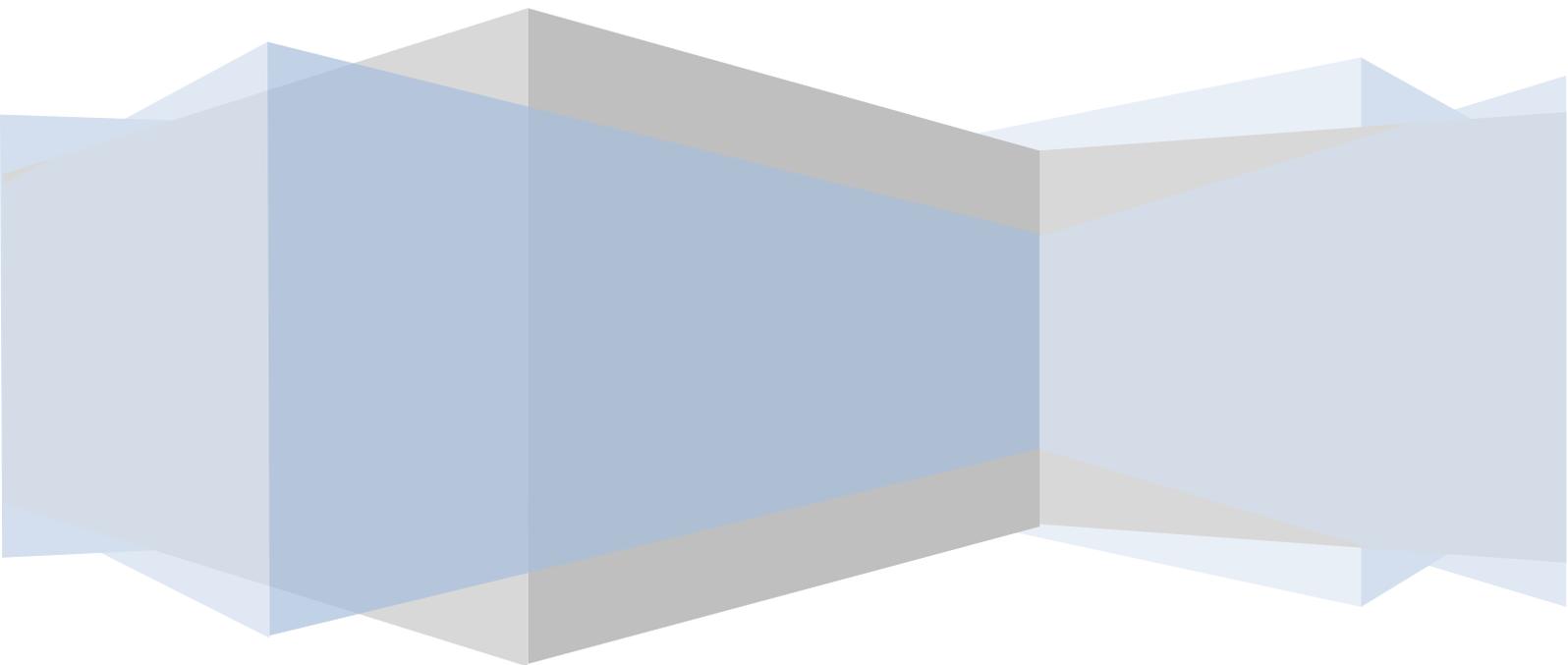


Total Station Transmission Software Manual



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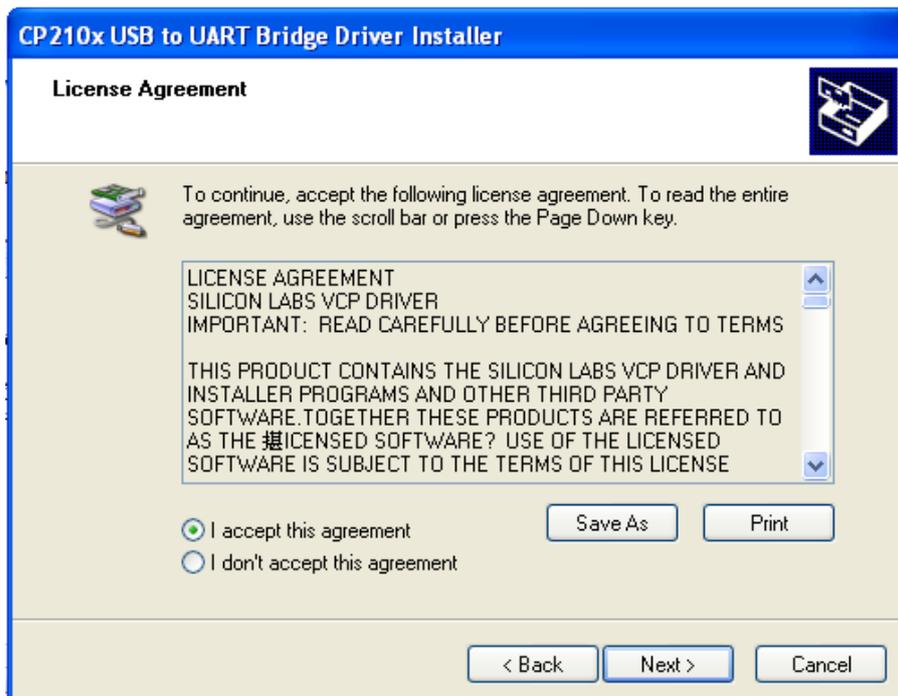
1. Installation of Data Cable Driver

(1) Run the driver software  CP210xVCPInstaller_x64 or  CP210xVCPInstaller_x86.

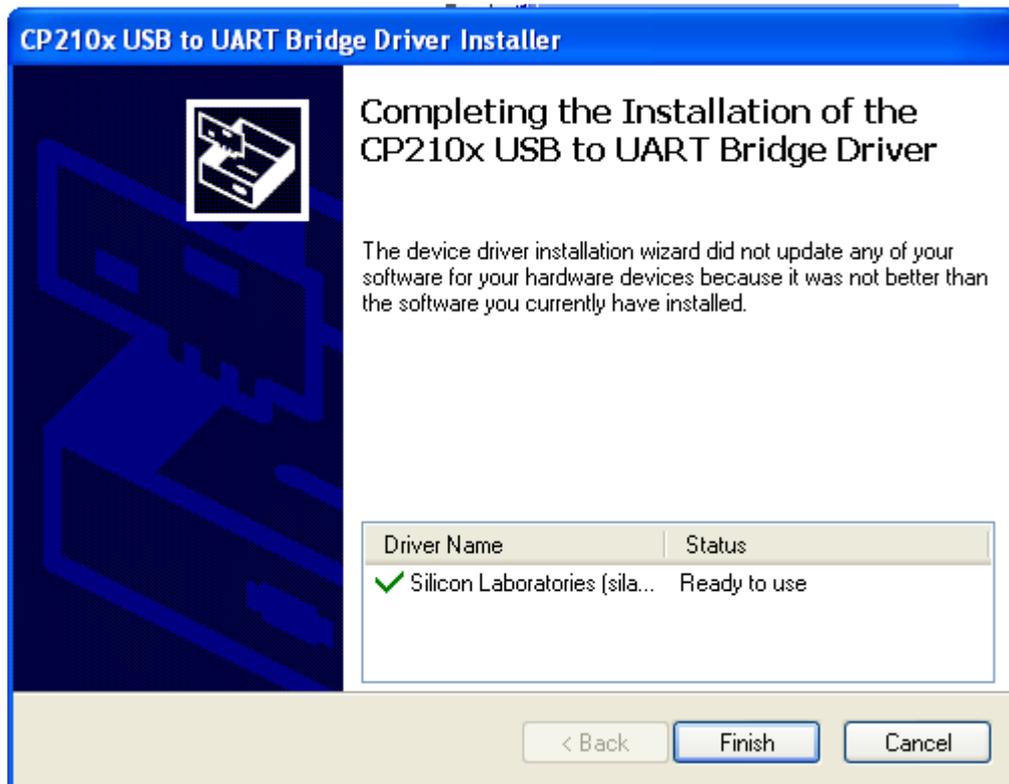
For this installation you need rights of administrators. For WIN7 operation system, select it and right click it, there will be a prompt Run as administrator.



