

SmartNet
powered by Leica Geosystems



Trimble R8 GNSS Real-Time SmartNet Corrections Via a Cell Phone

This guide describes how to configure your Trimble R8 GNSS with a Bluetooth enabled cellular phone using a GPRS Data plan for connection to Leica SmartNet.

Topics

- Establish a Connection between the Trimble R8 and Cell Phone via Bluetooth
- Establish a Connection between the Trimble R8 and SmartNet via Mobile Phone Internet Connection

Introduction

Many of the mobile phone providers today offer GPRS enabled phones with Bluetooth capability. As a result, these mobile phones may be utilised to log onto the Internet and receive correction data from the SmartNet reference network.

Notice: You will need to have a GSM mobile phone with a GPRS Data Plan from a UK provider, such as Vodafone, Orange, T-Mobile etc...

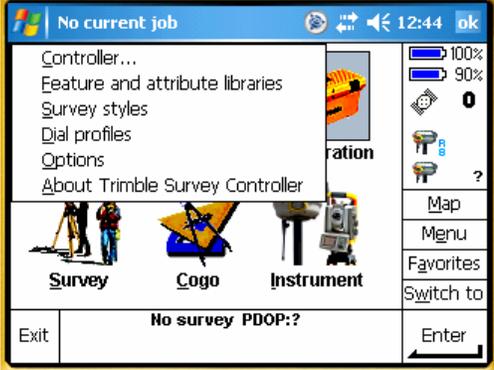
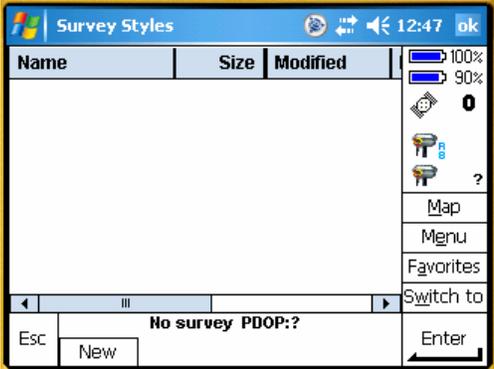
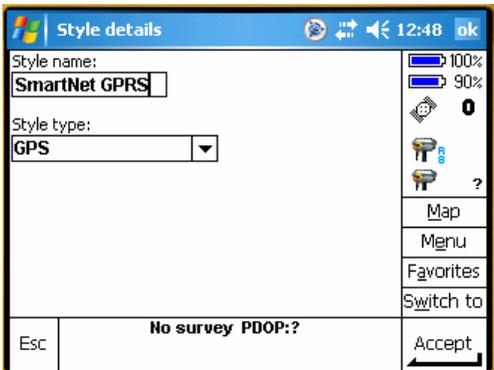
Note:

Please note that this guide is referenced to firmware version 12.10 and subsequent firmware releases may differ slightly from this guide.

- when it has to be **right**

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Creating a SmartNet Survey Style with a Bluetooth Mobile Phone

Step	Action	Display
1	From the main menu select Configuration and then Survey Styles	 <p>The screenshot shows the main menu of the Trimble Survey Controller. The title bar reads 'No current job' and the time is 12:44. The menu items are: Controller..., Feature and attribute libraries, Survey styles, Dial profiles, Options, and About Trimble Survey Controller. At the bottom, there are icons for Survey, Cogo, and Instrument. A 'Configuration' menu is open, showing 'Survey Styles' as the selected option. The status bar at the bottom says 'No survey PDOP:?' and has 'Exit' and 'Enter' buttons.</p>
2	Press New to begin a new Survey Style	 <p>The screenshot shows the 'Survey Styles' screen. The title bar reads 'Survey Styles' and the time is 12:47. It features a table with columns 'Name', 'Size', and 'Modified'. Below the table is a 'New' button. The status bar at the bottom says 'No survey PDOP:?' and has 'Esc' and 'Enter' buttons.</p>
3	Name the Style and define the type GPS and press Accept.	 <p>The screenshot shows the 'Style details' screen. The title bar reads 'Style details' and the time is 12:48. It has a 'Style name:' field with 'SmartNet GPRS' entered and a 'Style type:' dropdown menu with 'GPS' selected. The status bar at the bottom says 'No survey PDOP:?' and has 'Esc' and 'Accept' buttons.</p>

