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### HI • T Λ R G E T

### **1**、 Data transmission software instructions

#### **1.1 Install Data Transfer Line Driver**

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, then choose to "Run as administrator".



2. Select as the following, then click "Next>" button.

1	Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/
	License Agreement Please read the following license agreement carefully.
	END-USER LICENSE AGREEMENT IMPORTANT: READ CAREFULLY BEFORE AGREEING TO TERMS SILICON LABORATORIES INC., SILICON LABORATORIES INTERNATIONAL PTE. LTD., AND THEIR AFFILIATES (COLLECTIVELY, "SILICON LABS") HAVE DEVELOPED CERTAIN MATERIALS (E.G., DEVELOPMENT TOOLS, EXAMPLE CODE,
	EMBEDDABLE CODE, DLLs, SOFTWARE/COMPUTER PROGRAMS AND OTHER THIRD PARTY PROPRIETARY MATERIAL) ("LICENSED MATERIALS") THAT YOU MAY USE IN CONJUNCTION WITH SILICON LABS' MCU PRODUCTS. ANY USE OF THE LICENSED MATERIALS IS SUBJECT TO THIS END-USER LICENSE Interpret of the license agreement Print
	I do not accept the terms of the license agreement InstallShield

### 3.Click "Next>".

Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/	
Choose Destination Location Select folder where setup will install files.	
Setup will install Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 v5.40.29 in the following folder.	
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.	
Destination Folder	
c:\\MCU\CP210x\Windows_XP_S2K3_Vista_7 Browse	
InstallShield	-
< Back Next > Cancel	

# HI • T ∧ R G E T

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

Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/
Ready to Install the Program The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield Cancel

5.Select as the following, mark the "Launch the CP2102x VCP Driver Installer", then click "Finish".



# HI • T ∧ R G E T

6.Click the "Install" button, then start to install driver program.

Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 - Instal
InstallShield Wizard Complete
🖟 Silicon Laboratories CP210x USB to UART Bridge Driver Installer
Silicon Laboratories Silicon Laboratories CP210x USB to UART Bridge
Installation Driver Version 5.4.29
C:\Program Files\Silabs\MCU\CP210x\
hange Install Location. Install Cancel
< Back Finish Cancel

7. After installing, it will hint "Installation completed successfully" as following.



# HI • T ∧ R G E T

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.



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#### **1.2 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 Port 2"as the administrator.

Bill PC	# PC-PORT2 1.1											
NUM	Logo	Pt	HA	VA	SD	N	E	Z	IH / TH	Code	ComPort Setup	
1											ComPort 🗾	
											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	
											1	
											Exit	
< []]										>		
Welcom	e		Total: 0	1								

	3.	Serial	port	chooses	the	number	COM3	when	installing	hints	you.
--	----	--------	------	---------	-----	--------	------	------	------------	-------	------

Bill bC	-PORT2	1.1								
<del>御 PC</del>	PORT2	I. I Pt	HA		SD	N	E	Z	IH / TH	ComPort Setup ComPort Setup ComPort CDM3 V BaudRate COM3 File Transfer Measure File V Unit Setting Angle DMS V Unit Setting Angle DMS V Length Meter V Data Transmission Receive Send Stop Disk File Open Save Clear Copy data Paste data
<b>K</b> elcom	e		Tot	al: 0						Exit

4. Press the power button to start the equipment, then press "MENU" button to enter the function menu. Press "3" button to enter "Fileman".



5. Press "3" button to export the file.



6. Press "F3" to chose the file you need to export. This time we choose the original surveying data file \*.MEA, then press "ENT" button to confirm.



7. Press up and down button to select the file you need to export and press "F4" to confirm, then it will return back to the exporting interface, and show the file name you chose.



### HI • T A R G E T



8. On the computer, press "Receive" button as the following picture.

BU PC-	-PORT2	1.1							
NUM	Logo	Pt	HA	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
<									<u>&gt;</u>
Welcom	2		Tot	al: 0	Receive data:Click	: "Receive" bu	tton within 20	seconds after	the instrument click the "F

9. Then click the "F4" button to do the exporting operation, after exporting, it will show you how many data you have exported.