(2) Choose the setting as is shown, click next.



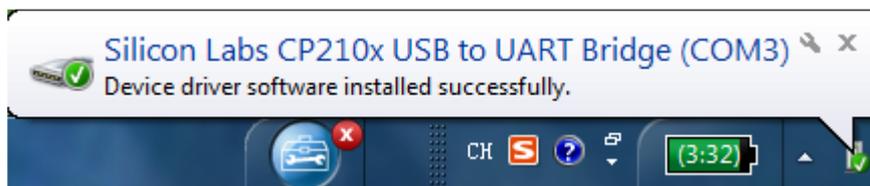
(3)Click next.



(4)Click "Finish", and complete installing.Plug in USB port to PC.



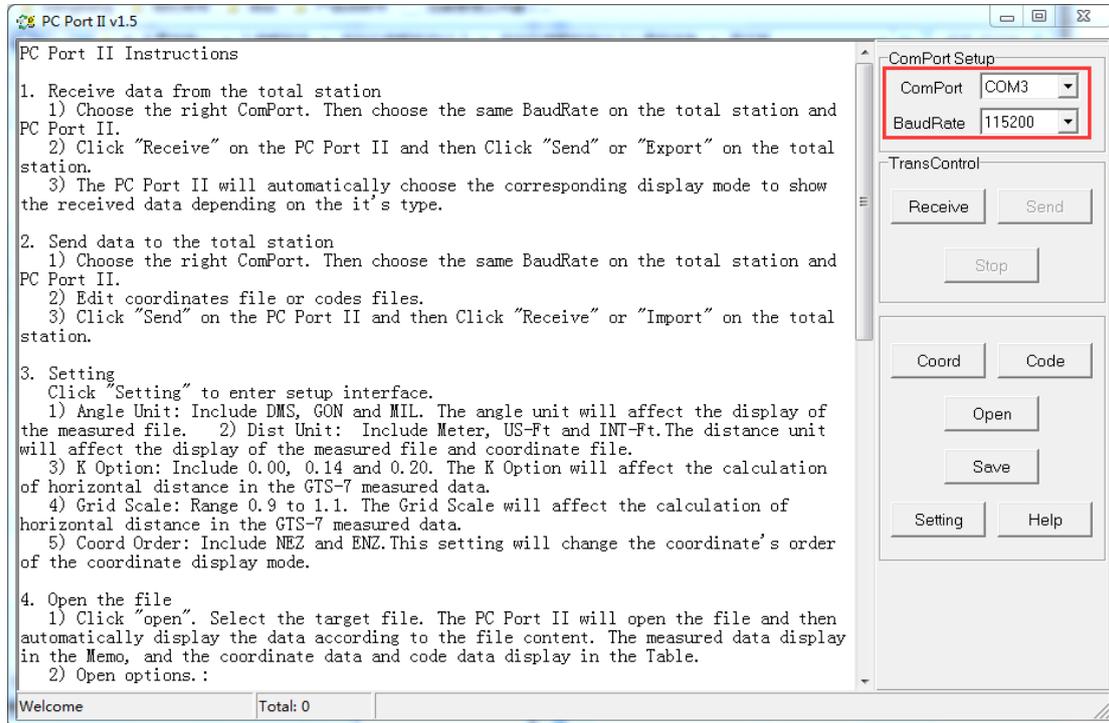
(5)It will prompt you it is installing, after the PC recognise driver, and tell you the current port.



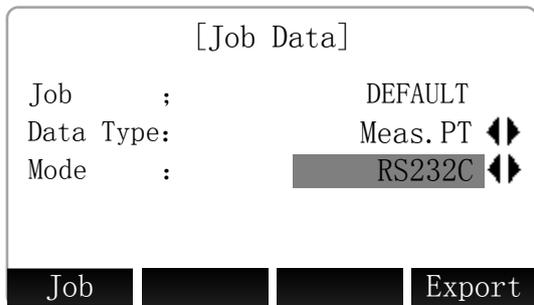
2.Data transmission software instructions

2.1 Export the Measuring Point to the computer

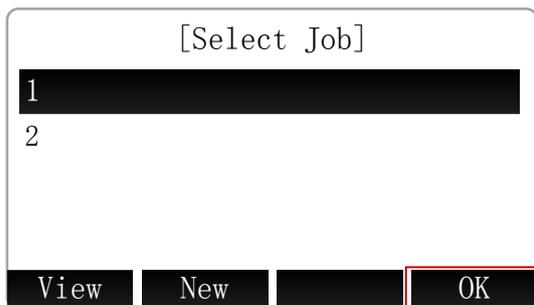
(1)Open the software,select the correct COM and baud rate.



(2)Select the data type and transmission mode.Power on→Select "Transfer"→Press **【F2】**to select "Export Date"→Press**【F1】**to select "Job Data".Data Type set to "Meas.PT", Mode set to "RS232C".



