Total Station Transmission

Software Manual
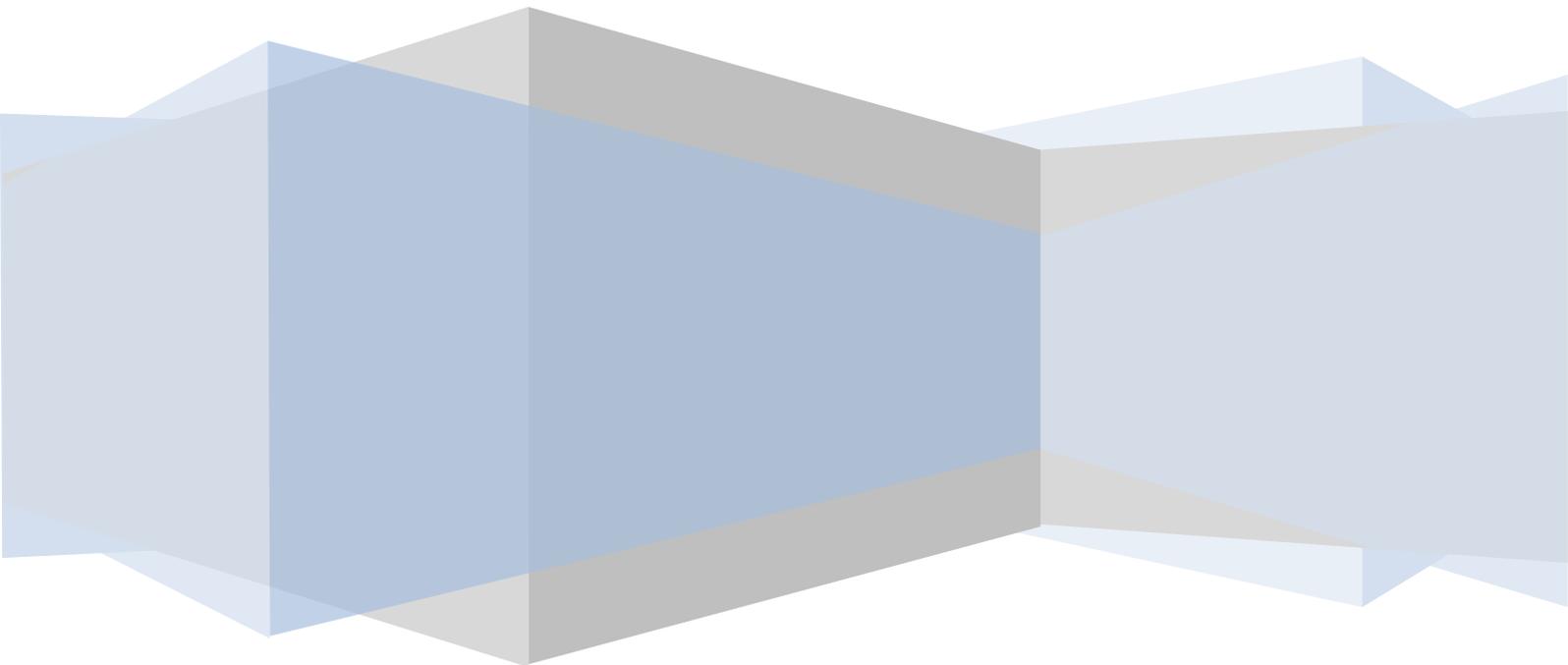
# Contents

# 1. Installation of Data Cable Driver

The following steps will show how to install the device under Windows 7 (64-bit) OS as this is the most inquired driver installation support received by Prolific. The procedures are the same and straight forward for all other supported Windows operating system versions.

(1) Power on your computer and boot to Windows. Run or double-click the PL-2303 Windows Driver Installer program.

(2) The InstallShield Wizard will be displayed to inform you that the PL-2303 USB-to-Serial driver will be installed on your computer. Click Next to continue.
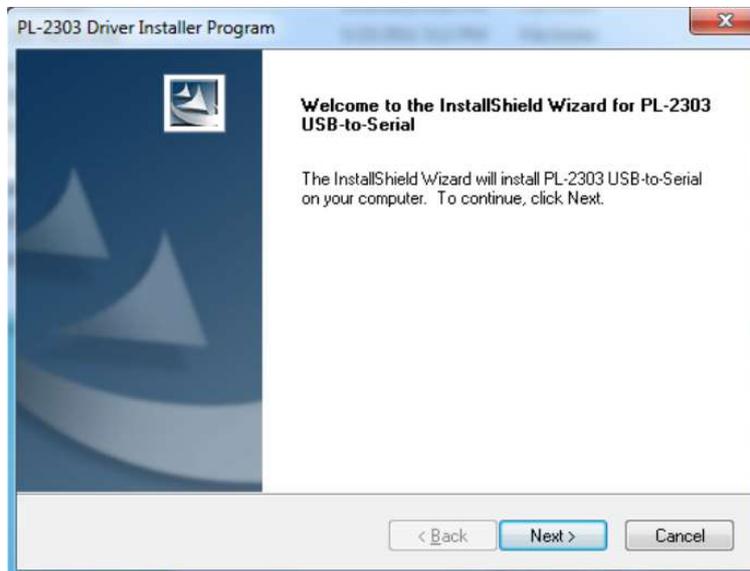
(3) The PL-2303 Driver Installer program will then start to install the drivers needed.
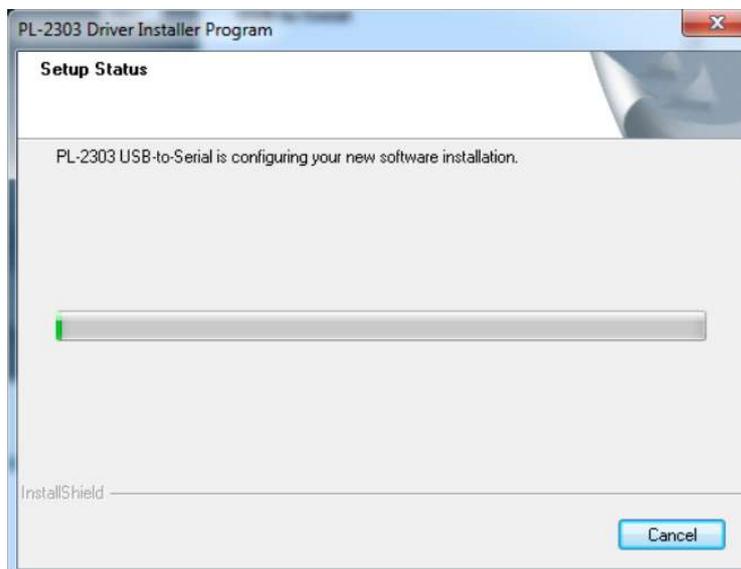
(4) Click the Finish button to close the InstallShield program. If you have plugged the cable into the PC while running the setup installation, please unplug and replug the cable for the system to detect the device.
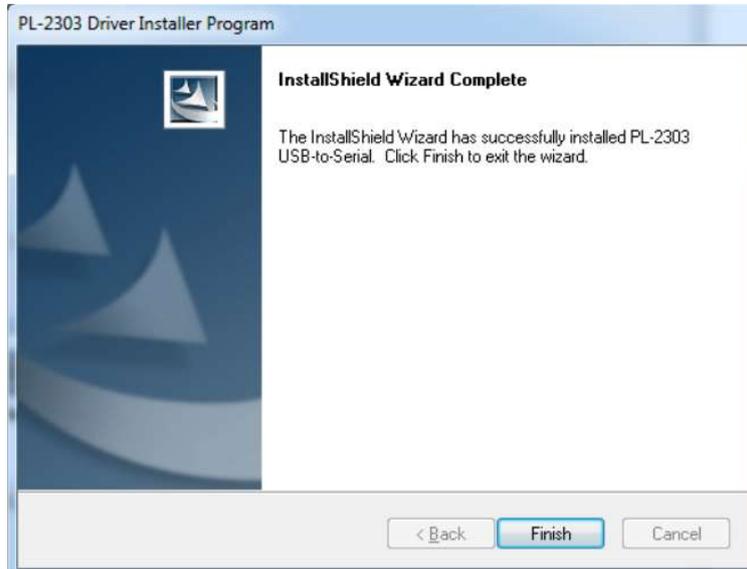
(5) Plug in the USB to Serial adapter to the PC USB port. Windows should detect the driver as Prolific USB-to-Serial Comm Port. Go to Device Manager and check for the "Prolific USB-to-Serial Comm Port" device and the COM port number assigned by Windows.
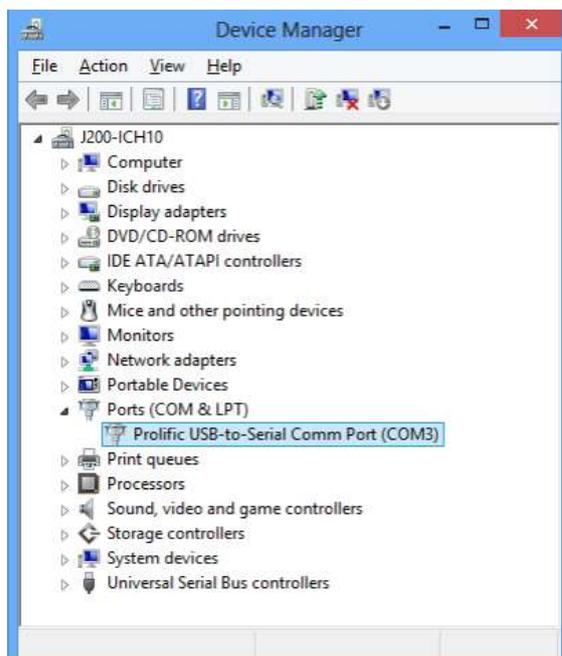
2.Data transmission software instructions