Step	Action	Display
4	Select the Rover Options and press Edit	

Step	Action	Display
5	Select the Broadcast format as VRS (RTCM) and proceed to page 2	

Step	Action	Display
6	Enter the information for your relevant antenna and proceed to page 3	

Step	Action	Display
7	Press Accept to return to the options screen.	

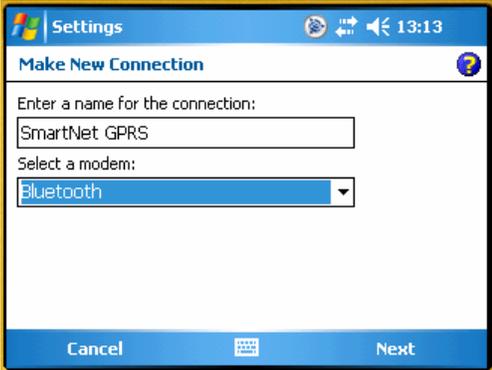
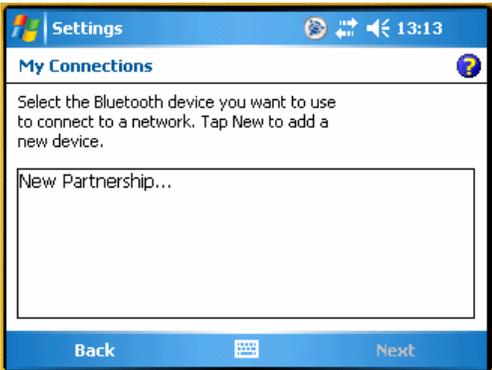
Step	Action	Display
8	Select Rover Radio and press Edit	

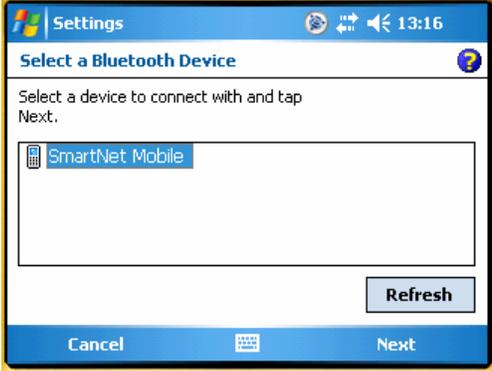
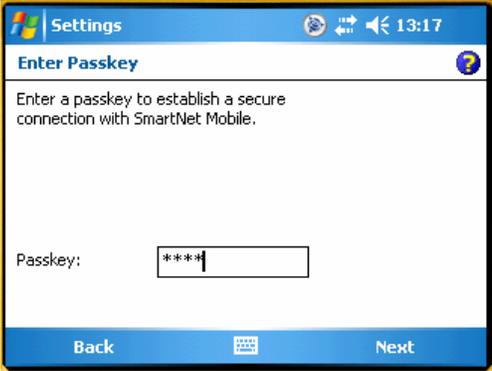
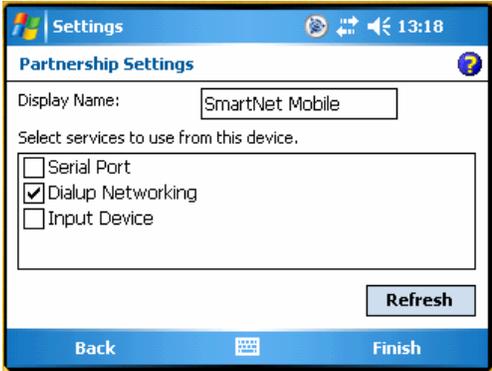
Step	Action	Display
9	Define the type as Internet Connection and then tap the arrow ► to the right of Dial Profile	

Step	Action	Display
10	Press F2 new to create a new Dial Profile	

Step	Action	Display
11	Name you new Dial profile and then press the arrow ► beside use connection.	