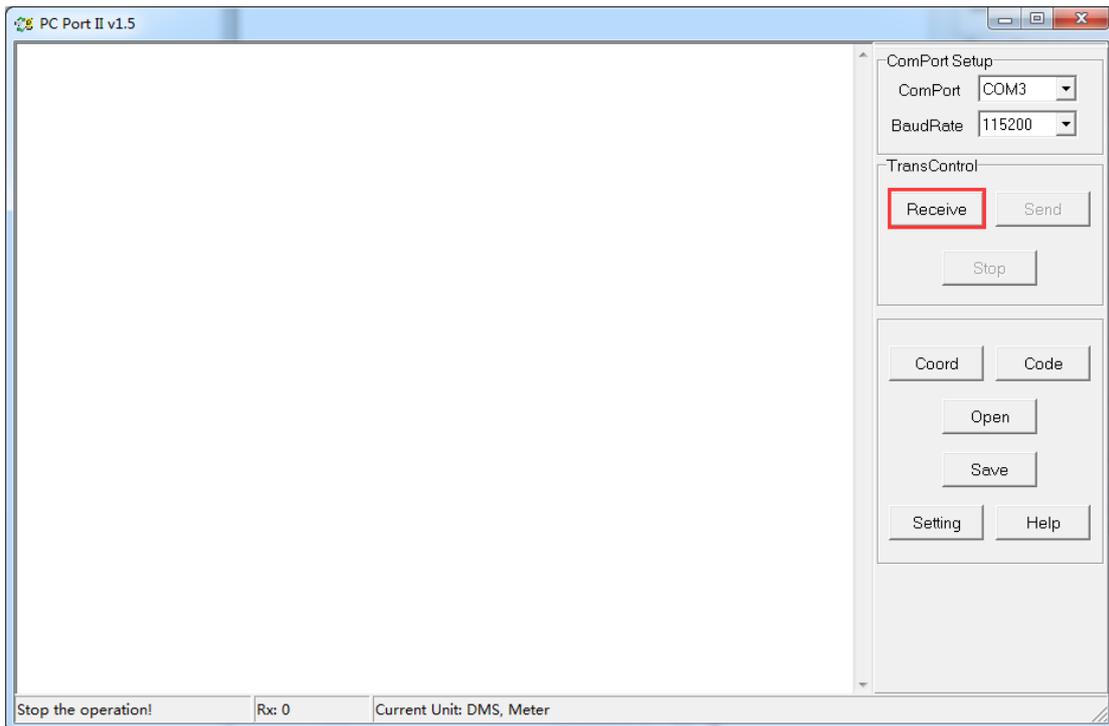
(3)Select file.Press[Job]→Select file which you want to export→Press[OK].



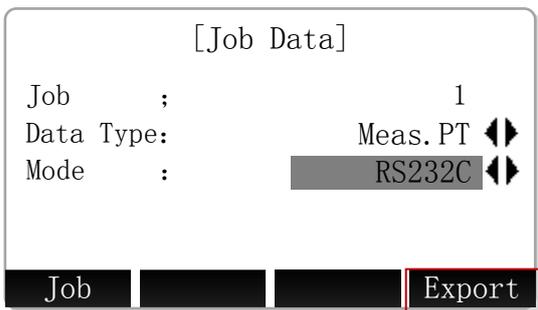
(4) Back to the transmission interface.



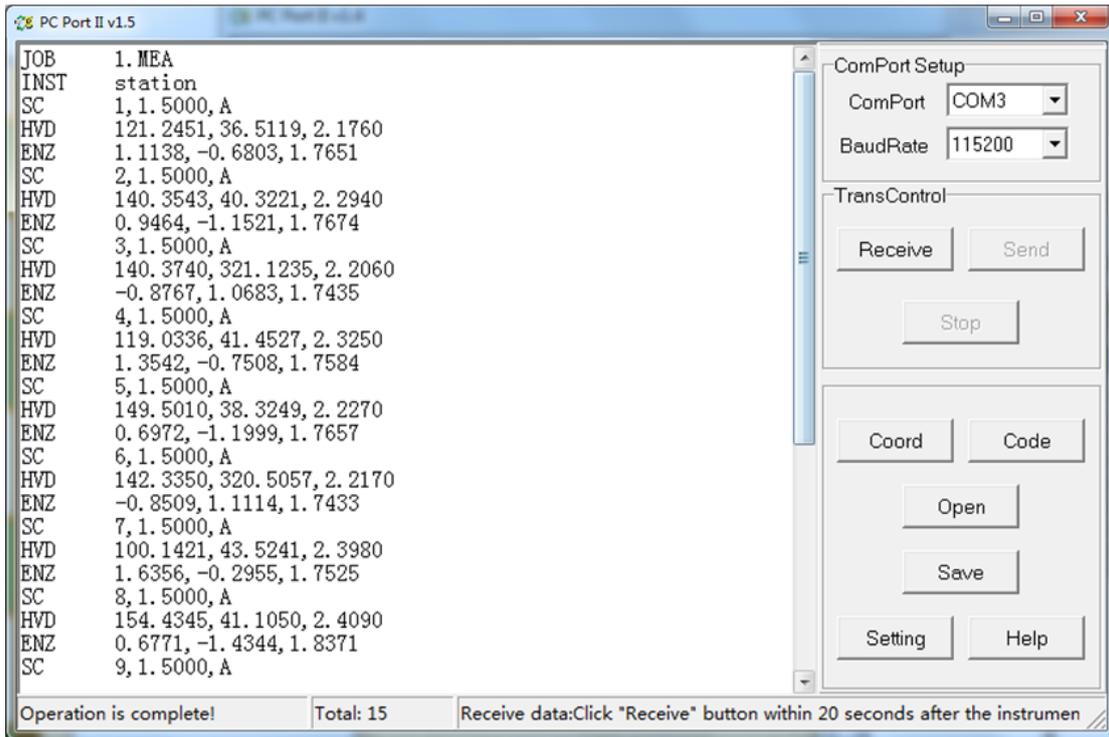
(5) Receive the data in PC. Click **Receive** in the software.



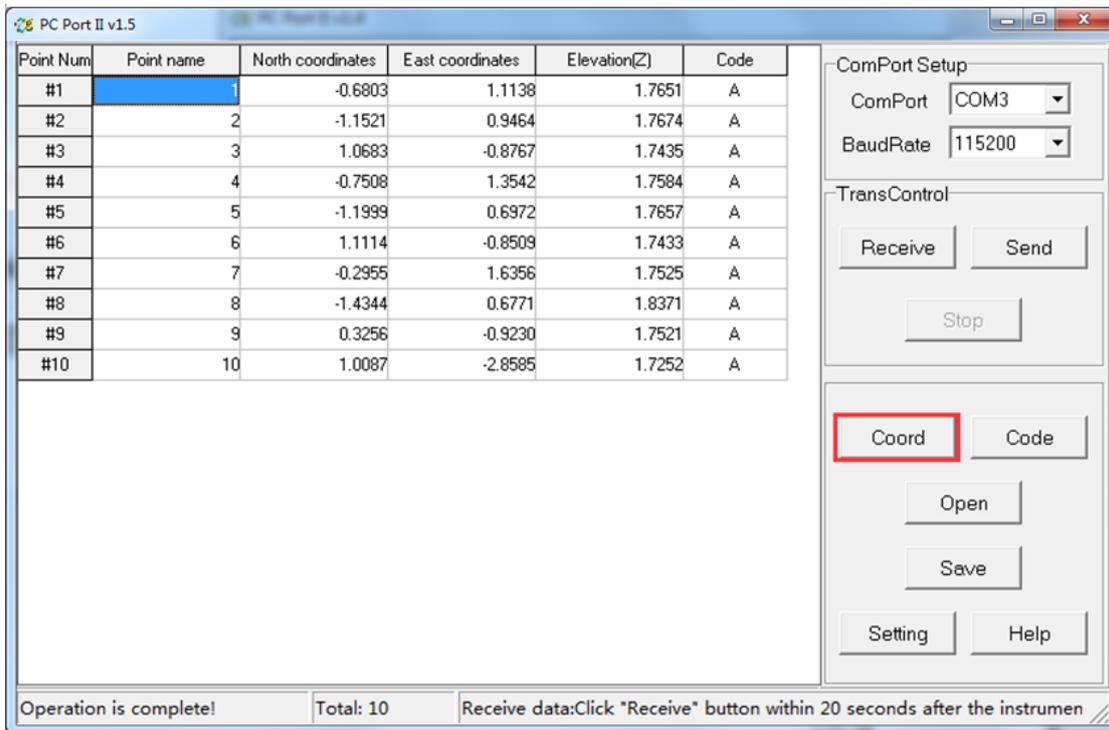
(6) Press **F4** in the Total station in 20s.



