### HI T Λ R G E T

### **ZTS - 320** series total station data transfer instructions

1. Install driver of data transmission	1
2. Transmit data through RS232C communication line	6
2.1 Export the surveying data (*.MEA) to the computer.	6
2.2 Import coordinates data into Total station (.COO file)	10
3. Transmit data through the SD card	13
3.1 Export data saved in SD card to PC	13
4. Transfer data though USB disk	16
4.1 Export measuring data file(.MEA data) in TS to the USB disk	16
4.2 Import data into .COO file (Coordinate file) by USB disk	19
5. Transfer data though MiniUSB communication cable	21
-	

#### 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.

Dissue read the following linence spreams	and an and failler		
Please read the following license agreeme	nt carerully.		-
END-USER LICENSE AGREEMENT IMPORTANT: READ CAREFULLY			-
SILICON LABORATORIES INC., SILICON LTD., AND THEIR AFFILIATES (COLLEC DEVELOPED CERTAIN MATERIALS (E. EMBEDDABLE CODE, DLLs, SOFTWAR THIRD PARTY PROPRIETARY MATERI MAY USE IN CONJUNCTION WITH SILI THE LICENSED MATERIALS IS SUBJEC	N LABORATORIES IN CTIVELY, "SILICON D G., DEVELOPMENT 1 (2/COMPUTER PRO( IAL) ("LICENSED MAT CON LABS' MCU PRO CON LABS' MCU PRO TTO THIS END-USE	TERNATIONAL P ABS") HAVE FOOLS, EXAMPLE BRAMS AND OTHI FERIALS") THAT Y DDUCTS, ANY US ER LICENSE	TE. CODE, ER TOU E OF
I accept the terms of the license agreer	ment		Print
allShield	ogreement		

### (3) Click "Next>".

hoose Destination Location		Same 1
Select folder where setup will insta	ll files.	
Setup will install Silicon Laboratorie Server/Vista/7 v5.40.29 in the follo	es CP210x VCP Drivers for Window owing folder.	rs XP/2003
To install to this folder, click Next. another folder.	To install to a different folder, click	Browse and select
Destination Folder		
Destination Folder c:\\MCU\CP210x\Windows_>	<p_s2k3_vista_7< td=""><td>Browse</td></p_s2k3_vista_7<>	Browse
Destination Folder c:\\MCU\CP210x\Windows_>	<p_s2k3_vista_7< td=""><td>Browse</td></p_s2k3_vista_7<>	Browse

#### (4) Click "Install" to start installing.

	Sec. 1
I he wizard is ready to begin installation	
Click Install to begin the installation.	
If you want to review or change any of the wizard.	your installation settings, click Back. Click Cancel to exit

(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



📇 Device Manager	X
Eile Action View Help	
GM06 GM06 Gish drives Disk drives Display adapters Display adapters Mice and other pointing devices Monitors Network adapters Ports (COM & LPT) Communications Port (COM1) High-Speed PCI Serial Port (COM2) High-Speed PCI Serial Port (COM2) High-Speed PCI Serial Port (COM3) Processors Sound, video and game controllers System devices Universal Serial Bus controllers	

### 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**)

<b>ВШ РС</b>	IO DATA	1.1.7 (201	3-07-09 EN)						
NUM	Logo	Pt	НА	VA	SD	N	E	Z	ComPort Setup
1									ComPort COM3 💌
									BaudRate 115200 -
									File Transfer
									Measure File 💌
									Input Output New
									Unit Setting
									Angle DMS 💌
									Length Meter 💌
									Data Transmission
									Receive
									Send
									Stop
									Disk File
									Open Save
									Clear
									Copy data
									Paste data
									Exit
1								N	
Welcome	•		Total: 0					<u> </u>	

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



## HI T Λ R G E T

(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.