### HI • T A R G E T



10. On the computer it will also show you how many data you have received.

BAN PC	-PORT2	1.1								
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / TH (m)	ComPort Setup
1	SA	SUN1	343.3024	11.5550					2.6000	ComPort COM3 💌
2	SD	SUN2	343.3039	11.5550	1.4800				2.6000	BaudRate 115200 -
3	STA	STN1				0.0000	0.0000	0.0000	2.6000	File Transfer
4	BKB	BS1								
5	SC	SUN3	45.0035	11.5550	1.4790	0.2162	0.2162	1.4471	2.6000	Measure File
										Input Output New
										Unit Setting
										Angle DMS 🔻
										Length Meter 💌
										Data Transmission
										Receive
										bend
										Stop
										Disk Eile
										Open Save
										Clear
										Conudata
										Paste data
< [1]		_			_				>	
Operat	ion is co	omplete!	Rx: 6							1

11. After received the data, click "Output" button, then it will enter the coordinate derived interface.

# ΗΙ•ΤΛRGET

NI PC	PORT	2 1.1								
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / TH (m)	ComPort Setup
1	SA	SUN1	343.3024	11.5550					2.6000	ComPort COM3 💌
2	SD	SUN2	343.3039	11.5550	1.4800				2.6000	BaudRate 115200 -
3	STA	STN1				0.0000	0.0000	0.0000	2.6000	File Transfer
4	вкв	BS1								Mozeuro Filo
5	SC	SUN3	45.0035	11.5550	1.4790	0.2162	0.2162	1.4471	2.6000	
										Input Output New
										Unit Setting
										Angle DMS 💌
										Length Meter 💌
										Data Transmission
										Receive
										Send
										stop
										Disk File
										Open Save
										Clear
										Lopy data
										Paste data
<									>	P P
Operat:	ionis	complete!	Rx: 6							

12. Choose the format of the coordinate you need to export, then click "Export" button, if you need preview the data, mark the check box of "Preview the data". Type the name and choose the data format in the dialogue pop-up, then click "Save" button.



### **1.3 Creating Coordinate data file on the computer.**

1. Run the data transfer software, select "Coordinate file" from the pop-up menu, then select "New".

Bill PC-	PORT2	1.1					
NUM 1	PT#	N	E	2	PCODE		ComPort Setup ComPort COM3 BaudRate 115200 File Transfer Coordinate File Input Output New Unit Setting Angle DMS Length Meter Data Transmission Receive Send Stop Disk File Open Save Clear
Operati	on is co	mplete!	Total: O	Send data:Click	"Send" button within 2	20 seconds ai	Ster the instrument cli

2. At the data editing interface, you can click the enter box to enter the Point Name, E,N, Z, and PCODE.

PC-	PORT2					
NUM	PT#	N	E	z	PCODE	[]
1	1	1.2	0.3	1	B	Append Insert Delete Search
			Rx :	6		11.

# HI**∙**T∧RGET

2. If you need to edit next data, you can click "Add" button, and if you entered wrong info, you can modify directly in the box.

时期 PC-	PORT:						
NUM	PT#	N	E	Z	PCODE	8	
1	1	1.2	0.3	1	В		
2							Append
							Insert
							Delete
							Delete
							C
							Search
							🗸 Return
			Tot	al: 22			

3. If you don't need one of the data, you can select that data, then click "Delete" button to delete.



# ΗΙ∙ΤΛRGET

4. If there are many data, you can use the "Search" function to enter the point name you want to see.

₩ <b>₽C</b>	PORT2 1.1					
NUM	PT#	N	E	Z	PCODE	
1	1	1.2	2.3	3.4	A	
2	2	2.3	21.1	2.5	A	Append
3	3	3.4	6.2	3.1	A	
4						Insert
5						
6						Delete
7						
8						
9						2
10						
11	1.5					Search
						✓ Return
Welcome		To	tal: 1111			

5. After editing, click "Return" to return back to the main interface, then you can import the data to the equipment or save to the computer.

₩# PC-	罐 PC-PORT2 1.1									
NUM	PT#	N	E	Z	PCODE	ComPort Setup				
1	1	1.2000	2.3000	3.4000	A	ComPort COM3 💌				
2	2	2.3000	21.1000	2.5000	A	BaudRate 115200 -				
3	3	3.4000	6.2000	3.1000	A	File Transfer				
						Coordinate File  Input Output New Unit Setting Angle DMS  Length Meter  Data Transmission Receive Send Stop Disk File Open Save Clear				
						Copy data				
		Tota	1: 1111 Sen	d data:Click "Sen	d" button within 20	seconds after the instrument .				