(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.

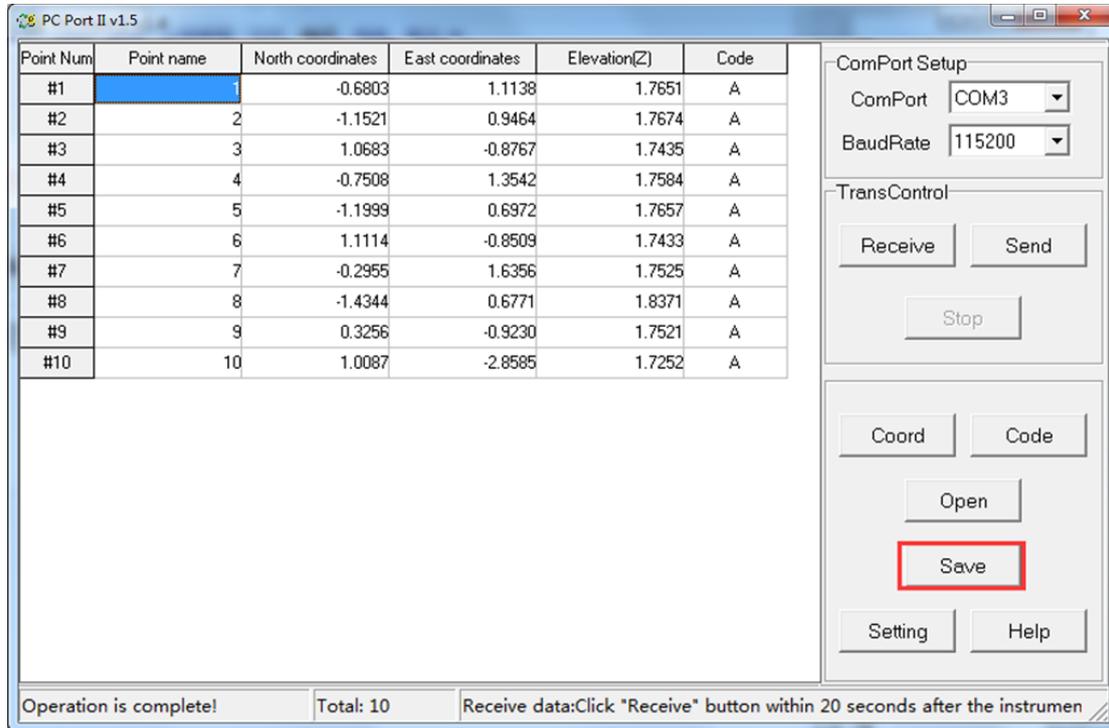
CASS coordinate file (*.dat)

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 "Transfer" → 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.

