

Crux_View Test Program Manual

For Transplant I GPSJ
(version 1.6.5)

EMTAC Technology Corp.

NOTE

- *This Crux_View Test Program is an evaluation version program and only for testing purposes. NOT for Navigation usage.*
- *For use with Transplant IGPSJ , This Crux_View program only supports Pocket PC (PPC).*
- *Current version of CRUX_View supports ARM (Strong ARM/X Scale) based PPC.*
- *Read and consult the IGPSJ User' s Guide before operating the CRUX_View program.*

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Crux_View Test Program

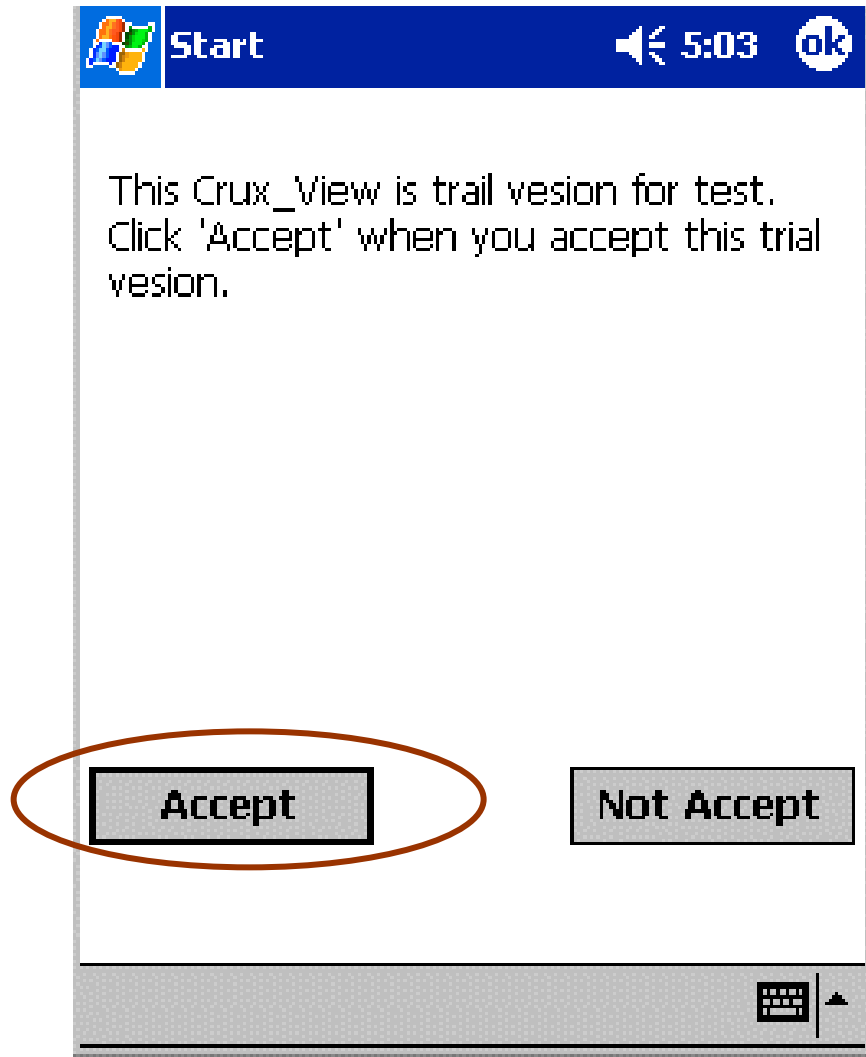
1. Installation

- 1.1 Connect the PPC to the Host PC then ' Active Sync' them.
- 1.2 Open ' My Computer' → ' Mobile Device' → ' My Pocket PC' , Copy Crux_View.exe to ' \Windows\Start Menu' of the PPC.
- 1.3 Disconnect the PPC to the Host PC.
- 1.4 From PPC ' Start' menu, Click ' Crux_View' to execute it.

