

Champion Instruments

How-To Guide

Table of Contents

Introduction	Welcome, Items Needed and Abbreviations	Pg. 1-2
Chapter 1	Preparing SIM for TKO	Pg. 2 - 6
Chapter 2	Configuring TKO	Pg 6-12
Chapter 3	Setting up SurvCe	Pg. 12-29

Introduction:

Welcome to Champion Instruments. This guide will show you how to set up the Champion TKO for Real Time Network (RTN) operations utilizing a SIM card from AT&T in the head of the receiver. This can be used for dialing up into the RTN with Carlson SurvCe version 2.58.

The items you will need are:

- ✓ TKO
- ✓ Scepter
- ✓ USB Cable
- ✓ Y-Cable
- ✓ Computer
- ✓ Rover Pole with Bi Pod
- ✓ Software
 - a. Hi Target GPS-V Series GPS receiver management Software v1.3.0
 - b. Carlson SurvCe 2.58
 - c. Active Sync

Abbreviations and Symbols:

- = Intelligent Voice



- **HGMS = Hi Target GPS-V Series GPS receiver management Software v1.3.0**

Chapter 1 Preparing SIM for TKO

Steps:

1. Power on computer.

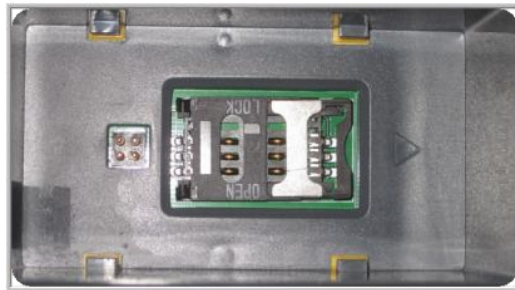
2. Remove Battery cover.



3. Remove battery



4. Unlock SIM Card Holder.

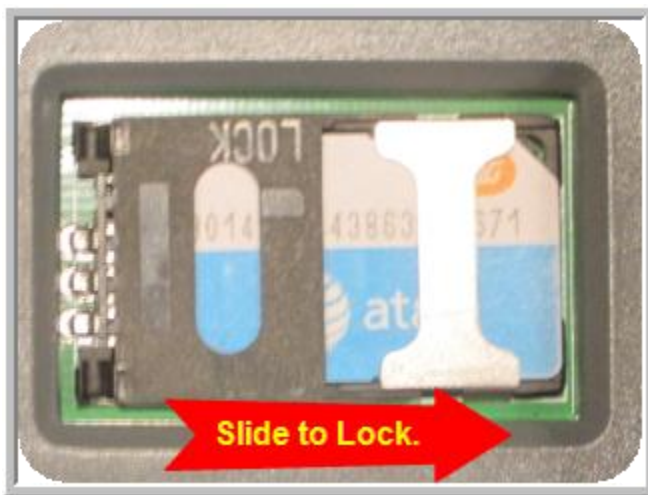


5. Insert SIM Card in slot by sliding between silver and black casing.





6. Close SIM Card casing and Lock into place.



7. Insert Battery and Replace battery cover!





8. Power on TKO. *“Single Press”*



9. *“Double Press”*



10. Listen to  for “MODE”

11. Scroll rough the “Modes” by *“Single Press”*  until  states “Rover”.

12. *“Single Press”*



13. *“Double Press”*



14. Listen to  for “Communication”.

15. Scroll through “*Single Press*”  until  Sais “GSM Rover”.

16. “*Single Press*” 

Chapter 2 Configuring TKO


1. Plug in Y-Cable into bottom of TKO “COM1/PW1”
2. Plug in “COM” end into “COM 1” on computer.

3. “*Double Click*”: “HGMS” 

4. This is what should appear:

[illegible]

5. “Single Click” the “Open Port”.



6. Check the message.

Message: SN:3005258 Register successfully!

7. Go to the “GPRS Settings” area of the software.

GPRS Setting | APN Setting | Other Setting

GPRS Setting

Network Mode: **ZHD** Communications: **GPRS**

User Group ID: 0020001 Sub Group ID: 001

Server IP: 202.96.185.34 Server Port: 9000

☐ Used WEB addr: hd-cors.gicp.net

☐ Is mainframe or not when using GSM dial-up mode(Base station)

Base station or dial-up Server phone No: 1234567890

Abbreviation of Network Operator(PDP): CMNET

CORS User Name: 123 Password: 321

Stream Name: RTCM GPRS Module: Q64

Get Parameter Set Parameter

8. Set the appropriate settings:

- a. Network Mode = VRS
- b. Communications = GPRS
- c. Server IP= RTN Providers IP Address.
- d. Server Port = RTN Port number.
- e. Abbreviation of Network Operator (PDP) = this should be obtained from AT&T. Here I have a Q64 type of SIM so I set it to : “broadband”
- f. CORS User Name: =RTN provider should give you an NTRIP User Name.
- g. Password = RTN provider should give you an NTRIP password.
- h. Stream Name: = the mounting point Name you desire to log into.

GPRS Setting | APN Setting | Other Setting

GPRS Setting

Network Mode: **VRS** Communications: **GPRS**

User Group ID: 0020001 Sub Group ID: 001

Server IP: 216.215.232.122 Server Port: 8080

☐ Used WEB addr: ga.egps.net

☐ Is mainframe or not when using GSM dial-up mode(Base station)

Base station or dial-up Server phone No: 1234567890

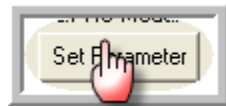
Abbreviation of Netw **User Name** broadband

CORS User Name: Password: **Password**

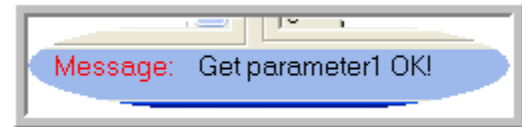
Stream Name: eGPSVRS GPRS Module: Q64

Get Parameter Set Parameter

9. *“Single Click”*



- a. **Check Message: If message states:**



10. *“Single Click”*

A screenshot of a software window titled 'GPRS Setting'. It has three tabs: 'GPRS Setting', 'APN Setting', and 'Other Setting'. The 'APN Setting' tab is active, and a red hand cursor is clicking on it. The tab contains the following elements: a checkbox labeled 'Use APN ?' which is unchecked; a 'User Name:' label followed by a text input field containing 'card'; a 'Password:' label followed by a text input field containing 'card'; a 'Get APN Parameter' button; a 'Set APN Parameter' button; a 'Band:' label followed by a dropdown menu showing 'Dual-band 1900/850'; a 'Read band' button; and a 'Select band' button with a dashed border.

11. Go to the **“Band”** section and choose **“Dual- Band 1900/850”**

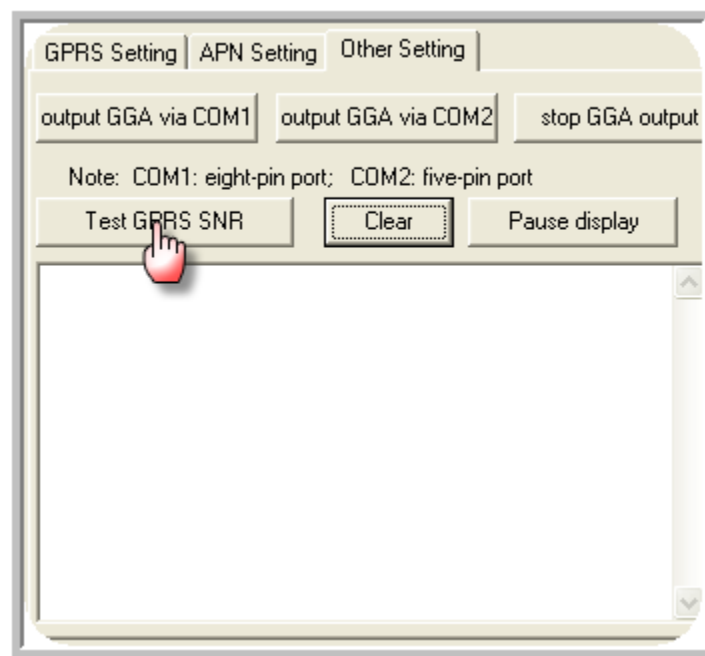
A close-up screenshot of the 'Band' section of the software window. It shows a 'Band:' label, a dropdown menu with 'Dual-band 1900/850' selected, a 'Read band' button, and a 'Select band' button with a dashed border.