# HI • T Λ R G E T

#### **1.4 Import coordinates data on the computer to the instrument.**

1. The way to connect the computer and the equipment is the same as before said.

2. Press the "MENU" button enter the menu interface, press "3" button to the "Fileman", then press" 2" button to do the operation of importing.



3. Press "F3", then you can choose the file to receive.



4. If there is no .COO file to choose, or you want to save these data in

# $HI \triangleright T \land R G E T$

new file, you can press "F1" button to create a new file.



5. Then enter the file name in the entering box, press "F4" button to change the file type to .COO, press "ENT" button to confirm.



6. Then select the file you just created, press "F4" button to confirm.

# HI • T Λ R G E T



7. Click "send" in Pc-Port and then press "F4" button to start importing.



8. As to the file that you already have, after running the data transfer

# $HI \triangleright T \land R G E T$

software, select "Coordinate file", then click "Input".

BALL DC	-PORT2	1.1					
NUM 1	PT#	N	E	2	PCODE		ComPort Setup ComPort CDM3 V BaudRate 115200 V File Transfer Coordinate File V Input Output New Unit Setting Angle DMS V Length Meter V Data Transmission Receive Send Stop Disk File Open Save Clear
Operat:	ion is co	mplete!	Total: O	Send data:Click	"Send" button with	thin 20 seconds af	ter the instrument cliv

9. Select the Coordinate format you want to import, then click "Import" button, then choose the file you need to open, click "Open" button.

tii PC−i	PORT2 1.1					
NUM	PT#	N	E	Z	PCODE	Coordinate format selection
1		di la constante de				1) PT,N,E,Z,P0 💌
						Separator options Comma Space Tabs Import Export Preview the data
Choose t	o import data for	rmat and	Receive	data:Click "Receiv	ve" button within 20	seconds after the instru

10. Then click "Send" button.

# HI•T Λ R G E T

NUM	PT#	N	E	z	PCODE	ComPort Setup
l	1	50000.0000	40000.0000	2000.0000		ComPort COM3 -
2	2	49987.3150	39988.8490	1998.4890		BaudBate 115200 -
;	3	49993.0700	39990.5250	1998.1120		Eile Trensfer
l.	4	49997.0740	39991.8470	1997.8070		File Transfer
5	5	50000.6400	39992.7500	1998.0020		Coordinate File
3	6	50003.1440	39993.4870	1997.2860		Input Output Nev
7	7	50006.1300	39994.9220	1998.4550		
8	8	50006.0040	39996.4370	1999.6830		Angle DMS
3	9	50005.9230	39998.4290	1998.1480		
10	10	50006.9330	40001.6990	1997.5950		Length Meter 💌
11	11	50007.9080	40004.6160	1997.6220		Data Transmission
12	12	50008.6500	40006.7100	1997.9090		Baceiva
13	13	50010.1410	40011.1890	1998.2390		
4	14	50011.2910	40014.6600	1998.2730		Send
15	15	50004.5850	40016.2750	1997.3610		Stop
16	16	50000.0350	40017.4300	1997.6260		
17	17	49995.2850	40018.6070	1997.5280		Disk File
18	18	49991.2410	40019.5410	1997.9080		OpenSave
19	19	49996.4200	40012.3340	1997.7590		Clear
20	20	49997.8090	40009.7810	1997.3410		
21	21	49999.9210	40006.7260	1997.6000		Copy data