2.1 Export the Measuring Point to the computer

(1)Open the software,select the correct COM and baud rate.
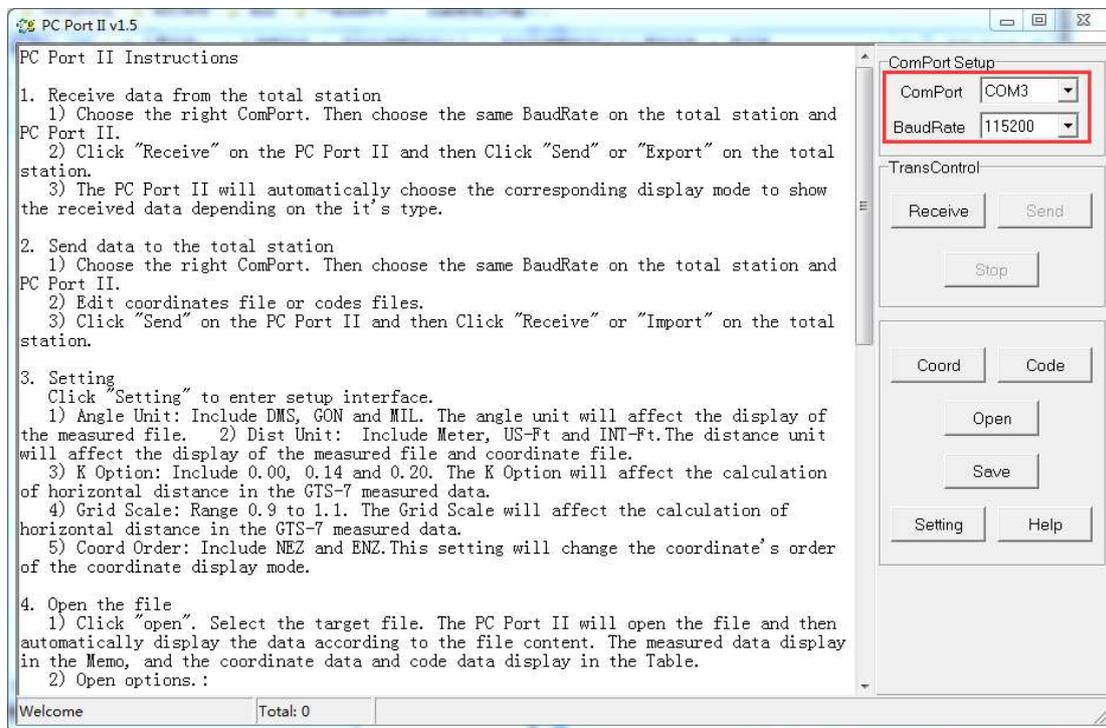
(2)Select the data type and transmission mode.Power on→Select "Tranfer"→Press 【F2】to select "Export Date"→Press【F1】to select "Job Data".Data Type set to "Meas.PT", Mode set to "RS232C".

(3)Select file.Press[Job]→Select file which you want to export→Press[OK].

(4)Back to the transmission interface.

```
          [Job Data]

Job      ;                    1
Data Type:           Meas.PT ◀▶
Mode     :           RS232C  ◀▶


  Job                      Export
```
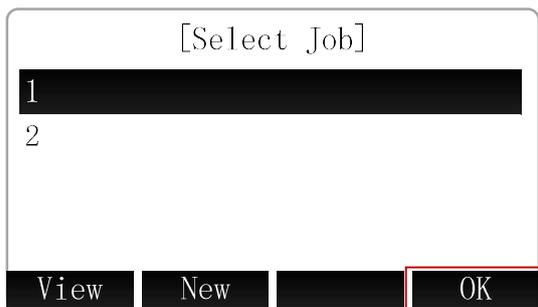
(5)Receive the data in PC.Click【Receive】in the software.

(6)Press【F4】in the Total station in 20s.

```
          [Job Data]

Job      ;                    1
Data Type:           Meas.PT ◀▶
Mode     :           RS232C  ◀▶


  Job                      Export
```
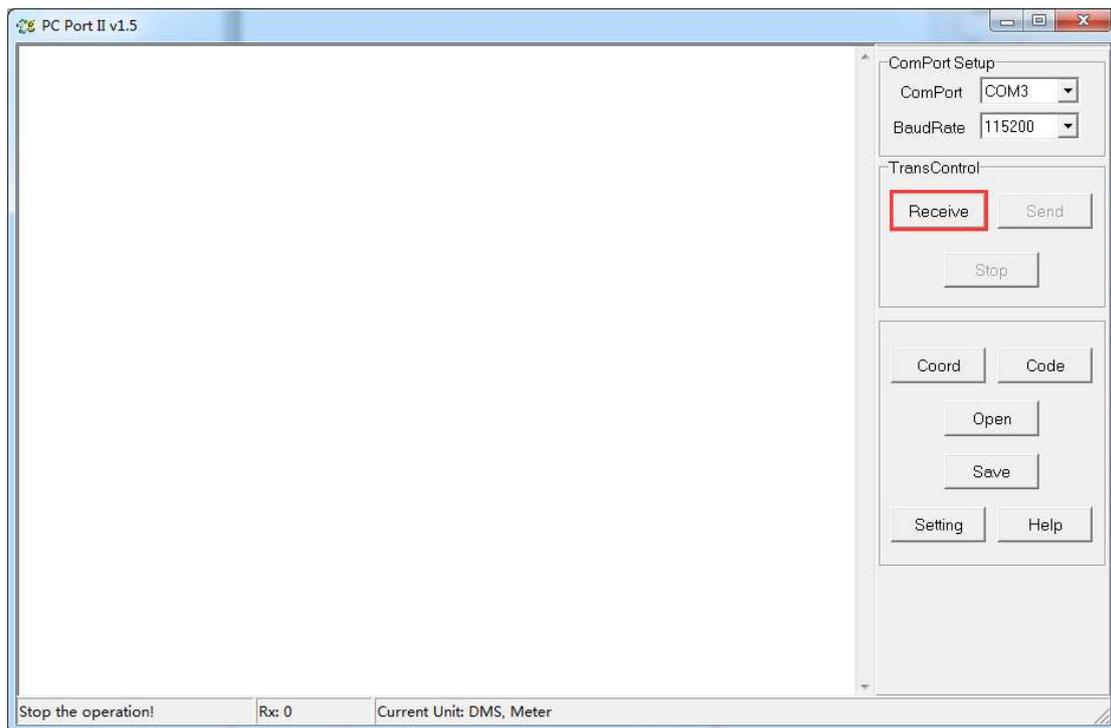
(7)Then the software will receive the data.
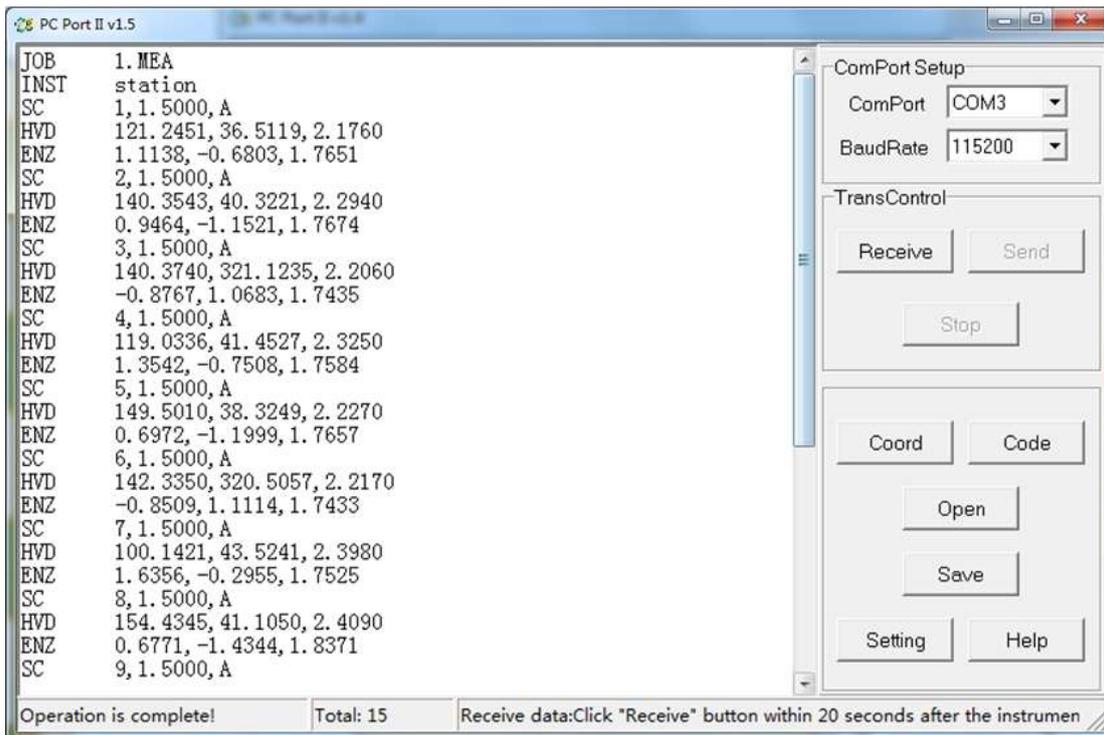
(8)Click【Coord】to view coordinates.
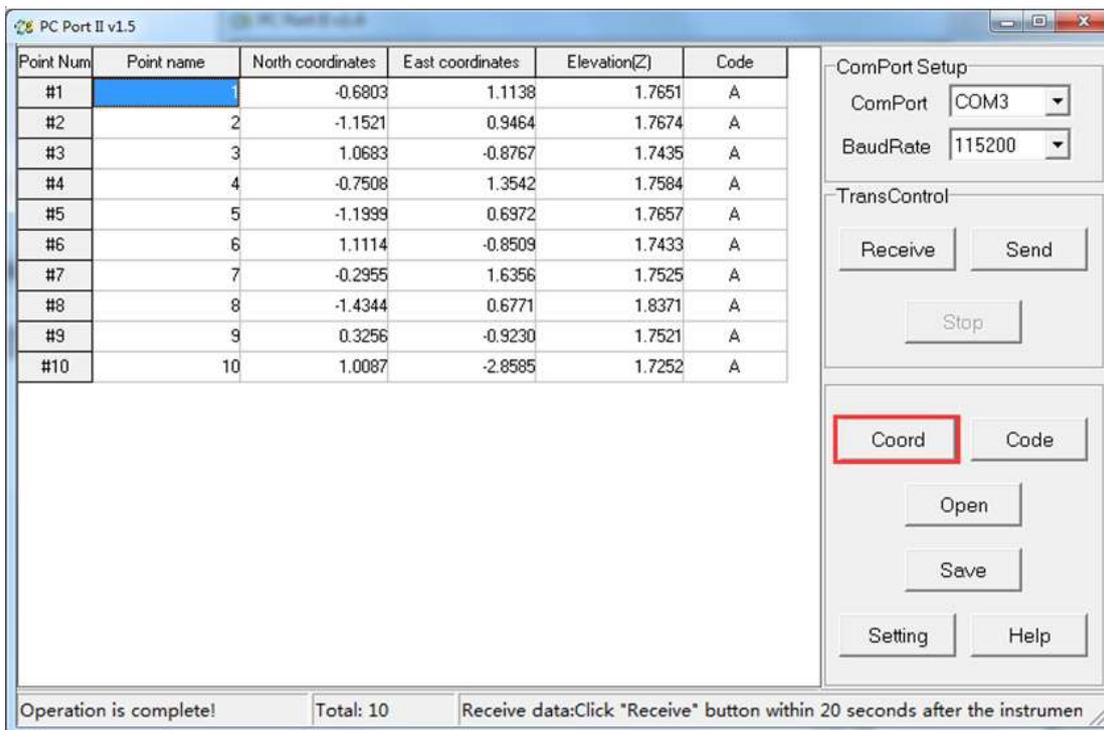
（9）Save the data.You can choose the data format to save.

