

# GE-Flash v1.00.23

Release Date 02/26/2007

## Release Notes And Revision History

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### SHAREWARE NOTICE

This software is released as shareware for evaluation purposes only. All features are enabled in the demo version except EEPROM writing and file Exporting. The EEPROM programmer read function is enabled so you may test EEPROM read support and functionality with a programmer board. The EEPROM image import functions are also fully enabled which allows you to view EEPROM images from Niles and other third party programming system if desired.

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Upon receipt of payment you will receive a license key file within 24 hours that will fully enable the software for use on a single machine. Although you are under no obligation to purchase a license, please do not expect me to provide tech support, assistance, etc, to the freeloaders of the world! I hope you enjoy using this program as much as I have enjoyed developing it.

### **LICENSED PSX200 USERS**

If you already own a PSX200 license you may use a copy of your PSX200 license file with GE-Flash by performing the following steps:

- 1) Run the GE-Flash setup to install the software as normal.
- 2) Place a copy of your original PSX200 license key file in the same directory as GEFlash.exe and rename it to "GEFlash.key".
- 3) Run GEFlash and reenter your original PSX200 license key number.

Note that the Delta and Ranger features are disabled in PSX200 license mode. If you wish to program these radios an upgrade license will be available in the future at a minimal price.

### **Why do I Charge a Fee?**

I have spent countless man months/years of coding, debugging, testing and supporting software projects for these classic radios. This software consists of thousands of lines of MFC C++ code. I am professional Windows software developer by day and do this for my love of radio and the hobby. I will make every attempt to address bugs and enhancements quickly as possible. If you find a bug please let me know and I will address any issues as quickly as possible.

As such, I am providing users with ongoing support, bug fixes and patch releases at no extra charge essentially. All software requires maintenance during the life cycle and this application is no different. I stand behind my work and will make every attempt to correct any problems found. However, in some cases it may not be possible for me to resolve problems for a particular radio without the original factory programming instructions and documentation. Many versions and variations of the Phoenix, Delta and Ranger radios exist and I do not have complete information on all the various models.

### **Installation and Usage**

GE-Flash uses the same driver and parallel programmer as the PSX200 application. Simply run the GE-Flash setup program to install the software. Other than the driver, no special setup or installation is required. You may also use the driver files included with the PSX200 installation if needed.

## GE-Flash Application Notes

GE-Flash supports Phoenix, Delta-SX and Ranger radio types at the moment.

The Delta and Ranger support is fairly new code in GE-Flash. If you are working with one of these radios and encounter difficulties please let me know. The Phoenix support should be fairly well covered. The Delta-SX support should be very close and needs testing mainly. The Ranger module was recently added and still needs work. The Ranger 800 MHz support is currently not working.

- The software should handle most all types of Phoenix radios that I'm aware of. The Delta-SX radios should be fairly well supported now. However, some confusion of the SY1 & SY2 synthesizer bit programming still exists. For now I've coded these per the Delta programming documentation I have. The Niles software seems to generate images that differ from the Delta-SX spec I have, so, testing will be required.
- GE-Flash supports three types of native file formats: EPROM Data (.edf), Phoenix (.phx), Delta (.dlt) and Ranger (.rgr). Currently GE-Flash does not read or import PSX200 files directly. You can export and import using Hex format if needed in this case.
- GE-Flash allows you to open and work on as many files as needed. The mouse provides several features via right/left click in the various windows. In the hex edit windows you may also copy/paste EPROM image data between the radio and hex programmer window if desired.
- GE-Flash supports banked EPROM programming support for up to 8 X2212 chips (banks) of EPROM's for support of the 128 channels units. The programmer and editors prompt the bank (chip) number to program as needed.
- Complete Niles Import/Export compatibility for multi-bank X2212 units has been added. The import will now allow importing Niles files up to 128 channels as needed. Each chips worth of data corresponds to a memory bank number that represent each chip in the radio.
- The Phoenix reference divisor options should be less confusing in GE-Flash. These reference divisor options in PSX200 were somewhat confusing and have been redesigned in GE-Flash to hopefully simplify things. I still do not have a complete understanding of the reference divisor programming bits and options between the narrow and wide band units.

## **GE-Flash Revision History**

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### **1.00.04 (08/07/2004)**

This is the first official beta release.

### **1.00.05 (08/19/2004)**

Most of the changes in this release include UI tweaks, fixes and enhancements. Support for importing PSX200 files was also added to allow direct importing of Phoenix data files created with PSX200.

### **1.00.06 (09/06/2004)**

This release includes mostly UI enhancements and context sensitive online help. The help system is still in the early stages but most of the hooks are now in place. The help system will continue to be enhanced in future releases.

### **1.00.07 (09/16/2004)**

This release includes mostly additions to the online help. Fixed a few minor bugs in the owner draw button class.

