

## **GRE PSR-800 Project 25 Phase 2 Public Beta Upgrade October 12, 2012**

GRE is pleased to offer this public beta upgrade to enhance the functionality and performance of your PSR-800 digital trunked scanning receiver. Please take a moment to review the release notes and installation instructions before proceeding with the upgrade.

**IMPORTANT NOTICE:** The software included in this archive is experimental beta software. While some testing has been done to ensure that there are no major issues with this software, there is always a chance that something may have been missed in testing that could cause a loss of your current scanner programming. We recommend that you make a backup of your scanner's current programming before performing these upgrades. There will be no official support for these beta versions of firmware and software.

Should you desire to return to the current release versions of the CPU and DSP firmware, you may use the PC Application's Check for CPU Updates and Check for DSP Updates options. See the "*Reverting to the current public release versions*" section at the end of this document for specific instructions on returning to the current release versions.

### ***CPU Beta Firmware version U1.7 Release Notes***

- This experimental beta CPU software adds APCO Project 25 Phase 2 functionality to the PSR-800 and must only be used in conjunction with the companion beta DSP version U1.2 included in this upgrade.
- When this version is installed, the uP Appl Ver line on the version screen (accessed by pressing menu when the welcome message is displayed after a power up) will show as version 1.7.
- Project 25 Phase II, 4 slot TDMA voice is not supported.
- Radio IDs, on Phase 2 voice channels, will not be displayed – unless they came from the CC before tuning to the voice channel. Radio IDs are not decoded from the voice channel data.
- Priority talkgroups are not supported when tuned to Phase 2 voice channels.
- Don't use "custom tables" for Phase 2 systems unless you really know what you're doing (let the scanner handle tables)
- When a Phase 2 talkgroup is active, the scanner will display "D2" instead of "DG".

### ***DSP Beta Firmware version U1.2 Release Notes***

- This experimental beta DSP software adds APCO Project 25 Phase 2 functionality to the PSR-800 and must only be used in conjunction with the companion beta CPU version U1.7 included in this upgrade.

## ***EZ Scan DG PC Application Beta version 1.07 Release Notes***

- Added options to the custom trunking tables to support Phase 2 operation. Unless you really know what you are doing, we recommend using the automatic option.

### ***What you will need to upgrade your radio***

You will need the following items to perform the CPU and DSP firmware upgrade on your PSR-800 scanner:

- The upgrade application files, which is normally supplied in a ZIP archive along with this documentation. To download the file, visit the GRE Support Site, at <http://www.greamerica.com/support>. Note that the upgrade package contains three executable upgrade files, as follows:
  - ➔ CPUUpdater\_PSR-800\_U1.7.exe – Beta CPU Firmware Update Program
  - ➔ DSPUpdate\_PSR-800\_U1.2.exe – Beta DSP Firmware Update Program
  - ➔ EZScanDGUpdate\_1.7.exe – Beta PC Application Update Program
- USB scanner programming cable for the PSR-800
- A personal computer running Windows™ XP SP3, Vista or Windows 7
- A PSR-800 scanner in to install the updates onto.

### ***Upgrading your PSR-800***

Upgrading your scanner is a quick, simple and safe process. There is no way you can render your scanner inoperable by performing the upgrade.

#### **Step by step upgrade procedure for CPU Beta Firmware**

This step by step procedure assumes that you have downloaded the PSR-800 Public Beta upgrade package, that you have installed the drivers for the PSR-800 on your personal computer, that the USB cable is connected to an available USB port on your personal computer, and that you know the COM port number that Windows™ has assigned to the PSR-800 Scanner.

If this is not the case, please take a moment now to prepare for the upgrade by completing the above steps before proceeding. Information on locating the COM port on your machine may be found at the end of this document.

1. While unlikely, upgrading your radio may result in the loss of any programming that you have stored. We recommend that you save your work before proceeding with the upgrade.

### **Step by step upgrade procedure for CPU Beta Firmware (Continued)**

2. Place the PSR-800 into CPU Firmware update mode. To do this, power the scanner off and then disconnect the USB cable from the scanner. While holding the MENU key, plug the USB cable into the scanner's PC/IF port. The bottom line of the display should show "Waiting for USB...".
3. Locate the CPUUpdater\_PSR-800\_U1.7.exe file on your computer. No installation is required - if necessary, move the file to your Windows Desktop or to another convenient location on your hard drive where you can find it when the time comes to start the program.
4. Double click the CPUUpdater\_PSR-800\_U1.7.exe program to start the upgrade process. Follow the onscreen upgrade instructions exactly to upgrade your radio.
5. When the upgrade is complete, the scanner will power itself off and display the clock on the screen. To confirm the upgrade, power the scanner on and press the MENU key when the welcome message appears after the GRECOM logo. The uP Appl Ver line should show 1.7.