CASS coordinate file（*.dat）

DXF coordinate file（*.dxf）

CASS coordinate file（*.txt）

CASS coordinate file（*.csv）

GTS-7 coordinate file（*.txt）
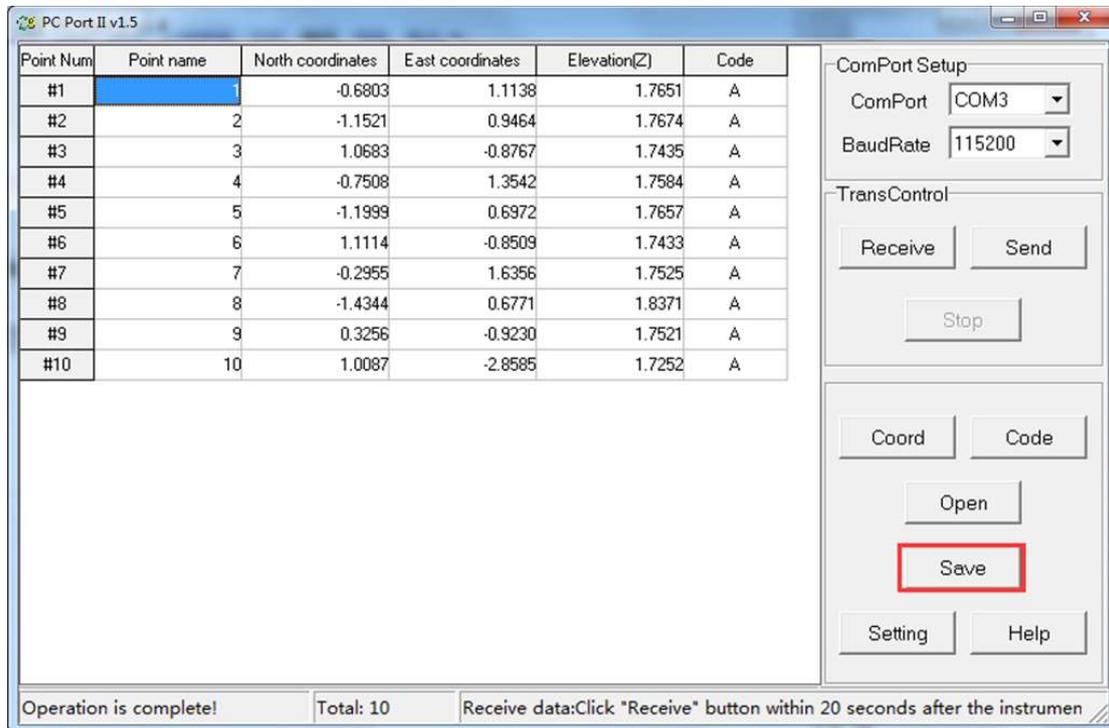
2.2 Export the Fix Point to the computer

(1)Operation is the same as 2.1,but you need to set "Data Type" as "Fix.PT".

```
           [Job Data]

Job      :                    1
Data Type:           Fix.PT ◀▶
Mode     :           RS232C ◀▶


  Job                    Export
```

2.3 Import the Fix Point to the total station

(1)The operation of connecting the computer and total station is the same as 2.1.

(2)Select the data type and transmission mode.Power on→Select "Tranfer"→Press【F2】to select "Import Date"→Press【F1】to select "Fix Pt.".Data Mode set to "RS232C"

```
         [Import Fix PT]

Mode     :           RS232C ◀▶


Target Job;          DEFAULT
  Job                    Import
```

(3)Select file.Press[Job]→Select file which you want to import→Press[OK].

```
          [Select Job]
DEFAULT                  *
2



  View     New            OK
```

(4)Back to the transmission interface.


```
[Import Fix PT]

Mode      :              RS232C ◀▶


Target Job:          DEFAULT

  Job                        Import
```
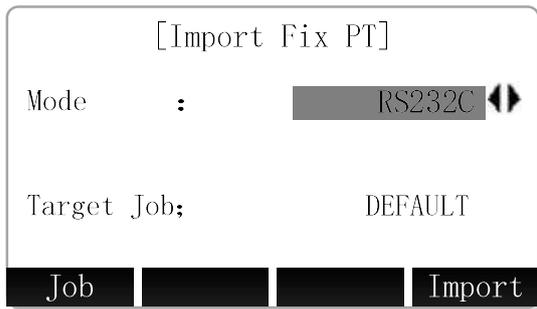
(5)There are two ways to import.One is custom-written coordinate data into instrument through transmission software.Another is open the edited coordinate data file into the instrument.