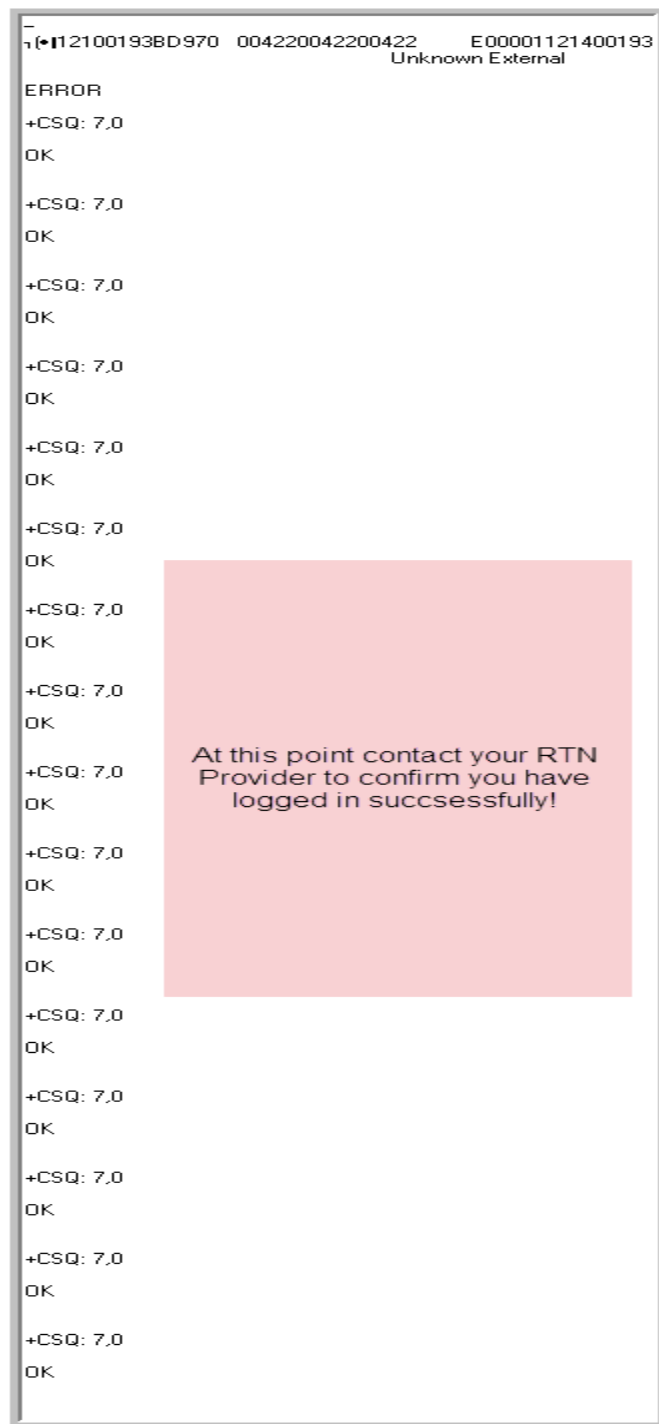
12. *“Single Click”*



13. Listen to  say “Online”.

14. Run test by choosing the “Other Setting” tab and *“Single Click”*





15. *“Single Click”* “Close Port”:



16. Power Down TKO. *“Single Press and Hold”*



Chapter 3 Setting up SurvCe

1. Head to the field.

2. Power on TKO. *“Single Press”*



3. Listen for



to say “TRACKING” then “Tracked”.

4. Listen for



to say “Online”.

You should hear 1 ding!!

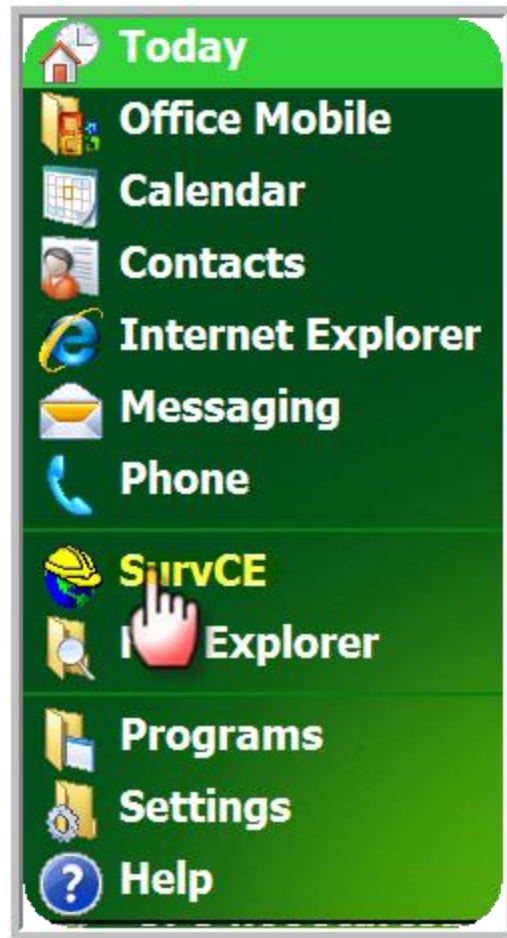
5. Get Scepter and Power on. *“Single Press”*