PC	Port II v1	.3-beta	3											
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / TH (m)	Code	BSB (dms)	BSA (dms)	Other	ComPort Setup
1														ComPort COM3 💌
														BaudRate 115200 🗸
													Chand	File Transfer
													Step1	Moseuro Filo
														Input Output New
														Unit Setting
														Angle DMS 💌
														Length Meter 💌
														Data Transmission
													Ster	2 Receive
														Send
														Stop
														Disk File
														Open Save
														Clear
														Lopy data
														Paste data
														Exit
•													•	
Operat	tion is co	mplete	el	Total: 0										
			-											

(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.

🗰 PC	Port II v1	.3-beta	-			-									
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / TH (m)	Code	BSB (dms)	BSA (dms)	Other	ComPort Setup	-1
1	STA	1				0.0000	0.0000	0.0000	0.0000					ComPort COM3 💌	
2	вкв	BS									227.0306	45.0000		BaudRate 115200 ▼	
3	BS	BS	18.1902	38.5337	1.3930				0.0000					-File Transfer	
4	SC	1	19.4704	39.5339	2.2510	1.3580	0.4890	1.7270	0.0000						
5	SC	2	13.3706	39.5340	2.2530	1.4040	0.3400	1.7290	0.0000					Measure File	
6	SC	3	20.4216	310.5448	2.6180	-1.8510	-0.6990	1.7150	0.0000					Input Output New	
7	SC	4	52.4702	283.1233	2.6480	-1.5590	-2.0530	0.6050	0.0000					Unit Setting	3
8	SC	5	6.2702	106.5636	0.5370	0.5100	0.0580	-0.1560	0.0000					Angle DMS -	
9	SD	6	24.2755	106.5637	2.4340				0.0000						
10	SD	7	19.5329	36.0423	2.1360				0.0000					Length Meter 💌	
11	SD	8	18.4902	243,5606	0.5130				0.0000					Data Transmission	51
12	SA	9	31.0758	63.5933					0.0000					Receive	
13	SA	10	114.1011	317.1036					0.0000						
														Send	
														Stop	
														Disk File	
														Open Save	
														Clear	1
														Copy data	1
														Paste data	1
														Exit	
•													•	•	
Opera	tion is co	mplete	1	Rx: 16	R	eceive dat	a:Click "R	eceive" but	tton within 20	) seco	onds after t	he instrum	ent click the	e "Export" button	//

(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.

Save as GTS-	file		
Please select	: data type you w	vant to save	
<ul> <li>All data</li> </ul>		C Angle and distance	
Distance Typ	e		
● SD		⊖ HD	
Sa	ve	Cancel	

#### 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 "NMNU" button to enter the NENU->choose "3.Fileman"-> "2.Import"



Fileman	Î
1.File Dialogbox	
2.Import	
3.Export	
4.Format disk	
5. Information of disk	

(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.