(6)Click【Coord】to edit Data.
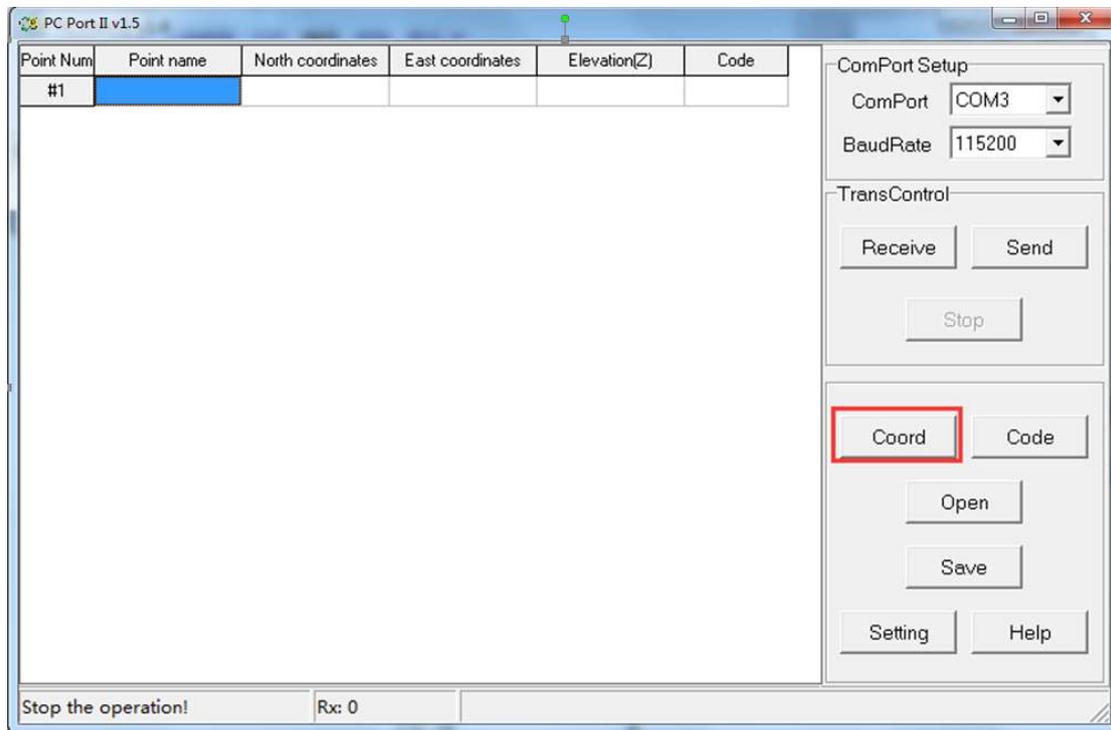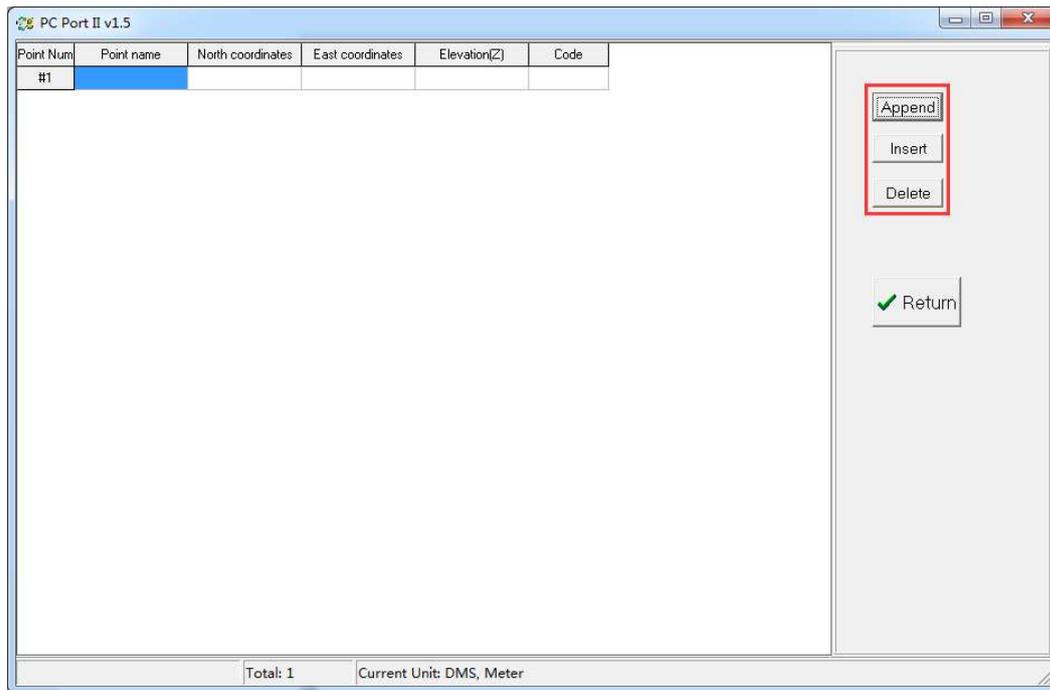
(7)Import the data to the total station.Click【Send】in the software.Then press【F4】in the Total station in 20s.

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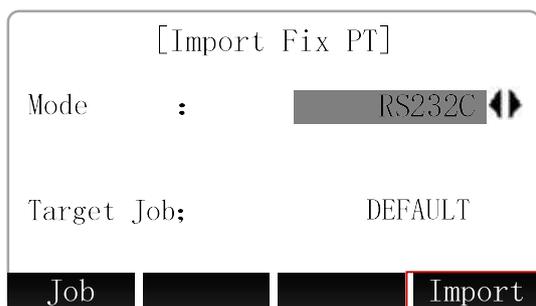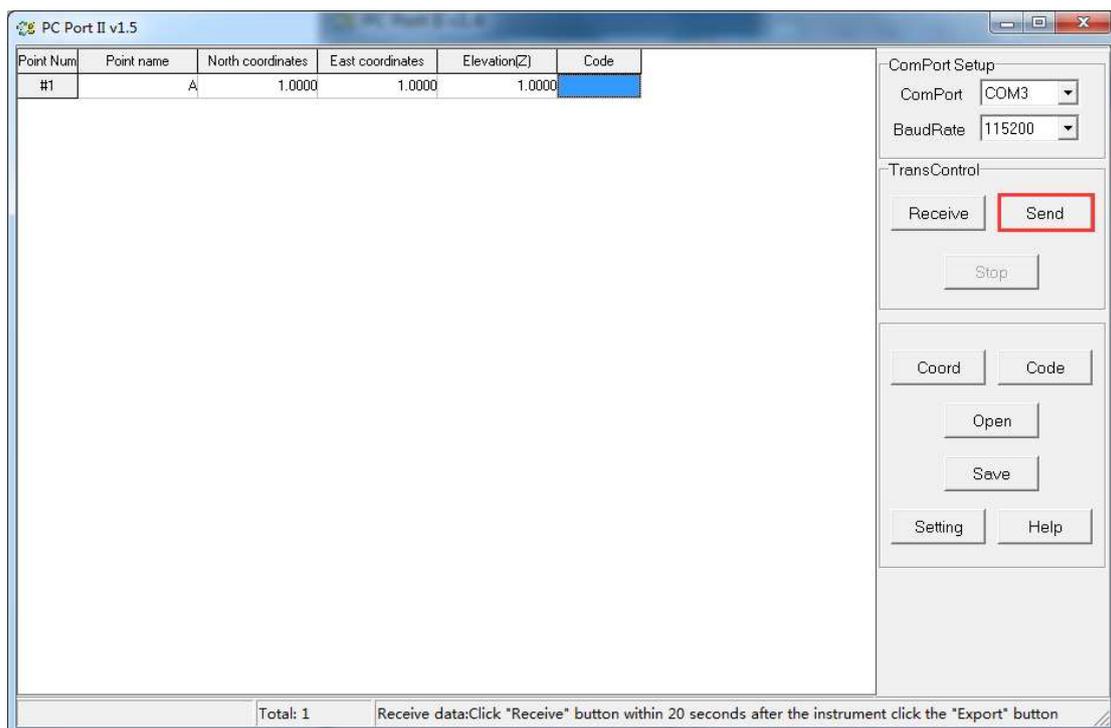
(8)Open the edited coordinate data file.Note that the data format and file format are correct.
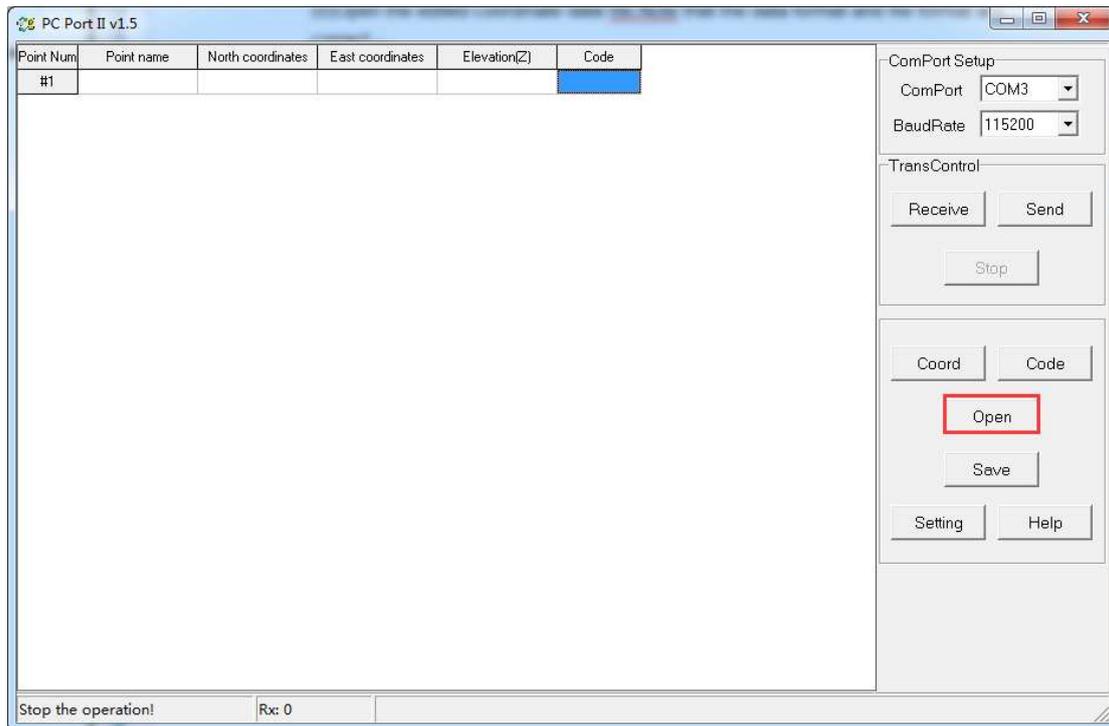
(9)Then export the data to the total station.