11. On the equipment, press "F4" button, then it will show the data number you have imported.



12. On the computer, it will also show what data you have imported.

# $HI \triangleright T \land R G E T$

NUM	PT#	N	E	Z	PCODE	ComPort Setup
1	1	50000.0000	40000.0000	2000.0000		ComPort COM3 -
2	2	49987.3150	39988.8490	1998.4890		BaudBate 115200 -
3	3	49993.0700	39990.5250	1998.1120		
4	4	49997.0740	39991.8470	1997.8070		
ō	5	50000.6400	39992.7500	1998.0020		Coordinate File
6	6	50003.1440	39993.4870	1997.2860		Input Output New
7	7	50006.1300	39994.9220	1998.4550		Linit Setting
3	8	50006.0040	39996.4370	1999.6830		
3	9	50005.9230	39998.4290	1998.1480		
10	10	50006.9330	40001.6990	1997.5950		Length Meter 💌
11	11	50007.9080	40004.6160	1997.6220		Data Transmission
12	12	50008.6500	40006.7100	1997.9090		Beceive
13	13	50010.1410	40011.1890	1998.2390		
14	14	50011.2910	40014.6600	1998.2730		Send
15	15	50004.5850	40016.2750	1997.3610		Stop
6	16	50000.0350	40017.4300	1997.6260		
17	17	49995.2850	40018.6070	1997.5280		Disk File
18	18	49991.2410	40019.5410	1997.9080		OpenSave
19	19	49996.4200	40012.3340	1997.7590		Clear
20	20	49997.8090	40009.7810	1997.3410		
21	21	49999.9210	40006.7260	1997.6000		Copy data

# $HI \triangleright T \land R G E T$

### 1.5 Convert data to GTS-7 format

1. Open a measuring file or receive measuring file from the instrument.

Then click the "Save" button.

BUT PC	-PORT2	1.1								
NUM	Logo	Pt	HA (dms)	VA (dms)	SD (m)	N (m)	E (m)	Z (m)	IH / T	ComPort Setup
1	SA	37	299.2005	53.0058					1.000	ComPort COM3 -
2	SD	38	299.2009	53.0058	2.7860				1.000	BaudRate 115200 -
3	SC	39	299.2004	53.0057	2.7870	98.9090	201.9410	3.7150	1.000	- File Transfer
4	SC	40				256.0000	3214.0000	3.0000	1.000	
5	STA	1				100.0000	200.0000	1.5000	1.538	Measure File
6	BKB	NONAME								Input Output New
7	SC	2	148.2704	58.2809	3.1070	97.7430	201.3860	3.6630	1.000	Linit Setting
8	STA	1				200.0000	300.0000	1.5000	1.538	Angle DMS V
9	ВКВ	111								
10	BS	111	20.3323	58.2809	2.4390				1.000	Length Meter 💌
11	SD	2	16.0128	58.2809	2.4990				1.000	Data Transmission
12	SC	3	9.3134	58.2808	2.1450	201.8030	300.3030	3.1600	1.000	Pasaiva
<									8	Send Stop Disk File Open Save Clear Copy data Paste data
Welcom	e		Total	: 12 Rec	eive data:Click	"Receive" butto	n within 20 sec	onds after the	instrument	click the "Export" but

2. Select "GTS-7 File (\*.gt7)", then input file name and click "Save"

button.

C 100	000.0004	50 0057	0.7070	00	0000	001 0440	3.7150
另存为							2 🔀 3.0000
保存在(四	): 🔂 bindata			•	• 🗈 💣 [	<b>.</b>	.5000
4 我最近的文档 桌面 教的文档 一 教的文档 一 一 一 一 一 一 一 一 一 一 一 一 一	Image: Construct of Construction         Image: Constredin Construction	gt7 5 7 5 _new. gt7 _new. gt7 _new. gt7 _new. gt7 . gt7 7	A_dst_coo_new.g A_new.gt7 A_nocoo.gt7 self_A_txt.gt7	t7			8.6630 .5000 8.1600
	文件名(图):				•	保存	(C)
	保存类型(工):	GTS-7 Fi	le(*.gt7)		-	取	消
1		CSV file	(*. csv)				11
		Text Fil	e (*. txt)				
		Any File	(*, *)				

3. Select the type of measuring data you want to save, then click "Save" button.

Save as GIS-7 fi	le 🛛
Please select data typ	e you want to save
All data	C Angle and distance
Save	Cancel

4. The software will save the measuring data to the file as GTS-7 file format. You can open the file with notepad and view the content.

