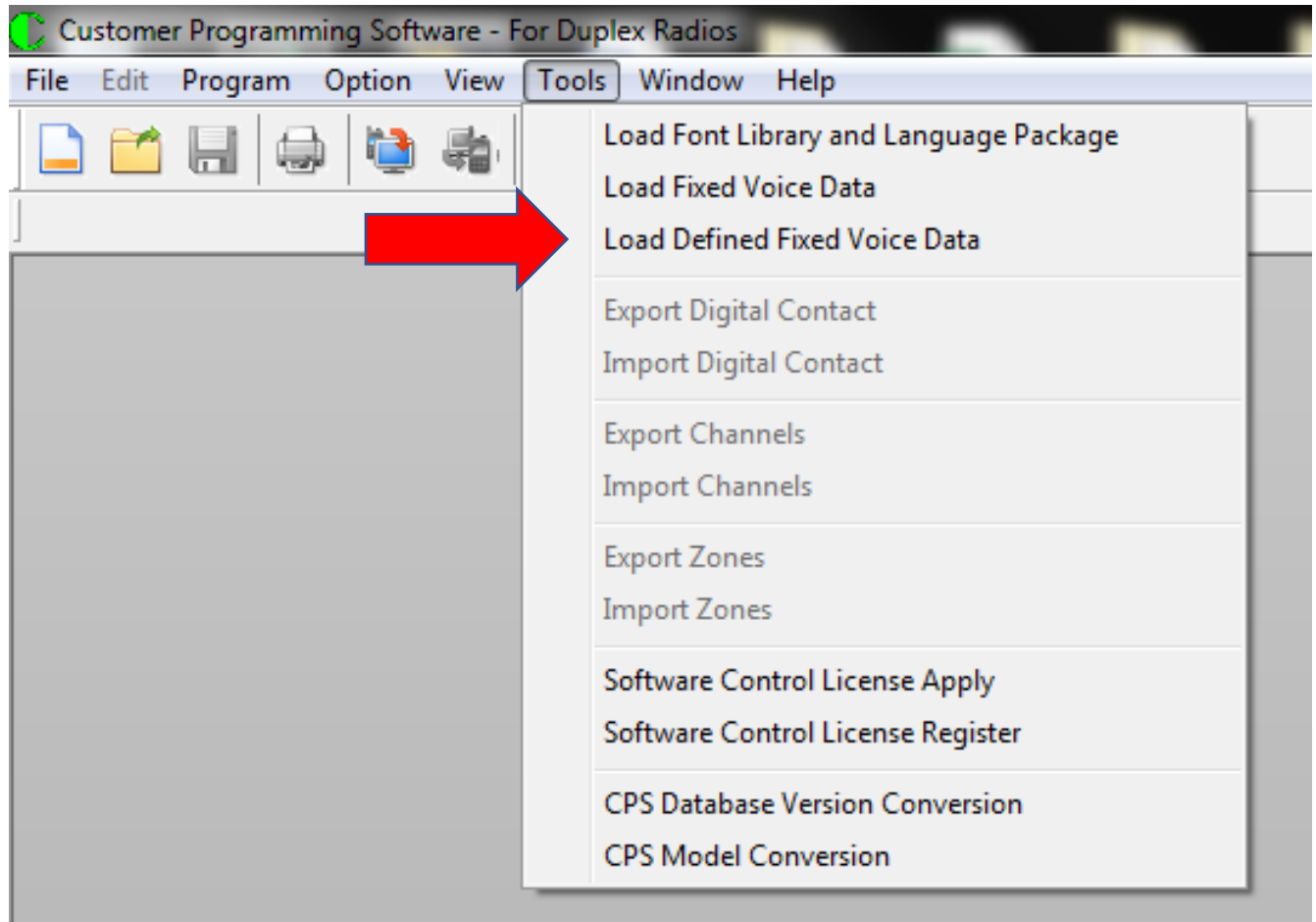# Installing the Test Firmware in the CS800D PLUS

1. Using FlashBurn 3.00, update radio with new firmware.
2. Using the CPS, update voice files

3. Using the CPS, change the definition of the buttons:

Set P1 to Special Function 1 and P3 to Special Function 2. While any button should be able to be used for these two special functions, doing it this way keeps it compatible with the way I am testing things.

When you restore the radio to its previous working condition, after you do the RCDB program and latest firmware, you also want to

