be imported, choose "coordinate File" in the "File Transfer" drop-down options, click "import" below and enter the coordinate import interface.

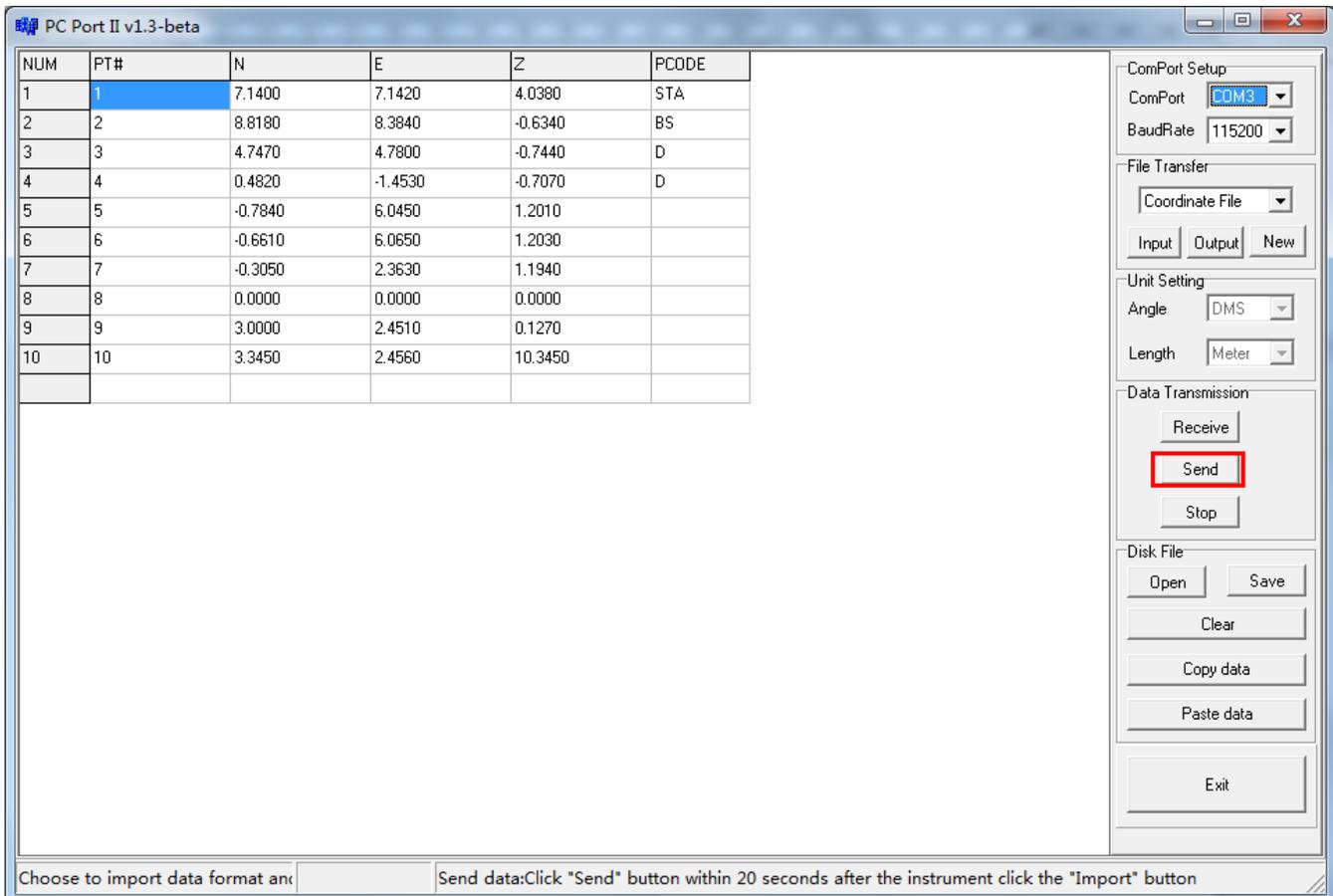


(6) According to existent data format to choose the data coordinate format that imported, click "import" button->choose the coordinate file to import. Click the "back" button after the data appear in the software.





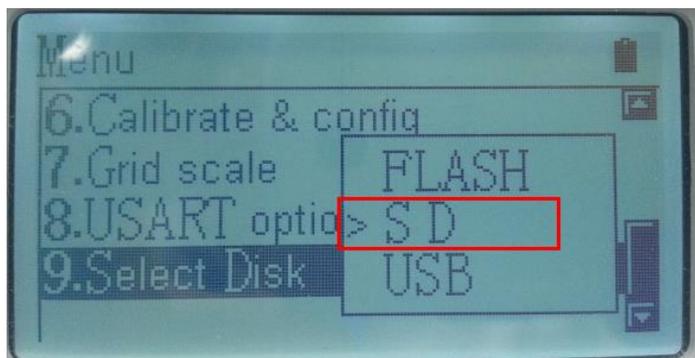
(7) After opening the data, click "send" in computer software-> press "F4" of TS start to import the data, there will be data number if finish the coordinate data completion importing.



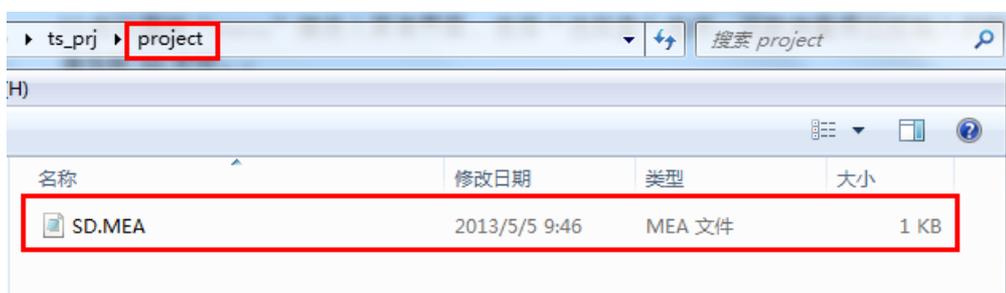
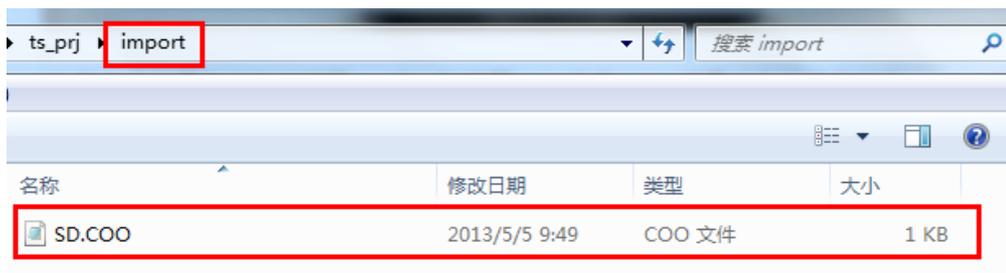
3. Transmit data through the SD card

