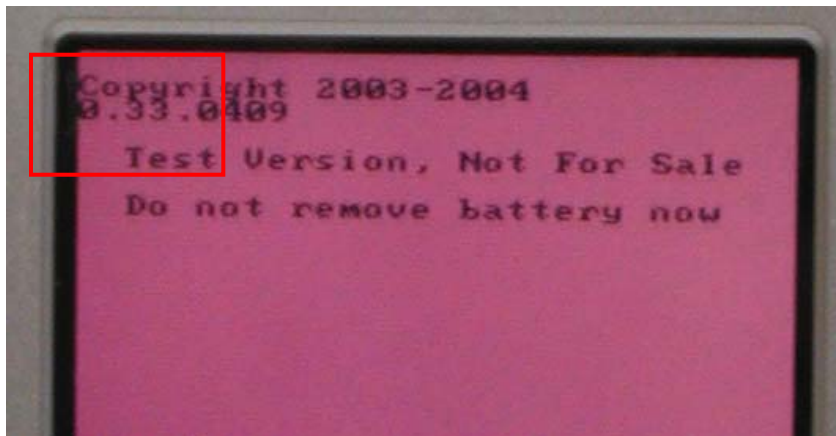## *MPx Software update procedure*

To perform a software update on MPx, there are a few steps.

- The device software version will need to be known.

- Some process setup needs to occur.

- The flash update software used will vary based on the device software version.
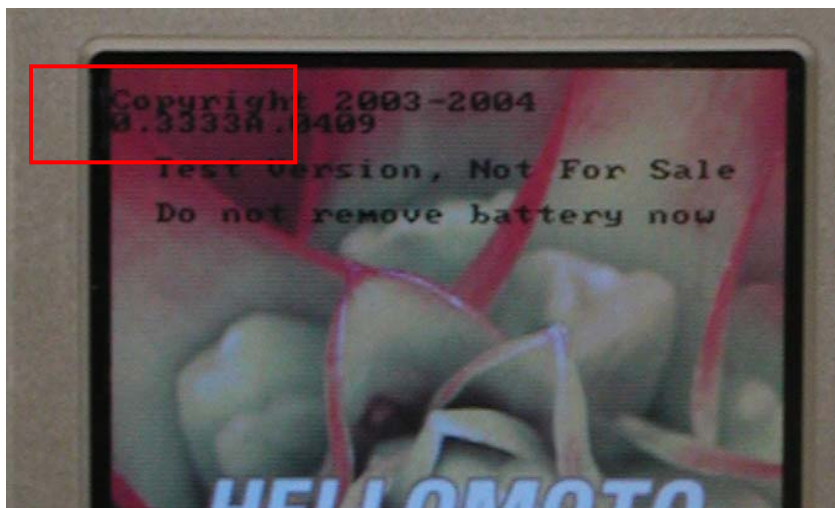
Setup

1. Determine device software version. This is an important step in that the flash update software to be used will depend on the device bootloader version.

    a. Bootloader version: During boot-up, either with the reset button or with by replacing the battery, there will be a series of screens displayed. The first will appear as shown and indicate the bootloader (eboot) version. Here, the device is bootloader version 0.33.

    b. OS version: Sometimes it is necessary to know the OS version. The next screen displayed will add the OS version as well. Here the bootloader version 0.33 and OS version 33A is displayed.
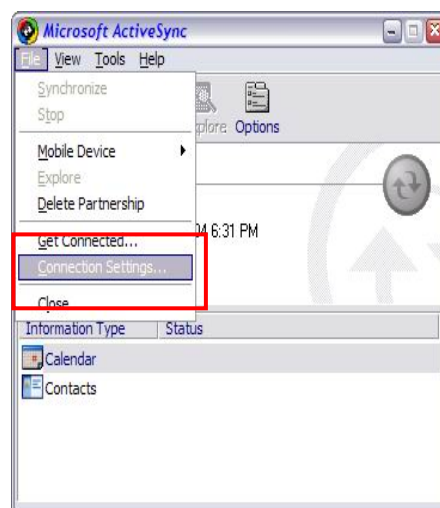

2. Get have the new device software extracted properly.

a. There can be up to three sets of software to update:

    i. Eboot = this corresponds to the bootloader version.

    ii. OS = this corresponds to the OS version

    iii. GSM = this corresponds to the software version that the radio CPU runs.