PC Port II v1.5

Point Num	Point name	North coordinates	East coordinates	Elevation(Z)	Code
#1					

ComPort Setup

ComPort COM3

BaudRate 115200

TransControl

Receive Send

Stop

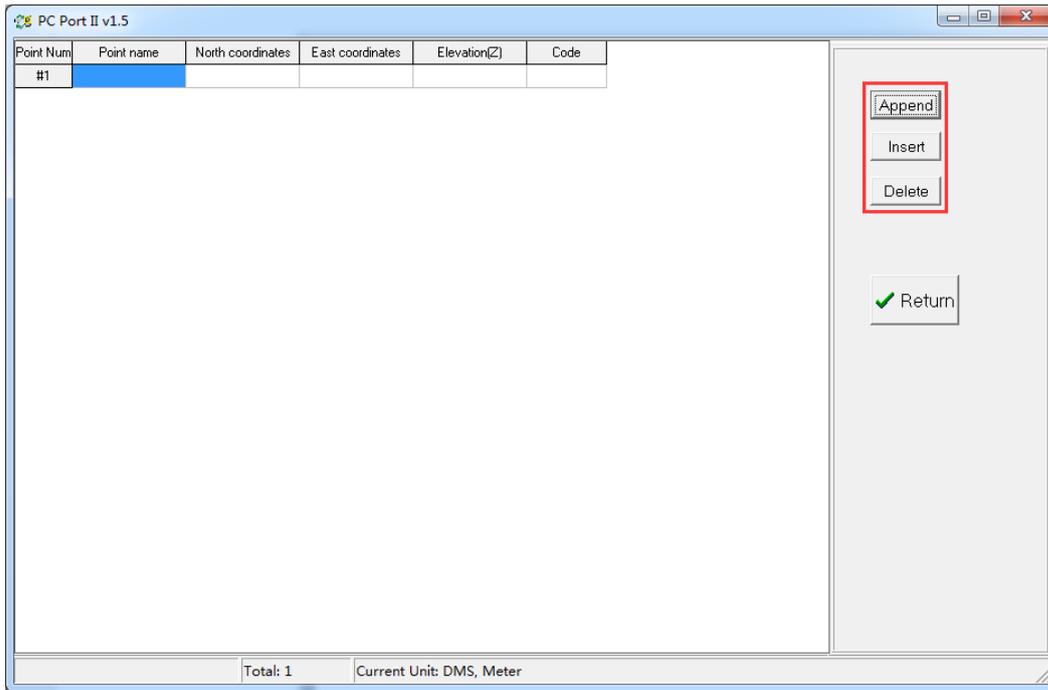
Coord Code

Open

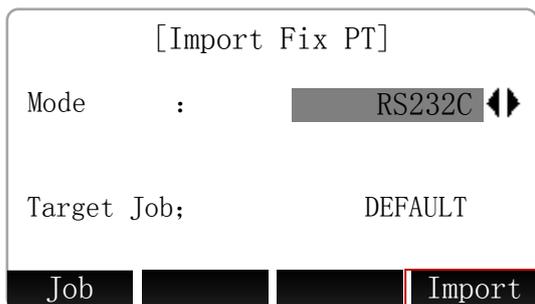
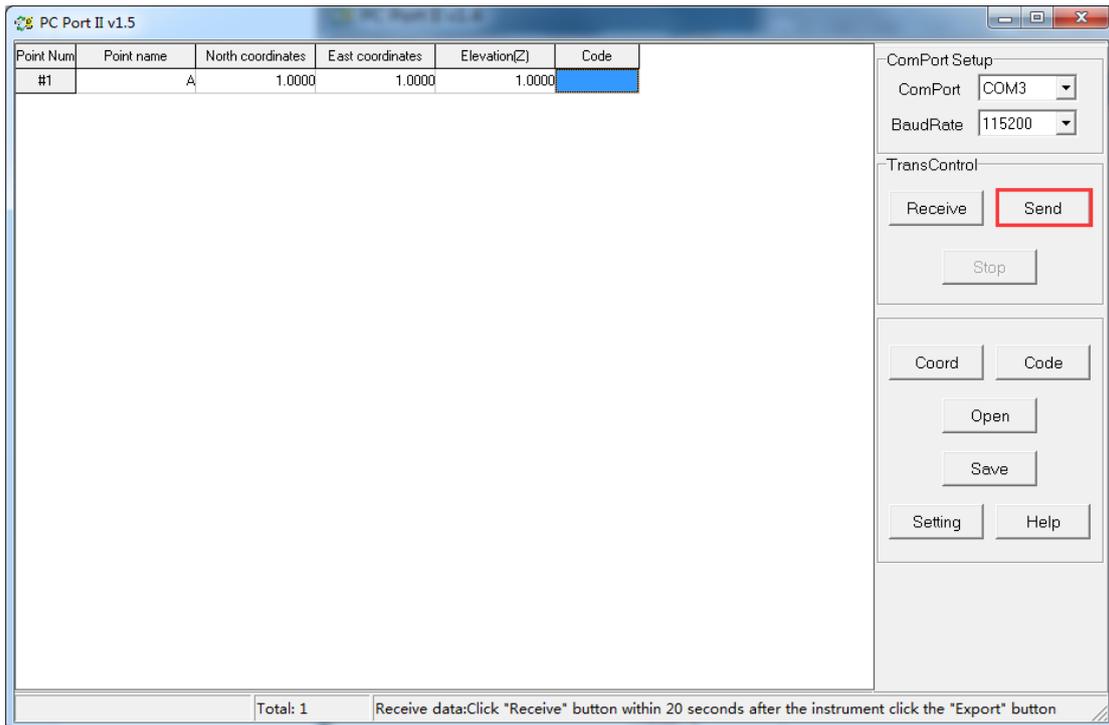
Save

Setting Help

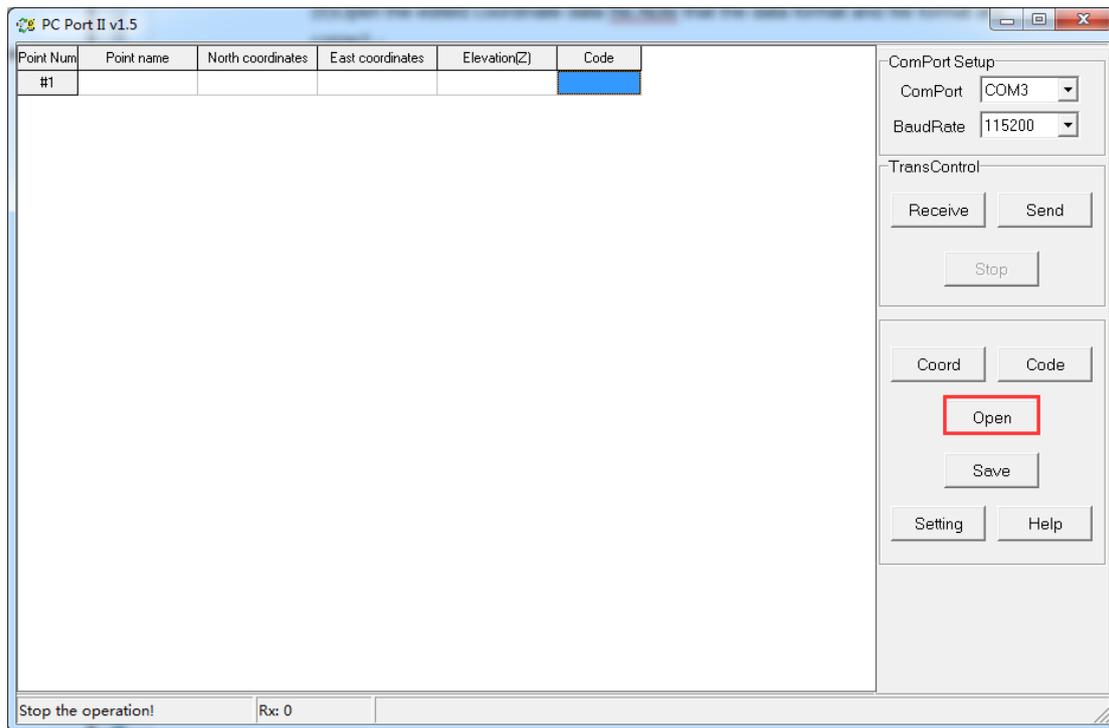
Stop the operation! Rx: 0



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



(8) Open the edited coordinate data file. Note that the data format and file format are correct.

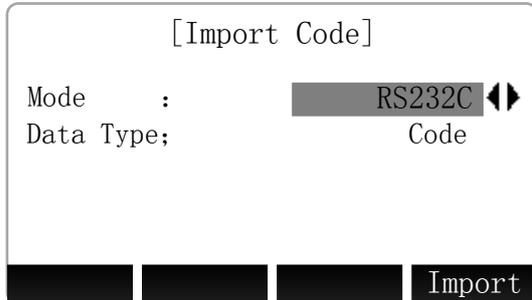


(9) Then export the data to the total station.

2.4 Import the codes to the total station

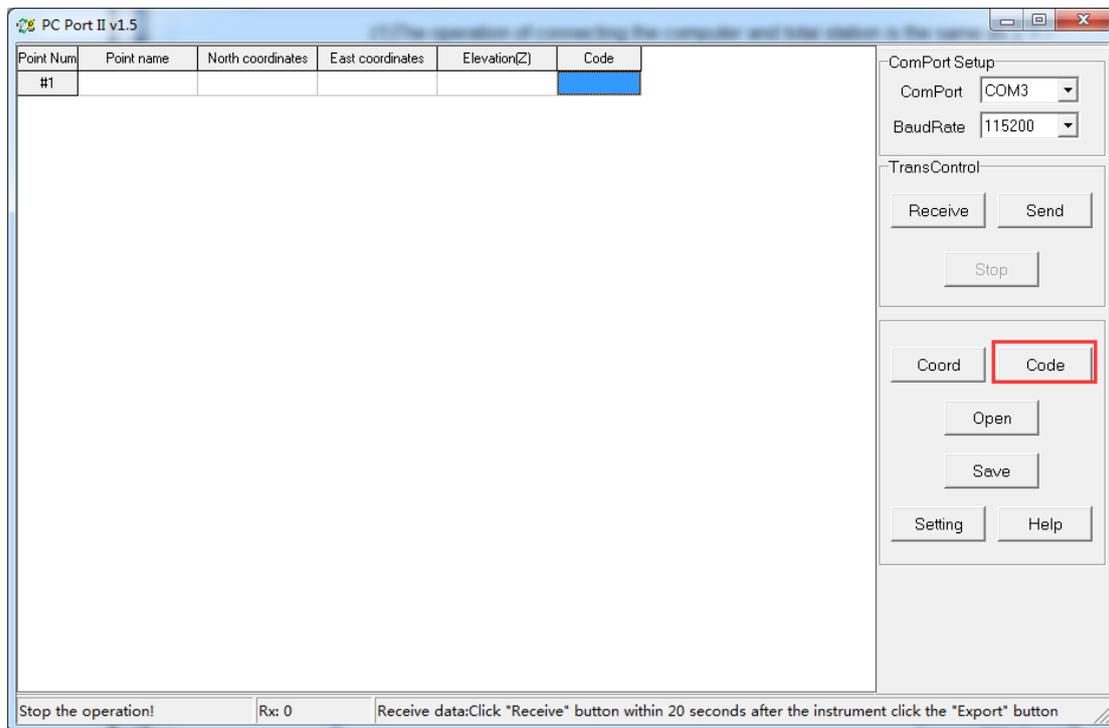
(1)The operation of connecting the computer and total station is the same as 2.1.