2. Operation

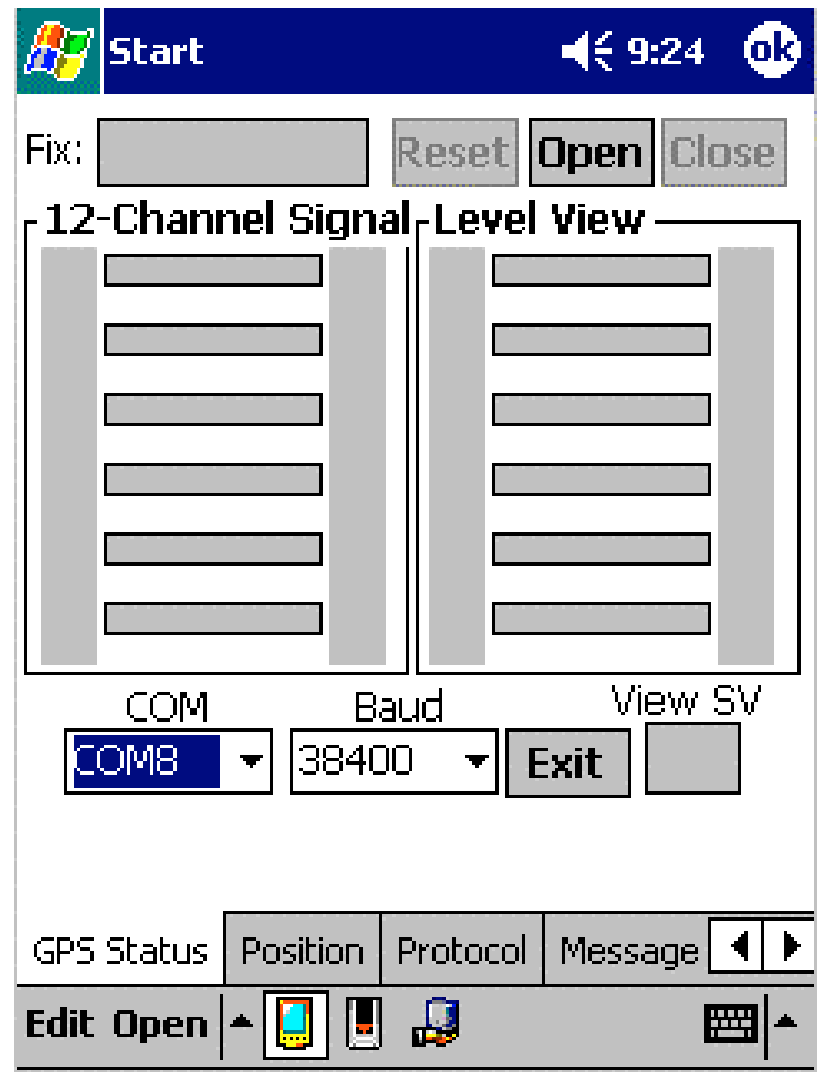
- 2.1 When used with GPS Jacket or CF GPS, connect GPS receiver to these devices first before starting Crux View
- 2.2 Execute ' Crux_View' from ' Start' menu on PPC.

