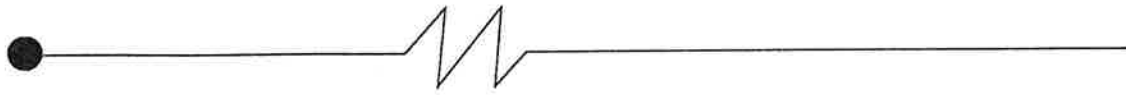


Technical Bulletin



FR3000 / FR4000 Flash Upgrade Utility Firmware Rev 1.4

This bulletin outlines the procedure to upgrade FR3000 / FR4000 firmware to revision 1.4. This upgrade should NOT be performed on any FR3000 / FR4000 containing firmware revision 1.0.

To determine the current firmware revision in your FR3000 / FR4000, turn off unit, press and hold "ANI Clear" and "Speaker Mute" keys while turning on the unit. Firmware revision will display momentarily on the left side of the LCD display.

Be sure you have the following materials on hand before attempting this upgrade:

- EX-2717 Flash Upgrade Software Utility
- OPC-1211 (Special order)

WARNING: Use CS-FR3000 Radio Cloning Software to read and save the personality file from the FR3000 / FR 4000 prior to performing this upgrade.

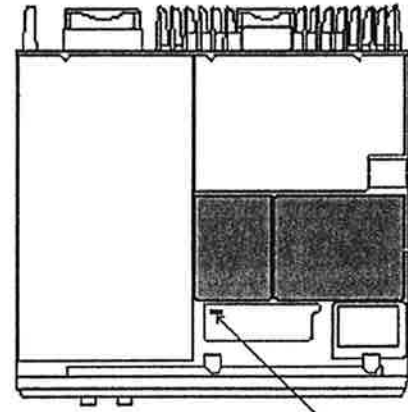
Installing the EX-2717 Flash Upgrade Software Utility

- Copy "EX-2717.EXE" to the desktop of your computer



Connecting OPC-1211 Flash Upgrade Cable to FR3000 / FR4000

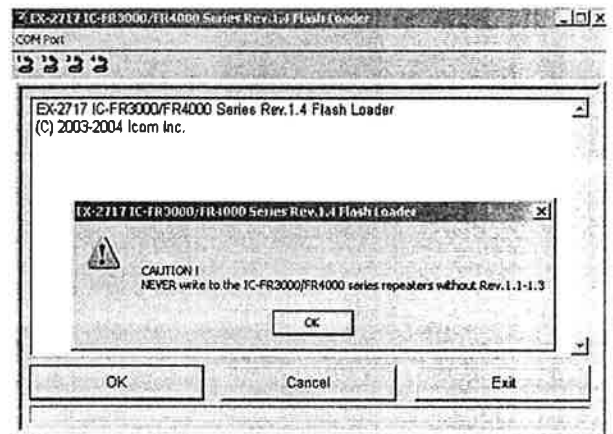
- Remove top cover of the FR3000 / FR4000
- Connect OPC-1211 cable to J-12 of the Logic board, as pictured.



J-12 flashport

Running the EX-2717 Flash Upgrade Software Utility

- Double-click on the icon for "EX-2717.EXE"
You will see the screen at right
- *When the application is started, a warning screen appears indicating that this upgrade should only be performed on FR3000 / FR4000 repeaters containing firmware rev 1.1 through 1.3.*
- Click "OK" on the warning screen to activate the upgrade utility.
The following screen appears:



- Power on the FR3000 / FR4000
- Click "OK" on EX-2717 program
Upgrade will begin
- When upgrade is complete, turn off FR3000 / FR4000
- Disconnect OPC-1211 Flash cable
- Re-assemble FR3000 / FR4000