Step	Action	Display
12	Press Config to access the Connections screen and then	

Step	Action	Display
13	Select Add a new modem connection.	
14	Give your connection a name, define the connection type as Bluetooth and the press Next.	
15	Select New Partnership which will invoke the search for your Bluetooth mobile phone.	

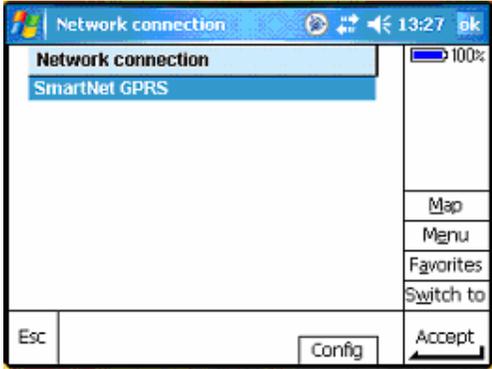
Step	Action	Display
16	Select you mobile phone from the list and press Next.	
17	<p>Follow any prompts on your mobile screen and enter a matching passkey '0000' on you phone and on the screen.</p> <p>You may be able to activate auto connect without confirmation on the phone so that the instrument is allowed to connect more easily in the future</p> <p>Once all these steps have been completed press Next.</p>	
18	Select Dialup Networking as the service to use and then press Finish.	

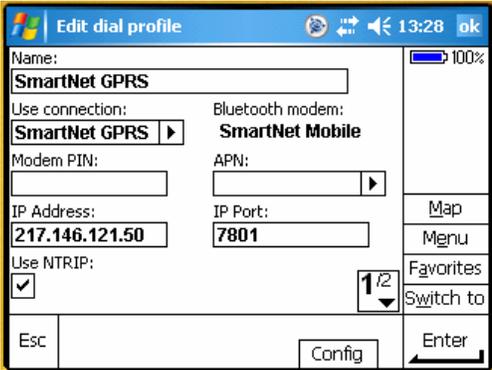
Step	Action	Display
19	Now highlight your partnership and press Next.	

Step	Action	Display
20	Enter *99***1# as the number for your device to dial and press Next	

Step	Action	Display															
21	<p>Enter the GPRS username and password for your mobile operator and press Finish</p> <table border="1"> <thead> <tr> <th>Operator</th> <th>Username</th> <th>Password</th> </tr> </thead> <tbody> <tr> <td>Vodafone</td> <td>web</td> <td>web</td> </tr> <tr> <td>O2</td> <td>faster</td> <td>password</td> </tr> <tr> <td>Orange</td> <td>leave blank</td> <td>leave blank</td> </tr> <tr> <td>T-Mobile</td> <td>leave blank</td> <td>leave blank</td> </tr> </tbody> </table> <p>If you are using another mobile provider please contact them directly for your GPRS username and password.</p>	Operator	Username	Password	Vodafone	web	web	O2	faster	password	Orange	leave blank	leave blank	T-Mobile	leave blank	leave blank	
Operator	Username	Password															
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Step	Action	Display
22	Press ok in the top righthand corner and then highlight your Network Correction	

Step	Action	Display
23	Press Accept to return to the Dial Profile screen.	

