Setting NMEA Output on Trimble XC Card

December 19, 2006

Summary

Trimble XC cards are capable of standard NMEA output. However, the XC card may have the SiRF protocol enabled by default. Mapping programs such as ESRI ArcPad will not be able to communicate with the card until the NMEA output is configured. Additionally, when NMEA output is enabled, the VTG string, required by some software packages (including Electronic Data Solutions' HydroPlus CE), will not be output automatically. Finally, WAAS may not be enabled by default. This Support Note describes how to enable these options on the XC card.

Installing *GPS Info* Configuration Program

All options are enabled using the *GPS Info* program, available for download from http://www.usglobalsat.com/downloads/GPSInfo_WM5.zip.   To install this program on your mobile device, follow these steps:

1. Download the program from http://www.usglobalsat.com/downloads/GPSInfo_WM5.zip.
2. Extract the program called 'GPS Information.exe' to your PC.
3. Connect your mobile device using Microsoft ActiveSync technology.
4. Run 'GPS Information.exe' to install the program to your PC. Accept the default installation directory.
5. When the installer completes, if you have an ActiveSync connection, the program will automatically be installed to your mobile device. If you are not connected, or if you need to install the mobile program to additional mobile devices, open ActiveSync and select Tools > Add/Remove Programs.

6. Check the checkbox next to 'GPS Information GPS Info' to install the program to your mobile device. If your mobile device is running Windows Mobile 5, installation begins immediately. If your mobile device is running Pocket PC 2003 or earlier, you will be prompted to install to the Default install directly. Click 'No' and choose a non-volatile storage location, such as DISK, C_Drive, or Built-in Storage.
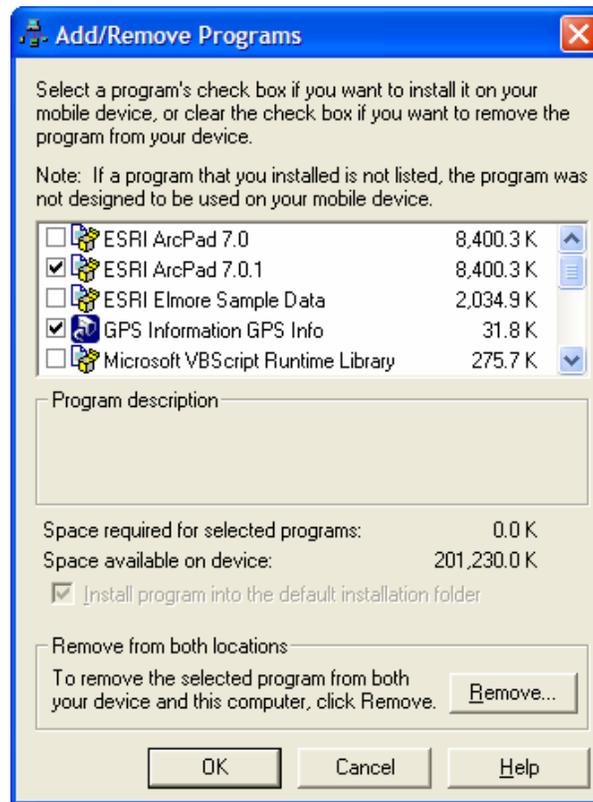
7. If your mobile is running Pocket PC 2003 or earlier, perform a system backup. This is usually accomplished by going to Start > Programs and running a program called 'Backup Now' or 'Pocket Backup.' Consult your mobile device documentation for specifics.