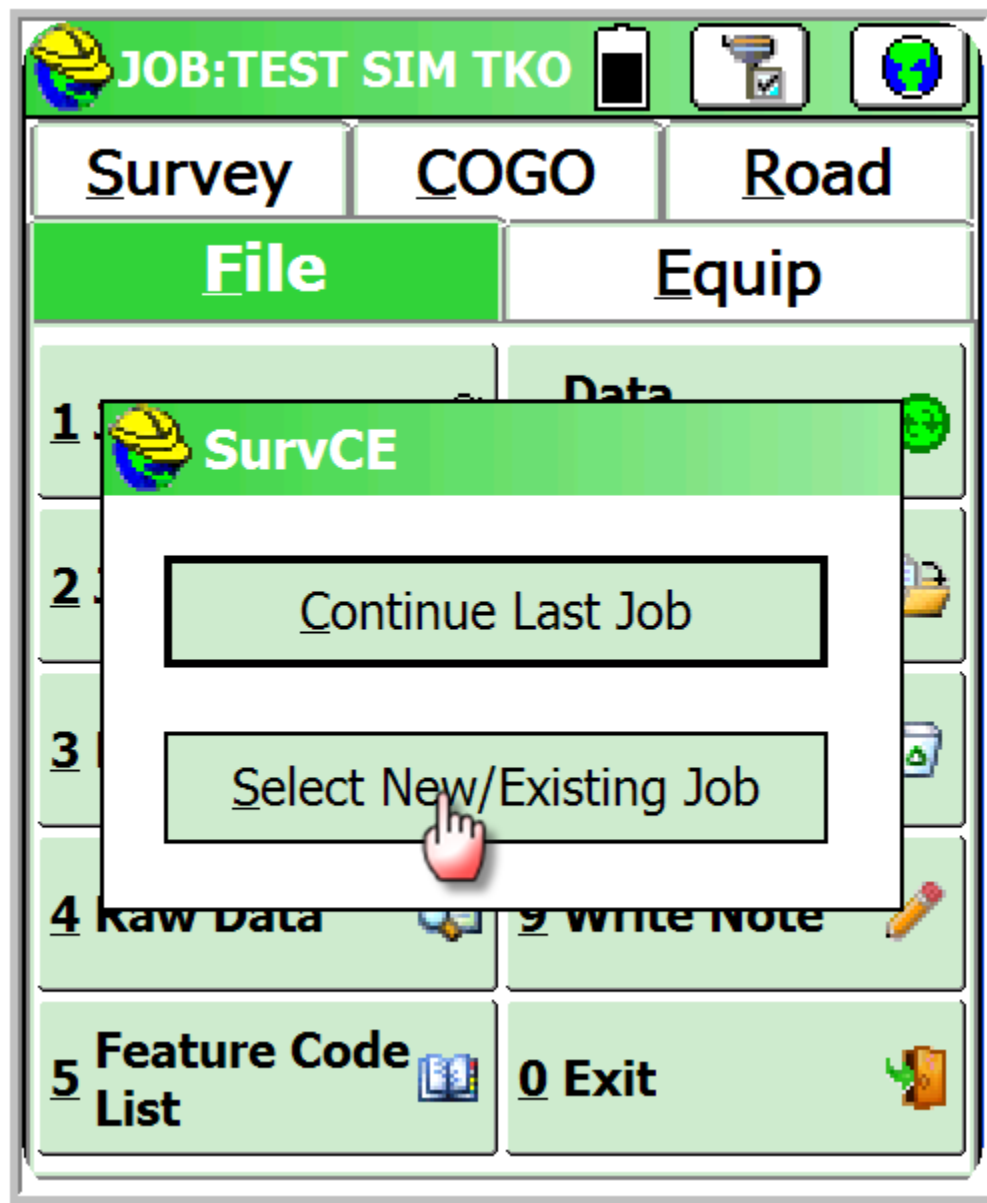
6. *“Single Click”*



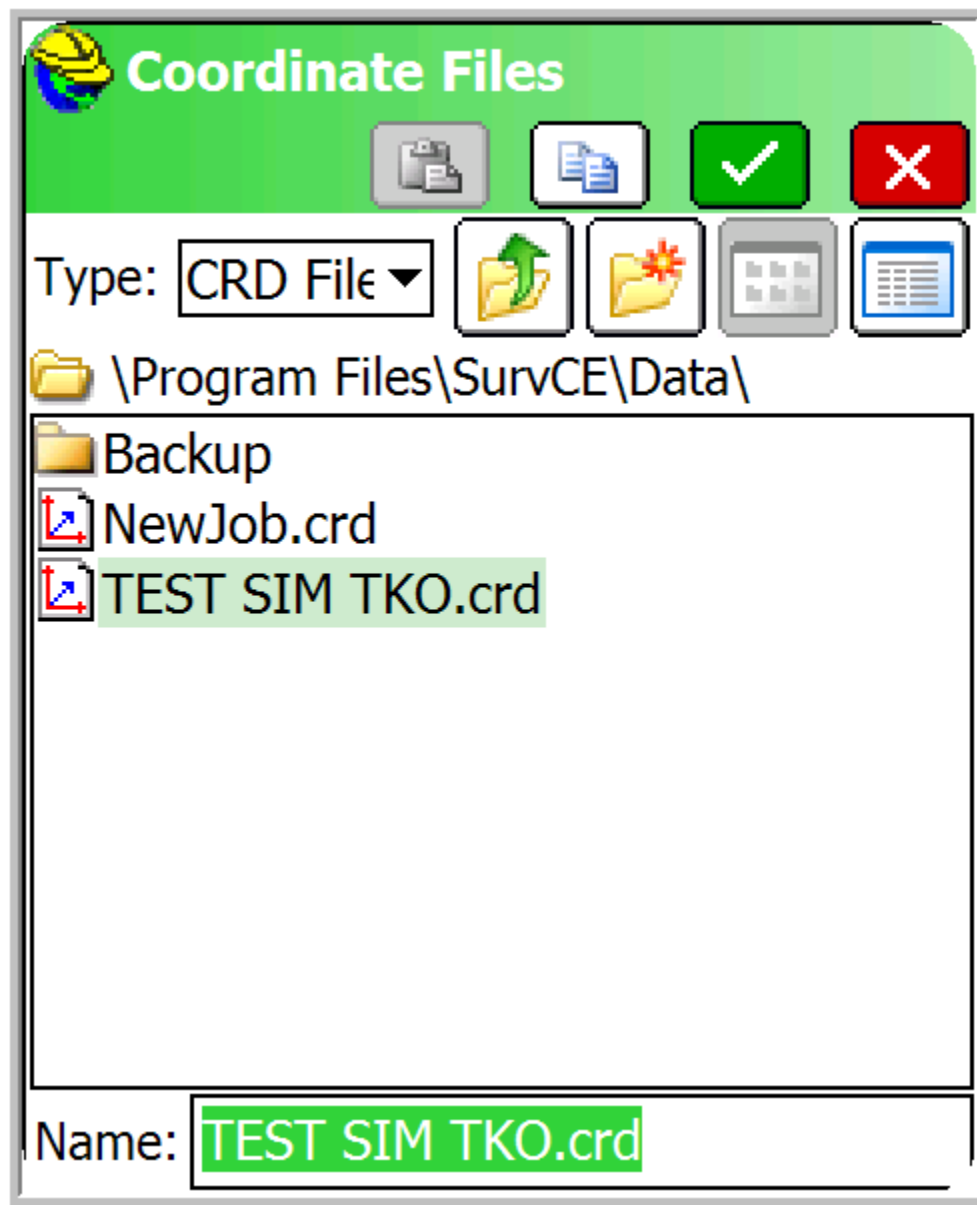
7. *“Single Click”*



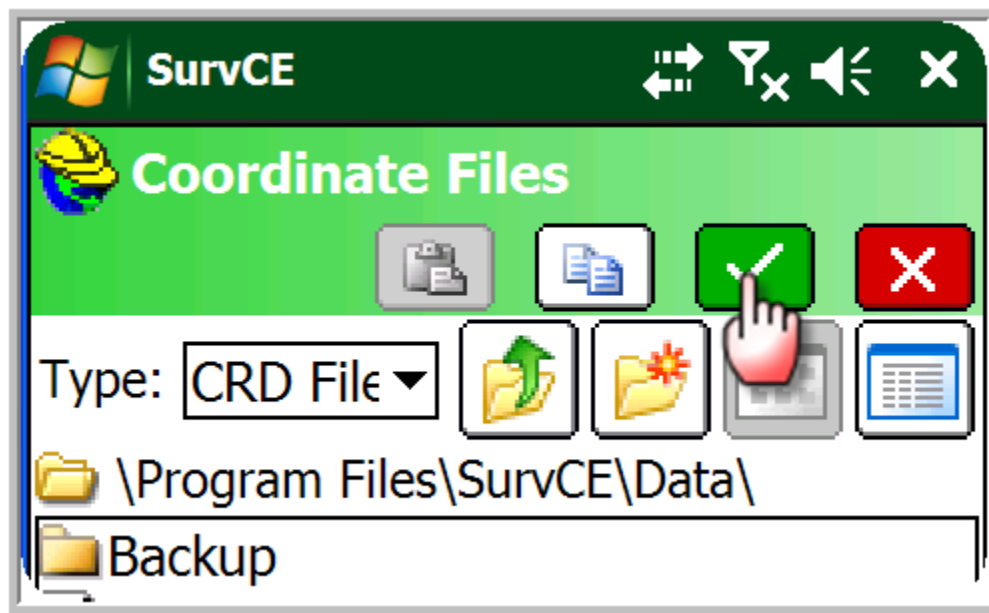
8. *“Single Click”*