2.3 Click ' Accept' to continue, if you accept the claim.



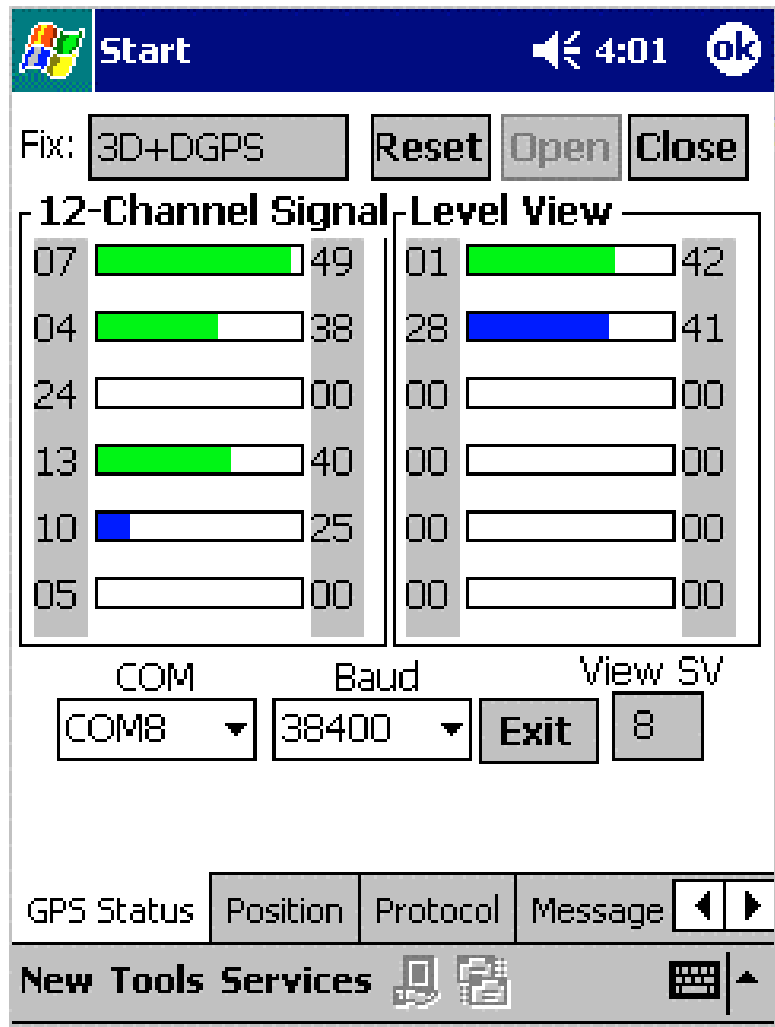
2.4 COM and BAUD setting for use with GPS Jacket or CF GPS.

- ‘ COM’ number,
iPAQ 36xx COM4
iPAQ 38xx COM5
iPAQ 39xx COM6
- b.** Set the ‘ Baud’ to ‘ 4800’ bps.



2.5 Click ' Open' to connect to the GPS receiver.

2.6 The GPS Status Page.



Indicator and Function Buttons:

Fix: The fix status, None, 2D or 3D; plus DGPS.

Reset: Cold Start the IGPSJ

Open: Connect IGPSJ.

Close: Disconnect IGPSJ.

Exit: Exit this program.

View SV: The No. of the Satellite Visible.

12-Channel Signal-Level View:

The Signal Level in dB-Hz of each GPS channel.

2.7 The Position Page.

DOP & Speed			
Fix	PDOP	HDOP	VDOP
3D+DGPS	9.5	6.7	6.8
Course	205.71	degrees	Unit
Speed	0.16	knots	knots

GPS Status: Position Protocol Message

Edit Open

Indicators:

Position: The Latitude and Longitude.

GPS time: UTC Date and Time.

DOP & Speed:

Fix: The Fix Status, None, 2D or 3D; plus DGPS.

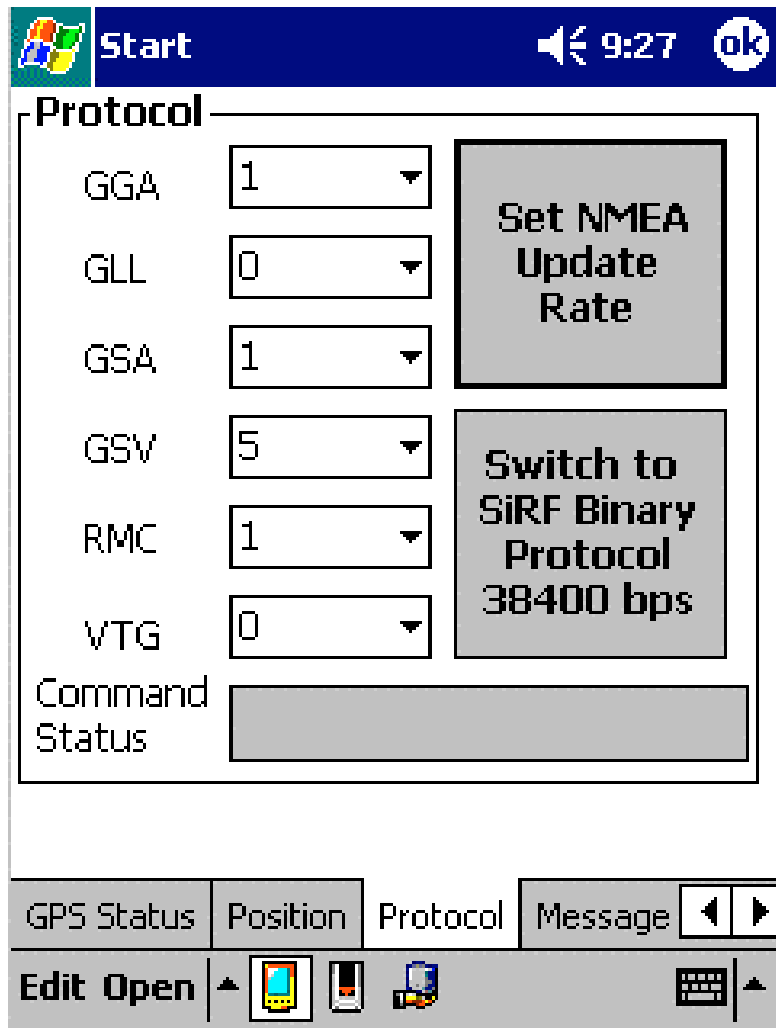
PDOP: Position Dilution of Precision.