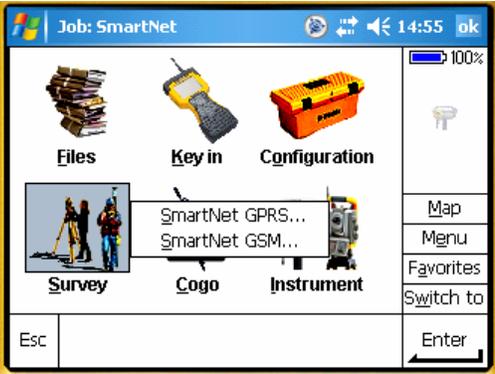
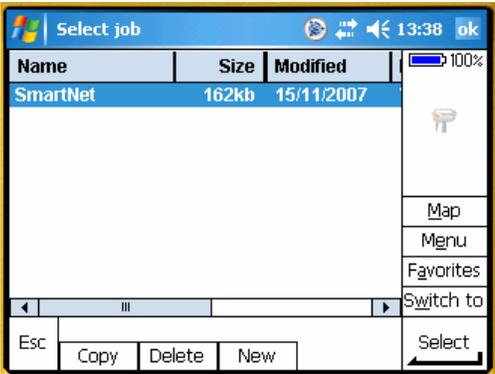
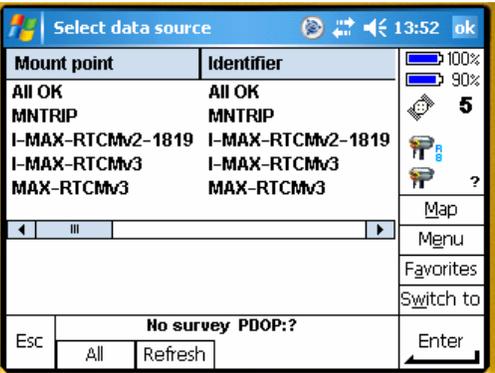
Step	Action	Display										
24	<p>Enter the APN of your mobile operator in the APN: box</p> <table border="1"> <thead> <tr> <th>Operator</th> <th>APN</th> </tr> </thead> <tbody> <tr> <td>Vodafone</td> <td>internet</td> </tr> <tr> <td>O2</td> <td>mobile.o2.co.uk</td> </tr> <tr> <td>Orange</td> <td>orangeinternet</td> </tr> <tr> <td>T-Mobile</td> <td>general.t-mobile.uk</td> </tr> </tbody> </table> <p>If you are using another mobile provider please contact them directly for your GPRS APN.</p> <p>Enter the IP Address as 217.146.121.50 and the port as 7801 and press 1/2 to go to the next page.</p>	Operator	APN	Vodafone	internet	O2	mobile.o2.co.uk	Orange	orangeinternet	T-Mobile	general.t-mobile.uk	
Operator	APN											
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Step	Action	Display
25	<p>Enter your SmartNet username and password in this screen, select the Connection type as GPRS and tick the identity info box.</p> <p>Once these have been completed press Store.</p>	

Step	Action	Display
26	<p>Make sure the Dial profile has come through and then press Accept</p>	

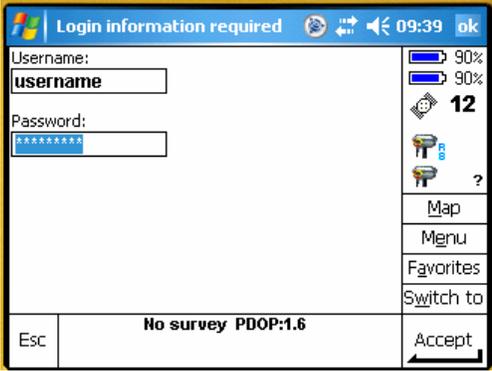
Step	Action	Display
27	<p>Press Store to complete the Survey Style</p> <p>The SmartNet GPRS Survey Style is now complete and ready to use.</p>	

Accessing SmartNet Corrections for use in Survey

Step	Action	Display
1	Select Survey, SmartNet GPRS and then tap Start Survey.	
2	Highlight your job/survey and press Select.	
3	Once the device has built a data source select I-Max-RTCMv2-1819 and press Enter.	

- when it has to be **right**



Step	Action	Display
4	Make sure your SmartNet Username and Password has been entered and press Accept.	

Step	Action	Display
5	Once initialisation has been gained you can continue your Survey.	