

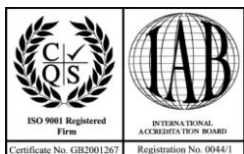
GPS Configuration User Guide



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Overview

GPS Config is a simple Pocket PC application to alter the settings of the Technology Solutions 1058 GPS module for the MC70.

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History

Version	Date	Modifications
1.0	09/10/06	Document Creation
1.1	11/10/06	Updated to GPS Config Application Version 1.0

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1 Installation

Copy the cab file to the device then run the cab file to deploy the application. A shortcut "GPS Config" will be placed in the Programs folder.

To uninstall the application use remove programs in settings.

2 GPS Config

By default the 1058 GPS runs at 9600 baud in NMEA mode.

WARNING

This application can permanently change the settings of the receiver making it unusable to applications expecting a specific configuration. Use with care.

2.1 Warning Screen

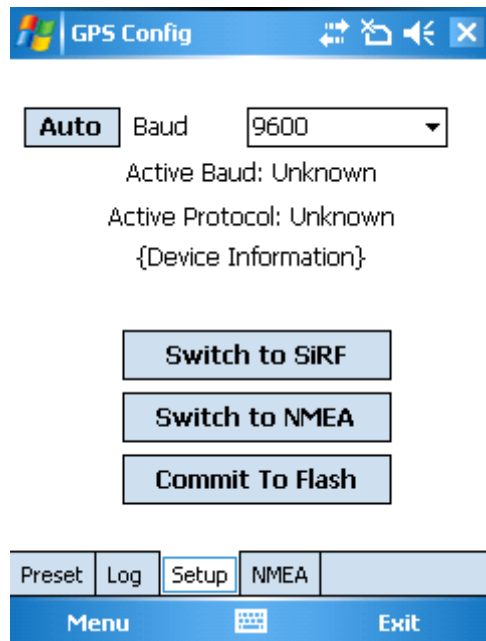


Tap the splash/warning the application.

screen to continue to

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2.2 Setup Screen



2.2.1 Auto

Tap this button to automatically detect the receiver's baud rate and protocol. Wait while the application cycles through the available baud rates looking for valid messages. As the receiver is detected the controls are enabled and the active protocol and baud displayed.

2.2.2 Connect to Receiver

Ensure the required baud rate is selected on the drop down then tap menu>connect.

The software will automatically detect the active protocol. Use the auto button to detect the baud.

2.2.3 Disconnect from Receiver

Tap menu>disconnect

2.2.4 Switch to SiRF

If the receiver is in NMEA protocol mode tapping this button will change it to SiRF protocol at the

selected baud rate. If already in SiRF protocol it can be used to change the SiRF baud rate.

2.2.5 Switch to NMEA

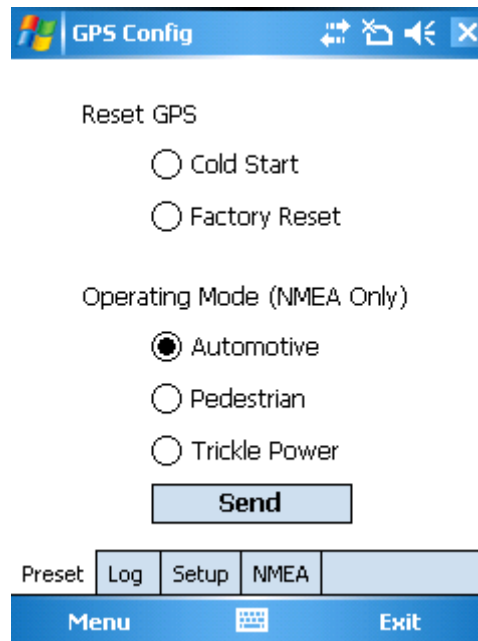
If the receiver is in SiRF protocol mode tapping this button will change it to NMEA protocol at the selected baud rate. If already in NMEA protocol it can be used to change the NMEA baud rate.

Note the receiver cannot change from SiRF to NMEA at 115200 baud. To run 115200 in NMEA mode tap Switch to NMEA with a lower baud rate selected then select 115200 baud and tap Switch to NMEA again to change to 115200 baud.

2.2.6 Commit To Flash

This command commits the receiver's settings as currently configured to FLASH to be restored on the next power up.

2.3 Preset Screen



GPS Config

Reset GPS

Cold Start

Factory Reset

Operating Mode (NMEA Only)


Automotive

Pedestrian

Trickle Power

Send

Preset Log Setup NMEA

Menu  Exit

2.3.1 Send

Tapping send transmits the selected command to the receiver.