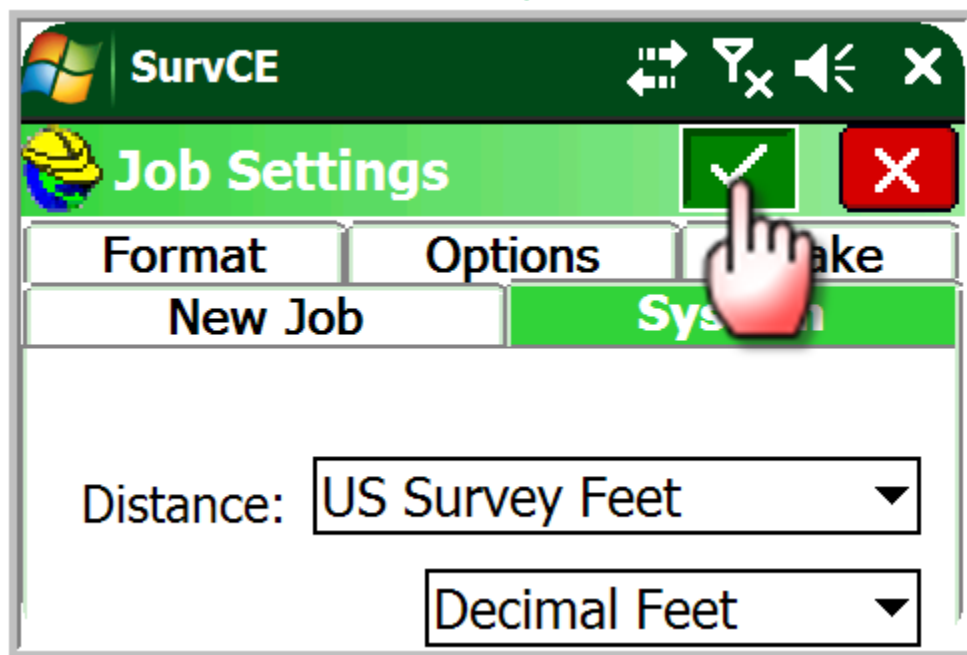
9. Create a job Name:



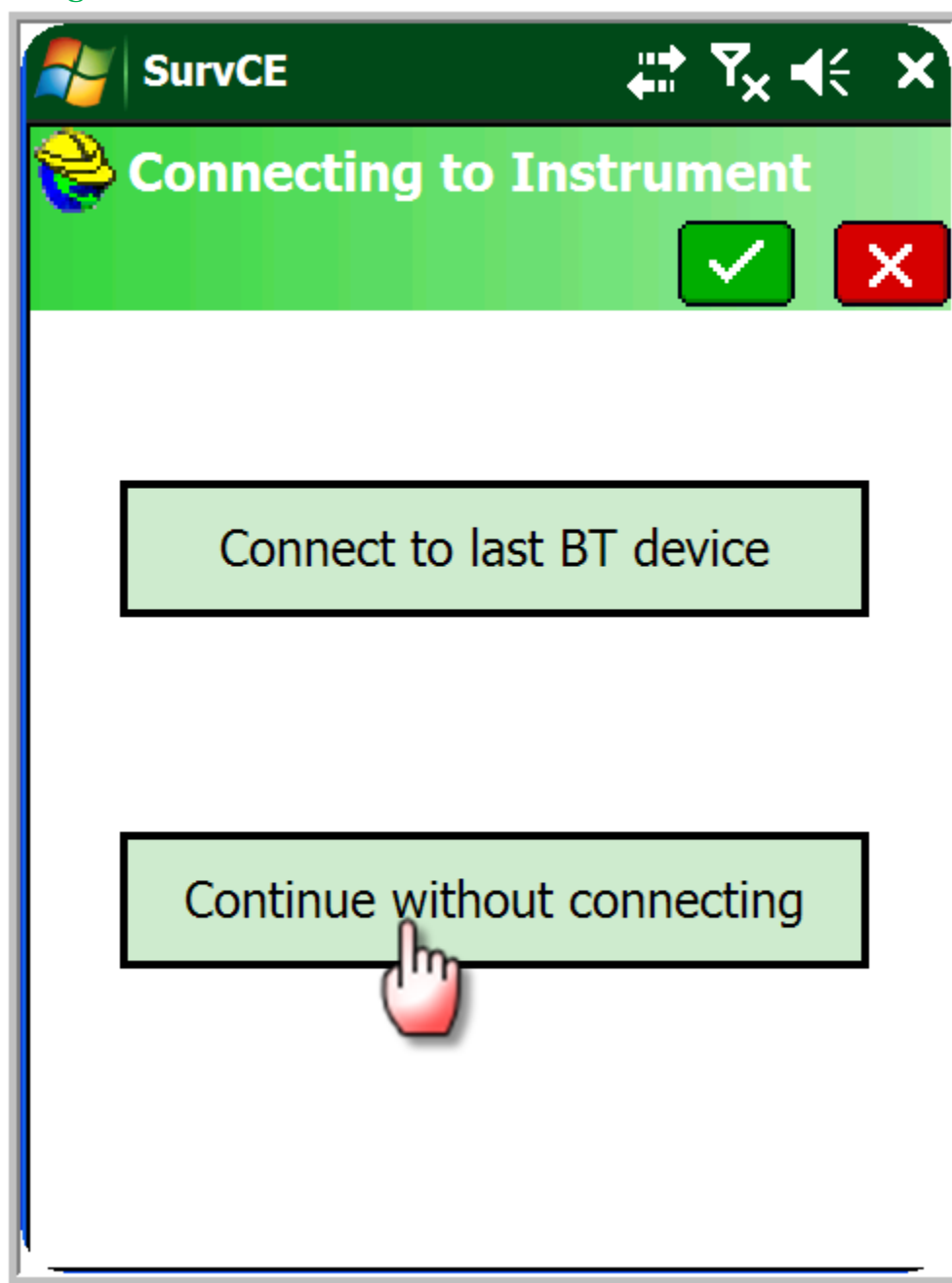
10. *“Single Click”*



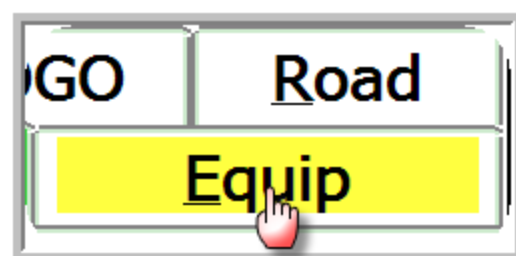
11. Choose correct job settings. *“Single Click”*