NUM       PT#       N       E       Z       PC0DE       ConPort Setup         T       Step1       ConPort Setup       ConPort C0M3 •         BauRate       T1520 •       File Transfer       ConPort Setup         Step1       File Transfer       ConPort Setup       ConPort Setup         ConPort Setup       ConPort C0M3 •       BauRate       T1520 •         Step1       File Transfer       ConPort Setup       ConPort Setup         ConPort Setup       Incut Output New       Incut Output New         Incut Output New       Incut Output New       Incut Output New         Operation is complete!       Total: 0       Receive' button within 20 seconds after the instrument click the "Export" button	B PC P	ort II v1.3-beta							
1       ComPort ION3 I BaudRate 115200 I Fee Transfer         Step1       Fee Transfer I Coordinate File I Coordinate	NUM	PT#	N	E	Z	PCODE			ComPort Setup
Step1       File Tansfer         Step2       File Tansfer         Unit Setting       Angle         Angle       Meter         Deta Transmission       Receive         Step1       Step1         File Tansfer       Coddmark         Deta Transmission       Receive         Step1       Deta Transmission         Receive       Send         Stop       Disk File         Open       Save         Copy data       Paste data         Exit       Exit	1								ComPort COM3 👻
Step1       File Transfer         Step2       Image         Image       Image         Angle       Image         Length       Meter         Data Transmission       Receive         Stop       Disk File         Open       Save         Copy data       Paste data         Exit       Exit									BaudRate 115200 ▼
Step2       Invul Duput New         Juit Setting       Angle         Data Transmission       Beceive         Step       Step         Data Transmission       Beceive         Stop       Diek File         Open       Save         Clear       Copy data         Paste data       Exit								Step1	File Transfer
Step2       Input Output New         Angle       DMS         Length       Meter         Data Transmission       Beceive         Step2       Disk File         Open       Save         Clear       Copy data         Paste data       Exit         Exit       Exit									Coordinate File 💌
Unit Setting         Angle         DMS         Length         Meter         Data Transmission         Receive         Send         Stop         Disk File         Open         Copy data         Paste data         Exit								Step2	Input Output New
Angle       UMS         Length       Meter         Data Transmission       Receive         Send       Stop         Disk File       Open         Open       Save         Clear       Copy data         Paste data       Exit         Disk File       Exit									Unit Setting
Deterministic         Data Transmission         Receive         Send         Stop         Disk File         Open         Save         Clear         Copy data         Paste data         Exit									Angle DMS
Data Transmission         Receive         Send         Stop         Disk File         Open         Save         Clear         Copy data         Paste data         Exit									Length Meter 💌
Beceive         Send         Stop         Disk. File         Open         Save         Clear         Copy data         Paste data         Exit									Data Transmission
Send         Stop         Disk File         Open         Save         Clear         Copy data         Paste data         Exit         Operation is complete!         Total: 0       Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Receive
Stop         Disk File         Open         Save         Clear         Copy data         Paste data         Exit         State         Operation is complete!         Total: 0       Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Send
Disk File         Open         Save         Clear         Copy data         Paste data         Exit         Operation is complete!         Total: 0       Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Stop
Open       Save         Clear       Clear         Copy data       Paste data         Exit       Exit         Operation is complete!       Total: 0         Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Disk File
Clear         Copy data         Paste data         Exit         Exit         Operation is complete!         Total: 0       Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Save
Copy data         Paste data         Exit         Operation is complete!         Total: 0         Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Clear
Paste data         Exit         Operation is complete!         Total: 0         Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Copy data
Exit         Operation is complete!       Total: 0         Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Paste data
Operation is complete! Total: 0 Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									Exit
Operation is complete! Total: 0 Receive data:Click "Receive" button within 20 seconds after the instrument click the "Export" button									
	Operati	on is complete!	Total: 0	Receive	data:Click "Receiv	e" button wit	hin 20 seconds after the instrumer	nt click the '	'Export" button

(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.

🗱 PC Po	rt II v1.3-beta								
NUM 1	rt II v1.3-beta	N	E	2	PCODE			Step1	Coordinate format selection
Choose t	o import data fo	rmat and	Receive	data:Click "Receiv	e" button wit	hin 20 seconds af	ter the instrum	ent click the	"Export" button

PC F	ort II v1.3-beta			1.1.1		
NUM	PT#	N	E	z	PCODE	Coordinate format selection
1	1	7.1400	7.1420	4.0380	STA	
2	2	8.8180	8.3840	-0.6340	BS	
3	3	4.7470	4.7800	-0.7440	D	Separator options
4	4	0.4820	-1.4530	-0.7070	D	Comma
5	5	-0.7840	6.0450	1.2010		C Space
6	6	-0.6610	6.0650	1.2030		C Tabs
7	7	-0.3050	2.3630	1.1940		
8	8	0.0000	0.0000	0.0000		
9	9	3.0000	2.4510	0.1270		Import
10	10	3.3450	2.4560	10.3450		
						Export
						Preview the data
						Step3
Choose	to import data fo	ormat and	C:\User:	s\Administrator\D	esktop\POINTS.txt	//

(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.