📕 test	.gt7 - 记事本	
文件(で)	编辑 (E) 格式 (Q) 查看 (Y) 帮助 (H)	
JOB	0417.JOB,	~
INST	HTS221	
UNITS	M,D	
22	37,1.0000,2	
HV	299.2005,53.0058	
SS	38,1.0000,2	
SD	299.2009,53.0058,2.7860	
22	39,1.0000,2	
SD	299.2004,53.0057,2.7870	
XYZ	201.9410,98.9090,3.7150	
22	40,1.0000,2	
XYZ	3214.0000,256.0000,3.0000	
STN	1,1.5380,2	-
XYZ	200.0000,100.0000,1.5000	
BKB	NONAME,336.4715,150.0000	
SS	2,1.0000,2	
SD	148.2704,58.2809,3.1070	
XYZ	201.3860,97.7430,3.6630	
STN	1,1.5380,2	
XYZ	300.0000,200.0000,1.5000	
BKB	111,148.2700,20.3322	
BS	111,1.0000	
SD	20.3323,58.2809,2.4390	
22	2,1.0000,2	
SD	16.0128,58.2809,2.4990	
SS	3,1.0000,2	
SD	9.3134,58.2808,2.1450	
		~

#### **1.6 Convert the measurement file to dxf format.**

1. After downloading the data to Pc-PORT, then click "Output".

# HI ▶ T ∧ R G E T

HIP PC	# PC-IO DATA v1.1.4.RC3-EN ( Jun 17 2013 )									
NUM	Logo	Pt	HA	VA	SD	N	E	z	IH / TH	ComPort Setup
1	STA	ST1				1.0000	1.0000	1.0000	1.5000	ComPort COM2 -
2	BS	BS	39.4702	94.4655	0.5190	1.4096	1.3158	0.8567	1.6000	BaudRate 115200 -
3	SC	1	48.4034	55.5009	2.8250	2.6097	2.6949	2.4864	1.6000	Eile Transfer
4	SC	2	58.0340	55.5009	2.8000	2.2256	2.9661	2.4724	1.6000	
5	SC	3	36.3028	55.5009	2.8220	2.8768	2.3892	2.4847	1.6000	Measure File
6	SC	4	46.0507	55.5009	2.8170	2.6167	2.6791	2.4819	1.6000	Input Output New
7	SC	5	56.5724	55.5009	2.8010	2.2637	2.9428	2.4729	1.6000	Unit Setting
8	SA	6	55.5216	55.5009					1.6000	Angle DMS -
9	SA	7	56.4152	55.5009					1.6000	
10	SD	8	58.4639	55.5009	2.8010				1.6000	Length Meter 💌
11	SD	9	64.3112	55.5009	2.7890				1.6000	Data Transmission
12	SD	10	50.3434	55.5009	2.8100				1.6000	Beceive
	1									Send Stop Disk File Open Save Clear Copy data Paste data
Operatio	on is compl	etel	Rv: 19		eceive data: Click "Re	ceive" buttop withi	n 20 seconds after	the instrument dick	the "Export" buttor	

2. Then you will go to the coordinates interface.

3. Click "Return" to go to the main interface, then click "Output" and you will see the "DXF" option in the drop-down list. Then click "Export" to export the dxf file.

H	)	Τ/	NR G	ΕT						
W PC	-IO DAT	A v1.1.4.R	C3-EN ( Jun 1	17 2013 )						
NUM	PT#	N	E	Z	PCODE					Coordinate formal
1	1	2.6097	2.6949	2.4864						71 × DXE
2	2	2.2256	2.9661	2.4724						1) PT,N,E,Z,PO
3	3	2.8768	2.3892	2.4847						2) PT, E, N, Z, PO
•	4	2.6167	2.6791	2.4819						4) PT.PO.E.N.Z
	5	2.2637	2.9428	2.4729						5) NUM,PT,PO,E
										7] *.DXF
										Preview the c
Operati	ion is com	lete!	Rx: 1	9 Rec	eive data:Click "Receive	e" button within 20	) seconds after I	the instrument cl	ick the "Export" button	

### 1.7 Copy and paste data between Pc-PORT and CSV file

1. Below Shows the surveying data in Pc-PORT, the coordinates, the code

data can be copied to the clipboard.