12. *“Single Click”*



13. *“Single Click”*

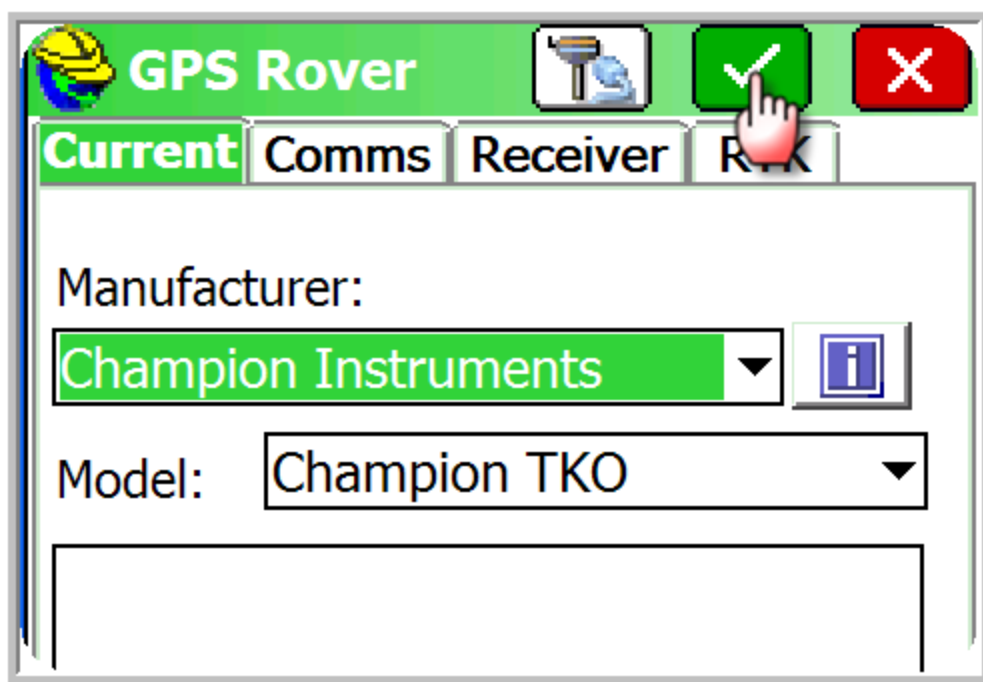


tab.

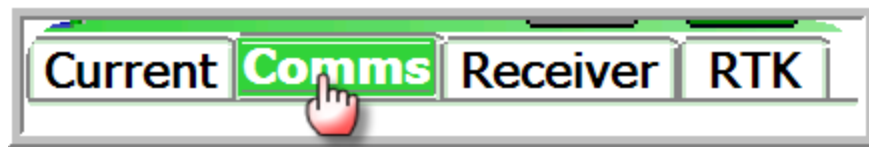
14. *“Single Click”*



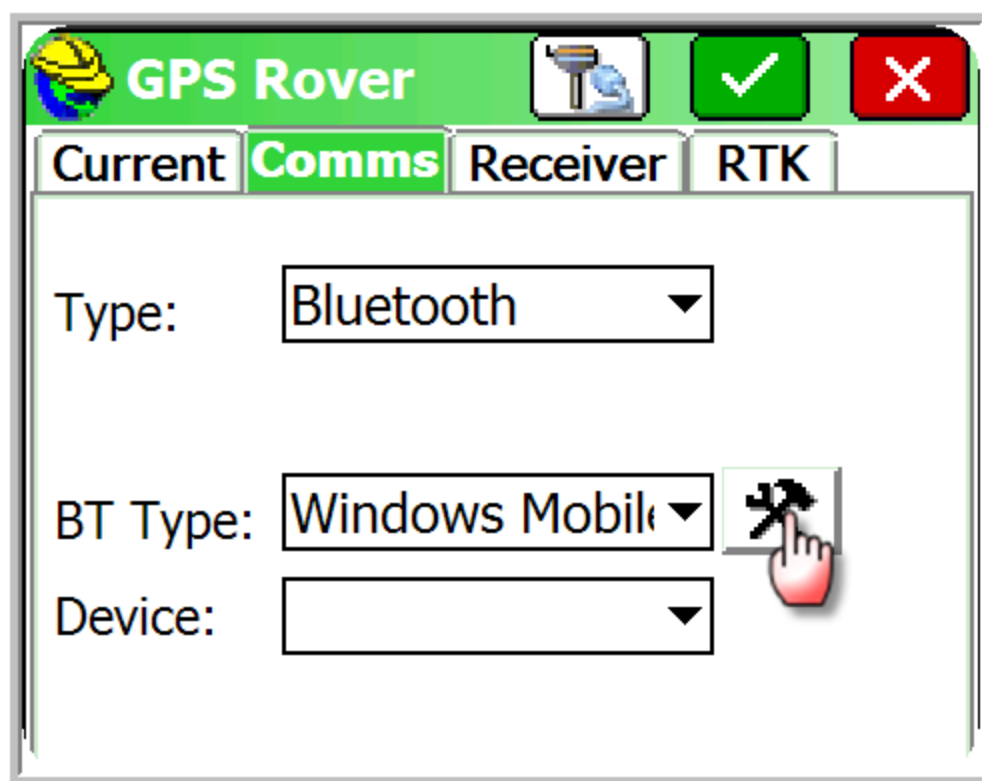
15. Select Champion Instruments from the “Manufacturer” Drop Down Menu and Champion TKO from the Model Drop Down Menu. Then *“Single Click”*



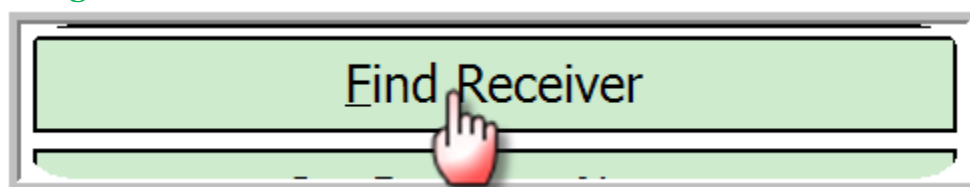
16. *“Single Click”*



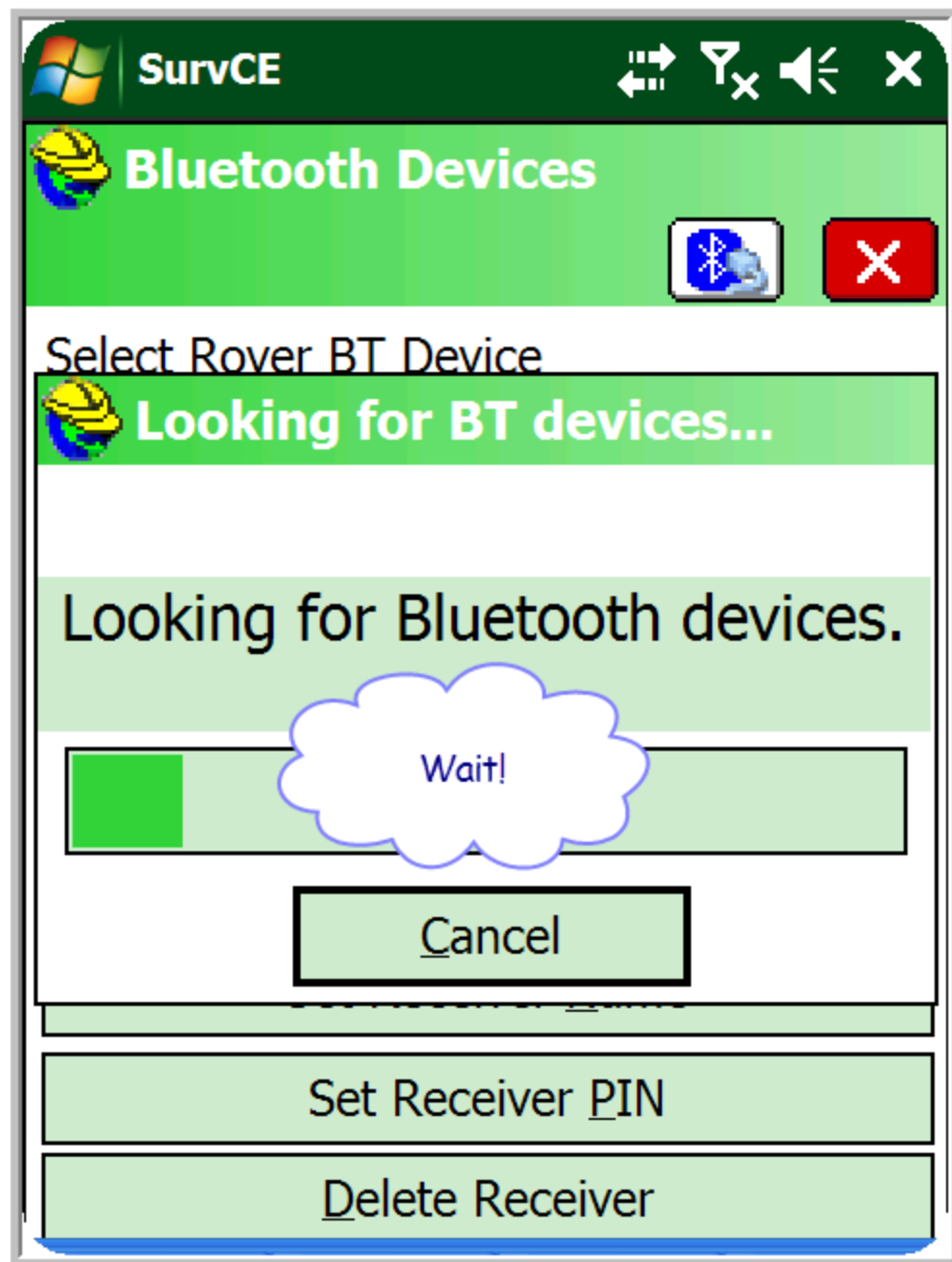
17. Select Bluetooth from the Type drop down menu and Windows Mobile from the BT Type drop down menu. Then *“Single Click”*