B PC F	PC Port II v1.3-beta									
NUM	PT#	N	E	z	PCODE				ComPort Setup	
1	1	7.1400	7.1420	4.0380	STA				ComPort COM3	
2	2	8.8180	8.3840	-0.6340	BS				BaudRate 115200	
3	3	4.7470	4.7800	-0.7440	D					
4	4	0.4820	-1.4530	-0.7070	D					
5	5	-0.7840	6.0450	1.2010					Coordinate File	
6	6	-0.6610	6.0650	1.2030					Input Output	
7	7	-0.3050	2.3630	1.1940					Unit Setting	
8	8	0.0000	0.0000	0.0000					Angle DMS	
9	9	3.0000	2.4510	0.1270						
10	10	3.3450	2.4560	10.3450					Length Meter	
									Data Transmission	
									Stop Disk File Open S Clear Copy data Paste data	
									Exit	
Choose	to import data f	ormat and	Sen	d data:Click "Send	d" button within 2	seconds afte	r the instrume	nt click the "Imp	ort" button	

### 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.

ts_prj → import		▼ <b>4</b> 搜索 i	mport		\$
			== •		2
名称	修改日期	类型	大小		
SD.COO	2013/5/5 9:49	COO 文件		1 KB	٦
▶ ts_prj ▶ project		▼ <b>4</b> 9 搜索 p	project		۶
<del>1</del> )					
			-		0
名称 ^	修改日期	类型	大小		
SD.MEA	2013/5/5 9:46	MEA 文件		1 KB	

(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"

PC	Port II v1	.3-beta								
NUM	Logo	Pt	HA	VA	SD	N	E	Z	IH / TH	ComPort Setup
1										ComPort COM3 💌
										BaudRate 115200 -
									Step1	File Transfer
										Measure File 🗸
										Input Output New
										Unit Setting
										Angle DMS 💌
										Length Meter 💌
										Data Transmission
										Receive
										Send
										Stop
									Step2	Diek File Open Save
										Clear
										Copy data
										Paste data
										Exit
									Þ	
Opera	tion is co	mplete!	Total: 0	Receiv	e data:Click "Red	eive" button wit	hin 20 seconds	after the instrun	nent click the	"Export" button
_										

(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.

B PC F	PC Port II v1.3-beta														3
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / TH (m)	Code	BSB (dms)	BSA (dms)	Other	ComPort Setup	-1
1	STA	1				0.0000	0.0000	0.0000	0.0000					ComPort COM3 💌	
2	вкв	BS									227.0306	45.0000		BaudRate 115200 -	
3	BS	BS	18.1902	38.5337	1.3930				0.0000					File Transfer	
4	SC	1	19.4704	39.5339	2.2510	1.3580	0.4890	1.7270	0.0000					Manual 51	
5	SC	2	13.3706	39.5340	2.2530	1.4040	0.3400	1.7290	0.0000						
6	SC	3	20.4216	310.5448	2.6180	-1.8510	-0.6990	1.7150	0.0000					Input Output New	
7	SC	4	52.4702	283.1233	2.6480	-1.5590	-2.0530	0.6050	0.0000					Unit Setting	
8	SC	5	6.2702	106.5636	0.5370	0.5100	0.0580	-0.1560	0.0000					Angle DMS 🔻	
9	SD	6	24.2755	106.5637	2.4340				0.0000						
10	SD	7	19.5329	36.0423	2.1360				0.0000					Length Meter 💌	
11	SD	8	18.4902	243.5606	0.5130				0.0000					Data Transmission	51
12	SA	9	31.0758	63.5933					0.0000					Receive	
13	SA	10	114.1011	317.1036					0.0000						
														Send	
														Stop	
														Disk File	Ę.
														Open Save	
														Clear	
														Copy data	1
														Paste data	1
														Exit	
•															
Operat	ion is co	mplete	!	Rx: 16	R	eceive dat	a:Click "Re	ceive" but	ton within 2	0 seco	nds after t	he instrum	ent click the	Export" button	