2.4 Import the codes to the total station

(1)The operation of connecting the computer and total station is the same as 2.1.

(2)Power on→Select "Tranfer"→Press 【F2】to select "Import Date"→Press【F2】to select "Code.".Data Mode set to "RS232C"
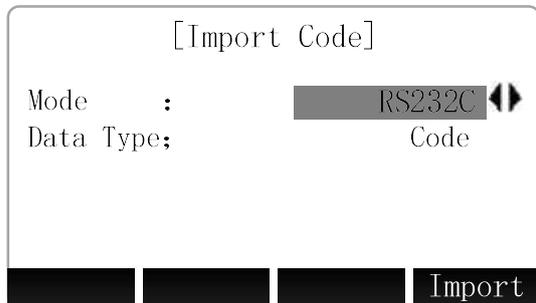
(3)There are two ways to import.One is custom-written codes into instrument through transmission software.Another is open the edited codes file into the instrument.

(4)Click【Code】to edit Data.
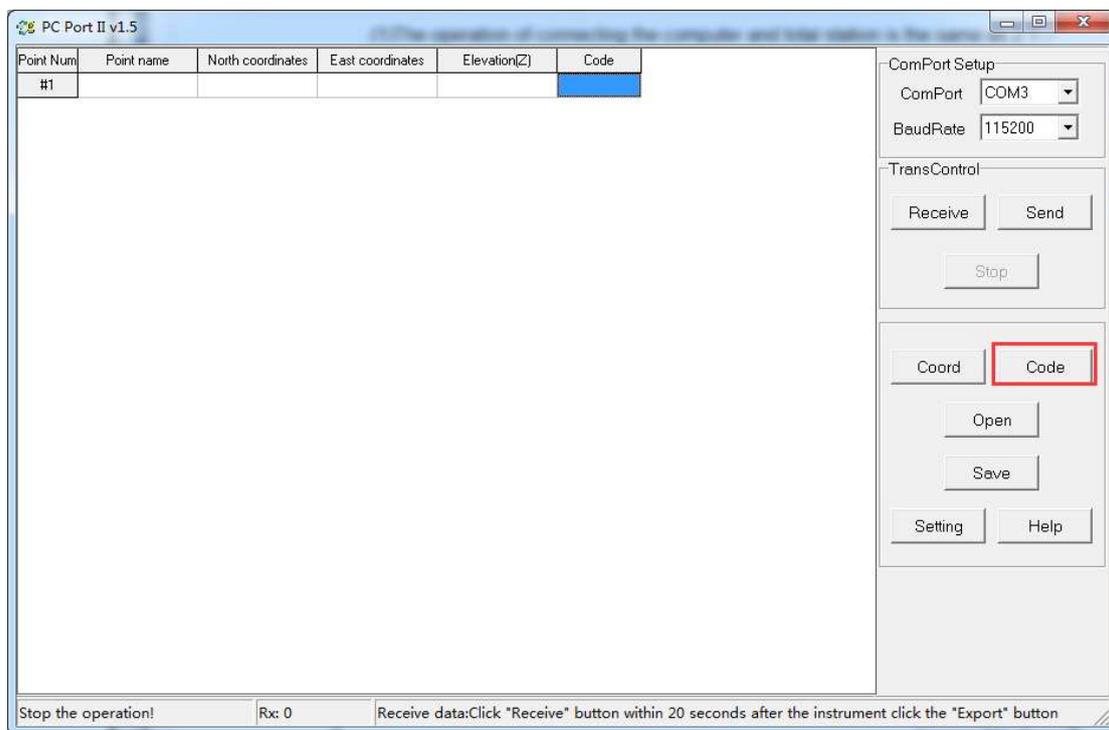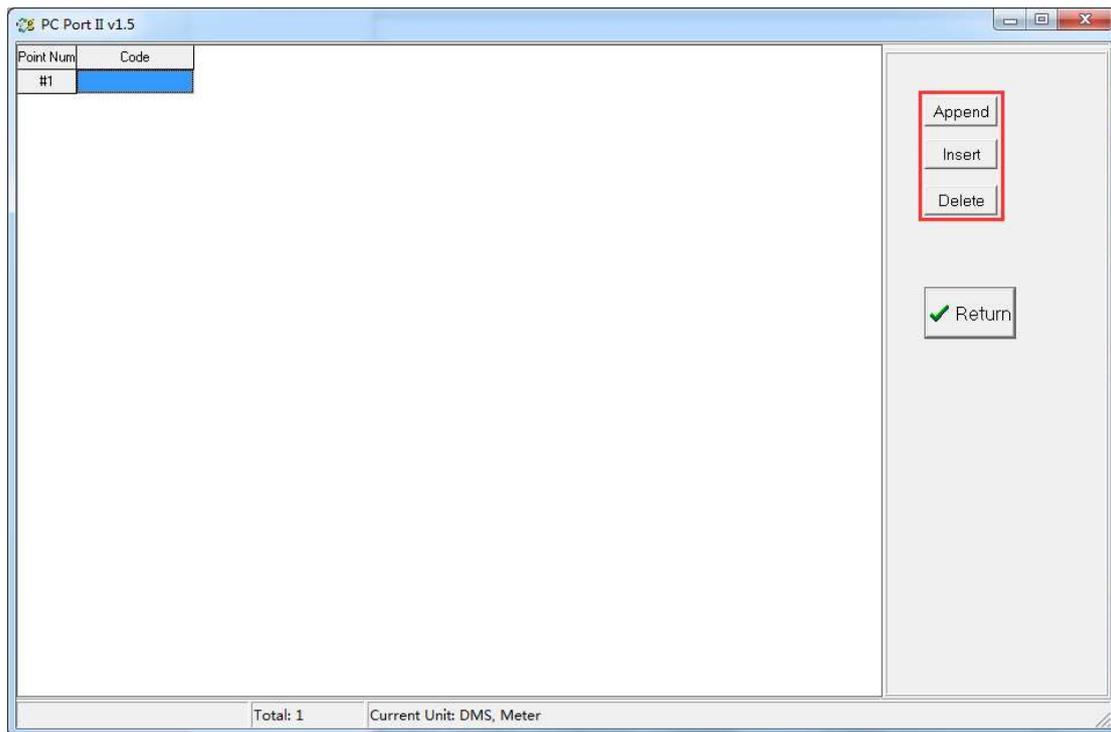
(5)Import the data to the total station.Click【Send】in the software.Then press【F4】in the Total station in 20s.
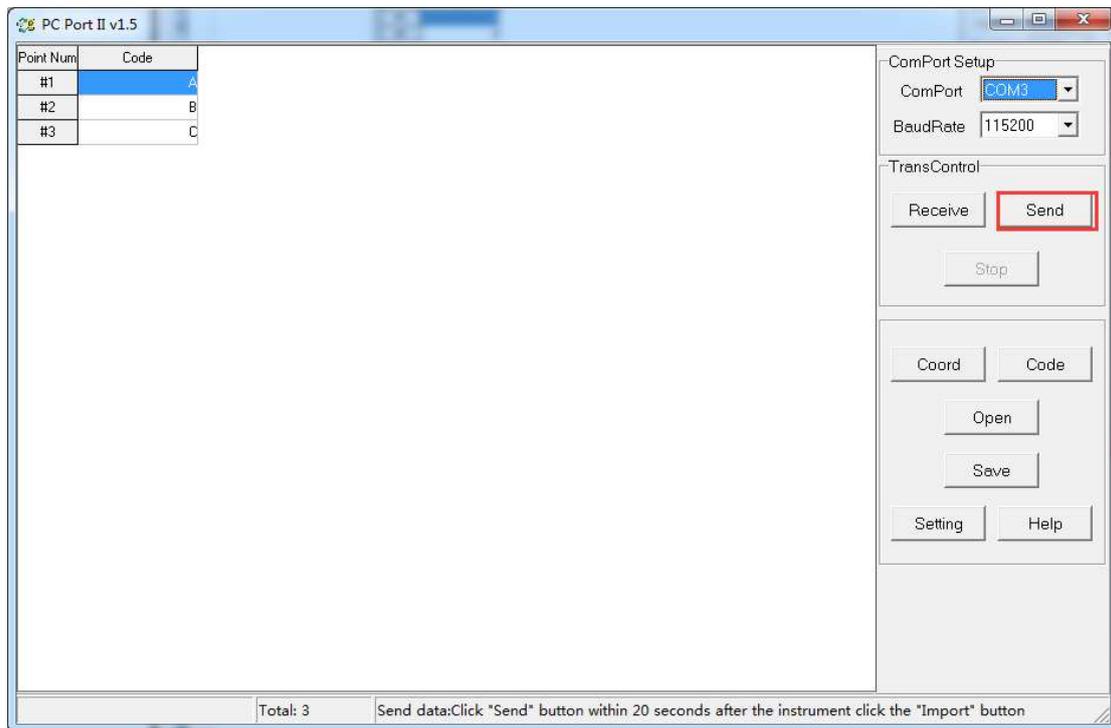
(6)Open the edited codes data file.Note that the data format and file format are correct.
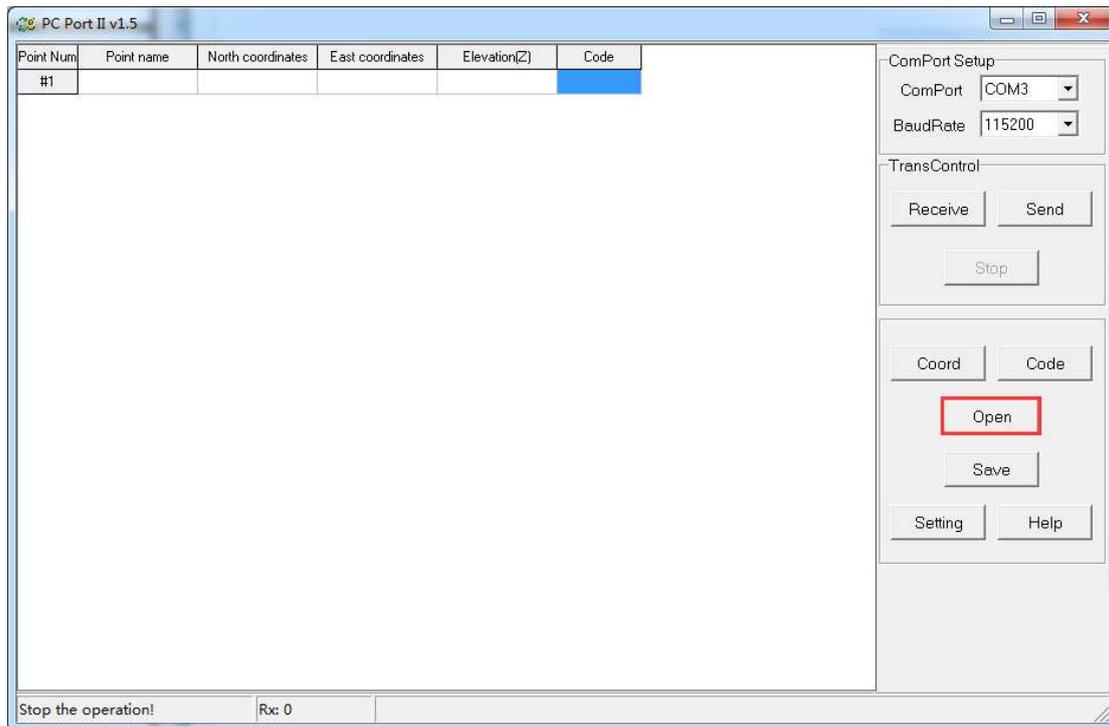
(7)Then export the data to the total station.