3.1 Export data saved in SD card to PC

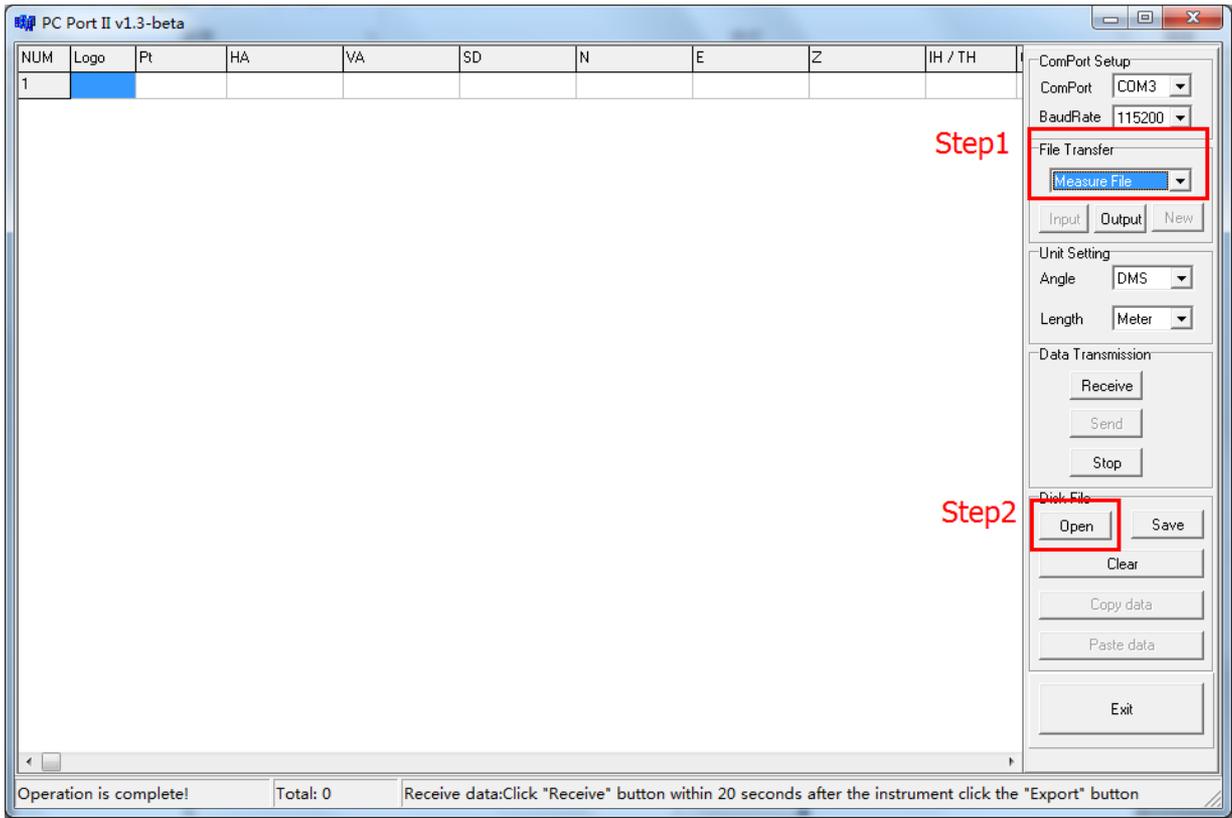
(1) Press “Menu” button ->choose “9.Select Disk”->SD card. **This option is save the measure data and imported data into this SD card.**



(2) Take out the SD card that in the Total station and use a card reader to read it in computer. As the following picture shows, in the SD card, the .COO(coordinate file) saved in the “Import ” folder and the .NEA measure file saved in “Project” folder.



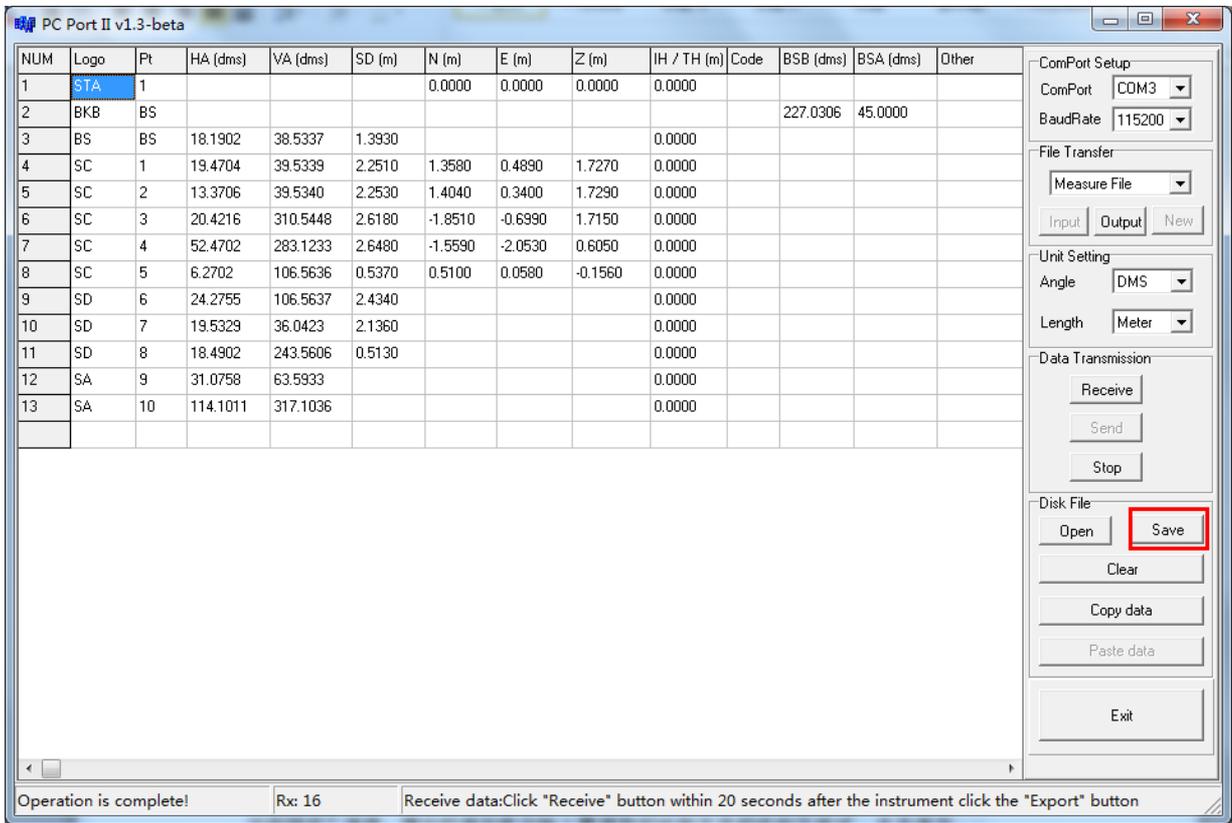
(3) Open **PC-IO Data software** to transfer the .MEA file. Choose “measuring file” in the “File Transfer” status bar (If want to export .COO data please choose “Coordinate File” here.), then click “Open”



