

Upgrading Cellcorder Firmware to Version 2.20

1. Introduction

This document describes how to upgrade the Cellcorder firmware to Version 2.20. The firmware upgrade is distributed on a 3.5-inch disk and as a file on the Albér corp web site. To install the upgrade, the current Cellcorder firmware version must be 2.16 or later.

2. Confirm Cellcorder Firmware Version

To determine your Cellcorder version, power up the Cellcorder and observe the firmware version displayed on the first screen. If the version is earlier than 2.16, then the Cellcorder requires a hardware change and must be returned to the factory. This change incorporates a new load module and additional safety circuitry.

For more information or to download files, access Albér corp on the Web at www.alber.com and click on Software Updates on the home page. If further assistance is required, obtain technical support by contacting Albér corp directly.

If your Cellcorder contains Version 2.16 or later, follow the procedure below to install the firmware.

3. Upgrade via Web Download

This section describes how to download the firmware upgrade software from the Web.

If a firmware upgrade disk is not available, the upgrade software may be downloaded from the Albercorp web site. Open the Albercorp site at www.alber.com and download the self-extracting firmware upgrade file available in the Software Updates section. Executing this file causes the file to self-extract and copy files to a 3.5-inch disk. After this is completed, continue with the next section of this document.

4. Upgrade From Disk

This section describes how to upgrade the firmware in the Cellcorder.

CAUTION: Do not power off the Cellcorder or disconnect the serial cable connected to the Cellcorder during the upgrade process. If this occurs, the Cellcorder will become inoperable and will have to be returned to the factory.

The following text appears in Chapter 13 in the Battery Analysis User's Guide and is reprinted here for your convenience.

Battery Analysis software version 1.2 and later provides the ability to upload new firmware to the Cellcorder. The firmware update is provided by Albercorp as a specially formatted file containing new program code for the Cellcorder. By using the firmware update feature, you can quickly bring your Cellcorder up to the latest operational specifications.

Access the firmware update feature through the Cellcorder Interface dialog box. To update your Cellcorder, do the following:

- 1) Obtain the firmware update file from Albercorp, either on CD-ROM, disk, or via the Internet. Before you begin the update, make sure the file is on your computer and you know its file name. Firmware update files have the extension **.prg**.
- 2) Connect the Cellcorder to the serial port configured in *Setting Communications Ports* and verify the Cellcorder is powered on. If desired, the serial port that communicates with the Cellcorder can be changed. From the Cellcorder Interface dialog box, click Change in the Communications area and select a different COM port from the Communications Options dialog box.
- 3) **IMPORTANT NOTE:** If you are applying a firmware update to a Cellcorder that was previously updated (that is, not running the firmware it was shipped with from the factory), reset the Cellcorder so it is running the factory-original firmware before proceeding with the update. The firmware update cannot be applied until this is done. At power up, a Cellcorder running original firmware displays the revision number, *Boot* at the bottom of the display, then *Initializing*, then the Main Menu. A Cellcorder running updated firmware displays the revision number then the Main Menu. Go to Step 4 to reset the Cellcorder firmware. Or, if the Cellcorder is running factory firmware, go to Step 5. If you are unsure of the firmware status, it will do no harm to reset it.

- 4) To reset the firmware:
Power on the Cellcorder.
Press the Cellcorder <F1> key four times in quick succession.
At the prompt: *Erase RAM program? <Enter> Clear <Esc> Quit*
press <Enter> and wait for the Cellcorder to re-initialize.
Refer to step 3 and verify the Cellcorder is reset to factory-original firmware.
- 5) Click the Cellcorder Interface button or select **Device|Cellcorder** on the main menu. The Cellcorder Interface dialog box appears. Verify Communication at the bottom of the box indicates Connected. The new firmware cannot be uploaded if there is a communication problem.
- 6) Click Load Update in the Firmware Update area to open the Upload New Cellcorder Firmware box.
- 7) Select the update file. Either type the path and file name into the File Name edit box and click Open, or navigate through the folders to locate the file, click the file name, then click Open.

If a valid file is selected, the software reads the firmware version from the file and prompts for confirmation before uploading. For example, the prompt might display "Click OK to begin uploading Version 2.15." To proceed, click OK, or to cancel and return to the Cellcorder Interface dialog box, click Cancel. Uploading begins when OK is clicked, and may take up to ten minutes. The Cellcorder Interface box estimates the time remaining for upload, and displays a message when upload is complete.