



Use of GHT with Vitel VX1004 units

15 January 2005

The Stevens GHT can be used with existing Vitel VX1004 units by employing the Stevens VX1004 GOES Dongle, PN 93541. The dongle plugs on to the VBUS connector, and allows existing VBUS modules to continue to access the VX1004 using an additional connector on the dongle.

AN EPROM is provided to allow for the interface requirements of formatting an appropriate GOES message and outputting it over the VBUS connector to the GHT. The format of the message is as it was previously with 100 BAUD VX1004 DCPs.

When installing the EPROM in the VX1004 CPU board, it is necessary to remove the existing GOES synthesizer board. This board should be left off when the unit is re-assembled. Please check with Stevens for the possible return of this board for credit toward future purchases.

To program the VX1004, all programming steps are as previously defined in the VX1004 DCP manual. The channel ID and channel number defined in the VX1004 are not used, and can be left to default values. Channel ID and number are defined only in the GHT.

The actual clock time, GOES interval and time of first transmission need to be programmed in both the GHT and the VX1004. In addition, the CT value in the GHT needs to be set to 50. Once both the clocks, intervals and times of first transmission are set in both units, the VX1004 will sync off of the CT signal from the GHT, and thereby maintain its clock with the same accuracy as the GPS clock on the GHT.

Vitel produced a number of different special firmware versions for use in the VX1004, for special add-in modules and custom routines. It is not known if all of these special modes are supported in the new EPROM, since records relating to these "specials" are sketchy. If you find the new EPROM does support all of your requirements, please notify us with the version number of your old EPROM and we will attempt to research the differences, and see if an appropriate new version can be created. Also, certain older versions of the CPU board will not support the new EPROM, and these will not be capable of being upgraded (Rev D or higher are supported).