Set Configuration Options

1. On the mobile device, run the *GPSinfo* program by going to Start > Programs > GPSinfo.
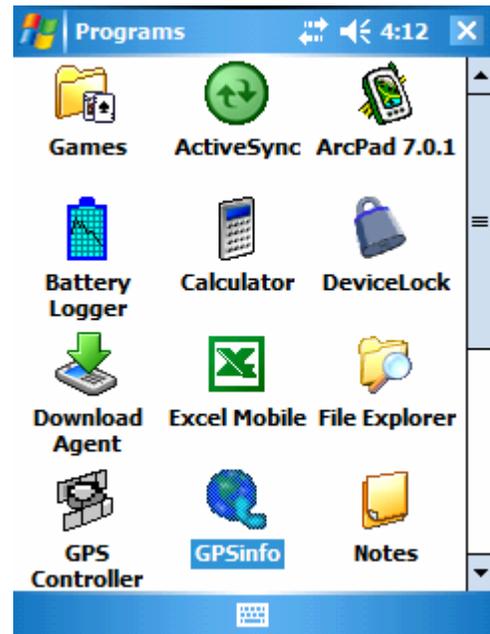
2. When GPS Info starts, set the COM port to COM2.
3. Press **Start GPS** to connect to the receiver. If the connection is successful, you should begin to see NMEA output scroll across the screen. **NMEA Output is now set.** If NMEA output does not appear, even after pressing the **Cold Start** button, you will need to set NMEA output using Trimble GPS Controller software.
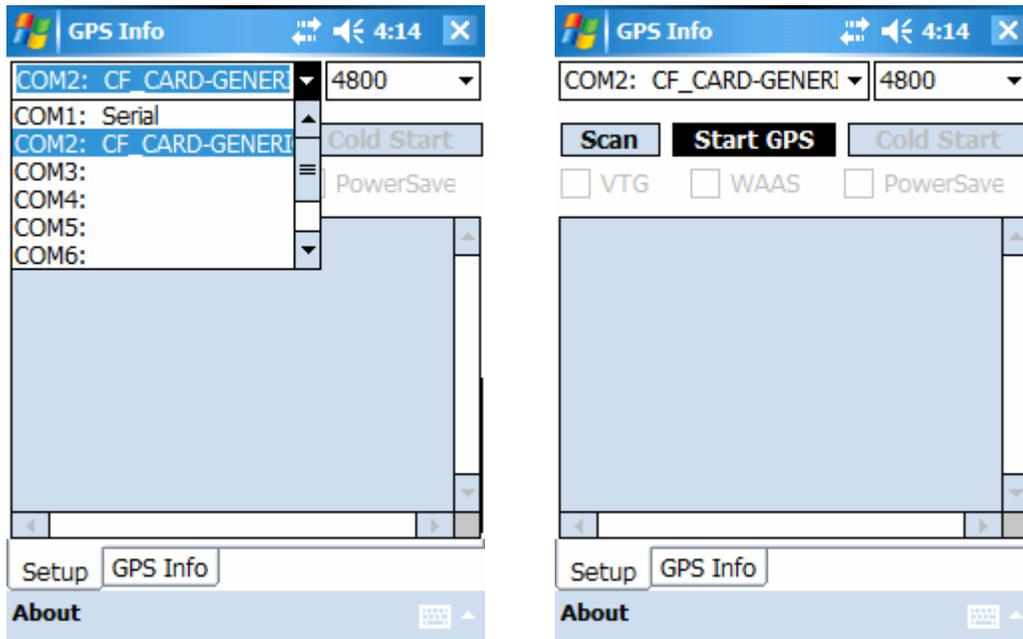
4. To enable VTG output, check the box next to VTG. If the change is successful, you will begin seeing $GPVTG messages on the screen.
5. To enable WAAS output, check the box next to WAAS.
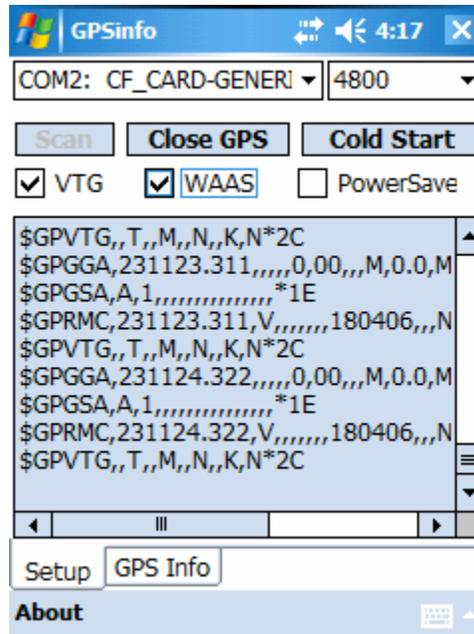
6. Click **Close GPS** to apply settings and disconnect from the receiver.
7. Close the *GPSinfo* program. *Note: GPSinfo continues running as a 'Running Program' in Windows Mobile. If you are applying settings to multiple XC card receivers, you will need to either shut down the program by going to Start > Settings > System tab > Memory > Running Programs tab, or you will need to uncheck and recheck the VTG and WAAS boxes in GPSinfo to get the settings to apply correctly.*