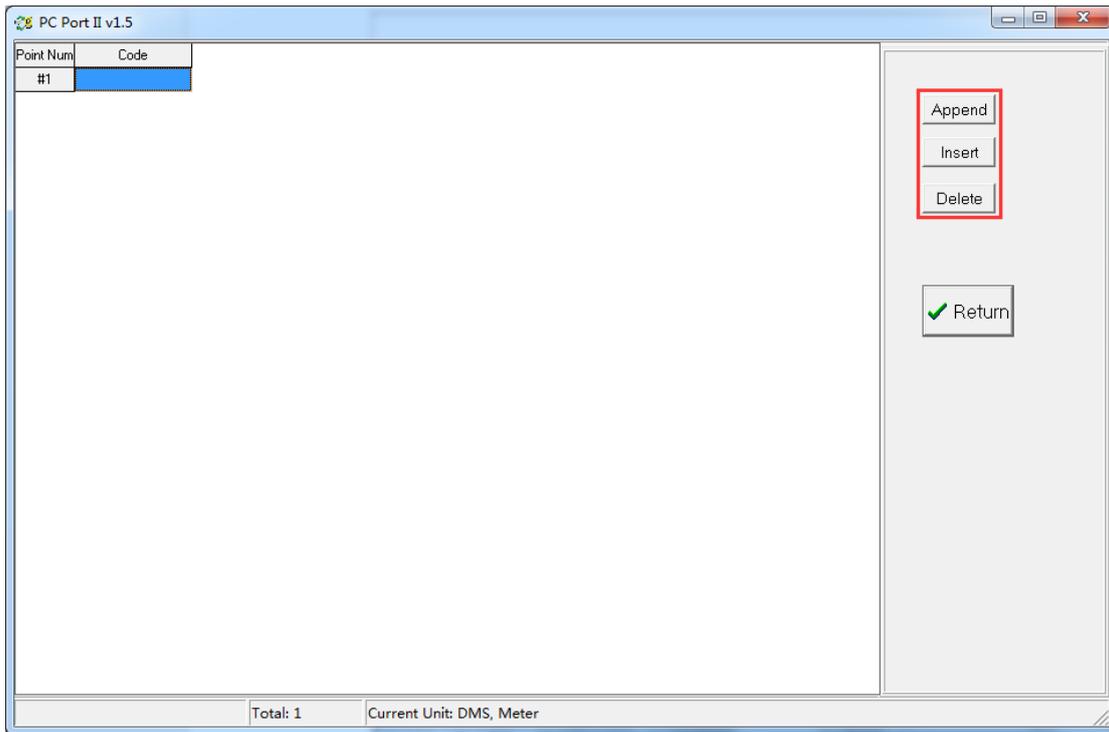
(2)Power on→Select "Tranfer"→Press **【F2】** to select "Import Date"→Press **【F2】** to select "Code.".Data Mode set to "RS232C"



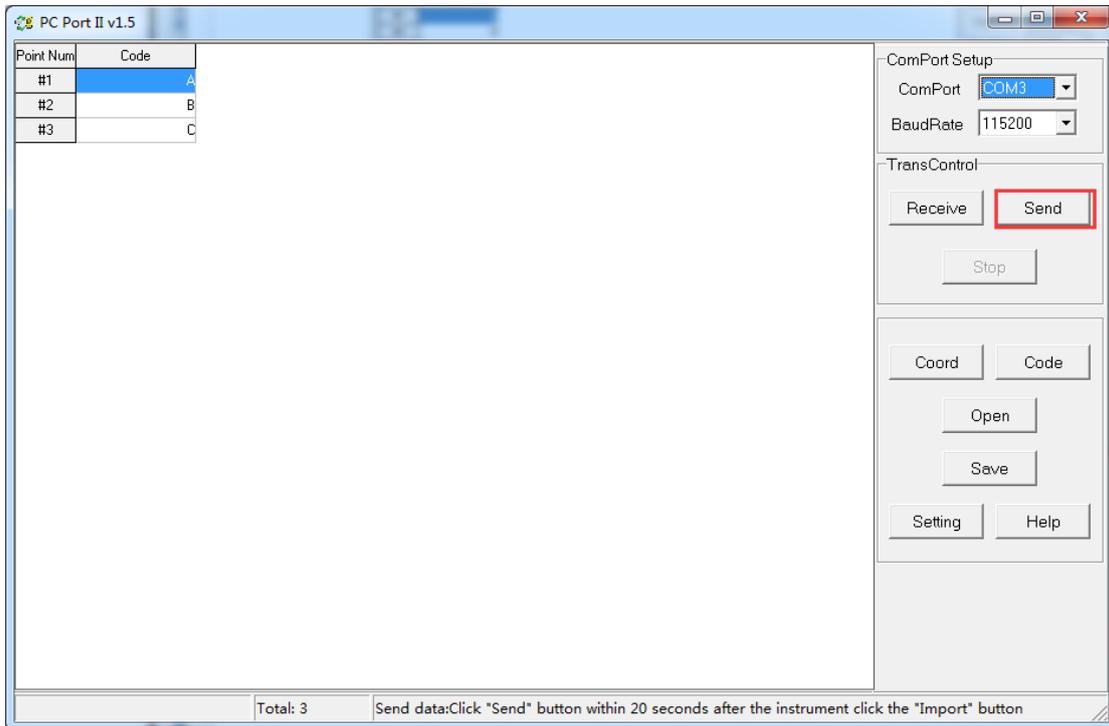
(3)There are two ways to import.One is custom-written codes into instrument through transmission software.Another is open the edited codes file into the instrument.

(4)Click **【Code】** to edit Data.