聊 To	tal Station	lata transfer	software ¥1.	08 build 1208	329		
NUM	PT#	E	N	Z	PCODE	^	ComPort Setup
1	2	-3.331	-0.648	0.417	A		ComPort COM3 💌
2	3	10.1613	14.3031	0.2756	A		BaudRate 115200 🔻
3	4	1.6340	1.7604	5.0998	X		
4	5	1.6307	1.7565	5.0713	X		File I ransfer
5	SSTAM	1.0000	1.0000	0.0000	×		Coordinate File 💌
6	12	12.0000	12.0000	0.0000	X		Input Output New
7	13	13.0000	15.0000	0.0000	X		
8	54	22.0000	44.0000	0.0000	X		Data Transmission
9	6	13.6035	15.7241	4.8544	×		Receive
10	44	42.0000	41.0000	0.0000	×		Send
11	SUN1	0.0801	0.1116	-0.4631	X		
12	SUN2	0.5752	-2.5964	0.2889	5		Stop
13	5	5.0000	5.0000	5.0000	R		Disk File
14	SUN1	-0.6005	2.2179	-2.2984	X		Onen Save
15	SUN2	-0.3955	1.2600	-2.5515	×		
16	SUN3	-0.4156	1.2321	-2.5125	X		Clear
17	SUN1	-0.7925	1.4354	2.1351	X		Copy data
18	19	5.387	5.141	-1.834	45		
19	SUN4	5.030	5.142	4.974	X		Paste data
20	SUN5	0.0471	-0.0059	-0.1370	×		
21	SUN6	-0.0544	0.0067	0.3882	×		Exit
22	400	10.0000	10.0000	10.0000	X	-	
C Operati	peration is complete! Tx: 28						

2. You can then paste to excel. The format from left to right order is Point

Name,N,E,Z,CODE.

	A	В	C	D	Е
1	2	-3.331	-0.648	0.417	A
2	3	10.1613	14.3031	0.2756	A
3	4	1.634	1.7604	5.0998	Х
4	5	1.6307	1.7565	5.0713	Х
5	SSTAM	1	1	0	Х
6	12	12	12	0	Х
7	13	13	15	0	Х
8	54	22	44	0	Х
9	6	13.6035	15.7241	4.8544	Х
10	44	42	41	0	Х
11	SUN1	0.0801	0.1116	-0.4631	X
12	SUN2	0.5752	-2.5964	0.2889	5
13	5	5	5	5	R
14	SUN1	-0.6005	2.2179	-2.2984	Х
15	SUN2	-0.3955	1.26	-2.5515	Х
16	SUN3	-0.4156	1.2321	-2.5125	X
17	SUN1	-0.7925	1.4354	2.1351	Х

3. It can also copy the data from excel. The format from left to right order

should be Point Name, N, E, Z, CODE.

4. Then paste the data by clicking "Paste data", refer to the picture below.

Bill To	tal Station d	lata transfer	software ¥1.	08 build 1208	329			
NUM	PT#	E	N	Z	PCODE	~	ComPort Setup	
2	3	10.1613	14.3031	0.2756	A		ComPort COM3 💌	
3	4	1.6340	1.7604	5.0998	×		BaudRate 115200 -	
4	5	1.6307	1.7565	5.0713	×			
5	SSTAM	1.0000	1.0000	0.0000	×		File I ransfer	
6	12	12.0000	12.0000	0.0000	×		Coordinate File 👤	
7	13	13.0000	15.0000	0.0000	×		Input Output New	
8	54	22.0000	44.0000	0.0000	×			
9	6	13.6035	15.7241	4.8544	×		Data Transmission	
10	44	42.0000	41.0000	0.0000	×		Receive	
11	SUN1	0.0801	0.1116	-0.4631	X		Sand	
12	SUN2	0.5752	-2.5964	0.2889	5		Jend	
13	5	5.0000	5.0000	5.0000	R		Stop	
14	SUN1	-0.6005	2.2179	-2.2984	X		Disk File	
15	SUN2	-0.3955	1.2600	-2.5515	×		Open Save	
16	SUN3	-0.4156	1.2321	-2.5125	×			
17	SUN1	-0.7925	1.4354	2.1351	X		Clear	
18	19	5.387	5.141	-1.834	45		Conv data	
19	SUN4	5.030	5.142	4.974	×			
20	SUN5	0.0471	-0.0059	-0.1370	×		Paste data	
21	SUN6	-0.0544	0.0067	0.3882	×			
22	400	10.0000	10.0000	10.0000	×		Evit	
23	5	5.0000	5.0000	5.0000	×			
L	1_					×		
Operat:	perstion is complete! Tx: 28							

# 2 Instruction of connecting controller with the instrument by Bluetooth

#### 2.1 Set in total station

After pressing the start button, press the [MENU] button to enter the menu interface, and then press the number key 8, in the pop-up dialog box press [ $\mathbf{\nabla}$ ] to select Bluetooth option.