### **1.00.08 (11/15/2004)**

Added new 10.7 MHz IF option for Delta-SX low band users.

### **1.00.09 (11/28/2004)**

Fixed a bug that caused frequencies to be encoded incorrectly. A data item was not initialized properly which sometimes caused erratic encode behavior.

### **1.00.10 (01/26/2005)**

This build includes fixes for Delta-S programming mainly. Apparently these used 10.7 IF?? The fixes errors with the rx frequency display as well as encode errors. Most of these changes still require verification but should be fairly close.

This version also includes fixes for the SY1 and SY2 bits which did not seem to encode properly. Note the value of these bits is determined by the frequency entered as specified in the programming data sheets. Still not sure what these should be on the VHF low band units - assuming 00 for now.

### **1.00.11 (01/28/2005)**

Fixed a bug in the Ranger low-band encode and decode. Should support Ranger VHF, UHF and Low Band units now.

### **1.00.12 (05/12/2005)**

Added SYN synthesizer bit combo boxes in DELTA frequency edit window. This allows the user to force a SY2/SY1 bit settings if required. These two bits are the synthesizer band setting control bits (see Delta programming manual for additional info). By default the software attempts to set these correctly based on the range of the frequency entered. For imported data, the currently value for a channel is used as the default.

### **1.00.13 (06/11/2005)**

Added SYN synthesizer bit combo selection boxes in the RANGER editor also. This feature basically works the same as the DELTA SYN options.

#### **1.00.14 (06/13/2005)**

Fixed a minor problem in the Phoenix editor with paste and import data operations that caused the existing global options (CCT timeout, number of channels, etc) to be used rather than the global options contained in the data.

#### **1.00.15 (06/16/2005)**

More fixes and options for the Delta and Ranger SYN synthesizer control bit options. The auto option should work correct the Ranger types now. The Delta SYN (auto) mode needs improvement still. Unfortunately I've not been able to find a clear set of rules as to how the SYN bits should be set for all radios and bands. The values used here are based on a copy of the Delta-SX programming guide someone sent me. Additional information was added to the online help for the Delta/Ranger and SYN bits (press the F1 help key in Ranger/Delta editor).

#### **1.00.16 (08/10/2005)**

Support for the older Delta-S radios should finally work now. This release includes a number of corrections and fixes for the Delta-S. A number of bugs existed in the Delta-S code that caused the software to create improperly formatted images. The Delta-S does not support SYN bit settings like the SX so these options are now disabled for Delta-S radio types.

#### **1.00.17 (08/22/2005)**

More Delta-S fixes to support WIDEBAND in addition to narrow. This release should support Delta-S wide or narrow units. The DCG options still need work in most cases and DPL most likely does not work properly yet. All TX/RX PL tones should work for the wide and narrow band units however. Note for the Delta-S you must set the radio type to narrow or wide in the radio type options dialog.

#### **1.00.18 (08/22/2005)**

This release contains more fixes to the Delta module. The radio type options dialog was changed to force radio type selection as Delta-SX, Delta-S or Delta-S Wideband type. NOTE THAT THE EPROM DATA FORMAT IS DIFFERENT FOR WIDE AND NARROW BAND RADIOS AND IMPROPRER SELECTION WILL CAUSE ENCODE/DECODE ERRORS. The frequency may display correctly, but the PL and other settings will be incorrect if the correct radio type is not selected.

#### **1.00.19 (01/18/2006)**

Corrects a bug for the Delta-S LOW-BAND data entry. The data entry fields did not allow two digit frequency data for low-band 10mHz IF mode.

#### **1.00.20 (03/24/2006)**

Added a new radio type option specifically for Delta-S LOW-BAND radios. Existing LO-BAND files from previous releases will need to change the radio type to Delta-S LowBand for the data to display correctly.

#### **1.00.21 (06/01/2006)**

Added support for Phoenix-S two-channel UHF unit. The VHF mode has not been tested. Also started support for Phoenix 32-channel UHF unit - this does not encode all TX data properly yet! Added option in Deltx-SX for low-side/high-side injection. A lot of changes were added, hopefully I didn't break anything.

#### **1.00.22 (10/29/2006)**

This is a maintenance build designed to address an occasional problem during install/registration and with resource strings in general. All of the resource strings have been renumbered and rebuilt. During license registration this sometimes caused the program to generate error dialogs with missing or incorrect text.

**1.00.23 (02/23/2007)**

This build includes changes to support the VX2212 virtual X2212 eeprom emulator over RS232. Options have been added to the global "Settings" dialog to specify the default programmer interface to use and the parallel or serial port number.

The HI/LO side injection option has been added to the Ranger and Delta modules to simplify LOW BAND VHF (42-50mhz) programming of modified radios. Entered frequencies are automatically adjusted for the correct HI or LO side LO injection.