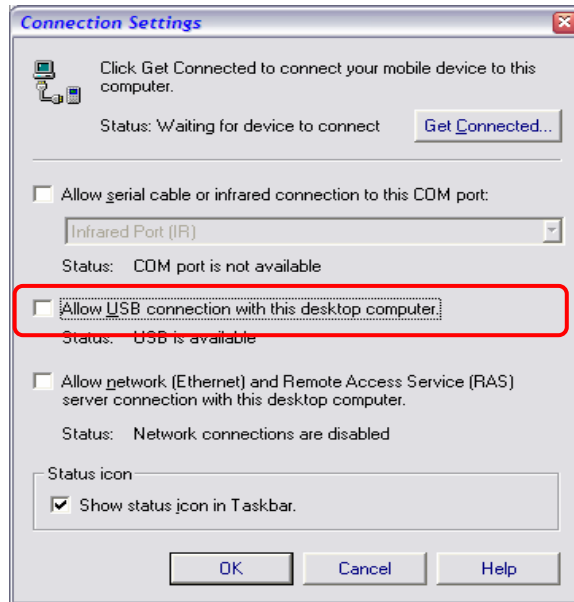b. Each set of software should be extracted to individual folders with nothing else in those folders

MPx. Update Method

1. SD card – The device software can be updated via an SD card.

    c. Only one set of software (eboot, GSM or OS) can be flashed at a time.

    d. A properly formatted SD card will be required. Use FAT file system (not NTFS or FAT32).

    e. Copy the folder contents of the set of software to the SD card root level.

    f. Insert the SD card into the device.

    g. Reset or remove and replace the battery while holding the shift key.

    h. The device will launch into the device flash process automatically. Refer to the device flash process section of this document.

2. USB cable – The device can be updated using a PC with a USB sync cable, either Motorola Part Number AAKN4011A or SKN6311B (with or without the external charger).

    a. To connect the device to a PC with the USB cable.

    b. Download and extract the appropriate flash tool based on the current bootloader version of the device.

    c. Deactivate the ActiveSync USB connection

        i. Open Activesync application, open the "Connection Settings" window located in the

menu bar under "File".

ii.   Uncheck the USB connection setting box located in "Connection settings" window as

shown.

d.   Ensure that there are no more Microsoft Windows Mobile devices attached to any other USB ports.

Using the USB Flash tool

1.   As previously stated, there are two versions of the Flash Update Tool. The version can be checked from the "About" menu item.
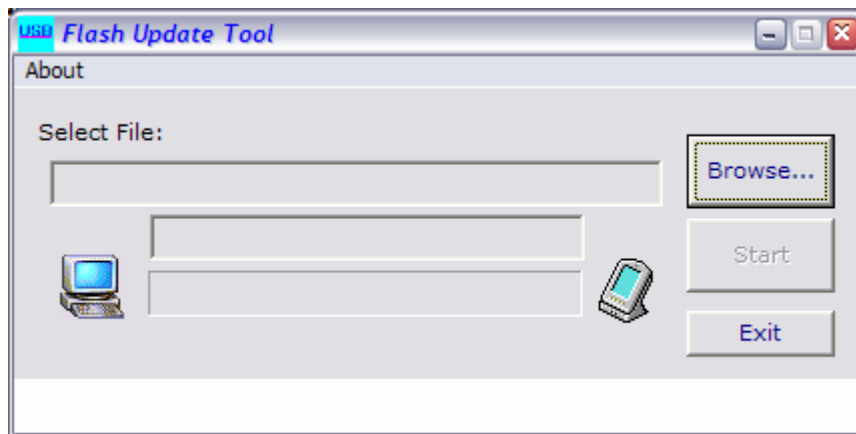

a.   For bootloader versions up to 0.30, use Flash Update Tool version 0.02.

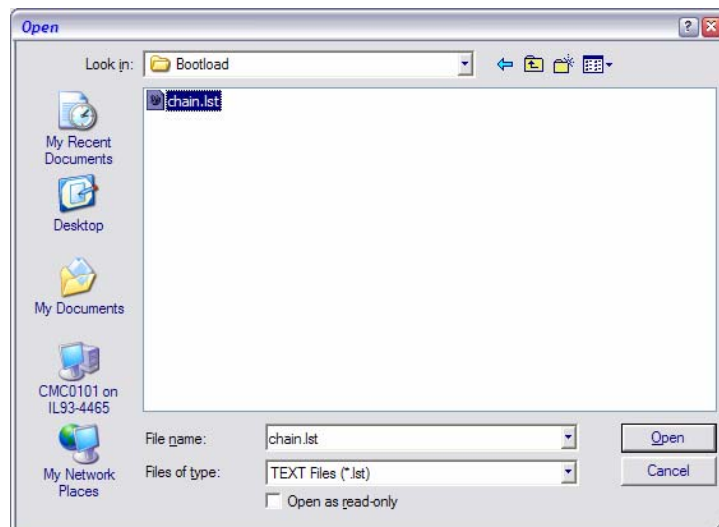b. For bootloader version 0.30 and beyond, use Flash Update Tool version 0.03.