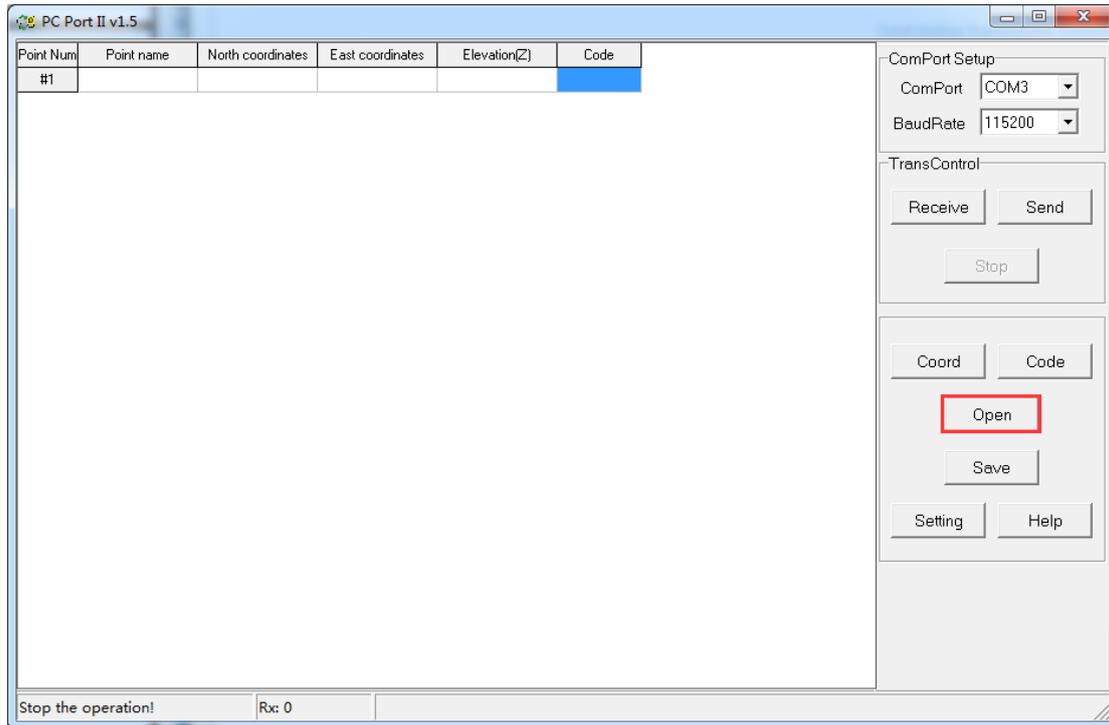




(5) Import the data to the total station. Click **【Send】** in the software. Then press **【F4】** in the Total station in 20s.



(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 "Transfer" → 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].

```

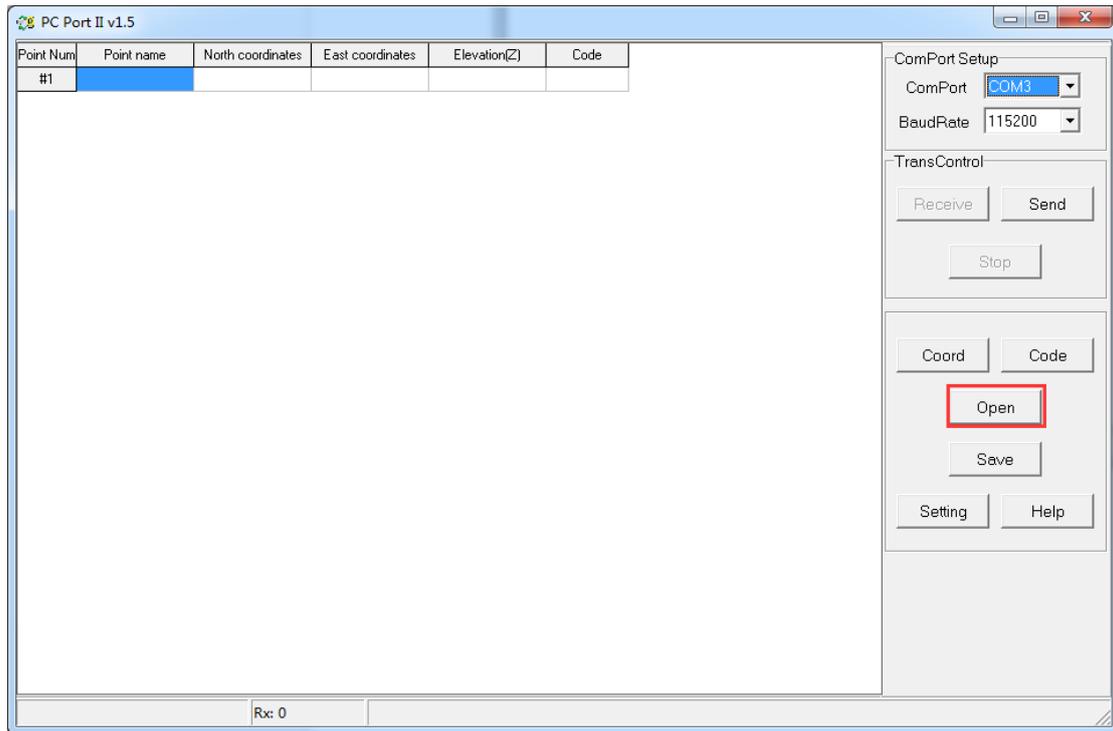
[Select Job]
1
2
View | New |           | OK
  
```

(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

```
POINTS.txt
1, 7.1420, 7.1401, 4.0380, STA
2, 8.3840, 8.8180, -0.6340, BS
3, 4.7800, 4.7470, -0.7440, D
4, -1.4530, 0.4820, -0.7070, D
5, 6.0450, -0.7840, 1.2010, ,
6, 6.0650, -0.6610, 1.2030, ,
7, 2.3630, -0.3050, 1.1940, ,
8, 0.0000, 0.0000, 0.0000, ,
9, 2.4510, 3.0000, 0.1270, ,
10, 2.4561, 3.3453, 10.3452, ,
|
```

With codes

Without codes

(2) Select the data type and transmission mode. Power on → Select "Transfer" → 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]
Mode      :      UDisk
Source    :      JOB1
Data Tpye :      CASS Format
Target Job;      DEFAULT
  
```

Job | Source | Import

```

[Select Job]
JOB1.DAT
2.TXT
  
```

OK

(4) Select the file which you want to receive the data.

```

[Import Fix PT]
Mode      :      UDisk
Source    :      JOB1
Data Tpye :      CASS Format
Target Job;      DEFAULT
  
```

Job | Source | Import