HDOP: Horizontal Dilution of Precision.

VDOP: Vertical Dilution of Precision.

The ' Unit' of the ' Speed' can be select either in ' knots' or ' km/hr' .

2.8 The Protocol Page.



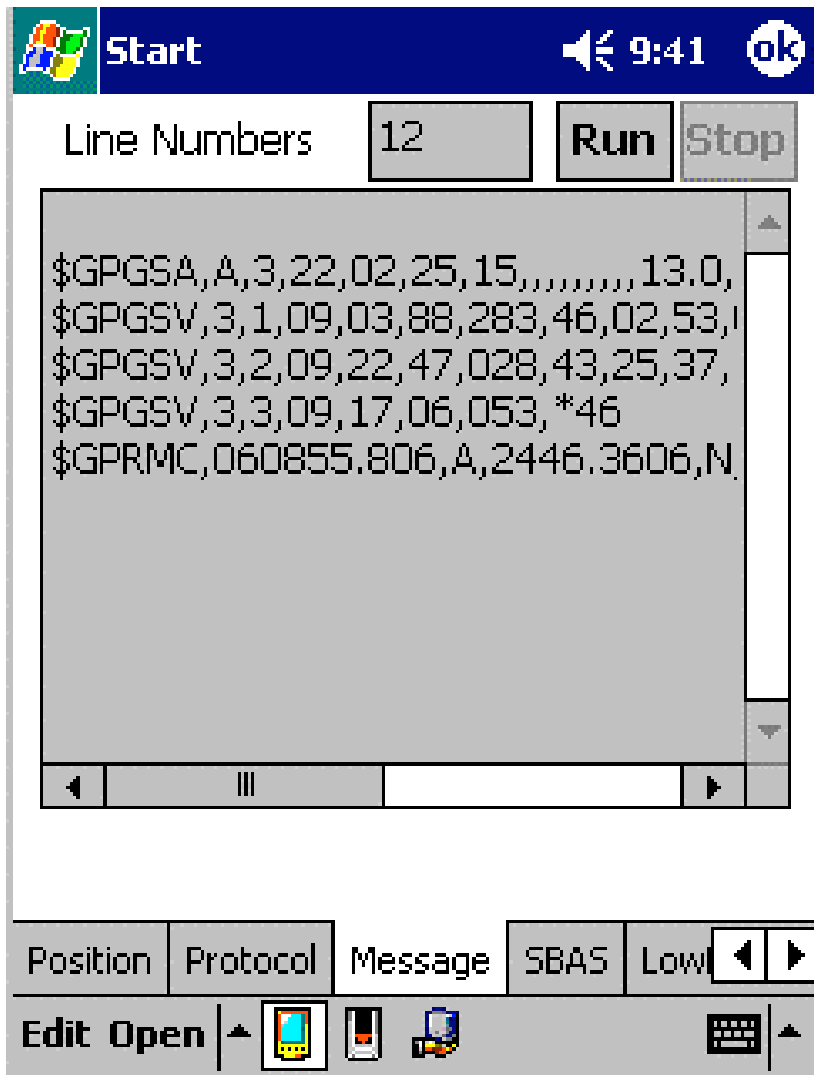
Set NMEA Update Rate: Click this button will send the NMEA update rate setting commands to BTGPS.