2. Using Flash Update Tool 0.02

    a. Upon opening the this version o fthe Flash Update Tool, the following window will be
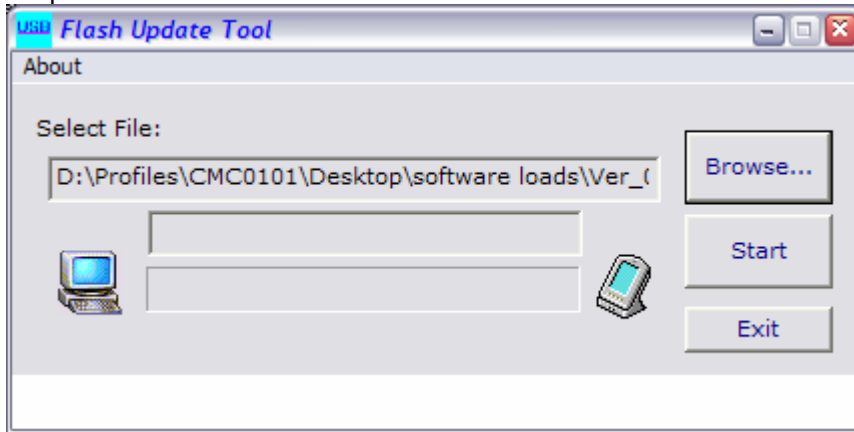

displayed.

    b. In order to flash a specific set of software (GSM, eboot, or OS) the recipe file must be loaded first. Click on "Browse" to start.
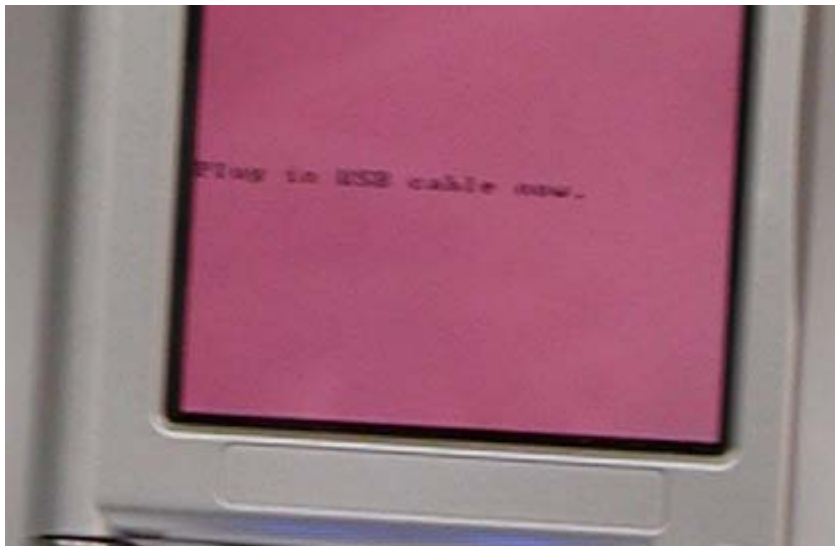
The standard Windows file selection window will appear. Navigate to the folder containing the desired set of software. For this version of software, the recipe file is labeled "chain.lst".
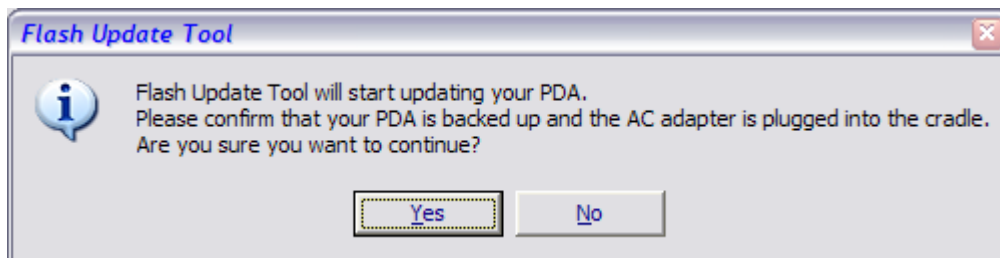
c. Highlight the file and click "Open". The Flash Update Tool window will display the selected recipe file.