3. Use U disk to transfer data

3.1 Export the Measuring Point to the U disk

(1)Instrument insert U disk and power on.

(2)Select the data type and transmission mode.Power on→Select "Tranfer"→Press 【F2】to select "Export Date"→Press【F1】to select "Job Data".Data Type set to "Meas.PT", Mode set to "U Disk".You can select the format "Meas Fmt(*.htf)" or "GSI(*.gsi)" or "GTS-7(*.gt7)" or "CSV(*.csv)" or "CASS(*.dat)".

```
          [Job Data]

Job      ;          DEFAULT
Data Type:         Meas.PT ◀▶
Mode     :          U Disk ◀▶
 Format  :   Meas Fmt(*.htf) ◀▶

   Job                        Export
```

(3)Select file. Press[Job]→Select file which you want to export→Press[OK].

```
        [Select Job]

 1
 2




   View     New              OK
```

(4)Back to the transmission interface then press【F4】.

```
          [Job Data]

Job      ;              1
Data Type:         Meas.PT ◀▶
Mode     :          U Disk ◀▶
 Format  :   Meas Fmt(*.htf) ◀▶

   Job                        Export
```

(5)PC insert U disk. Open the software then click【Open】and open the file which you export to the U disk. After opening successfully, then save the data.
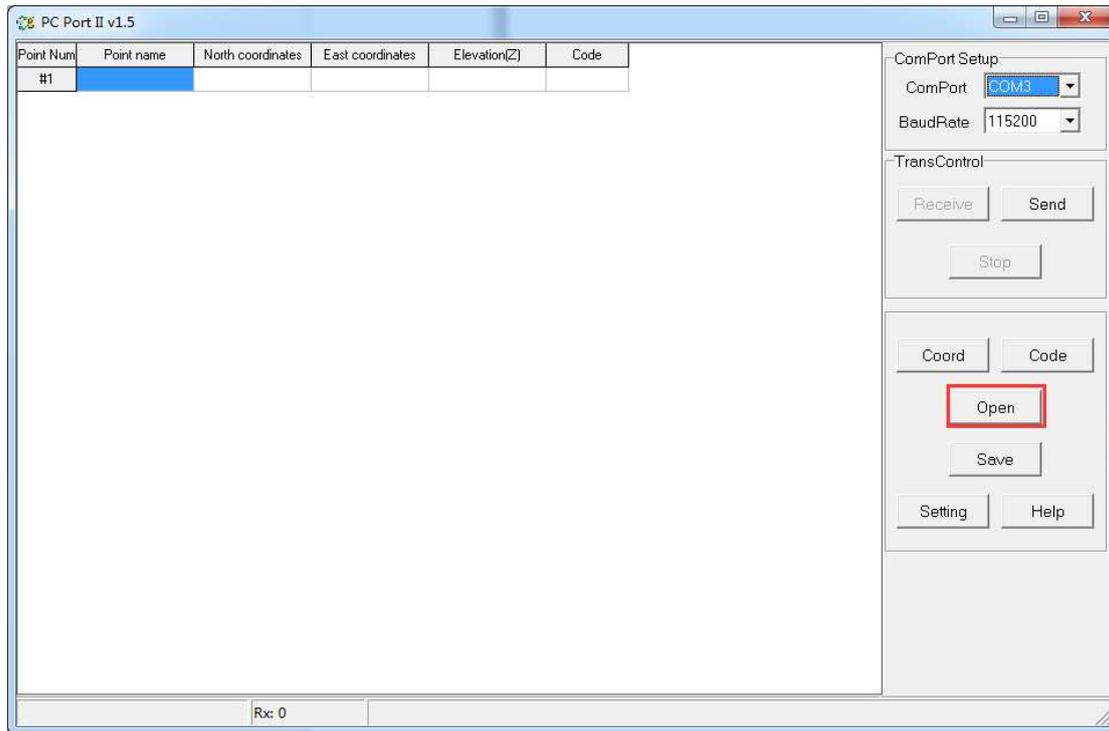
3.2 Export the Fix Point to U disk

(1)Operation is the same as 3.1,but you need to set "Data Type" as "Fix.PT" and select the format "GTS-7(*.gt7)" or "CSV(*.csv)" or "CASS(*.dat)".

```
        [Job Data]

Job       ;        DEFAULT
Data Type:        Fix.PT  ◀▶
Mode      :        U Disk  ◀▶
Format    :     CASS(*.dat) ◀▶

   Job                     Export
```

3.3 Import the Fix Point from U disk

(1)Data Editor.You must use the .TXT format data.