### **Step by step upgrade procedure for DSP Beta Firmware**

1. Power the scanner off and connect the USB programming cable to the scanner and the computer.
2. Locate the DSPUpdate\_PSR-800\_U1.2.exe file on your computer. No installation is required - if necessary, move the file to your Windows Desktop or to another convenient location on your hard drive where you can find it when the time comes to start the program.
3. Double click the DSPUpdate\_PSR-800\_U1.2.exe program to start the upgrade process. Follow the onscreen upgrade instructions exactly to upgrade your radio.
4. When the upgrade is complete, close the updater program. To confirm the upgrade, power the scanner on and press the MENU key when the welcome message appears after the GRECOM logo. The DSP App Ver line should show 1.2.

### **Step by step upgrade procedure for Beta EZScanDG PC Application**

1. Locate the EZScanDGUpdate\_1.7.exefile on your computer. No installation is required - if necessary, move the file to your Windows Desktop or to another convenient location on your hard drive where you can find it when the time comes to start the program.
2. Double click the EZScanDGUpdate\_1.7.exeprogram to start the upgrade process. Follow the onscreen upgrade instructions exactly to upgrade the PC Application.

## **Step by step upgrade procedure for Beta EZScanDG PC Application (Continued)**

3. To confirm the upgrade, start the PC Application, then check the Help->About screen. The software should display version 1.07.

## ***Troubleshooting***

Most users should experience no trouble whatsoever upgrading their radios. However, if you find that the upgrade process is not working for you, here are a few things you can check:

- Ensure that the USB drivers are installed and that Windows™ recognizes the scanner and has assigned a COM port number.
- Ensure that the correct COM port is set in the CPU upgrader.
- Ensure that no other applications are running that access the same COM port.
- Repeat the upgrade process, making certain that the on-screen instructions of the upgrader are followed exactly. In particular, note that the procedure for upgrading the radio's CPU firmware differs from the procedure to upgrade the radio's DSP firmware.

If none of the above suggestions work, try running the upgrade utility on a different computer. In some cases hidden applications can cause port conflicts. It is not always possible to see these hidden applications and disable them to eliminate the conflict.

## ***Reverting to the current public release versions***

**Important Note:** When reverting to the public release versions of firmware, you must revert both the CPU firmware and the DSP firmware. These experimental beta firmware versions are not compatible with the current public release versions.

To restore the CPU and DSP software to current release versions:

1. Power the scanner off and disconnect the USB cable from the scanner.
2. While pressing the MENU key, plug the USB Cable into the scanner. This should place the scanner in CPU Firmware Update mode.
3. Start the EZ Scan PC Application.
4. If the Auto Update Check window appears when the program starts, select "Skip Auto Update Check" and click the Accept button.
5. In the Updates menu, select the "Check for CPU Firmware Updates" option. After the update check, the screen should indicate that the current version of firmware in the scanner is newer than the available version.
6. Click the "Update my Scanner" button to apply the Public Release CPU Firmware.
7. When the update is complete, the scanner will power off. Leave the scanner off and connected to the computer via the USB cable.

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8. In the Updates menu, select the “Check for DSP firmware updates” option. After the update check, the screen should again indicate that the current firmware in the scanner is newer than the current release.

### ***Reverting to the current public release versions(Continued)***

9. Click on the “Update My Scanner” button and allow the PC Application to update the scanner firmware.
10. To revert back to the Public release version of the PC Application, in the Updates Menu, select the “Check For PC Application Updates” option and follow the prompts to complete the installation.

### ***Locating the scanner’s COM port***

#### **Windows 7 and Windows Vista**

- Click Start
- In the Search box, type Device Manager
- Click on the Device Manager when it appears in the found entries
- Locate the Ports (COM & LPT) section and expand it
- Locate the “GRECOM PSR-800 Serial Device” entry and note the COM port shown.

#### **Windows XP**

- Right click on the My Computer desktop icon or the Computer Icon in the start menu.
- Select the Properties option from the menu that appears
- Switch to the Hardware tab in the System Properties window
- Click on the Device Manager button
- Locate the Ports (COM & LPT) section and expand it
- Locate the “GRECOM PSR-800 Serial Device” entry and note the COM port shown.

### ***Support***

As these are experimental beta versions, they will not be officially supported. Use of these experimental beta software versions is at your own risk.