

SIGGEN DEVELOPMENT KIT

When the Signal Generator is tested or used as a stand alone device, a Safety Computer Simulator must be attached to enable the Signal Generators functionality. A Safety Computer Simulator must simulate two pieces of hardware, the WAAS GUS Message Processor (WMP) that controls the Signal Generator by communicating with the command/status port and the Comparator Message Processor (CMP) that provides the FEC encoded data that will be encapsulated in the NAV message.

NovAtel's SigGen Development Kit includes the following:

- Data Source Dongle (x2)
- SigGen Control GUI
- Parallel Port to JTAG Adapter Module
- Software Utility to Load the Data Source Program Firmware and Data Memory
- User Guide for the GUI, the Loader Program, and information on constructing Data Files

The SigGen Control GUI in the list simulates the WMP. This GUI allows the user to set up and control all of the Signal Generators adjustable features such as PRN generation, code and carrier frequency and rate, code chip advance, etc. plus it allows monitoring of the Signal Generator parameters and logging of the commands and status information.

The Data Source in the above list simulates the CMP. It provides the data for the WAAS GEO message. This data is store in non-volatile memory within the dongle and is a canned message that the user can formulate and reload.

IF THE USER WANTS TO CHANGE THE NAV INFORMATION IN THE CANNED MESSAGE CONTAINED WITHIN THE DATA SOURCE DONGLE, A PARALLEL PORT TO JTAG ADAPTOR CABLE IS PROVIDED AS WELL AS A SOFTWARE UTILITY TO DOWNLOAD NEW MESSAGES INTO THE DATA SOURCE DONGLE. THE USERS GUIDE PROVIDES INFORMATION ON CONSTRUCTING THESE MESSAGES.