```

[Select Job]
DEFAULT *
2
  
```

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
------	--	-----------

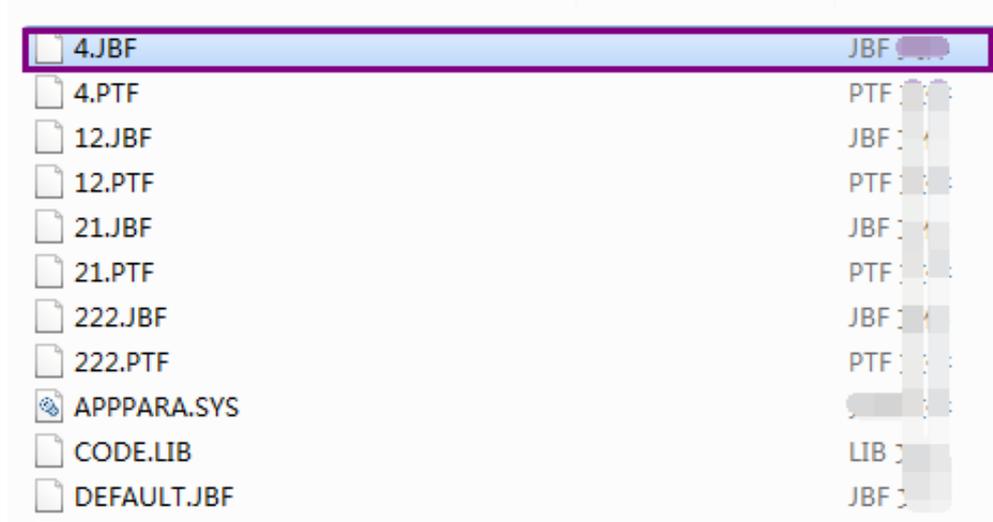
(5) Use the card reader to open the SD card in the computer. Then use the software to open the file. The way to save the file is the same as the 2.1.



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"

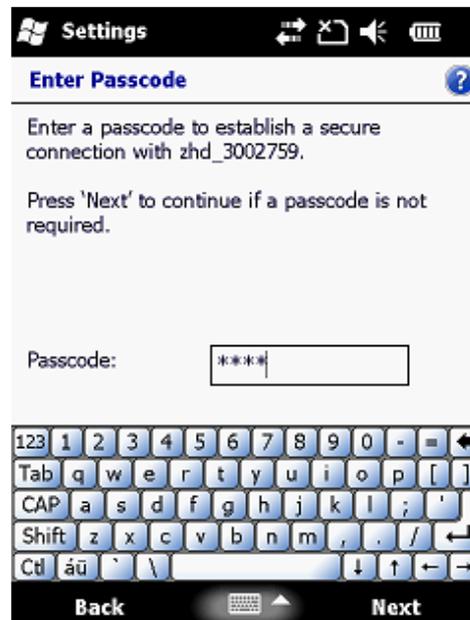
6.2 Set in the controller

6.2.1 Bluetooth Settings

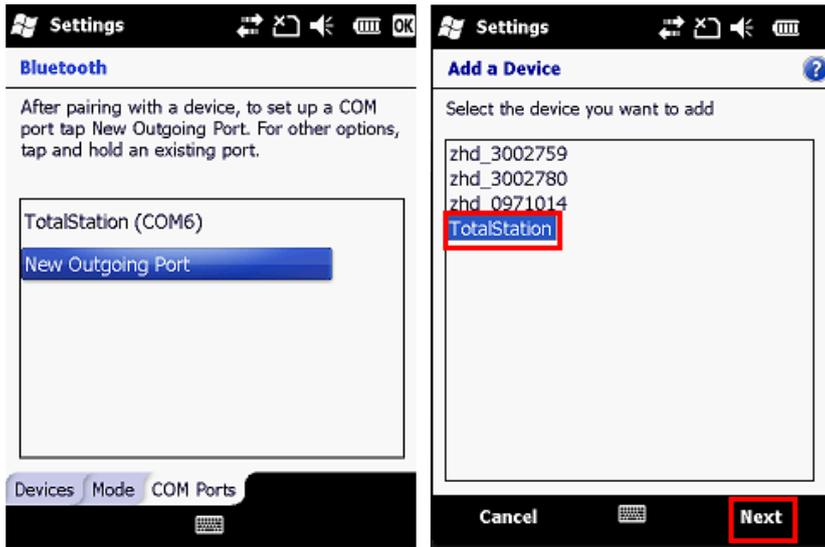
(1) Go to "Settings" and then "Bluetooth" to set the Bluetooth.



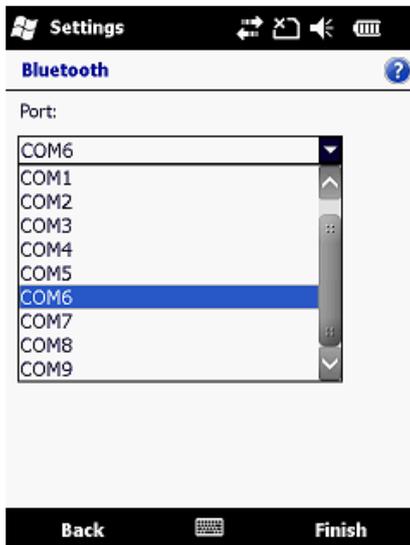
(2) Click "Add new device" to search the total station. Then you will see the it in the list. Then click "Next", enter the pin code "1234" and then click "Next".



(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.

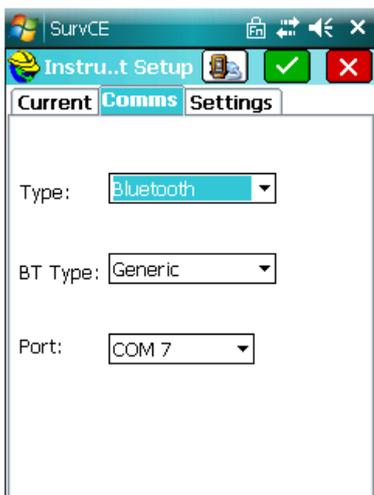
(2) Click “Equip” and then “1Total Station” in the main interface of SurvCE software.



(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.

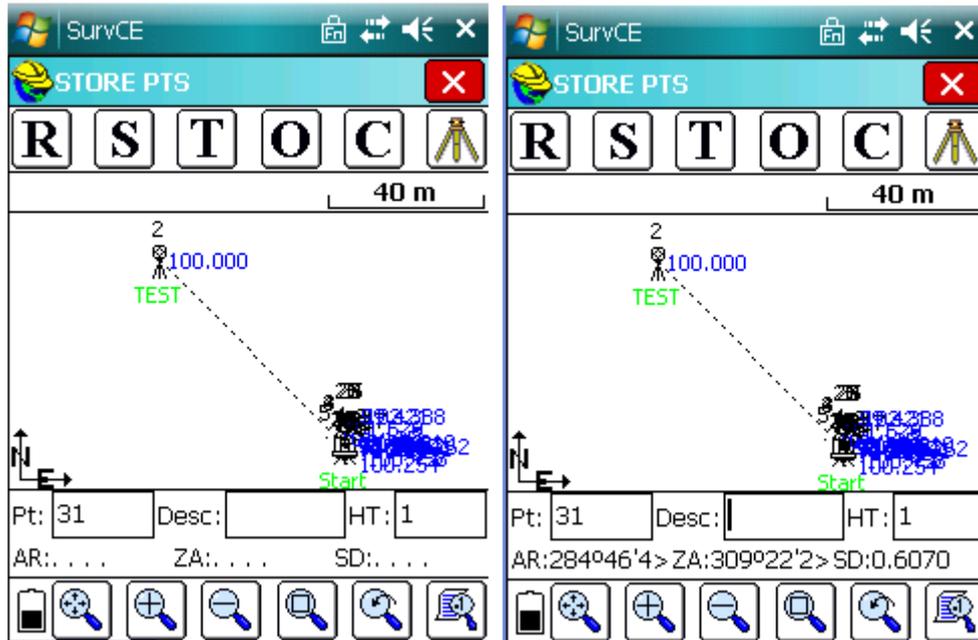


6.2.3 Bluetooth connections in SurvCE

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



(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.