The new update rate settings (seconds per message) were selected in left side pull down menus before click the ' Set NMEA Update Rate' button.

Switch to SiRF Binary Protocol 38400 bps: Click this button will switch the IGPSJ to SiRF binary protocol in 3800 bps baud rate. **WARNING** - when switching to SIRF protocol, many programs (including Crux View) will not be able to communicate with the IGPSJ. Use at your own risk.

Command Status: Indicate the status of sending commands.

2.9 The Message Page.



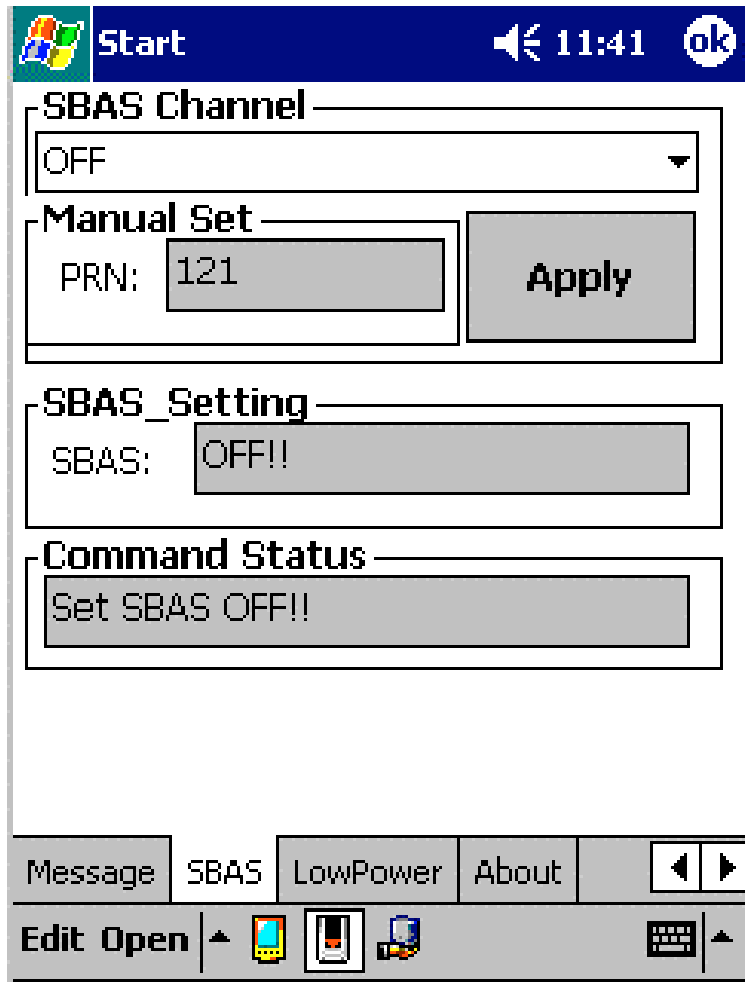
In this page the window display the NMEA messages that coming from BTGPS.

Function Buttons:

Run: Run displaying.

Stop: Stop displaying.

2.10 The SBAS (DGPS) Page.



SBAS Channel setting.

OFF: Do NOT use SBAS channel.

AUTO: BTGPS auto searching available SBAS satellite and use it for correction.

PRN120(EGNOS): Use PRN120 only.

PRN131(EGNOS): Use PRN131 only.

PRN122(WAAS): Use PRN122 only.

PRN134(WAAS): Use PRN134 only.

Manual Set: Key in PRN No. that desired to be used only.

After set the **SBAS Channel**, Click the '**Apply**' button to send the command to the IGPSJ.

SBAS Setting: Show the current SBAS Channel setting of the IGPSJ.

Command Status: Shows the Command Proceed.

2.11 The LowPower Page

Note. This function only applies to GPS products with SiRF LP chipset.