(7) In the "save as "dialog, saving types select the "GTS - 7 files (\*. Gt7) ", input the file name ->click "save" button. х 蹦 另存为 -保存在 (I): 📃 桌面 • 🗕 🛍 💣 🎫 A ÷ 1 库 最近访问的位 置 系统文件夹 Ξ Administrator 系统文件夹 桌面 计算机 100 系统文件夹 楃 网络 系统文件夹 计算机 NIKON DTM352、DTM552 中 文操作系统模拟器 文件夹 网络 文件名(10): TEXT • 保存(S) 保存类型(I): 工作文件(\*.htf) • 取消 「作文件 (\* ト+モ) 文本文件(\*. txt) 所有文件(\*. \*) 46.4110 18,4831 1 0000 (8) In the window following Pop-up, you can choose to save all the data or corner data only, the distance type can choose

 Save as GTS-7 file

 Please select data type you want to save

 • All data
 • Angle and distance

 Distance Type

 • SD
 • HD

 Save

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.

►	ts_prj ►	import			▼ 🍫 搜索 impo	ort		م
H)								
								?
	名称		A	修改日期	类型	大小		
	TEXT.	тхт		2013/5/6 1:16	文本文档		1 KB	
								_

	-pen u					8				,
🗰 PC	Port II v1	.3-beta								
NUM	Logo	Pt	HA	VA	SD	N	E	Z	ін / тн	ComPort Setup
1										ComPort COM3 -
										BaudRate 115200 💌
									Step1	File Transfer
										Measure File 🔽
										Input Output New
										Unit Setting
										Angle DMS 💌
										Length Meter 💌
										Data Transmission
										Receive
										Send
										Stop
										Disk Eilo
									Step2	Open Save
										Clear
										Copy data
										Paste data
										Exit
•									4	
Oper	ation is co	mplete!	Total:	0	Receive data:Click	"Receive" butt	on within 20 sec	onds after the i	nstrument click the '	Export" button

(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.

DC	PC Port II v1.3-beta													
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / TH (m)	Code	BSB (dms)	BSA (dms)	Other	ComPort Setup
1	STA	1				0.0000	0.0000	0.0000	0.0000					ComPort COM3 💌
2	вкв	BS									227.0306	45.0000		BaudRate 115200 🔻
3	BS	BS	18.1902	38.5337	1.3930				0.0000					File Transfer
4	SC	1	19.4704	39,5339	2.2510	1.3580	0.4890	1.7270	0.0000					
5	SC	2	13.3706	39.5340	2.2530	1.4040	0.3400	1.7290	0.0000					Measure File
6	SC	3	20.4216	310.5448	2.6180	-1.8510	-0.6990	1.7150	0.0000					Input Output New
7	SC	4	52.4702	283.1233	2.6480	-1.5590	-2.0530	0.6050	0.0000					Unit Setting
8	SC	5	6.2702	106.5636	0.5370	0.5100	0.0580	-0.1560	0.0000					Angle DMS -
9	SD	6	24.2755	106.5637	2.4340				0.0000					
10	SD	7	19.5329	36.0423	2.1360				0.0000					Length Meter 💌
11	SD	8	18.4902	243.5606	0.5130				0.0000					Data Transmission
12	SA	9	31.0758	63,5933					0.0000					Receive
13	SA	10	114.1011	317.1036					0.0000					
														Send
														Stop
														Disk File
														Open Save
														Copy data
														Paste data
														Exit
													•	
Opera	tion is c	omplete	-l	Bx: 16	Re	aceive dat	a:Click "B	eceive" but	ton within ?	0 seco	nds after t	he instrum	ent click the	"Export" button
[opena	aon is c	Inpiete		10.10	INC	conve dat	arenex to	oconve but	con whenill 2		nos anter t	ine macrani	and check the	caport button

(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.

