D GPSSK User's Guide (TAIP)

The TAIP Toolkit, known as GPSSK is a software package available from Trimble to assist users of the Trimble ASCII Interface Protocol (TAIP). GPSSK supports all Trimble receivers that use TAIP.

GPSSK can be used to setup, diagnose, and monitor the receiver and provides the following capabilities:

- Program the GPS receiver for automatic message reporting and verify the success of the programming.
- Quickly program Vehicle ID numbers into a fleet of receivers.
- Log the GPSSK session with the GPS receiver to disk and replay the data.
- On-screen plotting of GPS positions from the receiver.
- Poll for and view combinations of TAIP messages.
- Set different polling intervals for each message type.
- Conduct an interactive terminal session with the GPS receiver.

Note – The information about GPSSK in this document is a general overview. The GPSSK distribution diskette includes a READ.ME file that details the most current information about GPSSK functions, including loading and using GPSSK.

The GPSSK program does not support the TAIP messages DC and DD. These messages input differential corrections to the receiver and are defined as special TAIP format versions of RTCM SC-104 Type 1 and Type 2 messages.

The GPSSK program requires well over 500K RAM. It may not run in a DOS window, and may require removal of TSRs.

D.1 The GPSSK Files

GPSSK is included on the 3.5 inch DOS formatted GPS tool kit diskette. The diskette contains the following GPSSK related files:

GPSSK.EXE	The executable GPSSK program
GPSSK.HLP	The on-line, context-sensitive help file
READ.ME	Current information about GPSSK
TAIP.C	Sample source code for encoding and decoding TAIP

D.2 TAIP.C Source File

The sample source code for encoding and decoding TAIP messages is provided as a guide for the system integrator who is developing a communications controller that handles TAIP. There is no warranty of any kind on this software. Use it at your own risk.

The distribution diskette is not copy protected. Before using GPSSK or installing on the hard disk, make a working copy and put the original diskette in a safe place. During normal use, GPSSK saves configuration information to the diskette or current directory. Storing the original diskette away allows you to restore the original configuration should you encounter problems.

Copy the files GPSSK.EXE and GPSSK.HLP to a hard disk directory.

D.3 GPSSK Start-up

At the DOS prompt in the directory containing GPSSK, enter the command:

GPSSK

When the program is finished loading into memory, the GPSSK title page displays. The program then waits for 10 seconds to begin normal execution. You can bypass the 10 second wait by pressing any key after the title page displays.

The function key menu displays on the bottom of the screen. GPSSK is structured as a hierarchy of menus. The function keys control access to the menus.

To terminate GPSSK, back out of the menu structure by pressing [F9] until GPSSK prompts you to confirm that you want to exit the program.

At start-up, GPSSK attempts to initialize itself by querying the receiver for some basic information. To abort the receiver initialization process and use GPSSK to replay stored data, enter [Ctrl] + [X] (hold down the control key and press x). If initialization has been aborted, you must restart GPSSK when you want to communicate with the receiver.

D.4 On-line Help

Once GPSSK is running, on-line help is available to assist in performing all the GPSSK operations. Help is context sensitive and displays information regarding the current display or menu. A brief overview of GPSSK is available in the main menu's help screen.

There are several command line options available. For help with command line options, run GPSSK with the /HELP argument:

GPSSK /HELP

The help available on the GPSSK main menu explains menu operation and the menu hierarchy.

D.5 Connecting the GPS Receiver

Consult the *Installation and Operator's Manual* for information on installation, power requirements and cables specific to the SVeeEight Plus GPS receiver.

Connect the serial port of the receiver to the computer's COM1 or COM2 port. The default serial port settings for GPSSK are:

- 4800 baud
- 8 data bits
- 1 stop bit
- no parity

These default settings match the default settings for the SVeeEight Plus GPS receiver. Consult the *Installation and Operator's Manual* for the actual default settings and type of serial port on the receiver.

If the receiver is connected to COM2, start GPSSK by entering the command:

GPSSK/2



Note – A null modem may be required when connecting the receiver to a personal computer. The serial port on the computer is a DTE port (data terminal equipment) designed to connect to a DCE port (data communications equipment). If the receiver's serial port is DTE, you must use a null modem adapter.