Setting NMEA Output Using Trimble GPS Controller

1. Download the latest version of GPS Controller for your device from http://www.trimble.com/support_trl.asp?Nav=Collection-32053.
2. Install GPS Controller to your mobile device.
3. Start GPS Controller by going to Start > Programs. The program will attempt to connect to a GPS receiver on the first available COM port.
4. Tap the drop-down arrow in the upper left-hand corner and select Setup.
5. Tap GPS Settings.
6. Set GPS Receiver Port to COM2. Tap OK to save this change.
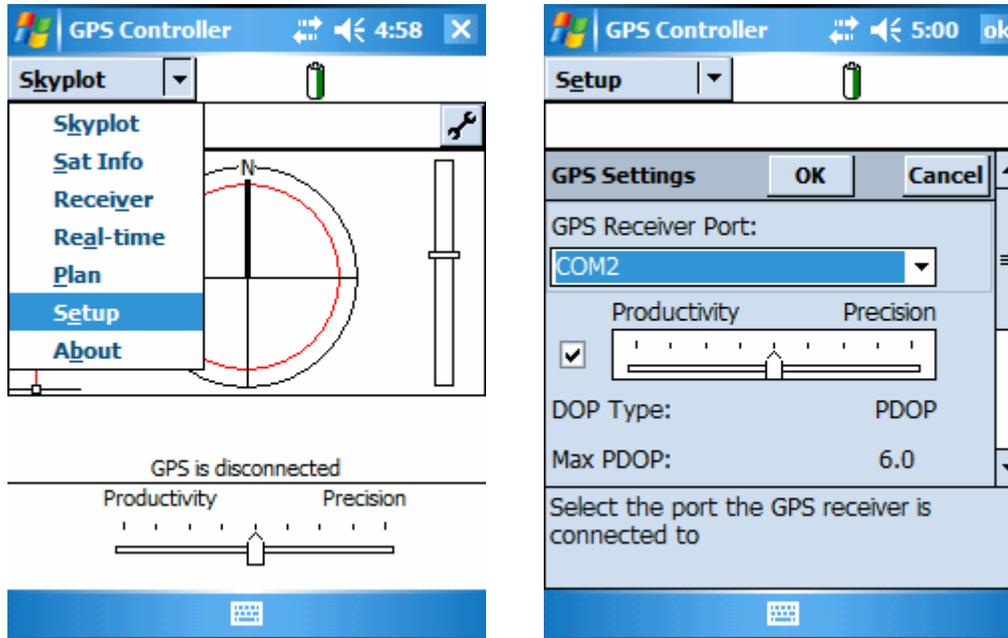
7. Tap the **GPS** button in the upper right-hand corner to connect to the XC card.
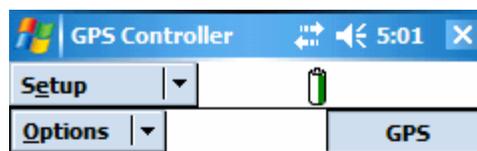
8. Once connection is made, tap GPS Settings.
9. *Scroll down and change NMEA Output to **On**. Tap OK to save this change. A message appears stating that 'The NMEA output settings will be applied on disconnect.' Please note that this does NOT occur if you simply exit GPS Controller.*
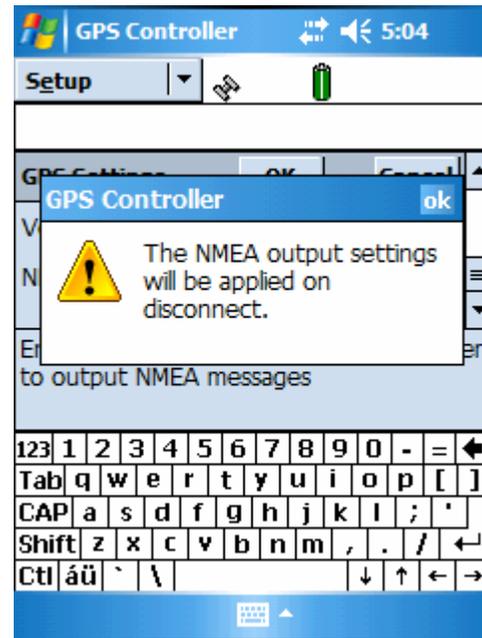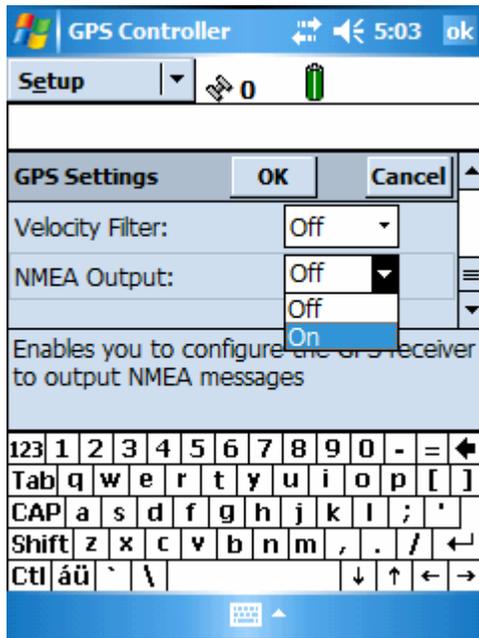
10. Tap Options > Disconnect from GPS to apply the settings changes.
11. When prompted, tap Yes to disconnect. NMEA output is now set.