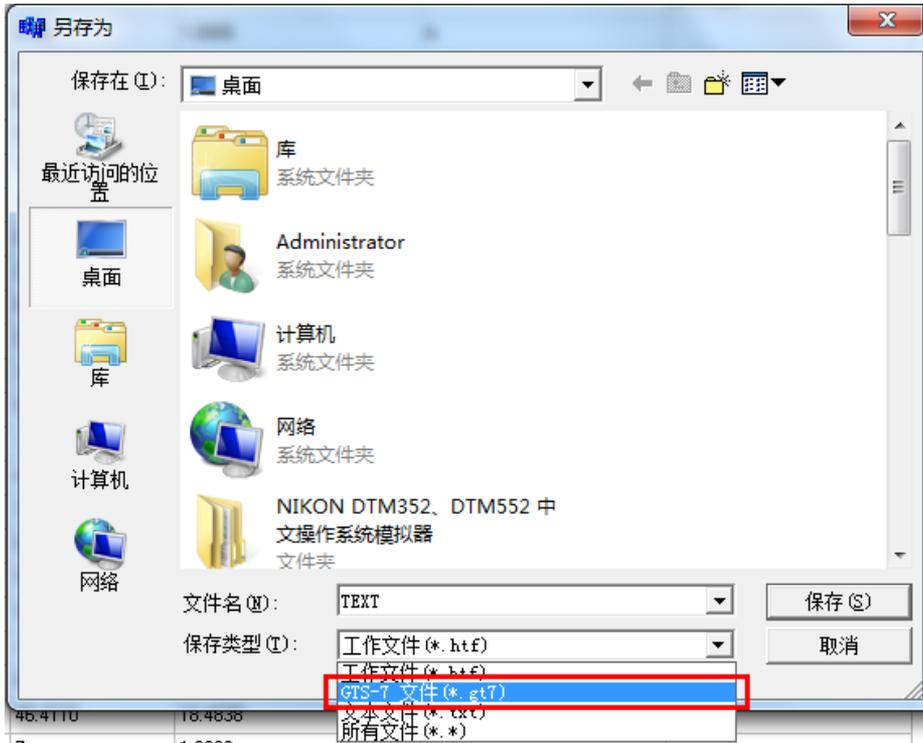
(4) Open .MEA data in SD card.

(5) After opening there will display the number of the received data .

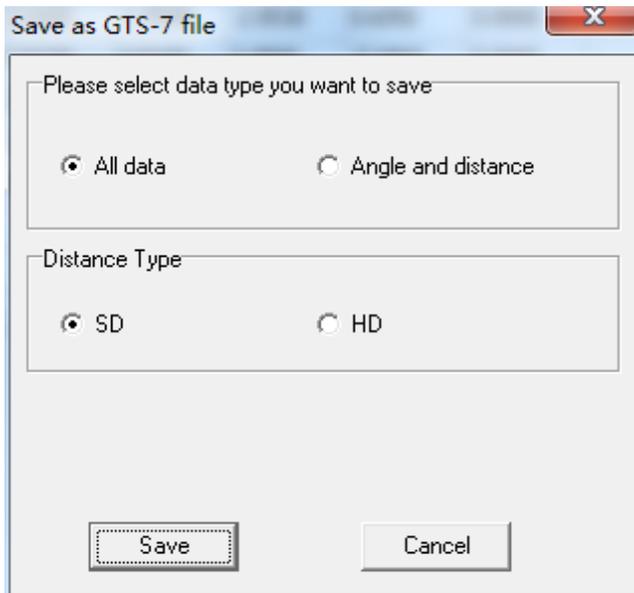
(6) After the PC receiving the data, click "Save" button. **GTS-7** for example.



(7) In the " save as " dialog, saving types select the " GTS - 7 files (*. Gt7) ", input the file name ->click " save " button.



(8) In the window following Pop-up, you can choose to save all the data or corner data only , the distance type can choose horizontal distance and slant distance.

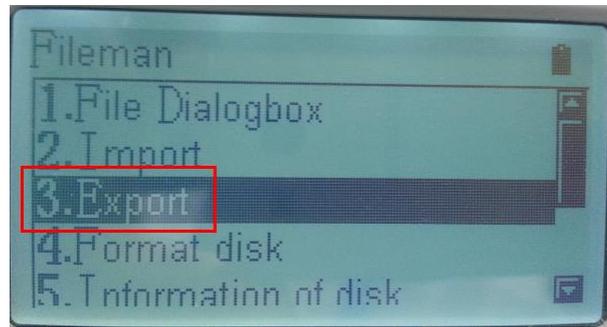
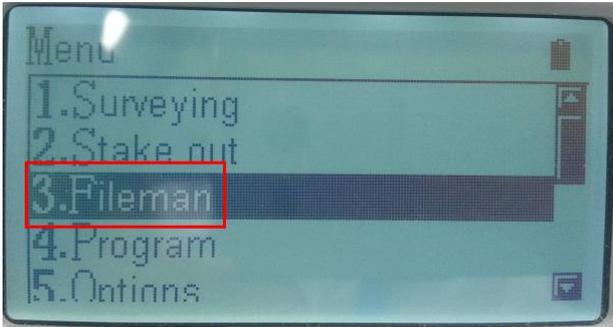


4. Transfer data though USB disk

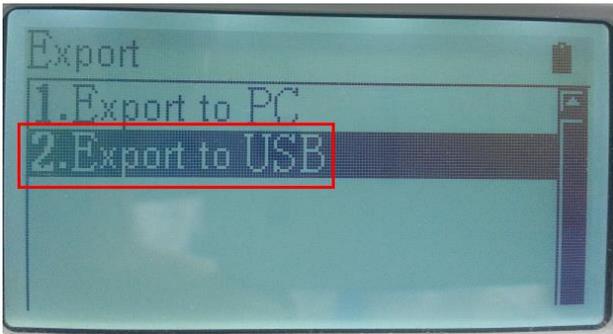
4.1 Export measuring data file(.MEA data) in TS to the USB disk

(1) Insert USB disk into the TS->Power on.