update the old voice files because the RCDB program erases it. Use the following for updating those files.
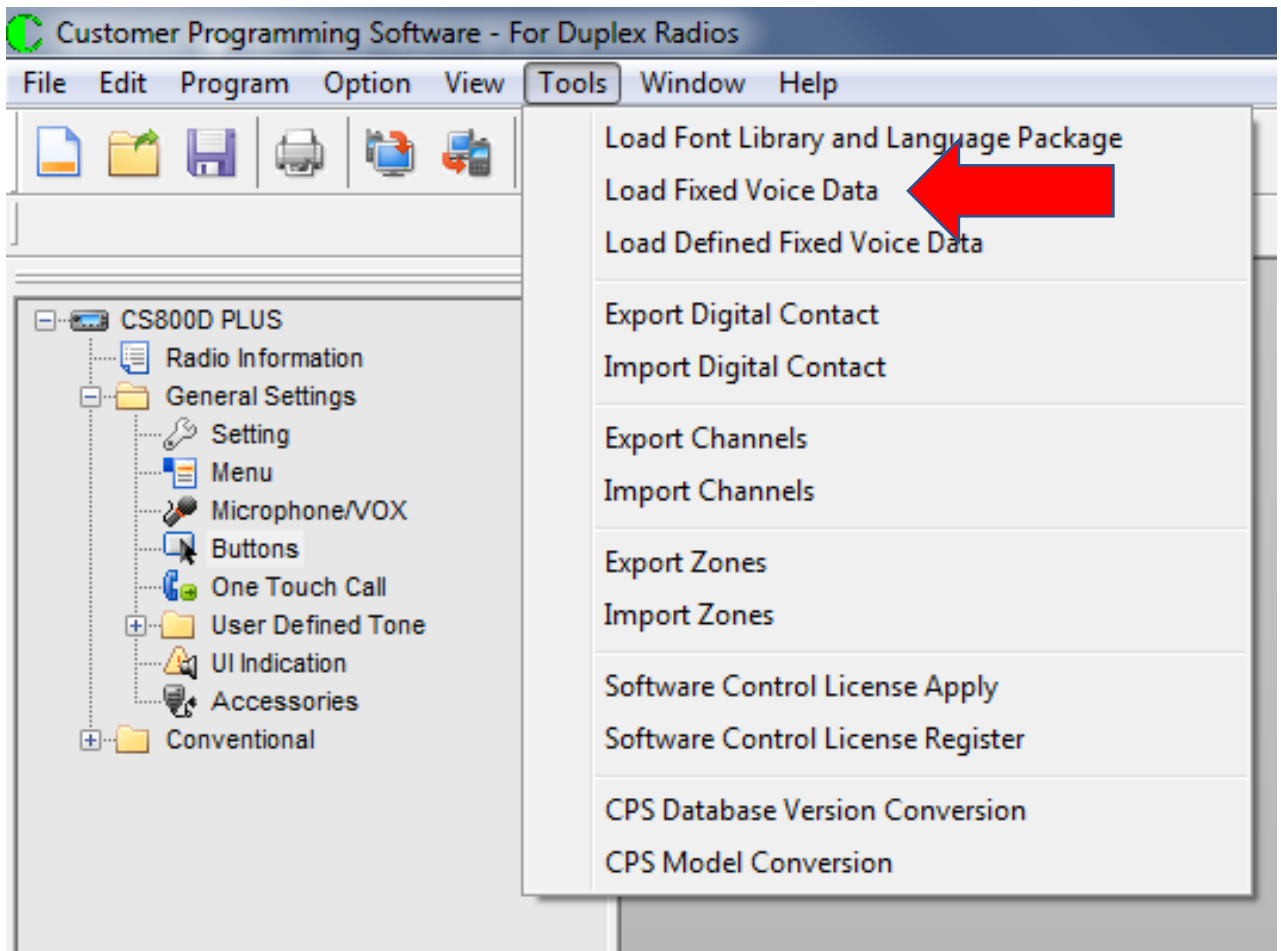
Don't forget to restore your old code plug after you updated the radio.

Limitations of the New Firmware

The Following Modules will not work without the GPS module attached and working:

GPS Roaming

GPS Location

Enhanced Scanning Mode

The Following Modules do not require the GPS Module

Special Function Key 1

Special Function Key 2

Enhanced Monitor Mode

Enhanced Parameter Mode

Extended Zones

VFO

If the feature is not within these modules shown above, then there is currently no firmware written for it. Those modules are:

Satellite Communication

Hot Spot

Aux Processor

Spectrum Display

Serial Communication

User Programming

As I mentioned before, while the firmware is effectively written, there is a few limitations within these routines.

1. The manufacturer has to give me the method of using firmware that is already in his radio. A partial list is as follows:
    a. Reading Alphanumeric characters from the microphone keypad
    b. Setting the PLL to the appropriate frequency
    c. Determining when carrier is present
    d. Reading the CTCSS/DCS/DMR parameters of a channel

2. Initializing the database within the radio (RCDB Program). This is not part of the firmware and will be a joint effort between myself and the manufacturer.
3. The CPS. This will be done almost entirely by the manufacturer with a little help from myself because the database used is different than what is currently in the CPS.

Compatibility with the CS800D

While I expect the firmware as written right now will be compatible with the CS800D, I am not sure because there are some minor differences between the two microprocessors.

However, when the radio is completely functional, I expect those differences to cause problems.

The bigger issue is when we start using the flash memory. The flash memory between the two radios is probably not compatible. Most of the routines don't use the memory right now but they will be using them in the very near future. Even if you could read and write with both radios with a single routine, the CS800D PLUS has a much larger memory chip and that extra space is used.

I have not tested the firmware on the standard CS800D.

If You Bought the CS800D Radio Recently

If your radio says CS800D PLUS in the front, you got the radio made for these routines. If you don't have the GPS module, you can buy it from our store at csi-radios.com for $99 plus shipping.