明 另存为		×
保存在(L):	■ 桌面 🔹 🔸	⊨ 🛍 📸 📰▼
最近访问的位置	库 系统文件夹	E
桌面	Administrator 系统文件夹	
<mark>篇</mark> 库	计算机 系统文件夹	
▲ ↓算机	网络 系统文件夹	
	NIKON DIM352、DIM552 中 文操作系统模拟器 文件夹	-
m#	文件名 (M): TEXT	▼ 保存(S)
	保存类型 ①: 工作文件 (*. htf) 工作文件 (*. htf)	
46.4110 7	15.46350 16.46350 1 0000 1 0000	

(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.

Save as GTS-7 file	×									
Please select data typ	Please select data type you want to save									
<ul> <li>All data</li> </ul>	C Angle and distance									
Distance Type										
ে SD	C HD									
Save	Cancel									

#### 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!

I ts_prj → import	_	▼ <b>4</b> 搜索 ii	mport	P
(H)				
			= • 1	0
名称	修改日期	类型	大小	_
POINTS.txt	2014/5/14 9:46	文本文档	1 KB	
POINTS.txt - 记事本           文件(F) 编辑(E) 格式(O) 查看(V)           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, ,	<sup>帮助(H)</sup> Have Codes No Codes			

(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".



(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 though MiniUSB communication cable

(1)Pack the batteries in the TS(make sure the poweris 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.



可移动磁盘 (H:) ▶		<b>▼</b> 4 <sub>7</sub>	搜索 可移动磁盘 (H:)	Q
工具(T) 帮助(H)				
新建文件夹				0
名称	修改日期	类型	大小	
\mu CODE		文件夹		
IMPORT		文件夹		
🎉 PROJECT		文件夹		
🗼 ROAD		文件夹		

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

B PC	Port II v1	3-beta								
NUM	Logo	Pt	HA	VA	SD	N	E	Z	IH / TH	ComPort Setup
1										ComPort COM3 💌
										BaudRate 115200 👻
									Step1	File Transfer
										Input Output New
										Unit Setting
										Angle DMS 💌
										Length Meter 💌
										Data Transmission
										Receive
										Send
										Stop
									Step2	Disk File
										Clear
										Copy data
										Paste data
										Exit
•									Þ	
Choos	e to impo	ort data form	nat and Total: 0	Send d	ata:Click "Send"	button within 20	0 seconds after	the instrument of	click the "Impo	ort" button

(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.

🙀 PC Port II v1.3-beta														
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / TH (m)	Code	BSB (dms)	BSA (dms)	Other	ComPort Setup
1	STA	1				0.0000	0.0000	0.0000	0.0000					ComPort COM3 💌
2	вкв	BS									227.0306	45.0000		BaudRate 115200 🔻
3	BS	BS	18.1902	38.5337	1.3930				0.0000					File Transfer
4	SC	1	19.4704	39.5339	2.2510	1.3580	0.4890	1.7270	0.0000					
5	SC	2	13.3706	39.5340	2.2530	1.4040	0.3400	1.7290	0.0000					Measure File
6	SC	3	20.4216	310.5448	2.6180	-1.8510	-0.6990	1.7150	0.0000					Input Output New
7	SC	4	52.4702	283.1233	2.6480	-1.5590	-2.0530	0.6050	0.0000					Unit Setting
8	SC	5	6.2702	106.5636	0.5370	0.5100	0.0580	-0.1560	0.0000					Angle DMS 🔻
9	SD	6	24.2755	106.5637	2.4340				0.0000					
10	SD	7	19.5329	36.0423	2.1360				0.0000					Length Meter 💌
11	SD	8	18.4902	243.5606	0.5130				0.0000					Data Transmission
12	SA	9	31.0758	63.5933					0.0000					Receive
13	SA	10	114.1011	317.1036					0.0000					
														sena
														Stop
														Disk File
														Open Save
														Clear
														Copy data
														Paste data
														Exit
													+	
Operat	ion is co	mplete	!	Rx: 16	Re	eceive dat	a:Click "Re	eceive" but	ton within 2	0 seco	onds after t	he instrum	ent click the	"Export" button

(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.

you want to save
C Angle and distance
C HD
Cancel