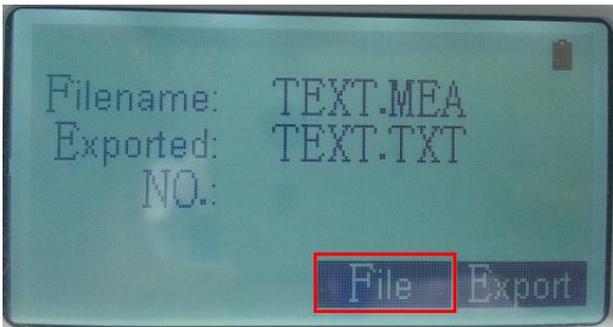
(2) Press "MENU" button to enter the MENU-> press "3" button to choose "3. Fileman"->Click "3.Export".



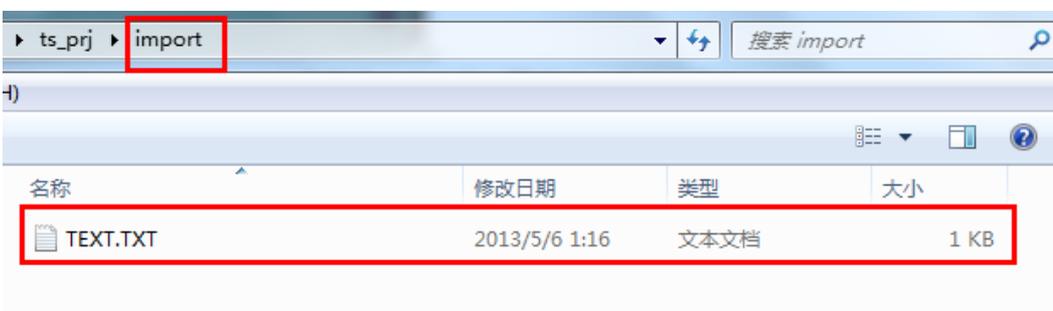
(3) Choose "Export to USB"



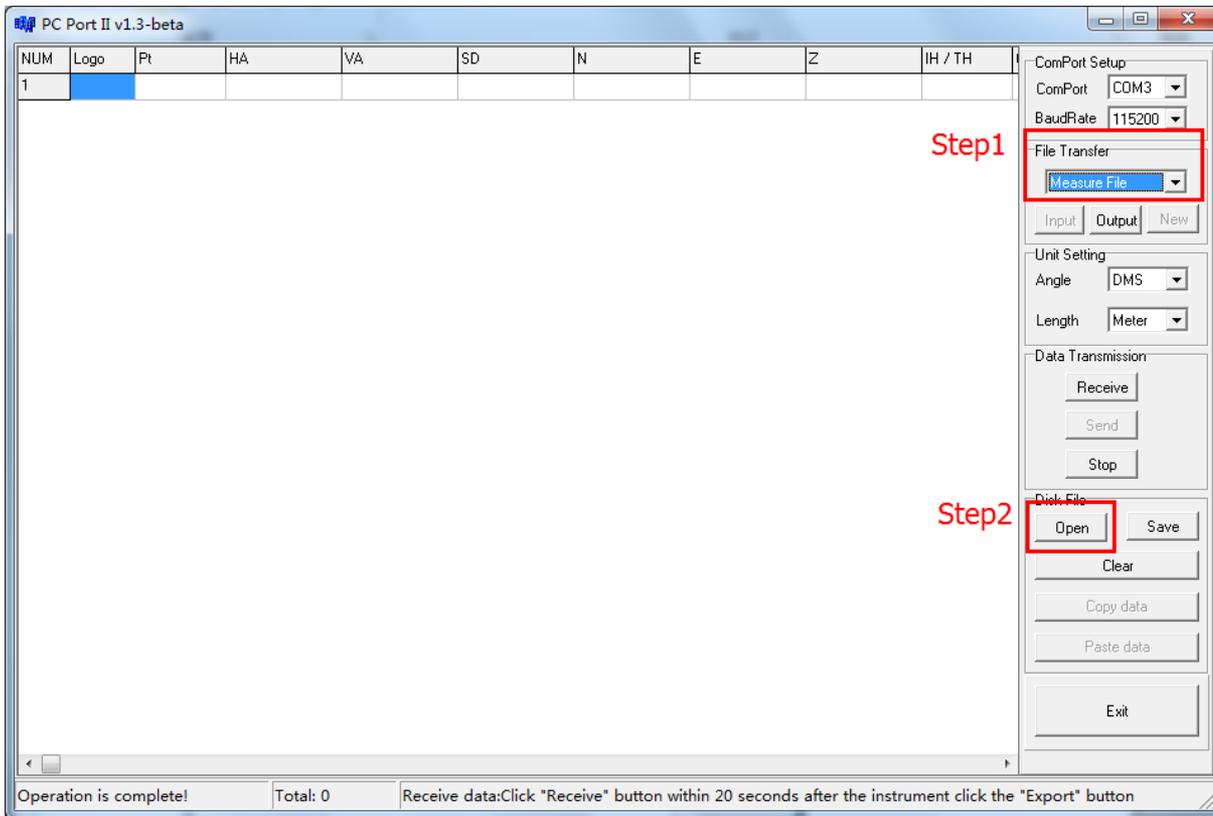
(4)After entering the interface, choose"File" to choose the data file that need to exported, then press "F4" for exporting.



(5) Turn to the PC, open the USB disk on your computer, as it show, the exported working file is saved in the "Import" folder.