Note:Use commas between the data. After the last line of the data file must add a "carriage return + line", otherwise the imported data will be missing the last data
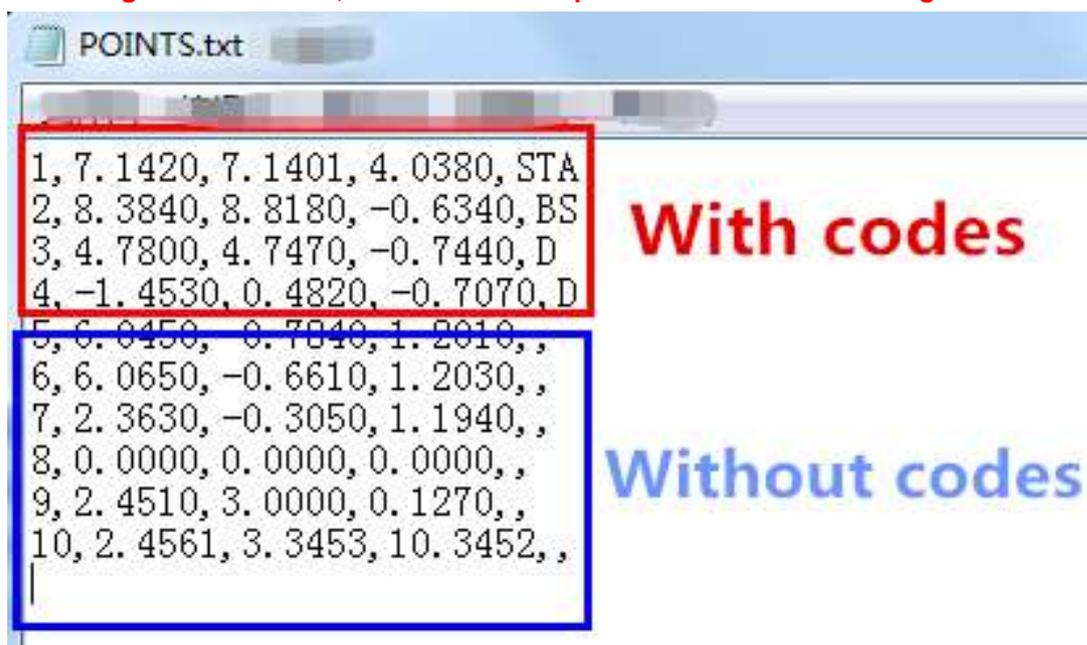
(2)Select the data type and transmission mode.Power on→Select "Tranfer"→Press 【F2】 to select "Import Date"→Press 【F1】 to select "Fix PT".Data Type set to "CASS Format", Mode set to "U Disk".

```
        [Import Fix PT]

Mode      :          UDisk ◀▶
Source    :           JOB1
Data Tpye :      CASS Format ◀▶
Target Job;        DEFAULT


   Job      Source              Import
```
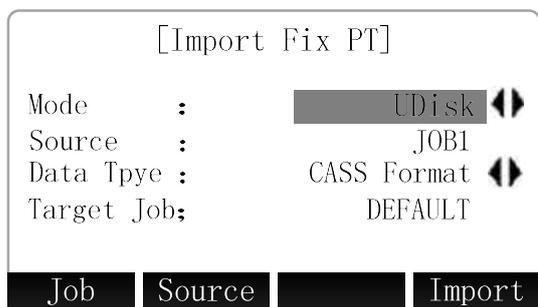
(3)Select the file which you want to import from the U disk.

```
      [Import Fix PT]                    [Select Job]

Mode      :          UDisk ◀▶      JOB1.DAT
Source    :           JOB1         2.TXT
Data Tpye :      CASS Format ◀▶
Target Job;        DEFAULT


   Job     Source         Import                                OK
```
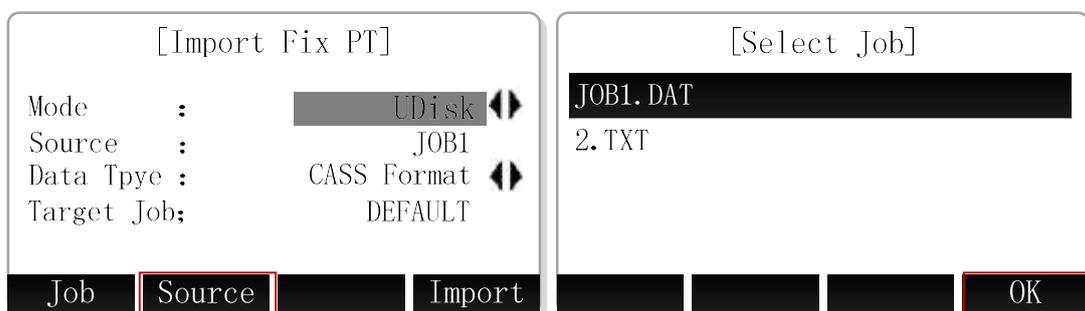
(4)Select the file which you want to receive the data.

```
      [Import Fix PT]                    [Select Job]

Mode      :          UDisk ◀▶      DEFAULT                *
Source    :           JOB1         2
Data Tpye :      CASS Format ◀▶
Target Job;        DEFAULT


   Job     Source         Import      View     New              OK
```

(5)Press 【F4】 to import.
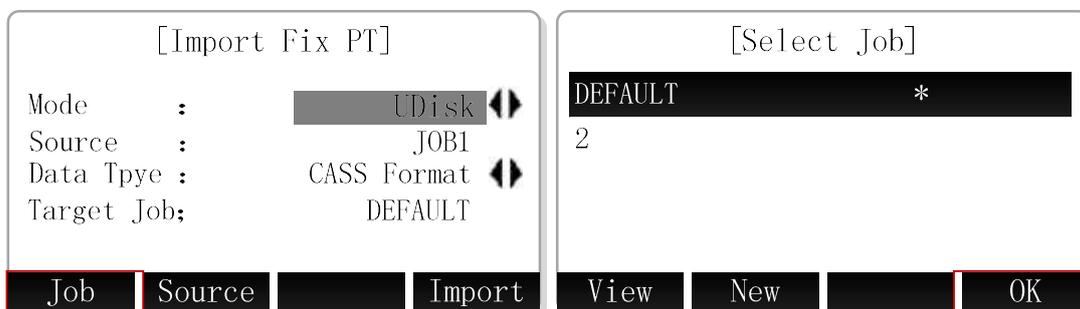
```
        [Import Fix PT]

Mode      :          UDisk ◀▶
Source    :           JOB1
Data Tpye :      CASS Format ◀▶
Target Job;        DEFAULT


   Job     Source              Import
```
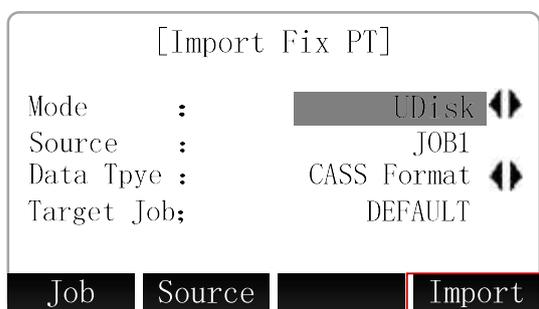
4. Use SD card to transfer data

(1)Save the data in the memory card. Instrument inserted SD card. Power on →Select "Program" →Press【F1】to select "Surveying" →Press【F1】to select "Set Job".

```
          [Surveying]

[*]   F1  Set Job         (1)
[ ]   F2  Set STA         (2)
[ ]   F3  Set B.S.        (3)
      F4  Start           (4)

   F1      F2      F3      F4
```

(2)Press【F2】to new a job in the SD card.

```
         [Set Job]
Job     :         DEFAULT

Operator:
Date    :         20150515
Time    :         14:10:20

  List    New            OK
```

(3)Select "SD card", then press【F4】.

```
         [Select Disk]
   A:Local Disk

   B:SD Card

  Prop.                  OK
```

(4)Finished entering information, save the new job is finished in the SD card. Then you can save the data in the SD card.

```
        [New Job]
Job     :            JOB1
Operator:
Note1   :
Note2   :
Date    :         20150515
Time    :         14:10:20
  Back                   OK
```

(5) Use the card reader to open the SD card in the computer. Then use the software to open the file. The way to save the file is the same as the 2.1.

5. Use Mini-USB to transfer data

    (1)The Mini USB transfer cable to connect the instrument and computer. After connecting the instrument boot display "Connected USB".

