

Selecting a Cell Phone Modem for Survey Pro NTRIP

Using Survey Pro's NTRIP Solution requires a digital cell phone capable of connecting a PDA to the Internet utilizing a digital data plan. If the cell phone will allow the PDA to surf the Internet, it can be used with a TDS Ranger or Recon and Survey Pro's NTRIP solution.

Cell Phone Requirements:

- Digital cell phone compatible with cell service provider.
- Cell phone must be web-enabled.
 - ✓ This means can it can handle both voice calls and transmit data. This is often referred to as dual mode. Newer cell phones are web-enabled. If you aren't sure about your cell phone, you can check the specifications in its User Guide or find out by calling the technical support number for your phone.
- The cell phone will need to have Bluetooth or a cable data port.

Cell Phone Provider Requirements:

- Offers digital voice service.
- Offers digital data service.

Data Service Plans:

Different cell phone service providers and some ISP's offer data connection plans. You may have to have your service provider unlock or enable data services on your cell phone in order to use the cell phone as a modem.

Be aware: Surveying via NTRIP is data-transfer intensive. Depending upon the RTK correction format your Network uses, you will transfer 2-5 MB of data per hour.

| <i>RTK Correction Format</i> | <i>Usage/Hour</i> |
|------------------------------|-------------------|
|------------------------------|-------------------|

| | |
|----------|--------|
| CMR/CMR+ | 2 MB |
| RTCM | 4-5 MB |

For this reason we recommend getting a plan that offers unlimited digital data transfer.

Connection Speed:

Browsing the Internet with your Ranger or Recon by using your cell phone as a modem will not be as fast as using a Wi-Fi hot spot or other broadband connection method. If you require the Internet connection only to send and receive email and do light Internet surfing, the connection speed should be adequate for your needs.

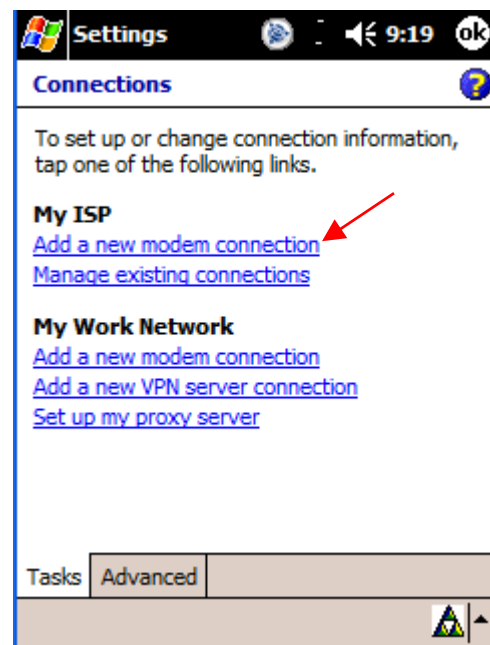
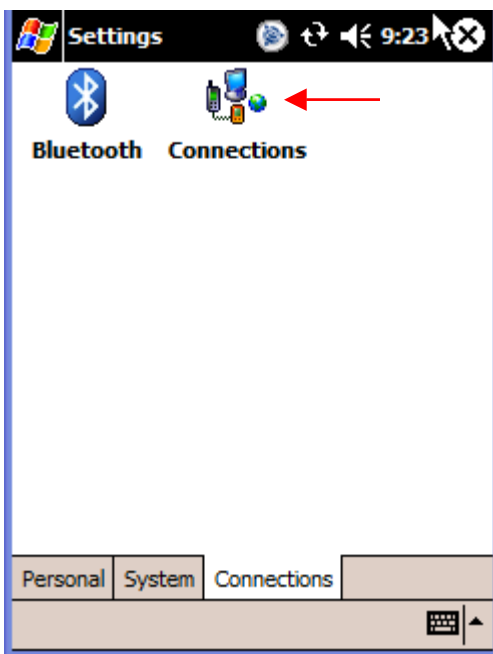
For connecting your TDS Data Collector to the Internet to utilize an NTRIP network, using your cell phone as a modem provides all the speed you will need.

Connect to the Internet with Your Cell Phone

If your cell phone can enable your Ranger/Recon to browse the Internet, it is compatible with NTRIP.

To make an Internet connection on your Ranger/Recon using your cell phone, do the following:

From the Desktop, go to Start > Settings > Connections and tap the **Connections** icon. Select [Add a new modem connection](#).

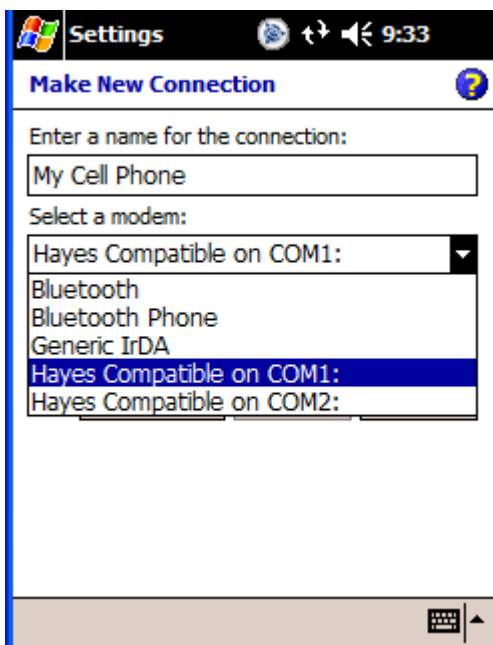


Give your **New Connection** a name and select your type of modem.