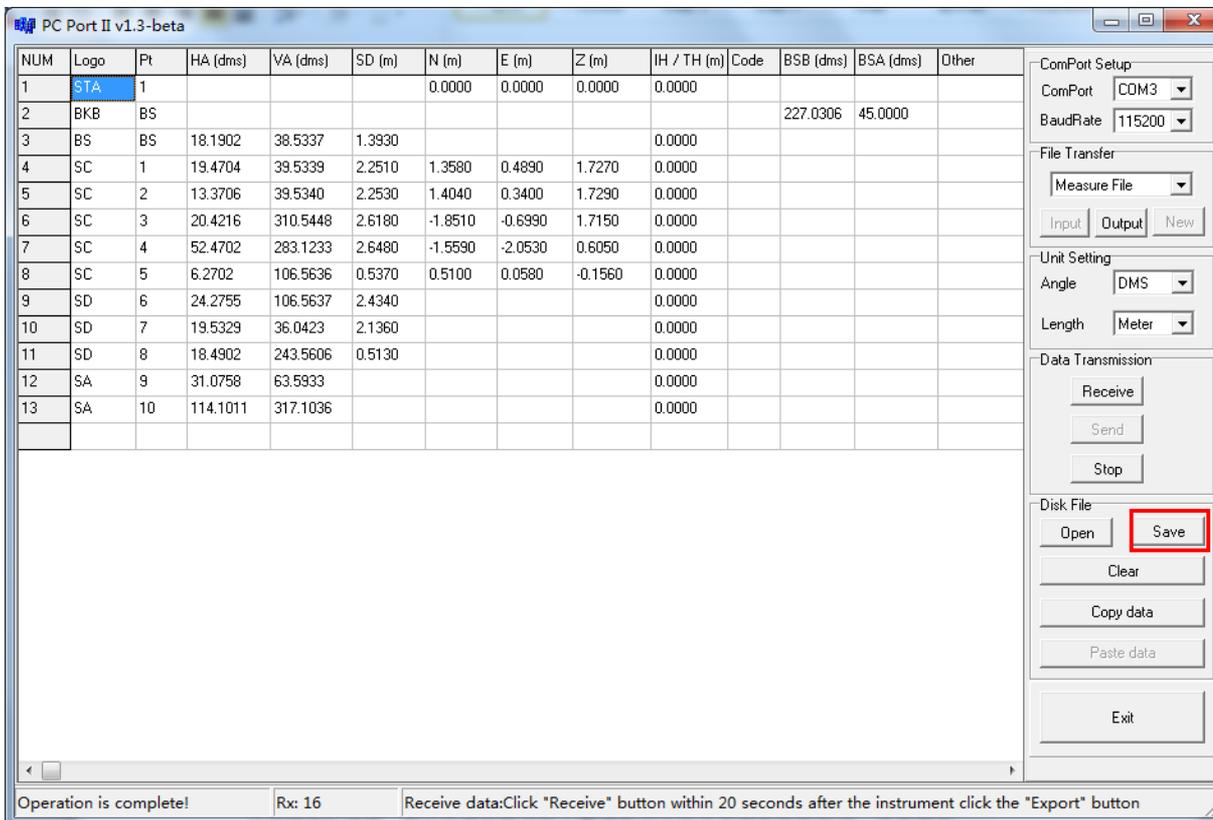


(6) Open the **PC-IO Data software** Choose “measuring file” in the “File Transfer” status bar, click “Open”.

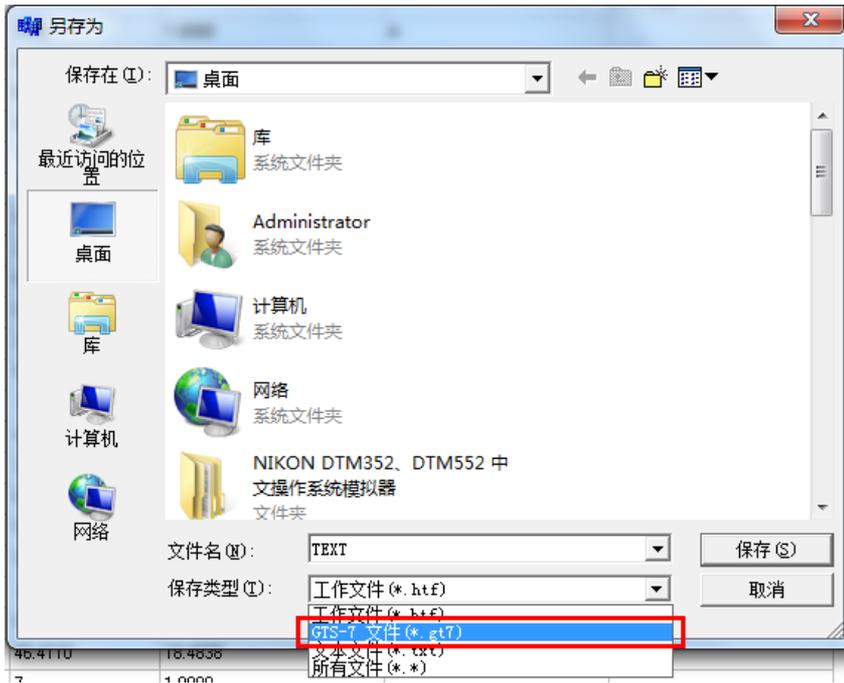


(7) In the pop-up dialog box, select the data that need to be exported from the USB disk.

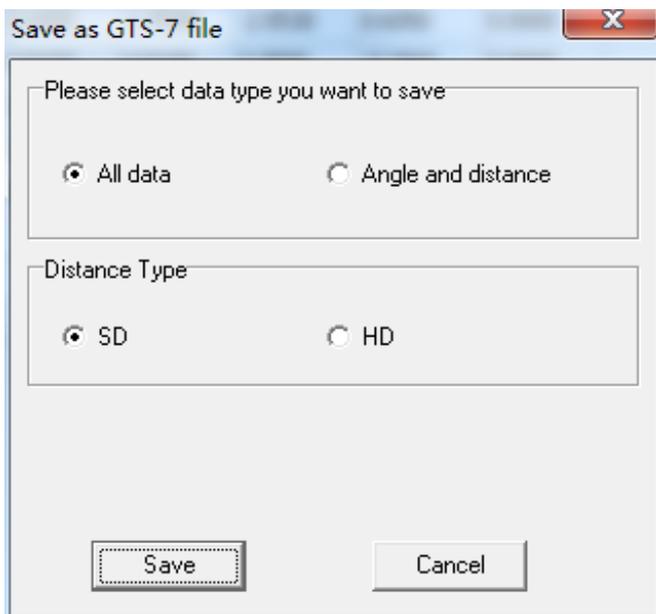
(8) After the PC receiving the file, click “save” button, here use the GTS-7 data file for example.