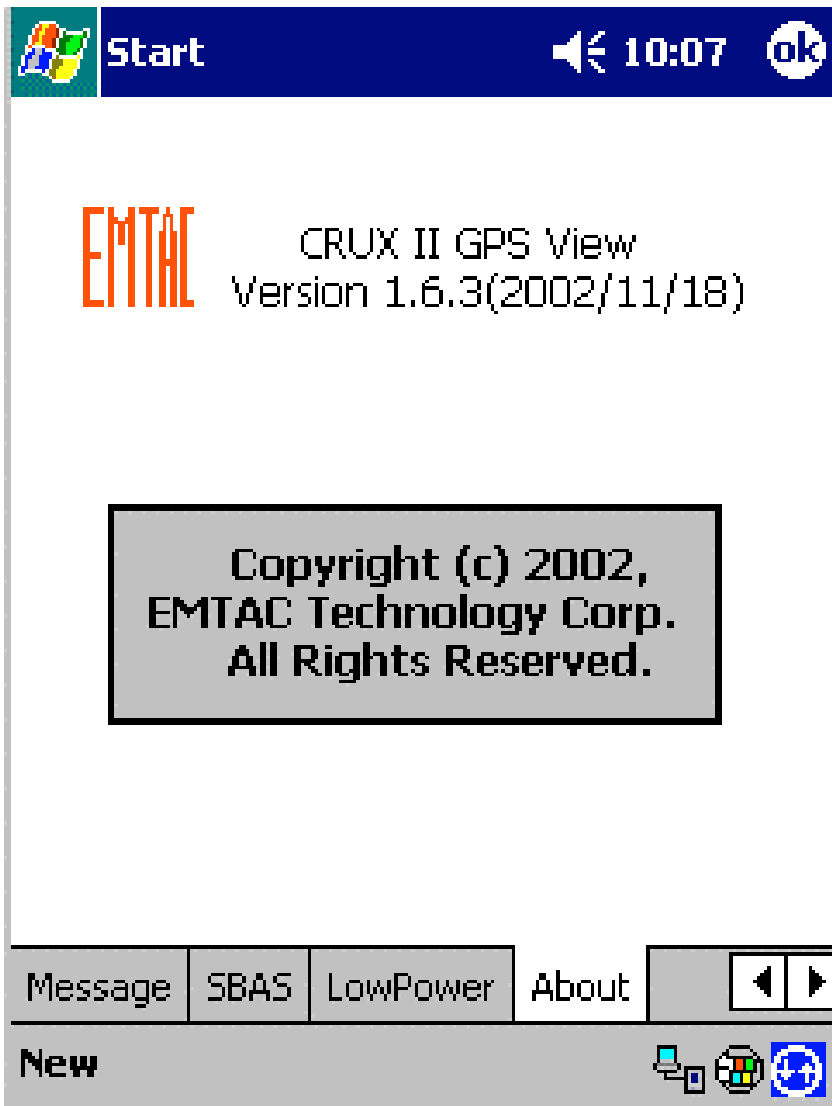
The screenshot shows a software interface for configuring the LowPower mode. At the top, there is a blue header bar with the Windows logo, the word "Start", a back arrow, the time "9:57", and an "ok" button. Below the header, the "Mode" section contains two radio buttons: "Continuous" (selected) and "TricklePower". Underneath are two dropdown menus: "Update rate (sec):" set to "1" and "On Time (ms):" set to "200". An "Apply" button is located below these settings. The "TricklePower Status" section displays three read-only fields: "LowPower:" showing "OFF", "On Time (ms):" showing "1000", and "Update rate (ms):" showing "1000". At the bottom of the screen, there is a navigation bar with tabs for "Protocol", "Message", "SBAS", and "LowPower" (which is active). To the right of the "LowPower" tab are navigation arrows and the letter "A". Below the navigation bar is a "New" button and several system icons.

Mode: You may set the Low power mode by select the Continuous/TricklePower Mode and setting the desired Update rate/On Time.

After changed the Power Mode, Click the ‘ **Apply** ’ button to send the command to the BTGPS.

Trickle Power Status: Displays current power mode setting.

2.14 The About Page.



This page shows the software version and copyright claim.