Cold Start – Performs a cold start on the receiver

Factory Reset – Performs a factory reset on the receiver

NB. This resets the receiver to the default 9600 baud NMEA protocol.

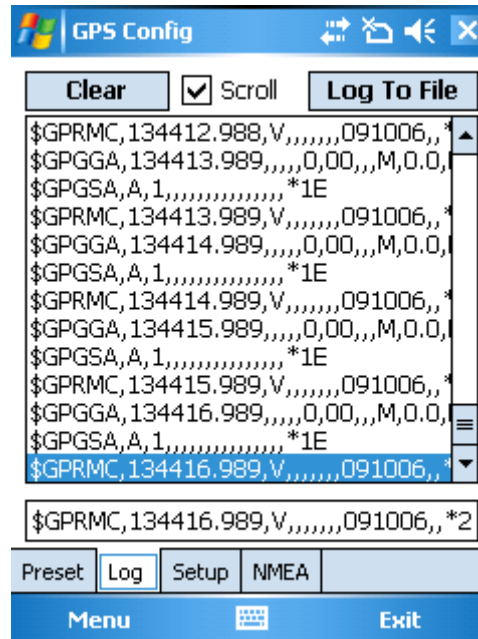
Note: The following commands are NMEA protocol only

Automotive – Configures the receiver for automotive mode

Pedestrian – Configures the receiver for pedestrian mode

TricklePower – Configures the receiver into the SiRF TricklePower mode

2.4 Log Screen



The log screen is used to monitor the output of the receiver. Messages are displayed to the screen as they are received. Only the most recent messages are displayed. The log to file option provides a method to log all communication to a log file for later reference.

2.4.1 Clear

Tapping clear will clear the list of received messages.

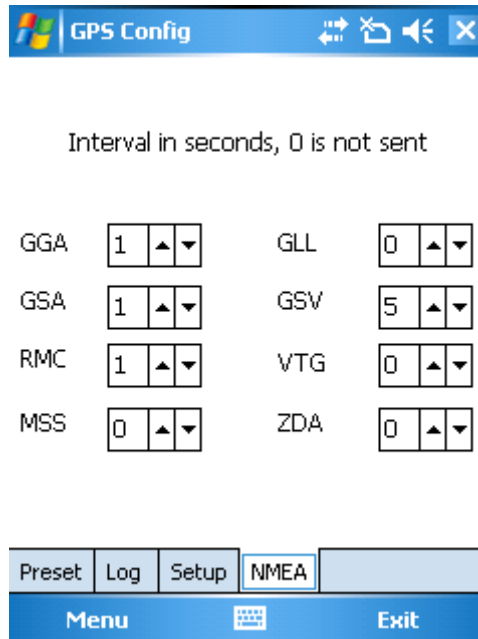
2.4.2 Scroll

When checked messages will scroll up the screen. Uncheck to be able to select a single message. The selected message appears in the text box at the bottom of the screen to allow it to be examined or copied.

2.4.3 Log To File / Stop Logging

Tap to prompt for a file to log to. This will create a log file to log the data to. SiRF messages are stored as HEX data. NMEA messages are stored as received. Tap the button again to stop logging.

2.5 NMEA Screen



Interval in seconds, 0 is not sent

GGA	1	▲▼	GLL	0	▲▼
GSA	1	▲▼	GSV	5	▲▼
RMC	1	▲▼	VTG	0	▲▼
MSS	0	▲▼	ZDA	0	▲▼

When the protocol is changed from SiRF to NMEA the interval at which the various NMEA messages are output is set. This screen allows the interval for those messages to be configured. The interval for each is between 1 and 255 seconds or 0 for off (not sent).

- GGA – Global Positioning System Fixed Data
- GLL – Geographic position Latitude/Longitude
- GSA – GNSS DOP and Active Satellites
- GSV – GNSS Satellites in View
- RMC – Recommended Minimum Specific GNSS Data
- VTG – Course Over Ground and Ground Speed
- MSS – MSK Receiver Signal
- ZDA – SiRF Timing Message

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+ About TSL

TSL designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals. Embedded technologies include:

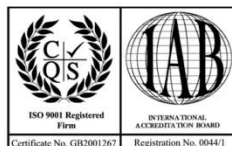
- GPS
- RFID – Low Frequency, High Frequency and UHF
- GPRS/GSM
- IrDA
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- Bluetooth
- 802.11 WiFi
- Magnetic Card Readers
- OCR – B and ePassport

Utilizing class leading Industrial design, TSL develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

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