(9) You can change the saving path and input file name, **the file type must choose “*.gt7” format.**



(10) In the window following Pop-up, you can choose to save all the data or corner data only , the distance type can choose horizontal distance and slant distance.

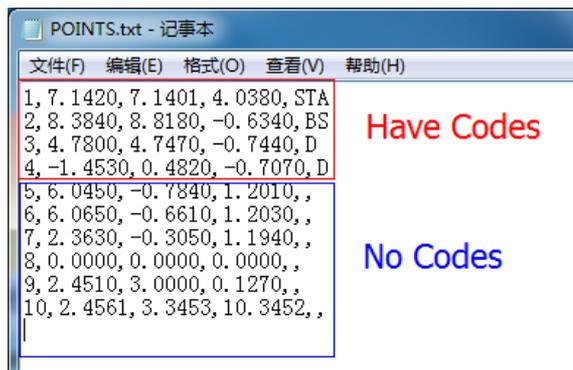


4.2 Import data into .COO file (Coordinate file) by USB disk

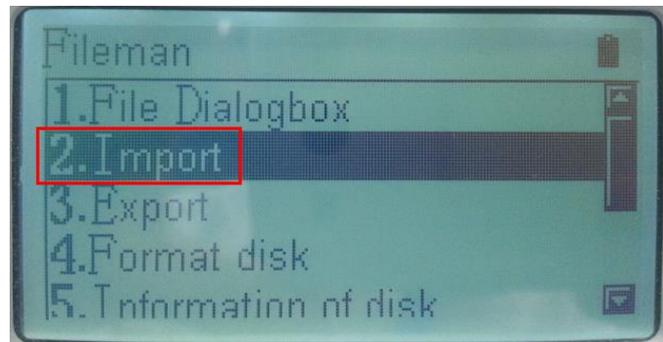
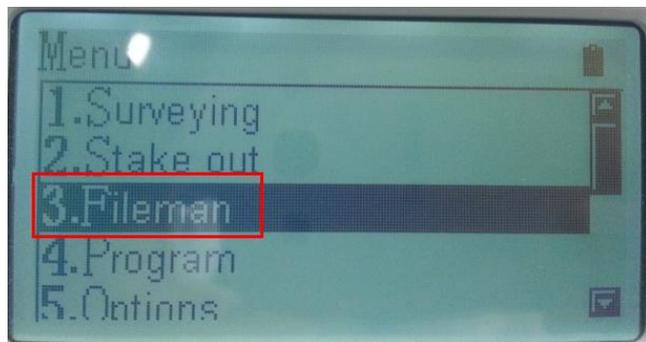
(1) Data in USB disk must be .txt format and left in the "Import" folder. ("Import" is the subfolder of "ts_prj")

The data format is: Name,E,N,Z,code(If no coding, data format is: Name,E,N,Z,,)

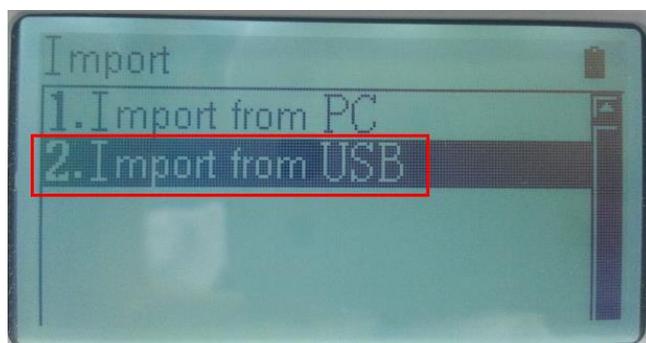
Note: At the last row of the data must add one line, otherwise the imported data will miss the last piece of data!



(2) Insert the USB disk in your TS, press "MENU" to enter the menu->press "3" button to choose "3.Fileman"->"2.Import".

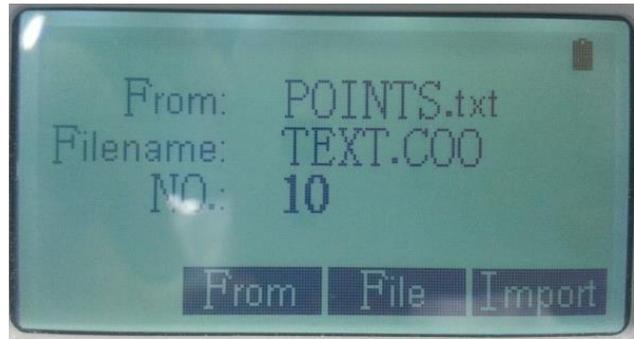
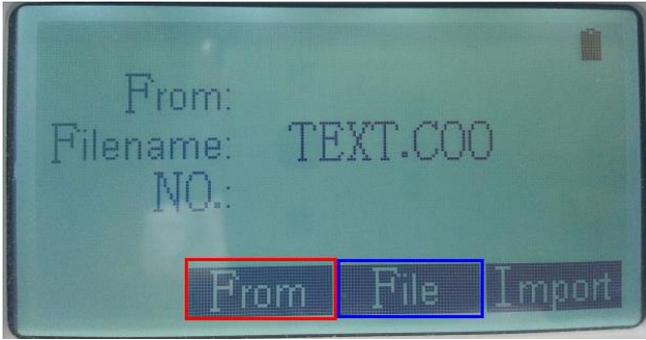


(3) Choose "Import from USB".



HITARGET

(4) After entering the interface, press "From" to choose the file need to be imported in the USB disk-> press "File" for changing another files->press "F4" for import.