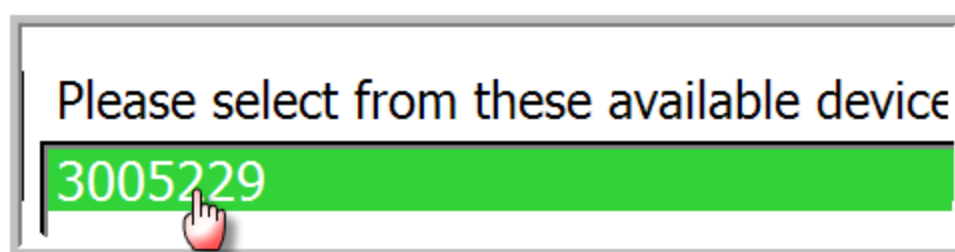
18. *“Single Click”*



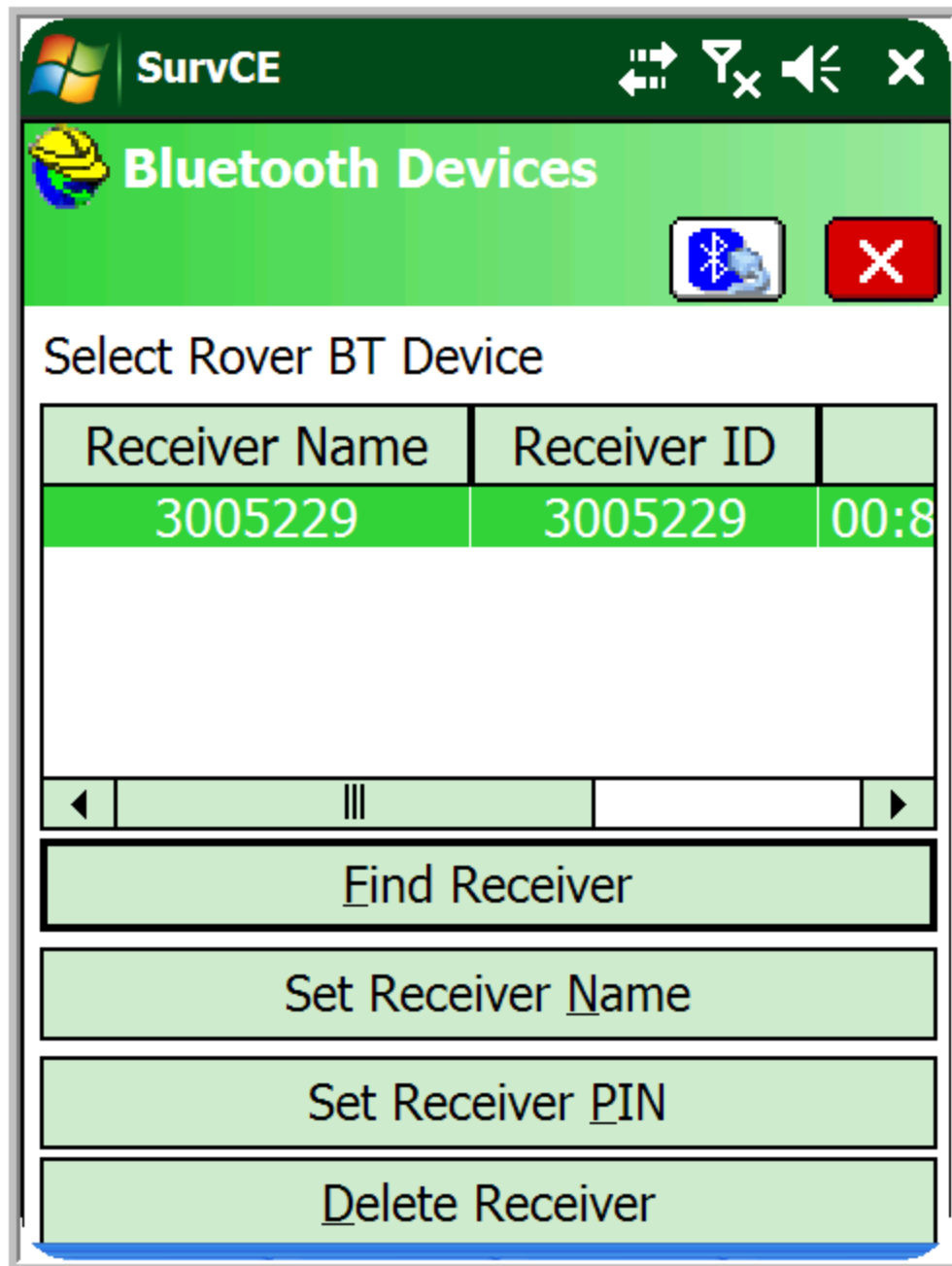
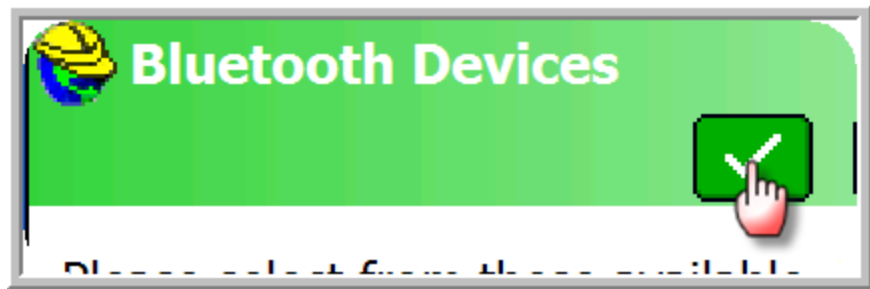
19.



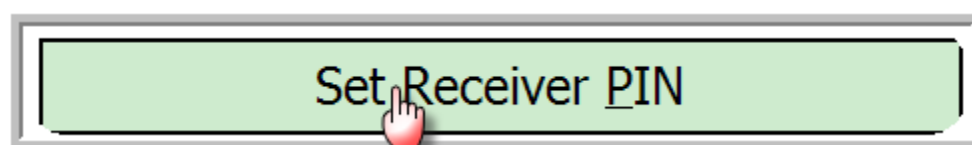
20. Select the correct receiver serial number.



