

June 8, 2005

LCD Firmware Files

The ATB3C uses an LCD daughter board to interface to the color LCD. This board has 3 firmware files that it uses, the LCD Firmware file, LCD Graphics file, and the LCD Parameters file. The Firmware file is the actual program that the daughterboard runs, and has a 3-digit version number associated with it. The Graphics file contains all of the bitmaps and fonts used by the display. The Parameters file has information about the display and its orientation. From time to time, TerraSonde will release updates of these files. They are all installed using an SD ram card. Once installed, they are burned into flash on the LCD board. The SD card **SHOULD** be formatted as FAT or FAT16 filesystem and **NOT** AS FAT32.

Upgrading the LCD Firmware

1. Unzip the file, copy it file to an SD ram card (the little card that fits into the slot on the Toolbox), and rename the file to appFlash.bin (exactly like that).
2. Power off the Toolbox, plug the card into the SD slot on the input panel of the Toolbox, power on the Toolbox, and wait approximately 1 minute while the file loads into the LCD board. **NOTE:** nothing appears on the display while the file is uploading. When the upload is complete, the color splash screen will appear on the display.
3. Remove the card and power-cycle the Toolbox. To check that the firmware has loaded, go to the PC Transmit/About function and check the version number that appears on the third line, beneath the date field. The number should match this release number.

Upgrading the LCD Graphics File

1. Unzip the file, copy it file to an SD ram card (the little card that fits into the slot on the Toolbox), and rename the file to indexFlash.ma (exactly like that).
2. Power off the Toolbox, plug the card into the SD slot on the input panel of the Toolbox, power on the Toolbox, and wait approximately 3 minutes while the file loads into the LCD board. **NOTE:** nothing appears on the display while the file is uploading. When the upload is complete, the color splash screen will appear on the display.
3. Remove the card and power-cycle the Toolbox.

Upgrading the LCD Parameters File

1. Unzip the file, copy it file to an SD ram card (the little card that fits into the slot on the Toolbox), and rename the file to paramFlash.bin (exactly like that).
 2. Power off the Toolbox, plug the card into the SD slot on the input panel of the Toolbox, power on the Toolbox, and wait approximately 10 seconds while the file loads into the LCD board. **NOTE:** nothing appears on the display while the file is uploading. When the upload is complete, the unit boots as it would normally and enters the main menu screen.
 3. Remove the card and power-cycle the Toolbox.
-