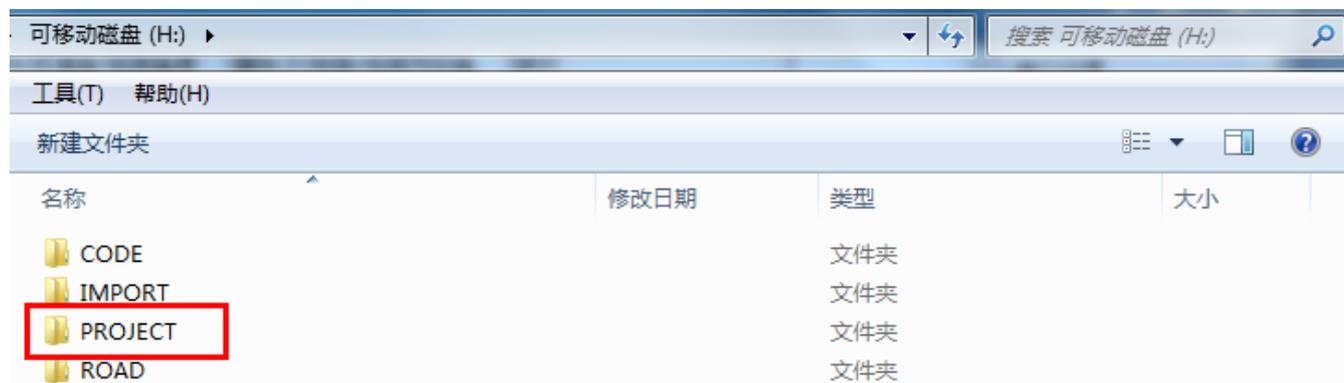
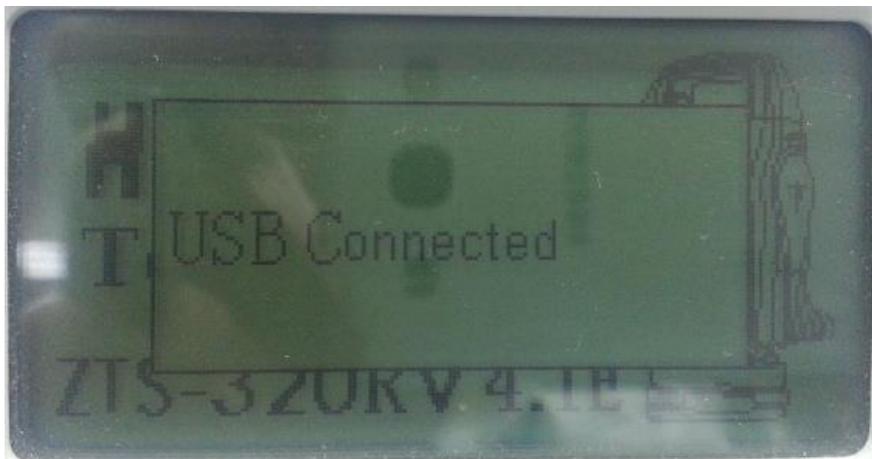


5. Transfer data through MiniUSB communication cable

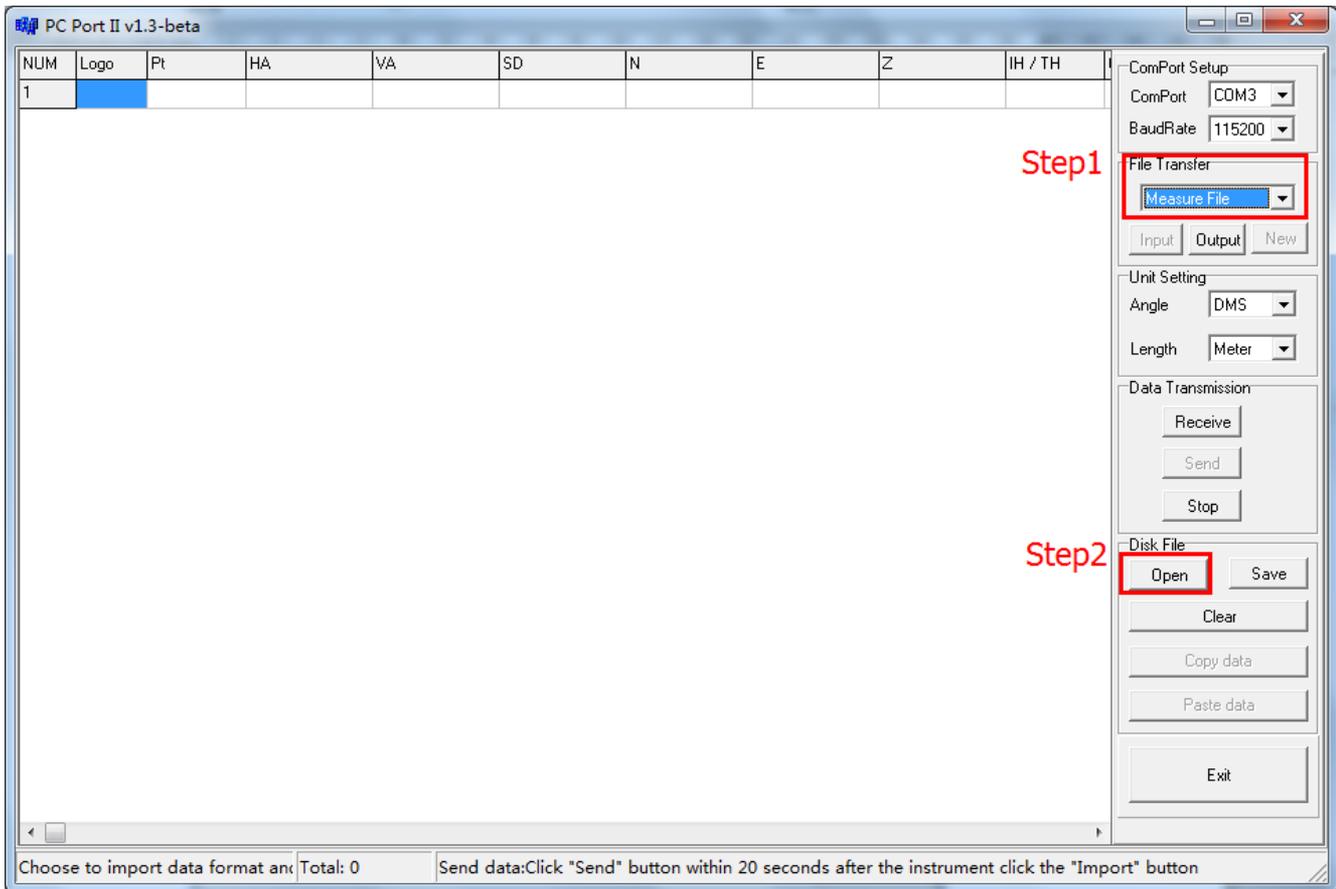
(1) Pack the batteries in the TS (make sure the power is more than half), connect the TS with PC by Mini-USB cable.