d. Now reset or remove and replace the battery in the device while holding the blue Function key. The device will display the "Plug in the USB cable now".
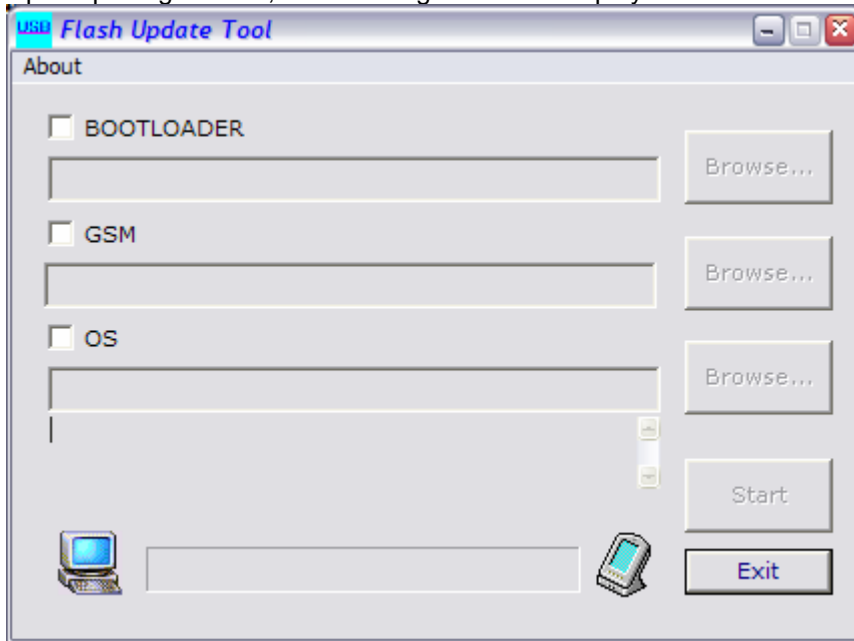

e. Connect the USB cable, and press "Start" in the Flash Update Tool window. Confirm that the PDA is ready to be updated.
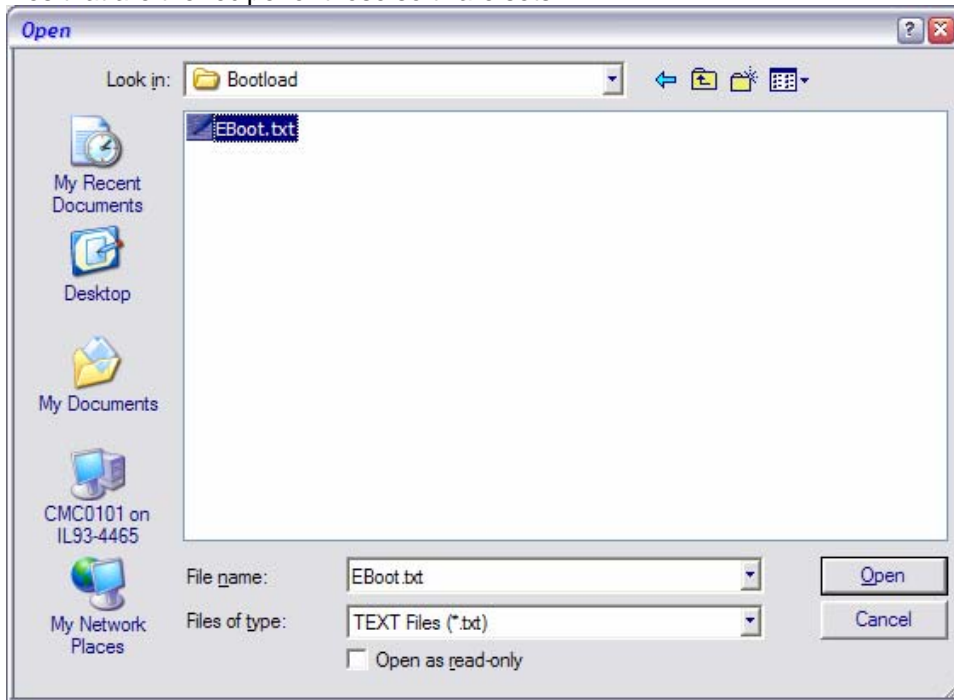

The device will begin the software update process. Refer to the Device Flash Indicator section below.