21. "Single Click"



22. "Single Click"



23. Type in 1234 and “Single Click”

Enter data

1234

Alphanumeric Special

A	B	C	D	E	F	G
H	I	J	K	L	M	N
O	P	Q	R	S	T	U
V	W	X	Y	Z	abc	
7	8	9	*	+	#	'
4	5	6	/	-	=	"
1	2	3	Del	Alt		
0	.	Bk Sp	Space			

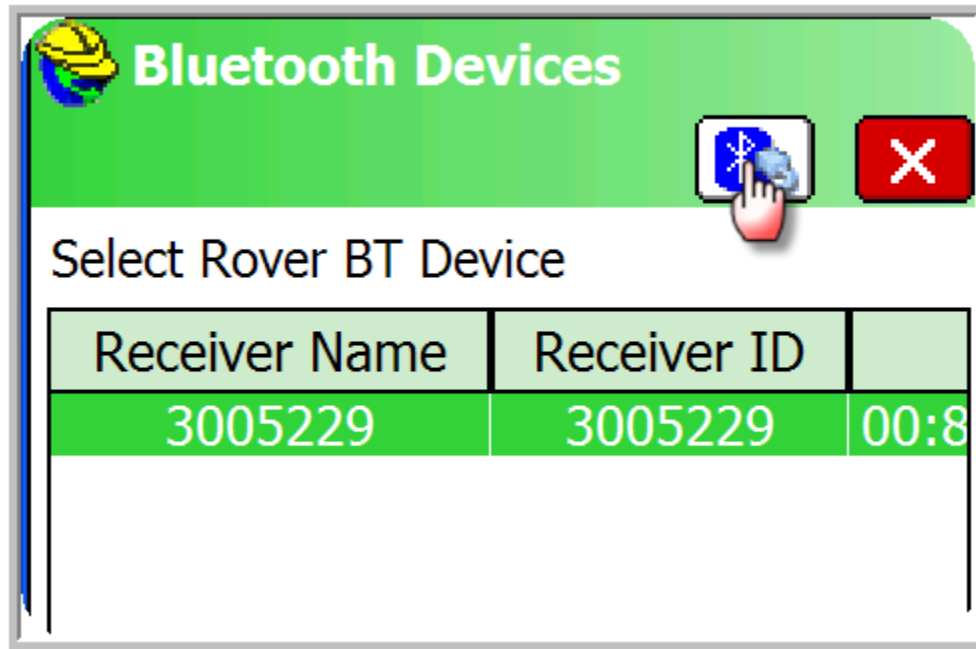
24. “Single Click”

Configure BT Device PIN

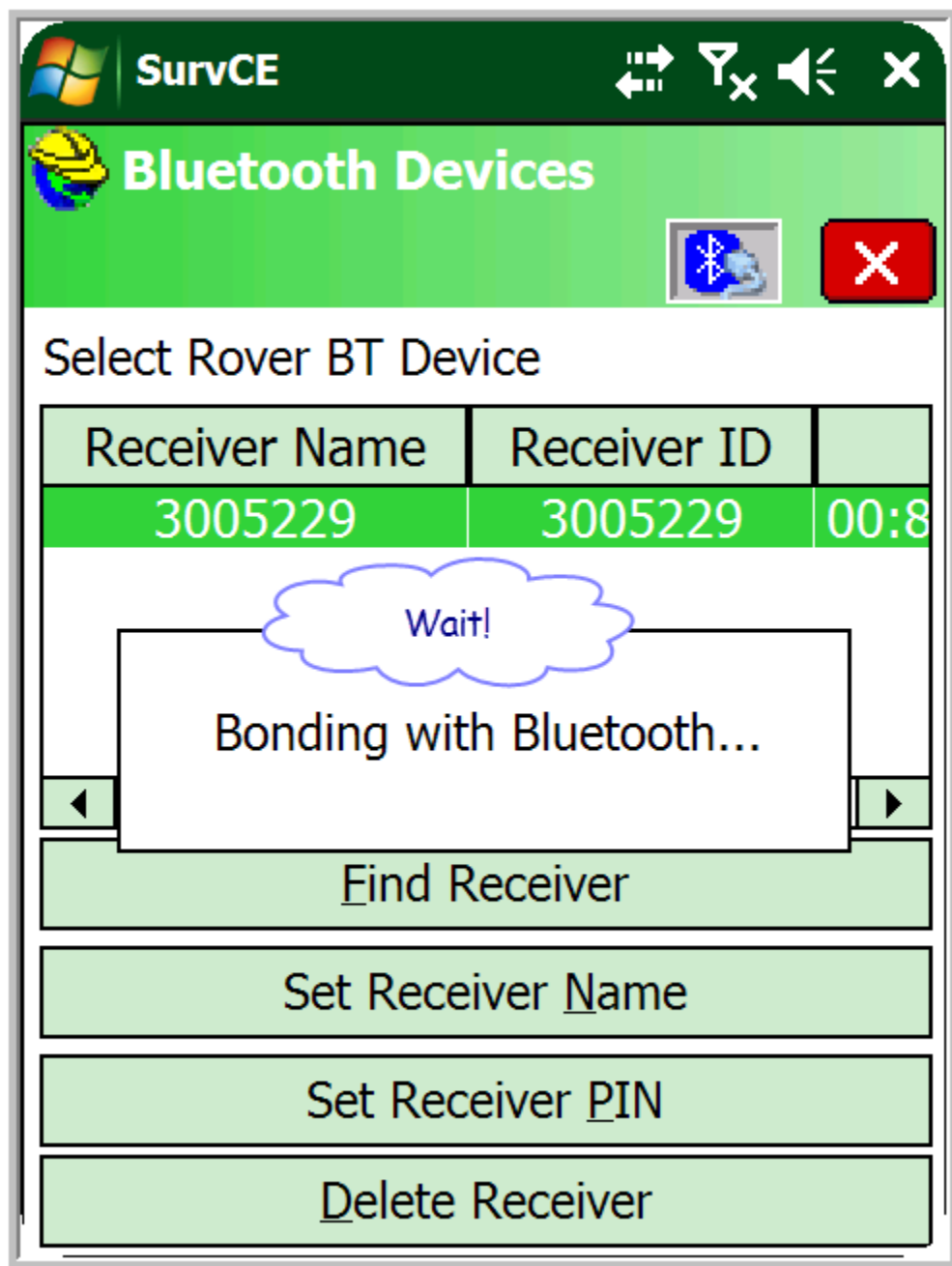
Enter BT Device's PIN:

1234

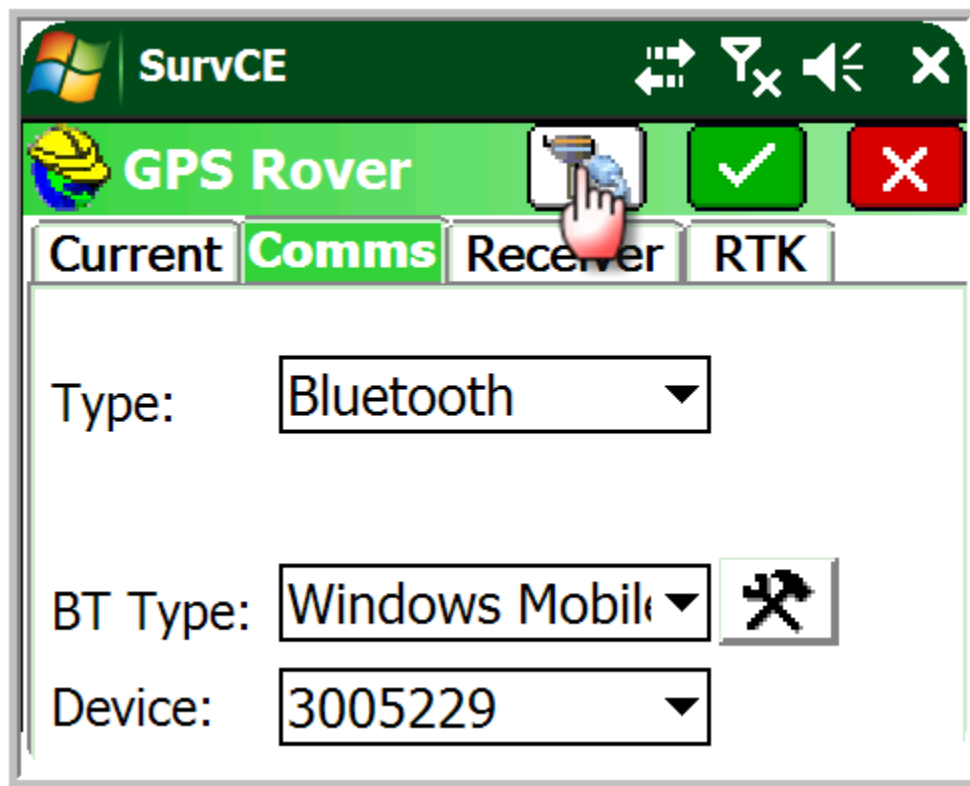
25. *“Single Click”*



26.