Click the [ENT] key to confirm and click [ESC] key to cancel.

#### 2.2 Set in the controller

- 2.2.1 Bluetooth Settings
- 1. Go to "Settings" and then "Bluetooth" to set the Bluetooth.

😝 Settings	# と €	СШОК			
Bluetooth					
Tap Add new device to s Bluetooth devices. Tap o its settings.	earch for other n a device to m	odify			
Connected					
Add new device					
Disconnected	1				
😵 zhd_3002759					
😵 zhd_3002780					
🛞 zhd_0971014					
🚯 TotalStation					
Devices Mode COM Po	rts				
	ŧ				

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".

💱 Settings 🛛 🛱 🍋 🗰	🞥 Settings 🛛 🗮 🖾 📢 🎟
Select a Bluetooth Device 🛛 🔞	Enter Passcode 👔
Select a device to connect with and tap Next.	Enter a passcode to establish a secure connection with zhd_3002759.
<mark>》zhd_3002759</mark>	Press 'Next' to continue if a passcode is not required.
	Passcode: ****
Refresh	123 1 2 3 4 5 6 7 8 9 0 - = • Tab q w e r t y u i o p [] CAP a s d f g h j k I ; Shift z x c v b n m , . / +
Cancel III Next	Ctláū `\\ ↓↑++→
	Back Next

3. Click "COM Ports" in the bottom, then click "New Outgoing Port" to select a port.

🐮 Settings 🛛 🛱 🖾 📢 🎟 🕅	🐉 Settings 🛛 📰 🎦	₩ ■
Bluetooth	Add a Device	0
After pairing with a device, to set up a COM port tap New Outgoing Port. For other options, tap and hold an existing port. TotalStation (COM6) New Outgoing Port	Select the device you want to add zhd_3002759 zhd_3002780 zhd_0971014 TotalStation	
	Cancel	Next

4. Choose a unused port and then click "Finish".

### HI T $\Lambda$ R G E T

💕 Settings	*** ***	בו 🕂 💷
Bluetooth		2
Port:		
COM6		-
COM1		~
COM2		
СОМЗ		**
COM4 COM5		
COM6		
COM7		
COM8		
COM9		$\sim$
Back		Finish

- 2.2.2 Bluetooth connections in SurvCE
- 1. Run SurvCE software.

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

SurvCE	≜ # ⊀ ×
😂 JOB:A	📄 🛃 📵
<u>S</u> urvey <u>C</u> (	)GO <u>R</u> oad
<u> </u>	Equip
1 Total Station	<u>6</u> Localizat 🔠
2 GPS Base  🕱	7 Check Level 📟
<u>3</u> GPS Rover 🚏	8 Tolerances 🔐
_4 GPS ⊈ Utilities 🛛 🕸	9 Peripherals 👫
<u>5</u> Configure 📌	_ About SurvCE ■

3. In "Current" interface, select "Topcon Direct" for "Manufacturer" and

"GTS Series (non-motorize)" for "Model".

🔗 Surv(	E	ß	a 🗱 ┥	€ ×
😤 Instr	ut Setu	p 📳		X
Current	Comms	Setting	IS	
1				
Manufac	:turer:			
Topcon	Direct		<b>-</b>	1
Model:	GTS Seri	ies (non-i	motoriz	:E 🔻
📳 ТТТ				3
Load	<u>S</u> ave	<u>R</u> ename	e <u>D</u> ele	ete

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.

🔗 SurvC	E	i 💩 🗱 📢 >	¢
💝 Instr	ut Setup 📳	a) 🔽 🗙	
Current	Comms Sett	tings 5	_
	1		
Type:	Bluetooth	• 2	
ВТ Туре	Generic	<b>-</b> 3	
Port:	COM 7	<b>•</b> 4	

#### 2.2.3 Store points

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

# HI • T Λ R G E T



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.

### 3. The usage of USB flash disc and SD card

3.1 For ZTS320, the projects can be conducted in the SD card or USB flash disc.



3.2 Go to "Menu' and then "Select Disc" to select a disc for the projects.3.3 Then you can create new files for the projects and all this files will be

saved in the disc you selected before.