Select Hayes Compatible if you are connecting your phone to your data collector via a cable.

Select Bluetooth if you are using a Bluetooth phone.

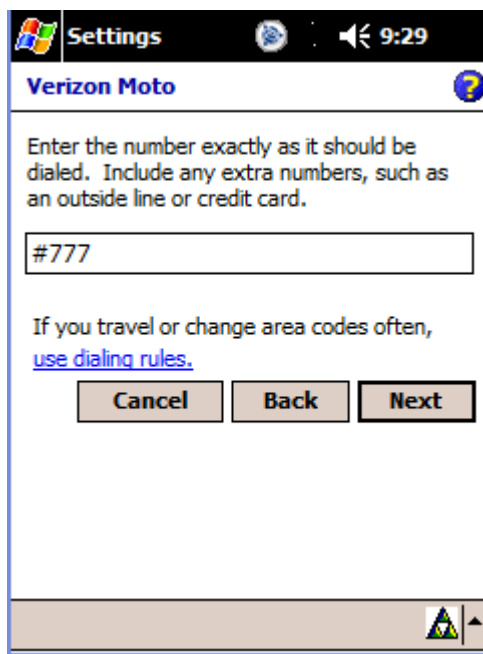
Tap **Next**.



Enter the phone number you will use to connect your phone to the Internet.

This should have been provided to you by your service provider.

Tap **Next**.



Type in your **User name**, **Password**, and **Domain**.

These should also have been provided to you by your service provider.

Tap **Finish**.

Settings 9:48

My Cell Phone

User name:

Password:

Domain:*

* If provided by ISP or network administrator.

Advanced...

Cancel Back Finish

This will drop you back to the Connections page.
Select [Manage existing connections](#).

Settings 9:19 ok

Connections

To set up or change connection information, tap one of the following links.

My ISP

[Add a new modem connection](#)

[Manage existing connections](#)

My Work Network

[Add a new modem connection](#)

[Add a new VPN server connection](#)

[Set up my proxy server](#)

Tasks Advanced

Select your **Connection**.

Settings 10:42 ok

My ISP

To create a connection, tap New. Tap and hold on an existing connection for more options.

| Name | Number |
|--|--------|
| <input type="radio"/> Auto pick | |
| <input type="radio"/> My Connection | #777 |
| <input checked="" type="radio"/> My Cell Phone | #777 |

Edit... New...

General Modem

Tap and hold on your Connection.
From the Options box that appears, choose Connect.

Settings 2:51 ok

My ISP

To create a connection, tap New. Tap and hold on an existing connection for more options.

| Name | Number |
|--|--------|
| <input type="radio"/> Auto pick | |
| <input type="radio"/> My Connection | #777 |
| <input checked="" type="radio"/> My Cell Phone | #777 |

Delete

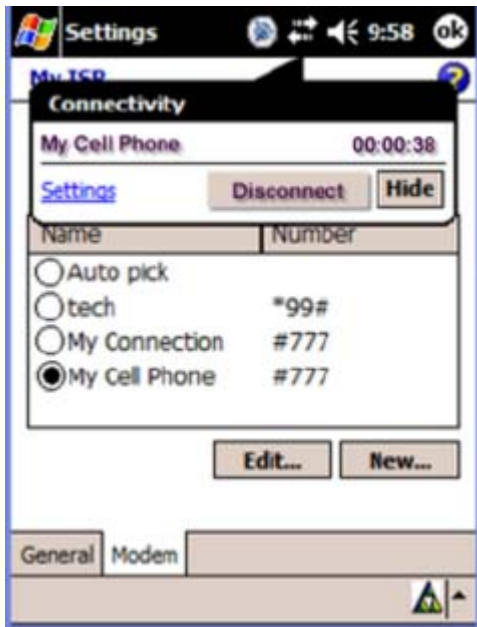
Connect

Edit... New...

General Modem

You should see a message that your phone is dialing and trying to connect. After a few seconds, this message should go away. This usually means that you have connected to your Internet provider.

You can confirm this by tapping the double arrows in the data collector Tool Bar. It should show that you are connected.



If you see this, launch Internet Explorer. You will be able to browse the Internet.

This also means that you will be able to use this cell phone with Survey Pro's NTRIP solution.

If your phone fails to make a connection check the following:

- Check cable connections at cell phone and data collector
- Ensure you have a BT connection
- Go to **Manage Connections** and check Phone Number, User Name and Password for accuracy
- Contact your service provider to verify that your settings are correct
- Check **Advanced in Connections Setting** to verify that correct **Network** and **Location** settings are selected

NTRIP Phones

The following phones have been tested and used successfully with TDS' NTRIP network:

Sony Ericsson T610

- BT and cable should work with most if not all TDS collectors. (Not tested with Ranger CE.NET)

Motorola V710

- BT does not work with WM5 so this will not work the Ranger using BT.
- Cable works with all data collectors tested (including Ranger).

Samsung t809

- Apparently no cable available so can not be used with Ranger CE.NET.
- Works with BT using the Recon PPC and Ranger.

Notes:

Ranger with PPC was not tested. However, it ***should*** behave similar to Recon PPC.

TCU requires some special configuration parameters. Please talk to Trimble Technical Support or the Trimble Systems Group for further details.