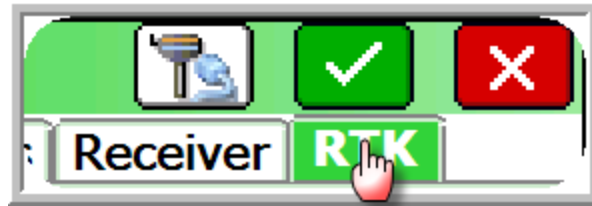
27. *“Single Click”*



28.



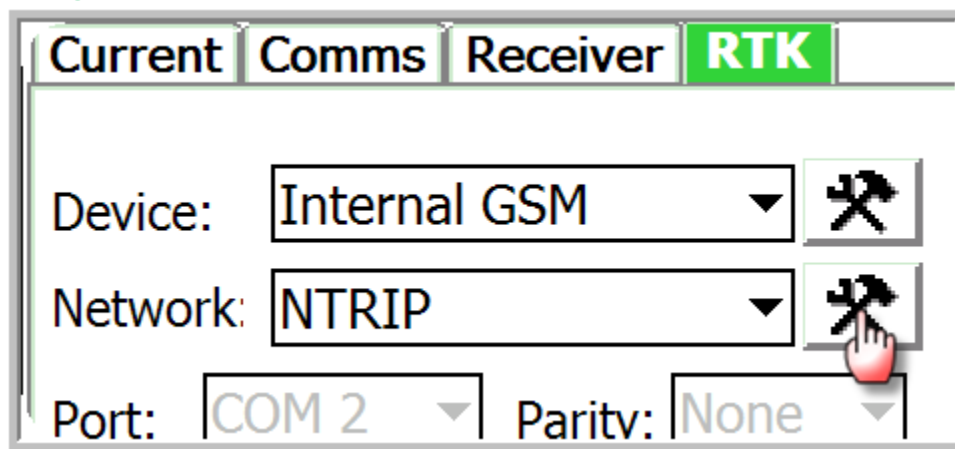
29. *“Single Click”*



30. Select Internal GSM from the Device: Drop down tab.

a. Select NTRIP from the Network drop down tab.

31. *“Single Click”*



32. Give a name to your connection for RTN.

- a. Type in IP. Address from RTN provider.
- b. Type in Port from RTN Provider.
- c. Type in User Name and Password from RTN provider.

Note this information should be the same as you typed into the TKO receiver on step # 24 above. Chapter 1

SurvCE

NTRIP Broadcasters

Name: TEST

IP Address: 216.215.232.122

Port: 8080

User Name: NTRIP User Name

Password: NTRIP Password

Broadcaster Information

Identifier:

Operator:

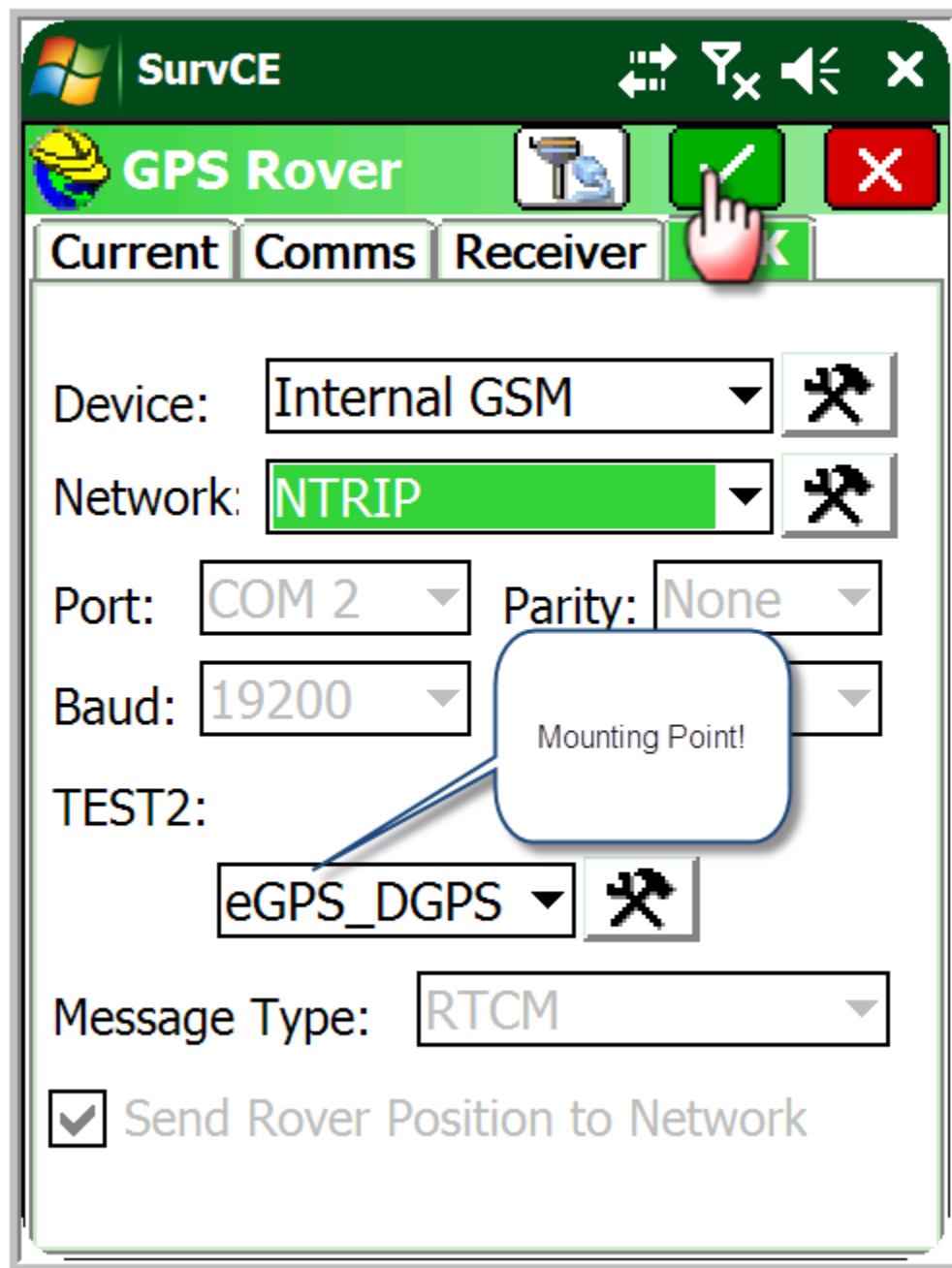
Position 0.00S 0.00W ,

Misc:

NMEA: Rover position not needed.

Once the Broad caster loads all the mounting points you are ready to dial in for RTK corrections.

33. *“Single Click”*



You are Finished!!!