    (2)Open the disk to find the file.(*.JBF is Measing PT,*.PTF is Fix PT)
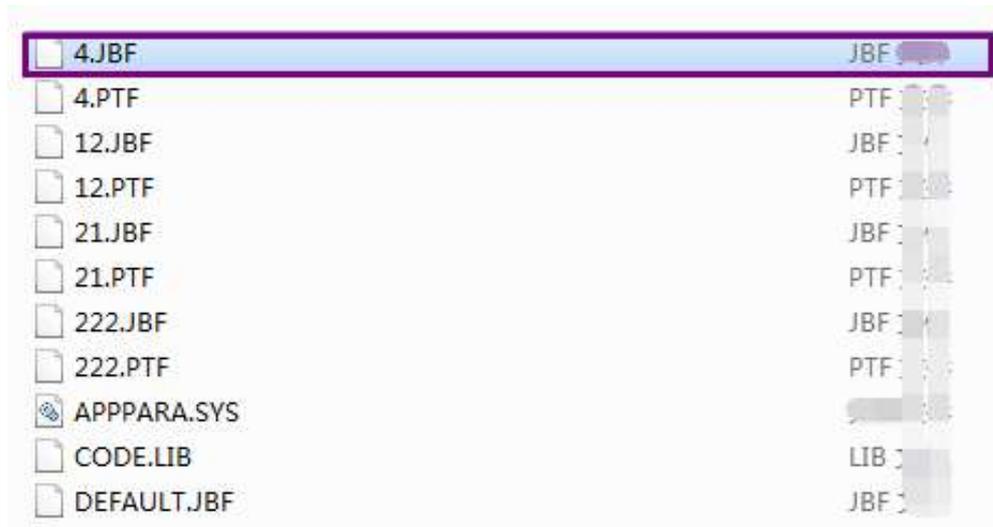
    (3)Then use the software to open the file. The way to save the file is the same as the 2.1.

6. Instruction of connecting controller with the instrument by Bluetooth

6.1 Set in total station

Power on →Select "Setting" →Press 【 F1 】 to select "General" →Set "Port" to "Bluetooth"

## 6.2 Set in the controller

6.2.1 Bluetooth Settings

(1) Go to "Settings" and then "Bluetooth" to set the Bluetooth.

(2) Click "Add new device" to search the total station. Then you will see the it in the list. Then click "Next", enter the pin code "1234" and then click "Next".
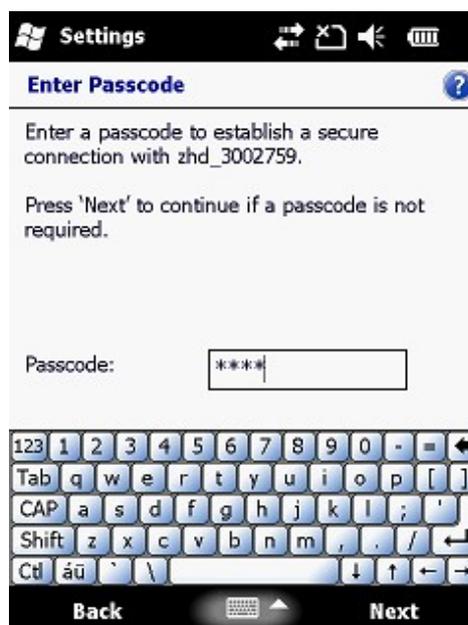
(3) Click "COM Ports" in the bottom, then click "New Outgoing Port" to select a port.
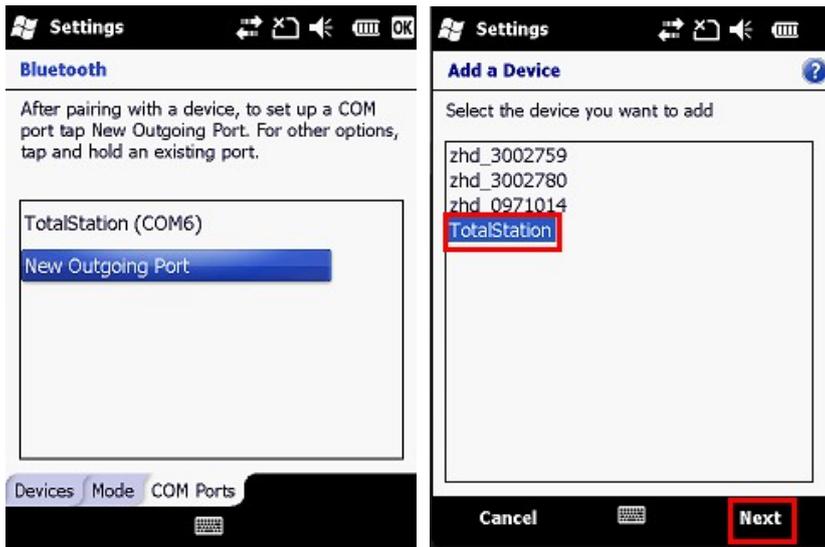
(4) Choose a unused port and then click "Finish".
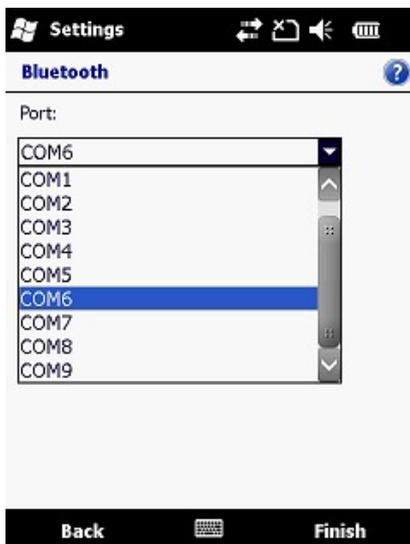
6.2.2 Bluetooth connections in SurvCE

(1) Run SurvCE software.

(2) Click "Equip" and then "1Total Station" in the main interface of SurvCE software.

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(3) In "Current" interface, select "Topcon Direct" for "Manufacturer" and "GTS Series (non-motorize)" for "Model".

(4) Then go to "Comms" interface, select "Bluetooth" for "Bluetooth" and "Generic" for "BT Type". As to the com port, it's the one you selected in the Bluetooth setting.
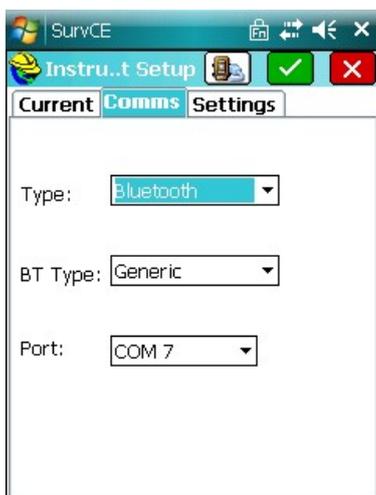

6.2.3 Bluetooth connections in SurvCE

(1) Click the "Store Points" items in the "Survey" options.

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(2) Select the upper-left corner of [R], you can remotely operate the instrument to measure, and display the data on the instrument on the blow screen.
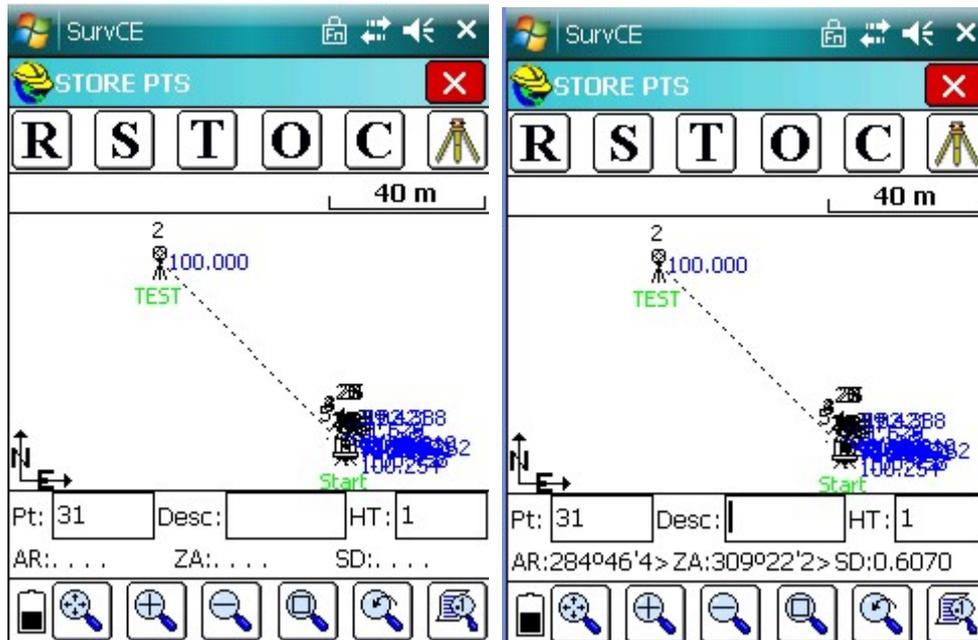
The data display on the hand book show that the instrument is connected to the hand book.