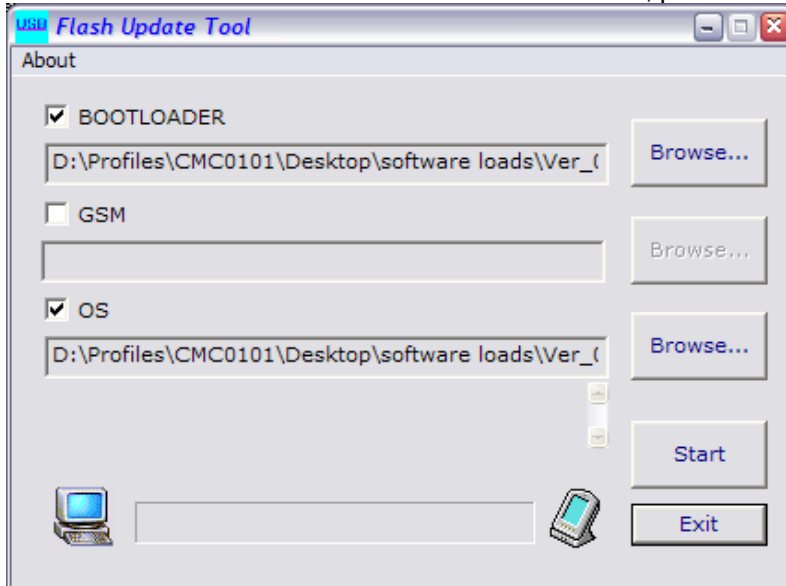3. Update using Flash Update Tool version 0.30.

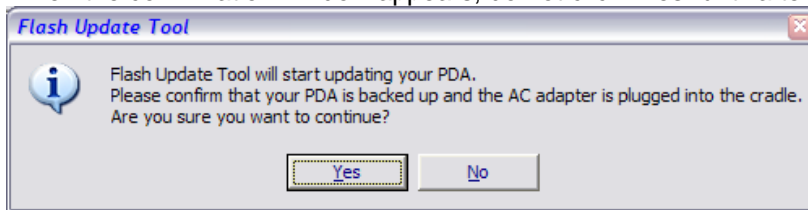   a. Upon opening the tool, the following window is displayed.

    b. In this version, multiple sets of software can be updated simultaneously. Click the appropriate check boxes and use the browse function to locate the "OS.txt", "eboot.txt" and the "GSM.txt" files that are the recipe for those software sets.

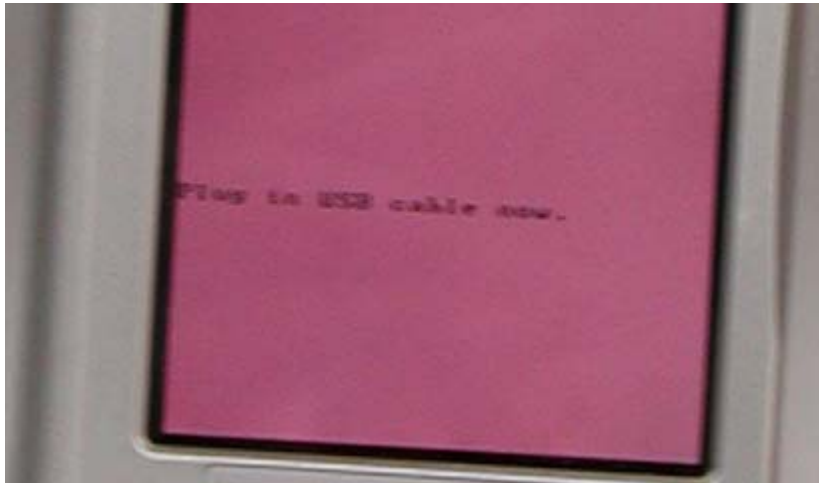c. When all desired sets of software have been identified, press start to continue.