(2) Power on the TS (you will see the following interface)->Then turn to your PC there will display mobile disk inserted->open the mobile disk and copy data. Such as TEXT, MEA. Stored in the PROJECT folder.

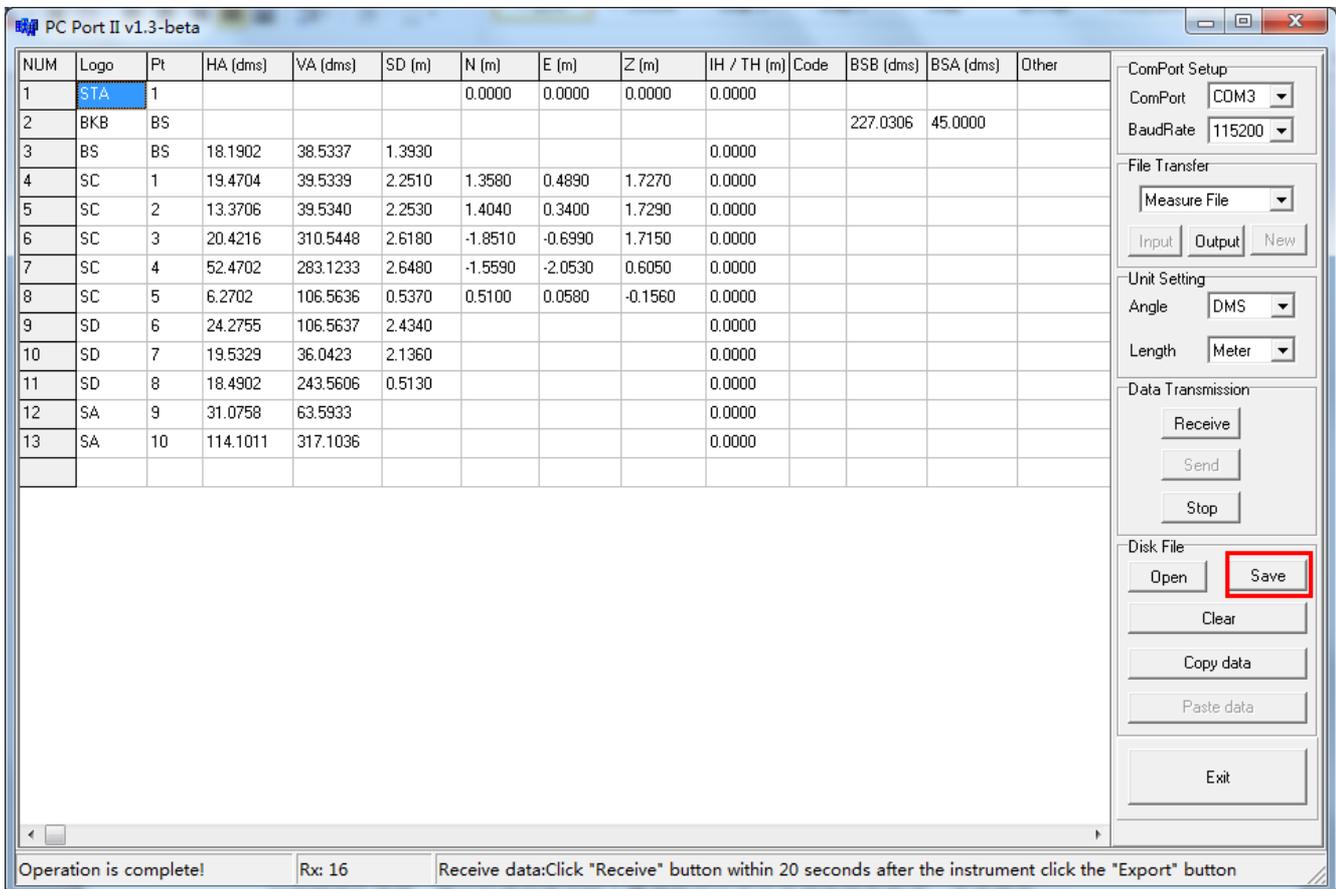


(3) Open the **PC-IO Data software** Choose “measuring file” in the “File Transfer” status bar, click “Open”.

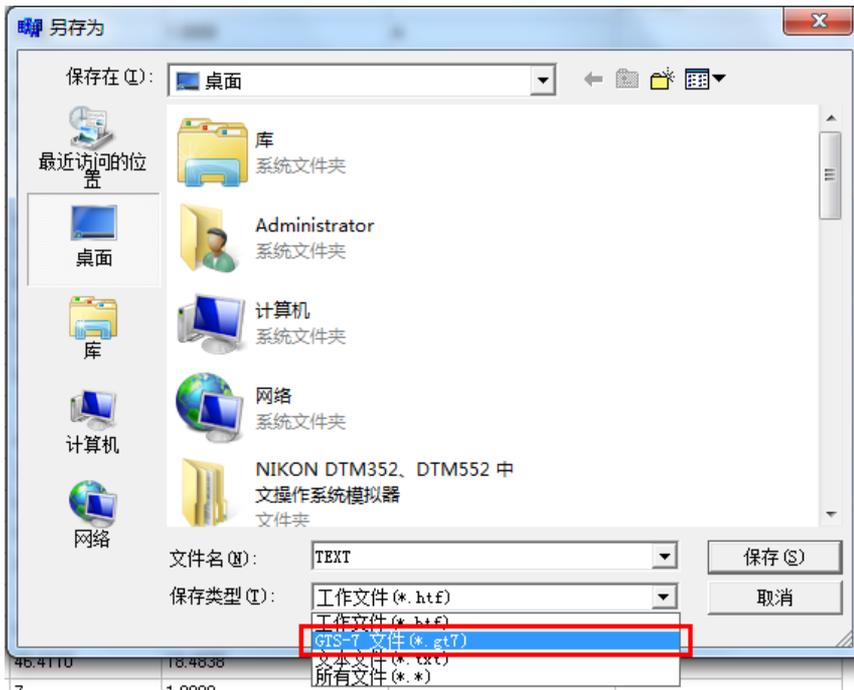


(4) In the pop-up dialog box, select the data that need copied.

(5) After the PC receiving the file, click “save” button, here use the GTS-7 data file for example.



(6) You can change the saving path and input file name, the **file type must choose “*.gt7” format.**



(7) In the window following Pop-up, you can choose to save all the data or corner data only, the distance type can choose horizontal distance and slant distance.