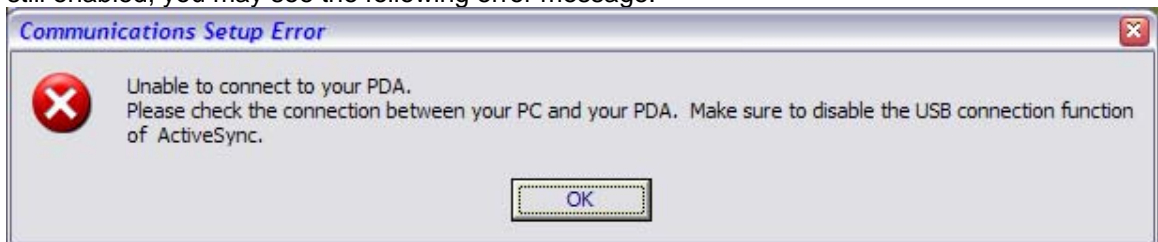d. When the confirmation window appears, do not click "Yes" until after the device is ready.

e. On the device, press the reset button or remove and replace the battery, while holding the blue function key. The Eboot menu will appear as shown.

f.   Use the navigation key (up/down) to select the proper option, in this case "1. USB DownloadImage" and select it with the center select button.

g.   The "Plug in…" message will appear. Connect the USB cable now.

h.   When the device is connected, press "Yes" in the Flash Update Tool confirmation window to begin the flash process.

i.   If the USB connection is being shared by another device or if ActiveSync USB connection is still enabled, you may see the following error message.
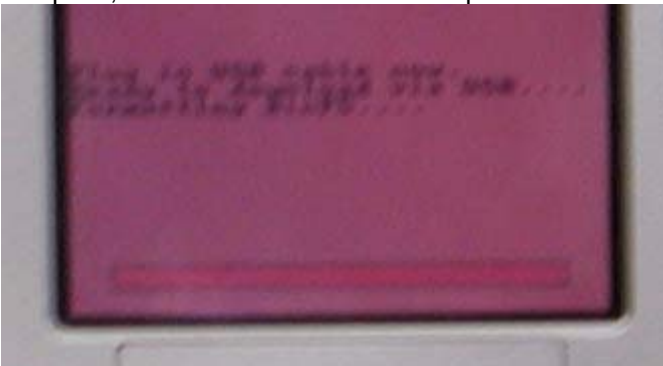

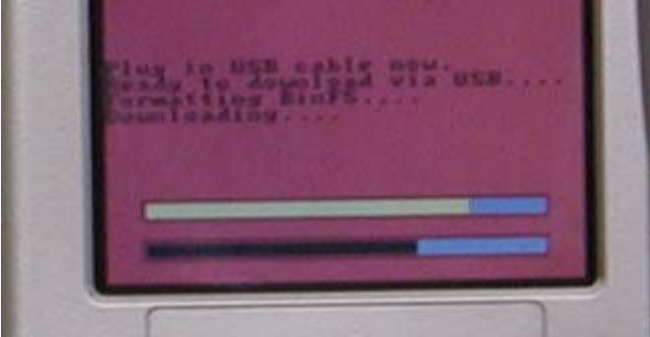j.   Refer to the device flash process section (next).

Device Flash Update indicators.

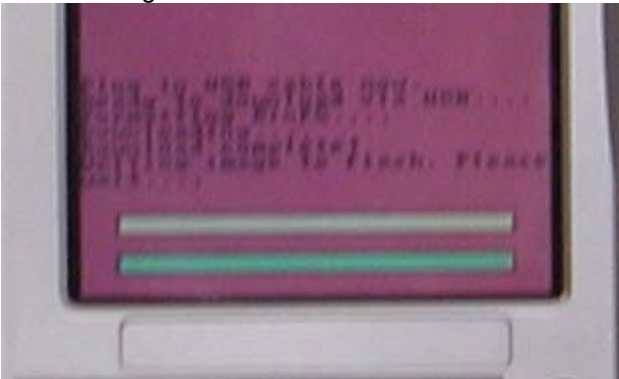When the device is being updated, the display will show several types of indicators.

1.   Red status bar – This indicator means that the device is clearing existing flash memory. When complete, it will continue to the next step.

2. Dual status bar – This can be either a one or two-bar indicator with yellow and black colors. It represents download progress of data files.

3. Green status bar – This indicates that the download has completed and the flashing of the ROM is occurring.
   When this indicator is on, the device can be removed from the USB cable so that the Flash Update Tool can begin another device.

4. Blue status bar – This indicator, when a complete bar, means that the device ROM has been completely flashed and the device can be rebooted at this time. The device may reboot on its own.